

# Traditional vegetables in Benin: *Diversity, distribution, ecology, agronomy, and utilisation*



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## Foreword

It is timely that a catalogue of the traditional vegetables of Benin is produced since it has become evident that the knowledge associated with these resources is rapidly being lost. This can be attributed to two main factors: firstly, as a consequence of the loss of these diverse genetic resources in wild and semi-domestic situations; secondly, because of social change and the loss of traditional and customary use of plants as well as changes in culinary tastes and habits. Consequently, it has become imperative to document this knowledge as well as begin the collection and conservation of the traditional vegetable species known to have significant cultural and nutritive value. Regional and national level projects and programmes have begun to emerge to raise awareness about the value of traditional vegetables, and to highlight not only the reliance of populations on the diversity of species consumed throughout African countries, but also the potential these plants have to contribute to livelihood and nutritional security elsewhere, if appropriate strategies to protect their status are put into place.

The particular importance of African indigenous vegetables as a rich source of proteins, vitamins and minerals has been recognised by a number of recent publications. The Plant Resources of Tropical Africa (PROTA) project's second volume is devoted to vegetables (Grubben and Denton 2004) and lists over 110 important indigenous and traditional vegetable species widely known and used through Africa. Schippers (2004) described 134 species covering 14 different plant families over the continent, although his list is confined to cultivated species because of the paucity of information concerning the occurrence, use and availability of wild vegetable species.

It is important to develop a guide which focuses on the traditional vegetables of Benin, for a number of different reasons. Guides and checklists which are country specific provide the specific detail needed to understand the nature of the national resource. Benin has often been the 'poor cousin' of ethnobotanical and botanical surveys as botanists consider the area of the Dahomey Gap to contain a less diverse flora than in neighbouring countries. The consequence of this has been a scarce literature on the traditional uses of plant diversity in the country, with very little documentation concerning the use of traditional vegetables. Contrary to expectation, this catalogue demonstrates the very wide array of species including wild, semi-domesticated and domesticated species that communities use. It also shows the significant variation in knowledge and utilization according to the sociolinguistic and ecological regions of Benin. Finally, this publication fills a significant gap, by describing not only the use of this biodiversity, but, importantly, details of the ecological occurrence and requirements of the traditional vegetable species.

This document has been published using financial support from the United Kingdom's Darwin Initiative through the project "Conservation of the biodiversity of traditional vegetables in West Africa (15/003)", and the International Foundation for Science (IFS) project "Conservation of the genetic resources of local cucurbit crops for

poverty reduction in Benin (T/3709-1)". Significant administrative and technical support was provided by the National Institute of Agricultural Research in Benin (INRAB) which hosted the project and the Laboratory of Plant Sciences (LVB) of the Faculty of Agronomic Sciences at the University of Abomey-Calavi.

The catalogue is divided in two parts. Part one presents the methodology used to gather the botanical, ethnobotanical and socio-economic data of indigenous vegetable resources. This leads onto a synthesis of a state-of-the-art overview of the status of traditional vegetables in Benin, including: a discussion of the species richness in the main phytogeographical regions of Benin; the nutritional, medicinal and cultural utilisation of different species by the 19 sociolinguistic groups living in these regions; a summary of production and commercialisation data; and finally an elaboration of the threats to the resource and existing conservation approaches. The second part of the publication describes local nomenclature, species distribution and agro-ecology, the extent and character of any existing production systems, and the reported utilisation of the most important species. An easily accessed alphabetical list of all the local names used to refer to vegetable species is also presented.

None of this would have been possible without the efforts of an enthusiastic, committed and collaborative group of people. The authors would like to acknowledge the important contributions of:

- The village communities and individuals in city quarters whose knowledge is documented here and whose time was generously given during the research exercises. We thank every individual in each of the villages that hosted us, and most particularly the chiefs of Ayétedjou, Bognongon, and Ganro for their personal involvement in the establishment and implementation of the domestication trials and other research support.
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We hope this book will be of interest to a wide audience of botanists, ethnobotanists, nutritionists, rural development specialists, natural resource managers, foresters and geographers from academic institutions, community organisations, non-governmental organisations, and public services. This broad audience should find information of interest that is both practical and instructive.

The experience of collecting the information for this catalogue has been wonderful. Not only were the village communities inspirational in their use of plants, but it has also shown us the diversity of Benin's plant genetic resources, and the importance of traditional vegetables amongst these. We hope that we can pass on our passion for Benin's traditional vegetables to new readers so as to ensure their place in the future of the country.



# Part I

## Chapter 1 – Inventory and use of traditional vegetables: methodological framework

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This chapter explains how the term “traditional vegetable” is used in this document. It provides the geographical context to the study and describes the methodology employed to inventory the traditional vegetables used across various socio-linguistic groups in Benin, the patterns and modes of use in rural and urban areas, and the threats to the biodiversity. It concludes by discussing some of the limitations of the study.

### 1.1. Defining the term “traditional vegetable”

The term vegetable has no clear scientific meaning and is widely used to refer to all plant parts used as accompaniments of main dishes. Grubben and Denton (2004) defined vegetables as ‘succulent plant parts consumed as side dish with a starchy staple food’ (p. 13). However, they recognized the limitations of such a definition which could overlap with other commodity groups. In this book the use of the term vegetable is limited to *‘plant parts (underground or shoot parts including stem, leaves, fruit, flowers) usually eaten fresh or processed in any way (cooked, steamed, dried, marinated, etc) and are not used as conventional fruit, nut, root/tuber crop, pulse or staple but as an accompaniment of the main dish or alone as snack mainly for their micronutrient benefits’* in the sense of Maundu *et al.* (2009). This can be simplified to ‘any plant part that is consumed usually fresh or after minimal processing to facilitate consumption of the main dish and also for its micronutrients’. Therefore the term vegetable is not a botanical description, but refers to the primary use of a plant resource by a community. However, it should be remembered that many species are multipurpose resources and their primary use can vary from one locality to another. For example, *Senna obtusifolia* is widely used as a leafy vegetable in the Sudanian regions of West Africa, but in some locations it may only be known for its medicinal properties. Certain crops may behave more as vegetables in certain situations (e.g. pulses) and as non-vegetables in others. By and large vegetables are consumed for their freshness and as a recognised source of many micronutrients especially vitamins A and C, some minerals (Maundu *et al.*, 1999) and also macronutrients (carbohydrate, proteins, fat). It is important to note that the term vegetable is not restricted to cultivated species; it also includes species collected in the wild and which might be herbs, shrubs or trees.

In this publication we use the term “traditional” in the sense of Maundu *et al.* (1999), to refer to a resource which has been in use for a sufficient period of time to be part of the local food habits, knowledge systems and customs of communities. This includes species which are indigenous (or native) to the area, but also includes varieties of exotic (or introduced) species which local communities have developed through many years of selection to produce strains and varieties uniquely adapted to local agro-ecologies. In this sense, exotic species such as cassava, sweet potato and cocoyam (taro) which originate from Latin America, can also be considered traditional vegetables in Benin<sup>1</sup>.

Within this text, therefore, traditional vegetable refers to all plant species (both indigenous and exotic) used by communities as a nutritional accompaniment to staples and for which related knowledge has been shared over the course of several generations and integrated as part of customs or cultural habits. Species which would fall within this definition include for instance *Sterculia tragacantha*, *Bidens pilosa*, *Vitex doniana*, *Solanum macrocarpum*, and *Bombax costatum*. Other species that might be widely used across Benin, but which are newer introductions or are without this history of community adaptation such as *Allium cepa*, *Capsicum annuum*, *Lycopersicon esculentum*, *Brassica oleracea*, and *Daucus carota*, which are nevertheless widely used in the country, are considered as non-traditional.

## **1.2 An introduction to Benin**

The Republic of Benin is located in West Africa, between latitudes 6° and 12°50'N and longitudes 1° and 3°40'E. The country is bordered by Nigeria to the east, Togo to the west, and Burkina-Faso and Niger to the north and by the Atlantic Ocean to the south along a 125 km coastline. The total area of Benin is 112 622 km<sup>2</sup>. The population is estimated at 6.7 million, with an annual growth rate of 2.8 to 3.2 percent (INSAE 2002). Up to 61% of the population live in rural areas. The country has about 42 socio-linguistic groups, the biggest comprising the Fon, Nagot-Yoruba and Bariba. Other important socio-linguistic groups include the Adja, Goun, Dendi, Wama, Idatcha, Berba and Lopka. The per capita GDP (2007) is \$749 and the economy is mainly based on agriculture which accounts for 40% of GDP and 70% of domestic exports and 75% of all employment (Bierschenk *et al.* 2003). Cash crop production is limited to cotton, cashew nut, pineapple and groundnut. The main staple crops produced are maize, yams, cassava, cowpeas, sorghum and rice (Igue *et al.* 2000; Vissoh *et al.* 2004). Most of the soils are tropical ferruginous soils which are limited in

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<sup>1</sup> See Maundu *et al.* (2009) for a review of the terms indigenous/native, exotic/introduced, naturalized, and traditional; and Bosch *et al.* (2005) for their distinction between indigenous, exotic and adapted.

depth by gravel and lateritic formations and which suffer from crusting and compaction (Saidou *et al.* 2003, 2004). With few exceptions, the soils have a low fertility, so increasing crop production necessitates increasing farm sizes which in turn drives land clearance (Gaoue 2008).

The vegetation pattern in Benin shows a gradient from the coast to the north, which arises from a combination of the climate and the soils. The country is divided into three major phytogeographical regions (White 1983, Akoègninou *et al.* 2006): the Guinean zone, the Sudano-Guinean zone and the Sudanian zone.

The **Guinean** regional centre of endemism is mainly a semi-deciduous rainforest zone with ferralitic soils extending from the Atlantic coast and stretching between 1°45' and 2°24'E and 6°15' and 7°00'N to the west and 6°15' and 7°30'N to the east. The mean annual rainfall varies from 1100 to 1300 mm; the mean annual temperature is 26°C (with a range of plus or minus 2.5-5°C). Species which are characteristic of this region include *Cola gigantea*, *Cola millenii*, *Sterculia tragacantha*, *Albizia adiantifolia*, *Ceiba pentandra*, and *Dialium guineense*. The **Sudanian** regional centre of endemism, is a woodland and savanna region with ferruginous soils, lying between 1°10' and 3°45'E and 10°20' and 12°10'N. The temperature reaches 40°C on average (with a range of plus or minus 5.5-6.5°C). The mean annual rainfall and the rainy season duration decreases from the Guinean region (1100 – 1300 mm rainfall; 6 month rainy period) to the Sudanian region (900 – 1100 mm rainfall; 5 month rainy period). Dominant species of the Sudanian region include *Isoberlinia spp*, *Combretum spp*, *Vitex doniana*, *Uapaca togoensis*, *Lophira alata*, *Vitellaria paradoxa*, and *Khaya senegalensis*. The **Sudano-Guinean** transitional zone between the Guinean forests and the Sudanian woodlands and savannas is characterized by a vegetation mosaic of forest islands, gallery forests and savannas. Although there is a change in the flora from the coastal zone to the Sudanian region, there are no sharp floristic, geographical boundaries. The recent studies by Natta (2003), Akoègninou (2004), Adomou (2005) provide detailed information on the floristic composition and the circumscription of vegetation types in Benin.

### 1.3 Purpose and objectives of the traditional vegetable research

In May 2006, the Institut National des Recherches Agricoles du Benin started work on a research project in collaboration with Bangor University (UK), entitled “Conservation of Biodiversity in Traditional West African Vegetable Species (project 15/003)” funded through the Darwin Initiative.

This project had the overall purpose of improving the conservation and sustainable use of biodiversity in Benin by cataloguing traditional vegetable species



and their uses; collecting seed and domesticating selected species; and promoting the value of traditional vegetables and the most promising domesticates to producers and consumers.

In order to develop a catalogue of the biodiversity of traditional vegetables, to collect information about the uses and the threats to these species, two country-wide research programmes encompassing both ethnobotanical and socio-economic surveys were developed, to realise three specific objectives:

1. To inventory the diversity of species used as traditional vegetables throughout the country through an ethnobotanical survey carried out in 49 villages;
2. To collect information on the patterns and specific uses of traditional vegetables in rural and urban locations by conducting focus groups in 49 villages, and administering individual questionnaires in 18 villages and three cities;
3. To understand the threats to the biodiversity of traditional vegetables, and identify species which are threatened by over-exploitation or habitat change by administering individual questionnaires and carrying out in-depth interviews with key informants in 18 villages.

The species information presented in this catalogue draws primarily on the work carried out in the course of the Darwin Initiative 15/003 research programme. However, information on species belonging to the Cucurbitaceae family is derived from the project "Conservation of the Genetic Resources of Local Cucurbit Crops for Poverty Reduction in Benin (project T/3709-1)" funded by the International Foundation for Science.

### **1.4 Methodology**

Table 1.1 and Figure 1.1 show the list of villages and cities/towns surveyed in the course of the Darwin Initiative 15/003 surveys, in each phytogeographic zone, and indicates the dominant socio-linguistic group in each location. Details on the methodology employed to address each specific objective are given in the following sections.

#### *1.4.1 Inventory of traditional vegetables*

The ethnobotanical surveys were carried out from September 2006 to February 2008 in 19 socio-linguistic groups spread over 49 villages. Except for the Ouémè group where only one village was surveyed, every other socio-linguistic group was sampled in at least two villages.

**Table 1.1:** Research methods used to collect information on traditional vegetables in Benin

Climatic region	Main socio-linguistic group	Type of location	Location	Focus group	Individual questionnaire	Semi-structured interviews
Guinean	Adja	Village	Afomayi	√		
		Village	Agnavo	√		
	Aizo	Village	Agbandonou	√		
		Village	Gbeko	√	√	√
		Village	Gome	√		
	Cotafon	Village	Assedji	√	√	√
		Village	Sohounme	√	√	√
	Fon	Village	Bognongon	√	√	√
	Holly	Village	Akpate	√	√	√
		Village	Ayetedjou	√	√	√
		Village	Zalimey	√		
	Mahi	Village	Zonmon	√	√	√
	Ouémè	Village	Gogbo	√	√	√
	Mixed but majority Goun	City	Porto Novo		√	
Sudano-Guinean	Anii	Village	Barikini	√	√	√
		Village	Kodowari	√		
		Village	Penelan	√		
		Village	Wellan	√	√	√
	Bariba	Village	Banigri	√		
		Village	Dabou	√		
		Village	Kpassa	√		
		Village	Soubado	√		
	Boko	Village	Mareguinta	√		
	Fon	Village	Sovlegni	√	√	√
	Idatcha	Village	Ileman	√	√	√
		Village	Kpakpaza	√	√	√
	Ife	Village	Ekpa	√		
		Village	Tamba	√		
	Kotokoli	Village	Akarade	√		
		Village	Tchimbere	√		
	Mahi	Village	Mondji	√		
		Village	Vossa	√	√	√
	Tchabe	Village	Ikemon	√		
		Village	Okunfo	√		
Idatcha	Town	Dassa-Zoumè		√		
Mixed but	City	Parakou		√		

## DIVERSITY OF TRADITIONAL VEGETABLES

Climatic region	Main socio-linguistic group	Type of location	Location	Focus group	Individual questionnaire	Semi-structured interviews
	primarily Bariba and Dendi					
Sudanian	Bariba	Village	Ganro	√	√	√
		Village	Keremou	√		
		Village	Poto	√		
		Village	Tankougou	√		
		Village	Zougou-Pantrossi	√		
		Village	Guessou-sud		√	√
	Boko	Village	Bensekou	√		
	Dendi	Village	Kargui	√		
		Village	Torozogou	√		
	Dendi/Djerma	Village	Garou-Tedji	√		
	Gourmantche	Village	Batia	√		
		Village	Loumbou-loumbou	√		
		Village	Tanongou	√		
	Otamhari	Village	Moupemou	√		
		Village	Tagaye	√		
	Wama	Village	Cotiakou	√		
		Village	Pouya	√	√	√
Village		Tchaakalakou		√	√	

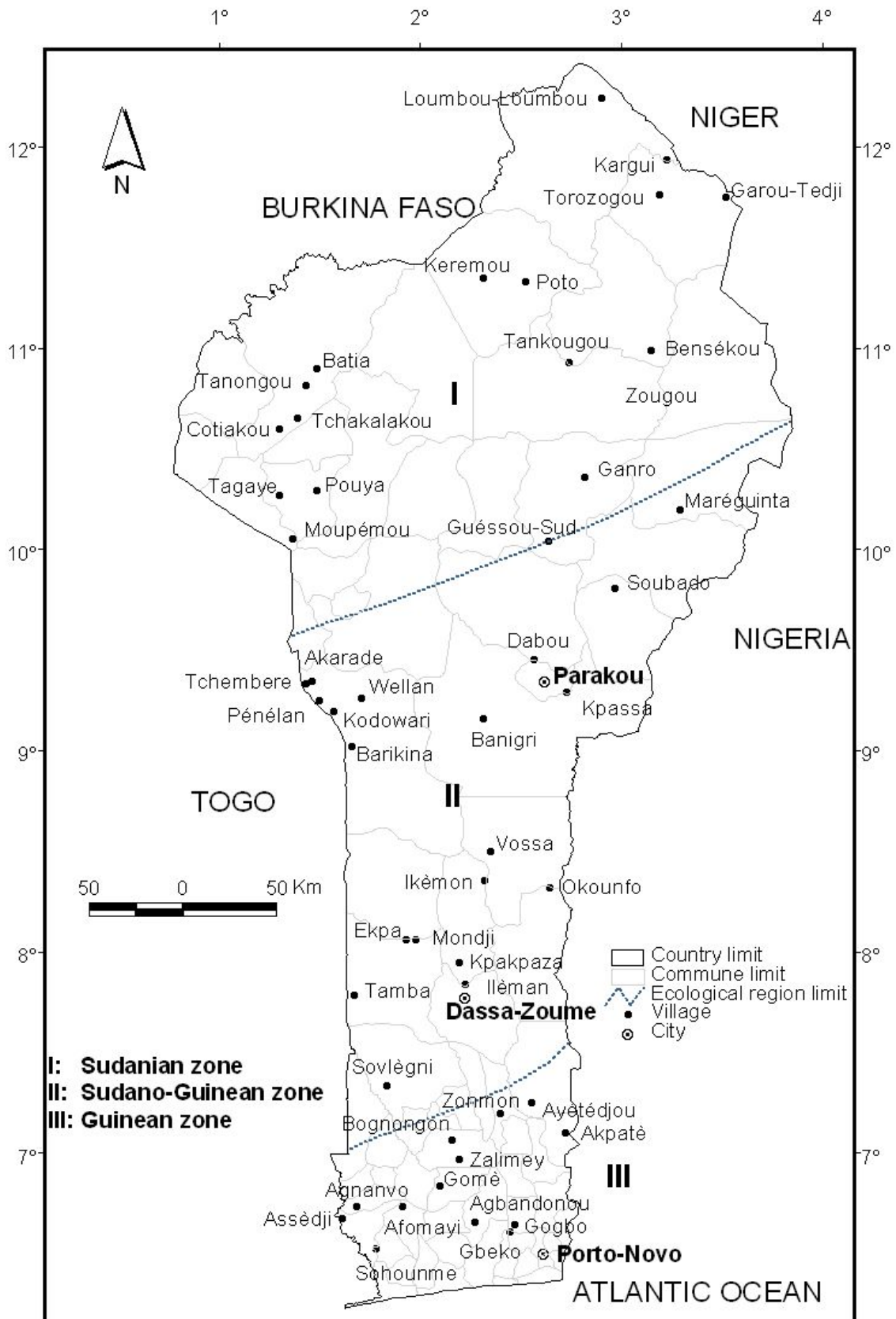


Figure 1.1: Survey areas in each phytogeographical zone.

The initial choice of villages was based on identifying the geographical distribution of socio-linguistic groups within the phytogeographical region (e.g. Baco 2000, Okry 2000), and selecting sites which would provide a sample that covered both cultural and ecological criteria. The final choice of villages depended on guidance and advice from local extension service workers (e.g. Centre Regional de Promotion Agricole), who identified villages they knew used traditional vegetables and where it would be practically possible to work. However, it was ensured that sampled villages belonging to the same socio-linguistic group within a phytogeographical area should be at least 20 km apart. Nine villages of the Bariba socio-linguistic group were surveyed because this particular group is spread out over a very large geographical area (see Baco 2000).

Focus groups were carried out in each village with at least 20 community members. The aim was to have a balanced composition in the focus groups, ensuring that both men and women and different age groups were represented. At the start of the focus group, participants were asked to collect to bring and display all plant species they collectively consumed as vegetables, and to provide the most common local names. An initial botanical identification was done in the field. Voucher specimens (i.e. samples of each species) were taken for determination (i.e. confirmation and identification) at the National Herbarium of Benin. All samples are currently stored at the National Herbarium. Following a first round of identification, a number of villages were visited for a second time to clear up any points of confusion, and to validate species lists with communities.

Where available, seed samples were also collected, and these are currently stored at the Institut National des Recherches Agricoles du Benin's Horticultural Programme research station, with a backup (for those samples which were collected in large enough quantities) at the World Vegetable Centre (AVRDC) office in Mali.

### *1.4.2 Patterns and modes of use*

In order to understand the patterns and types of use of traditional vegetables in various rural locations, the focus group participants were also asked to indicate the periods of availability, medicinal properties, cultivation status, frequency of consumption, and time and value of sale of each plant sample.

These data were complemented by administering individual questionnaires to nine or ten respondents in each of 18 villages, 16 of which were a subset of the villages where the ethnobotanical surveys were conducted (Table 1.1). Respondents were asked to list the wild and cultivated vegetables they used, the type of use,



details on their consumption habits, cultivation practices, and their perceptions on the threats to the biodiversity of traditional vegetables.

A similar questionnaire was administered in three urban locations: Porto Novo in the south, Dassa-Zoumè in the centre and Parakou in the north of the country<sup>2</sup>. Sixty respondents were interviewed in Porto Novo and Parakou and 59 in Dassa-Zoumè. Interviews were sought with female household members with food preparation responsibilities, though in a few instances only a male family member was available for the interview. Respondents in Parakou and Dassa-Zoumè were generally drawn from low or middle-income households. In Dassa-Zoumè 90% of respondents declared that the household income was <90 000 FCFA a month<sup>3</sup>. In Parakou 73% had incomes of <90 000 FCFA a month, and 25% had incomes between 91 000 and 180 000 FCFA. In Porto Novo incomes were more varied: 37% had incomes of <90 000 FCFA; 37% between 91 000-180 000 FCFA; 17% between 181 000-270 000 FCFA; and 9% >270 000 FCFA. Nearly all respondents in Parakou were Bariba; in Dassa-Zoumè they were Idatcha; in Porto Novo there was a greater socio-linguistic mix, however, the majority were Goun.

#### *1.4.3 Threats to the biodiversity of traditional vegetables*

As mentioned in section 1.4.2 individual respondents were asked about their perception of the threats to the biodiversity of traditional vegetables, and specifically they were asked to name any species which they thought had disappeared or were disappearing from the environment.

This information was complemented with in-depth semi-structured interviews with four key informants in each of the 18 villages to gather more detailed information about changes in the availability of traditional vegetables over the decades, the threats, existing and possible conservation measures, and domestication practices. Both men and women were identified as key informants by the village communities.

## **1.4. Study limitations**

This section summarises some of the methodological challenges and limitations of the study.

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<sup>2</sup> Porto Novo is located in the Guinean region, whereas the other two urban centres both fall within the Sudano-Guinean transitional zone.

<sup>3</sup> 655.957 FCFA are equivalent to 1 Euro

In a country with over 40 socio-linguistic groups, language issues were obviously a significant challenge. In many cases, particularly in the north and the centre, it was necessary for the survey teams to operate with local translators. This carried the usual risks of poor or inaccurate translation and enumerator error, but it also meant that transcription of local names could differ, particularly when there was a change in the composition of the team members between village locations. Transcription problems were noted when matching the data collected through the individual questionnaires (a task which was allocated usually to enumerators with experience in socio-economic surveys, but no specific knowledge on traditional vegetables), with the botanical identifications collected during the focus groups (a task allocated to ethnobotanists).

Another set of problems common to ethnobotanical studies (see for example Berlin, 1992 or Alexiades, 1996) were encountered with regard to the naming of plants, namely the use of more than one local name to describe the same species. Focus groups tended to agree on one or two local names, but of course could not provide an exhaustive list. This meant that when the enumerators worked with individual respondents other names might be given, which could not be matched to the focus group data. In addition to this was the limitation of the same local name being used to describe more than one species. So, for a small number of records, there could be uncertainty as to which species the respondent was actually referring to. The repeat identification missions were undertaken precisely to resolve some of these uncertainties, but of course it was not feasible to visit all of the villages.

The situation was particularly complicated in the case of the urban surveys. Unlike the rural locations where the species could be found in nearby fields and countryside, in the urban locations it was not possible to do a botanical identification of the species people said they used. In the urban context the identification was based on the common names given in the relevant local language. This meant that in some cases identification could only be down to genus level (e.g. *Vernonia* sp. which could comprise either *Vernonia amygdalina* or *Vernonia colorata*), or, the identification could be narrowed down to two species with the same function (e.g. *Ceratotheca sesamoides* or *Sesamum radiatum*). In some instances, the common names given in the urban areas had not been encountered in the course of the village ethnobotanical surveys. Where this happened no identification was possible because the reference species were those collected in the village surveys (this should be borne in mind when examining the data presented in Chapter 3).

Identifying species which were rare or had disappeared was also difficult. If the species named by key informants (usually elderly village members who could describe changes in food habits over a long period of time) were genuinely rare or

had disappeared from the local environment, they were obviously not brought to the focus groups for identification.

As a final note, it should be said that the research did not measure the absolute vegetable diversity of the country. Even though work was undertaken during both the rainy and dry seasons, many and representatives from half of the socio-linguistic groups found in Benin were included in the surveys over a large number of villages, additional surveys are likely to identify additional species.

Nevertheless, the wide geographical and socio-linguistic coverage of this inventory represents an important step forward in understanding the diversity of the vegetables used in rural as well as in urban environments, and provides a solid foundation on which to base future research and development interventions.

## Chapter 2 – Diversity of traditional vegetables and local taxonomy

EG Achigan-Dako & S Ndanikou

This chapter summarizes vegetable species richness by family. It also presents the diversity of traditional vegetable species according to their phytogeographical occurrence. Local nomenclature and classification approaches used at community level are presented and the meaning of local names is discussed.

### 2.1. Species richness and diversity

Recent studies from the African continent are recording an impressive diversity of species that are used as vegetables. For example, Maundu (1996) reports that 210 species are used by communities throughout Kenya. In Tanzania Keding *et al.* (2007) recorded 74 vegetables in one single district (Muheza) alone. In Togo, a country which borders Benin to the West, 105 species were recorded as wild vegetables (Batawila *et al.*, 2007). In Cameroon Stevels (1990) estimated that 150 species were used.

In Benin Dansi *et al.* (2008) reported 187 leafy vegetable species, whilst the Darwin Initiative 15/003 surveys recorded 245 plant species, belonging to 62 families. This includes leafy, fruit or seed vegetables. Tables 2.2, 2.3 a, 2.3 b, 2.4 a and 2.4 b (at the end of this chapter) provide the complete list of vegetable species found in the surveyed sociolinguistic groups and villages and grouped by phytogeographical regions.

For many of the plant families at least five species were recorded (Fig 2.1). Families with more than five vegetable species include Acanthaceae (6 species), Amaranthaceae (14 espèces), Asclepiadaceae (6 species), Asteraceae (29 species), Combretaceae (9 species), Convolvulaceae (9 species), Cucurbitaceae (14 species), Euphorbiaceae (11 species), Lamiaceae (8 species), Leguminosae (24 species for all three subfamilies), Moraceae (10 species), Pedaliaceae (5 species), Rubiaceae (10 species), Solanaceae (10 species), Sterculiaceae (5 species), Tiliaceae (6 species). Asteraceae and Cucurbitaceae are among the families with the highest diversity as vegetables, which reflects the pattern for Cameroon as noted by Stevels (1990). According to Batawila *et al.* (2007) the Fabaceae, Moraceae, Asteraceae and Malvaceae were among the most widely used plant families in Togo.

In the Acanthaceae family, species used include for example *Asystasia gangetica*, *Justicia tenella*, and *Justicia insularis*. In the Amaranthaceae examples include *Achyranthes aspera*, *Alternanthera brasiliana*, *Amaranthus cruentus*, *Amaranthus spinosus*, and *Celosia argentea*. Species of the Asclepiadaceae include *Leptadenia hastata*,

*Secamone afzelii*, and *Telosma africana*. In the Asteraceae examples of species used are *Vernonia amygdalina* and *V. colorata*, *Chrysanthellum indicum*, *Crassocephalum rubens* and *C. crepidioides*, *Launea taraxacifolia*, *Struchium sparganophorum*. The Cucurbitaceae comprise species which are mostly used for their fruits or seed. Examples include, for instance, *Citrullus lanatus*, *Cucumeropsis mannii*, and *Lagenaria siceraria*. Other species of this family include *Momordica cissoides*, *Momordica charantia*, *Kedrostis foetidissima* and *Telfairia occidentalis* which are used mostly for their leaves.

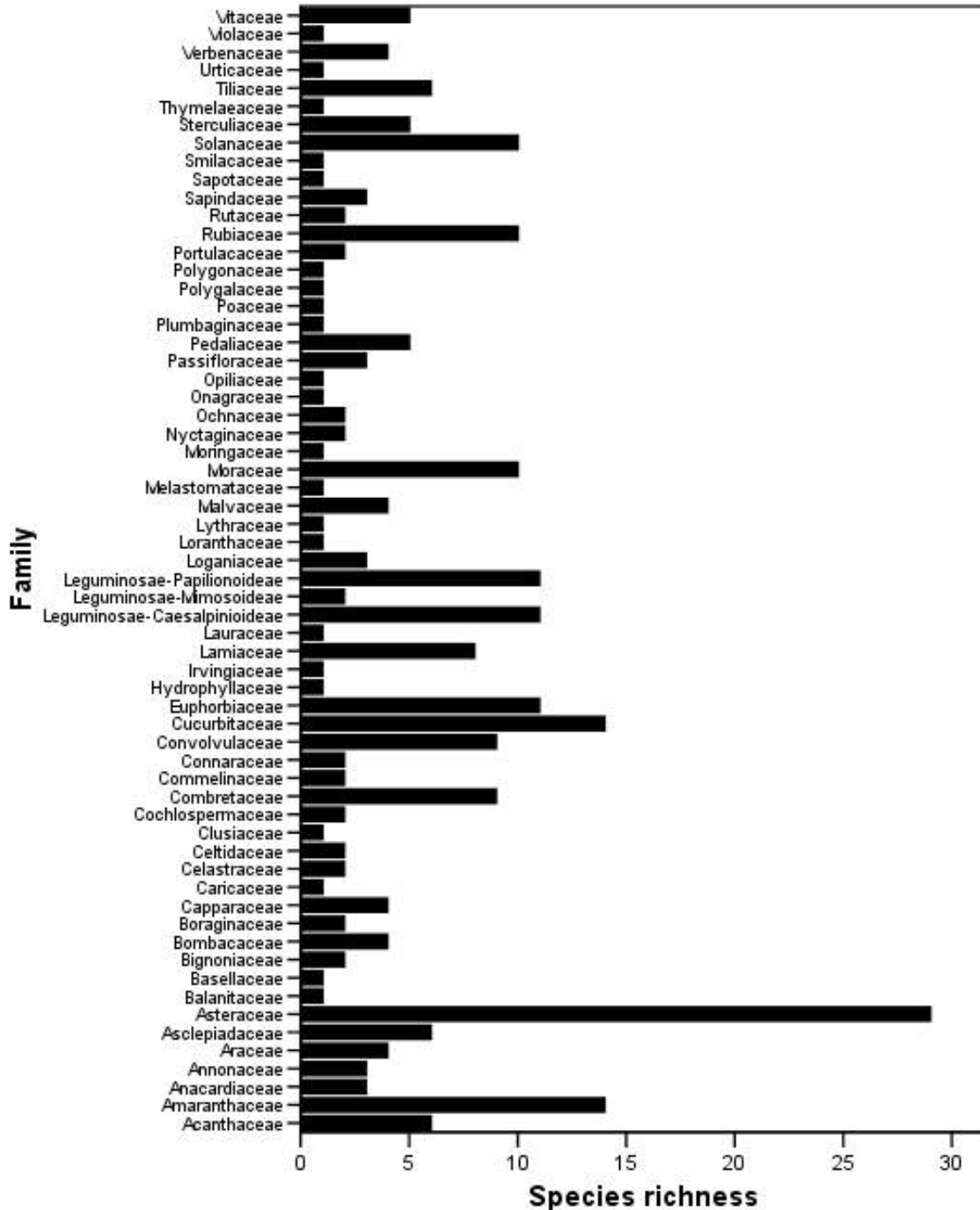


Figure 2.1: Number of species used as vegetable for 62 plant families in Benin



Examples of Leguminosae which are used as vegetables comprise *Senna occidentalis*, *Senna obtusifolia*, *Azalia africana*, *Daniellia oliveri*, and *Erythrina senegalensis*. In the Solanaceae the genus *Solanum* is the most used, which includes *Solanum americanum*, *Solanum aethiopicum*, *Solanum verbacifolium*, *Solanum macrocarpon* and *Solanum erianthum*. In Africa *Solanum americanum* and *S. scabrum* are usually confused with *S. nigrum* (Fontem and Shippers, 2004; Manoko and van der Weerden, 2004). Other species of Solanaceae used as vegetables include *Physalis angulata*. For the Tiliaceae family species such as *Corchorus olitorius*, *Corchorus tridens*, *Corchorus aestuans*, *Grewia mollis* are widely used. In the Moraceae only the genus *Ficus* is recorded as a vegetable and include species such as *Ficus asperifolia* and *Ficus thonningii*.

Most of these species exhibit intraspecific variations. Morphological variations have been described for species such as *Adansonia digitata* for which analysis of fruit traits and size revealed genetic differentiation among populations from the major phytogeographical regions across the country (Assogbadjo *et al.* 2005a, 2005b, 2006). *Momordica charantia* also exhibits leaf shape variation and has been divided into two subspecies based on leaf traits (Achigan Dako 2008, Achigan Dako *et al.* 2008a). A number of varieties or cultivars of *Solanum macrocarpon* and *Amaranthus cruentus* are cultivated in Benin for their leaf size, fruit size and colour (Assogba Komlan, unpublished data). Even spiny forms are found in many areas of South Benin. Another tremendously variable species is *Lagenaria siceraria*. The fruit of *L. siceraria* shows size and shape variations, which are used in different ways by local communities. For instance elongated soft cultivars are cooked as vegetables. Other cultivars are used only for their seed known as *egusi* (Achigan Dako *et al.* 2008b). For the genus *Cucurbita* three species are usually cultivated in Benin. This includes *C. pepo*, *C. moschata* and *C. maxima*. All three species exhibit size, shape, and colour variations. Some varieties show warts on the fruit pericarp (Fig. 2.2).

The life forms of vegetable species include tree, shrub, herb, and lianes. Of 245 species 42% are herbs (e.g. *Alternanthera sessilis*, *Acmella uliginosa*, *Chrysanthellum indicum*), 13% are lianes (e.g. *Cissus spp*, *Momordica spp*, *Leptadenia hastata*), 18% shrubs (e.g. *Annona senegalensis*, *Grewia mollis*, *Deinbolia pinnata*), and 18.8% are tree species (e.g. *Vitex doniana*, *Bombax costatum*, *Sterculia tragacantha*, *Cola millenii*). Only one parasitic species was inventoried, and this was *Cassytha filiformis* (Lauraceae) consumed in the Bariba community in Poto and in the Boko community in Bensekou. In most cases herbs were the most widely consumed life form by surveyed communities, and there were no marked differences between villages. No significant

difference<sup>4</sup> in life form prevalence was observed among phytogeographical regions (Table 2.1).



**Figure 2.2:** Intraspecific variation in *Cucurbita pepo*.

The diversity of traditional vegetables is associated with rich habitat diversity. In fact, of 245 vegetable species collected in Benin, 72% are wild and only 19% were clearly under cultivation; the remaining 9% of these resources were reported both as cultivated and wild, depending on the village, suggesting that they are in the process of being domesticated.

**Table 2.1:** Proportion of plant forms consumed as vegetables in phytogeographical regions of Benin. (n = species)

Life forms	Herb	Liana	Parasite	Shrub	Tree
Guinean (n=116)	56.90	12.93	0.00	13.79	16.38
Sudano-Guinean (n=155)	42.58	14.84	0.00	23.23	19.35
Sudanian (n=118)	55.08	13.56	0.85	11.86	18.64

Many species are collected in the wild, from forests, savannahs, fallows, wetlands, along rivers, and abandoned areas. *Vitex doniana* is collected from fallow and abandoned areas, in wetlands and along rivers, and when land is cleared it is normally left untouched. *Cola millenii*s a forest tree that thrives for example in the semi deciduous forests of Pobè or relic formations in Toffo. *Adenia lobata* was mostly collected in humid forests or tree savannas in southern Benin. The species that are

<sup>4</sup> Chi-square test did not yield a significant result.

most often found in fallows are generally herbaceous and include *Momordica charantia*, *Bidens pilosa*, *Launea taraxacifolia*, and *Tridax procumbens*.

## 2.2. Folk taxonomy

Local taxonomy is the foundation of community-level natural resource management. Knowledge of plant identification is transmitted from one generation to another, collectively accepted and legitimated as long as the resource is available and continues to be used.

Local taxonomy may use one or a combination of the following criteria in the identification process: 1) botanical traits (including shape, size, life form, taste, smell, colour, etc.); 2) plant status (wild or cultivated); 3) plant habitat (mostly used with wild plants); 4) type of utilizations and preparations (e.g. glutinous sauce, leafy sauce, etc.); or 5) analogy to widely known object. Those criteria are used to distinguish taxa at specific level as well as at infraspecific level. Classification of specimens into groups is also based on the same principles in which the major usage or the prominent botanical traits of the resource are used as reference for clustering.

Folk taxonomy is revealed by the nomenclature associated to each resource. Vegetables are locally referred to by a variety of names which usually differ from one sociolinguistic group to another. For instance in Bariba communities *Afonnu* refers to *Amaranthus cruentus* while *Afonnusuan* (which means red type of *Afonnu*) refers to *Celosia argentea*. *Amavivè* (*Vernonia amygdalina*) in the Fon community is the 'bitter leaf' which corresponds to the common name in English. The same species in Bariba communities is known as *Tuan*; in Idatcha communities it is called *Aroma* while Cotafon, Aizo and Mahi people call it *Aloman*. Here no direct translation or identification criteria are recognizable or associated with the resource. Although *Momordica charantia* has bitter leaves, communities do not use the bitterness attribute to name the plant. It is known as *Yinsinken* or *Tchaati* in Fon and Ifè communities respectively.

It was also observed that the status of the species can be used for identification or identification and naming purposes although the usage made of the plant may be similar. In the Boko community in Bensekou *Dossila* refers to *Ceratotheca sesamoides* while *Dossi* is *Sesamum indicum*. For these communities the two species which belong to two scientific genera are similar both in morphology and utility as reflected in the names which come from a common root. However, the two plants thrive in different habitats and under different management modes: one is wild and the second is cultivated.

Within the same genus species names can be without any clearly common attributes, and may be related to other important socio-cultural beliefs and understanding. For instance in Bariba communities *Corchorus tridens* is called *Yinrike* while *Corchorus olitorus* is known as *Yoyokun*, despite the two plants looking so similar and having similar uses. Fon people name *C. tridens* *Azataluga* and *C. olitorius* is *Ninnouwi*. The taste of a vegetable can also be translated in its name. In Cotafon communities (Assedji, Athiémé) *Hoslundia opposita* is referred to as *Wonanwè* (the vegetable with which no maize porridge will remain) which is an indication of how strongly appreciated this vegetable is. Local names and their scientific correspondence are alphabetically listed in Annex A which also shows the sociolinguistic groups and villages.

At a higher-scale level (i.e. above village level at an inter-village and regional level) folk taxonomy within a socio-linguistic group may vary, and be a source of confusion. Amongst the Bariba villages which were surveyed, for example, four referred to *Vitex doniana* as *Konnonku* (i.e. in Dabou, Kpassa, Banigri, Soubado), three named the species *Yankonnonku* (i.e. in Ganro, Zougou-Pantrossi, Tankougou). This slight change (adding of prefix *yan*) in the species name is attributable to variations of vocabulary at the community level and is not necessarily an indication of botanical change or ecological variation.

In some instances, a local name can refer to many different species. For example *Abotian* in Bariba communities can be *Ocimum americanum* or *O. basilicum*; *Etiologbo* (which means 'ear of a man' in Holly communities) refers to *Emilia sonchifolia* in Zalimey and *Emilia praetermissa* in Ayetedjou. *Egusi* or *Agushi* or *Goussi* usually refer to three species (*Lagenaria siceraria*, *Citrullus lanatus* and *Cucumeropsis mannii*) for which seeds are the main plant part used. *Toloman* refers to many species depending on the sociolinguistic group. For example this name is given to *Struchium sparganophorum* in Fon, Aizo and Mahi communities, whereas Aizo communities use the same name to describe *Ludwigia perennis* or *Blumea aurita*.

## DIVERSITY OF TRADITIONAL VEGETABLES

**Table 2.2:** Traditional vegetable species found in 13 villages (Adja, Aizo, Cotafon, Fon, Holly, Mahi and Ouémè socio-linguistic groups) located in the Guinean climatic zone of Benin

Socio-linguistic group	Adja		Aizo			Cotafon		Fon	Holly			Mahi	Ouémè
	Afomayi	Agnavo	Agbandonou	Gbeko	Gome	Assedji	Sohounme	Bognongon	Akpate	Ayetedjou	Zalimey	Zonmon	Gogbo
<b>Scientific name</b>													
<i>Abelmoschus esculentus</i>	√	√	√	√	√	√	√	√	√	√	√	√	√
<i>Acalypha ciliata</i>	√	√						√					
<i>Achyranthes aspera</i>													√
<i>Adansonia digitata</i>					√		√	√		√	√		
<i>Adenia lobata</i>								√					
<i>Afraegle paniculata</i>							√						
<i>Alternanthera brasiliiana</i>									√				
<i>Alternanthera sessilis</i>	√	√		√			√			√	√	√	√
<i>Amaranthus cruentus</i>	√	√	√	√	√	√	√	√	√	√	√	√	√
<i>Amaranthus dubius</i>								√				√	
<i>Amaranthus spinosus</i>		√				√	√		√	√		√	
<i>Amaranthus viridis</i>	√	√	√	√	√	√			√				√
<i>Aspilia africana</i>						√							
<i>Asystasia gangetica</i>		√	√						√				
<i>Basella alba</i>				√			√	√			√		√
<i>Bidens pilosa</i>		√											
<i>Blighia sapida</i>									√	√	√		
<i>Blumea aurita</i>				√									√
<i>Boerhavia diffusa</i>	√		√			√	√		√	√			

TRADITIONAL VEGETABLES OF BENIN

Socio-linguistic group	Adja		Aizo			Cotafon		Fon	Holly			Mahi	Ouémè
	Afomayi	Agnavo	Agbandonou	Gbeko	Gome	Assedji	Sohounme	Bognongon	Akpate	Ayetedjou	Zalimey	Zonmon	Gogbo
<b>Scientific name</b>													
<i>Bombax costatum</i>			√		√						√		
<i>Celosia argentea</i>	√		√	√	√	√	√	√	√		√	√	√
<i>Celosia trigyna</i>									√	√			√
<i>Centrosema plumieri</i>						√	√						
<i>Ceratotheca sesamoides</i>	√												
<i>Chassalia kolly</i>								√					
<i>Chromolaena odorata</i>										√			
<i>Chrysanthellum indicum</i>					√								
<i>Citrullus lanatus</i>	√	√	√	√				√	√	√	√		
<i>Cleome gynandra</i>	√	√				√			√	√	√	√	
<i>Cleome rutidosperma</i>		√				√	√			√	√	√	
<i>Cola millenii</i>					√								
<i>Colocasia esculenta</i>								√			√		
<i>Combretum mucronatum</i>							√						
<i>Corchorus olitorius</i>	√	√	√	√	√	√	√	√	√	√		√	√
<i>Corchorus tridens</i>	√	√			√		√	√			√	√	
<i>Crassocephalum crepidioides</i>				√						√			
<i>Crassocephalum rubens</i>		√			√	√		√			√	√	√
<i>Crateva adansonii</i>					√	√							
<i>Crescentia cujete</i>	√												
<i>Croton lobatus</i>		√							√	√	√	√	√



## DIVERSITY OF TRADITIONAL VEGETABLES

Socio-linguistic group	Adja		Aizo			Cotafon		Fon	Holly			Mahi	Ouémè
	Afomayi	Agnavo	Agbandonou	Gbeko	Gome	Assedji	Sohounme	Bognongon	Akpate	Ayetedjou	Zalimey	Zonmon	Gogbo
<b>Scientific name</b>													
<i>Cucumeropsis mannii</i>	√		√					√		√	√		
<i>Cucurbita moschata</i>										√			
<i>Cucurbita pepo</i>									√		√		
<i>Daniellia oliveri</i>	√												
<i>Deinbollia pinnata</i>	√	√			√	√	√	√		√			
<i>Eclipta prostrata</i>						√							
<i>Ehretia cymosa</i>	√												
<i>Emilia praetermissa</i>										√			
<i>Emilia sonchifolia</i>		√				√	√	√			√		
<i>Entada africana</i>						√							
<i>Ethulia conyzoides</i>				√									√
<i>Euphorbia heterophylla</i>				√									
<i>Ficus asperifolia</i>	√												
<i>Ficus polita</i>								√					
<i>Ficus sur</i>											√		
<i>Ficus thonningii</i>			√			√							
<i>Ficus trichopoda</i>			√										
<i>Fleurya aestuans</i>	√	√				√							
<i>Hallea stipulosa</i>								√					
<i>Heliotropium indicum</i>			√			√	√						√
<i>Hibiscus sabdariffa</i>								√					
<i>Hoslundia opposita</i>			√			√							
<i>Ipomoea aquatica</i>						√	√			√	√	√	
<i>Ipomoea batatas</i>									√	√	√		

TRADITIONAL VEGETABLES OF BENIN

Socio-linguistic group	Adja		Aizo			Cotafon		Fon	Holly			Mahi	Ouémè
	Afomayi	Agnavo	Agbandonou	Gbeko	Gome	Assedji	Sohounme	Bognongon	Akpate	Ayetedjou	Zalimey	Zonmon	Gogbo
<b>Scientific name</b>													
<i>Ipomoea triloba</i>	√												
<i>Irvingia gabonensis</i>								√		√	√		
<i>Jatropha curcas</i>									√	√			
<i>Jatropha gossypifolia</i>					√								
<i>Justicia anselliana</i>				√									√
<i>Lagenaria siceraria</i>	√				√			√	√	√	√		
<i>Launea taraxacifolia</i>	√	√	√		√	√	√	√	√	√	√	√	
<i>Ludwigia perennis</i>	√												
<i>Macrosphyra longistyla</i>			√	√			√						
<i>Manihot esculenta</i>	√	√	√	√	√	√	√	√	√	√	√	√	√
<i>Manihot glaziovii</i>					√	√	√						
<i>Margaritaria discoidea</i>			√										
<i>Melanthera scandens</i>		√				√	√						
<i>Melochia corchorifolia</i>				√									√
<i>Momordica cissoides</i>	√	√					√						
<i>Moringa oleifera</i>	√	√	√	√	√	√	√	√				√	√
<i>Ocimum basilicum</i>				√						√		√	
<i>Ocimum canum</i>												√	
<i>Ocimum gratissimum</i>	√	√	√	√	√	√	√	√	√	√	√	√	√
<i>Parkia biglobosa</i>								√		√		√	
<i>Passiflora edulis</i>						√	√						

## DIVERSITY OF TRADITIONAL VEGETABLES

Socio-linguistic group	Adja		Aizo			Cotafon		Fon	Holly			Mahi	Ouémè
	Afomayi	Agnavo	Agbandonou	Gbeko	Gome	Assedji	Sohounme	Bognongon	Akpate	Ayetedjou	Zalimey	Zonmon	Gogbo
<b>Scientific name</b>													
<i>Passiflora foetida</i>			√		√								
<i>Pergularia daemia</i>	√												
<i>Persicaria acuminata</i>				√									√
<i>Portulaca oleracea</i>													√
<i>Psophocarpus palustris</i>								√					
<i>Psychotria calva</i>			√										
<i>Rothmannia longiflora</i>			√										
<i>Senna occidentalis</i>			√			√		√					
<i>Senna sophera</i>					√		√						
<i>Sesamum indicum</i>												√	
<i>Sesamum radiatum</i>	√		√										
<i>Solanum aethiopicum</i>			√		√						√		
<i>Solanum americanum</i>						√			√	√	√	√	
<i>Solanum macrocarpon</i>	√	√	√	√	√	√	√	√	√	√	√	√	√
<i>Solanum scabrum</i>		√											
<i>Solanum villosum</i>		√				√			√				
<i>Spigelia anthelmia</i>						√	√		√				
<i>Stachytarpheta indica</i>	√	√	√	√	√	√	√	√		√	√	√	√
<i>Sterculia tragacantha</i>		√	√			√		√					
<i>Struchium</i>				√	√	√		√		√	√	√	√

TRADITIONAL VEGETABLES OF BENIN

Socio-linguistic group	Adja		Aizo			Cotafon		Fon	Holly			Mahi	Ouémè
	Afomayi	Agnavo	Agbandonou	Gbeko	Gome	Assedji	Sohounme	Bognongon	Akpate	Ayetedjou	Zalimey	Zonmon	Gogbo
<b>Village</b>													
<b>Scientific name</b>													
<i>sparganophorum</i>													
<i>Synedrella nodiflora</i>						√							
<i>Talinum triangulare</i>	√	√	√	√	√	√	√	√	√	√	√	√	√
<i>Telfairia occidentalis</i>			√	√	√			√	√		√	√	
<i>Telosma africana</i>					√								
<i>Terminalia glaucescens</i>		√											
<i>Terminalia superba</i>											√		
<i>Trichosanthes cucumerina</i>										√			
<i>Tridax procumbens</i>		√				√	√						
<i>Triplochiton scleroxylon</i>						√							
<i>Vernonia ambigua</i>			√										
<i>Vernonia amygdalina</i>	√	√	√	√	√	√	√	√	√	√	√	√	√
<i>Vernonia cinerea</i>								√					
<i>Vernonia colorata</i>			√		√					√			
<i>Vigna unguiculata</i>		√		√	√	√	√	√	√	√	√	√	√
<i>Vitex doniana</i>	√	√	√	√	√	√	√	√	√	√	√	√	√
<i>Xanthosoma maffafa</i>	√	√	√	√	√	√	√		√	√			√
<b>Total n species x village</b>	<b>35</b>	<b>36</b>	<b>36</b>	<b>29</b>	<b>34</b>	<b>45</b>	<b>37</b>	<b>39</b>	<b>31</b>	<b>41</b>	<b>37</b>	<b>30</b>	<b>29</b>

## DIVERSITY OF TRADITIONAL VEGETABLES

**Table 2.3 a:** Traditional vegetable species found in 10 villages (Anii, Bariba, Boko and Fon socio-linguistic groups) in the Sudano-Guinean climatic zone of Benin

Socio-linguistic group	Anii				Bariba				Boko	Fon
	Barikini	Kodowari	Penelan	Wellan	Banigri	Dabou	Kpassa	Soubado	Mareguinta	Sovlegni
<b>Scientific name</b>										
<i>Abelmoschus esculentus</i>	√	√	√	√	√	√	√	√	√	√
<i>Adansonia digitata</i>	√	√	√		√	√	√	√	√	√
<i>Adenia lobata</i>			√							
<i>Afraegle paniculata</i>					√					
<i>Afzelia africana</i>		√			√		√			
<i>Ageratum conizoides</i>	√			√						
<i>Alternanthera sessilis</i>	√	√	√							
<i>Amaranthus cruentus</i>	√	√	√		√	√	√		√	√
<i>Amaranthus viridis</i>					√					
<i>Ammannia baccifera</i>							√			
<i>Annona senegalensis</i>	√	√	√				√			
<i>Anogeissus leiocarpus</i>	√			√						
<i>Asystasia gangetica</i>	√		√							
<i>Basella alba</i>			√			√				
<i>Basilicum polystachyon</i>				√						
<i>Bidens pilosa</i>				√						
<i>Blighia sapida</i>	√			√	√	√	√		√	
<i>Boerhavia diffusa</i>						√		√		
<i>Boerhavia erecta</i>									√	
<i>Bombax costatum</i>	√	√	√	√						
<i>Bridelia ferruginea</i>		√								
<i>Calotropis procera</i>						√				
<i>Carica papaya</i>				√						
<i>Cayratia gracilis</i>	√		√	√						
<i>Ceiba pentandra</i>	√									

TRADITIONAL VEGETABLES OF BENIN

Socio-linguistic group	Anii				Bariba				Boko	Fon
	Barikini	Kodowari	Penelan	Wellan	Banigri	Dabou	Kpassa	Soubado	Mareguinta	Sovlegni
<b>Scientific name</b>										
<i>Celosia argentea</i>	√	√	√	√				√		√
<i>Celosia trigyna</i>					√			√	√	
<i>Ceratotheca sesamoides</i>		√	√		√	√	√	√	√	
<i>Chassalia kolly</i>				√						
<i>Chromolaena odorata</i>		√								
<i>Chrysanthellum indicum</i>			√							
<i>Cissus populnea</i>	√			√	√		√		√	√
<i>Citrullus lanatus</i>	√	√		√	√	√	√	√	√	√
<i>Cleome gynandra</i>					√					√
<i>Cochlospermum tinctorium</i>		√	√							
<i>Colocasia esculenta</i>	√	√		√	√	√	√			√
<i>Combretum comosum var. hispidum</i>				√						
<i>Conyza sumatrensis</i>		√								
<i>Corchorus aestuans</i>					√		√			
<i>Corchorus olitorius</i>	√	√	√	√	√	√	√	√	√	√
<i>Corchorus tridens</i>		√		√			√			√
<i>Crassocephalum rubens</i>				√	√					√
<i>Croton lobatus</i>								√		
<i>Cucumeropsis mannii</i>		√			√			√	√	√
<i>Cucurbita pepo</i>							√		√	
<i>Daniellia oliveri</i>	√			√						√
<i>Dicoma sessiflora</i>				√						
<i>Eclipta prostrata</i>	√									
<i>Ehretia cymosa</i>	√									
<i>Ficus sur</i>										√
<i>Ficus sycomorus</i>						√				
<i>Ficus vallis-choudae</i>		√								
<i>Fleurya aestuans</i>				√						



## DIVERSITY OF TRADITIONAL VEGETABLES

Socio-linguistic group	Anii				Bariba				Boko	Fon
	Barikini	Kodowari	Penelan	Wellan	Banigri	Dabou	Kpassa	Soubado	Mareguinta	Sovlegni
<b>Scientific name</b>										
<i>Gomphrena celosioides</i>	√									
<i>Grewia mollis</i>	√			√						√
<i>Heliotropium indicum</i>	√				√				√	
<i>Hexalobus monopetalus</i>										√
<i>Hibiscus asper</i>					√	√		√	√	
<i>Hibiscus sabdariffa</i>	√	√			√	√	√	√	√	√
<i>Hoslundia opposita</i>				√						
<i>Hybanthus enneaspermus</i>								√		
<i>Hydrolea macrosepala</i>						√				
<i>Ipomoea batatas</i>	√			√						
<i>Ipomoea fistulosa</i>									√	
<i>Ipomoea vagans</i>				√						
<i>Irvingia gabonensis</i>										√
<i>Justicia tenella</i>							√		√	
<i>Kedrostis foetidissima</i>							√			
<i>Lagenaria siceraria</i>					√	√	√	√	√	√
<i>Launea taraxacifolia</i>										√
<i>Leptadenia hastata</i>						√		√	√	
<i>Lippia multiflora</i>	√	√	√	√	√					√
<i>Ludwigia perennis</i>				√						
<i>Luffa aegyptiaca</i>		√				√				
<i>Maerua angolensis</i>								√		
<i>Manihot esculenta</i>		√		√	√	√	√		√	√
<i>Momordica charantia</i>	√	√							√	
<i>Momordica cissoides</i>				√						
<i>Momordica foetida</i>				√						
<i>Moringa oleifera</i>					√	√	√	√	√	√
<i>Nelsonia canescens</i>						√				

TRADITIONAL VEGETABLES OF BENIN

Socio-linguistic group	Anii				Bariba				Boko	Fon
	Barikini	Kodowari	Penelan	Wellan	Banigri	Dabou	Kpassa	Soubado	Mareguinta	Sovlegni
<b>Scientific name</b>										
<i>Ocimum americanum</i>							√			
<i>Ocimum basilicum</i>			√	√	√	√		√		
<i>Ocimum canum</i>										√
<i>Ocimum gratissimum</i>	√	√	√	√	√	√	√	√	√	√
<i>Pandiaka involucrata</i>	√									
<i>Parkia biglobosa</i>		√			√		√			√
<i>Paullinia pinnata</i>		√								
<i>Phyllanthus amarus</i>										√
<i>Physalis angulata</i>		√		√						
<i>Physalis minima</i>				√						
<i>Piliostigma thonningii</i>	√	√								
<i>Pupalia lappacea</i>	√									
<i>Secamone afzelii</i>				√						
<i>Senna alata</i>	√									
<i>Senna occidentalis</i>	√			√	√	√	√	√		√
<i>Sesamum indicum</i>	√				√		√			√
<i>Sesamum radiatum</i>						√		√		
<i>Solanum aethiopicum</i>										√
<i>Solanum americanum</i>	√			√					√	
<i>Solanum macrocarpon</i>	√	√	√		√	√	√	√	√	√
<i>Solanum scabrum</i>					√	√	√			
<i>Stachytarpheta indica</i>						√				√
<i>Sterculia tragacantha</i>	√	√	√							
<i>Stereospermum kunthianum</i>		√								
<i>Struchium sparganophorum</i>						√				
<i>Strychnos spinosa</i>		√								
<i>Stylochaeton hypogeum</i>					√		√			
<i>Talinum triangulare</i>	√	√	√	√	√	√			√	√

## DIVERSITY OF TRADITIONAL VEGETABLES

Socio-linguistic group	Aii				Bariba				Boko	Fon
	Barikini	Kodowari	Penelan	Wellan	Banigri	Dabou	Kpassa	Soubado	Mareguinta	Sovlegni
<b>Scientific name</b>										
<i>Trema orientalis</i>				√						
<i>Trichosanthes cucumerina</i>									√	
<i>Vernonia amygdalina</i>	√	√	√			√		√	√	√
<i>Vernonia colorata</i>										√
<i>Vigna unguiculata</i>	√			√	√		√		√	√
<i>Vitex doniana</i>	√	√	√	√	√	√	√	√	√	√
<i>Xanthosoma maffafa</i>		√	√					√		
<i>Zanthoxylum zanthoxyloides</i>	√	√								
<b>Total n species x village</b>	<b>42</b>	<b>38</b>	<b>24</b>	<b>41</b>	<b>35</b>	<b>33</b>	<b>31</b>	<b>26</b>	<b>30</b>	<b>37</b>

**Table 2.3 b:** Traditional vegetable species found in 10 villages (Idatcha, Ife, Kotokoli, Mahi, Tchabe socio-linguistic groups) located in the Sudano-Guinean climatic zone of Benin

Socio-linguistic group	Idatcha		Ife		Kotokoli		Mahi		Tchabe	
	Ileman	Kpakpaza	Ekpa	Tamba	Akarade	Tchimbere	Mondji	Vossa	Ikemon	Okunfo
<b>Scientific name</b>										
<i>Abelmoschus esculentus</i>	√	√	√	√	√	√	√	√	√	√
<i>Adansonia digitata</i>	√	√	√	√	√	√	√	√	√	
<i>Afzelia africana</i>						√				
<i>Aganope stuhlmannii</i>						√				
<i>Amaranthus cruentus</i>		√		√	√	√	√	√	√	√
<i>Annona senegalensis</i>					√	√				
<i>Anogeissus leiocarpus</i>										√
<i>Basella alba</i>	√									
<i>Blighia sapida</i>	√	√		√	√		√			√
<i>Boerhavia diffusa</i>	√	√								
<i>Bombax costatum</i>	√	√	√		√	√	√	√	√	√
<i>Bridelia ferruginea</i>						√				
<i>Burkea africana</i>						√				
<i>Ceiba pentandra</i>		√		√		√	√			
<i>Celosia argentea</i>	√		√		√	√	√	√	√	√
<i>Celosia trigyna</i>	√							√	√	√
<i>Ceratotheca sesamoides</i>	√	√	√	√	√	√	√		√	√
<i>Cissus populnea</i>	√	√	√	√			√	√	√	√
<i>Cissus quadrangularis</i>					√					
<i>Citrullus lanatus</i>	√	√	√	√	√	√	√	√		√
<i>Cleome gynandra</i>	√	√	√	√			√	√		
<i>Cnestis ferruginea</i>						√				
<i>Cochlospermum planchonii</i>		√	√				√		√	√
<i>Colocasia esculenta</i>	√	√	√				√	√	√	

## DIVERSITY OF TRADITIONAL VEGETABLES

Socio-linguistic group	Idatcha		Ife		Kotokoli		Mahi		Tchabe	
	Ileman	Kpakpaza	Ekpa	Tamba	Akarade	Tchimbere	Mondji	Vossa	Ikemon	Okunfo
<b>Scientific name</b>										
<i>Combretum collinum</i>							√			
<i>Combretum molle</i>						√				
<i>Combretum sericeum</i>						√				
<i>Corchorus olitorius</i>	√	√	√	√	√	√	√	√	√	√
<i>Corchorus tridens</i>	√	√	√	√			√	√		
<i>Crassocephalum rubens</i>	√	√	√	√			√	√	√	√
<i>Cryptolepis oblongifolia</i>						√				
<i>Cucumeropsis mannii</i>	√	√	√	√	√	√	√	√	√	√
<i>Cucurbita maxima</i>									√	
<i>Cucurbita pepo</i>	√								√	
<i>Dalbergia saxatilis</i>	√								√	
<i>Daniellia oliveri</i>					√	√				
<i>Desmodium ramosissimum</i>						√				
<i>Detarium microcarpum</i>						√				
<i>Emilia praetermissa</i>					√					
<i>Entada africana</i>						√				
<i>Erythrina senegalensis</i>						√				
<i>Fadogia cienkowskii</i>						√				
<i>Fadogia erythrophloea</i>					√					
<i>Ficus abutilifolia</i>									√	√
<i>Ficus asperifolia</i>			√			√				
<i>Ficus polita</i>							√			
<i>Gmelina arborea</i>						√				
<i>Grewia cissoides</i>						√				
<i>Grewia mollis</i>	√	√	√	√	√	√	√			
<i>Gymnosporia senegalensis</i>						√				
<i>Heliotropium indicum</i>							√			√
<i>Hexalobus monopetalus</i>						√				

TRADITIONAL VEGETABLES OF BENIN

Socio-linguistic group	Idatcha		Ife		Kotokoli		Mahi		Tchabe	
	Ileman	Kpakpaza	Ekpa	Tamba	Akarade	Tchimbere	Mondji	Vossa	Ikemon	Okunfo
<b>Village</b>										
<b>Scientific name</b>										
<i>Hibiscus asper</i>					√					
<i>Hibiscus sabdariffa</i>	√			√	√	√	√	√	√	√
<i>Ipomoea batatas</i>	√							√		
<i>Irvingia gabonensis</i>	√	√					√			
<i>Jatropha curcas</i>										√
<i>Justicia tenella</i>	√	√	√	√					√	√
<i>Lagenaria siceraria</i>	√	√	√	√			√	√	√	√
<i>Launea taraxacifolia</i>	√	√	√				√	√	√	√
<i>Lippia multiflora</i>	√	√	√	√			√	√	√	
<i>Lophira lanceolata</i>						√				
<i>Maerua angolensis</i>					√					
<i>Mangifera indica</i>						√				
<i>Manihot esculenta</i>	√	√	√	√	√		√	√	√	√
<i>Manihot glaziovii</i>							√			
<i>Melastomastrum segregatum</i>							√			
<i>Momordica charantia</i>			√	√			√		√	√
<i>Morinda lucida</i>							√			
<i>Moringa oleifera</i>	√	√		√			√	√	√	√
<i>Ochna schweinfurthiana</i>							√			
<i>Ocimum basilicum</i>	√	√		√			√			
<i>Ocimum canum</i>								√	√	√
<i>Ocimum gratissimum</i>	√	√	√	√	√	√	√	√	√	√
<i>Opilia amentacea</i>							√			
<i>Ozoroa pulcherrima</i>							√			
<i>Parkia biglobosa</i>					√		√	√		
<i>Pergularia daemia</i>	√		√	√						
<i>Phyllanthus amarus</i>			√	√						
<i>Piliostigma thonningii</i>							√			



## DIVERSITY OF TRADITIONAL VEGETABLES

Socio-linguistic group	Idatcha		Ife		Kotokoli		Mahi		Tchabe	
	Ileman	Kpakpaza	Ekpa	Tamba	Akarade	Tchimbere	Mondji	Vossa	Ikemon	Okunfo
<b>Scientific name</b>										
<i>Platostoma africanum</i>			√							
<i>Psorospermum febrifugum</i>						√				
<i>Ricinus communis</i>					√					
<i>Rourea coccinea</i>						√				
<i>Rytigynia senegalensis</i>						√				
<i>Securidaca longepedunculata</i>							√			
<i>Senna occidentalis</i>					√	√			√	√
<i>Sesamum indicum</i>								√		
<i>Smilax kraussiana</i>						√				
<i>Solanum aethiopicum</i>	√	√		√			√	√	√	√
<i>Solanum americanum</i>			√							
<i>Solanum erianthum</i>	√	√								
<i>Solanum macrocarpon</i>	√	√	√	√	√	√	√	√	√	√
<i>Stachytarpheta indica</i>	√	√				√				
<i>Sterculia tragacantha</i>	√	√	√	√	√		√	√		√
<i>Strychnos spinosa</i>						√				
<i>Swartzia madagascariensis</i>						√				
<i>Synaptolepis retusa</i>					√	√				
<i>Talinum triangulare</i>	√	√	√	√			√	√	√	√
<i>Terminalia brownii</i>						√				
<i>Uvaria chamae</i>	√	√								
<i>Vernonia amygdalina</i>	√	√	√	√	√	√	√	√	√	√
<i>Vernonia colorata</i>		√					√	√		
<i>Vigna unguiculata</i>	√	√			√		√	√		√
<i>Vitex doniana</i>	√	√	√	√	√	√	√	√	√	
<i>Xanthosoma maffafa</i>					√					
<b>Total n species x village</b>	<b>42</b>	<b>38</b>	<b>32</b>	<b>31</b>	<b>31</b>	<b>56</b>	<b>40</b>	<b>33</b>	<b>33</b>	<b>33</b>

**Table 2.4 a:** Traditional vegetable species found in 8 villages (Bariba, Boko and Dendi socio-linguistic groups) located in the Sudanian climatic zone of Benin

Socio-linguistic group	Bariba					Boko	Dendi		
	Village	Ganro	Keremou	Poto	Tankougou	Zougou-Pantrossi	Bensekou	Kargui	Torozogou
<b>Scientific name</b>									
<i>Abelmoschus esculentus</i>	√	√	√	√	√	√	√	√	√
<i>Acalypha ciliata</i>								√	
<i>Adansonia digitata</i>	√	√	√	√	√	√	√	√	√
<i>Amaranthus cruentus</i>	√					√	√		√
<i>Amaranthus spinosus</i>	√								
<i>Amaranthus viridis</i>					√	√		√	√
<i>Annona senegalensis</i>		√	√			√			
<i>Balanites aegyptiaca</i>									√
<i>Basella alba</i>							√		
<i>Blighia sapida</i>					√	√	√		
<i>Boerhavia diffusa</i>	√						√		
<i>Boerhavia erecta</i>								√	
<i>Bombax costatum</i>		√					√		
<i>Calotropis procera</i>						√			
<i>Canavalia ensiformis</i>				√					
<i>Cassia sieberiana</i>		√							
<i>Cassytha filiformis</i>				√			√		
<i>Cayratia gracilis</i>		√				√	√	√	
<i>Celosia argentea</i>	√				√	√	√	√	
<i>Celosia trigyna</i>	√					√	√		
<i>Ceratotherca sesamoides</i>	√	√	√	√	√	√	√	√	√
<i>Cissus populnea</i>		√			√		√		
<i>Citrullus lanatus</i>	√				√	√			

## DIVERSITY OF TRADITIONAL VEGETABLES

Socio-linguistic group	Bariba					Boko	Dendi		
	Village	Ganro	Keremou	Poto	Tankougou	Zougou-Pantrossi	Bensekou	Kargui	Torozogou
<b>Scientific name</b>									
<i>Cleome gynandra</i>								√	
<i>Cochlospermum tinctorium</i>								√	√
<i>Commelina benghalensis</i>							√		
<i>Corchorus olitorius</i>	√				√		√	√	√
<i>Corchorus tridens</i>			√		√			√	√
<i>Cucumeropsis mannii</i>	√				√	√			
<i>Cucurbita maxima</i>			√						√
<i>Cucurbita pepo</i>							√		
<i>Cyphostemma adenocaulis</i>							√		
<i>Daniellia oliveri</i>	√	√							
<i>Gmelina arborea</i>					√				
<i>Hibiscus asper</i>	√						√		
<i>Hibiscus sabdariffa</i>	√	√	√		√	√	√	√	√
<i>Hybanthus enneaspermus</i>	√								
<i>Ipomoea asarifolia</i>	√		√			√			
<i>Ipomoea batatas</i>	√		√		√	√	√		√
<i>Ipomoea vagans</i>									√
<i>Justicia tenella</i>	√					√	√		
<i>Lagenaria siceraria</i>	√					√	√	√	
<i>Lannea microcarpa</i>					√				
<i>Leptadenia hastata</i>	√	√			√	√		√	
<i>Manihot esculenta</i>	√		√			√	√		√
<i>Moringa oleifera</i>	√				√	√	√	√	√
<i>Nelsonia canescens</i>	√		√						
<i>Ocimum basilicum</i>	√						√		
<i>Ocimum gratissimum</i>	√				√	√		√	√
<i>Opilia amentacea</i>		√	√						

TRADITIONAL VEGETABLES OF BENIN

Socio-linguistic group	Bariba					Boko	Dendi		
	Village	Ganro	Keremou	Poto	Tankougou	Zougou-Pantrossi	Bensekou	Kargui	Torozogou
<b>Scientific name</b>									
<i>Parkia biglobosa</i>			√						
<i>Pistia stratiotes</i>					√				
<i>Portulaca oleracea</i>							√	√	√
<i>Senna obtusifolia</i>							√		
<i>Senna occidentalis</i>	√	√			√	√	√		
<i>Sesamum indicum</i>	√						√		
<i>Sesamum radiatum</i>	√	√			√	√			√
<i>Solanum aethiopicum</i>	√							√	
<i>Solanum americanum</i>	√		√			√	√	√	
<i>Solanum macrocarpon</i>	√		√		√	√	√		
<i>Sterculia setigera</i>		√	√						
<i>Stylochaeton hypogeum</i>	√	√	√				√		
<i>Triplochiton scleroxylon</i>							√		
<i>Vernonia amygdalina</i>	√				√	√	√	√	
<i>Vernonia colorata</i>		√							
<i>Vigna unguiculata</i>							√		
<i>Vitellaria paradoxa</i>							√		
<i>Vitex doniana</i>	√	√	√		√	√	√		√
<i>Xanthosoma maffafa</i>	√					√			
<b>Total n species x village</b>	<b>35</b>	<b>18</b>	<b>20</b>	<b>24</b>	<b>29</b>	<b>37</b>	<b>21</b>	<b>19</b>	

## DIVERSITY OF TRADITIONAL VEGETABLES

**Table 2.4 b:** Traditional vegetable species found in 8 villages (Dendi/Djerma, Gourmantche, Otammari, and Wama socio-linguistic groups) located in the Sudanian climatic zone of Benin

<b>Socio-linguistic group</b>	Dendi/ Djerma	Gourmantche			Otammari		Wama	
<b>Village</b>	Garou-Tedji	Batia	Loumbou-Loumbou	Tanongou	Moupemou	Tagaye	Cotiakou	Pouya
<b>Scientific name</b>								
<i>Abelmoschus esculentus</i>	√	√	√	√	√	√	√	√
<i>Acalypha ciliata</i>		√						
<i>Acmella uliginosa</i>		√		√			√	√
<i>Adansonia digitata</i>	√	√	√	√	√	√	√	√
<i>Afzelia africana</i>		√						
<i>Amaranthus cruentus</i>				√		√	√	√
<i>Amaranthus dubius</i>		√						√
<i>Amaranthus spinosus</i>		√	√	√	√			
<i>Amaranthus viridis</i>		√						
<i>Ammannia baccifera</i>								√
<i>Annona senegalensis</i>					√	√		
<i>Asystasia gangetica</i>				√				
<i>Basella alba</i>		√		√			√	√
<i>Blighia sapida</i>					√	√	√	√
<i>Boerhavia diffusa</i>							√	
<i>Boerhavia erecta</i>		√			√	√		
<i>Bombax costatum</i>		√	√	√	√	√	√	√
<i>Cayratia gracilis</i>				√		√	√	
<i>Ceiba pentandra</i>			√					
<i>Celosia argentea</i>				√	√	√		
<i>Celosia trigyna</i>				√				
<i>Celtis toka</i>			√					
<i>Ceratotheca sesamoides</i>	√	√	√		√	√	√	

TRADITIONAL VEGETABLES OF BENIN

Socio-linguistic group	Dendi/ Djerma	Gourmantche			Otammari		Wama	
	Village Garou-Tedji	Batia	Loumbou- Loumbou	Tanongou	Moupemou	Tagaye	Cotiakou	Pouya
<b>Scientific name</b>								
<i>Chrysanthellum indicum</i>								√
<i>Cissus palmatifida</i>					√		√	
<i>Cissus populnea</i>		√		√	√			
<i>Citrullus lanatus</i>		√		√	√	√		√
<i>Cleome gynandra</i>								√
<i>Cleome rutidosperma</i>		√		√	√	√	√	
<i>Cochlospermum planchonii</i>		√					√	
<i>Cochlospermum tinctorium</i>	√		√					√
<i>Colocasia esculenta</i>					√			√
<i>Commelina benghalensis</i>		√		√		√		
<i>Commelina diffusa</i>				√				
<i>Corchorus olitorius</i>		√		√	√	√	√	√
<i>Corchorus tridens</i>	√	√	√	√	√	√		√
<i>Crassocephalum rubens</i>							√	√
<i>Crotalaria macrocalyx</i>		√		√			√	
<i>Croton lobatus</i>						√		
<i>Cucurbita maxima</i>			√			√		
<i>Cucurbita pepo</i>		√		√	√	√		√
<i>Cymbopogon giganteus</i>					√	√		
<i>Ficus ingens</i>		√				√		
<i>Ficus thonningii</i>			√					
<i>Fleurya aestuans</i>						√		
<i>Grewia mollis</i>		√		√	√	√		
<i>Heliotropium indicum</i>								√
<i>Hibiscus asper</i>		√		√	√	√	√	√
<i>Hibiscus sabdariffa</i>	√	√	√	√	√	√	√	√
<i>Ipomoea argenteaurata</i>		√						



## DIVERSITY OF TRADITIONAL VEGETABLES

<b>Socio-linguistic group</b>	Dendi/ Djerma	Gourmantche			Otammari		Wama	
<b>Village</b>	Garou-Tedji	Batia	Loumbou-Loumbou	Tanongou	Moupemou	Tagaye	Cotiakou	Pouya
<b>Scientific name</b>								
<i>Ipomoea batatas</i>					√	√		√
<i>Ipomoea mauritiana</i>				√				
<i>Ipomoea triloba</i>					√	√	√	√
<i>Ipomoea vagans</i>								√
<i>Jatropha gossypifolia</i>						√		
<i>Justicia insularis</i>		√						√
<i>Justicia tenella</i>			√		√		√	√
<i>Lagenaria siceraria</i>		√					√	√
<i>Launaea nudicaulis</i>							√	
<i>Luffa acutangula</i>				√		√		
<i>Macrosphyra longistyla</i>				√				
<i>Manihot esculenta</i>			√			√		√
<i>Margaritaria discoidea</i>					√	√		
<i>Mikania chenopodifolia</i>				√				
<i>Momordica charantia</i>								√
<i>Moringa oleifera</i>	√		√	√			√	√
<i>Ocimum basilicum</i>		√			√			
<i>Ocimum gratissimum</i>				√	√	√		√
<i>Parkia biglobosa</i>						√	√	
<i>Plumbago zeylanica</i>								√
<i>Portulaca oleracea</i>	√	√	√	√				
<i>Senna obtusifolia</i>		√	√	√				
<i>Senna occidentalis</i>			√		√	√		√
<i>Sesamum alatum</i>	√		√					
<i>Sesamum indicum</i>		√	√	√	√	√	√	√
<i>Sesamum radiatum</i>	√							
<i>Sida alba</i>								√

TRADITIONAL VEGETABLES OF BENIN

Socio-linguistic group	Dendi/ Djerma	Gourmantche			Otammari		Wama	
Village	Garou-Tedji	Batia	Loumbou-Loumbou	Tanongou	Moupemou	Tagaye	Cotiakou	Pouya
<b>Scientific name</b>								
<i>Solanum aethiopicum</i>						√		√
<i>Solanum americanum</i>				√	√		√	√
<i>Solanum macrocarpon</i>		√		√	√	√		
<i>Solanum scabrum</i>								√
<i>Solanum verbacifolium</i>		√						
<i>Sphenostylis schweinfurthii</i>							√	
<i>Stachytarpheta indica</i>								√
<i>Strychnos innocua</i>							√	√
<i>Talinum triangulare</i>						√		√
<i>Tamarindus indica</i>		√					√	
<i>Trichosanthes cucumerina</i>				√				
<i>Vernonia amygdalina</i>				√	√	√	√	√
<i>Vernonia cinerea</i>					√			
<i>Vernonia galamensis</i>						√		
<i>Vigna unguiculata</i>		√	√	√	√	√	√	√
<i>Vitex doniana</i>		√		√	√	√	√	
<i>Zanthoxylum zanthoxyloides</i>				√	√	√	√	√
<b>Total n species x village</b>	<b>10</b>	<b>37</b>	<b>21</b>	<b>39</b>	<b>36</b>	<b>43</b>	<b>33</b>	<b>44</b>

## Chapter 3 – Consumption and potential nutritional contribution of traditional vegetables in Benin

MW Pasquini & B Ambrose-Oji

Traditional vegetables are widely consumed in Benin, and are generally prepared as sauces to accompany a main staple. Because of the numerous socio-linguistic groups living in diverse agro-ecological and climatic conditions, a wide range of species are used. However, it is only recently that studies have started to document the diversity and patterns of use of these vegetables (Darwin Initiative 15/003 surveys; Adjatin, 2006; Dansi *et al.*, 2008).

Using data collected in the course of the Darwin Initiative 15/003 surveys, this chapter provides an overview of the patterns of use of these vegetables, in 51 villages representing 19 socio-linguistic groups, and in three urban locations, Porto Novo, Dassa-Zoumè and Parakou. It will also consider the potential nutritional contributions of these vegetables, and highlight areas for further research and development.

### 3.1 Species used in rural areas of Benin

An impressive diversity of plant species are still being used as vegetables in rural communities across Benin, as shown in Table 2.2, 2.3 a, 2.3 b, 2.4 a and 2.4 b and as discussed in Chapter 2.

Discussions with mixed gender focus groups located in different phytogeographic zones identified a range of different species. In the Guinean zone between 29 and 45 species were identified depending on village (Table 2.2), 24 and 56 species (Table 2.3 a and 2.3 b) in the Sudano-Guinean zone and between 18 and 44 species (Table 2.4 a and 2.4 b) in the Sudanian zone. Overall, a total of 245 species were identified, and the most widely found in each phytogeographic zone are presented in Figures 3.1a, 3.1b and 3.1c. The three zones have quite a number of species in common, which are cultivated, for example: *Abelmoschus esculentus*, *Amaranthus cruentus*, *Corchorus olitorius*, *Manihot esculenta*, *Ocimum gratissimum*, *Solanum macrocarpon*, and *Vernonia amygdalina*. However, in terms of prevalence of wild species, there are marked differences between the zones. For instance: *Telfairia occidentalis* and *Launea taraxacifolia* are only widely found in the Guinean zone; *Lippia multiflora* and *Cissus populnea* are mostly found in the Sudano-Guinean region; while *Senna occidentalis* is found mainly in the Sudanian region. *Adansonia digitata*, *Bombax costatum* and *Ceratotheca sesamoides* are widespread in villages in the Sudano-Guinean and the Sudanian regions, but not in the Guinean zone.

Not all of the species reported by the village focus groups are used throughout the year, neither are they necessarily used on a regular basis. Figures 3.2a, 3.2b and 3.2c show differences in seasonal consumption of indigenous vegetables, listing the top five most frequently consumed vegetables, in each of phytogeographic zones during the dry season, the rainy season or those utilised throughout the year.

The three figures show that *Abelmoschus esculentus* and *Corchorus* species are widely used throughout the country, during the rainy season or even year-round, depending on the village. *Vitex doniana* is also a very popular vegetable, recorded in all three zones, but this species is generally regarded as a dry season resource. Other species are more clearly linked to the phytogeographic zones. *Solanum macrocarpon* was amongst the five most frequently used vegetables in all three zones, but is particularly popular in the Guinean villages, where it is used throughout the year. *Adansonia digitata*, *Hibiscus sabdariffa* and *Ceratotheca sesamoides* are key vegetables for the Sudanian zone at all times of year. *Launea taraxacifolia* is a rainy season vegetable, found to be a widespread resource only in the Guinean zone (recorded in ten out of 13 villages).

There are other species which are widely known, but used only occasionally or rarely, in specific circumstances. Figures 3.3 and 3.4 show the top five of these for each zone. For example, *Ocimum gratissimum* is reputed for its health benefits, but it is not consumed on a regular basis in any of the three zones. *Solanum americanum* and *Senna occidentalis* are used rarely, but are reasonably widespread in villages in the Sudanian zone because of their medicinal properties. Wild vegetables can play an important role when other sources of nutrition are limited, for example during the 'hunger gap' (*soudure*) between the end of the previous years agricultural stocks and harvest of the new season's crop, or during years of drought when certain species are used as 'famine foods'.

Belonging to a particular socio-linguistic group undoubtedly influences vegetable consumption patterns. However, there are noticeable variations from village to village of the same socio-linguistic group between, but also within, phytogeographic zones. Data from the Bariba group show, that whilst there are a number of species which are found in only a few, or even just a single village (e.g. *Luffa aegyptiaca* which was only found in Dabou or *Cayratia gracilis* which was only found in Keremou), they are reported to be consumed frequently<sup>5</sup>.

Figures 3.5 to 3.8 present data collected through individual questionnaires rather than focus groups. Figure 3.5 shows the traditional vegetables used by the majority of respondents in the three zones. The results present a similar picture, substantiating the focus group data, although there are some small differences in the case of a few species. For example, *Moringa oleifera* was reported to be frequently used by the focus groups in seven out of 13 Guinean villages (Figure 3.1), but it was not one of the top ten most widely used species by individual respondents (Figure 3.5). Indeed only 17 out of approximately 80 respondents reported using *M. oleifera*.

Figures 3.6, 3.7 and 3.8 show the top ten most widely cited vegetables by individual respondents in two villages of the Fon, Idatcha and Bariba socio-linguistic groups. These results show the variation between villages of the same socio-linguistic group, both between phytogeographic zones (e.g. the Fon villages) and within them (e.g. the Idatcha and Bariba).

<sup>5</sup> It is cautioned that the data collection approach used does not record absolute species richness in a socio-linguistic community or even in a village.

### 3.2. Species used in urban areas of Benin

The patterns in the urban areas are somewhat different to the rural locations. Figure 3.9 shows the most widely used vegetables amongst respondents surveyed in the three cities of Porto Novo, Dassa-Zoumè and Parakou<sup>6</sup>. Only four species were commonly used in all three cities, with varying degrees of importance, these were *Abelmoschus esculentus*, *Solanum macrocarpon*, *Amaranthus cruentus* and *Corchorus olitorius*. In Porto Novo consumer preferences were largely restricted to the four common species mentioned above, and *Celosia argentea*. In Dassa-Zoumè in addition to those used in Porto Novo, an important number of consumers reported using *Launea taraxacifolia*, *Ocimum gratissimum* and *Vitex doniana*. In Parakou consumers' diets were dominated by three species which all have glutinous properties: *A. esculentus*, *Sesamum radiatum* or *S. indicum* and *Ceratotheca sesamoides*. The latter two are very similar in terms of taste and appearance. Consumers in Parakou had different names to describe the dry and fresh forms of both the fruit and the leaves of *A. esculentus*. *Hibiscus sabdariffa*, which was not reported in either of the two other cities, was also an important vegetable in this city.

Comparing the results for the urban and rural areas suggests that certain vegetable resources may not be as available to, or are too expensive for, urban consumers. For example, *Adansonia digitata* and *Vitex doniana* are popular in the Bariba villages, but in Parakou a rather small proportion of consumers used these vegetables. Similarly, *Launea taraxacifolia*, which is widely used in villages in the Guinean zone, was not recorded in Porto Novo.

Consumers in the three cities were also asked if there were any vegetables that they were acquainted with, but did not use, and if so, what their reasons were. The answers were then classified into broad categories, and these are shown in Figure 3.10 expressed as a percentage of the overall number of answers given in each city (the much smaller total number of answers in Parakou should be noted). Though a range of answers were given in all three cities, it is interesting to note how 38% of reasons given in Porto Novo centred on stomach complaints. In Dassa-Zoumè the main reasons given were food taboo and dislike of the texture, taste, or smell (both just over 35%).

Overall respondents cited 30 species that they did not use. However, six species accounted for 61% of all responses. These were *Celosia argentea* (35), *Solanum macrocarpon* (22), *Abelmoschus esculentus* (cited 17 times), *Talinum triangulare* (15), *Adansonia digitata* (13) and *Vitex doniana* (11).

The main reasons respondents in each city gave for not using specific species are shown in Figure 3.11. The data show how the non-consumption of certain species can be tied to specific environments and for specific reasons. For example, *Solanum macrocarpon* was mostly rejected by consumers located in Dassa-Zoumè, and the main reason was that the species was a taboo for the respondent's family. *Celosia argentea* was also frequently rejected in Porto Novo, the primary cause being stomach upsets. The species was also

<sup>6</sup> See Chapter 1 for information on the socio-linguistic and income status characteristics of the survey sample in the three cities.

rejected by quite a number of consumers in both Porto Novo and Dassa-Zoumè because of taste preferences.

### 3.3. The use of traditional versus non-traditional species

Based on the individual questionnaire survey data, the 18 villages and three cities exhibited quite striking differences in terms of households' use of traditional versus non-traditional<sup>7</sup> species.

In the Sudanian and the Sudano-Guinean zones it was very common for village respondents to only use traditional vegetables. On average this was the case for 73% and 93% of respondents respectively in the two zones. In the Guinean zone the situation varied enormously from village to village. In Bognongon and Zonmon respondents only used traditional vegetables, but this was not the case for the remaining four villages, where the majority of respondents used both traditional and non-traditional vegetables.

The urban settings reflect the rural trends. In Porto Novo, all respondents used a mixture of traditional and non-traditional vegetables, in both seasons. However, in Dassa-Zoumè and Parakou at least 85% and 60% of respondents, respectively, only used traditional vegetables.

Figures 3.12, 3.13, 3.14 and 3.15 show how many respondents used different numbers of traditional and non-traditional, and only traditional, vegetables in periods of high and low availability<sup>8</sup>, in the three cities. Figures 3.16 and 3.17 combine the data to show how the use of specific numbers of traditional vegetables relates to the overall use of vegetables in each city in the high and low availability periods (e.g. Figure 3.16 shows that for eight consumers in Porto Novo traditional species made up three of the five vegetables they used overall in a week, whereas for eight consumers in Dassa-Zoumè the three vegetables they used were all traditional species).

The data indicate that in the high availability period, overall vegetable diversity was highest in Porto Novo, followed by Parakou and Dassa-Zoumè (Figure 3.12). The diversity declines in the low availability period for all cities, Dassa-Zoumè exhibiting the most striking downward change (Figure 3.13). Figure 3.14, however, clearly shows that in terms of traditional vegetables the diversity in Porto Novo is much lower than in the other two cities. In the low availability period, all cities see a decline in the diversity of

<sup>7</sup> As explained in Chapter 1, in this context the term non-traditional refers to species such as *Daucus carota* (carrot), *Lactuca sativa* (lettuce), *Phaseolus vulgaris* (French beans) and *Brassica oleracea* (headed cabbage). Locally, these species are often seen as 'exotic', but according to the classification used by Bosch *et al.* (2005) these are 'adapted' species. To avoid any confusion, particularly in the section on nutritional contributions of traditional vegetables, the term 'non-traditional' has been used rather than exotic. Species such as *Lycopersicon esculentum* (tomato) and *Allium cepa* (onion) are considered locally as traditional, but it was specified to individual respondents that information was not being sought on these two species.

<sup>8</sup> In Porto Novo most respondents stated that the high availability season falls between February and June, whereas the low availability season is between August and October. This is linked to the fact that Porto Novo is mostly supplied by the lowlying flood land in the Oueme Valley, where production takes place once flood waters recede. This differs from the situation in Dassa-Zoumè and Parakou where the high availability season coincides with the rainy season, roughly from April to October, and the low availability period is the dry season during the remainder of the year.



traditional vegetables, and Dassa-Zoumè exhibits the greatest decline (Figure 3.15). As can be derived from Figure 3.16, non-traditional species are widely used by respondents in Porto Novo, equalling or surpassing traditional species in number; whereas for respondents in Parakou, and Dassa-Zoumè particularly, traditional vegetables are exclusively or in great majority used. Figure 3.17 in the low availability season shows the same city patterns.

### 3.4. Nutritional contributions of traditional vegetables

The most comprehensive and up-to-date review of the research on the nutritional contributions of traditional vegetables in Africa is provided by Yang and Keding (2009) who examined available information on nutritional values of indigenous and adapted vegetables, as well as existing studies on vegetable consumption in Africa (patterns of consumption in rural and urban areas, amounts, frequency, seasonality, changes in consumer behaviour, preservation and cooking practices).

The authors compare the nutrient contents of indigenous (i.e. native to Africa), adapted (introduced long ago and widely adapted) and exotic (recently introduced) vegetable species, classified as priorities for Africa by Bosch *et al.* (2005) by collating data obtained from Grubben and Denton (2004), AVRDC (AVRDC 2002; 2004; unpublished data) and the USDA nutrient database (USDA).

Table 3.1, which is derived from this work, presents the nutrient contents of select species that are widely used in Benin. Four non-traditional species (classified as adapted under PROTA's definition) are included as comparison.

As the table clearly shows, *Moringa oleifera* is an exceptionally nutritious vegetable, with the highest values of all nutrients (except folates, which were not determined). *Corchorus olitorius* is also a very good source of most nutrients. In general terms, the traditional leafy vegetables have relatively high amounts of  $\beta$ -carotene and iron content, whereas these are much lower in the fruit vegetables, and in the non-traditional vegetables (except carrot which has high levels of  $\beta$ -carotene). *Amaranthus dubius* has higher nutrient values than *Amaranthus cruentus*. However, in Benin, the latter species is the most widely used. *Celosia argentea* is particularly rich in folates.

Some of these traditional vegetables may also have other health-giving benefits. Species such as *Adansonia digitata*, *Corchorus olitorius*, *Moringa oleifera* and *Vigna unguiculata* are rich in flavonoids which have anti-oxidant function; *Corchorus olitorius*, *Vigna unguiculata* and *Momordica charantia* can be used as anti-diabetic agents as they show hypoglycemia activity (Yang and Keding, 2009).

Even though research on the nutritional value of indigenous vegetables is now emerging, it is unfortunate that at the present time, little can be said about the nutritional contribution of traditional vegetables to the diets of people in Benin. Whilst it is encouraging to find that most of the species which are popular and used widely are rich in nutrients, information and up-to-date studies on the amounts of vegetables actually consumed, and the effect of preservation, preparation and cooking methods on nutritional content and bioavailability remains extremely limited.

**Table 3.1:** Nutrient values of traditional and non-traditional vegetables of importance in Benin

Species and status	Plant part	Source	DM %	Pro g	A mg	C mg	E mg	F µg	Ca mg	Fe mg	Zn mg
<b>Traditional</b>											
<i>Abelmoschus esculentus</i> (indigenous)	Fruit	AVRDC	8.9	1.8	0.4	37	0.5	32	44	0.9	0
<i>Adansonia digitata</i> (indigenous)	Leaf	AVRDC	18	3.8	2.7	69	3.5	35	264	2	0.6
<i>Amaranthus cruentus</i> (adapted)	Leaf	AVRDC	9.4	3.2	1.8	36	1.1	52	305	3.8	0.7
<i>Amaranthus dubius</i> (adapted)	Leaf	AVRDC	11.2	3.5	3.1	78	2.1	82	582	3.4	1.5
<i>Celosia argentea</i> (indigenous)	Leaf	AVRDC	10.4	3.7	4.1	35	1.4	159	162	2.3	0.3
<i>Ceratotheca sesamoides</i> (indigenous)	Leaf	PROTA	19	4.2		28			300	3.2	
<i>Citrullus lanatus</i> (indigenous)	Fruit	USDA	8.6	0.6	0.3	8	0.1	3	7	0.2	0.1
<i>Corchorus olitorius</i> (indigenous)	Leaf	AVRDC	15	4.8	4.7	105	3.6	92	259	4.5	0.4
<i>Crassocephalum crepidioides</i> and <i>C. rubens</i> (indigenous)	Leaf	PROTA	20.1	3.2					260		
<i>Cucurbita maxima</i> (adapted)	Fruit	AVRDC	7.1	2.3	0.2	18	1.7	36	65	1.1	0.5
<i>Cucurbita moschata</i> (adapted)	Fruit	USDA	13.6	1.0	4.2	21	1.4	27	48	0.7	0.2
<i>Hibiscus sabdariffa</i> (indigenous)	Leaf	AVRDC	10.8	2.5	2.5	28	1.9		183	1.2	
<i>Lactuca taraxacifolia</i> (indigenous)	Leaf	PROTA	15.7	3.2					326		
<i>Moringa oleifera</i> (adapted)	Leaf	AVRDC	24.9	8.6	19.7	274	13.4		584	10.7	2.8
<i>Solanum macrocarpon</i> (indigenous)	Leaf	PROTA	14.4	4.6					391		
<i>Solanum macrocarpon</i> (indigenous)	Fruit	PROTA	11	1.4					13		
<i>Talinum triangulare</i> (indigenous)	Leaf	AVRDC	6.2	1.9	3.3	3	0.9		41	1	
<i>Vigna unguiculata</i> (indigenous)	Leaf	AVRDC	11.8	4.5	2.9	75	3.0	123	275	1.9	0.6
<i>Vernonia amygdalina</i> (indigenous)	Leaf	PROTA	17.4	5.2		51			145	5	
<b>Non-traditional</b>											
<i>Brassica oleracea</i> (adapted)	Leaf	PROTA	9.9	1.7	0.4	49		75	52	0.7	0.3
<i>Daucus carota</i> (adapted)	Root	USDA	11.7	0.9	8.3	6	0.7	19	33	0.3	0.2
<i>Lactuca sativa</i> (adapted)	Leaf	USDA	4.4	0.9	0.3	3	0.2	29	18	0.4	0.2
<i>Phaseolus vulgaris</i> (adapted)	Fruit	PROTA	9.3	1.9	0.3	12		80	36	1.2	0.2

**Source:** Adapted from Yang and Keding (in press). Indigenous or adapted status as per PROTA (2005). Nutrient content values are based on 100 g fresh weight of edible portion; DM: dry matter; Pro: protein; A: β-carotene; C: vitamin C; E: α-tocopherol; F: folates



A recent study by Sodjinou *et al.* (2007) which examines the dietary patterns of adults in Cotonou, exploring the links with diet quality (scoring dietary diversity, micronutrient adequacy and healthfulness) and socio-demographics (socio-economic status and urbanization status), reports a reasonably high consumption of vegetables. Subjects with a “traditional” diet consumed on average 110.4g per day (130.1 standard deviation) of green leafy vegetables and 189.6 g per day (130.5 s.d.) of other vegetables; whereas subjects with a “transitional” diet consumed 114.4 g per day (125.9 s.d.) of green leafy vegetables and 226.3 g per day (160.6 s.d.) of other vegetables<sup>9</sup>. However, the study does not distinguish between different types of vegetables.

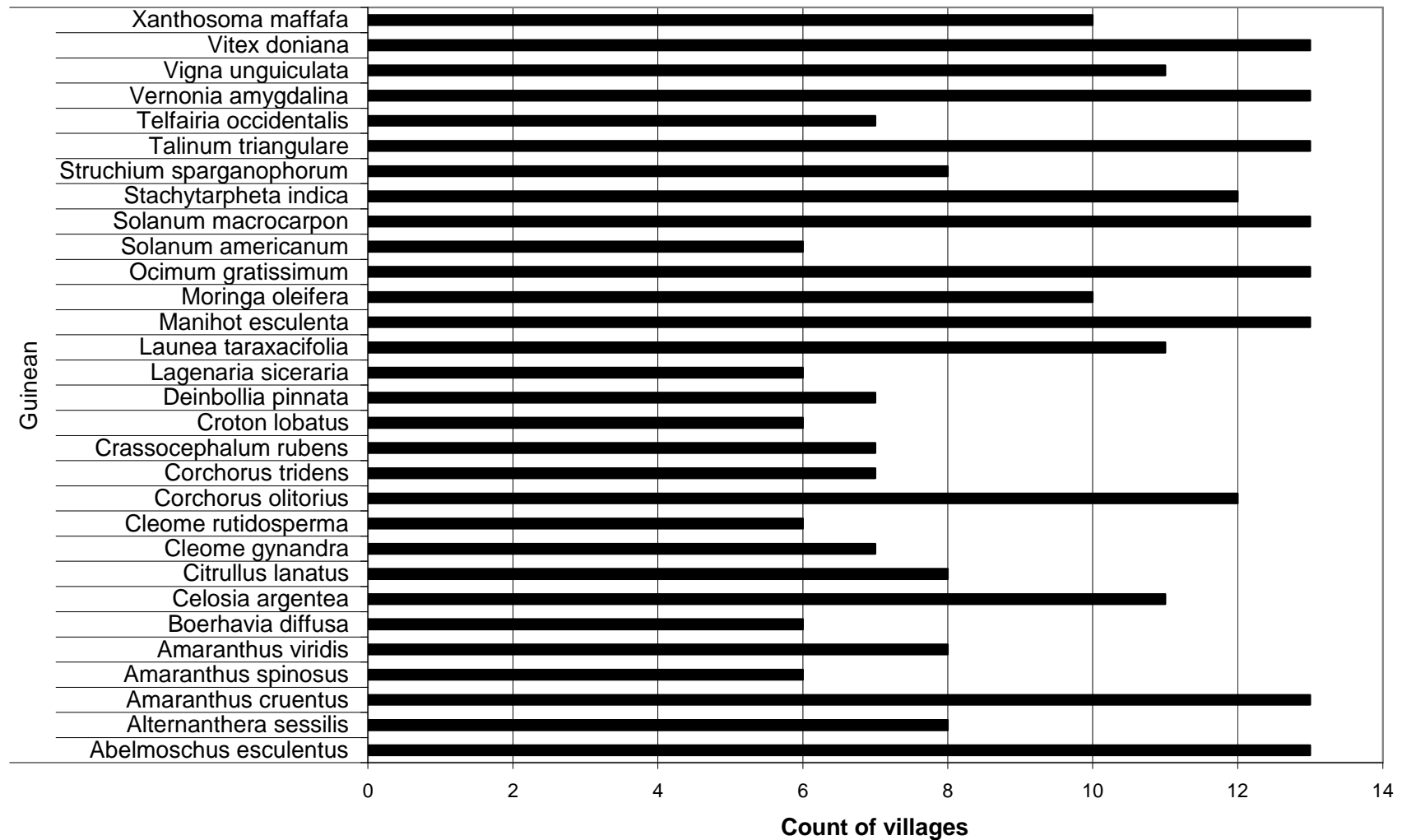
Another study in Cotonou reported an average vegetable consumption of 319.49 g per day (Guidi, 2007). However, the main contribution came from tomato (165.89 g), onion (38.32 g) and pepper (22.24). Whilst these three vegetables were eaten six days or every day of the week, depending on the neighbourhood, traditional vegetables (*Abelmoschus esculentus*, *Amaranthus cruentus*, *Corchorus olitorius*, *Solanum macrocarpon*, *Vernonia amygdalina*, *Vigna unguiculata* and *Vitex doniana*), were only eaten once or twice a week. The author cautioned that the study took place during the period of high vegetable availability, and particularly high tomato availability.

There is therefore an important need for further studies to distinguish between the contributions of traditional and non-traditional species in different environments (both physical and social) across the country, and at different times of year. The fact that the diversity of species used in the low availability season declines so dramatically compared to the high availability season in Dassa-Zoumè (two-three species for the majority of respondents, down from five-six – Darwin Initiative 15/003 surveys), for example, is a particular cause for concern.

Furthermore, as Benin does not have a national food composition table, a concerted effort on developing food composition data, which should pay particular attention to wild resources and should be based on processed/cooked foods, is undoubtedly an urgent priority (Sodjinou, 2006).

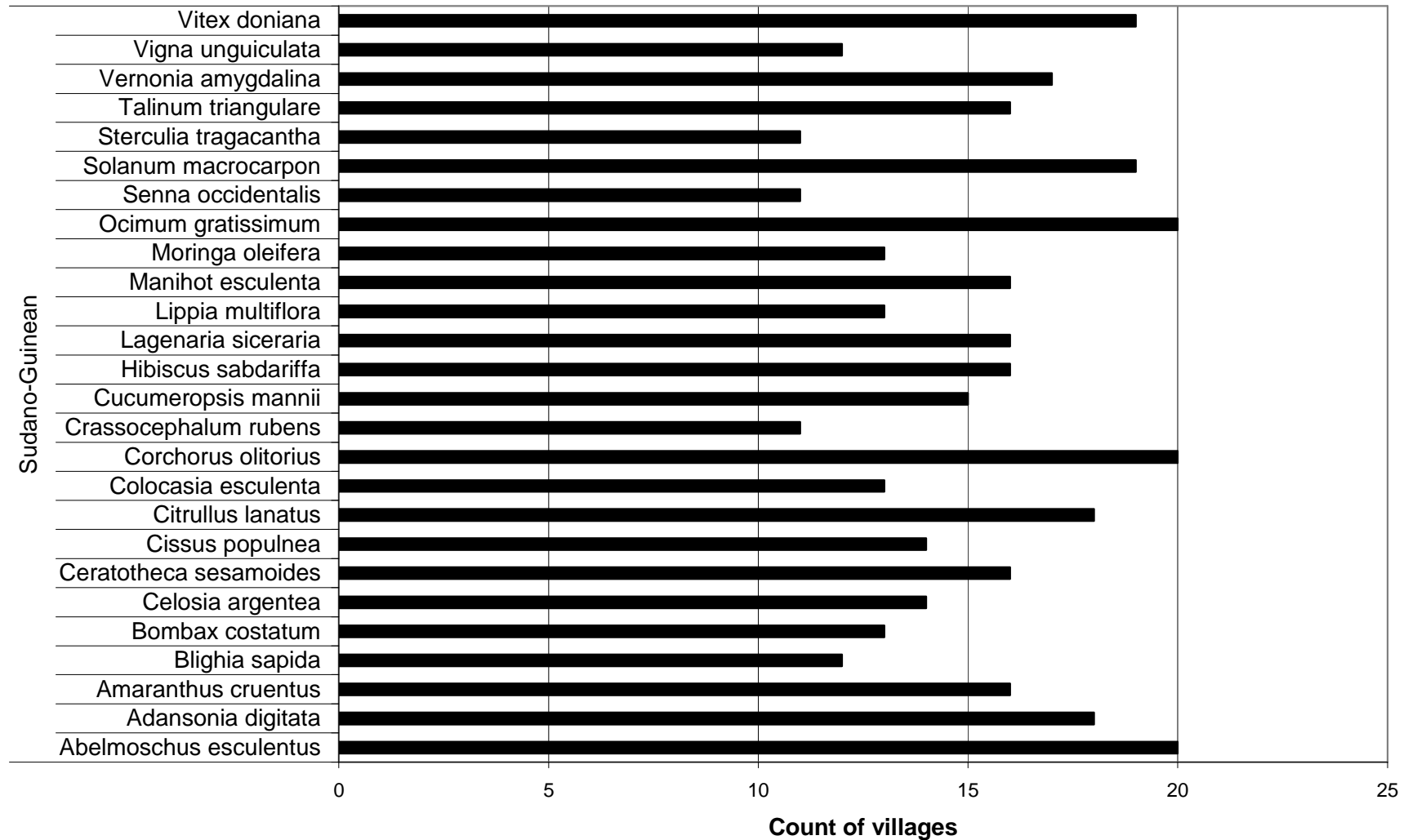
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<sup>9</sup> The World Health Organisation/Food and Agriculture Organization recommend that 400 g of fruits and vegetables should be consumed per day (WHO, 2003). In Cotonou, urban consumers do not meet this guideline mainly because fruit consumption in both the traditional and transitional groups is very low (15.7 g and 8.2 g, respectively; Sodjinou *et al.*, 2007).

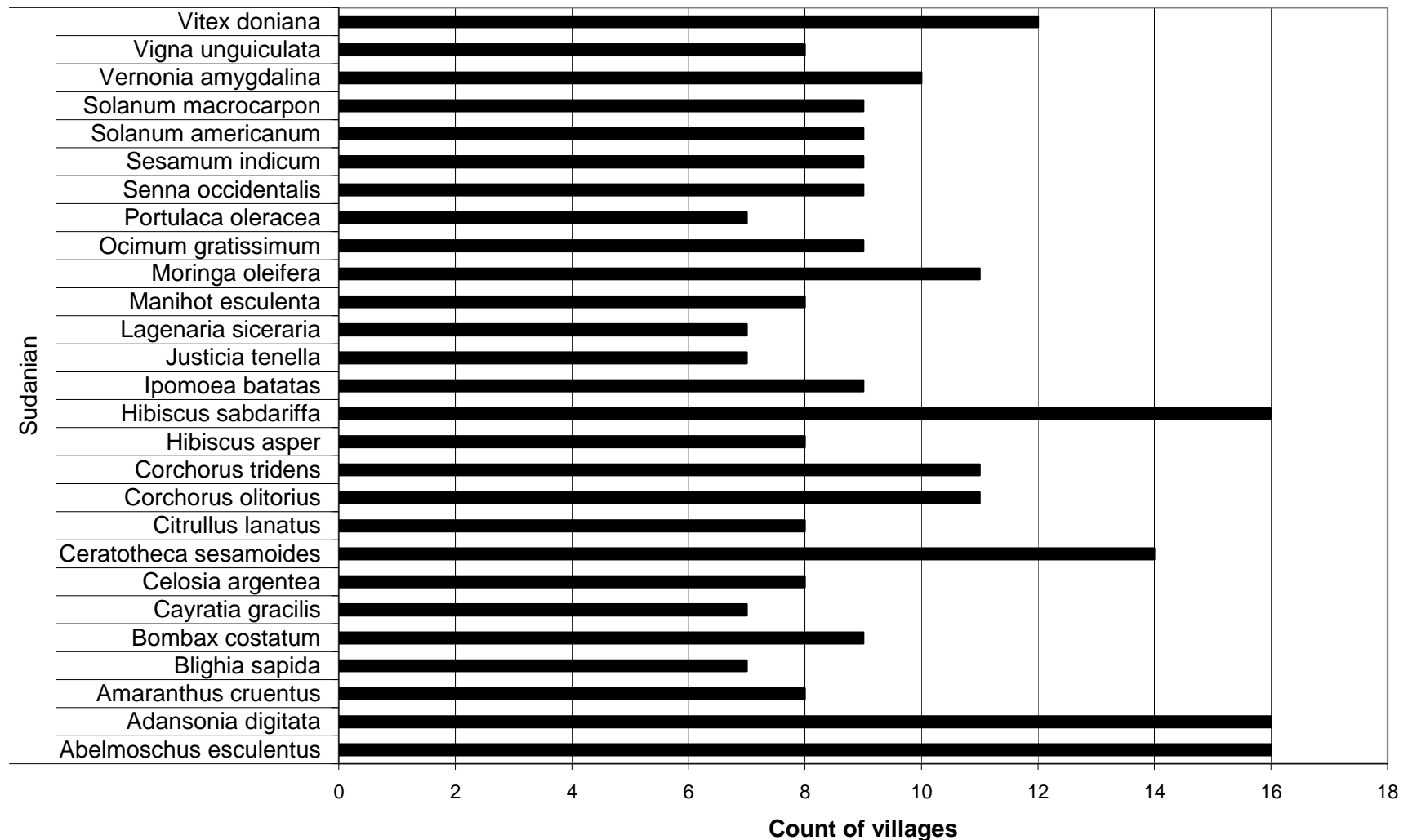


**Figure 3.1 a:** Most widely found traditional vegetables in the Guinean phytoecographic zone of Benin (village focus group data, n=13). The graph shows the number of villages where each species was recorded. Overall, 13 villages were surveyed in the Guinean zone. The data were collected through village focus groups. No distinction is made in terms of frequency of consumption.

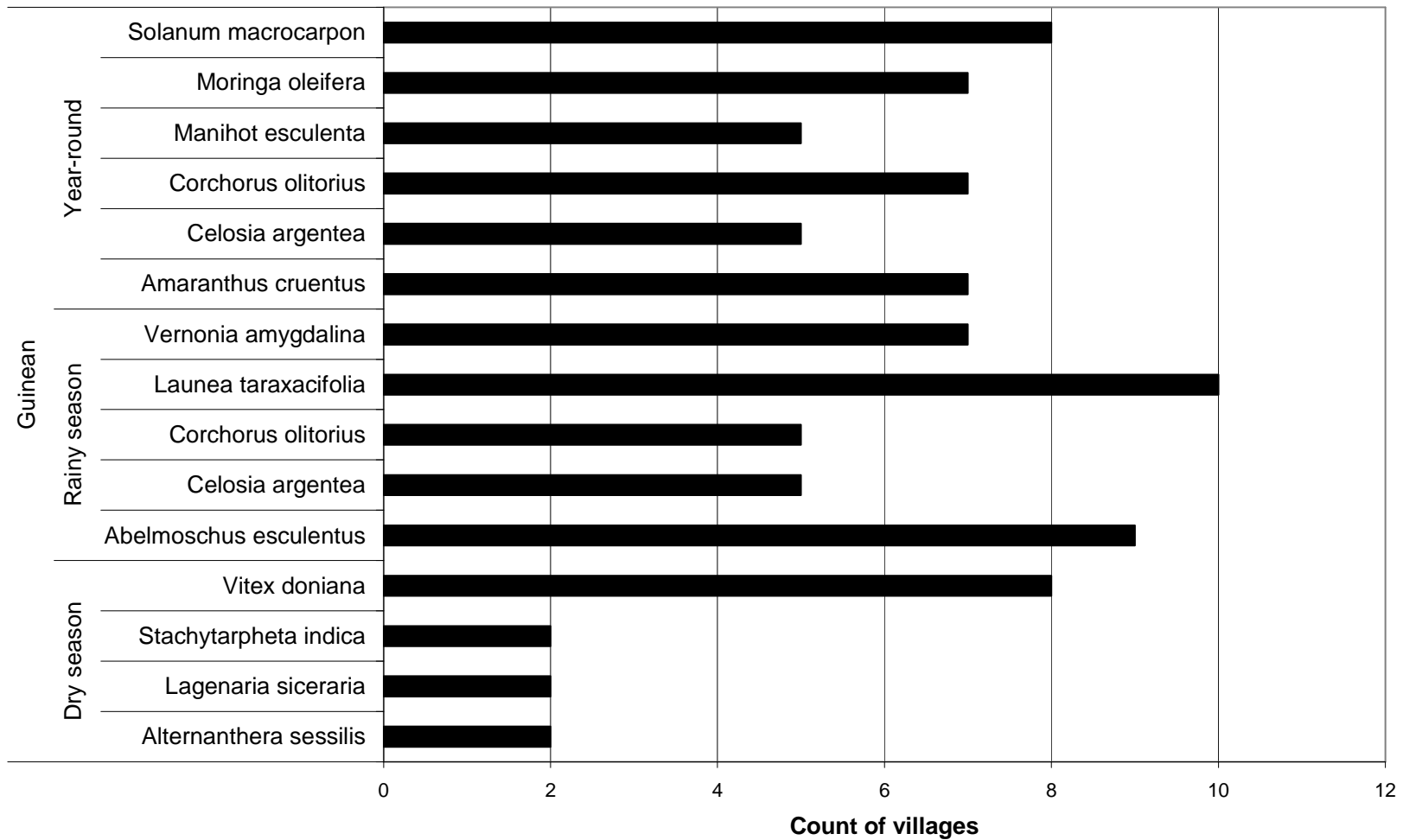
## CONSUMPTION AND NUTRITIONAL CONTRIBUTION



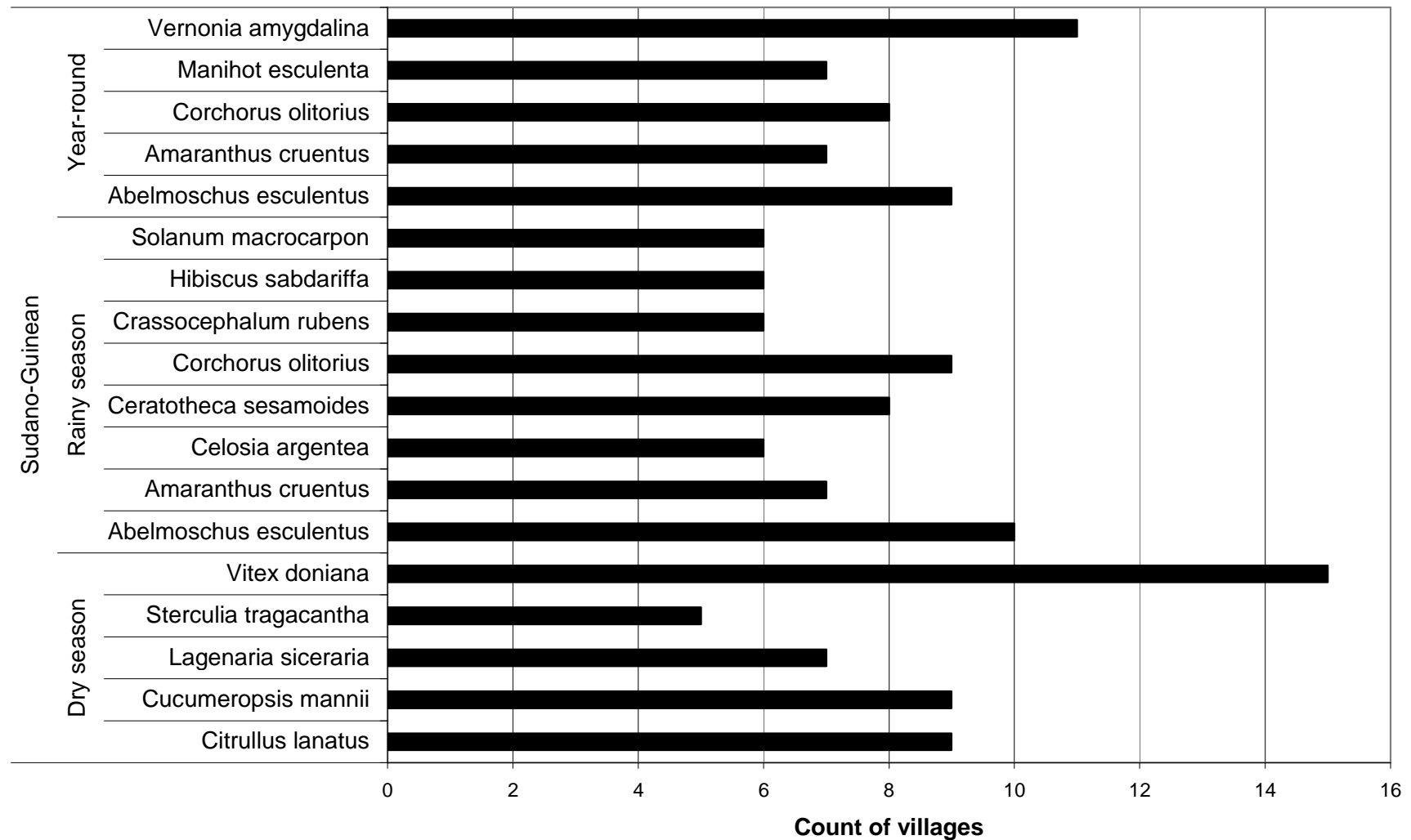
**Figure 3.1 b:** Most widely found traditional vegetables in the Sudano-Guinean phytogeographic zone of Benin (village focus group data, n=20). The graph shows the number of villages where each species was recorded. Overall, 20 villages were surveyed in the Sudano-Guinean zone. The data were collected through village focus groups. No distinction is made in terms of frequency of consumption.



**Figure 3.1 c:** Most widely found traditional vegetables in the Sudanian phytogeographic zone of Benin (village focus group data, n=16). The graph shows the number of villages where each species was recorded. Overall, 16 villages were surveyed in the Sudanian zone. The data were collected through village focus groups. No distinction is made in terms of frequency of consumption.

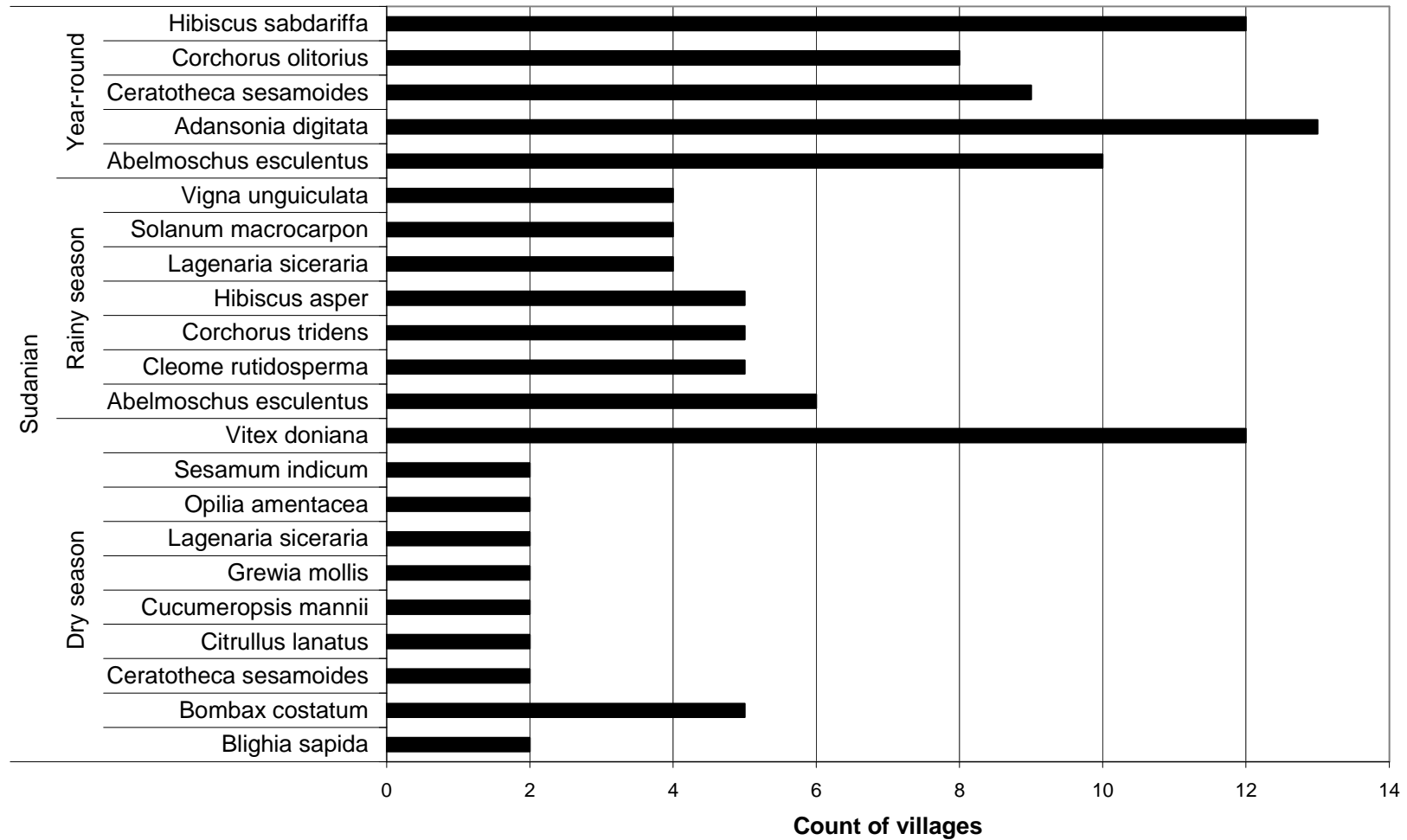


**Figure 3.2 a:** Top five frequently consumed traditional vegetables at different times of year in the Guinean zone of Benin (village focus group data, n=13). The graph shows for different periods of the year the top five frequently consumed, traditional vegetables in 13 villages in the Guinean zone of Benin (only four species are shown for the dry season, because all other species were found in only one village).

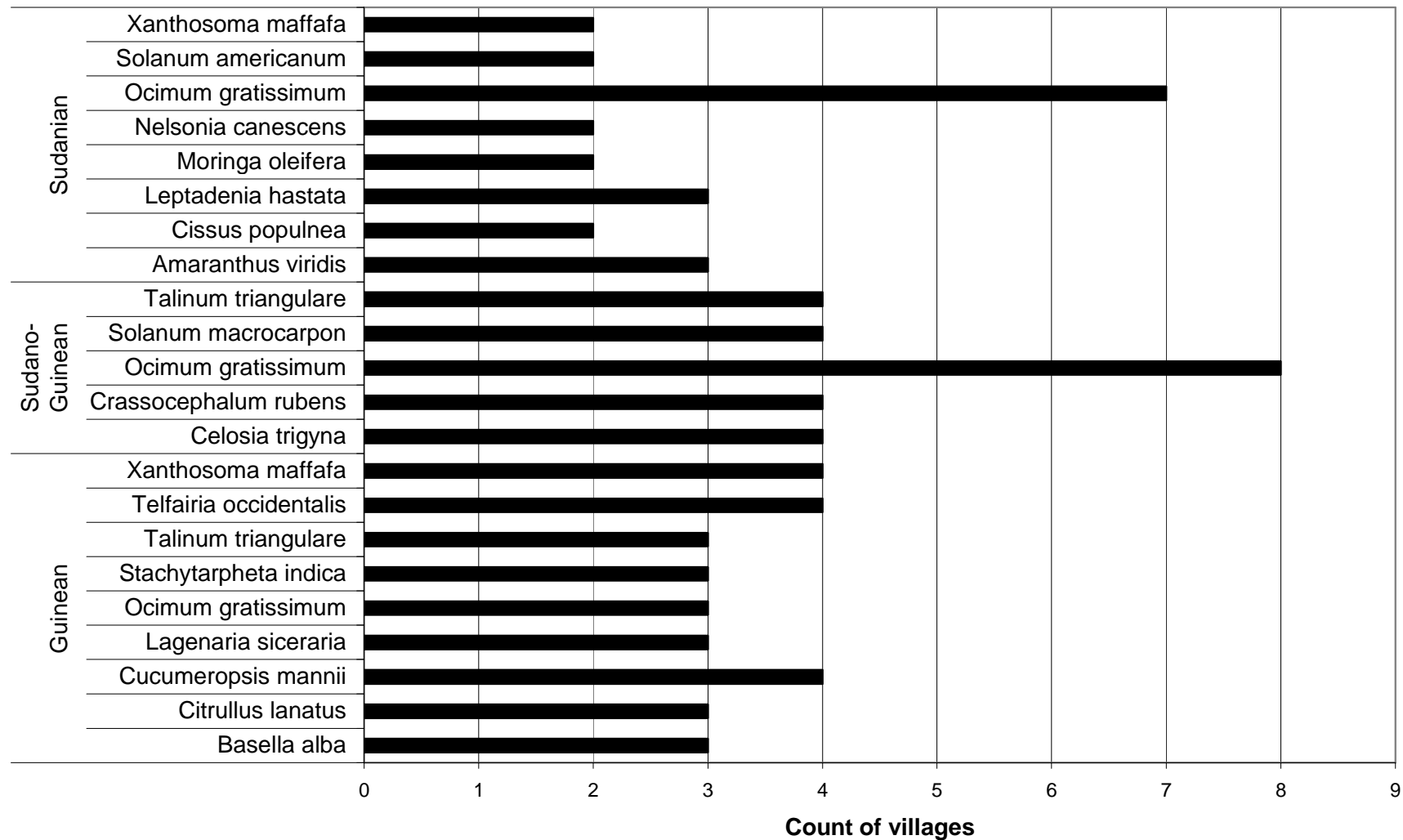


**Figure 3.2 b:** Top five frequently consumed traditional vegetables at different times of year in the Sudano-Guinean zone of Benin (village focus group data, n=20). Figure 3.2.b: The graph shows for different periods of the year the top five frequently consumed, traditional vegetables in 20 villages in the Sudano-Guinean zone of Benin

## CONSUMPTION AND NUTRITIONAL CONTRIBUTION

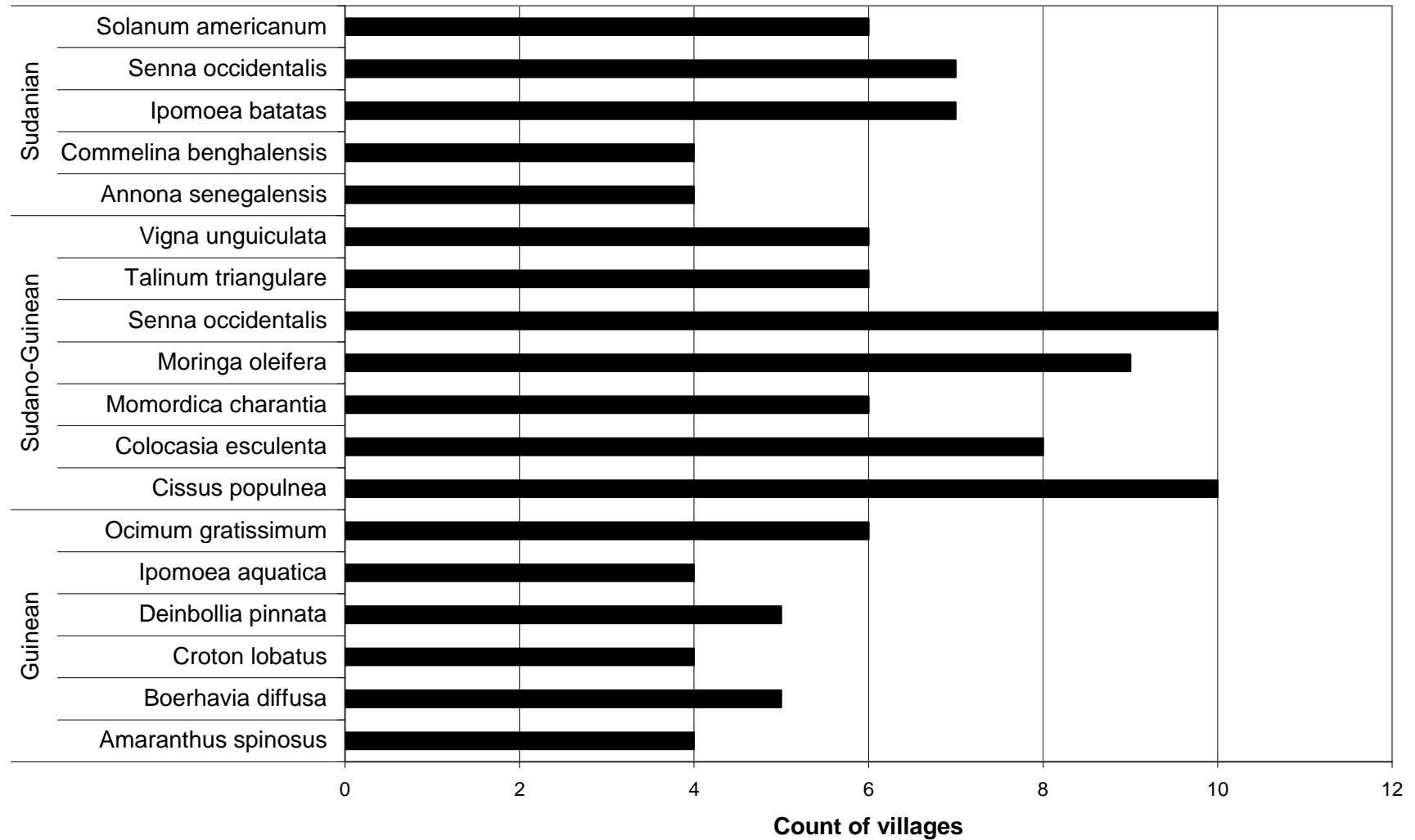


**Figure 3.2 c:** Top five frequently consumed traditional vegetables at different times of year in the Sudanian zone of Benin (village focus group data, n=16). The graph shows for different periods of the year the top five frequently consumed, traditional vegetables in 16 villages in the Sudanian zone of Benin.

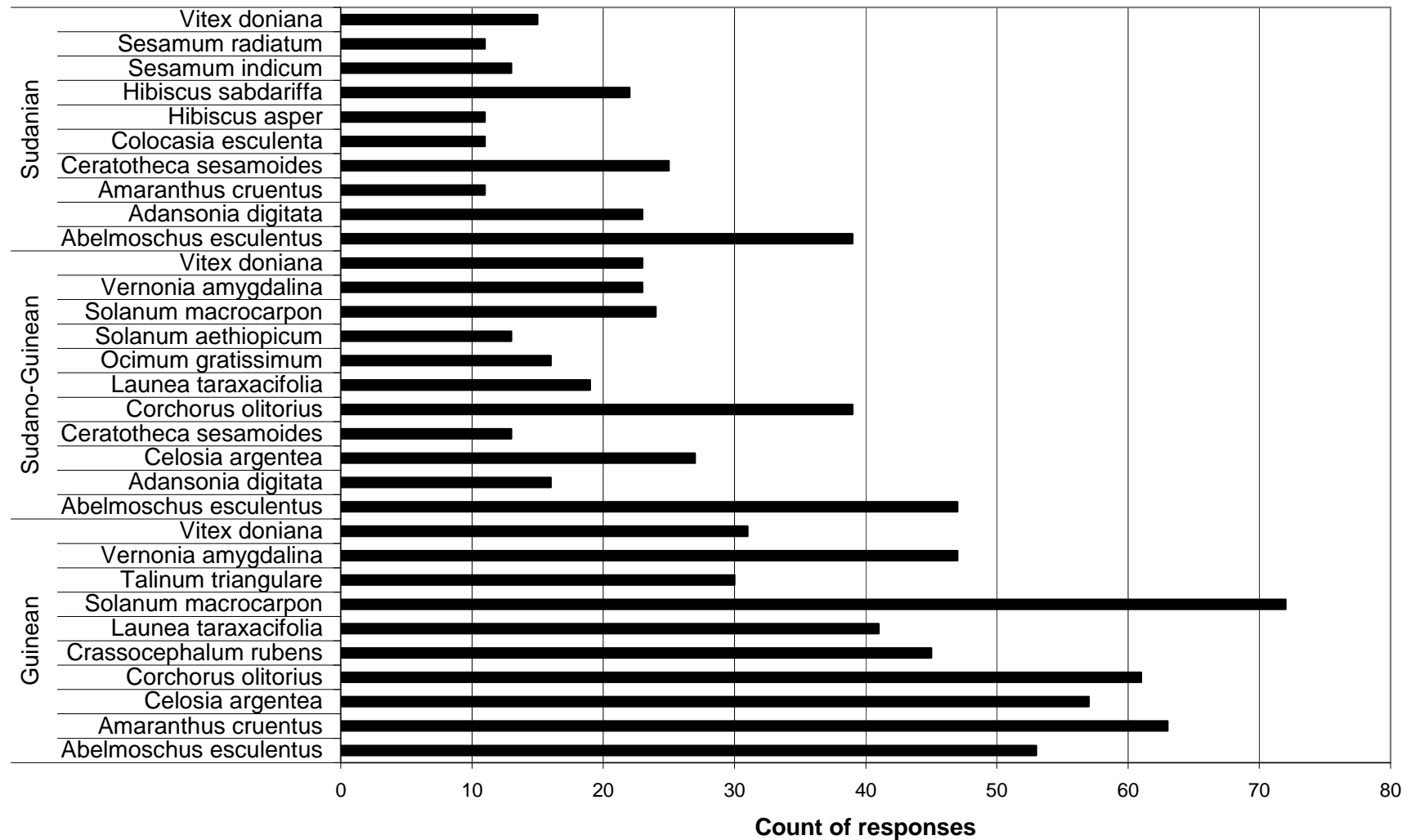


**Figure 3.1:** Top five occasionally consumed traditional vegetables in the Guinean (n=13), Sudano-Guinean (n=20), and Sudanian (n=16) zones of Benin (village focus group data). The graph shows the number of villages where each occasionally consumed species was recorded.



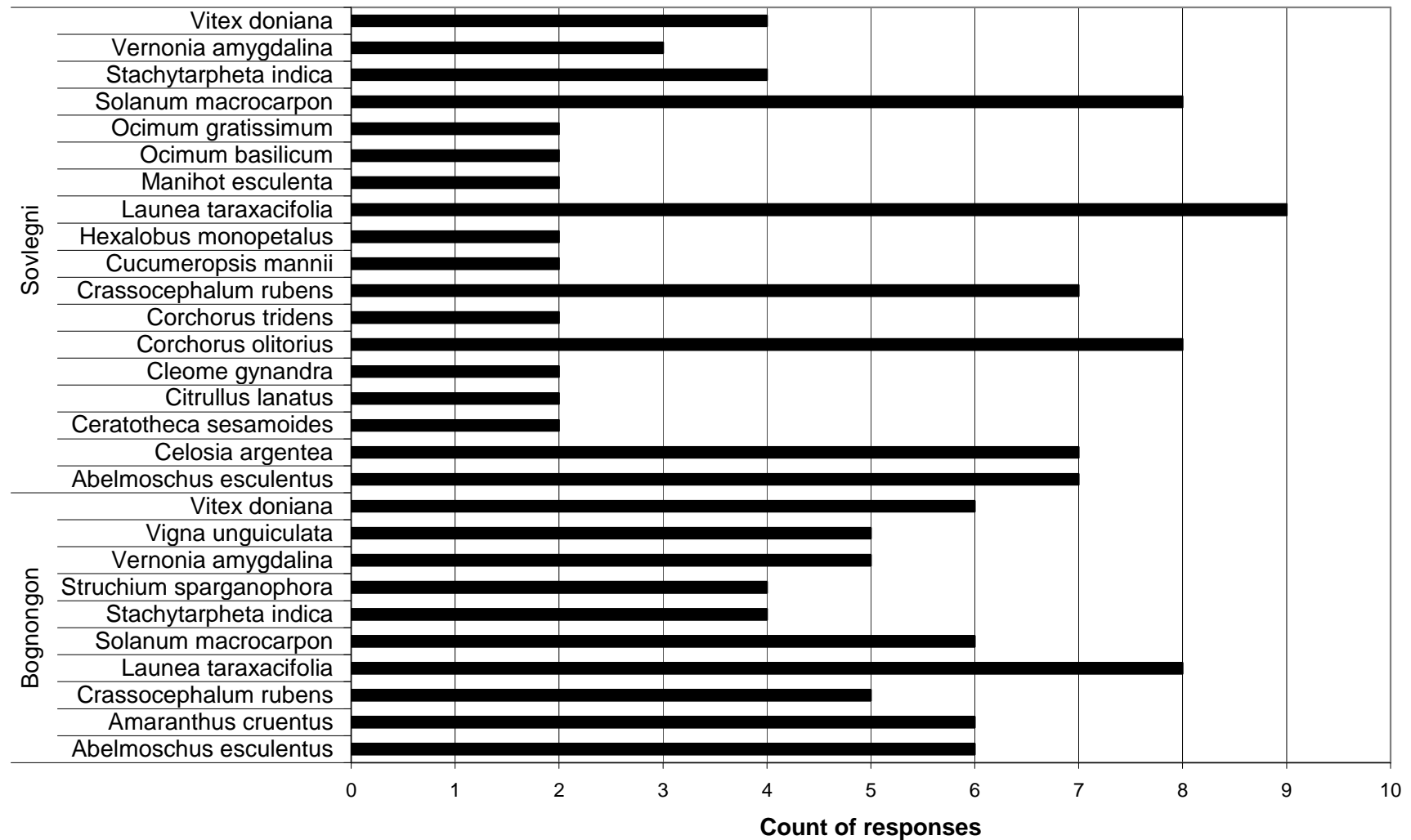


**Figure 3.2:** Top five rarely consumed traditional vegetables in the Guinean (n=13), Sudano-Guinean (n=20), and Sudanian (n=16) zones of Benin (village focus group data). The graph shows the number of villages where each rarely consumed species was recorded.

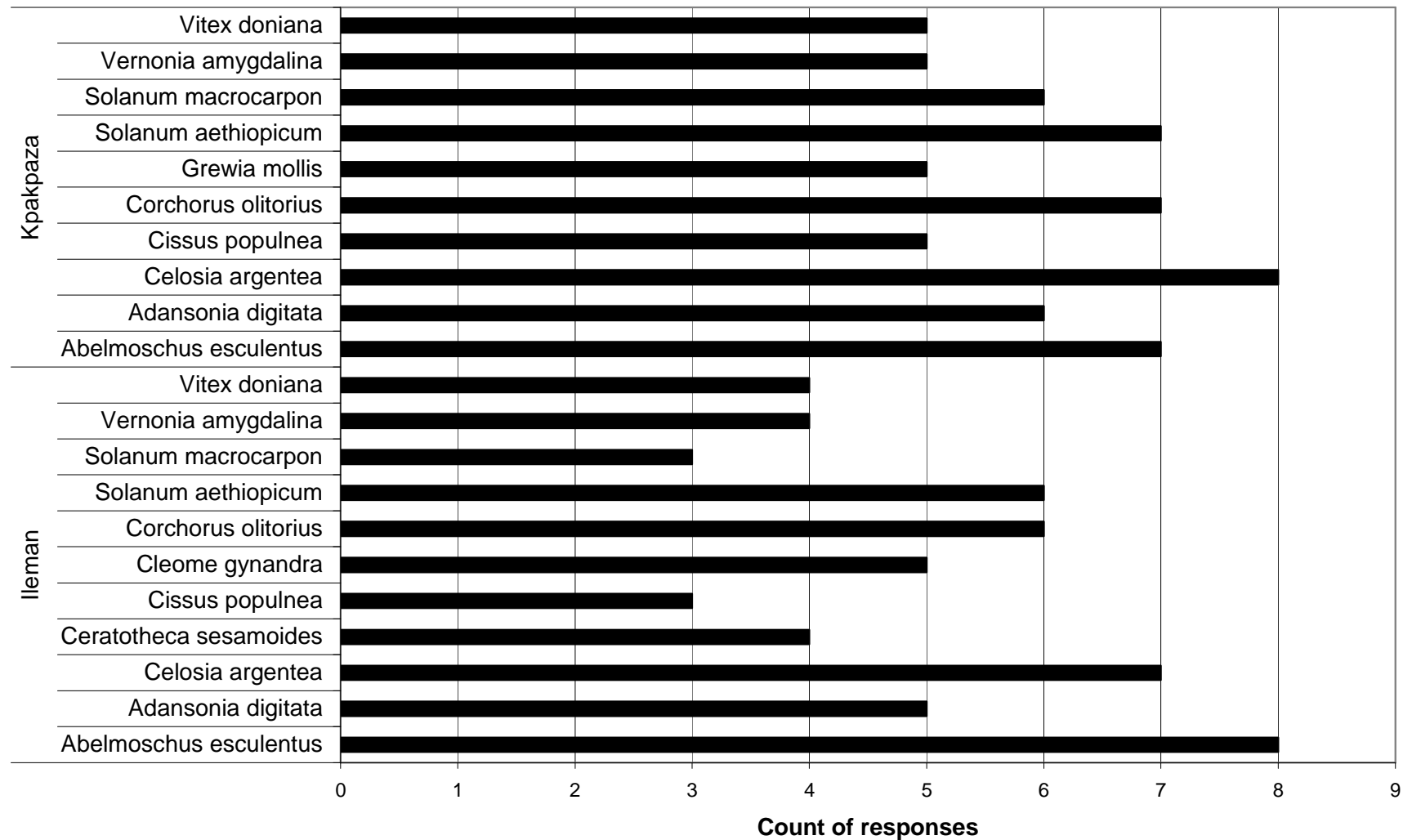


**Figure 3.3:** Most widely used traditional vegetables in the Guinean (eight villages), Sudano-Guinean (six villages) and Sudanian (four villages) phytogeographic zones of Benin (individual questionnaire survey data, n=171). The graph shows the number of respondents using each species. Between 10 and 12 respondents per village were interviewed.

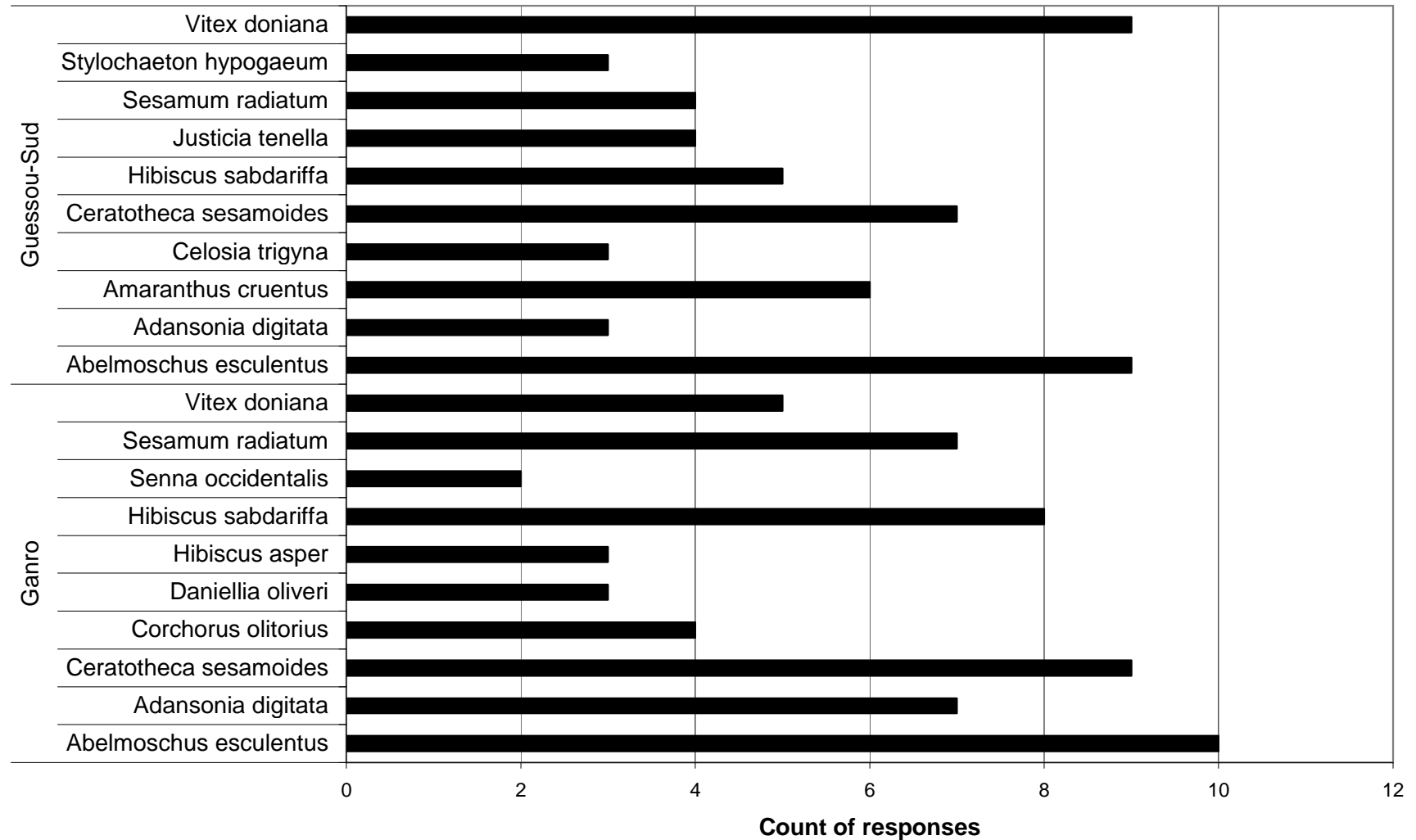
## CONSUMPTION AND NUTRITIONAL CONTRIBUTION



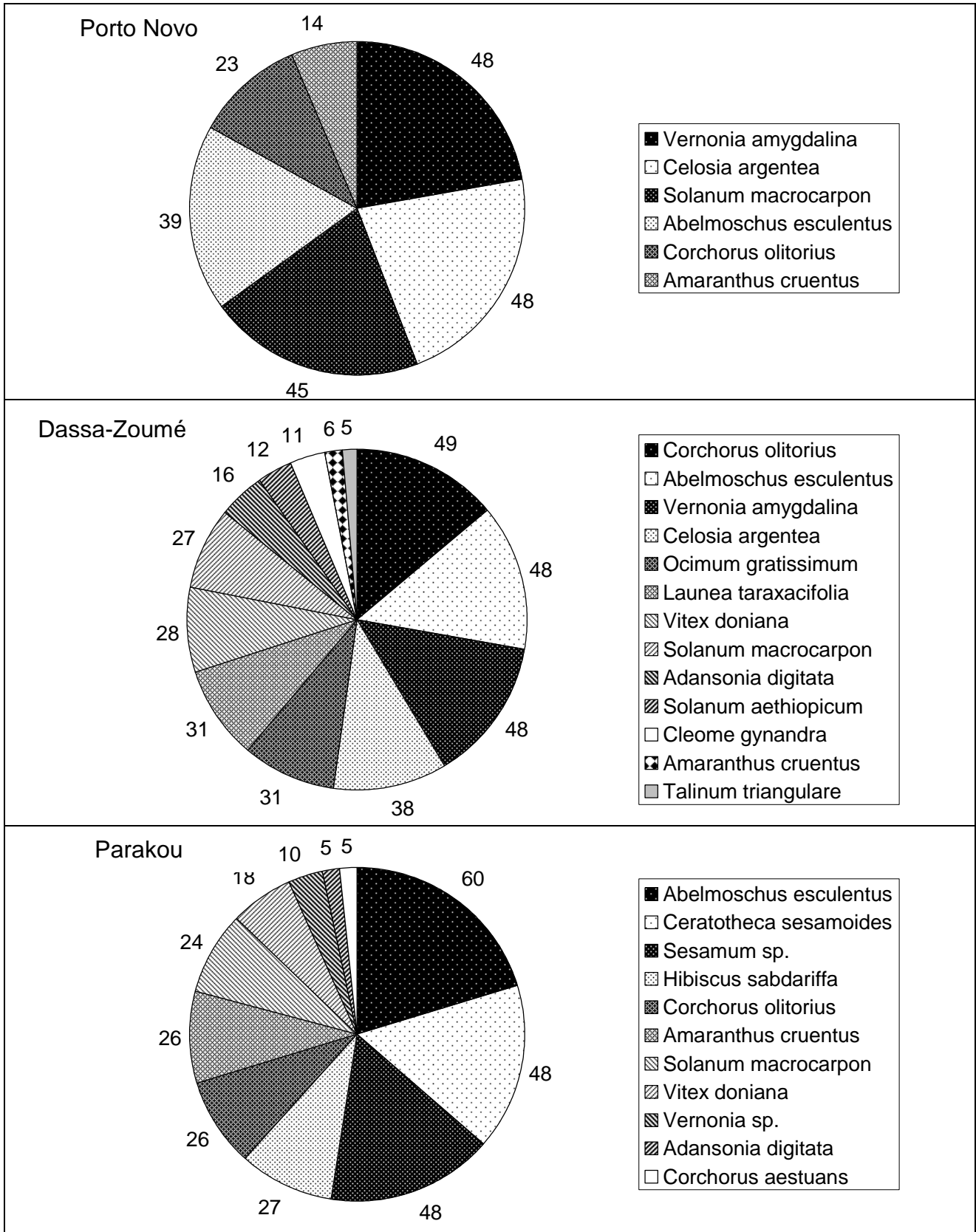
**Figure 3.4:** Top ten traditional vegetables in two Fon villages (individual questionnaire surveys). The graph shows the number of respondents using each species. Nine respondents were interviewed in each village. Bognongon is located in the Guinean and Sovlegni in the Sudano-Guinean climatic region.



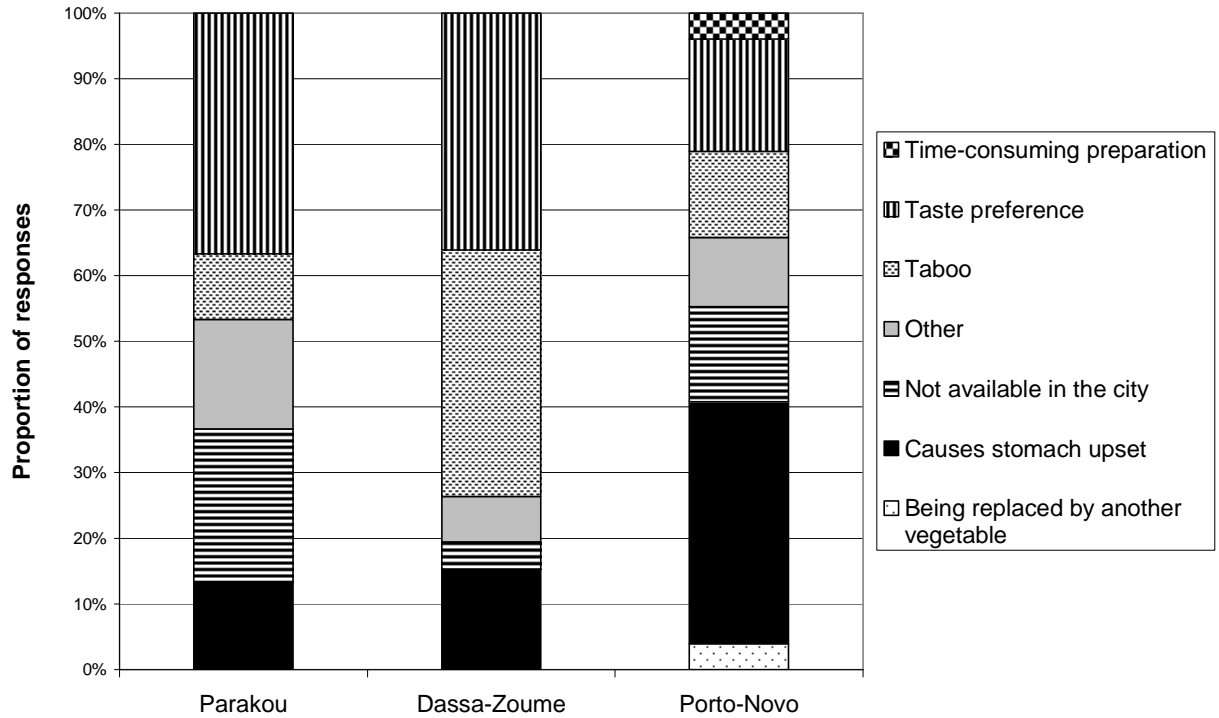
**Figure 3.5:** Top ten traditional vegetables in two Idatcha villages (individual questionnaire data). The graph shows the number of respondents using each species. Eight respondents were interviewed in Ileman and nine in Kpakpaza. Both villages are located in the Sudano-Guinean climatic region



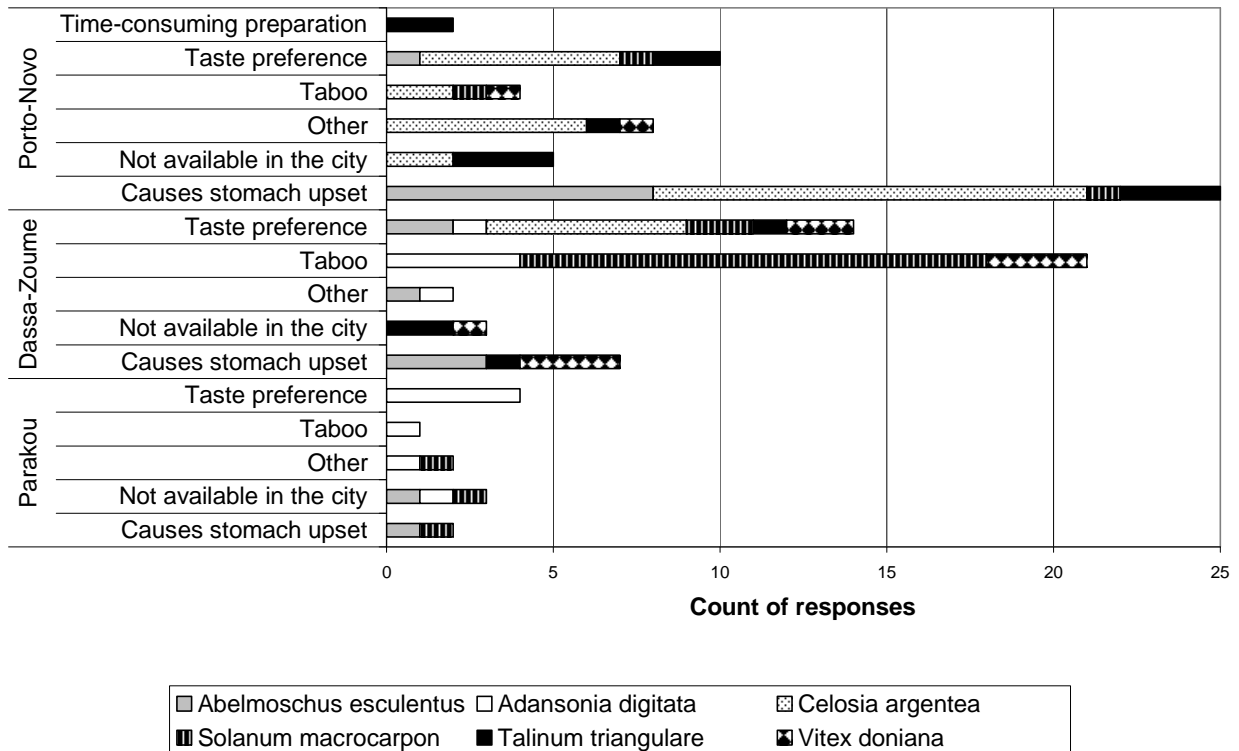
**Figure 3.6:** Top ten traditional vegetables in two Bariba villages in the Sudanian climatic zone (individual questionnaire surveys). The graph shows the number of respondents using each species. Ten respondents per village were interviewed, and both villages are located in the Sudanian climatic region



**Figure 3.7:** Most widely consumed traditional vegetables in Porto Novo (n=60), Dassa-Zoumé (n=59) and Parakou (n=60) (individual questionnaire surveys). The figures on the pie chart show the number of respondents using each species. Species with counts of less than five were excluded



**Figure 3.8:** Main reasons (%) for non-consumption of certain traditional vegetables in Porto Novo (n=76), Dassa-Zoumé (n=72) and Parakou (n=35) (individual questionnaire surveys). The reasons for non-consumption of a wide range of species have been grouped together for each city. A single respondent could list more than one species, and therefore give multiple reasons. Overall, 35 reasons were given in Parakou; 72 in Dassa-Zoumé ; 76 in Porto-Novo.



**Figure 3.9:** Main reasons for non-consumption of the six most widely cited traditional vegetables in three cities in Benin (individual questionnaire surveys)

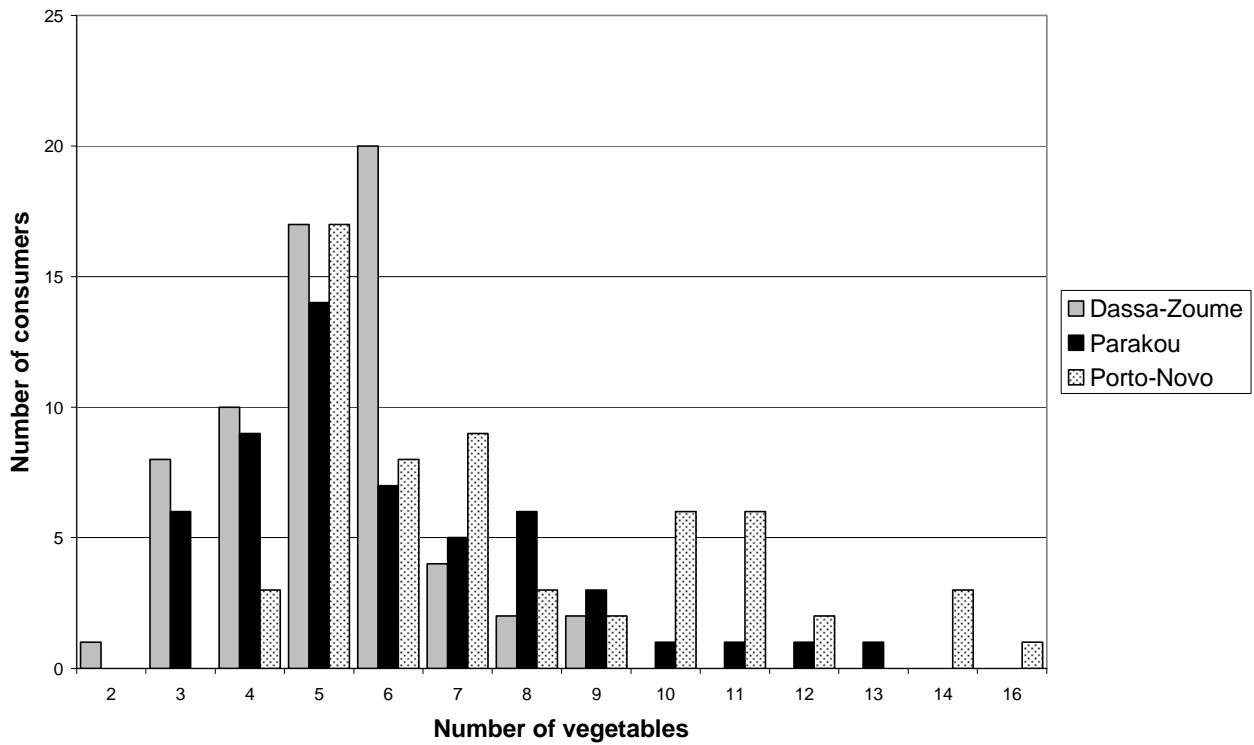


Figure 3.10: Overall number of vegetables used in a week in the high availability period by urban consumers in three cities in Benin (individual questionnaire surveys)

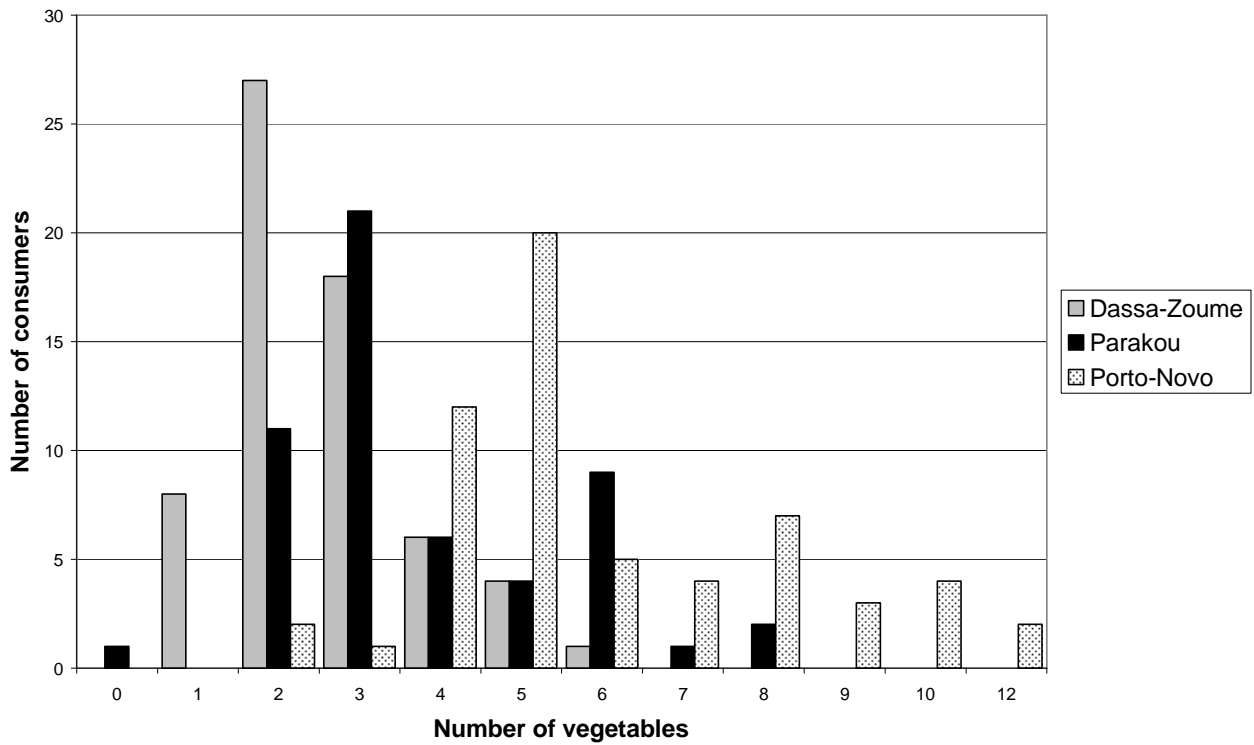
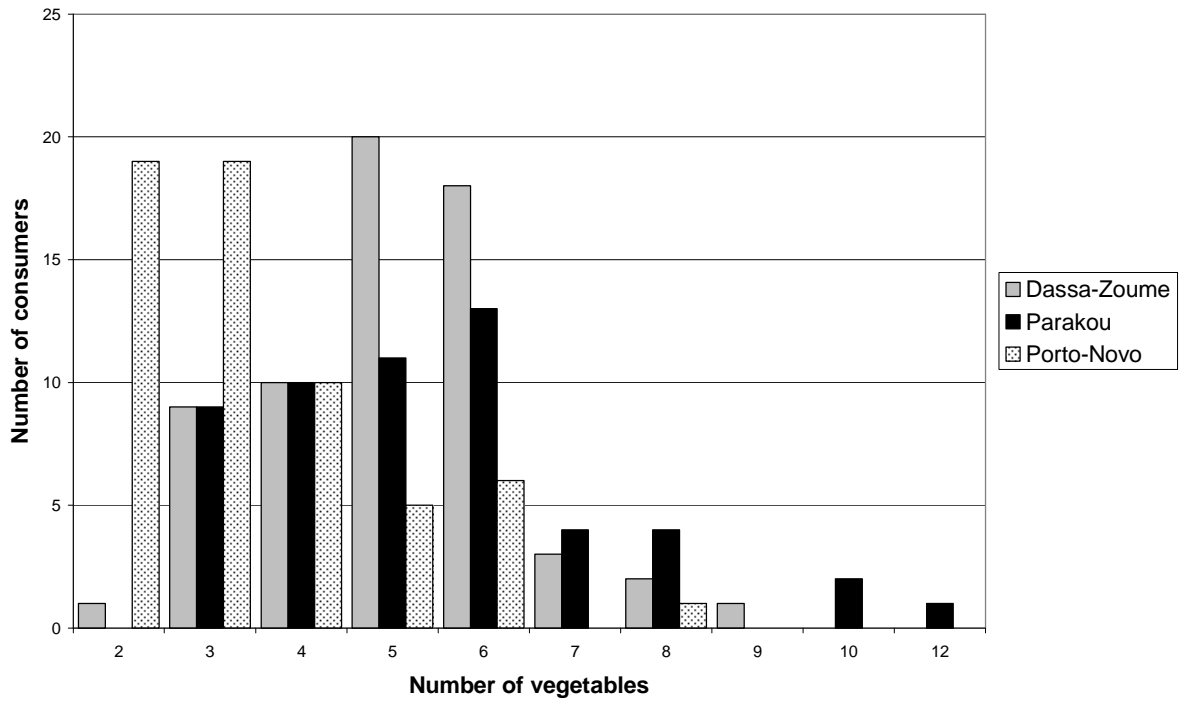
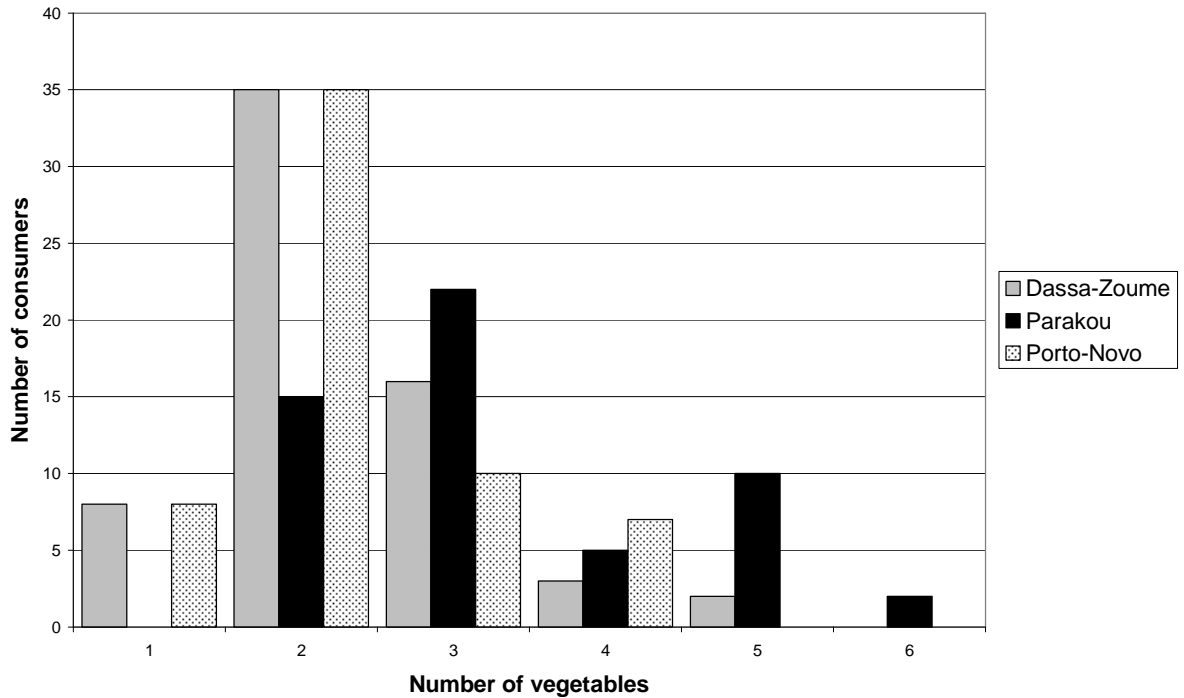


Figure 3.11: Overall number of vegetables used in a week in the low availability period by urban consumers in three cities in Benin (individual questionnaire surveys)





**Figure 3.12:** Number of traditional vegetables used in a week in the high availability period by urban consumers in three cities in Benin (individual questionnaire surveys)



**Figure 3.13:** Number of traditional vegetables used in a week in the low availability period by urban consumers in three cities in Benin (individual questionnaire surveys)

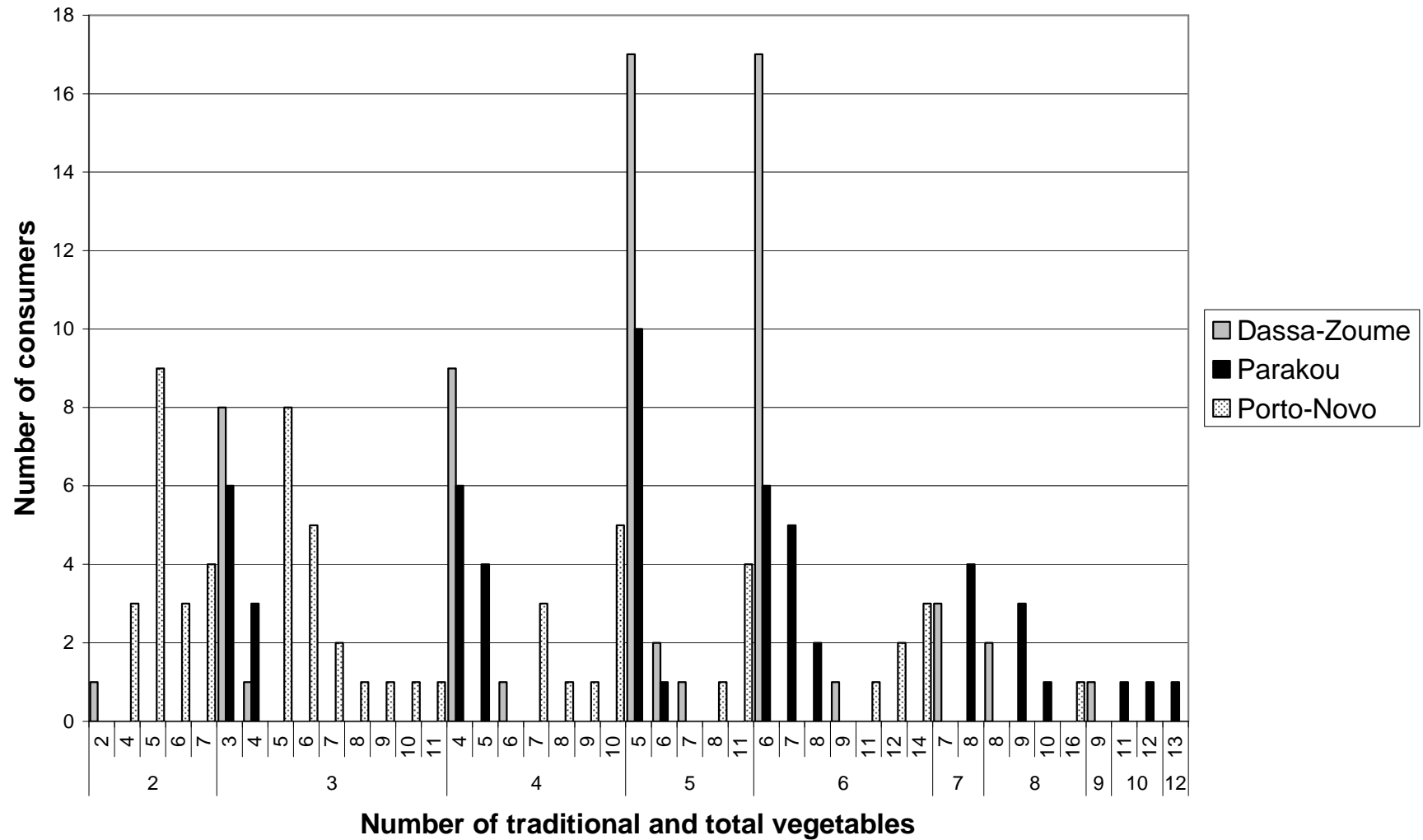


Figure 3.14: Number of traditional vegetables used in a week in the high availability period in relation to overall vegetable diversity by urban consumers in three cities in Benin (individual questionnaire surveys)

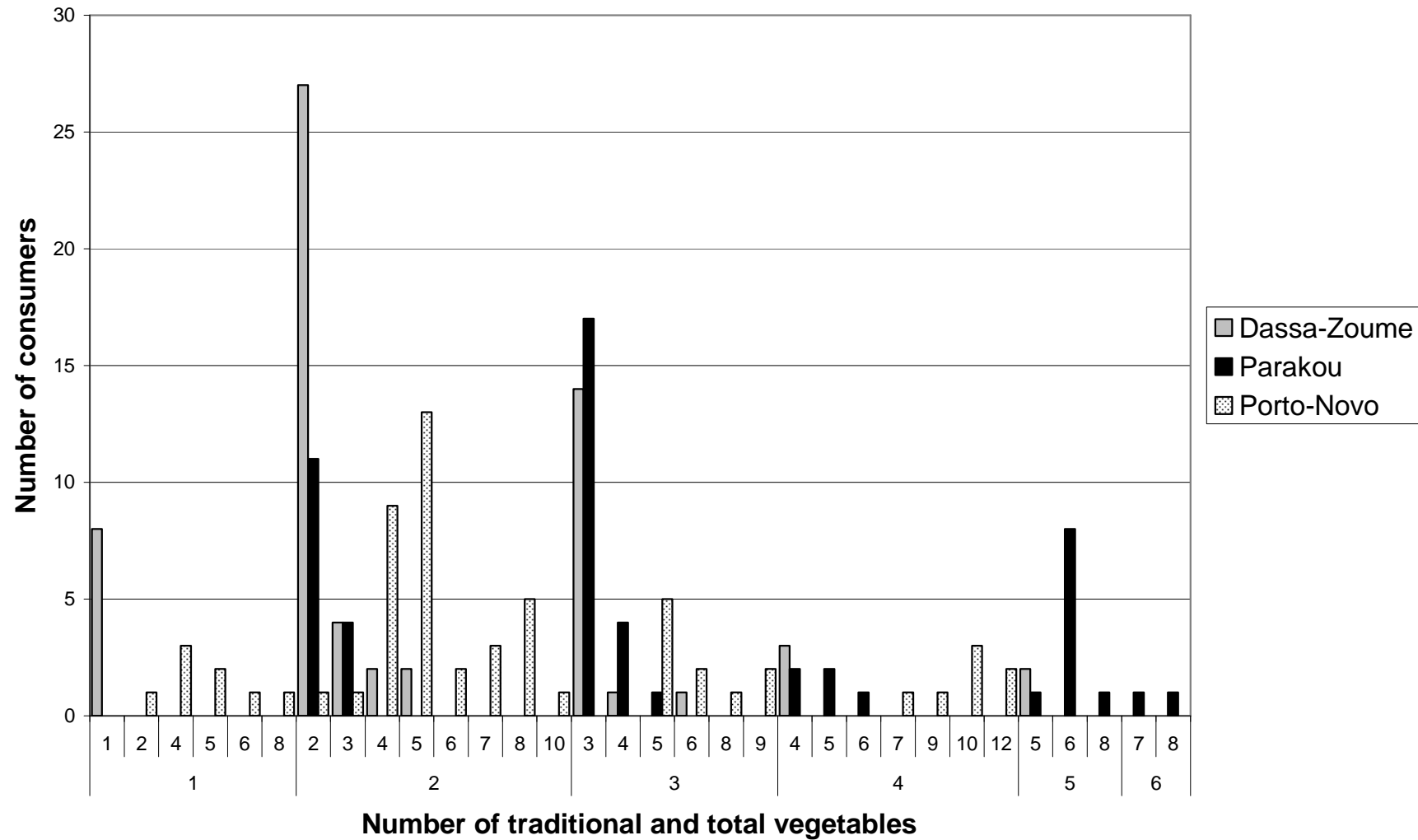


Figure 3.15: Number of traditional vegetables used in a week in the low availability period in relation to overall vegetable diversity by urban consumers in three cities in Benin (individual questionnaire surveys)

## Chapter 4 – Medicinal properties and cultural importance of traditional vegetables in Benin

A Dansi, MW Pasquini & IK Deleke Koko

This chapter describes the medicinal properties of traditional vegetables and their cultural importance for communities in Benin. The information presented in this chapter is based on the Darwin Initiative 15/003 surveys (focus group data from rural areas and individual questionnaire data from urban areas) and the work by Dansi *et al.* (2008).

### 4.1. Medicinal properties

Many traditional vegetables consumed throughout the African continent are also used for various curative, regulating and stimulating properties and are sometimes used as nutraceuticals (Chweya and Eyzaguirre, 1999; Maundu *et al.*, 1999, Shippers, 2000; Kimiywe *et al.*, 2007; Smith and Eyzaguirre, 2007).

In Benin, the medicinal use of plant species was recorded through a national survey in the mid-1980s by Adjanohoun *et al.* (1985). More recently, Dansi *et al.* (2008) reported the following utilisations for species which were also used as vegetables:

- *Acmella uliginosa* facilitates the elimination of blood clots in women after delivery;
- *Acmella uliginosa* and *Ocimum gratissimum* treat intestinal worms and prevent post-delivery infection;
- *Adansonia digitata* regularises women's menstrual cycle and heart beat;
- *Adansonia digitata*, *Cerathoteca sesamoides* and *Sesamum radiatum* are said to facilitate weight gain and good growth, dentition and bone strengthening in children, if they are consumed regularly;
- *Basella alba* and *Heliotropium indicum* are used to cure sores;
- soups of *Cissus populnea*, *Hibiscus sabdariffa* and *Lactuca taraxacifolia* are said to be aphrodisiac;
- *Cleome gynandra* is eaten by nursing mothers to stimulate milk production and regain blood lost during delivery;
- *Ehretia cymosa* is used in the case of stomach ulcer;
- *Grewia lasiodiscus* is used for stomach ache;
- *Grewia lasiodiscus* and *Hybanthus enneaspermus* are used to treat diarrhoea;
- *Hibiscus asper* for coughs and colds;
- *Hibiscus asper* and *Gymnanthemum amygdalina* for constipation;
- *Jatropha curcas* is used in cases of jaundice (icterus);
- *Lippia multiflora* regulates blood pressure;
- *Momordica charantia* for vomiting;

- *Moringa oleifera* is regularly consumed by pregnant women to prevent anaemia;
- *Moringa oleifera* and *Ocimum gratissimum* are used in the treatment for diabetes;
- *Senna occidentalis* is used in cases of anemia, smallpox (variola) and chickenpox (varicella).

The survey carried out under the auspices of the Darwin Initiative 15/003 surveys recorded medicinal use for 159 species across 49 villages. However, medicinal attributes were mentioned only once in the case of 85 species, and only 29 species had medicinal attributes recorded in five or more villages. The ten most reported medicinal plants for the Guinean, Sudano-Guinean and Sudanian phytogeographic zones are presented in Figure 4.1.

Table 4.1 shows the number of species which were used for medicinal purposes relative to the overall number of species recorded for each village. This highlights how even within the same socio-linguistic group the recognition of medicinal virtues in the local vegetables can differ quite significantly. For example, the Holly village of Zalimey reported medicinal use of only two species out of the 40 that they could describe, whereas in the village of Ayetedjou 18 out of 42 had reported medicinal uses. The uses can vary quite a lot from group to group, although certain species are used in specific ways by many groups. For example, *Ocimum gratissimum* is widely used for the treatment of infections, *Vernonia amygdalina* to improve lactation and to regain blood lost during delivery, and *Moringa oleifera* (by groups in the south) to treat headaches.

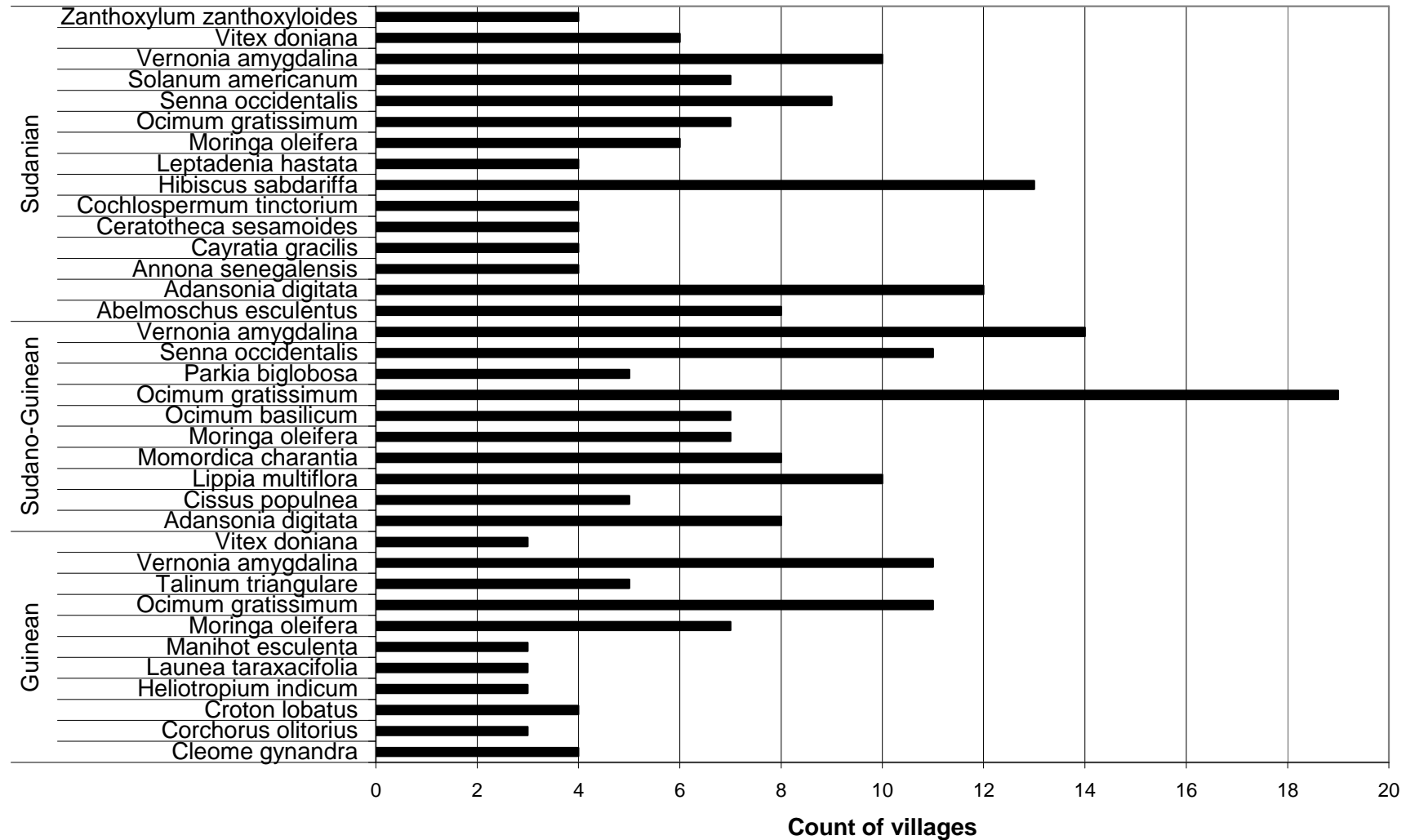


Figure 4.1: Top ten traditional vegetables used for medicinal purposes in the Guinean (n=13), Sudano-Guinean (n=20), and Sudanian (n=16) zones of Benin (village focus group data)

## MEDICINAL AND CULTURAL IMPORTANCE

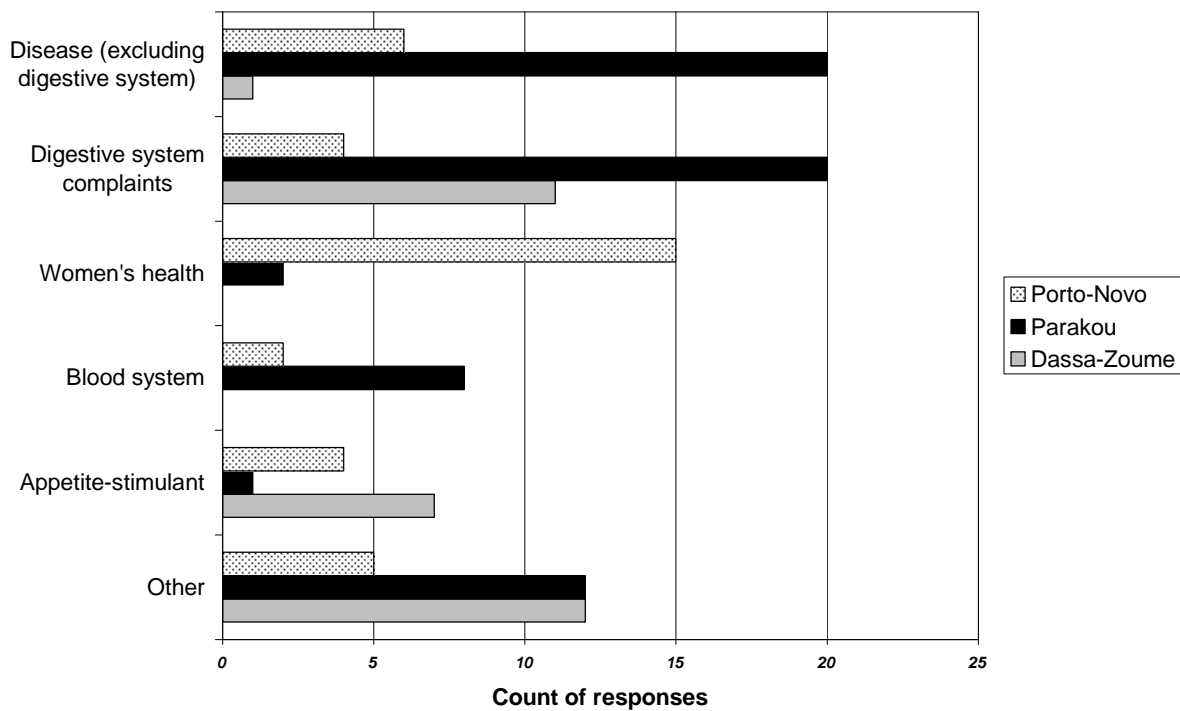
**Table 4.1:** Total numbers of traditional vegetables used for medicinal purposes in 49 villages in Benin

Main socio-linguistic group	Village	Total number of traditional vegetables used for medicinal purposes in each village†	Main socio-linguistic group	Village	Total number of traditional vegetables used for medicinal purposes in each village†	
Adja	Afomayi	16 (38)	Gourmantche	Batia	10 (45)	
	Agnavo	7 (38)		Loumbou-loumbou	7 (21)	
Aizo	Agbandonou	7 (39)		Fon	Tanongou	16 (40)
	Gbeko	13 (31)	Bognongon		5 (43)	
	Gome	6 (35)	Sovlegni		10 (40)	
Anii	Barikini	21 (46)	Holly	Akpate	4 (35)	
	Kodowari	7 (40)		Ayetedjou	18 (42)	
	Penelan	7 (26)		Zalimey	2 (40)	
	Wellan	26 (42)	Idatcha	Ileman	12 (42)	
Bariba	Banigri	12 (37)		Kpakpaza	8 (39)	
	Dabou	7 (37)	Ife	Ekpa	12 (38)	
	Ganro	12 (40)		Tamba	11 (33)	
	Keremou	13 (19)	Kotokoli	Akarade	7 (35)	
	Kpassa	12 (35)		Tchimbere	23 (62)	
	Poto	16 (22)	Mahi	Mondji	9 (43)	
	Soubado	13 (29)		Vossa	16 (34)	
	Tankougou	6 (27)		Zonmon	5 (36)	
	Boko	Zougou-Pantrossi	13 (30)	Otammari	Moupemou	16 (41)
		Bensekou	19 (41)		Tagaye	9 (49)
Cotafon	Mareguinta	5 (32)	Ouémè	Gogbo	8 (30)	
	Assedji	15 (46)	Tchabe	Ikemon	12 (36)	
Dendi	Sohounme	19 (42)		Wama	Okunfo	11 (40)
	Kargui	3 (23)	Cotiakou		12 (39)	
	Torozogou	8 (22)	Pouya		14 (52)	
Dendi/ Djerma	Garou-Tedji	7 (11)				

† The figures in brackets indicate the total number of traditional vegetables as per the local community's taxonomy. It should be noted that certain species were recorded more than once when communities gave two or more local names, describing for example, different varieties or the use of different plant parts. In these instances, one local name could be associated to medicinal use, and the other not.

Information on the medicinal uses of traditional vegetables from the individual questionnaires in the cities is relatively limited. Information was shared on 18 species in total, and those mentioned most frequently comprised *Abelmoschus esculentus* (33 responses), *Vernonia* sp. (primarily *V. amygdalina* – 29 responses), *Ocimum gratissimum* (14 responses), *Amaranthus cruentus*, *Ceratotheca sesamoides* and *Corchorus olitorius* (8 responses each). The identification of these species as medicinal was often city-specific, and linked to what was being consumed (Figure 3.9). Most respondents attributing medicinal properties to *A. esculentus*, *A. cruentus* and *C. sesamoides* were located in Parakou; those describing the medicinal properties of *O. gratissimum* in Dassa-Zoumè; and those of *V. amygdalina* in Porto Novo and Dassa-Zoumè (data not shown).

The reported medicinal attributes of these species were varied. In the cities, there did not appear to be any strong consensus on the benefits of each specific species (data not shown), except for *Vernonia amygdalina*, where over a third of the responses claimed that it was used to clean the womb of blood after delivery. Its other uses included treatment of stomach ailments, as an appetite-stimulant and treatment against malaria and typhoid fever.



**Figure 4.2:** Broad categories of ailments treated with or health benefits accruing from the use of traditional vegetable species in Porto Novo (n=36), Dassa-Zoumè (n=31) and Parakou (n=63) (individual questionnaire surveys)

The broad categories of ailments treated with, or perceived health benefits accruing from the use of traditional vegetable species in the three cities are shown in Figure 4.2. The digestive system complaints consisted mostly of stomach ache, worms or indigestion; the disease category comprised primarily malaria and typhoid fever; the women’s health category included remedies to cleans the womb after delivery or



build up the energy of pregnant or newly delivered women; the blood system category referred to various 'blood' boosting properties or treatment of anaemia; and finally the other category covered multiple benefits including combating fatigue and boosting energy levels and treating headaches and tension.

## 4.2. Cultural significance

In Benin, certain traditional vegetables may be part of important dishes presented during the celebration of marriages, births or funerals. Examples given during the Darwin Initiative 15/003 survey questionnaires included *Abelmoschus esculentus*, *Sesamum radiatum* and *Corchorus olitorius*.

The avoidance of certain species can have also a cultural significance that goes beyond taste or habit. Figure 3.10 shows that in certain locations there may be widespread taboos against specific vegetables. Fetishism (traditional religion), which is commonly practiced in Benin, can be one cause. A number of species may be prohibited to the followers of certain deities, perhaps because they are used during the rituals or they have other important associations. For example, Dansi *et al.* (2008) have reported that *Ipomea aquatica* is prohibited to the followers of the divinity Dan, *Solanum nigrum* for the followers of Hèviosso, *Corchorus tridens* and *Launaea taraxacifolia* for the followers of Sakpata.

However, none of the city respondents from the Darwin Initiative 15/003 survey clarified the nature of the taboo. The whole survey elicited very little information on the ritual uses of traditional vegetables from individual respondents, except in the villages of Assedji, Sohounme, Gbeko and Tchakalakou. This kind of information is recognised as being hard to collect (see for example, Given and Harris, 1994, or Minnis, 2000), so it is difficult to infer any conclusions about ritual use from the research. However, in the village of Assedji four species were clearly associated with fetishism: *Launaea taraxacifolia* (prohibited to the followers of Hèviosso), *Cleome gynandra* and *Sida acuta* (prohibited to the followers of Aguessi) and *Solanum macrocarpon* (prohibited to Tohossou). In Sohounme *Launaea taraxacifolia* was reported to be banned to followers of Hèviosso and Dan. In Gbeko *Corchorus olitorius* was used in a ritual related to the Tohossou.

Taboos may also be related to individual and family histories. In cases where an individual links an adverse health reaction to the consumption of a particular species, for example, this can then become a taboo plant for his or her descendants.

The perception that specific species can cause or aggravate illnesses, or weaken the body was found to be common. An example of this was observed in the village of Ayetedjou, where respondents consume *Crassocephalum crepidioides* but not *Crassocephalum rubens*. The common perception is that the latter causes a fever, and convulsions in children. Dansi *et al.* (2008) report that in the south-western part of Benin and particularly within the Adja, Cotafon and Saxwè socio-linguistic groups, it is believed that a patient affected by measles should never eat *Bidens pilosa* since this may aggravate the sickness. In the northwest, the soup of *Cerathoteca sesamoides* is

avoided by hunters because it is thought to reduce visual acuity as well as interfere with occult forces, reducing their supernatural powers needed for successful forays.

In other cases, species can have positive socio-cultural characteristics, for example be used to ward off bad luck (e.g. *Sesamum indicum*, *Solanum americanum*, *Solanum torvum*, *Launea taraxacifolia* and *Talinum triangulare*).

Understanding what motivates people to avoid different species, or how these may be used in ceremonies and rituals, is certainly an area which deserves further research attention. There may be important implications around belief and behaviour for development efforts to promote specific species. Research to date seems only to have addressed these issues through rapid surveys where teams of enumerators and researchers have spent only short periods of a few hours or days in each location. Evidence from ethnobotanical work in other African countries has shown that this kind of sensitive information often remains secret to particular sections of society or to particular associations and groups. Information which is volunteered is usually offered in response to more careful ethnographic research methods, and may be limited to particular activities or to particular species. It is probable that much remains to be understood on this particular aspect of traditional vegetables.

## Chapter 5 – The production and commercialisation of traditional vegetables

F Assogba Komlan

This chapter provides an overview of the main production systems of traditional vegetables, and reviews available data on their commercialisation. It is interesting to recall here that of the 245 species recorded by the Darwin Initiative 15/003 surveys only 17% were cultivated, and 9% appeared to be undergoing a process of “domestication” (reported as wild in certain villages, and cultivated in others).

### 5.1 Production systems

The production of traditional vegetables in rural areas is mainly the domain of women both in the rainy and in the dry season. In urban and peri-urban areas, where the activity takes on a commercial orientation men may also be heavily involved. A recent study showed that in Cotonou, for example, hardly any women were involved in the production of traditional vegetables (Pasquini *et al.*, 2009).

Four main production systems can be found:

- Year-round home garden production;
- Rain-fed on-farm production;
- Intensive irrigated production;
- Low-land production.

Year-round production in home gardens is found mainly in rural areas, on a small scale, to supply household vegetable food needs, and secondarily for medicinal purposes. The species found in the home gardens may have been produced by direct sowing or may have been collected as young seedlings in the surrounding countryside and transplanted. There are no specific inputs, though domestic waste and household waste water may be applied. As was found in the course of the Darwin Initiative 15/003 surveys, the diversity of species in the home gardens of certain socio-linguistic groups can be quite high, for example, amongst the Holly in the south-east of the country, or the Anii in the north on the border of the forest areas. Examples of species which can be found typically in home gardens include *Telfairia occidentalis*, *Cucurbita* sp, *Acmella uliginosa*, and *Ocimum* sp.

Production on-farm under rain-fed conditions is widespread throughout the country. The vegetables may be produced in single stand, but most of the times they are intercropped with other crops. In the latter case, the vegetables are generally destined for household consumption, and only the surplus is sold. Maize, cassava, sorghum, millet, tomato and pepper are intercropped with *Amaranthus cruentus*, *Solanum* sp. and *Cleome gynandra*, in combinations which vary from region to region. In the centre and the north, yam is often associated with *Solanum* sp. and pepper and

tomato, whereas in the south-west, *Corchorus olitorius* is usually intercropped with cassava and maize.

The morphology of the vegetable will influence the decision to produce in pure or intercropped stands. Vegetables with large leaves or which are creeping or climbing, are rarely intercropped with main food crops, because they inhibit their development. In these cases, it is more common to find that they are rotated with other crops, for example, the cucurbit species *Citrullus lanatus* and *Lagenaria siceraria* (known locally as *egusi*) are planted after maize, yam, cassava, or cotton crops (Darwin Initiative 15/003 surveys).<sup>10</sup> The vegetable crops produced under this system benefit from the residues left over from the input applications to the preceding crops or from the fertilization effect of the creeping crop. However, yields are low to medium (depending on the soil status) compared to the high-input vegetable production systems.

It should be noted that certain wild species, such as *Talinum triangulare* and *Launea taraxacifolia* may be found growing as weeds on farm plots in the Plateau area or in certain low-lying flood lands at the beginning of the rainy season, having sprouted from wind-borne seeds. In these cases, farmers may choose to preserve the species, weeding around it, or transplanting the seedlings in their home garden. They may choose to maintain certain plants until flowering, so as to collect the seed which is immediately spread in a corner of the farm. Long-term dormancy of the seed is often impossible to break, and in these cases the only way to perpetuate the species is through vegetative propagation, through stem or root cuttings.

High-input, intensive irrigated vegetable production systems are mostly found in urban and peri-urban production locations, and are dominated by a limited number of widely consumed species, such as *Solanum macrocarpon*, *Amaranthus cruentus*, *Ocimum gratissimum* and *Vernonia amygdalina*, which have a high market value in the dry season. These species are often produced in pure stands on plots which vary from 6 m<sup>2</sup> to 18 m<sup>2</sup> in size as one moves from urban to peri-urban production sites (Assogba Komlan *et al.*, 2007). However, intercropping of fast-maturing species with slow-maturing species can also take place, for example *Amaranthus cruentus* is commonly found in association with *Solanum macrocarpon*, *Vernonia amygdalina*, *Lactuca sativa*, or *Brassica oleracea*. This is done to optimise use of scarce land resources, to assure a regular supply of vegetables to the market, and amongst poorer farmers to generate some revenue with which to continue purchasing inputs to tend the slower-maturing species (Pasquini, 2002, reports a similar logic for intercropping vegetables in urban and peri-urban production sites on the Jos Plateau in Nigeria). Yields of leafy vegetables under these production systems are high (in some cases over 20 t/ha) because of the regular application of fertilizers and pesticides, and of irrigation. However, farmers tend not to be very knowledgeable about the rational use of soil fertility and crop protection.

Traditional vegetables are also produced on low-lying flood lands. In these areas, production can start once the rains finish and the flood water starts

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<sup>10</sup> Though they can be found intercropped together (Achigan Dako *et al.* 2008b).

withdrawing. The flood water will bring nutrients, but it can also carry pests and diseases from other areas. Yields are medium, compared to the high-input irrigated production areas. Certain areas, with an assured market, specialise in the production of specific species, which are produced under single stand conditions. This is the case of the Ouémé Valley with species such as *Celosia argentea*, *Amaranthus cruentus*, and *Solanum macrocarpon*, and the Mono Valley in the periurban area of Lokossa with *Corchorus olitorius*.

Various harvest methods are observed, both in rural and urban areas, depending on whether the species is herbaceous or woody. Woody species are harvested in the following ways:

- Harvest of the first branches below the stem to favour the regeneration of shoots with young leaves.
- Harvest of young shoots at the top of the tree (e.g. *Vitex doniana*).
- Topping of the species at the beginning of the rainy season to favour the regrowth of shoots during that rainy season.

Herbaceous species are harvested in the following various ways:

- Only the branches are harvested in various rounds, so that the main plant is preserved for the production of seed. For certain annual species, such as *Amaranthus hybridus* and *Solanum macrocarpon* it is recommended not to cut the stem too low to the ground because this can prevent their regeneration.
- Uprooting the whole plant at a young age.
- Harvest of the leaves only, and later on the whole plant regenerates from the roots. Seeds of these species are not usually viable because of various abiotic factors which influence the germination (the seasonality, the climate, the soil).

Production statistics for traditional vegetables in Benin are virtually non-existent and in the rare cases where data exist, they are usually not disaggregated by species. According to Mbaye and Renson (1997) the production of traditional leafy vegetables during the season 1995-1996 was estimated by the Ministry of Rural Development at 55 000 tonnes. Hounkpodoté and Tossou (2001) reported that the production of *Solanum macrocarpon* and *Amaranthus cruentus* in Cotonou increased from between 1995 and 2000 from 813 to 1668 tonnes and from 672 to 1512 tonnes, respectively. This is an area which requires further attention.

### 5.2 Commercialisation of traditional vegetables

Traditional vegetables have the potential to contribute quite substantially to the income of households involved in vegetable production, as work from the West African region shows. Abasse *et al* (2007) found that producers of traditional

vegetables in the regions of Maradi and Dosso obtained 20-30% of their annual income from these vegetables. And in the region of Tillabery income from the traditional vegetables could be more than 50% of total income. In particular, producers of *Corchorus olitorius*, which is exported in large quantities to Mali, could have annual revenues higher than USD 1000.

Work in Benin also shows the profitability of traditional vegetables. A study carried out by Agossou *et al.* (2001) shows that the production of *Vernonia amygdalina* in the dry season can generate a margin of 7 550 000 FCFA<sup>11</sup> per hectare. However, *Abelmoschus esculentus* produced under extensive production at Zogbodomey gives a much lower margin of only 67 200 FCFA per hectare. In Cotonou, a survey by Sodjinou and Assogba Komlan (2008) showed that the gross margin per m<sup>2</sup> for *Corchorus olitorius*, *Ocimum gratissimum*, *Vernonia amygdalina*, and *Solanum macrocarpon* is between 120 to 177 FCFA. Vodouhè (2008) reports that the sale of *Vitex doniana* leaves can bring a gross monthly revenue of 10 000 to 30 000 FCFA.

The commercialisation of traditional vegetables in Benin is primarily dominated by women under 30 years of age in rural areas, and rarely over 40 in urban environments (Akplogan *et al.*, 2007). Women traders are involved at all stages of the chain, from collectors at the level of the farm plots to retailers in local and regional markets (Levasseur *et al.*, 2007).

The main traded vegetables are cultivated species, however, certain wild species are also widely marketed (e.g. *Vitex doniana*). Figure 5.1 shows the top ten vegetables traded by rural villages located in each phytogeographic zone. Overall, the most widely traded vegetables for the whole of the country are *Amaranthus cruentus*, *Abelmoschus esculentus*, *Corchorus olitorius*, *Solanum macrocarpon*, *Vernonia amygdalina*, *Vitex doniana*, *Citrullus lanatus*, *Ceratotheca sesamoides*, *Adansonia digitata*, and *Hibiscus sabdariffa*. However, there are hardly any reliable statistics on the volumes and prices of vegetables traded in the country (Agossou *et al.*, 2001)

In general terms, the amounts of traditional vegetables sold vary by location and by season. In rural areas the availability of traditional vegetables is very high during the rainy season (from June to December) and low in the dry season (Agossou *et al.*, 2001). Woody species (e.g. *Adansonia digitata* and *Vitex doniana*) are the most widely found on local markets.

In urban and periurban production sites, and in low-lying flood lands, vegetable availability is quite high during the dry season, and this is reflected on local markets, nevertheless, supply does not meet demand. However, there can be variations depending on the species. In southern markets, the availability of *Amaranthus cruentus* and *Solanum macrocarpon* varies very little during the year. On the other hand *Corchorus olitorius* and *Vernonia amygdalina* fluctuate during the year, being at their highest during the rainy season (May to October), and at their lowest in January to April. From October to January when supply would normally decline because of the onset of the dry season, in urban areas in the south, supply is actually maintained because of production from the low-lying flood lands.

<sup>11</sup> The exchange rate of the FCFA is 655.957 to 1 Euro.

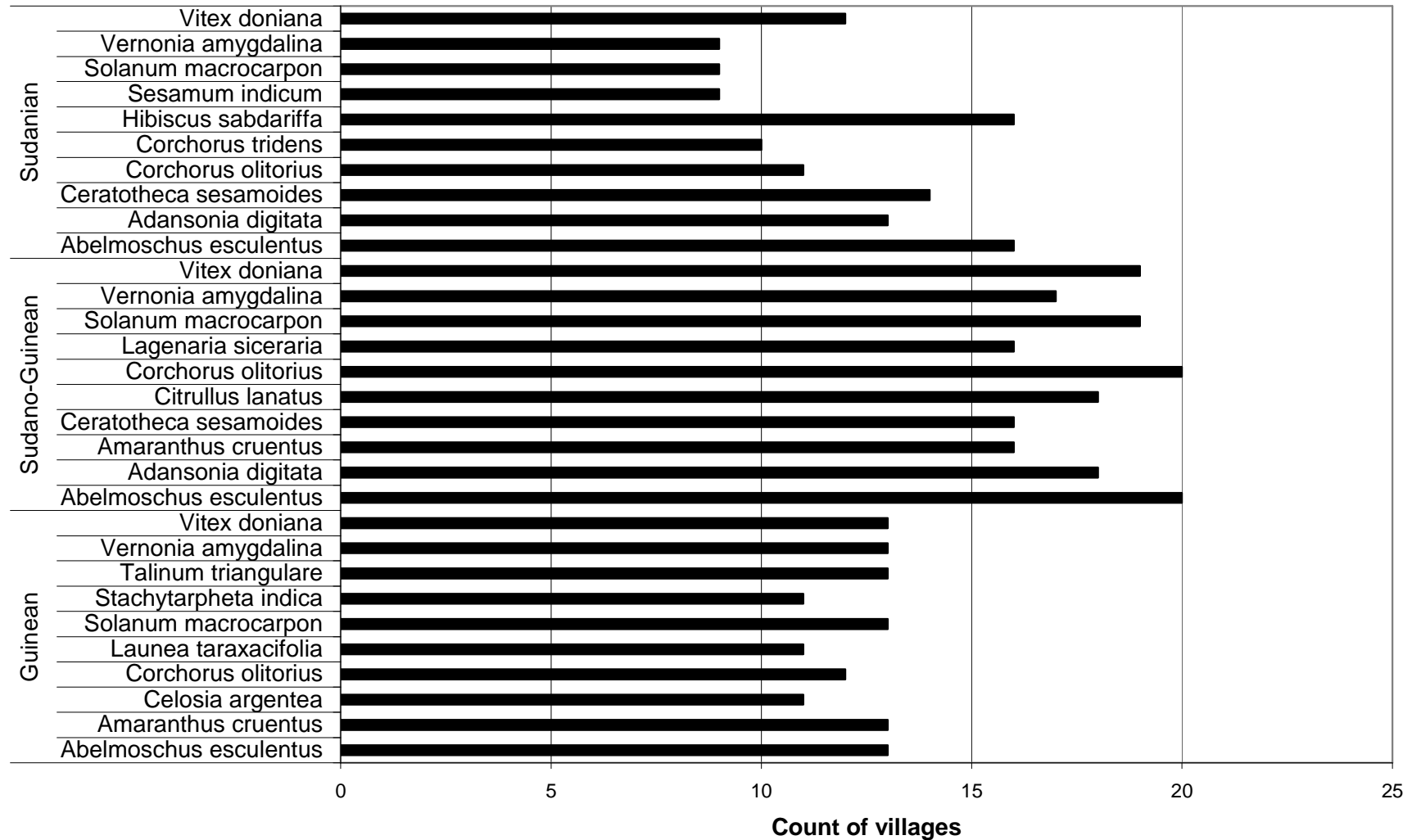


Traditional vegetables are more available in periurban markets compared to urban markets. These seem attributable to consumer demand and preference for these vegetables.

The supply chains can vary from location to location. In most cases, producers sell their produce on to wholesalers, who in turn sell it on to retailers. In areas of large-scale production, collectors may be found between the producers and the wholesalers. However, in urban areas, retailers may purchase directly from urban production locations, without intermediaries. Akplogan *et al.* (2007) report that traders rarely collaborate in terms of exchanging prices and information. Though each retailer tends to have regular suppliers (either wholesalers or sometimes farmers) there are no written contracts. However, if a retailer supplies a restaurant or a hotel then a formal contract is developed.

A price analysis of traditional vegetables shows that the highest prices are obtained in urban and periurban areas (Akplogan *et al.*, 2007), and that prices vary according to seasonality. The highest prices are obtained during the dry season when supply is exclusively from areas under irrigation or from low-lying flood lands (Agossou *et al.*, 2002; Akplogan *et al.* 2007; Matlhare *et al.*, 1999).

TRADITIONAL VEGETABLES OF BENIN



**Figure 5.1:** Top ten traditional vegetables traded in the Guinean (n=13), Sudano-Guinean (n=20), and Sudanian (n=16) zones of Benin (village focus group data). The graph shows the number of villages trading each species. Overall, 13 villages were surveyed in the Guinean zone; 20 in the Sudano-Guinean zone; and 16 in the Sudanian zone



## Chapter 6 – Conservation of diversity of traditional vegetables in Benin

MW Pasquini & B Ambrose-Oji

### 6.1. Assessing the status of traditional vegetables

There are widespread reports that the diversity of traditional vegetables in West and Central Africa is declining. There are many causes to which this can be attributed. They may be general threats common across many African countries, such as increasing land use change and habitat destruction in response to growing populations, as land is cleared for cultivation, for plantation silviculture, or as a consequence of urbanisation and infrastructure development. There are also more species-specific threats from intensive exploitation of particular plants used as vegetables. A characteristic example is the continuing destructive harvesting practices associated with *Gnetum africanum* (*eru*) in Nigeria, Cameroon, Gabon and the Central African Republic (Shippers and Besong, 2004) or with *Crassocephalum rubens* in Cameroon (Bosch, 2004).

Assessing the situation in Benin is not straightforward. Up until the recent Darwin Initiative 15/003 study, Dansi *et al.* (2008) and the work by Adjatin (2006) there has been no other accessible information documenting the vegetable species used by different socio-linguistic groups around the country. Even botanical single species studies which map distribution and species richness across different agro-ecological zones are limited to a few well recognised taxa of regional significance such as the baobab *Adansonia digitata* (Assogbadjo, 2006), the bitter melon *Momordica charantia* (Achigan-Dako, 2008) or aki/akee *Blighia sapida* (Ekue *et al.*, 2009). The work of the CGIAR centres reflect this too. The SINGER<sup>12</sup> records for Benin show 1118 accessions representing just seven different genus, only one of which *Vigna* can be used as a vegetable. Similarly the germplasm holdings of the World Vegetable Centre contain only two taxa from Benin (*Solanum aetiopicum* and *Amaranthus cruentus*). It is important for new studies to build on the work delivered by the Darwin Initiative 15/003 project, and begin to map in greater detail the distribution and genetic diversity of the species used as vegetables.

So, at the present time the only means of assessing which species used as vegetables may be disappearing from the environment is through knowledge of local communities. As discussed in Chapter 1 individual respondents were asked (using a questionnaire) whether they were aware that any species had disappeared or were disappearing in the environment. They were also asked whether they had undertaken any actions to prevent their disappearance, or if they could suggest any solutions for their preservation; if there were any specific harvesting systems to protect species; if there were any species that they had domesticated and wished to domesticate; and their perception of the constraints with regards to conserving biodiversity. In addition, these questions were explored in more detail with older informants considered to be knowledgeable on the plant species which could be used as vegetables, and who could give a long time perspective.

<sup>12</sup> SINGER is the genetic biodiversity collection and storage information service of the CGIAR centres and the FAO established in response to the International Treaty on Plant Genetic Resources for Food and Agriculture, which entered into force in June 2004. <http://singer.cgiar.org/index.jsp?page=showkeycount&serach=cuc=cuben>

The results yielded through this approach are of course the *perception* of specific individuals and do not necessarily reflect the actual status of the species in the environment. Nevertheless, where reports from respondents about the decline or disappearance of specific species are given by significant numbers of people, these should be taken seriously. One problem with this approach is that it may fail to detect species which though they are genuinely declining in the environment, are not reported because they are no longer of interest to the respondents.

Unfortunately, the actual identification of species reported to be extinct is extremely difficult because of the numerous socio-linguistic groups in the country. A species reported to be extinct in the environment around a village in the more populous south of the country may still be widespread in another location, where it is, however, called by a different local name. And even within the same linguistic groups, there can be uncertainties when a particular species is identified by more than one local name, or of course, when the same local name is applied to two different species. As the Darwin Initiative 15/003 surveys collected data from 19 socio-linguistic groups, with generally only two villages per group, identifying species reported to be extinct from local names has often not been possible.

Similarly, if a species was reported to be increasingly rare, it was sometimes possible to find a sample in the environment for identification, but not if the species was in a location with difficult access.

## **6.2. Perceptions of threatened species, constraints and local approaches to biodiversity conservation**

Across all 18 villages only 55% of questionnaire respondents reported a species that had disappeared or was disappearing, though a closer analysis of the data shows that it was mainly in the four villages located in Sudanian zone where the majority of respondents did *not* report any threats. Overall, 58 species were reported as threatened, but amongst these only a few species were reported as threatened by a reasonably high number of respondents. Figure 6.1 shows that only *Crassocephalum sp.* and *Launea taraxacifolia* were reported by more than ten respondents (indicating that more than one village was concerned about a decline of the species).

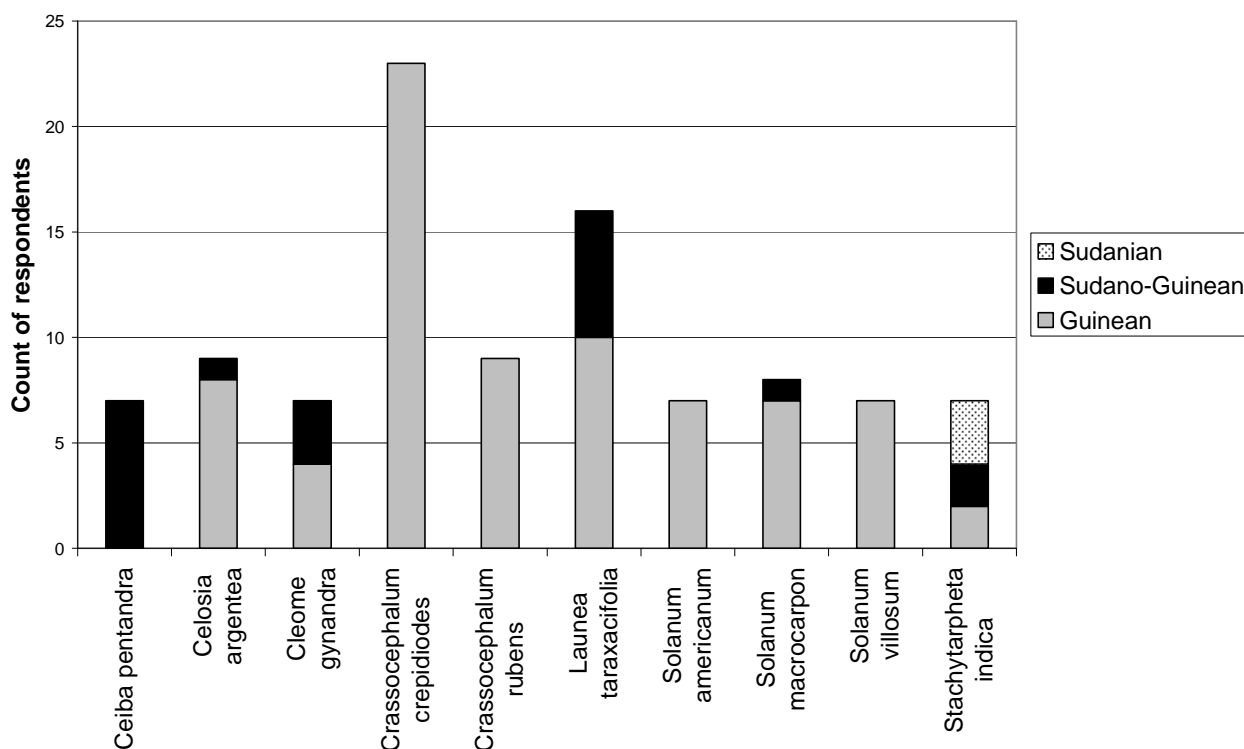
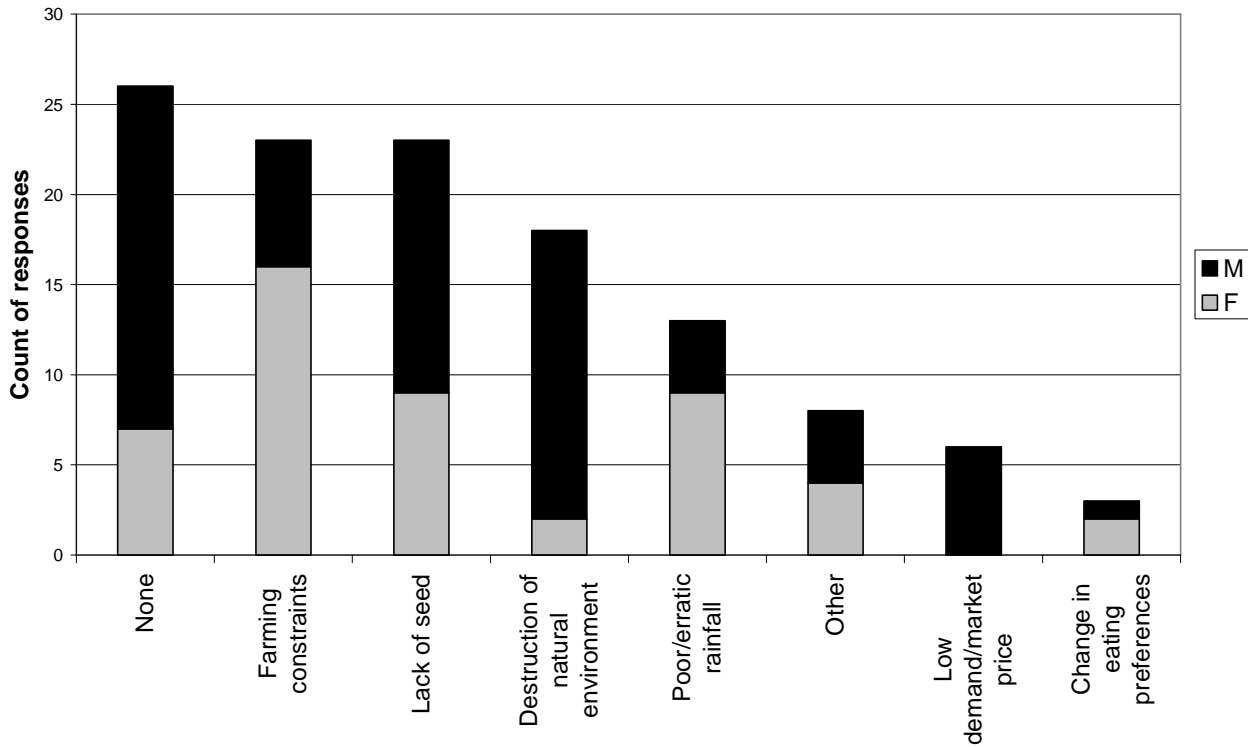


Figure 6.1: The most threatened species (respondent perception) disaggregated by phytogeographic region in Benin

Other species could be declining locally. For example, *Synedrella nodiflora* was reported as threatened only by respondents in Assedji. *Ceiba pentandra* was of concern only to respondents in Barikini. A further 40 local names which could not be identified were also given. The majority of these were from villages located in the Sudano-Guinean and Sudanian zone. However, problems with translation and the knowledge of the ethnobotanical team resting on plants and local names from other parts of the country means the survey identification of less common species in this area remained rather more limited.

Even fewer species were reported as having disappeared from the environment altogether (data not shown). The only species which stood out was *Ageratum conizoides*, which every respondent in Akpate reported as having disappeared from the environment. In the case of ‘disappeared’ species too, there was a similar problem of identification and 19 local names could not be identified.

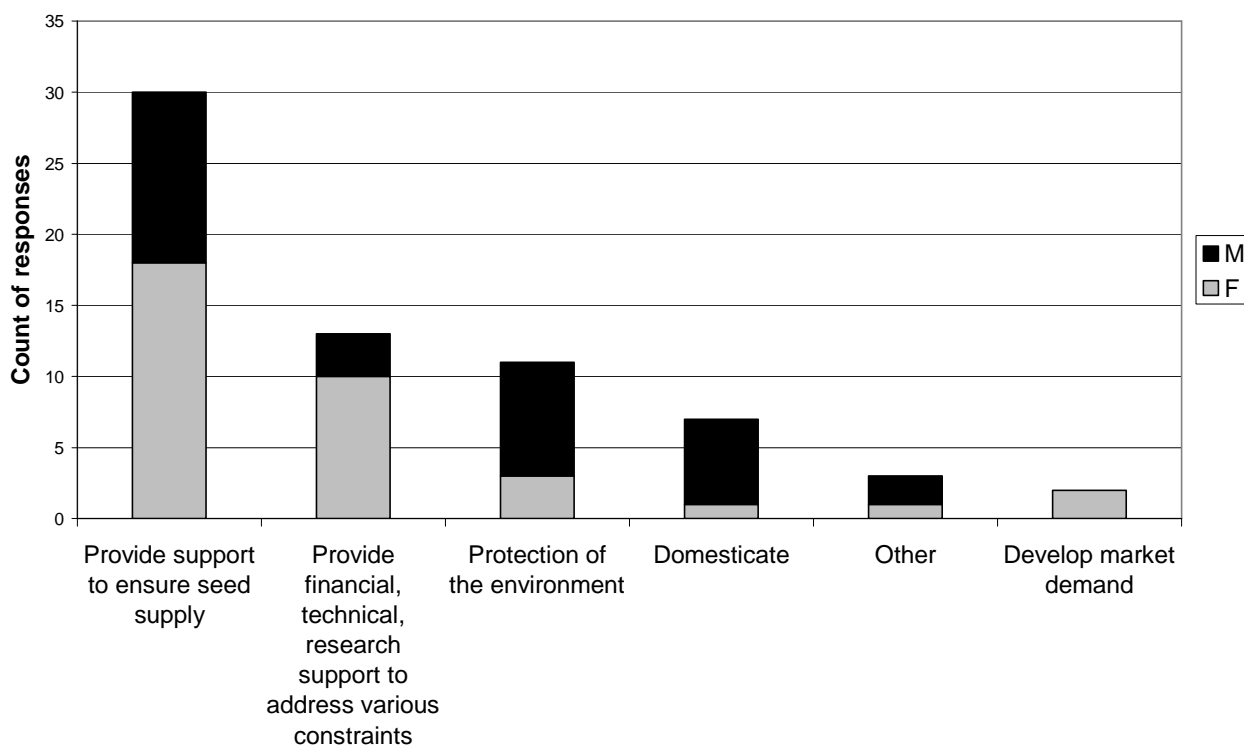
When asked what constraints survey respondents perceived with regards to protecting the diversity of traditional vegetables, 71 out of 170 respondents (interviewed through a questionnaire) did not give an answer or misunderstood the question and gave an irrelevant answer. The remaining 99 responses are shown in Figure 6.2. There is an interesting difference in perception between women and men. The constraints mentioned by women centred around production, and they mentioned various farming constraints, lack of seed supply and poor rainfall. The constraints listed by men were more varied, and noticeably they mentioned habitat destruction (destruction of forests, land clearance, bush fires), and also poor market demand or low prices. There was also a significant category of answers dominated by male respondents where “no constraints” were reported.



**Figure 6.2:** Constraints to the conservation of biodiversity of traditional vegetable disaggregated by gender M=Male, F=Female (individual questionnaires, n=120)

When respondents were asked if they had undertaken any actions to try and conserve the threatened species, only 87 (out of 170) gave an answer, and of these nearly 75% said they had not; 11.5% had looked for seeds and 11.5% had started cultivating them on small scale.

With regards to possible solutions to the disappearance of species in the environment, 98 respondents did not give any answer, and 19 felt there were no solutions. The solutions suggested by the remaining respondents are shown in Figure 6.3. Unsurprisingly, the solutions can be linked back to the perceived constraints. Women advocated support in terms of seed supply and requested other forms of technical/financial support. Very few respondents suggested protecting the natural environment and of those who did, the majority were male.



**Figure 6.3:** Solutions suggested by respondents to recover disappearing species disaggregated by gender M=Male, F=Female (n=66)

In terms of harvesting and collective resource management systems, it emerged that there were no particular techniques, or joint efforts. Respondents observed that to protect species, harvesting should not take place during flowering and fruiting period, in the case of herbaceous species only part of the plant should be collected (e.g. the leaves) and without damaging it, and in the case of tree species, certain silvicultural regeneration practices should be observed (see also Chapter 5).

The information provided by older informants in the course of the semi-structured interviews more or less mirrored the patterns obtained through the questionnaire survey (data not shown).

### 6.3 Domestication of wild species

Table 6.1 show the species which respondents claimed they had domesticated and wished to domesticate. These data should be viewed with caution, as the top three species are known to be widely cultivated. This suggests that respondents were giving a broader interpretation to the word ‘domestication’ than had been intended, and included species which were new to the village or to the respondent (but not necessarily wild). Whilst the process of domestication in scientific terms is associated with a process which results in the selection and replication of cultivars with desired traits and genetic suitability for domestic conditions, it has a far looser definition amongst villagers. For example, 15 of the 17 respondents claiming that *Celosia argentea* had been domesticated were from the village of Gogbo. It seems they probably considered *C. argentea* domesticated if they simply transplanted wildings from the surrounding environment into their home gardens, or if

they maintained them in their fields. Overall, there was little interest in domesticating species, apart from some desire to halt the decline of *Launea taraxacifolia* and *Crassocephalum* sp. as shown in Figure 6.1 and Table 6.1.

**Table 6.1:** Species which respondents claimed they had domesticated and wished to domesticate [count of female (F) and male respondents (M)]

Species which respondents claimed had been domesticated	F	M	Species which respondents wished to domesticate	F	M
<i>Celosia argentea</i>	15	2	<i>Ceratotheca sesamoides</i>	3	1
<i>Vernonia amygdalina</i>	11	1	<i>Vitex doniana</i>	3	1
<i>Corchorus olitorius</i>	8		<i>Corchorus tridens</i>	1	2
<i>Crassocephalum rubens</i> or <i>C. crepidiodes</i>	3	4	<i>Sterculia tragacantha</i>		3
<i>Cleome gynandra</i>	5		<i>Bombax costatum</i>		2
<i>Ocimum gratissimum</i>	4		<i>Celosia trigyna</i>		2
<i>Corchorus tridens</i>	2	1	<i>Corchorus olitorius</i>		2
<i>Launea taraxacifolia</i>	2	1	<i>Emilia sonchifolia</i>	1	1
<i>Synedrella nodiflora</i>	3		<i>Fleurya aestuans</i>		2
<i>Moringa oleifera</i>		2	<i>Hibiscus asper</i>		2
<i>Talinum triangulare</i>	2		<i>Ocimum gratissimum</i>	2	
<i>Vernonia colorata</i>		2	<i>Solanum macrocarpon</i>		2
<i>Vitex doniana</i>	1	1	<i>Synedrella nodiflora</i>		2
<i>Adansonia digitata</i>	1		<i>Vernonia amygdalina</i>		2
<i>Ceratotheca sesamoides</i>	1		<i>Adansonia digitata</i>		1
<i>Cucumeropsis mannii</i>		1	<i>Alternanthera sessilis</i>		1
<i>Melanthera scandens</i>	1		<i>Aspilia africana</i>	1	
<i>Ocimum basilicum</i>	1		<i>Cayratia gracilis</i>	1	
<i>Sesamum indicum</i>		1	<i>Celosia argentea</i>		1
<i>Solanum macrocarpon</i>	1		<i>Cissus populnea</i>	1	
<i>Stachytarpheta indica</i>		1	<i>Hibiscus sabdariffa</i>	1	
<i>Sterculia tragacantha</i>		1	<i>Lippia multiflora</i>	1	
			<i>Ludwigia perennis</i>		1
<b>Species which respondents wished to domesticate</b>	<b>F</b>	<b>M</b>	<i>Melanthera scandens</i>	1	
<i>Crassocephalum rubens</i> or <i>C. crepidiodes</i>	4	4	<i>Moringa oleifera</i>		1
<i>Croton lobatus</i>	5	2	<i>Solanum americanum</i>	1	
<i>Launea taraxacifolia</i>	2	5			
<i>Talinum triangulare</i>	2	3			



# Part II

## Selected species of traditional vegetable of Benin by family

S Ndanikou, TM Assogba, ES Avohou & EG Achigan-Dako

This part of the document combines data from a variety of sources (Grubben and Denton 2004, Akoègninou *et al.* 2006) with information collected through the Darwin Initiative 15/003 project describing species and their utilization as indicated by community respondents. Only species cited in at least two villages are described (with the exception of *Althernantera brasiliiana* which was found only in Holly socio-linguistic group in Akpatè). The species are grouped by family.

### Acanthaceae

#### *Asystasia gangetica* (L.) T.Anderson

**Local names:** Akoussimekpe (Holly), Azéman (Fon); Yéfè (Goun), Lobiri (Yoruba, Nagot) Atchelekman (Ani), Degnuman (Aïzo), Liman (Adja), Pobunga (Gourmantché).

**Description and variation:** *Asystasia gangetica* is an annual, sometimes perennial herb which can reach 1 m in height. Stems are usually ascending, branched and quadrangular. Leaves are simple, opposite, blade ovate to lanceolate, base cuneate to cordate, apex acuminate to acute, margin entire, glabrous to sparsely pubescent. Inflorescence is a terminal raceme up to 25 cm with flowers directed to one side.

**Status:** Wild

**Habitat:** It is a common weed found in farm fields, fallows and abandoned areas along roadsides and river banks in more or less water-logged areas as well as well-drained cultivated areas.

**Darwin Initiative 15/003 project specimen collected from:** Tanongou (Tanguieta/Gourmantche); Barikini, Penelan (Basilla); Akpate (Pobè); Agbandonou (Allada); Agnavo (Dogbo).

**Reproductive biology:** *Asystasia gangetica* is species which propagates by seeds. Multiplication by stem cuttings with 1-3 nodes is also possible. Single-node cuttings buried in soil produce flowers and fruits within 6 weeks.

**Utilisations:** As a leaf vegetable, it is collected from the wild and in general rarely eaten by the above communities, except for Gourmantché and Anii communities in the north Benin and Adja, Aïzo and Holly in south. It can be found sometimes in the market in the rainy season, its period of abundance.

**Threat on genetic resources:** Unknown.

**Further reading:** Grubben and Denton (2004).



***Justicia anselliana* (Nees) T.Anderson**

Syn.: *Adhatoda anselliana* Nees

**Local names:** Damandodjè (Ouémè, Aïzo).

**Description and variation:** It is an herbaceous plant, erect or decumbant. The inflorescence is a cyma with white flowers.

**Status:** Wild

**Habitat:** *Justicia anselliana* is found in low-lying flood lands.

**Darwin Initiative 15/003 project specimen collected from:** Gbéko (Dangbo), Gogbo (Adjohoun)

**Utilisations:** *J. anselliana* is rarely or occasionally consumed among Wémè and Aïzo communities in South Benin. Young leaves of this herb species are collected from the wild in the dry season when the level of water has dropped in the valleys. It is sold in the local market.

**Threat on genetic resources:** unknown

***Justicia insularis* T.Anderson**

**Local names:** Kpahunmarogu (Gourmantche); Mutun (Wamma).

**Common names:** Justicia, Tetu (English, French)

**Description and variation:** *Justicia insularis* is an annual or perennial herb up to 2 m tall. Stems are angular, glabrous to pubescent, basal part often swollen with aerial roots. Leaves decussately opposite, simple, almost glabrous to densely pubescent, blade linear or narrowly lanceolate to ovate, base attenuate to truncate, apex obtuse to acuminate, margin entire to crenate. Inflorescence is an axillary or terminal congested spike, few-flowered, with narrow bracts. Flowers are usually crimson but sometimes white. Fruit is an ovoid to ellipsoid capsule, yellow-brown to white, explosively dehiscent. There is a wide variation within *Justicia insularis*. Improved cultivars are not available and there are no germplasm collections.

**Status:** Wild, domestication underway

**Habitat:** This herbaceous plant occurs in a wide range of habitats from moist forests to dry savannah regions. It is also found in cultivated land refuse heaps, grasslands and forest edges. It can be found on sandy or loamy soils but requires rich humus soils with slight shade for optimum growth.

**Darwin Initiative 15/003 project specimen collected from:** Batia (Tanguieta); Pouya (Natitingou)

**Reproductive biology:** *Justicia insularis* can be propagated by seeds or cuttings. The seed remains dormant during the dry season and germinates readily with the onset of rains. Seed production is difficult because of the seeds are scattered when the fruits split open. As a result, the seeds may be gathered immediately when the colour changes from green to white or whole branches with inflorescences are harvested and dried. In cultivation it is easiest to take a root cutting obtained from the basal

part of stem. Spontaneous seedlings can be up-rooted and transplanted on vegetable beds. Stem cuttings about 15 cm long can also be planted.

**Utilisations:** It is collected from the wild in fallows and farms and young leaves are frequently consumed in the rainy season. It is sometimes sold in the market.

**Threat on genetic resources:** There is no immediate threat of genetic erosion of the existing variation. Collection and maintenance of the germplasm is required for genetic studies and selection of improved cultivars.

**Further reading:** Grubben and Denton (2004).

### *Justicia tenella* (Nees) T.Anderson

**Local names:** Djagudjagu (Ifè, Tchabè & Gourmantche), Kurokuro (Idatcha), Kurokuntonu (Bariba & Boko), Parbatukpékpériya (Waama), Tinukunti (Otamhari).

**Description and variation:** *Justicia tenella* is an herbaceous semi-perennial plant with spindly stems up to 40 cm long. It often roots at lower nodes.

**Status:** Wild but domestication underway

**Habitat:** It is a riparian forest or river bank specie. It is found in fallows or as weed in farms or cultivated in home gardens.

**Darwin Initiative 15/003 project specimen collected from:** Loumbou-lounbou (Karimama); Tamba, (Savalou); Ikemon (Ouèssè); Okunfo (Savè), Ekpa (Ouèssè); Ganro (Bembereke); Zougou-pantrossi (Gogounou) , Ilèman, Kpakpoaza (Dassa), Bensèkou (Kandi), Kpassa (Tchaorou); Mareguinta (Kalalé); Cotiakou (Tanguieta); Pouya (Natitingou); Moupemou (Natitingou)

**Reproductive biology:** *Justicia tenella* can also be propagated by seeds or cuttings. (Dabade 2009).

**Utilisations:** *J. tenella* is a herb collected by the above sociolinguistic groups from the wild but said to be domesticated by the Otamhari, Boko, Idatcha, Tchabè and Ifè communities. Usually sold in the market, the production is generally abundant in the rainy season. *J. tenella* is a major leaf vegetable in north-west Benin.

**Threat on genetic resources:** not established.

**Further reading:** Dabade (2009)

## Amaranthaceae

### *Alternanthera brasiliana* (L.) Kuntze

Syn.: *Gomphrena brasilina* L.; *Philoxerus brasiliana* (L.) Smith

Local names: Olowon'djedja or Djetandoyé (Holly)

**Description and variation:** It is an herbaceous plant up to 60 cm tall or more, very branched. Leaves are red, inflorescence terminal.

**Status:** It is an ornamental plant introduced in the country. The species is cultivated in rainy season but also goes wild.

**Habitat:** Around habitations and in fallows and waste lands.

**Darwin Initiative 15/003 project specimen collected from:** Akpate (Pobè)

**Utilisations:** Consumption of *A. Brasialiana* as a leafy vegetable is recorded among the Holly ethnic group in south western Benin. The species is said to be aphrodisiac.

**Threat on genetic resources:** Not under threat.

***Alternanthera sessilis* (L.) R.Br. ex Roth**

Syn.: *Gomphrena sessilis* L. ; *Alternanthera achyranthoides* Forssk.

**Local names:** Idé, Achoukpa (Holly); Gwè (Mahi); Houngba (Goun); Gomi (Adja); Tomadohoungbè (Cotafon), Atakuluesuan, Guinééné, Guinnindanou (Anii) ; Agoué (Wémè) ; Houngbè (Aïzo)

**Description and variation:** it is a perennial or annual herb up to 1 m tall, erect, ascending or creeping, often widely branched, with robust taproot. Stems are striate, terete below, and slightly tetragonous above, solid, sometime floating in water and fistulose in lower part. Leaves are opposite, simple, petiole up 5 mm long; blade linear-lanceolate, oblong to ovate or obovate, glabrous to sparsely pilose. Inflorescence is in an axillary, sessile, subglobose head. Flowers are bisexual, regular. Fruit is an obreniform, corky, indehiscent capsule 2 mm long, dark brown, 1-seeded.

**Status:** Wild.

**Habitat:** *Alternanthera sessilis* is a very common plant of constant or periodically humid, open localities in roadsides, gardens, ditches, swamps and rice fields on many types of soil. In fields and along watercourses, it can become noxious aquatic terrestrial weed. It prefers loamy, alkaline soil, low in exchangeable calcium and rich in total nitrogen.

**Darwin Initiative 15/003 project specimen collected from:** Afomayi (Lalo); Gogbo (Adjohoun); Ayetedjou (Kétou); Sohounme (Houeyogbé); Gbeko (Dangbo); Agnavo (Dogbo); Zonmon (Zagnanado); Zalimey (Zogbodomey). Penelan (Bassila); Kodowari (Bassila); Barikini (Bassila).

**Reproductive biology:** *Alternanthera sessilis* produces flowers and fruits throughout the year with most vigorous reproductive growth at the end of it. The flowers are self-pollinated and the fruits are dispersed by wind and water. It can be also propagated by rooted stem parts.

**Utilisations:** *Alternanthera sessilis* is an herbaceous creeping plant widespread in all Benin ecological zones. Its consumption as leafy vegetable occurs year-round among several ethnic groups. Leaves are collected from the wild and sold in local market.

**Threat on genetic resources:** It is widespread and is not in danger of genetic erosion.

**Further reading:** Grubben and Denton (2004).

***Amaranthus cruentus* L.**

Syn.: *Amaranthus hybridus* L. Subsp. *cruentus* (L.); *Amaranthus paniculatus* L.

**Local names:** Fotètè (Tchabè, Idatcha, Mahi); Tètè (Mahi); Èfo tètè (Tchabè); Èfo docteur (Tchabè); Olowon'djèdja (Tchabè); Adjogodo (ifè); Tètèfufu (Holly); Tètèdudu (Holly).

**Common names:** Amarante, brède de Malabar (Français); Amaranth, African spinach (English)

**Description and variation:** *Amaranthus cruentus* in an annual herb, erect or less commonly ascending up to 2 m tall. Stems are stout, branched, angular, glabrous or thinly to moderately furnished with multicellular hairs. Leaves arranged spirally, simple, without stipules, long-petiolate; lamina broadly lanceolate to rhombic-ovate, attenuate or shortly cuneate at base, obtuse to subacute at apex, mucronate, entire, glabrous to sparsely pilose, pinnately veined. Inflorescences large and complex consisting of numerous agglomerated cymes arranged in axillary or terminal racemes and spikes, the terminal one up to 45 cm long, usually with many lateral, perpendicular, thin branches. Flowers unisexual, subsessile, fruit is an obovoid to rhombic capsule 2-2.5 mm long, circumscissile, almost smooth, with a short beak, 1-seeded. Many cultivars exist and are cultivated (red, pink and green). Green cultivars are the most frequent and appreciated in Benin.

**Status:** Cultivated.

**Agro-ecology:** Vegetable amaranths grow well at day temperature above 25° C and night temperature not lower than 15°C. Amaranths like fertile, well-drained soils with a loose structure. The mineral uptake is very high. *Amaranthus cruentus* is fairly tolerant of adverse climate and soil conditions. The plant is used to control nematode populations in periurban agriculture in Cotonou.

**Production areas and systems:** In Benin, *Amaranthus* species is the most commonly cultivated and consumed African spinach throughout the country. Cultivation occurs in all agroecological zones from the coastal sector in the Guinean phytogeographic zone to the dry forests and herbaceous savannahs in the Sudanian zone. However, the species is more appreciated in the Guinean zone and widely spread out in urban agriculture. The common cultivation practice is sowing in nursery at a seed rate of 3-10g/m<sup>2</sup> and transplanting after 2-3 weeks. The production can be practised for once-over harvesting or repeated cuttings depending on the plant density. Usually the repeated cutting method (2-3 cuttings) is the one adopted by producers in urban agriculture. From market surveys it appears as one of the main Benin leafy vegetables, possibly the number two behind *Solanum macrocarpon*. In big cities like Cotonou, *Amaranthus cruentus* represents 31% of the average quantity of fresh leafy vegetable bought daily at the markets.

**Darwin Initiative 15/003 project specimen:**

**Utilisations:** The main use of *Amaranthus cruentus* is as a leafy vegetable prepared by cooking and consumed as a vegetable dish or as an ingredient in sauces. The plant parts used are leaves and soft stems. Leaves are often sold in either local or regional markets and made into bunches. The economic value of *Amaranthus cruentus* as a

popular vegetable is high. Production and sale of *Amaranthus cruentus* employs a great number of women and contributes to many households' income particularly in urban areas. Amaranths leaves provide iron and protein. Leaves have very high essential micronutrient content. Medicinal uses are numerous. Leaves are specially recommended for children, lactating women and in case of constipation, fever, haemorrhoids and anaemia.

**Threat on genetic resources:** There is no immediate threat of genetic erosion of the existing variation. However, escapes growing as weeds tend to disappear.

**Further reading:** Grubben and Denton (2004), Akplogan *et al.*, (2007).

*Amaranthus dubius* Mart.ex Thell.

**Local names:** Togba (Fon), Handoukpo (Mahi); Tekpegnonkonkondé (Gourmantché); Yonbita (Wama).

**Common name:** Amarante, brède de Malabar (Français); Amaranth, pigweed (English)

**Description and variation:** This is an erect annual herb, up to 150 cm tall; stems slender to stout, branched, glabrous or upwards, especially in the inflorescences, with short to rather long hairs. Leaves arranged spirally, simple, without stipules; lamina ovate or rhomboid-ovate, cuneate at base, blunt or retuse at apex, mucronate, entire, glabrous or shortly pilose, sometimes the centre of the lamina blotched red. Inflorescences are spikelike or paniculate, axillary and terminal, the terminal one up to 25 cm long, consisting of glomerules more or less isolated at base of inflorescence and agglomerated towards apex. Flowers are unisexual and sessile. The fruit is an ovoid-urceolate capsule with a short inflated beak, 1-seeded. Cultivated types of *Amaranthus dubius* differ from weedy types; they are larger, more erect and more succulent. Several local types occur.

**Status:** Wild, domestication underway.

**Habitat:** Weedy *Amaranthus dubius* is a small prostrate plant frequently found in tropical humid lowland. It is also a common weed plant in waste uplands, in fallows, roadsides, flood plains, river banks and cleared forest areas. Like *Amaranthus cruentus*, *Amaranthus dubius* grows well at day temperature above 25° C and night temperature not lower than 15°C and likes fertile, well-drained soils with a loose structure.

**Darwin Initiative 15/003 project specimen collected from:** Bognongon (Zogbodomey); Zonmon (Zagnanado), Batia (Tanguieta); Pouya (Natitingou).

**Reproductive biology:** The seed of *Amaranthus dubius* is smaller than that of other cultivated amaranths. In the wild, home garden and urban agriculture, the seed of fruiting plants scatters and gives rise to new plants. Cultivation method is sowing in a nursery at a rate of 2-10 g/m<sup>2</sup> and transplanting after 2-3 weeks.

**Utilisations:** *A. dubius* is a leafy vegetable domesticated and cultivated in some areas of Benin. It has been cited in the Sudanian (e.g. Pouya in Wama sociolinguistic group) and Guinean zones (e.g. Bognongon in Fon sociolinguistic group). Uses of *A*



*dubius* and its nutritional composition are similar to the ones of *A. Cruentus*. To make it more appetizing, many people preferred associate this vegetable with bitter vegetables (e.g. Bitterleaf, African eggplant).

**Threat on genetic resources:** not established.

**Further reading:** Grubben and Denton (2004)

### *Amaranthus spinosus* L.

**Local names:** Handoukpo (Mahi); Tètè ounon (Fon, Goun); Tètè vè (Goun); Tètè élégoun (Nagot); Awoundjagbe (Cotafon); Ayinkpinnan, Akpignikokonan (Gourmantche); Daboukonkondi (Gourmantché); Sagourou (Bariba); Sodjagbe (Cotafon); Sogbe (Adja); Tete elegou, Tètèlègoun (Holly) Tisanpoti (Otammari)

**Description and variation:** *Amaranthus spinosus* is an annual, erect, monoecious herb, up to 100(-130) cm tall, much branched; stem obtusely angular, glabrous or slightly pubescent, green or variably suffused with purple. Leaves are alternate, simple; stipule absent, petiole approximately as long as leaf-blade. Inflorescence is consisting of dense clusters; lower ones axillary, higher ones collected in axillary and terminal spike. Flowers are unisexual, solitary in the axil of a bract. Fruit is an oblong capsule with persisting styles, circumscissile a little below the middle or indehiscent, 1-seeded. It is usually difficult to make a distinction between *Amaranthus dubius* and *Amaranthus spinosus* bases on morphological characters; *Amaranthus spinosus* has axillary spines which are not present on *Amaranthus dubius*. However, spineless *Amaranthus spinosus* is observed in several localities.

**Status:** Wild.

**Habitat:** *Amaranthus spinosus* is adapted to a wide range of climatic and edaphic factors. It grows best in the sun or in light shade. Flowering is earliest and most abundant in areas with day lengths of 11-12 hours. Spiny amaranth is nitrophilous and prefers soil with high organic matters content but is also able to grow on sandy soils. Optimal growth is obtained on soil with moderate moisture content, but *Amaranthus spinosus* is also capable to grow on wet soil as well. It is drought-resistant and can even grow under arid conditions.

**Darwin Initiative 15/003 project specimen collected from:** Assedji (Athiémé); Zonmon (Zogbodomey); Sohounme (Houeyogbé); Agnavo (Dogbo); Akpate (Pobè); Ayetedjou (Kétou); Moupemou (Natitingou); Batia (Tanguieta); Tanongou (Tanguiéta); Loumbou-Loumbou (Karimama); Ganro (Bembèrèkè).

**Reproductive biology:** Seeds mature about one month after flowering. They are scattered around the mother plants or distributed by animals feeding on plants. It has been observed that large numbers of seedlings emerge from cattle faecal deposits. Seeds are also eaten by birds which contribute to the propagation of plant.

**Utilisations:** Because of its spines, this leafy vegetable is the less appreciated of *Amaranthus* species. Nevertheless small quantities of leaves and stands are harvested for self consumption especially in the dry season. Sometimes leaves are

sold in markets but it does not have a great market value. The plant is said to have several medicinal uses.

**Threat on genetic resources:** Unknown.

**Further reading:** Grubben and Denton. (2004)

*Amaranthus viridis* L.

**Local names:** Tètè moto (Fon, Goun) ; Amadjin (Fon) ; Tètè dudu wèrè, atarounwa (Yoruba) Soungui (Bariba); Agnigbandjowelo (Cotafon); Tètè, Ayodogo (Aizo); Tereguenu (Bariba); Nafanafa (Gourmantche); Sogbe (Adja); Tchiroché (Dendi); Tetegbe (Aizo); Tete ibile (Holly); Gblegbe (Adja); Gassira (Bariba); Etè moto (Wémè) ; Aléfo (Dendi).

**Description and variation:** The plant is an erect, ascending or short-lived perennial herb up to 1 m tall. Stems are slender, branched; angular, glabrous to sparsely pubescent in upper part with multicellular hairs. Leaves are alternate, simple, petiole up to 10 cm long. The inflorescence consists of agglomerated cymes arranged in slender, axillary or most terminal spike, frequently paniculate, up to 12 cm long. Flowers are unisexual, sessile, green, male and female intermixed but female ones more numerous. Fruit is a subglobose capsule (1.5 mm in diameter) not or exceeding the perianth indehiscent, usually strongly wrinkled, 1-seeded.

**Status:** Wild; but often cultivated by ethnics groups such as the Fon and the Goun, in southern Benin. This *Amaranthus* species is said to have a rapid growth hence its local name “tètè moto”.

**Habitat:** *Amaranthus viridis* is a weed growing on disturbed or cultivated lands, often around habitations.

**Distribution:** Akoègninou *et al.* (2006)

**Darwin Initiative 15/003 project specimen collected from:** Assedji (Athiémé) ; Gome (Toffo) ; Agnavo (Dogbo); Gogbo (Adjohoun); Afomayi (Lalo) ; Gbeko (Dangbo); Akpate (Pobè); Agbandonou (Allada); Banigri (Tchaourou); Torozogou (Malanville) ; Zougou-Pantrossi (Gogounou); Batia (Tanguieta); Tankougou (Kandi); Kargui (Karimama).

**Reproductive biology:** *Amaranthus viridis* is easily grown from seeds like other amaranths.

**Utilisations:** Leaves and young plants (before they come into flower) are occasionally eaten as cooked vegetable.

**Threat on genetic resources:** unknown.

**Further reading:** Grubben and Denton (2004).

***Celosia argentea* L. var. *cristata* (L.) Kuntze**Syn.: *Celosia cristata* L.; *Celosia argentea* f. *cristata* (L.) Schinz

**Local names:** Soman (Fon, Mahi, Holly, Adja, Aizo); Tchokoyokoto (Ifè, Yoruba); Adjobodo, Tètèkpkpo (Tchabè); Avunvo (Goun, Cotafon, Mahi); Djogbolo (Mahi); Afonnou (Bariba); Adéfò (Otammari); Yabagassirou (Bariba); Iforana (Anii); Avlounvé (Oueme); Ayinkpinnan (Gourmantché); Tchokoognibo (Holly); Tchokoyokoto (Ife); Gasiala (Boko); Alefò (Otammari); Èfo (Anii); Vounvo (Aizo); Aléfo (Anii, Kotokoli, Bariba, Dendi); Aféfokenka (Anii); Afonoussouan (Bariba); Aléfo; Kimbrékoudjondjo (Kotokoli); Tokounme (Cotafon); Gassia (Bariba).

**Common names:** Célosie, crête de coq (Français); common cockscomb, garden cockscomb (English).

**Description and variation:** *Celosia argentea* is an annual erect herb up to 2 m tall. Stems are rigged, glabrous, branches up to 25 per plant, ascending; the leaves are alternate, simple, without stipules. Inflorescence is a dense many-flowered spike, at first conical but becoming cylindrical, up to 20 cm long, bracteates, silvery to pink, in ornamental forms completely or partly sterile and in many colours. Flowers are small, bisexual, regular, 5-merous, tepals free, narrowly elliptical-oblong. Fruit is an ovoid to globose capsule 3-4 mm long, circumscissile, few-seeded. There are three major types of *Celosia argentea* produced in Benin: green broad-leaved cultivar; broad-leaved cultivars with anthocyanin pigmentation on the leaf blades and parts of the stems, and an early flowering cultivar with deep green narrow leaves with a hard texture.

**Status:** Cultivated.

**Agro-ecology:** *Celosia argentea* grows well in the lowland humid forest zone at day temperatures of 30-35°C and night temperatures of 23-28°C. Growth is greatly retarded by temperatures below 20°C; consequently it does not grow well in the savannah region during the Harmattan period. It performs well under partial shade, especially in dry conditions. A well-drained sandy loam soil allows optimum growth, but celosia also grows well on marshy soil. It is moderately resistant to drought and performs well under low water supply in the dry season, but severe drought promotes early flowering. The requirement during the rainy season is 500-1000 mm.

**Production areas and systems:** *Celosia argentea* is produced throughout the country, but mainly in agroecological zones of South Benin. The Ouémé Valley region in east-southern of Benin is known for its high production of *Celosia argentea*. In this region farmers produce it frequently along the Ouémé river banks and seasonally flooded areas (which are characterized by hydromorphic soils) during the dry season when the flood waters start to recede. It is grown on raised or flats beds, or ridges. Planting methods consist in direct sowing or seedling transplanting after sowing on nursery beds for 2-3 weeks. Direct sowing is used for harvesting by uprooting whole young plants. Compared to direct sowing, transplanting gives more uniform, vigorous plants and higher yields. Celosia is also grown in intercropping systems with other vegetables.



**Darwin Initiative 15/003 project specimen:** Assedji (Athiémé); Gome (Toffo); Agnavo (Dogbo); Gogbo (Adjohoun); Afomayi (Lalo); Gbeko (Dangbo); Akpate (Pobè); Agbandonou (Allada).

**Utilisations:** A leafy vegetable especially consumed in southern Benin. It is very appreciated by the Wémé sociolinguistic group. It is sold year-round in local as well as regional markets. It is occasionally collected from the wild by the Tchabè sociolinguistic group in the Sudano-Guinean zone in central region of Benin. Leaves are nutrient rich (iron, vitamins, calcium) and consumers claim that it has antibiotic properties, “gives” blood, smoothes the skin, and encourages children’s growth.

**Threat on genetic resources:** not established.

**Further reading:** Grubben and Denton (2004)

### *Celosia trigyna* L.

Syn.: *Celosia digyna* Suess., Trans. Rhodes.

**Local names:** Adjèmanwofoo (Tchabè, Idatcha); Tchobodouè (Mahi), Tètè (Wémé); Djendjé, (Holly); Gbonkèfru, Gbonkèfula (Boko); Gnambifan, Gnambinoufagarou, Sombékékéssou (Bariba); Nafanafafa, Piwejeya (Gourmantché).

**Common name:** Célosie, crête de coq (Français); silver spinach, wool-flower (English).

**Description and variation:** The plant is an annual herb up to 120(-180) cm tall. Stems are simple, branched, grooved or striate, glabrous or with few hairs, usually pinkish brown. Leaves are alternate, simple, without stipule, blade broadly ovate to narrowly lanceolate, tapering to truncate at base, acute to acuminate to apex, entire, glabrous to slightly shortly hairy below, pinnately veined. Inflorescence is an axillary and terminal simple or branched spike, formed of distant or approximate of cluster of flowers, bracteates, and silvery to pink. Flowers are small, bisexual, regular, 5-merous, tepals free, ovate elliptical, shortly mucronate. Fruits are ovoid capsules, circumscissile, few-seeded.

**Status:** Wild but the species is said to be cultivated among Wémé sociolinguistic group in the Ouémé Valley.

**Habitat:** *Celosia trigyna* occurs in forest clearings and grassland, along roadsides and rivers and as a weed. It is collected from fallows, farms and abandoned areas for consumption. It requires up to 2500 mm annual rainfall and maximum temperatures of 25-30°C for optimum growth, and does not tolerate temperatures below 15°C. It grows on a wide range of soils, but prefers fertile well-drained loamy soils.

**Darwin Initiative 15/003 project specimen collected from:** Ayetedjou (Kétou); Akpate (Podè); Gogbo (Adjohoun) Ikemon (Ouessè); Okunfo (Savè); Ileman (Dassa); Banigri (Tchaorou); Vossa (Ouessè), Mareguinta (Kalalé); Bensekou (Kandi); Zougou-Pantrossi (Gogounou); Ganro (Bembèrèkè); Tanongou (Tanguiété); Soubado (Pèrèrè).

**Reproductive biology:** *Celosia* is propagated by seeds which germinate 4-5 days after sowing. The growing period is 90-120 days from planting to seeds maturity. The flowers are pollinated by insects.

**Utilisations:** In Benin *Celosia trigyna* leaves are consumed as a vegetable, finely cut in soups and sauces. Leaves are mainly collected from the wild. The slightly bitter leaves are occasionally consumed among Nagot sociolinguistic groups (Tchabè and Idatcha) in the Sudano-Guinean zone. Year-round consumption is common in the Bariba sociolinguistic group on the east-northern side in Sudanian zone. It does not have any market value; indeed its sale has not been recorded.

**Threat on genetic resources:** not established.

**Further reading:** Grubben and Denton (2004).

## Annonaceae

### *Annona senegalensis* Pers. ssp. *Senegalensis*

Syn.: *Annona arenaria* Thonn., Schumach. & Thonn, Bersk.

**Local names:** Batoko, Yogoti (Bariba), Guiparagnepi (Ani), Mutanmutimu, Timutiti (Otammari), Tchôtchôdè (Kotokoli).

**Common names:** Pomme cannelle du Sénégal, corossol sauvage (French); wild custard apple (English).

**Description and variation:** It is a bush shrub up to 1-2 m tall, rarely exceeding this height. Leaves are entire, alternate and bluey-green. Young leaves are finely pubescent showing 9-15 lateral nerves, very marked on the lower face of blade. Flowers are isolated or in pairs, occasionally in threes, and yellow. Fruit is an edible ovoid berry, yellow to orange at maturity.

**Status:** Wild.

**Habitat:** *A. senegalensis* is a common savannah species which grows in woody savannah in Sudanian zone and on a wide range of soil types.

**Distribution:** Sémè, Sakabanssi, Nikki; Mondji gangan, Dassa, Gbananmè, Kandi; Kotiakou (Akoegninou *et al.*, 2006)

**Specimen of Darwin Project collected from:** Barikini (Bassila); Kodowari (Bassila); Penelan (Bassila); Moupemou (Natitingou); Akaradè (Bassila); Tchimbèrè (Bassila); Zougou-Pantrossi (Gogounou); Kèrèmou (Banikoara); Kpassa (Tchaourou); Tagaye (Natitingou); Poto (Banikoara).

**Utilisations:** Young leaves of *A. senegalensis* are collected from the wild in fallows of the Sudanian and Sudano-Guinean ecological zones of northern Benin by communities. The species is said to have blood pressure regulation properties. decoction of leaves of *A. senegalensis* leaves and roots of *Securidaca longepedunculata* is used by mouth and in exterior applications against snake bite, generalised oedemas, constipation and aches.

**Threat on genetic resources:** Not evaluated.

*Hexalobus monopetalus* (A.Rich.) Engl & Diels

**Local names:** Blaca (Fon), Gbèrèkundu (Kotokoli).

**Description and variation:** *Hexalobus monopetalus* is a small tree up to 10 m tall, with cream-coloured flowers with a strong smell. The edible fruit is red at maturity and star-shaped.

**Status:** Wild.

**Habitat:** *H. monopetalus* thrives in savannah and on forests edge. It is also found as a weed in fallows on a wide range of soil types.

**Distribution:** Koda, Wari-Marou Tamarou, (Tchaourou); Tchetti, Savalou; Parakou, Péhunko; Kotiakou, Natitingou (Akoegninou *et al.*, 2006)

**Darwin Initiative 15/003 project specimen collected from:** Sovlegni (Djidja); Tchimbere (Bassila).

**Utilisations:** *H. monopetalus* is a tree vegetable species with no market value at present. Young leaves are collected in fallows in the rainy season and consumed by Fon and Kotokoli communities in the Sudano-Guinean region, occasionally or rarely. The root powder of this tree is applied in fumigation against headache. A decoction of *H. monopetalus* root with bark of *Ficus glumosa* is used by mouth against diabetes.

**Threat on genetic resources:** Not evaluated.

*Uvaria chamae* P.Beauv.

**Local names:** Yraha (Idatcha).

**Description and variation:** *Uvaria chamae* is a small tree up to 3 m tall. Its fruit is brown and in tuff at the top of a common peduncle. The fruits are edible.

**Status:** Wild.

**Habitat:** It is found in abandoned areas, and fallows in the Guinean ecological zone.

**Distribution:** Sèmè; Ahozon; Aguigadji, Kétou; Dan, Bohicon; Doutou, Houéyogbé; Pobè; Bassila; Pouya, Natitingou (Akoegninou *et al.*, 2006)

**Darwin Initiative 15/003 project specimen collected from:** Ileman (Dassa-zoum); Kpakpaza (Glazoue).

**Utilisations:** The root bark of this climbing plant is collected from the wild and eaten as a soup among Idatcha communities in order to stimulate milk production by lactating women. In addition root bark, available year-round, is used as an anti-inflammatory medicine. It can be purchased in both local and regional markets, but generally for medicinal purposes. Indeed, a decoction of leaves and roots is used by mouth to treat abdominal pains and stomach cramp of adult persons.

**Threat on genetic resources:** unknown.

## Araceae

### *Colocasia esculenta* (L.) Schott

Syn.: *Arum esculentum* L.

**Local names:** *Glin* (Fon, Mahi), *Koko* or *Ikoko* (Tchabè, Holly), *Kokoobu* (Waama), *Mangani*, *Mankani* (Idatcha, Ifè, Ani, Bariba), *Yèkotenko* (Otammari).

**Common names:** Colocase, Taro (Français, English)

**Description and variation:** *Colocasia esculenta* is an erect, perennial plant up to 2 m tall, but mostly grown as an annual; the root system is adventitious, fibrous and shallow; the stem is a massive corm storage (up to 4 kg), cylindrical or spherical, up to 30 x 15 cm, marked by a number of rings, usually brown, with lateral buds giving rise to cormels, suckers or stolons. The leaves are arranged spirally but in rosette, simple, peltate; the petiole is up to 1 m long, with distinct sheath, blade cordate with rounded lobes at base, entire, thick, glabrous, with three veins. The inflorescence is spadix tipped by a sterile appendage, surrounded by a spathe and supported by a peduncle much shorter than the petiole. The flowers are unisexual, small, without perianth. Fruit is a many-seeded berry, densely packed and forming a fruiting head.

**Status:** Cultivated.

**Agro-ecology:** *Colocasia esculenta* does best in lowland areas where annual rainfall exceeds 2000 mm. It is well adapted to high temperatures and relative humidity, and rather tolerant to shade. It can withstand highly reduced soil conditions. In savannah areas, it is found in marshy soil and on river banks. Taro has cultivars adapted to grow both under dry land and flooded conditions,.

**Darwin Initiative 15/003 project specimen collected from:** Barikini (Bassila); Wellan (Bassila); Kpassa (Tchaourou); Banigri (Tchaourou); Kodowari (Bassila); Dabou (Parakou); Ileman (Dassa-zoumè); Ekpa (Savalou); Mondji (Savalou); Sovlegni (Djidja); Ikemon (Ouèssè); Vossa (Ouèssè); Kpakpaza (Glazoué); Zalimey (Zogbodomey); Bognongon (Zogbodomey); Moupemou (Natitingou); Pouya (Natitingou).

**Production areas and systems:** *Colocasia esculenta* is cultivated in all agroecological regions of Benin. Vegetative propagation is the most used for this plant. Essentially four types of planting material are used: side suckers growing from the main corm, small unmarketable cormels, corm pieces, and setts or the apical 1-2 cm oh the main corm with 15-20 cm of the leaf stalks attached. Cultivation occurs in uplands in farms as well as in lowland. Production systems in lowland areas are geared towards large-scale production, whereas in upland areas production is small-scale, home garden based.

**Utilisations:** *Colocasia esculenta* is primarily produced for the soft white fresh corms which are eaten boiled, fried or roasted as a side dish or are used for making fufu. Taro leaves and leaf stalks are also used as a leafy vegetable in soup and sauces. They are popular in some sociolinguistic groups especially in the period of new yam harvesting in the whole country. Its consumption occurs occasionally in rainy season

or year-round. Precooked leaves can also be found sometimes in local markets. People from Anii communities claim it has medicinal properties.

**Threat on genetic resources:** Genetic variability in taro is low in Benin. Farmers grow many clones but loss of genetic diversity is minimal.

**Further reading:** Grubben and Denton (2004).

### *Stylochaeton hypogeum* Lepr.

**Local names:** Kelesuan (Boko), Kètèkuso (Bariba); Konkpoto (Fon, Goun)

**Description and variation:** *S. hypogeum* is a small perennial herb with underground rhizomes. The leaves are in tufts, simple; petiole 8-15(25) cm long, leaf sheath marked with horizontal purple band; blade hastate to sagittate, basal lobes narrowly triangular. The inflorescence is a spadix 3-8 cm long, enclosed by a spathe about equally long, partially subterranean and appearing before the leaves; spathe only opening at apex. The flowers are unisexual, sessile with cuplike perianth; male flowers in upper part of spadix, female flowers 6-10 together in basal part of spadix. The fruit is a globose berry, several together in a subterranean, globose infructescence and few-seeded.

**Status:** Wild.

**Habitat:** *S. hypogeum* grows in open forest, shrub vegetation and savannah, on sandy or sandy clay soils, also in flood plains.

**Distribution:** Dassa-zoumè, Djougou, Ouinhi, N'dali, Nikki (Akoègninou *et al.* 2006)

**Darwin Initiative 15/003 project specimen collected from:** Bensekou (Kandi); Ganro (Bembereke); Poto (Banikoara); Keremou (Banikoara); Kpassa (Tchaourou); Banigri (Tchaourou).

**Utilisations:** Inflorescences are collected from the wild and eaten in northern Benin among the Boko and Bariba sociolinguistic groups in the rainy season. The species is said to have medicinal properties. For example, leaf decoction of *S. hypogeum* is drunk by pregnant women to stimulate the growth of the foetus.

**Threat on genetic resources:** *Stylochaeton hypogeum* does not seem to be endangered, despite its use as a vegetable and medicine. Both uses are limited and collection of the plant is not on a large scale.

**Further reading:** Grubben and Denton (2004).

### *Xanthosoma maffafa* Schott

Syn.: *Xanthosoma sagittifolium* (L.) K.Koch

**Local names:** Glin (Aïzo, Cotafon, Ouémè); Dogbiwo (Aïzo); Bangani or Mankani or Mangani (Bariba, Adja, Cotafon, Kotokoli, Ani); Ikoko (Holly), Kotubéré (Ani).

**Common names:** Oreille d'éléphant, taro, cocoyam, makabo, chou caraïbe (French); cocoyam (English).

**Description and variation:** It is a usually enormous perennial, monoecious and erect herb up to 2 m tall, glabrous with oblong-conical to fusiform corm. The leaves are in rosette at corm apex never peltate. The blade is fleshy, ovate, 30-75 x 25-40 cm, sagittate at base, acuminate at apex and entire. The inflorescence is a cylindrical spadix with unisexual flowers, female flowers at base and male flowers in upper part. This upper part of inflorescence or the apex is non sterile, and is surrounded by spathe up to 15-25 cm long, pale yellow to dark purple or violet, with hardy peduncle.

**Status:** Cultivated.

**Agro-ecology:** *Xanthosoma maffafa* is found in humid locations (in lowland and along river courses). *Xanthosoma maffafa* does best in lowland areas. As a result, cultivation of this species occurs in lowlands mainly in Guinean and Sudano-Guinean zones as well as in lowland of the savannah regions of Benin.

**Darwin Initiative 15/003 project specimen collected from:** Ganro (Bembereke); Zougou-Pantrossi (Gogounou); Penelan (Bassila); Kodowari (Bassila); Akarade (Bassila); Soubado (Perere); Assedji (Athiémè); Afomayi (Lalo); Agnavo (Dogbo); Gbeko (Dangbo); Gome (Toffo); Ayetedjou (ketou); Sohounmè (Houeyogbé); Agbandonou (Allada); Gogbo (Adjohoun); Akpate (Pobè).

**Production areas and systems:** *Xanthosoma maffafa* does not produce mature and viable seeds. Moreover, for many cultivars, flowering does not occur. And thus, like *Colocasia esculenta* vegetative propagation is the most used in production system in Benin.

**Utilisations:** Young and fresh leaves of *X. maffafa* are used like the ones of *C. esculenta* in Guinean and Sudano-guinean in Benin. Leaves which are not yet open are very appreciated, even more than those of *Colocasia esculenta*. Precooked leaves can be found sometimes in local markets, and the consumption of this species occurs more frequently than *C. esculenta*.

**Threat on genetic resources:** not established.

**Further reading:** Stevels (1990).

## Asclepiadaceae

### *Calotropis procera* (Aiton) W.T.Aiton

Syn.: *Asclepias procera* Aiton

**Local names:** Kororou, Plompo (Bariba)

**Common names:** Arbre à soie, pomme de Sodome, bois petard, mudar de grande taille (French); Sodome apple (English).

**Description and variation:** *Calotropis procera* is a semi-succulent shrub up to 5 m tall. The stems are corky with white latex. Leaves are large, ovate to obovate, sessile, bluey-green and embrace stem. Inflorescences are terminal or axillary, flowers are campanulate, corolla with purple coloration at apex. Fruit is simple, ovoid.



**Status:** Wild, domestication underway

**Habitat:** *C. procera* is a savannah shrub which grows on a large range of soil types. It is also found growing as a weed, but spared in farm fields for its uses.

**Distribution:** Porto-Novo, Dassa, Cotonou, Sakabansi, Ouidah (Akoegninou *et al.* 2006)

**Darwin Initiative 15/003 project specimen collected from:** Dabou (Parakou); Zougou-Pantrossi (Gogounou).

**Utilisations:** *Calotropis procera* is used in traditional methods to process milk into cheese. However, its leaves are also used as a soup ingredient in sauces among the Bariba sociolinguistic group in North Benin.

**Threat on genetic resources:** unknown.

***Leptadenia hastata* (Pers.) Decne.**

**Syn.: *Cynanchum hastatum* Pers.**

**Local names:** Suadobargaru (Bariba, Dendi, Boko); Fouadobaga, Karaouikpérou (Bariba); Leptanda (Dendi).

**Description and variation:** It is a climbing latex-containing herb, becoming woody at its base, with a strongly branched, finely pubescent stem becoming corky with age. Leaves are opposite, simple, blade variable usually ovate, entire and pubescent. Inflorescences are lateral, (sub)-sessile; cream coloured flowers, flower corolla up to 8 mm long, pubescent. The fruit is a pair of follicles, each one conical, up to 10 cm long, greenish and glabrous.

**Status:** Wild.

**Habitat:** *L. hastata* grows in dry savannah on sandy soil. It is also found as a weed in fallow, farm field and abandoned land.

**Distribution:** Ouidah; Kouandé; Kérou; Manta, Bounkounbé; Vers Ewé; Sohouignandji, Glazoué (Akoegninou *et al.* 2006).

**Darwin Initiative 15/003 project specimen collected from:** Zougou-Pantrossi (Gogounou); Tankougou (Kandi); Ganro (Bembèrèkè); Kèrèmou (Banikoara); Kargui (Karimama); Soubado (Pèrèrè); Dabou (Parakou); Maréguinta (Kalale).

**Reproductive biology:** Propagation of *Leptadenia hastata* is by seed and sometimes it is intentionally sown near houses so that it is available when the need arises.

**Utilisations:** Leaves, young shoots and flowers of *Leptadenia hastata* are eaten as a cooked vegetable and in sauces. The fresh leaves are collected year-round from the wild and consumed by many sociolinguistic groups of the central and northern regions of Benin. The plant is widely available in the bush but it is rarely sold. According to some communities *L. hastata* has galactogenic properties and is good for lactating women. The latex is applied on wounds and applied inside the nostrils to relieve headaches. Decoctions and maceration of leaves and roots are used against abdominal complaints such as constipation, urethral discharge, gonorrhoea, stomach-ache and diarrhoea.

**Threat on genetic resources:** It is widespread in the Sudano-Guinean and Sudanian phytogeographic zones and is not in danger of genetic erosion in Benin.

**Further reading:** Grubben *and* Denton (2004)

*Pergularia daemia* (Forssk.) Chiov.

**Local names:** Gbahunkeki (Adja), Ogbonfufu (Ifè, Idatcha).

**Description and variation:** *Pergularia daemia* is a vigorous and climbing herbaceous plant and containing latex. Leaves are entire, ovate, and deeply cordate at base, glabrous or pubescent. Inflorescences show a long peduncle, cream-coloured flowers, corolla with semi-sagittate lobes; fruits usually in pairs, soft or smooth and ornamental.

**Status:** Wild.

**Habitat:** It is a savannah species but also found on the forest edge.

**Distribution:** Sérrou, Aguigadji, Forêt d'été, Sakété, Abomey, Savalou (Akoegninou *et al.*, 2006).

**Darwin Initiative 15/003 project specimen collected from:** Tamba (Savalou); Ekpa (Savalou); Ileman (Dassa-zoumè); Afomayi (Lalo).

**Utilisations:** *P. daemia* is used by the Adja, Idatcha and Ifè socio-linguistic groups in the Sudano-Guinean zone. Fresh young leaves and flowers are collected in fallows and consumed rarely in the rainy season. The leaves have a bitter taste and can be used against cough.

**Threat on genetic resources:** Unknown.

## Asteraceae

*Acmella uliginosa* (Sw.) Cass.

Syn.: *Spilanthes uliginosa* Sw.

**Local names:** Lifrubile (Gourmantché), Yoritamkoobu (Waama).

**Description and variation:** *Acmella uliginosa* is a small herbaceous plant, annual, up to 15-40 tall. The blade is lanceolate or elliptic. The inflorescence is a capitule ovoid with 4-6-seried verticillate bracts. The receptacle is a long cone-shaped. The flowers are yellow coloured with ligules. The fruit is a 2-4-armed achene.

**Status:** Cultivated among Wama and Gourmantché socio-linguistic groups of north-western region of Benin.

**Habitat:** *Acmella uliginosa* is a pantropical species found in Benin in Sudano-Guinean and Sudanian phytogeographic zones. The plant grows in fields, in ruderal or humid locations, in fallows and in semi-aquatic prairies.

**Distribution:** Gamba, Okèmèrè towards Goho; Parakou, Perma, Malanville (Akoegninou, *et al.* 2006)

**Darwin Initiative 15/003 project specimen collected from:** Pouya (Natitingou); Tanongou (Tanguieta); Batia (Tanguieta); Cotiakou (Tanguieta).



**Reproductive biology:** The plant regenerates easily by seed.

**Utilisations:** Fresh leaves are frequently cooked, especially for lactating women. *Acmella uliginosa* is a gallactogenic plant used as ingredient (it has a hot taste like pepper) in sauces. It is available year-round and can be found in local markets.

**Threat on genetic resources:** not under threat of genetic erosion.

**Further reading:** (Dabade 2009).

### *Ageratum conizoides* L.

**Local names:** Fufurubo, Girifoonontu (Ani).

**Common names:** Herbe aux sorciers (French).

**Description and variation:** *Ageratum conizoides* is an annual, erect herbaceous plant up to 15-80(100) cm tall. The stem is spindly, branched and finely pubescent. The leaves are opposite, ovate, finely pubescent, jagged, acute at apex. The inflorescence is a terminal corymbs arranged in grapes of 10 capitules. The flowers are composite, blue-pale coloured but sometimes white. The fruit is a linear achene, black, rounded by five pointed scale.

**Status:** Wild.

**Habitat:** This short-lived herb is very widespread in all agroecological zones of Benin. It is usually found as a weed in fields, in fallows and in abandoned areas.

**Distribution:** Porto-Novo; Lokossa; Affamè; Pobè; Kétou; Ita-Djèbou, Sakété; Ina, N'dali; Sakabansi; Dassa-zoumè; Tanguiéta (Akoegninou, *et al.* 2006).

**Darwin Initiative 15/003 project specimen collected from:** Wellan (Bassila); Barikini (Bassila)

**Utilisations:** The consumption of fresh leaves of *A. conizoides* in a mixture with *Abelmoschus esculentus* has been recorded in the Sudano-Guinean zone in the Anii communities. The consumption occurs rarely and happens in the rainy season by lactating women. A decoction of this plant and leaves of *Abelmoschus esculentus* is used against malaria.

**Threat on genetic resources:** not established.

### *Bidens pilosa* L.

**Local names:** Boboyo (Ani), Djankoui (Adja).

**Common names:** Bident bipenné, sornet, piquant noir, herbe aiguille, herbe villegague (French); Black jack, spinach needles, hairy beggarticks (English).

**Description and variation:** *Bidens pilosa* is an herbaceous plant, erect, annual, up to 20cm – 1,5 m tall, with slender, stiff and 4-angled stem and spreading branches. Leaves are decussately opposite, pinnately 3-5-foliolate, usually serrate or crenate-serrate. Inflorescence is an axillary or terminal head, solitary or arranged in cymes. Ray flowers are absent, ligulate, sterile, white to yellow or pinkish. Disk flowers are tubular, bisexual. The fruit is a linear achene 4-13 mm long, 4-6 ribbed.

**Status:** Wild.

**Habitat:** *Bidens pilosa* grows freely in disturbed areas or as a weed in farm fields. It is widespread in Benin. The optimum temperature for germination is 25-30°C. It thrives in soils with pH ranging from 4-9 and can tolerate a very high salinity.

**Distribution:** Porto-Novo, Cotonou; Ita-Djèbou, Sakété; Abomey-Calavi; Dogbo; Bassila, Diépani; Parakou-Péréré, Wararou (Akoegninou, *et al.* 2006).

**Darwin Initiative 15/003 project specimen collected from:** Agnavo (Dogbo); Wellan (Bassila).

**Reproductive biology:** *Bidens pilosa* only propagates by seeds. The seeds are not dormant and germinate within 3-4 days in moist soil at shallow depth.

**Utilisations:** Fresh leaves of *B. pilosa* collected from abandoned areas and fallows are consumed as a vegetable by the Anii and Adja socio-linguistic groups. The consumption of this annual herb is rare and occurs in the rainy season in time of food scarcity. It can, however, be found in local markets. It is also used as medicinal plant. The roots, leaves and seed has been reported to possess antibacterial, anti-dysenteric, anti-inflammatory, antimicrobial, antimalarial, diuretic, hepato-protective and hypotensive properties.

**Threat on genetic resources:** In view of its widespread distribution and weedy nature, *Bidens pilosa* is not at risk of genetic erosion.

**Further reading:** Grubben and Denton (2004).

### ***Blumea viscosa* (Mill.) V.M.Badillo**

Syn.: *Conyssa viscosa* Mill.; *Blumea aurita* (L. f.) DC.; *Laggera aurita* (L.f.) Sch.Bip. ex Clarke ; *Pseudoconyssa viscosa* (Mill.) d'Arcy

**Local names:** Toloman (Ouémè, Aïzo).

**Description and variation:** It is an aromatic, annual, erect and glutinous herbaceous plant up to 30-100 cm tall. The stem is slightly woody, striate, with a short wing. It is very branched, densely silky and marked with aromatic glands. Leaves are alternate, initially in rosette in the lower part of the plant, ovate, serrate. The base of leaves is decurrent on the stem and possesses also glandulous points. The inflorescence shows several involucre per head. Flowers are formed with many blue, white yellow or mauve coloured small flowers with narrow bracts. The fruit is a campanulate capitule up to 1cm large.

**Status:** Wild.

**Habitat:** *Blumea viscosa* is a common weed of farm fields in the humid savannah regions. It is widespread in Benin and is also found in wetlands, flood plains and disturbed areas.

**Distribution:** Sèmè; Ahogbaya, Mono; Agbado, Savalou; Agbohoutogon, Dan; Perma; Porga (Akoegninou, *et al.* 2006).

**Darwin Initiative 15/003 project specimen collected from:** Gbeko (Dangbo); Gogbo (Adjohoun).

**Reproductive biology:** Propagation of this herb species is by seed.

**Utilisations:** *B. aurita* is a leafy vegetable and fresh leaves collected from wetlands when water levels drop are rarely or occasionally eaten by Ouémè and Aïzo communities in the Guinean zone. It is said to have a diuretic properties and is used by pregnant women.

**Threat on genetic resources:** unknown.

***Chromolaena odorata* (L.) R. M. King**

Syn.: *Eupatorium odoratum* L.

**Local names:** Agatun (Holly), Abofrufu (Ani).

**Description and variation:** *Chromolaena odorata* is a giant herb, perennial, very smelling, diffuse, usually liana shaped and with a rapid growth, up to 3.5 m tall. The stem is robust, cylindrical, erect and meanly pubescent. Leaves are opposite, ovate to triangular. Young leaves are purple but become green at maturity, glabrous to slightly pubescent. They possess many glandulous points from where a strong-smelling substance emerges. The inflorescence is a terminal composite corymb. Flowers are blue, mauve, white, with numerous small flowers arranged in peduncled graps.

**Status:** Wild.

**Habitat:** It is a disturbing weed which grows in fields and along roadsides. Widespread in the Guinean phytogeographic zone of Benin, *C. odorata* is also found in fallow, abandoned areas, disturbed savannah and ruderal station.

**Distribution:** Houèto; Pobè; Davougon; Lama; Kraké; Igolo, Ifangni (Akoegninou, *et al.* 2006).

**Darwin Initiative 15/003 project specimen collected from:** Kodowari (Bassila); Ayetedjou (Ketou)

**Utilisations:** Fresh leaves of *C. odorata* are used as an aromatic in soups by communities. The consumption of this leafy vegetable occurs rarely. It is declared to have anti-malarial and anti-fever properties. It is also used to heal eye pain. The juice from fresh leaves is an excellent antibiotic.

**Threat on genetic resources:** The plant is widespread and invasive.

**Further reading:** (Ganglo, xxxx)

***Chrysantellum indicum* DC. Ssp *afro-americanum* B.L. Turner**

Syn.: *Chrysanthelum americanum* auct.; non (L.) Vatke; *Chrysanthelum procumbens* Pers.; *Chrysanthelum senegalensis* DC.

**Local names:** Kitchininnin (Ani), Tcharipokoma (Waama), Adjahunkpi (Aïzo).

**Description and variation:** It is a small annual herb, branched, up to 15-30 cm tall, with **composite** leaves. The inflorescence is a hemispheric capitule up to 4-6 mm large, with 2-seried involucre. The flowers are yellow or yellow-orange and outer ligulated. Fruit is an achene with a wing.

**Status:** Wild.

**Habitat:** The plant grows in ruderal station, in fallows and fields.

**Distribution:** Parakou; Boroné; Boukoumbé; Fombahoui, Nikki; Djougou; Kotopunga (Akoegninou, *et al.* 2006).

**Darwin Initiative 15/003 project specimen collected from:** Pouya (Natitingou); Gome (Toffo)

**Utilisations:** The consumption of fresh leaves occurs rarely or occasionally in the rainy season. The species has anti-malarial properties and is used against jaundice. It can be found in local markets.

**Threat on genetic resources:** Not evaluated.

### *Crassocephalum crepidiodes* (Benth.) S.Moore

Syn.: *Gynura crepidiodes* Benth., Hook.

**Local names:** Adjèfè (Ifè), Kogbo, Akogbo (Fon, Mahi, Aïzo, Cotafofon), Gbolo (Tchabè, Idatcha, Holly, Ouémè, Aïzo, Adja), Huholawé, Hohunhogui (Mahi), Kiagbosu (Bariba), Olowohungbiè (Ani), Tihunkoroya (Waama).

**Common names:** Ebolo, (French); Ebolo, thickhead, red-flower ragleaf, fireweed (English).

**Description and variation:** *Crassocephalum crepidiodes* is an annual, erect herbaceous plant, slightly succulent, up to 100(-180) cm tall. The stem is rather stout, soft, ribbed, very branched and pubescent. Leaves are arranged spirally are simple to pinnately lobed to pinnatifid; stipules absent, elliptical to obovate-elliptical, irregularly serrate; lower leaves with short petiole, upper ones sessile. Inflorescence a cylindrical head is arranged in a terminal corymb, many-flowered. The flowers are bisexual, yellow or orange with reddish brown top and tubular corolla. Fruit is a dark achene of 2 mm long. In folk classification based on leaf traits and plant growth habit, people distinguish two types of *Crassocephalum*: "female *Crassocephalum*" which correspond to *Crassocephalum crepidiodes* and "male *Crassocephalum*" which is *Crassocephalum rubens*. Indeed, *Crassophelum crepidiodes* is more productive in terms of biomass production. It is said to be tastier than *Crassocephalum rubens*. As a result, farmers of Gboko and Gogbo in the Guinean ecological zone have undertaken the cultivation of *C. crepidiodes*.

**Status:** Wild, domestication underway.

**Habitat:** *Crassocephalum crepidiodes* is a common weed in abandoned farm land, plantation, and fallow. It is also found in ruderal station, disturbed savannah and swamp. It may be a dominant pioneer species in shifting cultivation system. It often occurs in yam fields.

**Distribution:** Ganvié; Pobè; Kétou; Covè; Dassa-zoumè, Forêt de la Lama; Parakou (Akoegninou *et al.* 2006)

**Darwin Initiative 15/003 project specimen collected from:** Gogbo (Adjohoun); Gboko (Dangbo).

**Reproductive biology:** Ebolo produces lots of seeds. Due to his fine silky pappus hairs covering the achene, the seeds are easily dispersed by wind.

**Utilisations:** *C. crepidiodes* is a widely consumed leafy vegetable. According to communities, this annual herb has an attractive smell. The tender and succulent leaves and stems are mucilaginous and are used in soup. It is especially popular among socio-linguistic groups of the southern and central regions of Benin. Sauces and soups cooked with this indigenous vegetable accompany pounded yam dish in rainy season, a period when the plant is most available and abundant. Fresh bunches are sold in local and regional markets and represent with other vegetable species an important source of income for households.

**Threat on genetic resources:** As a widely used resource in Benin, natural populations of *C. crepidiodes* are overexploited and under threat. In few communities cultivation of *C. crepidiodes* appears to be a response to the rarity of the resource in the wild.

**Further readings:** Grubben and Denton. (2004); Schippers (2004); Dairo and Adanlawo (2007).

***Crassocephalum rubens* (Juss. Ex Jacq.) S.Moore var. *rubens***

Syn.: *Senecio rubens* Juss. Ex Jacq.; *Gynura cernua* Benth., Hook.

***Crassocephalum rubens* (Jacq.) S.Moore var. *sarcobasis* (DC.) C.Jeffrey & Beentje**

Syn.: *Gynura sarcobasis* DC. ; *Crassocephalum sarcobasis* (DC.) S. Moore

**Local names:** Adjèfè (Ifè), Kogbo, Akogbo (Fon, Mahi, Aïzo, Cotafon), Gbolo (Tchabè, Idatcha, Holly, Ouémè, Aïzo, Adja), Huhoalawé, Hohunhogui (Mahi), Kiagbosu (Bariba), Olowohungbiè (Ani), Tihunkoroya (Waama).

**Common names:** Brède Yoruba (French); Yoroban bologi (English)

**Description and variation:** *Crassocephalum rubens* is an annual, erect, up to 30-150 cm tall herb. The leaves are spirally arranged and sessile; the stipules are absent. Lower leaves are elliptical, oblanceolate or obovate, either not lobed, rarely pinnately lobed whereas upper leaves are narrowly lanceolate, elliptical or ovate, not lobed or 6-8 lobed. The inflorescence is composed of up to 18 heads arranged in a terminal corymb. The flowers are bisexual. The fruit is a ribbed achene crowned by white pappus hairs. Two varieties are noticed in Benin: *Crassocephalum rubens* var. *rubens* and *Crassocephalum rubens* var. *sarcobasis*. The second variety is taller than the first one and can reach 1.5 m tall whilst the second variety is only 30-100 cm tall.

**Status:** Wild.

**Habitat:** *C. rubens* occurs as a weed in arable land, along riversides, roadsides. It is also found in fields, fallows, ruderal stations, and in prairies.

**Distribution:** Abomey-Calavi, Pobè, Azohluissé, Parakou, Tanguiéta, Kotiakou, Adjohoun, Davougon, Kpakpaliki, Forêts des Monts Kouffé, Banigri, Tchaourou (Akoegninou *et al.* 2006).

**Darwin Initiative 15/003 project specimen collected from:** Tamba (Savalou); Bognongon (Zogbodomey); Mondji (Savalou); Zonmon (Zangnanado); Vossa (Ouesse); Sovlegni (Djidja); Agnavo (Dogbo); Assedji (Athieme); Cotiakou (Tanguieta); Gome (Toffo); Kpakpaza (Glazoué); Gogbo (Adjohoun); Ekpa (Savalou);

Zalimey (Zogbodomey); Okunfo (Save); Ikemon (Ouesse); Wellan (Bassila); Ileman (Dassa-zoumè); Banigri (Tchaourou); Pouya (Natitingou).

**Reproductive biology:** *C. rubens* propagated by seed. Optimal germination conditions of the species are yet to be determined. Vegetative propagation is being tested at the horticultural programme of INRAB. Preliminary results indicated that Propagation by stem cuttings 20-25 cm long obtained from mature shoot is possible. But this method seems to favour early flowering and reduction of leaf production.

**Utilisations:** *Crassocephalum rubens* has the same utilisation as *C. crepidioides* but less appreciated. Also the species is said to heal eye diseases by the Wama community of Cotiakou.

**Threat on genetic resources:** Similar to *C. crepidioides*.

**Further readings:** Grubben *et al.* (2004); Schippers (2004); Dairo and Adanlawo (2007)

### *Eclipta prostrata* (L.) L.

Syn.: *Eclipta alba* (L.) Hassk.

**Local names:** Ahokponu (Cotafon), Guenandonu (Anii).

**Description and variation:** *Eclipta prostrata* is an annual herb of up to 60 cm tall. The inflorescence is a head arranged in terminal hemispheric capitules 1-1.2 cm long. Flower ligules are white. The fruit is a rough achene; the pappus is absent or has a cupule shape.

**Status:** Wild.

**Habitat:** *Eclipta prostrata* grows in ruderal and post-cultural lands, along rivercourse, and riparian forests.

**Distribution:** Porto-Novo; Cotonou; Ahogbeya; Lama; Dassa-zoumè; Sakabansi; Tanguieta (Akoegninou *et al.* 2006).

**Darwin Initiative 15/003 project specimen collected from:** Barikini (Bassila); Assedji (Athieme).

**Utilisations:** *E. prostrata* is an annual herb of which fresh leaves are collected by Cotafon people of south western Benin in the Guinean phytogeographic zone and Anii people in north western in the Sudano-guinean zone. This minor vegetable is available in the rainy season.

**Threat on genetic resources:** unknown.

### *Emilia praetermissa* Milne-Redh.

**Local names:** Tohonto (Cotafon), Etiologbo (Holly), Abonukodjoflonu (Kotokoli).

**Description and variation:** This is an annual herb, erect up to 1(-1.5) m tall, glabrous. Leaves are alternate, lowers leaves petiolate; ovate, deltoid to panduriformes. The inflorescence is a head arranged in terminal capitules. The fruit is a pubescent achene with white pappus.

**Status:** Wild



**Habitat:** *Emilia praetermissa* is grown in ruderal areas, fallows and road sides, and also in wetlands.

**Distribution:** Houngbo; Pobè; Abomey-Calavi; Obomey; Lokossa; Lama; Covè; Samiondji, Tanéka (Akoegninou, *et al.* 2006).

**Darwin Initiative 15/003 project specimen collected from:** Ayetedjou (Ketou); Akarade (Bassila)

**Utilisations:** *E. praetermissa* is a leafy vegetable of which fresh leaves collected in wetlands and vague areas are rarely eaten. It is available year-round and does not have any market value. The plant is used in Kotokoli community as a tonic species.

**Threat on genetic resources:** unknown.

***Emilia sonchifolia* (L.) DC. Ex Wight**

Syn.: *Cacalia sonchifolia* L.

**Local names:** Akogbobogo (Fon), Étiologbo (Holly), Tohonto or Yèwonto (Cotafon), Toguti (Adja)

**Description and variation:** *Emilia sonchifolia* is also an annual herb up to 16-50 cm tall; usually blue-green. Leaves are alternate, ovate; lower leaves petiolate. The inflorescence is a head arranged in terminal capitules 8-10 cm long; with white flowers. The fruit is a white achene, pubescent, with hairy pappus.

**Status:** Wild.

**Habitat:** The plant grows in ruderal landscape, but also found in farm fields and in fallows as weed.

**Distribution:** Ouando; Abomey-Calavi; Davougou; Dassa; Bohicon; Gankpétin; Moudja; Parakou (Akoegninou *et al.* 2006).

**Darwin Initiative 15/003 project specimen collected from:** Assedji (Athiémè); Zalimey (Zogbodomey); Agnavo (Dogbo); Bognongon (Zogbodomey); Sohounmè (Houeyogbé).

**Utilisations:** Fresh leaves of *E. sonchifolia* are used as vegetable in the rainy season. However consumption is rare or occasional. It is widely present in the Guinean zone.

**Threat on genetic resources:** Unknown.

***Ethulia conyzoides* L.f.**

**Local names:** Hodokponu (Aïzo), Gniman (Ouémè).

**Description and variation:** *Ethulia conyzoides* is an annual herbaceous plant; prostrate or erect, up to 1(-2) m tall. The leaves are elliptical, linear-lanceolate. The flowers are mauve or purplish, rarely white. Fruit is a glabrous achene without pappus.

**Status:** Wild.

**Habitat:** The plant is found in swamp, along rivercourse, humid landscape in riparian forest and savannah.

**Distribution:** Porto-Novo; Bonou; Sagon, Zagnanado; Djougou, Manta; Malanville (Akoegninou *et al.* 2006).

**Darwin Initiative 15/003 project specimen collected from:** Gbeko (Dangbo); Gogbo (Adjohoun).

**Utilisations:** Fresh leaves of *E. conizoides* collected from fallows or abandoned areas are used. This utilisation occurs rarely though the species is available year-round.

**Threat on genetic resources:** Unknown

***Launaea taraxacifolia* (Willd.) Amin ex C. Jeffrey**

Syn.: *Sonchus taraxacifolius* Willd.; *Lactuca taraxacifolia* (Willd.) Schmach. Ex Hornem.

**Local names:** Alatotoé, Latotoé (Aizo, Mahi), Yantoto (Fon, Mahi), Awonto, Wonto (Cotafon, Aizo), Wontu (Adja), Èfo, Efognanri, Gnanri (Holly), Katakpa (Tchabè), Ododo (Idatcha, Ifè).

**Common name:** Laitue sauvage (French).

**Description and variation:** *Launaea taraxacifolia* is an herb with rhizomes, annual or perennial, erect with blue grey flowers. It is up to 1.5 m tall. All of the plant parts contain white latex. The stem is glabrous, finely striate and smooth. Leaves are in basal rosette, alternate, sessile, pinnatifid to pinnatifid. The inflorescence is an open, lax panicle, very ramified with yellow flowers; ligules are present.

**Status:** Wild.

**Habitat:** *Launaea taraxacifolia* is a common weed which grows in fields, fallows, abandoned areas and in ruderal landscape. The species is widespread in the Guinean and Sudano-Guinean zones of Benin.

**Distribution:** Grand-Popo; Ouandio; Kpédjilé; Covè; Davougou; Sakété, Dassa; Parakou (Akoegninou *et al.* 2006).

**Darwin Initiative 15/003 project specimen collected from:** Tankougou (Kandi); Ayetedjou (Ketou); Ikemon (Ouesse); Zonmon (Zagnanado); Sohounmè (Houeyogbe); Assedji (Athiémè); Gome (Toffo); Okunfo (Save); Zalimey (Zogbodomey); Kpakpaza (Glaazoué); Agbandonou (Allada); Ileman (Dassazoumè); Ekpa (Savalou); Vossa (Ouesse); Sovlegni (Djidja); Bognongon (Zogbodomey); Akpate (Pobe); Mondji (Savalou); Afomayi (Lalo); Agnavo (Dogbo).

**Reproductive biology:** Propagation of *Launaea taraxacifolia* is by seed or by vegetative regeneration from rhizome cuttings. Vegetative regeneration and seed propagation are important and the plant is very invasive in some instance.

**Utilisations:** *L. taraxacifolia* is used as leafy vegetable by most communities in south Benin. It is available year-round and sold in local and regional markets. The species is increasingly introduced in farming system. Ongoing studies revealed probable nematicide properties of *Launaea taraxacifolia* (Assogba Komlan *et al.* unpublished data). It also is used against vomiting, teeth pain and diabetes. Decoction of leaf is used for wound treatments. The plant is also said to have magic properties. Consequently some people avoid consumption of this vegetable in order to preserve their magic power.



**Threat on genetic resources:** *Launaea taraxacifolia* is not under threat of genetic erosion. The plant regenerates very well. However, knowledge on better cultivation practices and more investigation on pesticide properties are needed to promote the utilization of this species.

***Melanthera scandens* (Schumach. & Thonn.) Roberly**

**Local names:** Wlassi (Cotafon), Wlatchi (Adja).

**Description and variation:** *Melanthera scandens* is a climbing perennial herb, up to 3-4 m tall. The stem is quadrangular, very branched and rough to the touch. Leaves are opposite, widely ovate, entire, acuminate at apex, cordate or truncate at base and with a long petiole. The inflorescence is composed of solitary capitules, often axillary to upper leaves. Each head of inflorescence is up to 2.5 cm large with tubular yellow to orange flowers. Ligules are present.

**Status:** Wild.

**Habitat:** *Melanthera scandens* is a weed which grows in forests, savannas and fallows. It may be a dominant pioneer species in shifting cultivation.

**Distribution:** Adjaha, Mono; Kpédjilé; Pobè; Kétou; Gobé, Savè; Akofodjoulé, Dassa (Akoegninou *et al.* 2006).

**Darwin Initiative 15/003 project specimen collected from:** Agnavo (Dogbo), Assèdji (Athiémé); Sohounmè (Houéyogbé).

**Utilisations:** *M. scandens* is mostly used in the Guinean zone. Available year-round, its consumption occurs rarely among cited socio-linguistic groups. But leaves are sometime commercialised in local market.

**Threat on genetic resources:** Unknown.

***Struchium sparganophorum* (L.) Kuntze**

Syn.: *Ethulia sparganophora* L.; *Struchium africanus* (Steud.) P.Beauv.; *Sparganophorus sparganophora* (L.) Jeffrey

**Local names:** Tolo, Lingbohukoun (Cotafon), Toloman (Fon, Mahi, Aïzo), Achoukpa, Osundudu (Holly), Gninman (Ouémè), Dorontouan (Bariba).

**Description and variation:** *Struchium sparganophora* is a perennial herb up to 1 m tall. The inflorescence is composed of small, sessile capitules, arranged into spherical glomerules. The flowers are pinkish violet or white. The fruit is an achene, glabrous with couronne shaped pappus.

**Status:** Wild.

**Habitat:** This herbaceous plant is found in aquatic or semi-aquatic prairies, in swamps or riparian forests.

**Distribution:** Porto-Novo; Pobè; Kétou; Forêt de la lama; Savalou; Gbegourou, Goro (Akoegninou *et al.* 2006).

**Darwin Initiative 15/003 project specimen collected from:** Gome (Toffo); Bognongon (Zogbodomeey); Zonmon (Zangnanado); Ayetedjou (Kétou); Zalimey

(Zogbodomey); Gbeko (Dangbo); Dabou (Parakou); Gogbo (Adjohoun); Assedji (Athiémé).

**Utilisations:** Fresh leaves of the annual herb *S. Sparganophorum* collected in wetlands are consumed. This diet use is reported mainly among socio-linguistic group of south Benin. Available year-round, its consumption is rare and occurs in the dry season. Despite it's used by many communities of the Guinean and Sudano-Guinean, it has not a great market value.

**Threat on genetic resources:** Unknown.

### *Tridax procumbens* L.

**Local names:** Azuigbe (Cotafon), Djakpatagbe (Adja).

**Description and variation:** *Tridax procumbens* is an annual, sometime perennial herb, prostrate or erect, up to 50 cm tall. The stem is slightly woody and pubescent. Leaves are simple, opposite, ovate, irregularly serrate, acute at apex, cuneate, at base, subsessile. The inflorescence is a solitary capitule, terminal, or axillary at the extremity of of a fine peduncle up to 20 cm long. Flowers are white cream coloured; 3-lobed and tubular ones are yellow.

**Status:** Wild.

**Habitat:** The plant is a weed widespread in fields, abandoned areas and along roadsides. It is also found in savannah, in disturbed, post-cultural and ruderal areas.

**Distribution:** Cotonou; Kétou; Samiondji, Davougon; Sakabansi (Akoegninou *et al.* 2006).

**Darwin Initiative 15/003 project specimen collected from:** Sohounmè (Houeyogbé); Assedji (Athiémé); Agnavo (Dogbo).

**Reproductive biology:** Propagation is by seed. But vegetative regeneration by stem cuttings is also known for this species.

**Utilisations:** Rarely or occasionally consumed in the rainy season. The plant also is used to feed rabbits.

**Threat on genetic resources:** unknown.

### *Vernonia amygdalina* Delile

Syn.: *Gymnanthemum amygdalina* (Delile) Walp.

**Local names:** Adaca (Ifè), Aloman, Amanvivè (Fon, Mahi, Aïzo, Cotafon), Loman (Adja, Cotafon, Aïzo), Alomangbo (Ouémè), Anoukoro/ Eyouro (Holly), Aroman (Idatcha), Ééwo (Tchabè), Gousounouko (Ani), Kakawaabu (Waama), Kuanla (Boko), Mikpekagma (Gourmantché), Souaka (Dendi, Kotokoli), Tifinhòuti (Otammari), Touan (Bariba).

**Common names:** Vernonie, vernonie commune (French); bitterleaf, common bitterleaf (English).

**Description and variation:** *Vernonia amygdaliana* is a shrub or small tree up to 1.8-15 tall. The stem is erect and covered with white hairs. The leaves are ovate-lanceolate

to elliptic-lanceolate. The inflorescence is a head, arranged in terminal, compound, umbel-like cymes, up to 1 cm long. The flowers are bisexual, regular strongly exerted from the involucre. The fruit is an achene 1.5-3.5 mm long, pubescent and glandular, brown to black crowned by the much longer pappus bristles.

**Status:** Cultivated.

**Agro-ecology:** *Vernonia amygdaliana* is cultivated under full sunlight. It requires humid environment although it is fairly drought tolerant. Cultivation occurs on a wide range of soil type, but performs well in humus rich soil.

**Darwin Initiative 15/003 Project specimen collected from:** Agbandonou (Allada); Assedji (Athiémé); Bognongon (Zogbodomey); Mondji (Savalou); Vossa (Ouèssè); Zonmon (Zangnanado); Gome (Toffo); Sovlegni (Djidja); Tanongou (Tanguieta); Afomayi (Lalo); Zalimey (Zogbodomey); Sohounme (Tanguieta); Ileman (Dassazoumè); Kargui (Karimama); Ekpa (Savalou); Kpakpaza (Glazoué); Agnavo (Dogbo); Cotiakou (Tanguieta); Tagaye (Natitingou); Tchimbere (Bassila); Dabou (Parakou); Moupemou (Natitingou); Akpate (Pobè); Akarade (Bassila); Barikini (Bassila); Soubado (Perere); Okunfo (Savè); Ikemon (Ouesse); Ganro (Bembèrèkè); Pouya (Natitingou); Gbeko (Dangbo); Gogbo (Adjohoun); Tamba (Savalou); Tankougou (Kandi); Kodowari (Bassila); Zougou-Pantrossi (Gogounou); Bensekou (Kandi); Mareguinta (Kalale); Ayetedjou (Kétou); Penelan (Bassila).

**Production areas and systems:** *Vernonia amygdaliana* is a traditional leafy vegetable produced in all agroecological region of Benin. Two production systems can be distinguished. In urban and periurban agriculture, the plant is produced intensively on bed or in rows. The young plant is regularly pruned for commercialisation. This production system occurs often in big cities like Cotonou, Porto-novo, etc. In other agroecological regions, the species is grown on humid areas of household or in home gardens. Bitterleaf is then planted among other crops or as hedge or live fence. Harvesting takes place by cutting leafy shoots, allowing new side shoots to develop.

**Reproductive biology:** Propagation of *Vernonia amygdaliana* is possible by seed. The use of mature stem cuttings is frequent.

**Utilisations:** *V. amygdalina* is one of the major vegetable species and one of the most used in communities' dishes. Bitterleaf is a highly appreciated vegetable and can be consumed in various dishes. Fresh leaves can be boiled in soups as mixture with egusi seeds or peanut paste. Leaves are often sold in either local or regional markets, after being cut, parboiled and made into fist-size balls. Commercialisation of *V. amygdalina* employs a great number of women and contributes in a wide range to many households' income. It is available year-round and of course frequently used in both rural and urban households. Furthermore the species is said to have vermifuge, laxative, galactogenic, antibiotic, anti-malaria and anti-anaemic properties. As a very appetizing vegetable, it can also relieve from cough, fever, stomach-ache and tooth pains. According to communities the vegetable is vitamins rich and is good for diabetics, and children.

**Threat on genetic resources:** There is probably ample diversity in cultivars of *Vernonia amygdaliana*. The crop is not under threat of genetic erosion. However

research on genetic variability, agronomy, processing and post harvest conservation of leaves are also needed.

**Further readings:** Grubben and Denton (2004)

***Vernonia colorata* (Willd.) Drake**

Syn.: *Eupatorium coloratum* Willd.; *Vernonia senegalensis* Less.; *Gymnanthemum coloratum* (Willd.) H.Rob. & B.Kahn

**Local names:** Agblélé, Gblélé (Aïzo), Gblé (Fon), Adoukoigbo (Holly), Arikoro (Idatcha), Xizihan, Dadohissrè (Mahi), Touan (Bariba).

**Description and variation:** *Vernonia colorata* is a shrub or a small tree like *V. Amygdaliana*. It can reach 8 m in height. The leaves are ovate to elliptical, tomentuous in lower part of blade. The inflorescence is a head arranged in terminal campanulated capitules. The corolla of flower is white coloured.

**Status:** Wild.

**Habitat:** *Vernonia colorata* is found in savanas, forests and riparian forests. It also grows as a weed in fallows.

**Distribution:** Pahou, Ouidah; Kpédjilé; Lama; Kétou, Zagnanado; Djidja; Savalou; Goro; Tanéka (Akoegninou *et al.* 2006).

**Darwin Initiative 15/003 Project specimen collected from:** Gomé (Toffo) ; Ayétédjou (Kétou) ; Vossa (Ouesse); Agbandonou (Allada); Sovlegni (Djidja); Keremou (Banikoara); Mondji (Savalou); Kpakpaza (Glazoué)

**Utilisations:** The fresh leaves of *V. colorata* are available year-round and are sometimes sold in local markets. Consumption of the species is not common. It has same medicinal properties as *V. amygdalina*. In addition it is used to fight convulsion, urticaria and mycoses.

**Threat on genetic resources:** unknown.

## Basellaceae

***Basella alba* L.**

Syn.: *Basella rubra* L.

**Local names:** Abokpaba/ Libokpabli (Gourmantché), Tchoosikpékéfa (Waama), Forukpètè (Ani), Yooda (Boko), Yoroukpé (Bariba), Djomankugbédé (Ouémè), Obaléran (Holly), Tokpodéyovoton (Fon), Yovogbomanhuégbé (Cotafon), Yovoglassi (Aïzo).

**Common names:** Baselle, brède de Malabar, épinard (French); Indian spinach, Ceylon spinach (English)

**Description and variation:** *Basella alba* is a short-lived perennial herb up to 4 (-8) m long, succulent. The stem is twining, slender, smooth, green or purplish. Leaves are simple, alternate, fleshy, and ovate to heart-shaped, usually cordate at base, acute or

acuminate at apex, dark green or purplish. Inflorescence is an axillary spike. The flowers, white, pink or red are bisexual, perianth fleshy. The fruit is a pseudo-berry containing a violet juice and is enveloped by the fleshy perianth.

**Status:** Cultivated.

**Agro-ecology:** *Basella alba* does well in lowlands. The optimal temperature range is 20-35°C. It tolerates high rainfall and survives short periods of drought. Water stress encourages early flowering. It grows well in a variety of soil types, but prefers humus-rich well drained soil.

**Darwin Initiative 15/003 project specimen collected from:** Pouya (Natitingu); Zalimey (Zogbodomey); Ileman (Dassa-zoumè); Sohounme (Houeyogbe); Bognongon (Zogbodomey); Tanongou (Tanguieta); Gogbo (Adjohoun); Batia (Tanguiéta); Dabou (Parakou); Bensekou (Kandi); Cotiakou (Tanguieta); Gbeko (Dangbo); Penelan (Bassila). **Production areas and systems:** *Basella alba* was probably introduced in Benin. Currently, the plant is cultivated in all agroecological zones. Both red and green varieties of this climbing spinach are cultivated in home gardens, and are available year-round. Except in big cities like Cotonou, *Basella alba* is grown as a perennial crop on living stakes, usually on a fence or on a hedge in row intercropping systems. In urban agriculture, it is cultivated as a short-term crop of 2-4 months. Propagation is often by stem cuttings or by seeds. Propagation by seeds is often used for annual crop. Indeed, plants grown from seed are more productive than those grown from cuttings.

**Utilisations:** The green form of *Basella alba* is commonly grown for its young shoots, which make a succulent, slightly glutinous vegetable. It is boiled, used as a potherb in soups or sometimes used as green salad. Thus this traditional vegetable enters in dishes of many socio-linguistic groups and is frequently or occasionally consumed depending on communities. Red forms are commonly planted as ornamentals. It is reported that the leaves are used by the Boko community of Bensekou for medicomagic purposes.

**Threat on genetic resources:** *Basella alba* is not under threat.

**Further reading:** Grubben and Denton (2004).

## Bombacaceae

### *Adansonia digitata* L.

Syn.: *Adansonia sphaerocarpa* A.Chev.

**Local names:** Sonnan (Bariba), Kadara (Kotokoli), Fonla (Boko), Butuobu/Tituokari (Gourmantché), Gatongaboi (Ani), Kôô (Dendi), Kutunga (Zerman), Kpèborè (Waama), Mutorumu/Titookanti/Yètookpèrè (Otammari), Zinzoun (Cotafon), Kpassa (Fon, Mahi, Aïzo), Otché (Tchabè, Idatcha, Ifè, Holly).

**Common names:** Baobab, pain de singe (French); Baobab (English)



**Description and variation:** *Adansonia digitata* is a massive deciduous tree up to 10-20 m tall. The trunk often has a vast girth. The bark is smooth and variable in colour. Leaves are alternate, simple and digitate with 5 to 7 folioles. The flowers are white, and overlapping with a long peduncle. The fruit is a woody, indehiscent capsule, globose to ovoid or oblong cylindrical, covered by velvety tomentum and filled with dry, mealy pulp, many-seeded. Morphological and genetic variations across phytogeographical regions have been described in Baobab populations in Benin. Variations in habit, vigour, and size, quality of the fruits and vitamin content of the leaves were described.

**Status:** Wild but also planted and spared in/around villages and farm fields.

**Habitat:** Baobab prefers sandy topsoil above loamy subsoil. It tolerates poorly drained soils with heavy clay, but does not grow in deep sand. It is common in areas with an annual rainfall of 200-800 mm. The plant is widespread in Benin but is more frequent in the Sudano-Guinean and Sudanian phytogeographic zones.

**Distribution:** Malanville; Ewé; Soklogbo, Boukoumbé (Akoegninou, *et al.*, 2006).

**Darwin Initiative 15/003 project specimen collected from:** Loumbou-Loumbou (Karimama); Barikini (Bassila); Tankougou (Kandi); Zougou-Pantrossi (Gogounou); Kpassa (Tchaourou); Poto (Banikoara); Banigri (Tchaourou); Mareguinta (Kalale); Bensekou (Kandi); Kodowari (Bassilla); Akarade (Bassila); Tagaye (Natitingou); Zalimey Zogbodomey); Kargui (Karimama); Ikemon (Ouesse); Ileman (Dassa- zoumè); Kpakpaza (Glazoué); Penelan (Bassila); Tamba (Savalou); Batia (Tanguiéta); Mondji (Savalou); Pouya (Natitingou); Ayetedjou (Kétou); Keremou (Banikoara) ; Vossa (ouèssè); Torozogou (Malanville); Sovlegni (Djidja); Bognongon (Zogbodomey); Gome (Toffo); Tanongou (Tanguieta); Sohounme (Houeyogbe); Ganro (Bembèrèkè); Soubado (Perere) ;Tchimbere (Bassila); Moupemou (Natitingou); Cotiakou (Tanguiéta); Dabou (Parakou); Ekpa (Savalou); Garou-Tedji (Malanville).

**Reproductive biology:** Seeds of baobab exhibit orthodox behaviour but scarification facilitates germination. Natural regeneration is generally poor. Unaided germination of baobab seeds is also generally poor. As a result, farmers facilitate seedlings growth in their courtyard until they are 2-3 m tall, when they are transplanted along the borders of their field. This vegetative propagation has the advantage that desirable characteristics like large leaves and good quality can be assured.

**Utilisations:** *A. digitata* is a multipurpose tree of which fresh or dried and powdered leaves are used as an ingredient of soups and sauces. Plant parts are sold in local and regional markets. As leaves can be dried and conserved this vegetable is available year-round. But fresh leaves are more available in the dry season. The species is said to be very nutritious. Moreover leaves, barks, roots, and pulp of fruits are used to heal various diseases (e.g. stomach and ear aches, malaria, haemorrhoids, erectile dysfunction, infertility and menstruation difficulties, intestinal worms, injuries and eye trouble).

**Threat on genetic resources:** For this species, populations are under threats of extinction due to climate change, difficulties of regeneration and over-exploitation.

**Further reading:** Grubben and Denton (2004), Assogbadjo (2006), Assogbadjo *et al.* (2005a,b, 2006, 2008a,b).

***Bombax costatum* Pellegr. & Vuillet**

Syn.: *Bombax andrieui* Pellegr. & Vuillet, Lecomte ; *Bombax houardii* Pellegr. & Vuillet, Lecomte

**Local names:** Aagun (Tchabè), Akpatin (Idatcha), Ogufè (Holly, Ifè, Idatcha), Agnagna/Dèhouiman (Mahi), Kpatidewoun (Aïzo), Fola (Kotokoli), Gasokinmè/Gwô (Ani), Bufuobu (Gourmantché), Fookubu/Kugunfa (Waama), Kapoo (Boko), mulannou (Bariba), Mukomu/Tikonfaati (Otammari).

**Common names:** Kapokier à fleurs rouges de savanne (French)

**Description and variation:** *Bombax* is a savannah tree up to 10-25 m tall with a spiny trunk. The leaves are digitate, alternate. The flowers are solitary on a branch without leaves, red to orange coloured, rarely yellow. The fruit is an oblong to subglobose capsule

**Status:** *B. costatum* is a wild savannah species. Domestication is underway in northern Benin.

**Habitat:** *B. costatum* is usually found in cleared forest and savannah especially in woody savannah.

**Distribution:** Guéné; Malanville (Akoegninou *et al.* 2006)

**Darwin Initiative 15/003 project specimen collected from:** Cotiakou (Tanguiéta); Barikini (Bassila) ; Tchimbere (Bassila); Moupemou (Natitingou); Loumbou-Loumbou (Karimama); Keremou (Banikoara); Akarade (Bassila); Gome (Toffo); Pouya (Natitingou); Ikemon (Ouesse); Okunfo (Save); Zalimey (Zogbodomey); Ekpa (Savalou) ; Penelan (Bassila) ; Kodowari (Bassila); Vossa (ouèssè); Agbandonou (Allada); Ileman (Dassa- zoumè); Bensekou (Kandi); Tanongou (Tanguieta); Tagaye (Natitinguo); Wellan (Bassila); Mondji (Savalou); Batia (Tanguiéta); Kpakpaza (Glazoué).

**Utilisations:** The flower calyces are collected, dried, ground to powder and used as an ingredient in sauces by the above communities. People recognise it by its red corolla that occurs in the dry season. It is more available in the dry season and is widely used by communities in the Sudanian zone but occasionally or rarely consumed in the Guinean and Sudano-Guinean zones. Therefore it is sold in the Sudanian zone but does not have any market value in the Guinean zone. *B. costatum* is used to heal dysentery and eye troubles. Fresh leaves are used as a good anti haemorrhagic. The plant is used to treat fever. This vitamin-rich species is used also as antibiotic, and against haemorrhage.

**Threat on genetic resources:** Natural populations are rare in non protected areas.

***Ceiba pentandra* (L.) Gaertrn.**

Syn.: *Bombax pentandrum* L.; *Eriodendron pentandrum* (L.) Kurz

**Local names:** Aagun (Ifè), Agungun (Idatcha), Guédéhunsu (Mahi), Guwa (Ani), Komiré (Kotokoli), Bupukambu (Gourmantché).

**Common names:** Fromager, Kapokier à fleurs blanches (French); Kapok tree (English).

**Description and variation:** *C. pentandra* is a tall tree up to 20 to 30 m in height. It can even reach 60 m tall. Leaves are composite, digitate with 7-9 folioles. Flowers are white. Fruit is an ellipsoid to fusiform capsule with a slightly woody pericarp.

**Status:** Wild but spared in farm fields and occasionally planted in villages.

**Habitat:** The cotton tree *C. pentandra* occurs in woodlands and relic forests but sometimes as a protected tree in the agro forestry landscape. It is a species found usually in moist and dense semi-deciduous forests.

**Distribution:** Abomey-Calavi; Forêt de la Lama, Sakété (Akoegninou *et al.* 2007)

**Darwin Initiative 15/003 project specimen collected from:** Loumbou-Loumbou (Karimama); Kpakpaza (Glazoué); Tamba (Savalou); Tchimbere (Bassila); Barikini (Bassila); Mondji (Savalou).

**Utilisations:** Fresh leaves are sold in local markets and used to make glutinous sauces when *Corchorus* species are scarce; hence its consumption occurs more in the dry season. The wood of this tree is used for the construction of pirogues. The leaves are said to various medicinal uses.

**Threat on genetic resources:** unknown.

**Boraginaceae*****Ehretia cymosa* Thonn. Ex Schum. var. *cymosa* Brenan**

**Local names:** Unranafunfunma (Anii), Zomali (Adja).

**Description and variation:** *Ehretia cymosa* is a shrub or small tree which can reach 12 m in height. The inflorescences are in terminal cymes arranged in corymbs shape. The flowers are white and the fruit red.

**Status:** Wild.

**Habitat:** The shrub *E. cymosa* occurs in cleared land, savannah, abandoned areas and fallows.

**Distribution:** Tori; Cocotomey, Ouidah; Pobè; Samiondji; Sénahouyé, Dogbo; Mondji-Gangan, Dassa (Akoegninou *et al.* 2006)

**Specimen of Darwin Project collected from:** Barikini (Bassila); Afomayi (Lalo)

**Utilisations:** Fresh leaves of *Ehretia cymosa* are used in sauces by the Anii socio-linguistic groups in the north and the Adja in south-western Benin. The fresh leaves are rarely sold in local markets. The product is available year-round and is said to be very nutritious for nursing and pregnant women.



**Threat on genetic resources:** unknown.

***Heliotropium indicum* L.**

Syn.: *Heliotropium africanum* Schumach. & Thonn., Beskr.

**Local names:** Aburokuseri (Bariba), Akuéta (Ouémè), Chlochlodin (Cotafon), Koklossudinkpatcha (Aïzo, Mahi, Cotafon), Gukurutchibo (Ani), Igbéako (Tchabè), Kikpaovlan (Boko), Kookatchore (Waama).

**Common names:** Crête de coq, herbe à verrues, heliotrope de l'inde, tournesol de l'inde (French).

**Description and variation:** *Heliotropium indicum* is an herbaceous plant, annual up to 30-90 cm tall. It is much branched, pubescent. The stem is robust, slightly woody and covered with dense and smooth hairs. The leaves are simple, alternate and ovate. The inflorescence is a long and spindly spike up to 20 cm tall which bears small flowers blue pale to white, arranged together in one side at the spike top.

**Status:** Wild.

**Habitat:** *H. indicum* grows as a common weed in humid locations, abandoned areas, in fallows and fields. It occurs most frequently around households and disturbed lands.

**Distribution:** Abomey-Calavi; Assanté; Bétérou; Konkombri; Kpédékpo; Pendjari. (Akoegninou, *et al.* 2006)

**Darwin Initiative 15/003 project specimen collected from:** Gogbo (Adjohoun); Okunfo (Savè); Pouya (Natitingou); Assedji (Athiémé); Sohounme (Houeyogbé); Banigri (Tchaourou); Agbandonou (Allada); Mareguinta (Kalalé); Mondji (Savalou); Barikini (Bassila).

**Reproductive biology:** *H. indicum* propagates by seeds.

**Utilisations:** *H. indicum* is widespread but rarely or occasionally used as a vegetable. Despite its year-round availability it does not have a market value. *H. indicum* has medicinal use in many communities. In many villages where it has no edible use, the leaves are used in healing mycoses, haemorrhoids, stomach ache, and regulation of blood pressure

**Threat on genetic resources:** unknown.

## Capparaceae

***Cleome gynandra* L.**

Syn.: *Gynandropsis gynandra* (L.)

**Local names:** Akaya, Kaya (Fon, Ifè, Mahi, Cotafon), Djéndjé, Èfooko (Holly), Èfo (Idatcha, Ifè), Garsia (Bariba, Waama), Sabo (Adja), Foulbé (Dendi).

**Common names:** Moustaches de chat, Caya blanc, brèbe caya (French), spiderplant, cat's whiskers, spider flower, bastard mustard (English).

**Description and variation:** *Cleome gynandra* is an annual herb up to 60 cm tall. The leaves are alternate, glandular, palmately composed with 3-7 leaflets. The flowers are white to purple. Fruit is a linear and cylindrical capsule up to 12 cm x 1 cm.

**Status:** Wild. But the species is domesticated and cultivated among many sociolinguistic groups in Benin.

**Agro-ecology:** *Cleome gynandra* is a leafy vegetable present in all agroecological areas of Benin. Wild populations are found along road, in fallow and abandoned areas. Cultivation is more important in south and central regions of the country in Fon and Nagot sociolinguistic groups. It is grown and cultivated on a wide range of soil type with pH 5.5-7.0.

**Darwin Initiative 15/003 Project specimen collected from:** Banigri (Tchaourou); Ayetedjou (Kétou); Ekpa (Savalou); Zonmon (Zangnanado); Vossa (Ouèssè); Sovlegni (Djidja); Mondji (Savalou); Pouya (Natitingou); Zalimey (Zogbodomey); Assedji (Athieme); Afomayi (Lalo); Agnavo (Dogbo); Tamba (Savalou); Kargui (Karimama); Akpate (Pobè); Ileman (Dassa-zoumè); Kpakpaza (Glazoué).

**Production areas and systems:** In cultivation, *C. gynandra* is produced in home gardens.

**Utilisations:** Tender leaves of *C. gynandra* are widely consumed in sauces in rainy season by above cited communities. The species appears most in disturbed areas near habitations and home gardens. Its consumption is more common in Fon and Yoruba and/or related sociolinguistic groups where it has an important market value. Hence it is under domestication/cultivation in Adja, Fon, Mahi and Holly regions. Moreover it has a great value in traditional pharmacopea where it is used in healing ear and stomach aches, malaria and blood pressure regulation.

**Threat on genetic resources:** Not threatened in Benin.

### *Cleome rutidosperma* DC.

Syn.: *Cleome ciliata* Schum. & Thonn., Beskr.

**Local names:** agariyana (gourmantché), aiya (Mahi), éyitayi (Holly), gbessabo (Adja), Gbetokaya (Cotafon), tèwon (Waama), ticefunti (Otammari).

**Common names:** Cleome à graines ridées (French); Spiderplant, fringed spiderflower (English).

**Description and variation:** It is an annual herb, up to 60-90 cm tall. The leaves are alternate, glandular, glabrous to sparsely pubescent, strictly three leaflets. Inflorescence is a raceme lax and not clearly demarked; bracts are similar to leaves. The flowers are usually white sometimes pinkish. Fruit is a linear, cylindrical capsule.

**Status:** Wild.

**Habitat:** This pantropical herb is found in fallow, farm field and on house refuse.

**Distribution:** The species is present in all phytogeographic areas in Benin: Sèmè; Calavi; Togon; Djimè; Parakou; Pèrèrè; Wourarou; Kouandé (Akouègninou *et al.* 2006).

**Darwin Initiative 15/003 Project specimen collected from:** Zonmon (Zangnanado); Assedji (Athieme); Batia (Tanguiéta); Tanongou (Tanguiéta); Tagaye (Natitingou); Zalimey (Zogbodomé); Sohounme (Houeyogbé); Moupemou (Natitingou); Cotiakou (Tanguiéta); Ayetedjou (Kétou); Agnavo (Dogbo).

**Reproductive biology:** It is a monocious species which reproduces by seeds.

**Utilisations:** *C. rutidosperma* is consumed in the soudanian (western part) where it seems to occur more than *C. gynandra*. It's sold in local markets and also used in traditional pharmacopea. Decoction of the whole plant is used in fighting malaria and fresh leaves and flowers in healing ear aches by Gourmantché peoples. It is an appetizer, and has laxative properties in Otamari communities. Decoction of leaves also is used against malaria. The plant is more available in the rainy season.

**Threat on genetic resources:** *Cleome rutidosperma* is not in danger of genetic erosion.

**Further readings:** Grubben and Denton (2004).

### *Crateva adansonii* DC. ssp. *adansonii*

Syn.: *Crateva religiosa* Forst.f.

**Local names:** Honton-Azizuin (Cotafon, Aïzo).

**Common names:** *Crateva sacré* (French).

**Description and variation:** It is a small tree up to 3-10 m tall. The leaves are 3-foliolate. Flowers are white and appear when the tree is completely without leaves. Fruit is spherical up to 3.5-5 mm large.

**Status:** Wild; domestication underway; found in homeyards.

**Habitat:** It is grown in riparian forest, swamp forest and savannah, but also planted in the villages.

**Distribution:** The species is well spread in dry tropical regions. In Benin, it is present in all phytogeographic areas: Lokossa; Pendjari; Mékrou; Dan tota; Bohicon; Gogounou (Akoègninou *et al.* 2006).

**Darwin Initiative 15/003 Project specimen collected from:** Assedji (Athieme); Gome (Toffo).

**Utilisations:** Perennial *C. adansonii* is a tree species and occurs in fallows and rarely used as vegetable. It's available year-round and said to have medicinal properties. Decoction of leaves is used to treat malaria and abscess.

**Threat on genetic resources:** Not evaluated.

*Maerua angolensis* DC.

**Local names:** Gbéssouan (Bariba), Tchindjinan (Kotokoli).

**Description and variation:** *M. angolensis* is a tree or shrub species up 9 m tall or more; cauliflower with rosary or sting shaped.

**Status:** Wild.

**Habitat:** The tree occurs in savannah areas.

**Distribution:** In Benin, the species is found in Sodano-Guinean and Sudanian phytogeographic areas: Ndali; Pendjari; Tchanwassaga, Tanguiéti; Perma; Konkombri, Tanguieta (Akoègninou *et al.* 2006).

**Darwin Initiative 15/003 Project specimen collected from:** Akarade (Bassila); Soubado (Pèrèrè).

**Utilisations:** Tender leaves are used as ingredient in sauces by women after childbirth to stimulate milk production and elimination blood clots. The plant also is used in healing oedema and artroses. However its consumption occurs rarely despite it is availability year-round.

**Threat on genetic resources:** Not evaluated.

## Cochlospermaceae

*Cochlospermum planchonii* Hook.f.

**Local names:** Busoron'bu (Waama), Lisayani (Gourmantché), Lomboukou (Kotokoli), Gbétu (Tchabè), Omronlugboko (Ifè), Tcholi (Idatcha).

**Description and variation:** *C. planchonii* is a perennial rhizomatous subshrub up 1-1.5 m tall. The leaves are palmately lobed, alternate. Inflorescence is terminal; flowers gold yellow. The fruit is an ovoid capsule.

**Status:** Wild.

**Habitat:** It occurs in open woody savannah. It is also found in fallow.

**Distribution:** Zoundji, Tchèti, Savalou; Tamarou; Tanguiéti; Davougon; Méréguinta, Kalalé, Kouandé (Akoègninou *et al.* 2006).

**Darwin Initiative 15/003 Project specimen collected from:** Okunfo (Save); Ekpa (Savalou); Batia (Tanguiéti); Tchimbere (Baassila); Kpakpaza (Glazoué); Ikemon (Ouèssè); Cotiakou (Tanguiéti).

**Reproductive biology:** Flowering occurs at the end of the rainy season. Propagation is by seeds. But the plant regenerates usually by rhizomes.

**Utilisations:** Rootstock is collected from the wild, cleaned, pounded and dried. The reddish powder obtained is used as colorant for sauces and soups. It is used in the same way as *C. tinctorum* that is the mostly used in the Sudanian. The plant is available year-round but its consumption occurs rarely. It is sometimes sold in local markets in the northern Benin. In Ifè community it is used as anti venom. Leaves are used against dysentery by Anii and Ifè people.

**Threat on genetic resources:** Not evaluated.

***Cochlospermum tinctorum* A.Rich.**

Syn.: *Cochlospermum niloticum* Oliv.

**Local names:** Busoron'bu (Waama), N'buburumin (Ani), Kota (Dendi, Zerman), Kubologun (Gourmantché).

**Description and variation:** It is a plant with perennial stump, semi-tuberous and woody which grows in rainy season. The leaves are alternate and palmately lobed. Gold yellow coloured flowers appear after bush fires.

**Status:** Wild.

**Habitat:** It is found in Sudanian shrub and woody savannas.

**Distribution:** The plant is present in Sudano-Guinean and Sudanian phytogeographic areas: Monkassa, Garou, Mallanville; Kota, Kouandé; Kalalé; Kotopounga (Akouègninou *et al.* 2006).

**Darwin Initiative 15/003 Project specimen collected from:** Garou-Tedji (Malanville); Kargui (Karimama); Penelan (Bassila); Loumbou-Loumbou (Karimama); Torozogou (Malanville); Kodowari (Bassila); Pouya (Natitingou).

**Reproductive biology:** Propagation is by seeds. But the plant regenerates usually by its perennial stump.

**Utilisations:** Use of *C. tinctorium* is recorded only in the north in Sudanian ecological zone where it is widely and frequently used and in the same hand as *C. planchoni* with the emphasis here that tenders leave are also eaten by Anii people. This perennial rhizomatous subshrub is said to be available year-round and has a great market value. In addition to medicinal utilisations in Anii and Ifè communities for *C. planchoni*, *C. tinctorium* is said to be employed against icterus by Wama people.

**Threat on genetic resources:** Not evaluated.

## Combretaceae

***Anogeissus leiocarpus* (DC.) Guill. & Perr.**

Syn. : *Conocarpus leiocarpus* DC.

**Local names:** Agni (Tchabè), Bokangala (Anii).

**Description and variation:** *A. leiocarpa* is a tree species up to 30 m tall. The leaves are obtuse, mucronate to acuminate at apex. Inflorescence is a capitule 6-15 mm large with yellowish flowers. The fruit is an akene prolonged with a wing (samare).

**Status:** Wild.

**Habitat:** *A. leiocarpus* is a tree species that is found in the whole country, both in dry forests and savannahs but also in disturbed woodlands. It prefers moist conditions.

**Distribution:** The species is well spread in Benin: Dahvougou; Mono/Koufo; Djakotomè; Forêt de Wari-Marou, Kétou (Akouègninou *et al.* 2006).

**Darwin Initiative 15/003 Project specimen collected from:** Okunfo (Save); Barikini (Bassila); Wellan (Bassila).

**Reproductive biology:** The species reproduces by seeds. The wind and other dispersal agent help in the dispersion of seeds.

**Utilisations:** Tenders leaves are used as vegetable in Anii communities while Tchabè people use barks of steams to make sauces glutinous. Its consumption happens occasionally even if it's available year-round. Leaves are used in diarrhoea curing.

**Threat on genetic resources:** Not evaluated.

**Further readings:** (Glèlè Kakai; Houéhanou Thierry; Fandohan Bélarmain).

## Commelinaceae

### *Commelina benghalensis* L.

**Local names:** Tiborafuuti (Otammari), Tipiepiebri (Gourmantché), Zoula (Boko).

**Common names:** Comméline (French); Blue commelina, venus' bath, Benghal dayflower, tropical spiderwort (English).

**Description and variation:** It is a prostrate, ascending, perennial herb. The stem is laxly pubescent and roots at lower nodes. The leaves are ovate or elliptical with obtuse apex. Cleared green, hairy spathes are solitary or piled up at stem top. There is presence of subterranean cleitogamous flowers which are bright blue or mauve. Genetic variation in populations across production systems was described in Benin (Ahanchede *et al.* 1992).

**Status:** Wild.

**Habitat:** *C. benghalensis* is an invasive and ruderal herb usually found in humid station. It grows as well in savannah, disturbed areas, at forest edge, along roadsides, in secondary regrowth and fields, on abandoned areas and in home gardens. It can withstand prolonged drought.

**Distribution:** The plant is widespread in Benin where it causes serious problems in cotton fields: Calavi; Kalalé, Zoungbonou, Houéhogbé; Moudja, Dassa; Setto (Akouègninou *et al.* 2006).

**Darwin Initiative 15/003 Project specimen collected from:** Batia (Tanguiéta); Tagaye (Natitingou); Tanongou (Tanguieta); Bensekou (Kandi).

**Reproductive biology:** The species reproduces by seeds as well as vegetative propagation both stem and root cuttings. The seeds are produced above and below ground. Seeds produced underground germinate very well and thus weed control is cumbersome.

**Utilisations:** Consumption of *C. benghalensis* is recorded only in the Sudanian where it is used as a leafy vegetable. The local name in Gourmantché means "pig's food" and the plant is said to be used only in shortage periods and does not have any market value. Gourmantché communities are used to cook it in a mixture with fruits of *A. esculentus* or *H. sabdariffa*. The sole consumption of *C. benghalensis* may give



diarrhoea. Tender leaves are usually collected from the wild. They are most available in the rainy season but its consumption happens more in the dry season.

**Threat on genetic resources:** Not threatened.

**Further readings:** Ahanchede *et al.* (1992.); Grubben and Denton (2004)

## Convolvulaceae

### *Ipomoea aquatica* Forssk.

**Local names:** Èminnin, Èminnin-Odo (holly), Tôwèli (Cotafon), Tôdokui (Mahi).

**Common names:** Kangkong, liseron d'eau, patate aquatique (French); Kangkong, kangkung, water convolvulus, water spinach, swamp spinach, swamp morning glory (English).

**Description and variation:** It is a perennial, fleshy, aquatic herbaceous plant. The stem is smooth, succulent and hollow rooting at the nodes. Inflorescence is an axillary cyme. The flowers are 7.5 cm, mauve; purple rarely white, with funnel-shaped corolla. Seeds are angular or rounded; densely pubescent.

**Status:** Wild.

**Habitat:** *I. aquatica* occurs in wetland as the folk taxonomy reveals (the prefixes "odo" or "tô" means river, pond or stream). *I. aquatica* is a pantropical species which grows floating on water or rooting at the stem nodes in marshy and wet soil often in river banks, swamps and pool.

**Distribution:** In Benin the species is present in all phytogeographic areas: Karimama, Azowlissè; Boukonta, Mono; Cotonou; Djougou; Tchaourou; Pobè; Kétou (Akouègninou *et al.* 2006).

**Darwin Initiative 15/003 Project specimen collected from:** Zalimey (Zogbodomey); Assedji (Athieme); Zonmon (Zagnanado); Sohounme (Houeyogbe); Ayetedjou (Kétou).

**Reproductive biology:** It a monoecious plant which regenerates by seeds. Vegetative propagation by stem and root cuttings is possible as well.

**Utilisations:** Tender leaves are sometimes used as base of some sauces in the dry season, while it is available year-round. It is also known as rabbit's food.

**Threat on genetic resources:** The species is not under threat of genetic erosion.

**Further readings:** Grubben and Denton (2004).

### *Ipomoea asarifolia* (Desr.) Roem. & Schult.

Syn.: *Ipomea repens* Lam.

**Local names:** Kpéhloussou, Sanro (Bariba).

**Description and variation:** *Ipomea asarifolia* is a tall, perennial, prostrate herbaceous plant. The stem is robust, glabrous, and hollow. The leaves are suborbicular to ovate;

cordate at base with two glands at the base of blade. Flowers are funnel-shaped, mauve or red rarely whitish; up to 8 cm long and arranged in glabrous capsule.

**Status:** Wild. But *I. asarifolia* is said to be cultivated in Bariba communities of Ganro, Poto and Zougou-Pantrossi in the soudanian.

**Agroecology and Habitat:** It is a minor vegetable crop cultivated in home gardens in north Benin among Bariba sociolinguistic group. In the wild, the plant grows along rivers, roads and in disturbed steppe and is present in all agroecological areas.

**Darwin Initiative 15/003 Project specimen collected from:** Poto (Banikoara); Zougou-Pantrossi (Gogounou); Ganro (Bembèrèkè).

**Reproductive biology:** Reproduce by seeds.

**Utilisations:** It's available year-round but consumed rarely as leafy vegetable. Decoction of the leaves is used to regulate blood pressure.

**Threat on genetic resources:** Unknown.

### *Ipomoea batatas* (L.) Lam.

**Local names:** Dokui (Mahi), Idoki, Èminnin (Holly), Loki (Idatcha, Ani), Lokikabo (Ani), Forowontèma (Waama), Kudoola (Boko), Tikòkònuonti, Timanuòti (Otammari), Kokotagu, Kotagu, Kudéhun (Bariba), Dundutchili (Dendi).

**Common names:** Patate douce (French); sweet potato (English).

**Description and variation:** *Ipomea batatas* is a perennial herb with edible, tuberous root. The stem is creeping-ascending, rarely voluble, glabrous or slightly pubescent. The leaves are ovate, entire or palmately lobed to palmatifid. Flowers corollas are funnel-shaped, pale mauve to white; 3-4.5 cm long arranged in capsule.

**Status:** Cultivated.

**Agroecology:** *Ipomea batatas* grows well in lowlands under high temperatures, full sunshine and abundant water. It is adapted to a wide range soil conditions, but fertile soils with high level of organic matter are preferred. The optimum pH is 5.3 -6.

**Darwin Initiative 15/003 Project specimen collected from:** Ganro (Bembèrèkè); Ayetedjou (Kétou); Ileman (Dassa-zoumè); Zalimey (Zogbodomey); Tagaye (Natitingou); Pouya (Natitingou); Vossa (Ouesse); Poto (Banikoara); Torozogou (Malanville); Bensekou (Kandi); Barikini (Bassila); Tankougou (Kandi); Akpate (Pobè)Moupemou (Natitingou); Zougou-Pantrossi (Gogounou); Wellan (Bassila)

**Production areas and systems:** Sweet potato is a minor crop cultivated in all agroecological areas of Benin. The production occurs in home gardens or at small scale. However, in the Ouémé Valley the production of this crop is important. In this region, the crop is cultivated and commercialized toward the big cities of the country. Vegetative propagation by stem cuttings and pieces of tuberous root is common.

**Utilisations** *I. batatas* is cultivated by farmers for its sweet tubers used sometimes leafy vegetable. The vegetable is more available in the rainy season and said to be sold only in Pouya in the Sudanian.

**Threat on genetic resources:** Not under threat.



*Ipomoea triloba* L.

**Local names:** Gbogbogui, Gbahunkeki (Adja), Kootibitirinan, Kuotina (Wama), Tide'ndeti, Tihòrenhònti (Otamari).

**Description and variation:** It is an annual herb, voluble or creeping and glabrous. The leaves are entire, 3-lobed. Inflorescence is umbeliform; flower sepals with long cils, apiculate and corolla up to 2 cm long, white, mauve or pink.

**Status:** Wild.

**Habitat:** It grows in ruderal station, along roadsides and in swamp edge. It is also found in disturbed lands around habitations, in farms and fallows.

**Distribution:** The herb is well spread in Benin and found throughout the country: Cotonou; Dassa-zoumè; Kétou; Pobè; Tanguiété (Akouègninou *et al.* 2006).

**Darwin Initiative 15/003 Project specimen collected from:** Cotiakou (Tanguieta); Tagaye (Natitingou); Afomayi (Lalo) ; Pouya (Natitingou); Moupemou (Natitingou);

**Utilisations:** The plant is frequently used as leafy vegetable in Wama and Otammari communities. It is even sold in Pouya local Market. The resource is abundantly available in the rainy season. Medicinal uses are related to the healing of stomach-ache by leaves decoction.

**Threat on genetic resources:** Not under threat.

*Ipomoea vagans* Baker

Syn.: *Ipomea sulphurea* Hochst. Ex Choisy

**Local names:** Ganapèn'ta (Ani), Nantorobu (Waama), Hansihanga (Dendi).

**Description and variation:** Annual herb with prostrate stem, rarely voluble, slightly woody at base, pubescent. The leaves are simple. The flowers are small, axillary, solitary or in fascicules, funnel-shaped with white corolla. The fruit is a capsule ovoid, glabrous and seeds are covered with a soft-silvery matter.

**Status:** Wild.

**Habitat:** *Ipomea vagans* is a full shine species which grows in savannah, disturbed woodlands and in fallows.

**Distribution:** Bodjékali; Malanville (Akouègninou *et al.* 2006).

**Darwin Initiative 15/003 Project specimen collected from:** Pouya (Natitingou); Wellan (Bassila); Torozogou (Malanville).

**Reproductive biology:** Propagation is by seeds.

**Utilisations:** Rural communities used to collect tenders leaves for sauce preparations. But consumption occurs rarely or occasionally even if the species is available year-round. Anii community of Wellan used the plant for its galactogenic properties.

**Threat on genetic resources:** not under threat.

## Cucurbitaceae

### *Citrullus lanatus* (Thunb.) matsum. & Nakai subsp. *mucospermus* Fursa

Syn.: *Colocynthis citrullus* (L.) O.Ktze.; *Momordica lanata* Thunb.

**Local names:** Agoussi, Sonki, Wèwèssou (Bariba); Agusi, Ituni, Ewegoussi (Gourmantche, Holly); Aroowotchè (Idatcha); Dopua (Boko); Égusi bara (Tchabe); Esidakika, Essèdakaka, Isidikaka (Anii); Goussi (Aizo); Guchi, Kilovi (Adja); Itchegba (Idatcha, holly); Kaka Arotchè (Ife); Kotchiodo (Kotokoli); Lotché, Tchègba (Mahi); Tchègba (Fon); Tinacanti, Tinoncanti (Otammari).

**Common names:** Egusi melon (English).

**Description and variation:** The species is an annual liana; creeping on the ground. The leaves are pennatilobed and alternate. The species includes three subspecies with subsp. *mucospermus* used as egusi in Wet Africa. Subspecies *mucospermus* has fruits with brownish inedible purple. The seeds are yellow and bordered with whitish (sometimes black) edge. A small-seed type (known as Neri) is cultivated in Ghana and in north-western Benin.

**Status:** Cultivated.

**Agro-ecology:** *Citrullus lanatus* subsp. *mucospermus* performs better in the savannah region than the wet forest zone. Annual rainfall requirement is at least 700-100 mm and daytime temperature is 28-35°C. It is cultivated on a wide range of soil type but well-drained soil with pH 6-7 is more adequate.

**Darwin Initiative 15/003 Project specimen collected from:** Moupemou (Natitingou); Banigri (Tchaourou); Kpassa (Tchaourou); Tagaye (Natitingou); Ayetedjou (Kétou); Zalimey (Zogbodomey); Pouya (Natitingou); Batia (Tanguiéta); Mondji (Savalou); Bognongon (Zogbodomey); Barikini (Bassila); Kpakpaza (Glazoué); Wellan (Bassila); Okunfo (Save); Soubado (Pèrèrè); Tchimbere (Bassila); Vossa (Ouèssè); Akarade (Bassila); Gbeko (Dangbo); Ganro (Bembèrèkè); Tamba (Savalou); Akpate (Pobè); Ekpa (Savalou); Tanongou (Tanguiuéta); Agbandonou (Allada); Ileman (Dassa-zoumè); Afomayi (Lalo); Agnavo (Dogbo); Dabou (Parakou); Tankougou (Kandi); Zougou-Pantrossi (Gogounou); Mareguinta (Kalale); Kodowari (Bassila); Sovlegni (Djidja).

**Production areas and systems:** Cultivation of egusi melon occurs in all agro-ecological regions of Benin. But the species is more important in central Benin where farmers allocate important land for its production. In those communities, *Citrullus lanatus* is cultivated in plain fields or in home gardens. This could be in monoculture or in association with other crops. This is a green fertilizer mostly included in rotation system when the soil has become poor.

**Utilisations:** *Citrullus lanatus* subsp. *mucospermus* is grown mainly for its seeds. Crushed seeds of *Citrullus lanatus* are used to thicken tomato soup or cooked together with other leafy vegetables. The seeds are very rich in proteins and oils; sometimes called "the poors meat". Although few statistics are available, the crop is part of regional trade and the supply chain includes country such as Benin, Nigeria,

Ghana, and Côte d'Ivoire. The regional market of Glazoué is an important trading place for egusi. According to producers of these localities, egusi rank high among cash food crops. In some communities the use of the leaves of *C. lanatus* also is recorded. In other communities, the consumption of *C. lanatus* is said to increase milk production by nursing mother. It is used also to treat stomach-ache or used as Laxative.

**Threat on genetic resources:** In Benin, most producers cultivate and maintain their own seed collections. There is apparently no threat on the genetic resources of the crop which is anyhow maintained by individual farmers.

**Further readings:** Grubben and Denton (2004), Achigan-Dako *et al.* (2006, 2008b).

***Cucumeropsis mannii* Naud.**

Syn.: *Cladosicyos edulis* Hooks.f.; *Momordica procera* A.Chev.; *Cucumeropsis edulis* (Hook.f) Cogn.

**Local names:** Amélikaka (Anii); Atoo (Holly); Azohan, Goussi (Aizo); Égusi Itoo (Tchabe); Gbessenou, Guérou, Guinru, Kasoungui (Bariba); Ito (Idatcha); Kaka n'to, Kaka Itoo (Ife); Kèrè (Kotokoli); Pinwè (Boko); Tchegba (Adja); Tooku (Fon); Zohan, Zounhan (Mahi).

**Common names:** égusi; égusi-itoo; white seed melon, dark egusi (English).

**Description and variation:** *Cucumeropsis mannii* is a monocious, giant and climbing herb up to 5(-10) m long. The corolla of flowers is yellow. Male flowers are arranged in axillary raceme more or less ombel-like. Female flowers are solitary in leaf axils. Fruit is an ellipsoid to obovoid berry 17-25 x 8 – 18 cm, smooth, green to pale yellow or creamy white. The species exhibit little morphological variations.

**Status:** Cultivated.

**Agro-ecology:** Like *Citrullus lunatus*, *Cucumeropsis mannii* is cultivated in all agroecological areas of Benin. It requires organic matters rich soils.

**Darwin Initiative 15/003 Project specimen collected from:** Kodowari (Bassila); Ayetedjou (Kétou); Agbandonou (Allada); Okunfo (Save); Ikemon (Ouèssè); Zougou-Pantrossi (Gogounou); Ganro (Bembèrèkè); Soubado (Pèrèrè); Banigri (Tchaourou); Ileman (Dassa-zoumè); Kpakpaza (Glazouué); Tamba (Savalou); Ekpa (Savalou); Tankougou (Kandi); Tchimbere (Bassila); Akarade (Bassila); Zalimey (Zogbodomey); Mareguinta (Kalale); Afomayi (Lalo); Sovlegni (Djidja); Bognongon (Zogbodomey); Mondji (Savalou); Vossa (Ouèssè).

**Production areas and systems:** Cultivation of egusi-itoo takes place at the beginning of rainy season. It is produced in association with other crops (yam, palm tree, cassava, maize, sorghum, etc.). Cultivation of egusi –itoo requires stakes and can last about eight months. Fruits are harvested when the stems are dried and fruits have changed colour from green to creamy white.

**Utilisations:** Crushed seeds of *C. mannii* also are used as sauce thickener or prepared as bullets in sauce. The species is said to be the true egusi (Burkill 1985) and more

appreciated for its organoleptic properties than other egusi species. The use of tender leaves of *C. mannii* as leafy vegetable also is reported in Adja communities.

**Threat on genetic resources:** Although *Cucumeropsis mannii* is well appreciated for its organoleptic qualities, its production is declining for a number of reason including its low yield in addition of the fact it is a late variety. Moreover improved varieties are unavailable and seeds production and distribution of local varieties are not organized.

**Further readings:** Achigan-Dako *et al.* (2006, 2008b); Grubben and Denton (2004).

### *Cucurbita maxima* Duchesne

**Local names:** Éléguédé (Tchabè); Gnianrou (Bariba); Leptanda (Dendi); Lifèli (Gourmantche); Tipeti (Otammari)

**Common names:** Courge, potiron, courge turban (French); pumpkin, winter squash (English)

**Description and variation:** *Cucurbita maxima* is an annual, herbaceous, creeping liana. The stem is more or less cylindrical. Leaves are simple, reniform. Pedicels of male flowers are long (up to 23 cm long); pedicels of female flowers are shorter. The fruit is very big and can reach 50 kg with yellow to orange flesh.

**Status:** Cultivated.

**Agroecology:** *C. maxima* is a tropical species which tolerate low temperature and drought. Water requirement is limited. The plant prefers organic matters rich soils. Application of fertilizers improves yields.

**Darwin Initiative 15/003 Project specimen collected from:** Ikemon (Ouèssè); Poto (Banikoara); Torozogou (Malanville); Loumbou-Loumbou (Karimama); Tagaye (Natitingou).

**Production areas and systems:** In Benin *C. maxima* is cultivated from the Sudano-Guinean to the Sudanian region. The crop is mostly found in home garden around households. No stake is needed and the crop is rarely associated with other crops.

**Utilisations:** *Cucurbita maxima* is cultivated for its fruit which is cut in slices and cooked in sauce. The use of *Cucurbita maxima* as leafy vegetable occurs mostly in north Benin among Bariba, Dendi, Otamari and Gourmantché sociolinguistic groups. Leave are frequently consumed by people belonging to those communities. Consumption of flowers and seeds is also reported but seemingly very rare. Commercialisation of parts or products of this plant occurs in local and regional markets but only fruits are sold. *Cucurbita maxima* is also used by Tchabè community in central region of the country although consumption is scarce among this sociolinguistic group.

**Threat on genetic resources:** Resources are still conserved on farm by individual farmers. But genetic resources of *C. maxima* are not under threat in Benin.

**Further readings:** Burkill (1985), Grubben and Denton (2004), Schippers (2004).

*Cucurbita pepo* L. and *Cucurbita moschata* Duchesne

**Local names:** Aguidi, Ewe Eleguede (Holly); Aguidigbèdjè (Idatcha); Dipeeri, Tipétipésiiti (Otammari); Gboo (Tchabe); kanhin, Kansin (Boko); Kufelugu, Tifefari (Gourmantche); Ninnibu (Wama); Wianru (Bariba).

**Common names:** Citrouille, courgette, courge, pepon (French); courgette, zucchini; summer squash, vegetable marrow, pumpkin (English).

**Description and variation:** The two species differ by the fruit stalk but are equally called with the same local names. Both species are annual, herbaceous and creeping liana with more or less angular stem. The leaves are simple and palmately lobed. Flowers are yellow, 10 cm long. Sometimes the fruit reaches 50 kg in weight. There is a wide variety of shape and colour.

**Status:** Cultivated.

**Agroecology:** *C. pepo* and *C. moschata* like *C. maxima* are a tropical species which tolerate low temperature and drought. These species also prefers organic matters rich soils.

**Production areas and systems:** Like *C. maxima*, *C. pepo* is mostly found in home garden and rarely in plain fields. No stake is needed. The species are incidentally cultivated in every agro-ecology in Benin but more importantly in the northern part of the country.

**Darwin Initiative 15/003 Project specimen collected from:** Zalimey (Zogbodomey) ; Ileman (Dassa-Zoumè) ; Moupemou (Natitingou) ; Akpate (Pobè); Ikemon (Ouèssè); Mareguinta (Kalale); Bensekou (Kandi); Batia (Tanguiéta); Pouya (Natitingou); Tanongou (Tanguiéta); Tagaye (Natitingou); Kpassa (Tchaourou).

**Utilisations:** The immature fruits of *Cucurbita pepo* are the main product. They are consumed as vegetable either boiled or fried or stuffed. Mature fruits are used like those of *Cucurbita maxima*. Consumption of leaves and other plant products is frequent, rare or occasional depending on the sociolinguistic group. The plant products are available year-round but mostly in rainy season. Major parts of the harvest product are consumed by household members. However part of the product (mainly fruit) is commercialized in local and regional markets.

**Threat on genetic resources:** Like *C. maxima*, *C. pepo* and *C. moschata* are not under threat of erosion.

**Further readings:** Burkill (1985), Grubben and Denton (2004), Schippers (2004).

*Lagenaria siceraria* (Mollina) Standl.

**Syn. :** *Cucurbita lagenaria* L.; *Lagenaria vulgaris* Ser.

**Local names:** Accra koun (Fon); aklamkpa kaku, kaku (Mahi); akluibugula (Gourmantche); Atooilè, Yebe, igba (Holly); Batamaé (Dendi); cacaacra, kaka (Idatcha); égusi accra, égusi ilè, égusi kaka, égusi ougba (Tchabe); gbaka, gbesseru, gboro, kasonki, Kasoungui, Kokpaki, Kpékonan (Bariba); Guchi (Adja); Kagoussi (Aizo);



kaka acra, kaka aklankpa, kaka igba, kaka ungba (Ifè); ninnibu, yanditiré (Wama); toumougou, tumugu (Boko).

**Common names:** Calebasse, courge blanche, gourde massue, gourde bouteille (French); bottle gourd, calabash gourd, common gourd, white-flowered gourd (English). However, local names refer to a specific cultivar known as aklankpa (Achigan Dako et al. 2006) and used as egusi.

**Description and variation:** *Lagenaria siceraria* is an annual plant with alternate leaves and climbing or creeping on the soil. Flowers corollas are white, whitish yellow to dark green or brown at maturity. *Lagenaria siceraria* exhibit a huge variation of fruit shape, size, and colour. Cultivars collected in Benin and Togo clustered in three major groups based on morphological traits. Genome size variation analysis revealed two cytotype with cultivar Aklankpa (egusi gourd) having higher DNA amount (Achigan Dako et al. 2008c,d).

**Status:** Cultivated.

**Agroecology:** Tropical plant which can be found from 0 to 2500 m altitude. Many escapes from cultivation are particularly found along roadsides, or abandoned areas.

**Darwin Initiative 15/003 Project specimen collected from:** Sovlegni (Djidja) ; Mondji (Savalou) ; Batia (Tanguiéta) ; Ayetedjou (Kétou); Kargui (Karimama); Kpakpaza (Glazoué); Okunfo (Save); Ikemon (Ouèssè); Dabou (Parakou); Kpassa (Tchaourou); Banigri (Tchaourou); Soubado (Perere); Afomayi (Lalo); Zalimey (Zogbodomey); Akpate (Pobè); Gome (Toffo); Ileman (Dassa-zoumè); Ekpa (Perere); Tamba (Savalou); Vossa (Ouèssè); Bognongon (Zogbodomey); Zougou-Pantrossi (Gogounou); Ganro (Bembèrèkè); Cotiakou (Tanguieta); Bensekou (Kandi); Mareguinta (Kalale), Pouya (Natitingou).

**Production areas and systems:** *Lagenaria siceraria* is cultivated in almost all agroecologies of Benin. But the central region is known for being the major producer of that crop.

**Utilisations: Medicinal use:** Common gourd is cultivated for a wide range of utilizations including food, storage, utensils, medicinal, decoration, music instruments depending on cultivars and customs. A number of cultivars are produced for the consumption of there fresh fruit which is cut into sliced and cooked in sauce. Elongated cultivars of fruits covered with warts are particularly consumed in many communities (e.g. Bariba, Wama). People of Benin consume in many ways the seeds of this crop. But seeds of egusi gourd are abundantly produced. The kernels are crushed after removing the teguments and added to soups and stews. Like *C. lanatus*, *L. siceraria* has a great market value, and is commercialized in local and regional market. The leaves are used to calm the dizziness. Roots and fruits are sometimes used as purgative.

**Threat on genetic resources:** Not under threat.

**Further readings:** Grubben and Denton (2004), Achigan Dako et al. (2008b),

***Luffa acutangula* (L.) Roxb.**

Syn.: *Cucumis acutangulus* L.; *Cucurbita acutangula* (L.) Blume

**Local names:** Tikpinsindi (Gourmantche); Yèsoso (Otamari)

**Common names:** Liane torchon, éponge végétale torchon, papengaye (French); ridge gourd, angled loofah, ribbed gourd, Chinense okra, silk squash (English).

**Description and variation:** *Luffa acutangula* is a monocious, climbing or creeping plant. The stem is angular. Flowers are yellow; males ones are in long racemes and female ones are solitary densely pubescent. Fruit is a dry and fibrous capsule dehiscent by an apical operculum.

**Status:** Cultivated.

**Agroecology:** The plant prefer seasonal climate. Sowing in dry season is preferred to the one in rainy season. It grows well on house refuse.

**Darwin Initiative 15/003 Project specimen collected from:** Tanongou (Tanguieta); Tagaye (Natitingou).

**Production areas and systems:** The production of *L. acutangula* is observed mainly in Atacora region close to Burkina Faso where the species is particularly important in local diet and even known as the "queen's okra". Cultivation of the species requires stakes. For this reason the crop is grown on fence, close to dead tree, etc. We did not observe any monoculture of that species.

**Utilisations:** Gourmantché and Otamari communities in north-western consume frequently immature fruits as vegetables. Consumption takes place in rainy season. Among Otamari; the plant products are said to be commercialized in local market. Consumption of stem top with young leaves, and flowers bud as vegetable is also recorded.

**Threat on genetic resources:** Unknown.

**Further readings:** Grubben and Denton (2004).

***Momordica charantia* L.**

Syn.: *Momordica thollonii* Cogn.

**Local names:** Baroman (Wama); Gnisinkin (Mahi); Kpalaari (Anii); Kpalayi (Tchabe); Tchaati (Ife); Tchatchala (Boko).

**Common names:** Poire de balsam, concombre africain, liane merveille, margose (French); bitter gourd, balsam pear, bitter melon, African concomber, karela (English).

**Description and variation:** *Momordica charantia* is climbing or trailing herb with ridged, glabrous or hairy stem, tendrils simple. The species is recently split into two subspecies based on leaf traits: subspecies *charantia* and subsp. *macroloba* (Achigan Dako et al. 2008a).

**Status:** The species is wild in Benin. It is spared when it grows around household.

**Habitat:** *Momordica charantia* grows spontaneously in humid station, in forests, along rivers. It is sometimes planted in home gardens on humid places (e.g. backyard) of the household.

**Distribution:** Odomèta, Pobè, Aguigadji, Godomey; Bohicon (Akoègninou *et al.* 2006).

**Darwin Initiative 15/003 Project specimen collected from:** Pouya (Natitingou); Mondji (Savalou); Barikini (Bassila); Kodowari (Bassila); Ikemon (Ouèssè); Okunfo (Savè); Ekpa (Savalou); Tamba (Savalou); Mareguinta (Kalale).

**Reproductive biology:** Flowering is observed year-round but fructification and fruit maturation occurs mainly at the end of rainy season from June to November. The species reproduces by seeds which certainly exhibit a physical dormancy due to the hard tegument.

**Utilisations:** *Momordica charantia* is primarily known for its medicinal uses. The plant is used to treat diabetes and malaria. It is also used as febrifuges either by washing or drinking. Decoction of the plant is used against stomach ache, urticary; chickenpox, measles. The consumption of *M. charantia* as vegetables is reported in many communities in north and central regions of Benin. In addition seed aril is used as sweets by young people.

**Threat on genetic resources:** The species is not under threat. It is present in most forest in the Guinean region.

**Further readings:** Grubben and Denton (2004); (Achigan Dako, 2008)

### ***Momordica cissoides* Planch. Ex Benth.**

Syn.: *Momordica maculata* Planch. ex Benth.; *Momordica gracilis* Cogn.

**Local names:** Gbofu (Anii); Voyi (Cotafon, Adja)

**Description and variation:** *Momordica cissoides* is an annual, climbing or trailing herbaceous plant with striate stem. The leaves are 3-foliolate. Fruit are ovoid, red-orange at maturity.

**Status:** Wild.

**Habitat:** it is usually found in forest hedge and in roadsides.

**Distribution:** The plant is well spread in Guinean and Sudano-guinean phytogeographic areas in Benin: Lama, Houèto, Pobè, Savè, Linkpodji, Houin (Akoègninou *et al.* 2006).

**Darwin Initiative 15/003 Project specimen collected from:** Wellan (Bassila); Sohounme (Houeyogbe); Afomayi (Lalo); Agnavo (Dogbo).

**Reproductive biology:** The species certainly reproduces by seeds which are probably dormant and hard to germinate.

**Utilisations:** Consumption of immature fruit and even leaves is reported among Anii communities in north-western as well as Adja and Cotafon in South-western. But its level of consumption is frequent or rare or even occasional according to communities. Frequent consumption is mostly record in Adja and Cotafon communities in the south western regions. Consumption occurs in rainy season but



also year-round depending on localities. It is said that filtrate of leaves is used to treat eye pain.

**Threat on genetic resources:** Given its distribution areas, *Mamordica cissodes* is not under danger of genetic erosion in Benin.

*Telfairia occidentalis* Hook.f.

**Local names:** Iroko, Roko (Holly); Loko, Lokohouegbe, Lokohoueton (Aizo); Lokpo (Fon, Mahi)

**Common names:** Cource cannelée (French); fluted pumpkin, fluted gourd (English)

**Description and variation:** It is a climbing liana, dioecious, perennial up to 6 m long or more. Flowers corollas are creamy white with a red violet point in centre. Fruit is a large and long, drooping and ellipsoid berry with ten very prominent ribs.

**Status:** Cultivated.

**Production areas and systems:** This is a typical home gardens species of the Guineo-congolese agroecological region in Benin. Its cultivation requires stake. The household fence is usually used as support for the plant.

**Darwin Initiative 15/003 Project specimen collected from:** Zalimey (Zogbodomey); Gbeko (Dangbo); Agbandonou (Allada); Gome (Toffo); Bognongon (Zogbodomey); Zonmon (Zangnanado); Akpate (Pobè).

**Reproductive biology:** The species reproduces by seeds. But is it important to have male and female plants in the same surrounding to increase the chance to have fertile fecundations. Seed longevity is very short and the regeneration of the plant has been always problematic for large scale production.

**Utilisations:** Leaves are harvested in rainy season or even year-round and consumed as vegetable by many people of south Benin but particularly Yoruba or Nagot people. Consumption level is occasional, rare or frequent depending on sociolinguistic group. It is frequent among Aizo. In contrary, Fon, Mahi and Holly communities consume it rarely or occasionally. Seeds are also used to make a typical dish known as 'avlouda' in Yoruba communities. Commercialization of products of the species occurs in some localities but the species has not a great market value.

**Threat on genetic resources:** Seed germination is hard to achieve and require further investigations.

**Further readings:** Grubben and Denton (2004), (Ajayi *et al.* 2007).

*Trichosanthes cucumerina* L.

Syn.: *Trichosanthes anguina* L.

**Local names:** Tikpinsindi (Gourmantche); Timantibankoman (Boko); Timati (Holly).

**Common names:** Serpent vegetal, concombre-serpent (French); snake gourd, snake tomato (English).

**Description and variation:** *Trichosanthes cucumerina* is a climbing by 2-3-branched tendrils, annual, monoecious liana with digitate-lobed. Fruit is a linear, long berry up to 25-50 cm, greenish white to dark red at maturity.

**Status:** Cultivated.

**Agroecology:** In cultivation, *T. cucumerina* performs in humid lowlands. Average day temperatures requirement is 30-35°C. It does not tolerate dry soil and prefers a good moisture reserve in the soil.

**Production areas and systems:** This is another typical home garden species in Benin which grows on household fence.

**Darwin Initiative 15/003 Project specimen collected from:** Tanongou (Tanguieta); Mareguinta (Kalalé); Ayetedjou (Kétou)

**Reproductive biology:** The species reproduces by seed.

**Utilisations:** The mature fruits contain a soft, red, tomato-like pulp. As a result, mature fruits are sometimes used as substitute to tomato in sauces or as a substitute of tomato puree or paste. Immature fruits and more rarely young shoots and leaves are used as cooked vegetables. The plant products are available at the end of the rainy season and even year-round and commercialized in local markets.

**Threat on genetic resources:** The limited distribution or cultivation areas of *T. cucumerina* make it vulnerable even though there is no immediate threat of extinction or genetic erosion.

**Further readings:** Grubben and Denton (2004).

## Euphorbiaceae

### *Acalypha ciliata* Forssk.

Syn.: *Acaphyla fimbriata* Schumach. & Thonn., Beskr.

**Local names:** Axhuassamandjè (Fon), Hossudugblé (Adja), Tekpadjeluyologa, Titayanyandi (Gourmantché), Barichiri (Dendi).

**Common names:** Acaphyla cilié (French)

**Description and variation:** It is an annual herb, slightly pubescent and much branched. The flowers are greenish and arranged in axillary racemes.

**Status:** Wild.

**Habitat:** It is grown in forest, savannah, in fallows, on a wide range of soil types.

**Distribution:** Adjohoun; Ouando, Porto-novo; Hozin; Toumè; Odomèta; Guéné; Athiémé (Akoègninou *et al.* 2006).

**Darwin Initiative 15/003 Project specimen collected from:** Kargui (Karimama); Batia (Tanguieta); Agnavo (Dogbo); Afomayi (Lalo); Bognongon (Zogbodomey).

**Utilisations:** This annual herb is used as leafy vegetable. It is also said to be cooked in mixture with fruits of *A. esculentus* or leaves *V. unguiculata*. The plant is collected from disturbed lands and it is more available in the rainy season. However its consumption occurs rarely or occasionally and when other vegetable species become

scarce. Local knowledge about usage of the species might be under threat because when people of Gourmantché community of Batia reported that this wild vegetable is these days used only by old persons.

***Bridelia ferruginea* Benth**

**Local names:** Koolu (Kotokoli), Gosassala (Ani).

**Description and variation:** *B. ferruginea* is a small tree or a shrub up to 6 m tall often spiny. The flowers are yellow greenish with reddish disc.

**Status:** Wild.

**Habitat:** It is found in savannah, woodlands, riparian forest, in fallow and thicket.

**Distribution:** *B. ferruginea* is a deciduous tree well spread in Benin: Cotonou; Pobè; Odomèta; Lanta; Savè; Méréguinta; Savalou (Akoègninou *et al.* 2006).

**Darwin Initiative 15/003 Project specimen collected from:** Tchimbere (Bassila); Kodowari (Bassila).

**Utilisations:** Rarely used as leafy vegetable even if available year-round, it has been said to be used in healing women from dysmenorrhoea in Kotokoli communities.

***Croton lobatus* L.**

**Local names:** aloviatoon (Ouémè), eyetayé, oru (Holly), kissiadje (Adja), koklowontin (Mahi), mèkokummè (Otammari), Mussukubaagu (Bariba).

**Description and variation:** *Croton lobatus* is an annual herbaceous plant much branched, erect, pubescent, sometimes woody at base. The leaves are palmately lobed with 3-5 lobes.

**Status:** Wild.

**Habitat:** *C. lobatus* is an invasive species occurring in the first stage of vegetation establishment, after land clearing. It is also found in fallows.

**Distribution:** It is well spread in Sudano-Guinean and Guinean phytogeographic zones: Calavi; Ouédo; Bétérou, Adjarala; Cotonou (Akoègninou *et al.* 2006).

**Darwin Initiative 15/003 Project specimen collected from:** Zalimey (Zogbodomey); Agnavo (Dogbo); Soubado (Pèrèrè); Zonmon (Zangnanado); Ayetedjou (Kétou); Gogbo (Adjohoun); Akpate (Pobè); Tagaye (Natitingou).

**Reproductive biology:** Reproduction is by seeds.

**Utilisations:** The tender leaves are rarely consumed in some communities. They are frequently consumed in others where the plant is well appreciated. In Ayetedjou the plant is sold in the local market. The species is available in the rainy season, but more in the dryer one in the Ouémé valley. It is known as very useful plant in traditional medicines where it is used in against jaundice in Mahi community of Zonmon and recommended to pregnant women for welfare of foetus in Holly community of Ayétédjou.

*Jatropha curcas* L.

**Local names:** Orkpokpoou (Tchabè), Yanayikpadja, Kpayola (Holly).

**Common names:** Pignon d'inde, purghère (French); Physic nut, purging nut (English).

**Description and variation:** *J. curcas* is a shrub or small tree with robust branches; it has abundant and translucent latex. The seeds are black.

**Status:** Cultivated.

**Agro-ecology:** It is found in Guinean phytogeographic zone where it is used for fence establishment.

**Darwin Initiative 15/003 Project specimen collected from:** Akpate (Pobè); Okunfo (Save); Ayetedjou (Kétou).

**Production areas and systems:** *J. curcas* has been introduced in Benin and usually used in fence establishment in rural areas.

**Utilisations:** It is currently cultivated in many communities for its medicinal properties. However consumption of its tender leaves has been recorded in Tchabè and Holly communities in the Guinean and soudano-guinean ecological regions even if occurring rarely. It's said to be available year-round and be used in curing of malaria.

*Jatropha gossypifolia* L.

**Local names:** Nyikpotin vovo (Fon) Botujè pupa, Lapa Lapa pupa (nagot, yoruna); Timmo'nti (Otamari).

**Common names:** Médecinier sauvage, médecinier bâtard, médecinier rouge (French).

**Description and variation:** *J. gossypifolia* is a shrub with glabrous and glandulous branches. The leaves are stained purple and flowers are red purple.

**Status:** Cultivated or domesticated.

**Darwin Initiative 15/003 Project specimen collected from:** Tagaye (Natitingou); Gome (Toffo).

**Production areas and systems:** The plant is planted around household as live hedge.

**Utilisations:** Like *J. Curcas*, *J gossypifolia* is a shrub introduced in Benin. Currently widespread in all Benin ecological zones, it is cultivated around habitations for the same uses of *J. Curcas*: fence instalment. Consumption of leaves as leafy vegetable is noticed among Otamari sociolinguistic group in western north of Benin in Sudanian zone. Medicinal uses are the most important utilizations of this small tree. Leaf latex is used against anaemia and sexuals troubles.

***Manihot esculenta* Crantz**Syn.: *Manihot utilissima* Pohl

**Local names:** Finyin, Golotin, Hunla, Sohwe (Fon, mahi) ; Gbatchi, Baountchi (Ifè) ; Kpaki (Tchabè, Holly) ; Ajangun (Idatcha, Mahi, Ifè) ; (Ifè) ; Éguèkè (Mahi), Tamguma, Logo (Bariba), Logo (dendi), Otangoumbo (Gourmantché).

**Common names:** Manioc, cassava (French); cassava, tapioca plant (English).

**Description and variation:** *Manihot esculenta* is a shrub with white latex up to 2-3 m tall. The stem is knotty. The leaves are digitate. The roots are tuberous. There a great variability of bark colour, leaves stain, etc.

**Status:** Cultivated

**Darwin Initiative 15/003 Project specimen collected from:** Afomayi (Lalo); Poto (Banikoara); Akarade (Bassila); Agbandonou (Allada); Gogbo (Adjohoun); Okunfo (Save); Ikemon (Ouèssè); Bognongon (Zogbodomey); Kpassa (Tchaourou); Banigri (Tchaourou); Akpate (Pobè); Zalimey (Zogbodomey); Mondji (Savalou); Ayetedjou (Kétou); Assedji (Athieme); Ganro (Bembèrèkè); Agnavo (Dogbo) ; Zougou-Pantrossi (Gogounou); Bensekou (Kandi); Dabou (Paaraakou); Mareguinta (Kalale); Gbeko (Dangbo); Ekpa (Savaalou); Ileman (Dassa-zoumè); Zonmon (Zangnanado); Kodowari Bassila); Tagaye (Natitingou); Loumbou-Loumbou (Karimama); Pouya (Natitingou); Vossa (Ouesse); Wellan (Bassila); Kpakpaza (Glazoué); Sohounme (Houeyogbe); Sovlegni (Djidja); Torozogou (Malanville); Gome (Toffo);Tamba (Savalou).

**Production areas and systems:** Cassava is produced throughout the country. The central region of Benin is the high production zone. It is cultivated in monocropping or intercropping with other food crops. Cuttings are mostly used for reproduction.

**Utilisations:** *Manihot esculenta* is an important staple crop in Benin. Tuber provides starch. Consumption of young leaves as leafy vegetables have become eating habit of many sociolinguistic groups. Leaves are available all year-round and are sold in local markets. The plant is used to treat anaemia, malaria, kwashiorkor, dizziness, frontanel and earache.

**Threat on genetic resources:** *Manihot esculenta* is widely produced and then it is not or less endangered of genetic erosion.

**Further readings:** (A completer)

***Manihot glaziovii* Müll. Arg.**

**Local names:** Lobatin (Fon), Ban'ctchi (Kotocoli).

**Common names:** Ceara rubber tree (English).

**Description and variation:** It is a small tree or a shrub with white latex, up to 10 m tall. The leaves are digitate, peltate.

**Status:** In the past the plant is cultivated but it goes spontaneous nowadays.

**Darwin Initiative 15/003 Project specimen collected from:** Sohounme (Houyogbé); Gome (Toffo); Tchimbere (Bassila) ; Assedji (Athieme).

**Production areas and system:** It is cultivated in village and in palm tree plantation.

**Utilisations:** *Manihot glaziovii* is a small tree which can reach 10 m in size. It has been introduced in Benin and is cultivated for rubber production. Currently the tree is spontaneous or wild in certain regions. Young leaves are available all year-round but its consumption as leafy vegetable is very rare. This usage of leaves is recorded among Gourmantché sociolinguistic group in western north in Sudanian zone. The species is used in the treatment of earache.

### *Margaritaria discoidea* (Baill.) Webster

**Local names:** Hinlinxomè, wople, jeyi (Fon), wusu poyi (Bariba), Kouta (Aïzo)

**Distribution:** Tagaye (Natitingou) ; Agbandonou (Allada) ; Moupemou (Natitingou).

**Habitat:** It is a tree species which grows in forest, riparian forest or humid station in Guinean as well as sudanian phytogeographic zones.

**Utilisation:** Young leaves consumption is recorded among south Benin Aïzo group in Guinean zone. However this usage is still rare.

### *Phyllanthus amarus* Schumach & Thonn

**Local names:** Arigbisso (Ifè); henlenwé (Fon); sobaru (Bariba); banna banna biriku (dendi).

**Distribution:** Tamba (Savalou) ; Ekpa (Savalou) ; Sovlegni (Djidja).

**Habitat:** *P. amarus* is an herbaceous plant which is widespread in all ecological zones of Benin. It grows in rainy season in forests, fallows, and farm area and road side.

**Utilisations:** Medicinal uses are the most common for this herb occasionally cultivated in home gardens. It is used against vomiting, skin inflammations and other diseases. It said to be consumed as soup ingredient in central region of Benin by Ifè people.

## Irvingiaceae

### *Irvingia gabonensis* (Aubry-Lecomte ex O'Rorke) Baill.

**Local names:** Aslotin, Aslo, Asro (Fon), Asiotin (Goun), Oro, Oroyefun (Idatcha, Tchabè, Holly).

**Common names:** Pomme sauvage (French), Wild mango tree, Rainy season bush mango, African mango, Dika nut (English).

**Description and variation:** Small to giant tree with dark green leathery leaves; the rounded fruits are green when immature and yellow when ripened. Some authors distinguish two varieties: var. *gabonensis* bearing fruit with sweet edible pulp and



var. *excelsa* with bitter inedible pulp. But based on DNA analysis, others consider these taxa as two different species as genetically distinct and do not hybridize, even where sympatric. For var. *gabonensis* there is continuous variation in fruit, kernel and shell characters among cultivated populations.

**Status:** Actually undergoing in the domestication process, it has been established as parkland tree in many regions in the guineo-congolese rain forest. Many works are undertaken by the World Agroforestry Centre (ex ICRAF) in west and central Africa for the improvement of potential ideotypes of var. *gabonensis* for domestication.

**Distribution:** Aguidahoué; Godomey; Adjara; Porto Novo; Bopè; Abomey (Akoegninou *et al.*, 2006).

**Darwin Initiative 15/003 Project specimen collected from:** Sovlegni (Djidja), Ileman (Dassa-zoumè); Mondji (Savalou); Kpakpaza (Glazoué); Ayetedjou (Kétou); Bognongon (Zogbodomey); Zalimey (Zogbodomey).

**Agro-ecology:** *A. gabonensis* is a tree species of semi-deciduous humid forest in the Guineo-congolese phytogeographic zone. In Benin it's found in the patchy humid regions in the South.

**Production areas and systems:** In Benin, it is cultivated in villages since long time ago for fruit consumption or protected within farmlands where it occurs. However, production systems remain traditional with no work towards productivity improvement.

**Utilisations:** Fruits are juicy and sweet. They are eaten fresh and the kernels are sold in local and regional markets. The kernels have high oil content and glutinous property. This later property justifies the use of crushed kernels by south Benin people for cooking a special dish known as ogbono in Yoruba communities. However, this consumption is very sporadic because the fruits and kernels are available mostly in the dry season. Additionally, the species is said to be used in medico-magic practices (e.g. children enuresis treatment) in Benin.

**Threat on genetic resources:** Domestication efforts have helped to keep the species out of danger. It is fairly widespread in West and Central Africa and does not seem to be in danger of genetic erosion. It is classified in the IUCN Red List as a lower risk species, but being close to the qualification 'vulnerable'.

**Further readings:** Atangana *et al.* (2001); Tchoundjeu and Atangana (2007); Okafor (1975); Nya *et al.* (2006).

## Lamiaceae

### *Hoslundia opposita* Vahl.

**Local names:** Guédjékangara (Anii); Hlatchiayo (Fon), Hlatchio (Aizo), Wonanvwe (Cotafon).

**Common names:** Kamyuye (English).

**Description and variation:** *H. opposita* is a perennial erect shrub with elliptic leaves.



**Status:** Wild.

**Habitat:** The species naturally occurs in fallows, riparian forests and woody savannahs within tall grass species. It is typically found at an altitude of 0 to 1 660 meters.

**Distribution:** Lanta; Pobè; Atchéribé; Gbananmè; Daho; Dassa (Akouègninou *et al.* 2006).

**Darwin Initiative 15/003 Project specimen collected from:** Assedji (Athiémè); Agbandonou (Allada); Wellan (Bassila).

**Utilisations:** Aromatic tender leaves are collected wild and used as leafy vegetable in the communities cited above. In Anii community of Wellan village, below three months pregnant women are defended to eating this vegetable. Although *H. opposita* is available all year-round, its usage occurs rarely or occasionally and therefore is not sold. It is recognised wherever used to have important medicinal values and intervenes in healing children from Kwashiorkor and malaria in Aizo communities.

**Reproductive biology:** The species reproduces by seeds. It flowers and fructifies in April, May, June, and October.

**Threat on genetic resources:** The plant widely expands in southern and tropical Africa, and Madagascar. It seems not in danger currently.

**Further readings:** Amvan Zollo *et al.* (1998); Ayedoun *et al.* (1999)

**References consulted**

*Ocimum americanum* L.

Syn.: *Ocimum canum* Sims.

**Local names:** Abotian (Bariba), Kesu kesu, Xisi xisi, Xweflu (Fon); Hacıyayo (Goun) Akohun, Kohun (Fon, Mahi), Féeokuta, Ofin (Tchabe)

**Common names:** Basilic Blanc (French), Hoary basil (English).

**Description and variation:** *O. americanum* is an annual herb which looks like *Ocimum basilicum* but smaller than this later.

**Status:** Probably introduced in Benin, it is has adapted to the local agro ecology. Currently it colonises abandoned areas of village neighbourhoods where it grows spontaneously.

**Agro-ecology:** *O. americanum* is a garden species which is present in all phytogheographical zones. It is typically found at an altitude of 0 to 1,400 meters.

**Distribution:** Dassa-zoumè; Monts Atacora (Akouègninou *et al.* 2006).

**Darwin Initiative 15/003 Project specimen collected from:** Kpassa (Tchaourou)

**Production areas and systems:** The species is cultivated in home gardens, but also spread sometimes around huts and can become a bad weed in farms. It does not need to be resown each season as seeds spread around by wind in the dry season can easily germinate when conditions are again favourable.

**Utilisations:** *O. americanum* is an aromatic herb. The species is rarely consumed and like almost all *Ocimum* species, its leaves are used for their arum and as ingredient in

sauces. *O. americanum* is much more abundant in the rainy season, but less consumed and does not have any market value. In addition to the medicinal uses listed for *O. basilicum*, it is said to be an aphrodisiac in the Fon communities and also used to cure skin diseases (urticaria and mycoses) in Mahi communities.

**Threat on genetic resources:** As widely distributed across the country, *O. americanum* seems less or not threatened in Benin.

### *Ocimum basilicum* L.

**Local names:** Akohoun (Idatcha, Mahi, Aizo); Unkpéhoun (Ifè); Kodukwè (Mahi); Kokoula (Boko); Timunurdi (Gourmantché), *Guefudire*, *Gofounnoutoure* (Ani) Abotian, Bonouregou (Bariba), Kupanuonku (Otammari), Iroun (Holly).

**Common names:** Sweet basil, Common basil, Garden basil (English), Basilic, Basilic commun, Herbe royale (French)

**Description and variation:** *O. basilicum* is an aromatic annual herb which can reach 1 m tall, stem erect and white flower spikes blooming from June to August.

**Status:** It has been introduced in Benin like other *Ocimum* species, but can actually reproduce spontaneously.

**Distribution:** Porto-Novo; Abomey-Calavi (Akouègninou *et al.* 2006).

**Darwin Initiative 15/003 Project specimen collected from:** Moupemou (Natitingou); Ganro (Ganro); Batia (Tanguiéta); Mondji (Savalou); Ileman (Dassa-zoumè); Soubado (Pèrèrè); Tamba (Savalou); Banigri Tchaorou); Dabou(Parakou); Kpakpaza (Glazoué); Penelan (Bassila); Gbeko (Dangbo); Zonmon (Zangnanado); Ayetedjou (Kétou); Wellan (Bassila); Bensekou (Kandi).

**Agro-ecology:** *O. basilicum* is grown in home gardens. It grows on average well-drained soils, 5.1-8.5 pH. Flowering needs full to part-time sun exposure.

**Production areas and systems:** It is not cultivated as crop but just kept in backyards mainly for medicinal uses.

**Reproductive biology:** It can reproduce spontaneously from seeds spread around by wind during the dry season.

**Utilisations:** The plant is used for the same purposes as *O. americanum* to which it morphologically looks like. However, its consumption is wider. *O. basilicum* is available year-round and is sold in villages. In Gourmantche community of Batia, its tender leaves are cooked with cowpea seeds (*Vigna unguiculata*). All *Ocimum* species contain antibiotic and anti-helminthic compounds and are used for these reasons they are used against cold, fever, head aches, malaria, convulsion, and venoms of reptiles and insects.

**Threat on genetic resources:** the species is available country-wide in Benin and seems not endangered at the moment.

*Ocimum gratissimum* L.

**Local names:** Am'baba, Anrubaba (Holly, Ife), Aribara (Idatcha), Tchanmandido, Tchanmandidou (Cotafon, Aizo), Gbodoglin (Fon), Tchiayo (Fon, Aizo, Oueme), Yandodu, Yandodoui, Lolouide (Adja), Gudjeme (Ani), Kiooyo (Mahi), Kinunubidjaga (Gourmantche), Nuanzua (Boko), Simonba (Tchabe), Tibòdayati, Tibòsèyenti (Otammari), Nunugu, Gassaman (Dendi), Warima (Wama), Kinanzorou, Kounonsorou (Kotokoli), Danbakaru, Unonbuboko, Wronwron, Bonurogu (Bariba).

**Common names:** African basil, South-East-Asian basil, Tree basil, Pale-yellow-flowered-basil (English), Gros basilica, Plante moustique, Buisson thé, Feuille fievre, Thé de Gambie, Basilic en arbre, Basilic à Thymol (French).

**Description and variation:** *O. gratissimum* is a subshrub. Two varieties have been morphologically described, *O. gratissimum* var. *gratissimum* and *Ocimum gratissimum* var. *macrophyllum*. RAPDs markers analysis revealed that there are three different groups.

**Status:** It is cultivated as an aromatic and medicinal plant.

**Distribution:** Dassa-zoumè; Kouandé (Akouègninou *et al.* 2006).

**Darwin Initiative 15/003 Project specimen collected from:** Wellan (Bassila); Barikini (Bassila); Ikemon (Ouèssè); Pouya (Natitingou); Sohounme (Houéyogbé); Gogbo (Adjohoun); Agbandonou (Allada); Soubado (Pèrèrè); Okunfo (Savè); Gome (Toffo); Vossa (Ouèssè); Akarade (Bassila); Tanongou (Tanguieta); Mondji (Savalou); Assedji (Athiémè); Sovlegni (Djidja); Moupemou (Natitingou); Ayetedjou (Kétou); Dabou (Parakou); Tagaye (Natitingou); Tchimbere (Bassila); Zougou-Pantrossi (Gogounou); Akpate (Pobè); Tankougou (Kandi); Zalimey (Zogbodomey); Kargui (Karimama); Ekpa (Savalou); Tamba (Saavalou); Afomayi (Lalo); Kpakpaza (Glazoué); Ileman (Dassa-zoumè); Torozogou (Malanville); Bognongon (Zogbodomey); Kpassa (Tchaourou); Gbeko (Dangbo); Penelan (Bassila); Ganro (Bembèrèkè); Kodowari (Bassila); Agnavo (Dogbo); Mareguinta (Kalalé); Zonmon (Zangnanado); Banigri (Tchaourou).

**Agro-ecology:** Typically found at an altitude of 0-2, 382 m.

**Production areas and systems:** Because of its importance (food and medicine), the species is integrated by small scale farmers in home gardens or cropland. Also it can be found in villages neighbourhoods where seeds spread by the wind during the dry season germinate and grow when conditions become favourable. In peri-urban agriculture, the species stand up at a great position within vegetable crops and is produced nearly by most urban producers to supply cities. It is therefore available year-round.

**Utilisations:** *O. gratissimum* was initially known for its medicinal uses. In the past, leaves collected from cultivated plants are occasionally used for consumption. Currently, the plant has become very appreciated by people of south Benin particularly in urban areas where it gains a great market value. It is sold in both local and regional markets. Reasons of the increase of interests on the species are the good taste of leaves but also its antibiotic properties. It is the widest eaten *Ocimum* species and is currently a good source of income for urban. In the cooking processes it's

sometimes mixed with other vegetables, inter alia, crushed kernels of *Citrullus lanatus*. In addition, its medicinal values are commonly recognised in almost all communities where it occurs. Macerates of leaves are used against vomiting, diarrhoea, dystocia, dysmenorrhoea, digestives troubles, mycoses, haemorrhoids, stomach-ache, cough, headache, dysentery, constipation, abscess, typhoid fever and cephalic etc. It is also widely used as first aid anti-biotic to treat injuries. Most importantly, it is prescribed in the northern Benin to women in their first days after childbirth in order to eliminate blood clots from the body. It is also said that eating *O. gratissimum* vegetable dishes frequently will prevent pregnant women from dystocia.

**Threat on genetic resources:** Widely cultivated, *O. gratissimum* seems less endangered in Benin.

**Further readings:** Graver *et al.* (2000); Vieira *et al.* (2001); Grubben and Denton (2004).

## Lauraceae

### *Cassytha filiformis* L.

**Local names:** Seiyaba (Boko), fouadobagaru (Bariba)

**Common names:** Liane sans tête, Liane sans fin (French); Fine-stem Lovevine, Devil's gut (English).

**Description and variation:** Fleshy perennial vine, leafless parasite plant.

**Status:** it is collected wild.

**Distribution:** Ouèdèmè-Péda ; Cotonou ; Adjérégbé ; Takon ; Bowourouho, Kopargo (Akouègninou *et al.* 2006).

**Darwin Initiative 15/003 Project specimen collected from:** Poto (Banikoara); Bensekou (Kandi)

**Habitat:** *C. filiformis* is collected from fallows established on sandy soils wetlands and swamp edges. It also occurs in coastal vegetations.

**Reproductive biology:** Perennial vine which requires full sun for flowering. It is high drought tolerant.

**Utilisations:** Frequently consumed in dry season in the Boko community of Bensekou, whereas rarely used as vegetable in Bariba community of Poto, in the Sudanian phytogeographic zone. However it does not have any market value. Traditionally, *C. filiformis* is known for its medico-magic properties. Its utilisation as vegetable is restricted.

**Threat on genetic resources:** The current conservation status of *C. filiformis* in Benin is unknown.

## Leguminosae-Caesalpinioideae

### *Afzelia africana* Sm.

**Local names:** Bonakpanbo (Gourmantche), Gbeuseri (Bariba), Kèemè (Kotokoli), Guiyobolo (Ani)

**Common names:** Lingué (French); African mahogany, African oak (English).

**Description and variation:** Tree tall up to 33 metres, black characteristic pods and seeds.

**Status:** Wild tree species.

**Habitat:** Dry forests and woodlands species, *A. africana* occurs in savannahs as well in semi-deciduous forests.

**Distribution:** It is found in all the three phytogeographic zones of Benin: Pobè; Adjarala; Dan; Dassa; Tchétou; Agbassa, Tchaourou and Koussoukouangou (Akouègninou *et al.* 2006)

**Darwin Initiative 15/003 Project specimen collected from:** Kodowari (Bassila); Batia (Tanguiéta); Kpassa (Tchaourou); Banigri (Tchaourou); Tchimbere (Bassila).

**Reproductive biology:** Perennial species, seeds disseminated in the landscape by animals.

**Utilisations:** Important timber tree, *A. africana* is also used as leafy vegetable in some communities of the Sudanian and the Sudano-guinean regions. Tender leaves are mostly collected in the dry season, after the course of first rainfalls following bushfires. The consumption of this resource in the centre and the north-west of Benin occurs rarely or occasionally even though the resource could be available year-round. Therefore, the species as vegetable resource does not have any commercial importance. The decoction of stems bark is used in healing rheumatisms and malaria in these communities. *A. africana* is also an important fodder and trees are pruned in the dry season to feed livestock.

**Threat on genetic resources:** *A. africana* has multiple uses which leaves are to heavy exploitation. It is currently nationally threatened according to IUCN criteria. It falls in the IUCN 2.3 category (vulnerable).

### *Burkea africana* Hook.

**Local names:** Tchinguili, Balabalodè (Kotokoli)

**Description and variation:** Deciduous tree up to 23 metres tall.

**Status:** Wild.

**Habitat:** Farmlands, fallows, woodlands and establish on ferruginous soils.

**Distribution:** Common in the whole tropical Africa, *B. africana* occurs in all phytogeographic regions in Benin: Agonli-kpahou; Batèdji-Savalou; Dassa; Savè; Boukouro, Kouandé; Nalohou II, Djougou; Kouaténa; Kalalé (Akouègninou *et al.* 2006).

**Darwin Initiative 15/003 Project specimen collected from:** Tchimbere (Bassila).

**Reproductive biology:** Perennial tree species which reproduces by seed.

**Utilisations:** It is used as leafy vegetable only in Kotokoli communities in the north-western Benin. However, this consumption is very rare. Therefore, it does not have any commercial activity which involves it, even though available all through the year. Nonetheless, it has an important medicinal value for this community where it is used against malaria.

**Threat on genetic resources:** It seems less threatened in Benin.

***Daniellia oliveri* (Rolfe) Hutch. & Dalziel,**

Syn.: *Daniellia fosteri* Holland, *Daniellia punchii* Holland, *Daniellia similis* Holland, *Paradaniellia oliveri* Rolfe

**Local names:** Guobole, Ibonon (Ani), Gbeou, Gnannu (Bariba), Za (Fon/Adja), Tchèlè/Tchalè (Kotokoli)

**Common names:** Copalier africain de balsam, santan (French), African copaiba Balsam tree, West African copal, West african gum copal (English).

**Description and variation:** *D. oliveri* is a tree species up to 30 m tall with blackish and scratched trunk.

**Status:** Wild.

**Habitat:** Occurs in savannah areas where it grows on ferruginous soils.

**Distribution:** It is widespread in sudano-guinean and sudanian phytogeographic zones in Benin: Adjarala; Zogbodomey; Agbangnizoun; Zinkanmè; Djidja; Goro; and Piscine Tanékas (Akouègninou *et al.* 2006).

**Darwin Initiative 15/003 Project specimen collected from:** Keremou (Banikoara); Tchimbere (Bassila); Akarade (Bassila); Ganro (Bembèrèkè); Afomayi (Lalo); Sovlegni (Djidja); Barikini (Bassila); Wellan (Bassila).

**Reproductive biology:** Perennial tree and reproduces by seeds disseminated in the landscape by dispersal agents (birds and mammals essentially).

**Utilisations:** Tender leaves are used as leafy vegetable. The species is sometimes sold in local markets of villages where it is consumed. Its consumption is frequent in Anii and Kotokoli communities which are geographically neighbours, whereas rarely or occasionally used in other communities. In Fon communities, the species is being progressively used as substitute to *Vitex doniana* of which leaves become scarcer due to a high pressure on the resource. Tender leaves of *D. oliveri* are abundantly available in the dry season, although it may be available year-round in some areas. It is also said to be used in the treatment of dysmenorrhoea in the Adja community of Afomayi in south-western Benin.



**Threat on genetic resources:** Not evaluated. However, if the use of this species as substitute of *Vitex doniana* continues, there is a great potential threat on the resource.

**Further readings:** (Houehounha xxx)

***Piliostigma thonningii* (Schumach) Milne-Redh.**

Syn.: *Bauhinia thonningii* Schumach.

**Local names:** Goutchérimè (Ani), Bako (Kotokoli)

**Common names:** Pied de boeuf (French), Kao (English)

**Description and variation:** Shrub with indehiscent pods.

**Status:** Wild.

**Habitat:** It is found in savannas and fallows.

**Distribution:** the species is widespread in tropical Africa. In Benin, it occurs in all phytogeographic zones: Dogo; Lanta; Gobada; Savalou-Tchetti; Okpara; Donkparawi, Nikki and Porga (Akouègninou et al. 2006).

**Darwin Initiative 15/003 Project specimen collected from:** Kodowari (Bassila); Barikini (Bassila); Tchimbere (Bassila).

**Reproductive biology:** *P. thonningii* is perennial and reproduces by seeds dispersed by birds, animals and insects.

**Utilisations:** It is rarely or occasionally used as leafy vegetable by Anii and Kotokoli communities in the Sudano-guinean zone. The resource is said available all year-round; but it does not have any market value. Nonetheless, it is recognised to have important anti-inflammatory and anti-bacterial properties and therefore intervenes in practices for curing haemorrhoids, diarrhoeas, etc. It is also said to facilitate teeth growth by children.

**Threat on genetic resources:** Not evaluated.

**Further readings:** Ibewuike (1997)

***Senna obtusifolia* (L.) H.S.Irwin & Barneby,**

Syn.: *Cassia obtusifolia* L., *Cassia tora* auct. non L., *Senna tora* (L.)Roxb

**Local names:** Sooula (Boko), Tikpahunkpadi (Gourmantche)

**Common names:** Cassia fétide, Casse fétide, Casse puante, Séné, Pistache marron (French); Siklepod, African foetid cassia, Low cassia (English).

**Description and variation:** Herb with lignified basal stem, up to 1.5 m tall, 3 pairs obovate leaflets with foetid smell, and it blooms solitary or paired yellow flowers. Distinction between *S. obtusifolia*, *S. occidentalis* and *S. tora* is not always clear. Names have often been misused and the same vernacular names may apply to all of them.

**Status:** Wild.

**Habitat:** *S. obtusifolia* is collected from fallows, abandoned areas in villages' neighbourhoods, along roads, as well as on cultivated land. It is also found along rivers and on dams' shores. The species is a pioneer colonising the land in the first



stage of vegetation establishment. But its presence is often associated with human presence or trace.

**Distribution:** Pantropical except for Madagascar, probably introduced from South-America, it is widespread in Benin: Cotounou; Gomé; Samiondji; Gouéné; Djidja; Kalalé; Saakabansi; Aplahoué ; Goungoun (Akouègninou *et al.* 2006).

**Specimen of Darwin Project collected from:** Tanongou (Tanguieta); Batia (Tanguieta); Bensekou (Kandi); Loumbou-Loumbou (Karimama).

**Reproductive biology:** Annual or perennial short-day plant and self-pollinated, the blooming period is between July and September.

**Utilisations:** Tender leaves are frequently used in Gourmantche communities as vegetable, whereas rarely eaten by Boko people in the dry season. This wide consumption by Gourmantche people of the far north-eastern Benin may be an influence of the vicinity to Niger and Burkina Faso where *S. obtusifolia* is an important vegetable. The species in Benin does not have an important commercial importance even though the species is available year-round in the region. Additionally, it is used by communities to combat malaria. Leaves contain 20% of proteins and are also grazed by livestock. But it contains some mycotoxicosis which is often a fatal disease for cattle feeding on *S. obtusifolia*.

**Threat on genetic resources:** Currently, the species seems not in danger.

**Further readings:** Grubben and Denton (2004)

### *Senna occidentalis* L.

Syn.: *Cassia occidentalis* L.

**Local names:** Adjagulu (Tchabe), Agbossouwanlui (Cotafon), Ayahouènu (Fon), Gitchantchunpè, Icencenpè (Ani), Siandala (Boko), Titukouti, Titukpòòti (Otammari), Yannuyinnon (Bariba, Wama), Kitchintchin (Kotocoli), Togble (Aïzo), Sangasanga (Gourmantche)

**Common names:** Séné café, café nègre, casse café, casse puante, pois puant, faux kinkéliba (French), Coffee senna, Coffee senna, Stinking weed (English).

**Description and variation:** *S. occidentalis* is an annual erect herb lignified at basis, up to 1 m tall.

**Status:** Wild.

**Habitat:** Same as *S. obtusifolia*.

**Distribution:** Pantropical species, it is widespread in all phytogeographical zones of Benin: Cotonou; Azowlissè; Ouando; Porto Novo; Samiondji; Ina (Akouègninou *et al.* 2006).

**Darwin Initiative 15/003 Project specimen collected from:** Barikini (Bassila); Tankougou (Kandi); Bognongon (Bognongon); Kpassa (Tchaourou); Agbandonou (Allada); Bensekou (Kandi); Sovlegni (Djidja); Dabou (Parakou); Keremou (Banikoara); Banigri (Tchaourou); Wellan (Bassila); Ganro (Bembèrèkè); Moupemou (Natitingou); Assedji (Athiémé); Tagaye (Natitingou); Loumbou-Loumbou

(Karimama); Ikemon (Ouèssè); Soubado (Pèrèrè); Zougou-Pantrossi (Gogounou); Okunfo (Save); Tchimbere (Bassila); Pouya (Natitingou); Akarade (Bassila).

**Reproductive biology:** *S. occidentalis* reproduces between May and June.

**Utilisations:** The species has many uses. Utilisation of *S. occidentalis* as leafy vegetable is observed mostly from central to northern Benin. It is a minor vegetable rarely eaten even though available year-round. It does not have any important market value (sold only in 3 out of 23 villages). The species is commonly recognised to have a significant medicinal value for rural people. As with many other *Senna* species, the plant is a purgative. Importantly, in all communities, it is used in treatment of malaria and jaundice. Additionally, it is regularly eaten in sauces by women after childbirth in Bariba and Boko communities in the North and Tchabe in the centre, in order to eliminate blood clots. It is also used as an anti-biotic. However, fresh beans can be poisonous for cattle (Barth *et al.* 1994).

**Threat on genetic resources:** Currently, the species seems not in danger.

### *Senna sophera* (L.) Roxb.

Syn.: *Cassia sophera* L.

**Local names:** Ayawénou (Aïzo), Dougba (Cotafon)

**Common names:** Senna, Pepper-leaved senna, African senna (English).

**Description and variation:** Erect shrub, up to 2-3 m tall, 4-10 paired leaflets, less smelly than other *Senna* species.

**Status:** The species originated from tropical America and is probably introduced in Benin. *S. sophera* is sometimes cultivated, but actually can reproduce spontaneously.

**Habitat:** Ruderal (in secondary habitats such as roadsides and waste places), but can occur in fallows at lower elevations.

**Distribution:** The species is pantropical. In Benin, it occurs in Guinean phytogeographic zone: Kpinnou; Atchérigbé; Bonou; Houignan-Illé Issaba; Ewé (Akouègninou *et al.* 2006).

**Darwin Initiative 15/003 Project specimen collected from:** Gome (Toffo); Sohounme (Houéyogbé).

**Reproductive biology:** The plant flowers in January, August; fructify in August.

**Utilisations:** Leaves are available in the rainy season and are rarely or occasionally consumed as vegetable by Cotafon and Aïzo people. As a very minor vegetable species, it does not have any economic importance. It is used for healing malaria in Cotafon community of Sohounme in the South Benin. *Senna sophera* has been reported to contain anthraquinones, including chrysophanol and emodin.

**Threat on genetic resources:** It widely spread and therefore neither endangered nor liable to genetic erosion.

**Further readings:** Bosch (2007)

### *Tamarindus indica* L.

**Local names:** Bupuodu (Gourmatché); Pusika (Wama)

**Common names:** Tamarin, Tamarinier de l'Inde (French); Tamarind, Indian tamarind, Sweet sampalok (English).

**Description and variation:** Tree species, opposites 12-15 paired leaflets, brown fruit with seed surrounded with brown pulp and fibres.

**Status:** Semi-natural (in domestication in some areas).

**Habitat:** Parklands, savannahs where usually occurs on anthills. Best soils range from pH 4.0 to 8.0 and can cope with medium fertile soils. The species is drought tolerant, but shade sensitive.

**Distribution:** Probably originated from African or Malagasy savannahs or India, it is actually widespread in the tropics and found in all phytogeographical zones in Benin: Igbomakoro; Gonnán, Nikki; Samiondji; Béyarou, Parakou; Tamarou; Loumbou-Loumbou; Tanougou; Porga; Matéri, Doga (Akouègninou *et al.* 2006).

**Darwin Initiative 15/003 Project specimen collected from:** Batia (Tanguiéta); Cotiakou (Tanguiéta).

**Reproductive biology:** The species is perennial and reproduces by seed but also vegetatively. It has a slow growth rate, flowers in March-June and fructifies in March, May, October-December.

**Utilisations:** The acid pulp of the fruit is eaten fresh or used as an ingredient in soups and drinks in northern Benin. Also in the dry season, Gourmantché people use tender leaves as vegetable. But this form of utilisation is rare. The only commercialised organ is the acid pulp of the fruit which is used for its laxative properties, and sold in local as well as regional markets.

**Threat on genetic resources:** Not evaluated.

**Further readings:** (Fandohan B. xxx)

## Leguminosae-Mimosoideae

*Entada africana* Guill. & Perr.

Syn.: *Entada sudanica* Schweinf.

**Local names:** Adakatin (Cotafon), Doulou, Kpalo (Kotokoli)

**Common names:** Néré des éléphants (French)

**Description and variation:** Shrub of up to 5 m tall.

**Status:** Wild.

**Habitat:** Savannah tree, it grows in woodlands and hill sides. It is also found in agricultural lands, disturbed areas.

**Distribution:** It is widespread in Benin. Covè; Dan; Niaro; Ségbana-Kouté; Boukoumbé; Igbo Makoro; Ouabou; Kalalé; Tanakpé (Akouègninou *et al.* 2006).

**Darwin Initiative 15/003 Project specimen collected from:** Assedji (Athiémé); Tchimbèrè (Bassila).

**Reproductive biology:** Perennial shrub, it reproduces by seed.

**Utilisations:** Tender leaves are collected from the wild and used in sauces. This form of utilisation occurs rarely even though the resource is abundant year-round. The utilisation of *E. africana* as vegetable has only been recorded in Kotokoli and Cotafon communities in the Sudano-Guinean and in the Guinean regions. It does not have any market value. However, it is used in the treatment of malaria in the Cotafon community of Assedji and dental caries in the Kotokoli community of Tchimbèrè.

**Threat on genetic resources:** Unknown.

**Further readings:** Sanogo *et al.* (1998).

***Parkia biglobasa* (Jacq.) R.Br. ex Benth.**

Syn.: *Mimosa biglobosa* Jacq., *Parkia africana* R.Br., *Parkia clappertoniana* Keay, *Parkia filicoidea* auct. non Welw. ex Oliv.

**Local names:** Ahwa (Fon, Mahi), Donbukohundu, Sonru (Bariba), Doobu (Wama), Tèyontè (Otamari), Igba (Holly), Solo (Kotokoli), Goré (Ani).

**Common names:** Néré, Arbre à farine, Arbre à fauve, Mimosa pourpre, Caroubier africain (French), West-African locust bean tree (English)

**Description and variation:** Tree up to 15 m tall, bark distinctly longitudinally fissured. There is a very high genetic diversity in *P. biglobosa* both at inter- and intra-population levels.

**Status:** Wild.

**Habitat:** It occurs in savannas. The tree is integrated in the agroforestry systems of many sociolinguistic groups particularly in northern part of the country.

**Distribution:** Pantropical, widespread in sudano-guinean and sudanian phytogeographic zones of Benin. Abomey-Calavi; Dohouimè; Zogbodomey; Tanguiéta.

**Specimen of Darwin Project collected for:** Cotiakou (Tanguieta); Poto (Banikoara); Ayetedjou (Kétou); Kodowari (Bassila); Zonmon (Zangnanado); Kpassa (Tchaourou); Vossa (Ouèssè); Sovlegni (Djidja); Mondji (Savalou); Tagaye (Natitingou); Akarade (Bassila); Banigri (Tchaourou); Bognongon (Zogbodomey).

**Reproductive biology:** Perennial and propagation is often by seed, and these are orthodox. Main pollinators are bats, but insects, such as bees and, less often fly and moths also frequently visit the capitula and pollinate flowers. The flowers are protandrous, which facilitates cross-pollination. Animals like squirrels, monkeys, parrots, etc contribute to this dissemination. However, human plays an important role in seeds dispersal nowadays.

**Utilisations:** It produces comestible yellow fruit pulp and seeds are processed and used in soups and sauces as an important ingredient locally called 'afintin' in fon sociolinguistic groups, nearly used in the whole country, even in regions where the species does not occur. This fermented product from seeds of *P. biglobosa* is an income source for both rural and urban women. Bohicon regional market in the southern Benin is known as the 'capital' of this small scale industry. In addition,

consumption of leaves is reported in the Kotocoli community of Akaradè in the North-western where tender leaves are collected from trees in fallows and parklands. However, the utilisation of leaves is very limited. Boiled and fermented seeds contain 35% proteins, 29% lipids, 16% carbohydrates and have good organoleptic properties and a positive effect on intestinal flora. In many communities it is used to prevent hypertension. Fermented seeds of *Prosopis* species and recently *Glycine max* are used as a substitute for fermented *Parkia biglobosa* seeds.

**Threat on genetic resources:** The current conservation status of the species in Benin is less unknown. The increases in exploitation of seeds of *P. biglobosa*, if domestication not reinforced, may lead to a serious menace in a mid-term.

**Further readings:** Sina *et al.* (2002); Teklehaimanot (2004); Timmer *et al.* (1996)

## Leguminosae-Papilionoideae

***Centrosema plumieri* (Turpin ex Pers.) Benth.**

Synonym: *Clitoria plumieri* Turpin ex Pers.

**Local names:** Yeyiman (Cotafon)

**Common names:** Pois puant, Cocotte ferme (French); Butterfly pea (English),

**Description and variation:** Perennial creeping herb.

**Status:** Introduced from tropical America, it has naturalised in Benin.

**Habitat:** It colonises fallows in their first stages after cultivation. It occurs also in village vicinities.

**Distribution:** In Benin it is present in the Guinean region: Allada; Ouèrè, Pobè; Porto Novo (Akouègninou *et al.* 2006)

**Darwin Initiative 15/003 Project specimen collected from:** Assedji (Athiémè); Sohounme (Houéyogbé).

**Reproductive biology:** The species reproduces by seeds.

**Utilisations:** Used as leafy vegetable by Cotafon people of Assedji and Sohounme in the south-western Benin. It is frequently consumed in Assedji, whereas occasionally in Sohounme village. In both localities, it has an economic importance and is sold in local markets. However, *C. plumieri* is just known as weed in other communities and sometimes used as cover plant and green fertilizer.

**Threat on genetic resources:** The species seems not or less threatened in Benin.

**Further readings:** Fantz (2004); Njarui *et al.* (2004)

***Crotalaria macrocalyx* Benth.**

**Local names:** Kuanonman (Wama), Kumalikoungu (Gourmanthe)

**Common names:** Crotalaire (French)

**Description and variation:** Prostrate annual or short time perennial herb, ascendant or erect up to 0.9 metre tall.

**Status:** Wild.

**Habitat:** Savannah species, it is collected from the neighbourhoods of villages and fallows. It is a pioneer and establish in the first stage of vegetation growth.

**Distribution:** Found in all phytogeographical zones in Benin: Dogo; Alfa Kouara; Tonri; Aoro, Mts Kouffé; Sakabansi; Ségbana; Natitingou; Djougou; Boukoumbé (Akouègninou *et al.* 2006).

**Darwin Initiative 15/003 Project specimen collected from:** Cotiakou (Tanguieta); Tanougou (Tanguieta); Batia (Tanguiéta).

**Reproductive biology:** The plant reproduces by seed, flowers in January, June, September-November and fructifies in September-November.

**Utilisations:** Tender leaves used as vegetable. Its consumption occurs frequently and the resource is available year-round. It has a slight commercial value in Batia village where it is sometimes sold at the local market. In the Gourmantche communities of Tanougou and Batia, tender leaves are collected, dried and stored up for use in the dry season when the resource becomes rare. It is sometimes used in stews, accompanied with cowpea (*Vigna unguiculata*). Also it is said to be used as fodder for livestock.

**Threat on genetic resources:** Actually seems not threatened in Benin.

### *Dalbergia saxatilis* Hook.f.

**Local names:** Agougou (Idatcha), Ogundu (nagot, tchabè)

**Description and variation:** Creeping or climbing shrub.

**Status:** Wild.

**Habitat:** Gallery forests and riparian thickets.

**Distribution:** In Benin it occurs in all macro-ecological zones: Porto Novo; Niaouli; Pouya; Lama; Kétou; Banigbé (Akouègninou *et al.* 2006).

**Darwin Initiative 15/003 Project specimen collected from:** Ikemon (Ouèssè); Ileman (Dassa-zoumè).

**Reproductive biology:** The plant reproduces by seeds.

**Utilisations:** Tender leaves are collected and used as glutinous vegetable by Idatcha and Tchabe communities as leafy vegetable. While it is frequently consumed in Idatcha community of Ileman village and sold in the local market, it is rarely used in Tchabe community where it does not have any commercial importance. It is abundant in the rainy season and additionally used as an anti-helminthic, abortifacient and to treat leprosy.

**Threat on genetic resources:** It seems not or less threatened in Benin.



***Vigna unguiculata* (L.)Walp. ssp. *unguiculata* var. *unguiculata***

Syn.: *Dolichos unguiculatus* L., *Vigna sinensis* (L.)Hassk.

**Local names:** Ayiman (Fon, Mahi, Adja, Cotafon, Aizo, Oueme), Ewa (idatcha, Tchabè, Nagot, Holly), Yangutu (Wama), Atchakabo, Guései (Ani), Blaa (Boko), Suiwurusu (Bariba), Titukpindi, Toutoufari (Gourmantche), Titu'nti (Otammari), Yiman (Cotafon), Yiviman (Aizo), Sonanfadé (Kotokoli).

**Common names:** Haricot dolique, Dolique mongette, Niébé, Haricot à l'œil noir, Pois aux yeux noirs, Cornille (French); Cowpea, Black-eye bean, Black-eye pea, marble pea (English).

**Description and variation:** *V. unguiculata* is a creeping, climbing, trailing or more or less erect annual or perennial herb (but cultivated as an annual). Flowers bisexual, papilionaceous have different colours. A large genetic diversity of wild types occurs throughout the African continent, with southern Africa being richer. Five cultivar-groups are generally recognized and the greatest genetic diversity of cultivated cowpea is found in West Africa, in savannah regions. Several varieties are cultivated in Benin.

**Status:** Cultivated.

**Agro-ecology:** Cultivated in all agro ecological zones in Benin and low altitudes in the tropics.

**Darwin Initiative 15/003 Project specimen collected from:** Gome (Toffo); Gbeko (Dangbo); Mondji (Ouèssè); Zonmon (Zangnanado); Zalimey (Zogbodomey); Kpassa (Tchaourou); Okunfo (Savè); Banigri (Tchaourou); Ayetedjou (Kétou); Wellan (Bassiila); Assedji (Athiémè); Ileman (Dassa-zoumè); Bognongon (Zogbodomey); Batia (Tanguiéta); Kpakpaza (Glazoué); Akarade (Bassila); Gogbo (Adjohoun); Tanongou (Tanguieta); Moupemou (Natitingou); Bensekou (Kandi); Tagaye (Natitingou); Mareguinta (Kalale); Pouya (Natitingou); Sohounme (Houeyogbe); Sovlegni (Djidja); Cotiakou (Tanguiéta); Agnavo (Dogbo); Loumbou-Loumbou (Karimama); Barikini (Bassila); Vossa (Ouèssè) Akpate (Pobè).

**Production areas and systems:** Cultivated in all savannah regions and restricted to low and medium altitudes. It can be grown on a wide range of soil types with pH 5.5–7.5, provided they are well drained. In a small scale farming system, cowpea is central in the rotation practices where it is used as green fertilizers for cereal crops. Each year, millions of tonnes of dry cowpea seeds are yielded from millions of hectares worldwide.

**Utilisations:** *V. unguiculata* is the most important edible pulse in Benin. The most eaten part is the seeds which are rich in protein (relatively rich in lysine, but poor in S-containing amino acids). They are cooked alone or together with other vegetables. The usage of *V. unguiculata* as vegetable involves tender leaves, immature seeds and pods. Leaves are shred, parboiled and sometimes crushed and used to make different types of soup, sauce and stew. Leaves are also boiled with grains for consumption with maize flour. Immature pods are used for cooking a tick soup. All of these dishes are common in Fon sociolinguistic groups, especially in the rainy season when leaves are available. In some localities, leaves are occasionally sold in local markets. In



addition, *V. unguiculata* plant is a good fodder and by-products are used to feed livestock after the crop has been harvested. The plant is also said to heal abscess and panari.

**Threat on genetic resources:** There is a great genetic diversity being manipulated by farmers and research institutions. But *V. unguiculata* is not totally out of danger of being lost since improved cultivars started to be widely grown.

Further readings: Pasquet (1993); Grubben and Denton (2004), Madamda *et al.* (2006)

## Loganiaceae

### *Spigelia anthelmia* L.

**Local names:** Eriere (Holly), Dan nyè, alinso, avlokunma (Fon), Tohossoumanou, Koguede (Cotafon)

**Darwin Initiative 15/003 Project specimen collected from:** Assedji (Athiémé); Sohounme (Houéyogbé); Akpate (Pobè).

**Habitat:** *S. anthelmia* is invasive weed specie which grows in farm areas, vague areas and road side. Originate from tropical America; this annual herb has been naturalized in West Africa.

**Utilisations:** In Benin, plants of this specie are collected from the wild for consumption by people belonging to Holly and Cotafon sociolinguistic groups. This consumption occurs in rainy season but is rare. Use against eyes pain is reported.

### *Strychnos innocua* Delile

**Local names:** Potoca (Wama)

**Darwin Initiative 15/003 Project specimen collected from:** Cotiakou (Tanguieta); Pouya (Natitingou).

**Habitat:** *S. innocua* is a small tree ou shrub of forest or riparian forest and woodlands. It is widespread in sudano-guinean and sudanian phytogeographic zones of Benin.

**Utilisation:** Consumption as leafy vegetable occurs among Wama ethnic group in extreme western north of Benin. Leave are collected from the wild and consumption frequency varies according to locality. The plant is said to be consumed frequently and sold in Cotiakou whereas in Pouya consumption is rare and occurs in rainy season.

## Lythraceae

### *Ammannia baccifera* L.

**Local names:** Worougbo (Bariba), Worukoho (Wama)

**Darwin Initiative 15/003 Project specimen collected from:** Kpassa (Tchaourou) ; Pouya (Natitingou).

**Habitat:** Widespread in all the three phytogeographic zones of Benin. *A. baccifera* is a prostrated herb which grows in humid station around pool and along stream.

**Utilisations:** Plant are available all year-round in north Benin where it is consumed as leafy vegetable by Bariba and Wama ethnic groups. Among Bariba, consumption is rare and plants are collected from the wild. Wama group in the other hand mentioned specie cultivation but consumption remains rare. In both localities, the plant does not have market value but it is said to be used for medicinal purposes. The plant is used against fever, malaria, jaundice or to eliminate blood clots.

## Malvaceae

### *Abelmoschus esculentus* (L.) Moench. Syn. *Hibiscus esculentus* L.

**Local names:** Févi, sinku (Fon, Mahi); ila (Ifè, Tchabè, idatcha, holly); kobéré éru (ifè); nonnou (mahi); ogo, yabonu, gangan, ganganhoun, woogo, koobsa, gnanbonon (Bariba), Féviman (Aïzo, Wémé); mèldè, manan (Kotocoli), ikounnin, akounbo, ginuku (Anii); lafoï, lafé (Dendi); yimmani, kumanfagou (Gourmantché); nanfama, maande, manya (Wama); kpela, kpé (boko), kobéré eru (Ifè); yènurè, kunuruku, tinufaati (Otamari); fétri (adja); nèhun (Cotafon)

**Common names:** Gombo, gombaud, doigt de dame (French); okra, lady's fingers (English).

**Status:** Cultivated.

**Darwin Initiative 15/003 Project specimen collected from:** Bensekou (Kandi); Garou-Tedji (Malanville); Soubado (Pèrèrè); Torozogou (Malanville); Ileman (Dassazoumè); Ganro (Bembèrèkè); Kpakpaza (Glazoué); Zalimey (Zogbodomey); Dabou (Parakou); Gbeko (Dangbo); Gogbo (Adjohoun); Banigri (Tchaourou); Ayetedjou (Kétou); Keremou (Banikoara); Okunfo (Save); Gome (Toffo); Tankougou (Kandi); Zougou-Pantrossi (Gogounou); Kodowari (Bassila); Kargui (Karimama); Penelan (Bassila); Akarade (Bassila); Akpate (Pobè); Barikini (Bassila); Afomayi (Lalo); Mareguinta (Kalale); Bognongon (Zogbodomey); Sovlegni (Djidja); Zonmon (Zagnanado); Wellan (Bassila); Loumbou-Loumbou (Karimama); Ikemon (Ouèssè); Tchimbere (Bassila); Agnavo (Dogbo); Mondji (Savalou); Ekpa (Savalou); Vossa (Ouèssè); Pouya (Natitingou); Assedji (Athiémé); Kpassa (Tchaourou); Cotiakou (Tanguieta); Tamba (Savalou); Sohounme (Houéyogbé); Agbandonou (Allada);

Tanongou (Tanguiéta); Tagaye (Natitingou); Batia (Tanguiéta); Poto (Banikoara); Moupemou (Natitingou).

**Production areas and systems:** Porto Novo; Adjohoun; Togon (Akouègninou *et al.* 2006).

**Utilisations:** Okra is one of major vegetables in Benin. Fruits are the plant part usually consumed by all sociolinguistic groups. Fresh immature fruits are boiled for making sticky soup. Its can be dried and reduced in powder for conservation. Young leave are commonly consumed like spinach. Cultivated in all agroecological zones and all year-round in urban and periurban agriculture, fresh and dried okra products are sold in local as well as regional markets. In comparison with others vegetables okra is particularly rich in calcium and in ascorbic acid. Protein and lipid content are very high about 20% for each constituent. *A. Esculentus* is also used in traditional medicine. It is used against stomach ache and to boost bloos pressure.

**Threat on genetic resources:** Not under threat.

**Further readings:** Grubben and Denton (2004).

### *Hibiscus asper* Hook.f.

**Local names:** Ayoma (Kotocoli); bootaman (Wama); doogana (Yom), gatchounlangokolé (Anii); gayouguissima (Dendi); gbéboussééri (Bariba); kantabooti (Natimba), kouandou (Berba); pooladè (Peulh); sèénanbolèzian (Boko), tigbèréti (Gourmantché); tikansibouoti (Ditamari); tikli (Lokpa).

**Common names:** Hibiscus rigueux (french).

**Description and variation:**

**Status:** Wild.

**Habitat:** *H. asper* is an annual herb widespread in all ecological zones of Benin. This specie is found in fallows, herb savannah and in edge of riparian forest.

**Distribution:** Godomey; Zanganando; Kouaténa; Ilara; Dassari; Bodjrékali (Akouègninou *et al.* 2006)

**Darwin Initiative 15/003 project specimen collected from:** Ganro (Bembèrèkè); Batia (Tanguiéta); Akarade (Bassila); Soubado (Pèrèrè); Cotiakou (Tanguieta); Dabou (Parakou); Banigri(Tchaourou); Pouya (Natitingou); Bensekou (Kandi); Mareguinta (Kalale); Moupemou (Natitingou); Tagaye (Natitingou); Tanongou (Tanguiéta)

**Reproductive biology:**

**Utilisations:** Leave are boiled in water and consumed as leafy vegetable by many people of Benin. This consumption is particularly noticed among sociolinguistic groups of north Benin in sudanian phytogeographic zone. Consumption takes place mostly in reaning season. However, it remains rare. *H. asper* is used to treat malaria and fever. It is as aphrodisiac plant.

*Hibiscus sabdariffa* L.

**Local names:** Pôôla awagna (Peulh), Gakolo-gabo (Anii); guissima (Dendi); ibgui (Gourmantché); kpakpa (Idatcha, Tchabè), mainsitou (Wama), paganaha (Kotocoli); séénan (Boko), sééri (Bariba), sinko (Fon), tchakpa (Mahi).

**Description and variation:** *H. sabdariffa* is an herb. Two cultivars can be distinguished: green and red cultivars.

**Status:** Cultivated.

**Agro-ecology:** In Benin, the specie is present in all agroecological areas and is quite an important vegetable.

**Darwin Initiative 15/003 Project specimen collected from:** Vossa (Ouèssè); Kargui (Karimama); Kodowari (Bassila); Okunfo (Save); Dabou (Parakou); Moupemou (Natitingou); Poto (Banikoara); Tagaye (Natitingou); Sovlegni (Djidja); Garou-Tedji (Malanville); Ileman (Dassa-zouumè); Tamba (Savalou); Ganro (Bembèrèkè); Zougou-Pantrossi (Gogounou); Bognongon (Zogbodomey); Bensekou (Kandi); Tchimbere (Bassila); Mareguinta (Kalale); Akarade (Bassila); Barikini (Bassila); Keremou (Banikoara); Mondji (Savalou); Pouya (Natitingou); Batia (Tanguiéta); Cotiakou (Tanguieta); Tankougou (Kandi); Ikemon (Ouèssè); Banigri (Tchaourou); Kpassa (Tchaourou); Torozogou (Malanville); Soubado (Pèrèrè); Loubou-Loubou (Karimama); Tanongou (Tanguiéta).

**Production areas and systems:** Zogbodomey; Manigri; Bodjékaali; Pèrèrè; Cotonou; Boukoumbé (Akouègninou *et al.* 2006).

**Utilisations:** Useful plant parts available in rainy season are leave and calyx. Fresh leave and calyx are used for doing a mucilaginous soup. As leafy vegetable, green cultivars are preferred. Red varieties are more often used to make drink. Consumption of *H. sabdariffa* is mostly observed in central and northern Benin. In these regions, *H. sabdariffa* is sold in local and even regional market and contributes to income generation for households. The plant is used to treat anaemia, malaria, cold, dizziness, measles, and conjunctivitis. It is an aphrodisiac plant.

**Moraceae***Ficus abutilifolia* (Miq.) Miq.

Syn.: *Urostigma abutilifolium* Miq.

**Local names:** Agbèdè (Tchabè); Okpto (Ifè).

**Description and variation:** *Ficus abutilifolia* is a savannah tree up to 15 m; mature fruits called figs are 1.2-2 cm large and reddish or yellowish.

**Status:** Wild.

**Habitat:** It is usually found over rocky soil in savannah.

**Distribution:** Distribution of *A. abutilifolia* is restricted to two ecological zones: the sector of dry forests in sudano-guinean phytogeographic zone and the sector of

Combretaceae dry forest with inclusion of thorny steppe in Sudanian phytogeographic zone: Savè; Lissa; Tanguiéta (Akouègninou *et al.* 2006).

**Darwin Initiative 15/003 Project specimen collected from:** Ikemon (Ouèssè); Okunfo (Savè).

**Reproductive biology:** The plant flowers year-round. Reproduction is by seed. The seeds are dispersed by bird, chiroptera and other dispersal agents.

**Utilisations:** The consumption of this resource as vegetable is recorded among Tchabè and Ifè sociolinguistic groups in Sudano-Guinean zone. Consumption is occasional or rare although leaves are available all year-round. Leave are used against stomach-ache.

**Threat on genetic resources:** Unknown.

### *Ficus asperifolia* Miq.

Syn.: *Ficus acutifolia* Hutch.

**Local names:** Agbèdè (Tchabè); gassirè (Anii), axoxo man (Goun), evoun (Adja); frou (Kotocoli).

**Description and variation:** The species is a shrub which reaches 5 m in height, often with extended or semi-climbing branches. Mature figs are coloured in dark red to orange or yellowish; 1-2 cm large.

**Status:** Wild.

**Habitat:** Swamp forest.

**Distribution:** This Guinean species is found in: Adjara; Sèmè; Akassato; Tchakou (Akouègninou *et al.* 2006).

**Darwin Initiative 15/003 Project specimen collected from:** Afomayi (Lalo); Tchimbere (Bassila); Ekpa (Savalou).

**Utilisations:** Consumption of leaves of this species is recorded in Adja, Anii, Goun, Kotocoli and Tchabè sociolinguistic groups. Consumption occurs in rainy season.

**Threat on genetic resources:** Not evaluated.

### *Ficus ingens* (Miq.) Miq.

Syn.: *Urostigma ingens* Miq.

**Local names:** Vo (Fon); Piarfiatou (Berba); Tipètènti (Otamari); Bukankanbu (Gourmantché).

**Description and variation:** The species is a tree up to 18 m tall. Its figs are whitish, pink or pale purple to dark at maturity; 0.5-1 cm large.

**Status:** Wild.

**Habitat:** It is a savannah tree.

**Distribution:** The tree is well spread in all phytogeographic areas of Benin in Sudano-Guinean as well as Sudanian phytogeographic zones: Zogbodomey; Djidja; Pèrèrè; Parakou; Pouya; Tanguiéta (Akouègninou *et al.* 2006).

**Darwin Initiative 15/003 Project specimen collected from:** Afomayi (Lalo); Tchimbere (Bassila); Ekpa (Savalou).

**Reproductive biology:** Propagation of this tree is by seed.

**Utilisations:** Leave consumption is rare among Fon, Berba, and Otamari and Gourmanthé sociolinguistic group. In some regions leave are consumed in rainy season, in others it is in dry season. The leaves maceration is used against malaria.

**Threat on genetic resources:** Not evaluated.

***Ficus polita* Vahl ssp *polita*, Berg**

Syn.: *Ficus polita* Vahl

**Local names:** Agbaouforo (Ifè), Vo, Voman (fon, Mahi), Kankanbou (Gourmantché)

**Description and variation:** It is a tree species up to 15(-40)m tall, hemi-epiphytic, (secondary) terrestrial with mature figs 1.5-4 cm long; greenish to purple at maturity.

**Status:** Wild.

**Habitat:** It naturally grows in gallery forest and riparian forests. But it is often found in villages as shadow tree.

**Distribution:** *F. Polita* is found in all of phytogeographic zones of Benin. Bopa; Tanougou; Bembèrèkè (Akouègninou et al. 2006).

**Darwin Initiative 15/003 Project specimen collected from:** Bognongon (Zogbodomey); Mondji (Savalou).

**Reproductive biology:** Reproduction is by seed. But the use of stem cutting is also possible.

**Utilisations:** Leaves are consumed as vegetable among Ifè, Fon, Mahi and Gourmantché sociolinguistic group. Consumption is rare and occurs in rainy season.

**Threat on genetic resources:** Certainly not under threat.

***Ficus sur* Forssk.**

Syn.: *Ficus capensis* Thunb.; *Ficus mallatocarpa* Warb.

**Local names:** Kamboussbou (Berba); Kansaaribou (Wama); Voman (Fon); Okpoto (Holly); Kankandri (Natimba).

**Description and variation:** A tree species up to 25(-30) m tall, sometimes with buttress or foothills; cauliflower; figs 0.5-3 cm large; red to dark orange at maturity.

**Status:** Wild; domestication underway.

**Habitat:** Flooded savannah, riparian forests and thicket.

**Distribution:** It is found in nearly in all ecological zones of Benin: Djigbé; Ouidah; Gbananmè; Parakou; Massi; Tanguiéta (Akouègninou et al. 2006).

**Darwin Initiative 15/003 Project specimen collected from:** Sovlegni (Djidja); Zalimey (Zogbodomey).

**Reproductive biology:** Propagation is by seed and stem cutting reproduction is also possible.



**Utilisations:** The consumption is reported in Wama in north western and in Fon and Holly communities in the south. According to Fon people in Sovlegni, *Ficus sur* is a domesticated species. For others it is wild species. Leave consumption as vegetable is occasional or rare and occurs in rainy or dry season depending on sociolinguistics groups. Leaves decoction is used in healing malaria and head aches. Stem tannins and young branch are used to treat dysentery and gonorrhoea.

**Threat on genetic resources:** Not evaluated.

### *Ficus thonningii* Blume

Syn.: *Ficus iteophylla* Miq.; *Ficus dekdekana* Mildbr. & Burret (Miq.)

**Local names:** Voman (Aïzo); boukamkambou (Gourmantché), honbwe (Cotafon).

**Description and variation:** *Ficus thonningii* is a tree or shrub specie of which can reach 30 m tall; terrestrial or hemi-epiphytic. Mature figs up to 0.5 cm large are reddish or yellowish.

**Status:** Wild; domestication underway.

**Habitat:** This tree species thrives naturally in forest, riparian forest and woody savannah. But many people plant it as shadow tree in villages.

**Distribution:** It is found in all Benin ecological zones: Athiémé; Savalou; Kalalé; Perma; Natitingou (Akouègninou *et al.* 2006).

**Darwin Initiative 15/003 Project specimen collected from:** Agbandonou (Allada); Assedji (Athiémé); Loumbou-Loumbou (Karimama).

**Reproductive biology:** Propagation is by seed. The use of stem cutting is more frequent in the villages.

**Utilisations:** In west northern Benin, Gourmantché people collect frequently leave from wild and consume it as vegetable in dry season. In Aïzo and Cotafon communities in south Benin, leave consumption is occasional or rare. Leave are collected both from wild and from planted trees.

**Threat on genetic resources:** Not evaluated.

## Moringaceae

### *Moringa oleifera* Lam.

**Local names:** Agunmonliyé, djagala (Tchabè); dréléman, kpatchi (Adja); ékégnibo (Yoruba), gambaaga (Gourmantché), gbolosolola, wosso (Boko), kpatiman, kpanouyédédé (Fon); kpatovigbé (Cotafon); lagalanga (idatcha, Tchabè), mansamanbou (Wama), monnpêkom (Ditamari); wouidiboutou (Dendi); yorouyara (Bariba), yovokpatin, kpalouman (Mahi).

**Common names:** moringe, bien ailée (French); horse-radish tree, drum-stick tree (English).



**Description and variation:** Shrub.

**Status:** Cultivated, planted.

**Agro-ecology:** *M. oleifera* originates from India and Pakistan.

**Distribution:** Cotonou; Dangbo; Savè; Sékou; Okèmèrè (Akouègninou et al. 2006)

**Darwin Initiative 15/003 Project specimen collected from:** Afomayi (Lalo); Agbandonou (Allada); Agnavo (Dogbo); Assedji (Athiémé); Banigri (Tchaourou); Bensekou (Kandi); Bognongon (Zogbodomey); Cotiakou (Tanguieta); Dabou (Parakou); Ganro (Bembèrèkè); Garou-Tedji (Malanville); Gbeko (Dangbo); Gogbo (Adjohoun); Gome (Toffo); Ikemon (Ouèssè); Ileman (Dassa-zoumè); Kargui (Karimama); Kpakpaza (Glazoué); Kpassa (Tchaourou); Loumbou-Loumbou (Karimama); Mareguinta (Kalale); Mondji (Savalou); Okunfo (Save); Pouya (Natitingou); Sohounme (Houéyogbé); Soubado (Pèrèrè); Sovlegni (Djidja); Tamba (Savalou); Tankougou (Kandi); Tanongou (Tanguiéta); Torozogou (Malanville); Vossa (Ouèssè); Zonmon (Zagnanado); Zougou-Pantrossi (Gogounou).

**Production areas and systems:** It is used to make living hedge in row cropping system, living stake for vegetables, or for soil regeneration. It is cultivated in all agroecological zones.

**Utilisations:** It has been introduced in tropical and subtropical areas and naturalized in many countries. Widespread in all phytogeographic zones of Benin, *M. oleifera* is a multipurpose small tree species. Consumption of leaves has become a cultural food habit of many sociolinguistic groups. Leaves, available all year-round are the main plant part frequently consumed in Benin but flower consumption is also recorded. Essential nutrients, glucids, proteins contents are very interesting in leaves. As a result, dry leaf powder is recommended in malnutrition alleviation in West African countries especially for children, pregnant and breast-feeding women. Nearly all of the plant parts are used in traditional medicine. Leaves are used against fever and spasms. Plant has also sedative, bactericide and fungicide properties. It is used to treat headache, fever, malaria, abscess, conjunctivitis, anaemia, cephalic, diarrhoea, blindness, ulcer, evacuate clot of blood and stop bringing up. It is used as laxative, aphrodisiac, antibiotic and contains vitamins.

**Threat on genetic resources:** Not under threat.

**Further readings:** Grubben and Denton 2004.

## Nyctaginaceae

### *Boerhavia diffusa* L.

**Local names:** Atchlickèma (Anii), bitèrèrè (Kotocoli), gbagbadagbè (Mahi); tataya (Wama); tikpalala (Idatcha), tikpatikpa ilaara (Tchabè), , xwasse (Adja); blaicona (Boko); katchudayi, katchingahi (Cotafon, Aïzo); tikpedola, tikpinninla (Holly); gangassigourou, gangansikénou (Bariba).

**Common names:** Herbe cochon (French).

**Description and variation:** Herb.

**Status:** Wild.

**Habitat:** It is common weed species found in farm areas, abandoned areas and road sides.

**Distribution:** Cotonou; Abomey Calavi; Houngbo Nagot; Gamaré; Louho; Lama (Akouègninou et al. 2006).

**Darwin Initiative 15/003 Project specimen collected from:** Afomayi (Lalo); Agbandonou (Allada); Akpate (Pobè); Assedji (Athiémé); Ayetedjou (Kétou); Bensekou (Kandi); Cotiakou (Tanguieta); Dabou (Parakou); Ganro (Bembèrèkè); Ileman (Dassa-zoumè); Kpakpaza (Glazoué); Sohounme (Houéyogbé); Soubado (Pèrèrè).

**Reproductive biology:** Reproduction is by seeds.

**Utilisations:** This herb is a leafy vegetable. Consumption is rare despite abundant availability in rainy season. According to many people from different sociolinguistic groups, *B. diffusa* has laxative, diuretic pain-killer properties and other medicinal uses.

### *Boerhavia erecta* L.

**Local names:** Bawokonan (Boko); alakalakafiana (Gourmantché); tipètènonwonti (Otamari); zibibéri (Dendi).

**Description and variation:** It is weed herb which looks like *B. diffusa* but differs from this later by its erect plant growth habit and its inflorescences very ramified with pink to white flowers and non sticky fruits.

**Status:** Wild.

**Habitat:** Fallows, road sides, abandoned areas.

**Distribution:** Samiondji; Dassa; Guéné; Bodjékali (Akoègninou et al. 2006)

**Darwin Initiative 15/003 Project specimen collected from:** Batia (Tanguiéta); Kargui (Karimama); Mareguinta (Kalale); Moupemou (Natitingou); Tagaye (Natitingou).

**Reproductive biology:** Reproduction is by seeds.

**Utilisations:** It is a leafy vegetable in north Benin among Boko, Otamari, Gourmantché and Dendi ethnic groups. Consumption is rare or occasional and occurs in rainy season; do not have any market value. It used as vermifuge.

## Onagraceae

### *Ludwigia perennis* L.

*Syn. Jussiaea perennis* (L.)

**Local names:** Genandènin (Anii); Toloman (Adja, Fon, Goun)

**Description and variation:** *L. perennis* is an annual herb of which height reaches 1 m.

**Status:** Wild.

**Habitat:** It is found on flooding soil, in rice field and in pool, and swamp.

**Distribution:** Porga ; Bodjékali, Malanville (Akouègninou et al. 2006)

**Darwin Initiative 15/003 Project specimen collected from:** Afomayi (Lalo); Wellan (Bassila).

**Utilisations:** Consumption of leave as vegetable occurs among Anii in western north and among many people of south Benin (Fon, Adja, Goun, etc). Leaves available in rainy season are collected from the wild and frequently consumed. In these regions the commercialisation of this traditional vegetable occurs in local market.

## Opiliaceae

*Opilia amentacea* Roxb.

Syn.: *Opilia celtidifolia* ( Guill. & Perr.).

**Local names:** Banho, Gbanro (Bariba).

**Common names:**

**Description and variation:** Liana, sometimes with straight stems. The fruit is a drupe with 1 to 3 cm long.

**Status:** Wild

**Habitat:** Tree savannas, thickets, inselberg, forest edge and riparian forest.

**Distribution:** Adjarala ; Abomey-calavi ; Lama ; Ouèdèmè-Péda ; Toui-Kilibo ; Parakou ; Pèrèrè ; Ouari Maro ; Bessassi (Akoègninou et al. 2006)

**Darwin Initiative 15/003 Project specimen collected from:** Keremou (Banikoara); Poto (Banikoara).

**Utilisations:** Leafy vegetable with a number of medicinal properties.

## Passifloraceae

*Adenia lobata* (Jacq.) Engl.

Syn. *Modecca lobata* Jacq.

**Local names:** Soonou (Anii); donwada, dema, dedo (Fon, Goun).

**Description and variation:** A climbing herb.

**Status:** Wild

**Habitat:** *Adenia lobata* is found in woody savannah. Its distribution area includes agroecological zones of south Benin and the sector of "Dry semi-deciduous forest, fire zone subtype" of western north in sudano-guinean phytogeographic zone.

**Distribution:** Niaouli; Ahogbaya; Djaloukou (Akouègninou et al. 2006).

**Darwin Initiative 15/003 Project specimen collected from:** Agbandonou (Allada), Bognongon (Zogbodomey); Penelan (Bassila).

**Utilisations:** Leave are collected from the wild and consumed as vegetable among Anii group in north and Aizo sociolinguistic groups of south Benin. But consumption remains rare or occasional in spite of leave availability all year-round.

*Passiflora edulis* Sims

**Local names:** Lokoyovo (Aizo).

**Common names:** Grenadille, maracuja, fleur de la passion, paassiflore (French); paassion fruit (English)

**Description and variation:** Perennial liana.

**Status:** Cultivated, but naturalized as well in fallows.

**Distribution:** Lama ; Pobè (Akouègninou et al. 2006).

**Darwin Initiative 15/003 Project specimen collected from:** Agbandonou (Allada); Gome (Toffo).

**Reproductive biology:** Reproduction is by seeds.

**Utilisations:** Cultivated for its fruit; but used as leafy vegetable as well.

*Passiflora foetida* L.

**Local names:** Kpatotwe (Cotafon); lokoyovo, awontimèfoun (Aizo);

**Common names:** Passiflore, fleur puante de la passion (French)

**Description and variation:** It is a climbing herb which is widespread in Benin.

**Status:** Wild.

**Habitat:** grows in fallows and ruderal areas.

**Distribution:** Togbin ; Zangnanado ; Okpara ; Aguigadji ; Kargui (Akouègninou et al. 2006).

**Darwin Initiative 15/003 Project specimen collected from:** Assedji (Athiémé), Agbandonou (Allada).

**Reproductive biology:** Reproduction is by seeds.

**Utilisations:** Leaves are used as soup ingredient in south by Cotafon and Aizo people. Consumption is frequent all year-round. Used in the treatment of kwashiorkor.

## Pedaliaceae

*Cerathoteca sesamoides* Endl.

Syn. *Cerathoteca melanosperma* Hochst.

**Local names:** Agbô (Mahi); Dowoungbana (Boko); foyito (Dendi); gblôgblô (Péda), golo (Tchabè), goufounou (Anii); idjabo (Tchabè, Idatcha); kanmankou (Fon);

koufouagnanhoun (Gourmantché); koumonkoussoulè (Ifè), wori (Bariba); likwakwati, tikôkti, siwadompéi (Ditamari); n'zoti (Kotocoli), taanonwonman (Wama); xonônm (Lokpa).

**Description and variation:** *C. sesamoides* is an annual pubescent herb distributed in all phytogeographic zones of Benin.

**Status:** Wild; domestication under way

**Habitat:** It is an indigenous wild vegetable found in woodland, herb savannah, and woody savannah over sandy soil and road side.

**Distribution:** Agondogoui; Gokana; Bassila; Lou ; Borodarou ; Kopargo ; Guéné ; Alfa Kouara (Akoègninou et al. 2006).

**Darwin Initiative 15/003 Project specimen collected from:** Afomayi (Lalo); Akarade (Bassila); Banigri (Tchaourou); Batia (Tanguiéta); Bensekou (Kandi); Cotiakou (Tanguieta); Dabou (Parakou); Ekpa (Savalou); Ganro (Bembèrèkè); Garou-Tedji (Malanville); Ikemon (Ouèssè); Ileman (Dassa-zoumè); Kargui (Karimama); Keremou (Banikoara); Kodowari (Bassila); Kpakpaza (Glazoué); Kpassa (Tchaourou); Loubou-Loubou (Karimama); Mareguinta (Kalale); Mondji (Savalou); Moupemou (Natitingou); kunfo (Save); Penelan (Bassila); Poto (Banikoara); Soubado (Pèrèrè); Tagaye (Natitingou); Tamba (Savalou); Tankougou (Kandi); Tanongou (Tanguiéta); Tchimbere (Bassila); Torozogou (Malanville).

**Reproductive biology:** Seeds are dormant. Germination percentages usually low.

**Utilisations:** Cultivation of this vegetable is recorded in many regions in central and north Benin. Leaves and flowers are frequently consumed in rainy season when available and are sold in local markets. To achieve availability in dry season, leaves are dried and reduced into powder. Leaves are boiled into glutinous soup. This herb has also many medicinal uses. It is used against diarrhea, dysentery, headache, stomach ache, helps women delivery, strengthens pregnant women, disinfects digestive system, hips pain.

**Threat on genetic resources:** The resource is still found in the wild.

**Further readings:** Dabade (2009).

### *Sesamun indicum* L.

Syn. *Sesamun orientale* L.

**Local names:** Agbo (Mahi); akanmaku (Fon); dohoungbana (Boko), dossi (Bariba); gosanafunu, gufunougutolo (Anii); kuaan'gu, kufoagnagu, kouagniboubougou (Gourmantché); taanonman, nonman (Wama); sihaadompéi, tikokuti, tipaakaadonti (Otamari); wari (Bariba).

**Common names:** Sésame de l'Inde (French); benniseed, sesame (English).

**Description and variation:** Like others *Sesamum* species, *S. indicum* is an annual and erect herb. It has been introduced in Africa from India. Currently the plant has been naturalized and gone weed and wild. Then it grows in farm fields, fallows, forests and savannah both in Guinean and Sudanian zones. It is widespread in all agroecological zones of Benin. Originally cultivated for its fruits sold under "sesame

grain" name, it is become indigenous leafy vegetable very similar to *Sesamum radiatum* and *Ceratotheca sesamoides* in terms of taste and appearance

**Status:** Cultivated, wild.

**Distribution:** Dan ; Tektibayaou ; Karimama (Akoègninou et al. 2006).

**Darwin Initiative 15/003 Project specimen collected from:** Banigri (Tchaourou); Barikini (Bassila); Batia (Tanguiéta); Bensekou (Kandi); Cotiakou (Tanguieta); Ganro (Bembèrèkè); Kpassa (Tchaourou); Loumbou-Loumbou (Karimama); Moupemou (Natitingou) Pouya (Natitingou); Sovlegni (Djidja); Tagaye (Natitingou); Tanongou (Tanguiéta); Vossa (Ouèssè); Zonmon (Zagnanado).

**Reproductive biology:** Reproduction is by seed.

**Utilisations:** Leaves are used to make a glutinous sauce. Among people of South Benin, consumption is rare. In central and northern regions, consumption is frequent. *S. indicum* with *Sesamum radiatum* and *Ceratotheca sesamoides*, dominated consumers' diets in North Benin. It then has a great market value and is sold in local market. Leave are available from the wild or cultivated plants. Fresh leave consumption is restricted to rainy season but can be dried and reduced in powder for dry season use.

**Threat on genetic resources:** Not under threat.

**Further readings:** Grubben and Denton (2004).

### *Sesamum radiatum* Schumach. & Thonn.

Syn. *Sesamopteris radiata* (Schumach. & Thonn.)

**Local names:** Agbô (Mahi); akanmako (Fon); goolowo, dossé (Tchabè); dossi (Bariba, Boko); dossiyo (Peulh); kouangou (Gourmantché); nonman, nôrman (Wama, Dendi, Yom); tissédônté (m'bermin), toohoun (Berba); touandouanti (Ditamari); touxoonôm (Lokpa), xangalamboati (Natimba), agbon (Adja); agblo (Aïzo); lakuta (Dendi/Djerma)

**Common names:** Sésame sauvage (French); wild beniseed (English)

**Description and variation:** *Sesamum radiatum* is an erect herb.

**Status:** Wild; domestication under way. As weed plant it grows in farm field and fallows. It is African indigenous specie spread in all phytogeographic zones of Benin.

**Habitat:** Found in ruderal station and savannah.

**Distribution:** Grand Popo ; Irokohin ; Gnassata ; Illikimou ; Kotopounga (Akoègninou et al. 2006)

**Darwin Initiative 15/003 Project specimen collected from:** Afomayi (Lalo); Dabou (Parakou); Agbandonou (Allada); Ganro (Bembèrèkè); Garou-Tedji (Malanville); Keremou (Banikoara); Soubado (Pèrèrè); Tankougou (Kandi); Torozogou (Malanville); Zougou-Pantrossi (Gogounou);

**Reproductive biology:** Reproduction is by seeds.

**Utilisations:** Fresh leaves of *S. radiatum* constitute leafy vegetable very appreciated by many people specially those of north Benin. Indeed leave are used to make a glutinous sauce. Leave are cut into fine pieces and employed in soup or sauce. Specie



is cultivated among all ethnic groups. Leave are mainly available in rainy season and frequently consumed and sold in local markets. Grain consumption is also recorded. *S. radiatum* has many others medicinal and cosmetics uses. For example, leave are used against diarrhea and vomiting.

**Threat on genetic resources:** Not under threat.

**Further readings:** Dabade (2009).

## Poaceae

### *Cymbopogon giganteus* (Hochst) Chiov.

**Local names:** Dimongnonsidé (M'bermin); kinwounkou (Natimba); timammuti (Otamari).

**Common names:** Tsauris grass (English).

**Description and variation:** The perennial herb *Cymbopogon giganteus* is widespread in Benin.

**Status:** Wild.

**Habitat:** It grows in savannah, stream edge, riparian forest and fallow.

**Distribution:** Porga ; Kétou ; Lanta ; Djidja ; Saavè ; Karimama (Akoègninou *et al.* 2006).

**Darwin Initiative 15/003 Project specimen collected from:** Tagaye (Natitingou); Moupemou (Natitingou).

**Utilisations:** Rare consumption of this graminea leave is noticed among Otamari, M'bermin and Natimba ethnic group in western north Benin. Leaves available all year-round are collected from the wild. The plant does not have any market value and is not sale.

## Polygonaceae

### *Persicaria acuminata* (Kunth) M.Gómez

Syn. *Polygonum acuminatum* Kunth

**Local names:** Towé (Aizo, Oueme).

**Description and variation:**

**Status:** Wild.

**Habitat:** Swamp, wetlands.

**Distribution:** Parakou; Tchatchou; Okpara (Akoègninou *et al.* 2006).

**Darwin Initiative 15/003 Project specimen collected from:** Gbeko (Dangbo); Gogbo (Adjohoun).

**Utilisations:** Leafy vegetable.



## Portulacaceae

### *Portulaca oleracea* L.

**Local names:** Afouwôbôkpaba, aboualènan (Gourmantche); mouroumaratchi, mourou mandjé, awoudéenain, houadénin (Dendi); louakpain (Boko); Ninkounmangbaxhagnoe, dehoukan (Wémè).

**Common names:** Pourpier (French); purslane (English).

**Description and variation:** *P. oleracea* is an annual erect or prostrate herb widespread in Benin.

**Status:** Wild.

**Habitat:** It is a crop weed but also found in herb and shrub savannah

**Darwin Initiative 15/003 Project specimen collected from:** : Batia (Tanguiéta); Bensekou (Kandi); Garou-Tedji (Malanville); Gogbo (Adjohoun); Kargui (Karimama); Loumbou-Loumbou (Karimama); Tanongou (Tanguiéta); Torozogou (Malanville).

**Production areas and systems:** Cotonou; Calavi; Porto Novo; Kouandé; Samiondji (Akouègninou et al. 2006).

**Utilisations:** One of the most ancient leafy vegetable, its stem and leave are harvested from the wild and consumed. In north Benin, it is Gourmantché, Dendi and Boko people who consumed it. Consumption occurs in rainy season and is rare or frequent according to ethnic groups. Among Gourmanthé ethnic group, sale of leave is recorded in local market. In south Benin, it is Wémè people in Ouémé Valley who are used to consume the plant frequently after water goes down. The plant is said to have many medicinal uses. It is used against rheumatism, gynaecologic diseases, dysentery, fever and others infections.

### *Talinum triangulare* (Jacq.) Willd.

Syn. *Portulaca triangularis* Jacq.

**Local names:** Tokpédé fonton, glassoeman, (Fon, Ifè); ordondon (Tchabè); kpodo (Idatcha); tokpessindji (Mahi); ododo, tokpodé (ifè); dodo ikpokpo, gourè (Holly); glassoeman (Mahi); bôkôbôkô (Anii); glasséman (Wémè); glassi, glassoué (Cotafon, Péda, Saxwè); glasso (Toli), glazoui (Adja); gourè (Yoruba); komplékankann'dê (Lokpa); kpôdô (Idatcha); odôndôn (Bariba, Tchabè); yêmontouo (Ditamari)

**Common names:** Pourpier droit (French).

**Description and variation:** *T. triangulare* is an herbaceous plant.

**Status:** Wild ; domestication underway.

**Habitat:** Talinum or waterleaf is a weed plant found in humid station.

**Distribution:** Calavi; Porto Novo; Pobè; Sakabansi (Akouègninou et al. 2006).

**Darwin Initiative 15/003 Project specimen collected from:** Afomayi (Lalo); Agbandonou (Allada); Agnavo (Dogbo); Akpate (Pobè); Assedji (Athiémé); Ayetedjou (Kétou); Banigri (Tchaourou); Barikini (Bassila); Bognongon (Zogbodomey); Dabou (Parakou); Ekpa (Savalou); Gbeko (Dangbo); Gogbo

(Adjohoun); Gome (Toffo); Ikemon (Ouèssè); Ileman (Dassa-zoumè); Kodowari (Bassila); Kpakpaza (Glazoué); Mareguinta (Kalale); Mondji (Savalou); Okunfo (Save); Penelan (Bassila); Pouya (Natitingou); Sohounme (Houéyogbé); Sovlegni (Djidja); Tagaye (Natitingou); Tamba (Savalou); Vossa (Ouèssè); Wellan (Bassila); Zalimey (Zogbodomey); Zonmon (Zagnanado).

**Reproductive biology:** Reproduction is by seed and root cuttings.

**Utilisations:** Widespread in Benin agroecological zones, waterleaf is consumed by many people belonging to different ethnic groups. Leave are harvested from the wild and consumed in rainy season. Consumption is frequent or rare according to sociolinguistic groups. For example it is frequent among Ifè, Tthabè, Idatcha and Bariba. South Benin people are also very used to consume this indigenous vegetable. Very available in rainy season, leave are sold in local and regional markets. However it is said to have antinutritional properties. People stated that it gives diarrhoea, stomach ache. It is also difficult to prepare because of its high slime content.

## Rubiaceae

*Chassalia kolly* (Schumach.) Hepper

Syn. *Psychotria kolly* Schumach.

**Local names:** Djètinman (Fon); gubodjunon (Anii)

**Common names:**

**Description and variation:** The shrub *Chassalia kolly* is found in forest and riparian forests. Its distribution areas include South Benin ecological zones but the plant is also found in the sector of “Dry semi-deciduous forest, fire zone subtype” of western north in sudano-guinean phytogeographic zone. Consumption of fresh leave is recorded among Fon group in south and Anii in north. Leave available all year-round harvested from the wild are rarely consumed in both two communities.

**Status:** Wild

**Habitat:**

**Distribution:** Abomey-Calavi; Gbanannmè; Aguigadji; Hoenbo Nago; Zoungbono (Akoègninou et al. 2006)

**Darwin Initiative 15/003 Project specimen collected from:** Wellan (Bassila); Bognongon (Zogbodomey)

**Reproductive biology:**

**Utilisations:** treat frontanelle

**Threat on genetic resources:**

**Further readings:**

*Gardenia ternifolia* Schumach. & Thonn.

**Local names:** *Gapèpè* (Anii); *som'ti* (Natimba); *bunasoobu* (Gourmantche); *timeiti* (Otammari); *bèbiré* (Wama)

**Common names:**

**Description and variation:** This shrub specie is found in shrub savannah. Spread in both Guinean and Sudanian phytogeographic zones in Benin, it is consumed by Anii and Natimba in western north Benin. Fresh young leave are rarely harvested in the wild and consume in rainy season but does not have any market value.

**Status:** Wild

**Habitat:**

**Distribution:** Béké ; Goro ; Tamarou ; Lanta ; Kokaboa (Akoègninou et al. 2006)

**Darwin Initiative 15/003 Project specimen collected from:** Barikini (Bassila); Batia (Tanguiéta); Cotiakou (Tanguieta); Tagaye (Natitingou);

**Reproductive biology:**

**Utilisations:** treat stomacheache, kwashiorkor. It is used as vermifuge

**Threat on genetic resources:**

**Further readings:**

### *Macrosphyra longistyla* (DC.) Hiern

**Local names:** *Aziguigokui*, *zébligohoun* (Aïzo); *azonhoungogoé* (cotafon); *tiluomugbadi* (Gourmantché)

**Description and variation:** It is a creeping shrub growing in forest and riparian forest. Widespread in Benin, it is found both in Guinean and Sudanian phytogeographic zones. Fresh leave collected from the wild are consumed by Gourmantché people in North and Aïzo and Cotafon in South Benin but does not have any market value. Consumption level and period vary according to ethnic groups. Among Gourmantché it is frequent and occurs in dry season. In other hand Aïzo consumed it all year-round.

**Status:** Wild

**Habitat:**

**Distribution:** Togba ; Kinkinhoué ; Adjohoun ; Affamé ; Kotopounga ; Kotiakou (Akoègninou et al. 2006)

**Darwin Initiative 15/003 Project specimen collected from:** Agbandonou (Allada); Gbeko (Dangbo); Sohounme (Houéyogbé); Tanongou (Tanguiéta)

**Reproductive biology:**

**Utilisations:**

**Threat on genetic resources:**

**Further readings:**

## Rutaceae

*Afraegle paniculata* (Schumach. & Thonn.) Engl.

**Syn.** *Citrus paniculata* Schumach. & Thonn. Engl.

**Local names:** Hongogwé, buhwe (Cotafon, Fon); bueru (Bariba)

**Description and variation:** It is a tree or a shrub growing in forest. It is also planted in villages for its medicinal uses. Diet uses of leave of this specie are recorded among Cotafon in south and Bariba in North Benin. But in both ethnic groups, consumption is rare.

**Status:** Wild

**Habitat:**

**Distribution:** Tchétou ; Bétérou ; Dan ; Manigri (Akoègninou et al. 2006)

**Darwin Initiative 15/003 Project specimen collected from:** Banigri (Tchaourou); Sohounme (Houéyogbé);

**Reproductive biology:**

**Utilisations:**

**Threat on genetic resources:**

**Further readings:**

*Zanthoxylum zanthoxyloides* (Lam.) Zapernick & Timleer

**Syn.** *Fagara zanthoxyloides* Lam.

**Local names:** Karikoobu, tampuobu (Wama); lifrubiale (Gourmanthé), mubuo, tibooti (Otamari); goutèlowè, goka (Anii); xêtin, drubi, xè (Fon)

**Common names:**

**Description and variation:** It is a shrub found in nearly all ecological zones of Benin. Very used by Benin people in traditional medicine, consumption of root bark occurs among Anii, Wama, Otamari and Gourmatché ethnic groups in western north. The plant part consumed are mainly harvested from the wild and sometime sold in local markets. But specie domestication is reported among Wama. Consumption level and period vary depending on ethnic group.

**Status:** Wild

**Habitat:**

**Distribution:** Togbin ; Cotonou ; Lougba ; Avégamè ; Ouidah ; Kpomassè ; Ouankou (Akouègninou et al. 2006)

**Darwin Initiative 15/003 Project specimen collected from:** Barikini (Bassila); Cotiakou (Tanguieta); Kodowari (Bassila); Pouya (Natitingou); Moupemou (Natitingou)Tagaye (Natitingou); Tanongou (Tanguiéta);

**Reproductive biology:**

**Utilisations:** evacuate clot of blood and stimulate appetite. It is a galactogenic plant

**Threat on genetic resources:**

**Further readings:**

## Sapindaceae

### *Blighia sapida* König

**Local names:** Lisetin (Fon); ishin jijè, ishin oko (Holly, Idatcha, Ifè, Tchabè); goulèkahunbo (Anii); sissi (Mahi); mètodomè, moufodomou (Ditamari); derebu, direbu (Bariba)

**Common names:** Blighia savoureuse, ris de veau, pommier finsam, arbre sarriette (fr)

**Description and variation:** *B. sapida* is a tree naturally found in forest. But it is usually planted in villages by people in all ecological zones of Benin. The plant produces fruit of which grains are black and yellow aril. The plant part useful in diet is the aril. It is used to make sauce or as sauce or soup ingredient by many people. Consumption is frequent but arille is not yet commercialized in market.

**Status:** Wild/ Domestication

**Habitat:**

**Distribution:** Zogbodomey ; Ewè ; Savalou ; Adjaha ; Dassa (Akoègninou et al. 2006)

**Darwin Initiative 15/003 Project specimen collected from:** Akarade (Bassila); Akpate (Pobè); Ayetedjou (Kétou); Banigri (Tchaourou); Barikini (Bassila); Bensekou (Kandi); Cotiakou (Tanguieta); Dabou (Parakou); Ileman (Dassa-zoumè); Kpakpaza (Glazoué); Kpassa (Tchaourou); Mareguinta (Kalale); Mondji (Savalou); Moupemou (Natitingou) Okunfo (Save); Pouya (Natitingou); Tagaye (Natitingou); Tamba (Savalou); Tankougou (Kandi); Wellan (Bassila); Zalimey (Zogbodomey); Zougou-Pantrossi (Gogounou);

**Reproductive biology:**

**Utilisations:** treat anaemia and itching

**Threat on genetic resources:** Not under threat.

**Further readings:** Ekue et al. (2009)

### *Deinbollia pinnata* (Poir.) Schumach. & Thonn.

**Syn.** *Ornitrophe pinnata* Poir.

**Local names:** Kotakédé, ganhotin (Fon); fléfitchi (Adja); Ganhokpovi (Mahi); Wamonnonfitin (Cotafon), atiman (Watchi)

**Description and variation:** Fresh leaves of this shrub are consumed particularly by South Benin people. The plant is found in Guinean phytogeographic zone. Leaves are collected from fallows, forests and savannah but are not sold. Consumption is reported in rainy season but levels vary depending on ethnic groups.

**Status:** Wild

**Habitat:**

**Distribution:** Atchérigbé ; Dassa ; Djaagbalo ; Lama (Akoègninou et al. 2006)

**Darwin Initiative 15/003 Project specimen collected from:** Afomayi (Lalo); Agnavo (Dogbo); Assedji (Athiémé); Ayetedjou (Kétou); Bognongon (Zogbodomey); Gome (Toffo);Sohounme (Houéyogbé);

**Reproductive biology:**

**Utilisations:**

**Threat on genetic resources:**

**Further readings:**

## Sapotaceae

*Vitellaria paradoxa* C. F.Gaert.

Syn. *Butyrospermum paradoxum* (C. F.Gaert.)

**Local names:** Koula (Boko); wugo, kotoble (Fon)

**Common names:** Karité (fr); sheaa-butter tree

**Description and variation:** Like *Parkia biglobosa*, *Vitellaria paradoxa* is a woody savannah tree widespread in sudano-guinean and sudanian phytogeographic zones of Benin. It has been integrated in agroforestry practices of many ethnic groups particularly in north of the country. The tree is known for its edible fruits and the processing of its nut into butter. Spared in farm fields in North Benin where it forms agroforestry parks, young leave of shea-butter tree are occasionally collected and consumed by Boko people in eastern north. This diet use is however reported in only among this ethnic group in Bensekou locality.

**Status:** Wild, domesticated.

**Agro-ecology:**

**Darwin Initiative 15/003 Project specimen collected from:** Bensekou (Kandi);

**Medicinal use:** treat malaria and diarrhoea

**Production areas and systems:** Ouémé; Zou; Gbéré; Djidja; Kandi; Kouaténa (Akoègninou et al. 2006).

**Utilisations:**

**Threat on genetic resources:**

**Further readings:**

## Solanaceae

*Physalis angulata* L.

**Local names:** Bobobobo, Goutawountara, Gotamta (Anii)

**Commons names:** Plante lanterne, coqueret anguleux (French); Cape gooseberry, (angular) winter cherry (English).

**Description and variation:** *Physalis angulata* is an annual herbaceous plant. The stem is erect glabrous up to 1 m tall. The flowers are creamy. Fruit is a yellow berry to green yellow.

**Status:** Wild.

**Habitat:** It is found over debris, in fallows, farm fields and coastal sand. The plant grows on nitrate rich soils.

**Distribution:** It originates from South America. It has been introduced in tropics where it is currently widespread and became common weed herb in West Africa. It is well spread in all three phytogeographic zones of Benin: Togbin; Niaouli; Dan-Vidjinanvo; Dassa-zoumè; Savalou; Malanville; Wourarou (Akoègninou *et al.* 2006)

**Darwin Initiative 15/003 Project specimen collected from:** Wellan (Bassila); Kodowari (Bassila).

**Reproductive biology:** Reproduction is by seeds.

**Utilisations** In Benin, it is consumed among Anii sociolinguistic group as leafy vegetable. Those people who live Kodowari and Wellan localities in western north harvest use the resource in rainy season. Consumption remains rare or occasional and commercialization is reported in local market.

**Threat on genetic resources:** Probably not under threat.

### *Solanum aethiopicum* L.

**Local names:** Agbitchan, Gbégnanmain, Gbo (Mahi); Osun (Hollyi); Ikin, Tchidifulè (Tchabè); Agutchan (Fon); Aboutchan (Ifè); Tchidifulè (Tchabè); Iman (Tchabè, Idatcha); Chanmava, Kalbônôxô (Yom); Gbognanmain (Adja, Cotafon, Fon); Kawountowoungla, Yèkodiye (Ditamari); Kouwoundou (Lokpa); Kpanwounsadou (Wama); Yèbè (Yorouba).

**Commons names:** Tomate amer, aubergine indigene, aubergine écarlate (French); mock tomato, scarlet eggplant, bitter tomato (English).

**Description and variation:** *Solanum aethiopicum* is an annual or perennial herb. The flowers are white to more or less cleared or pale violet. Two group of *S. aethiopicum* are in use in Benin. One is *Solanum aethiopicum* L. Groupe Gilo which is up to 60(-150) cm tall, generally non-spiny. The fruits are globose or ellipsoid, white, dark green, brown or violet, or stripped in two or more colour smooth to grooved. The second one is *Solanum aethiopicum* L. Groupe Shum which is less tall than the first one (up to 60 cm), non-spiny, and its fruits is a bright red and globose.

**Status:** Cultivated.

**Agroecology:** *Solanum aethiopicum* is a tropical crop with optimum daytime temperature of 25-30°C and night temperatures of 20-27°C. They prefer a well-drained soil with pH 5.5-6.8. Rainfall or humidity requirement is different for each group. Group Shum requires a higher humidity than Group Gilo; none of these cultivar-groups survive cold or very wet conditions.



**Production areas and systems:** *Solanum aethiopicum* is one of the main African vegetables. The crop is cultivated in all agroecological zones of Benin at small scale in home gardens or in urban and periurban agriculture. Cultural practices include nursery and transplanting.

**Darwin Initiative 15/003 Project specimen collected from:** Ikemon (Ouèssè); Sovlegni (Djidja); Gome (Toffo); Okunfo (Save); Pouya (Natitingou); Kpakpaza (Glazoué); Kargui (Karimama); Tagaye (Natitingou); Tamba (Savalou); Ganro (Bembèrèkè); Zalimey (Zogbodomey); Vossa (Ouèssè); Agbandonou (Allada); Mondji (Savalou); Ileman (Dassa-Zoumè).

**Utilisations:** This perennial herb is cultivated in all agroecological zones of Benin mainly for its immature fruits. Leaves, flowers and fruits of bitter tomato are available year-round. Many people in Benin consume immature fruits as vegetable, raw or cooked in sauce. Young leaves are also consumed as leafy vegetable. There are some varieties especially cultivated for their leaves. Consumption of immature fruits or leave of bitter tomato is frequent or occasional depending on the sociolinguistic groups. However there can be noticeable the more frequent consumption among South Benin people (Adja, Cotafon, Fon, etc.). Commercialization of bitter tomato product is reported in local markets among all sociolinguistic groups. The plant also is used in medicine. Medicinal uses include the healing of colic and high blood pressure by the root or fruit. The plant is also used as sedative.

**Threat on genetic resources:** Farmers maintained a wealth genetic diversity. But more investigations are needed for the conservation of the existing diversity.

**Further readings:** Grubben and Denton (2004); Schippers (2004).

### *Solanum americanum* Mill.

Syn.: *Solanum nigrum* auct. Non L.

**Local names:** Krocotou (Wama); Ewéidou (Holly); Kpéronra, Kpéouka (Bariba); Foïbi (Dendi); Imonruèyè (Ifè); Yèbè (Holly); Adjagboman (Mahi).

**Commons names:** Morelle noire, légume vert (French); black or glossy nightshade (English).

**Description and variation:** It is an herb up to 40-60 cm tall or more, with small white flowers. Fruit is a berry 6-9 mm large, black and shiny at maturity.

**Status:** Wild, cultivation underway. Cultivation is reported among Holly sociolinguistic group.

**Habitat:** The plant can be found on ruderal areas, in fallows and farm fields.

**Distribution:** Probably introduced in Africa, nightshade is now widespread and well spread in all three phytogeographic zones of Benin: Doutou-Zoungbanou, Houéyogbé; Niaouli; Tanéka; Kouandé; Sota; Bodjékali (Akoègninou *et al.* 2006).

**Darwin Initiative 15/003 Project specimen collected from:** Akpate (Pobè); Ayetedjou (Kétou); Poto (Banikoara); Wellan (Baassila); Zonmon (Zagnanado); Barikini (Bassila); Ganro Bembèrèkè); Ekpa (Savalou); Tanongou (Tanguiéta); Zougou-

Pantrossi (Gogounou); Cotiakou (Tanguieta); Bensekou (Kandi); Mareguinta (Kalale); Pouya (Natitingou); Kargui (Karimama); Moupemou (Natitingou); Assedji (Athiémé); Zalimey (Zogbodomey).

**Reproductive biology:** It is a monoecious species which reproduces by seeds.

**Utilisations:** Leave and stem of *Solanum americanum* are consumed by some communities (e.g. Wama, Bariba and Dendi in the North and Holly in the South). Those plant parts are boiled as leafy vegetable. Cooking methods depend on bitterness level. Indeed if the bitterness is very high leaves are boiled in two times before eating. To reduce bitterness some people associated this leafy vegetable with *Amaranthus* species when cooking or eating. But consumption of this vegetable is rare, occasional or frequent depending on communities. Consumption period varies as well. Commercialization is reported only among Holly sociolinguistic group. The specie has also medicinal uses. Indeed the plant is used to treat abscess, fever by newly born infant, stomach-ache, malaria, wound, haemorrhoids, mycoses, burn and any hurt or lesion. It is used as anti-helminthic, antibiotic.

**Threat on genetic resources:** the species seem not or less endangered in Benin.

**Further readings:** Grubben and Denton (2004); Schippers (2004).

### *Solanum erianthum* D. Don

**Syn. :** *S. verbascifolium* auct. non L.

**Local names:** Ikan (Idatcha)

**Commons names:** Potato tree (English)

**Description and variation:** Potato tree is a shrub with white to blue purple flowers.

**Status:** Wild; domestication underway. Cultivation of this specie is only reported among Idatcha sociolinguistic group.

**Habitat:** A weed found in fallows and farm field, in savannah and cleared or dry forest.

**Distribution:** Pobè; Niaouli; Odométa; Athiémé; Dassa; Tchatchou; Bassila; Agbassa (Akoègninou *et al.* 2006).

**Darwin Initiative 15/003 Project specimen collected from:** Ileman (Dassa-zoumè); Kpakpaza (Glazoué).

**Reproductive biology:** Reproduction is by seeds.

**Utilisations** People living in Ilèman and Kpakpaza consume leave and immature fruits occasionally in rainy season. Commercialization of useful plant parts is also recorded in these localities.

### *Solanum macrocarpon* L.

**Local names:** Gboman, gboma (Fon, Idatcha, Mahi, Tchabè, Adja, Anii, Cotafon, Kotokoli, Lokpa, Wémé); igboman (Ifè); agbangbawonra, gbangbnayonla (Yom); babatou (Wama); bobola (Boko); boualakamdi (Natimba); gbéman, boboya (Peulh), gbodo (Holly);

katakounkpakoun, kpatakpakô (Tchabè, Yorouba); kôrfiatou (Berba); nonrouffou (Dendi); oukangou (Gourmantché); sanbinou (Bariba); tikann'té (M'bermin); tikawounfanti (Ditamari).

**Commons names:** Aubergine, gboma, aubergine africaine, anghive, (French); African eggplant, gboma eggplant, gboma (English).

**Description and variation:** It is a subshrub, slightly woody with robust branches, up to 1.5 m tall, glabrous or sometimes hairy. Flower is 18 mm large, purple greenish or sometimes white. The fruit is a depressed globose berry 2-6 cm x 3-10 cm, green, ivory or purplish white with dark stripes when young, yellow to brownish when ripe. There is a great variability of size and shape of leaves and fruits.

**Status:** Cultivated.

**Agro-ecology:** Gboma requires warm conditions for optimum growth. Most cultivars grow in high annual rainfall. Cultivars with small leaves and fruits withstand drought and are usually grown in dry areas of the north of the country.

**Darwin Initiative 15/003 Project specimen collected from:** Afomayi (Lalo); Agbandonou (Allada); Agnavo (Dogbo); Akarade (Bassila); Akpate (Pobè); Assedji (Athiémé); Ayetedjou (Kétou); Banigri (Tchaourou); Barikini (Bassila); Batia (Tanguiéta); Bensekou (Kandi); Bognongon (Zogbodomey); Dabou (Parakou); Ekpa (Savalou); Ganro (Bembèrèkè); Gbeko (Dangbo); Gogbo (Adjohoun); Gome (Toffo); Ikemon (Ouèssè); Ileman (Dassa-zoumè); Kodowari (Bassila); Kpakpaza (Glazoué); Kpassa (Tchaourou); Mareguinta (Kalale); Mondji (Savalou); Moupemou (Natitingou)Okunfo (Save); Penelan (Bassila); Poto (Banikoara); Sohounme (Houéyogbé); Soubado (Pèrèrè); Sovlegni (Djidja); Tagaye (Natitingou); Tamba (Savalou); Tankougou (Kandi); Tanongou (Tanguiéta); Tchimbere (Bassila); Vossa (Ouèssè); Zalimey (Zogbodomey); Zonmon (Zagnanado); Zougou-Pantrossi (Gogounou).

**Production areas and systems:** Gboma is the second leafy vegetable cultivated in Benin and the first one in the south. In the coastal region, Gboma production takes place throughout urban and periurban agriculture. It is a commercial agriculture to meet the high demand of urban populations. Urban producers normally practise monocropping, but in rotation with other vegetables particularly *Amaranthus* species. In the north, it is essentially a household production or subsistence cultivation. In this case, landraces are cultivated in home gardens or in intercropping system with other food crops.

**Utilisations:** It is the most common and cultivated in *Solanum* species. The most common African eggplant variety in Benin is the one with small fruits. It is cultivated and commercialized in all agroecological zones of Benin and among all ethnic groups. Leaves are very appreciated by people and boiled and consumed in sauce or cooked with egusi. *Solanum macrocarpon* came into the top five frequently used vegetables in all three phytogeographic zones of Benin, but it is particularly popular in the Guinean villages, where it is used throughout the year. In Guinean zone, it has been integrated in urban and periurban production system. Leave composition is comparable with those of other green leafy vegetables. It has many

medicinal properties and uses: digestion facilitation, anti anaemic. Decoction of leaves and root treats abscess and ear infection.

**Threat on genetic resources:** The local cultivars of Gboma are not under any danger of genetic erosion.

**Further readings:** Grubben and Denton (2004); Schippers (2004).

### ***Solanum scabrum* Mill.**

Syn. *Solanum nigrum* L var. *guineense* L.

**Local names:** Adjagboman (Mahi); agbôè, lanman (Cotafon); akoribouotê (M'bermin); ewédou (Yorouba, Holly); yèbè (Holly); féyibi (Dendi); foibi (Peulh); gbôè, lanman (Adja); gbogodo (Tchabè); gboman alawiniwini, hédougboognin, kpakossu, sègbégnamain (Mahi); gotantala, goutantaro (Anii); imonruèyè (Fè); kabnor, kantoxagn (Yom); kouliabougou (Gourmantche); kpainsiola (Boko); lanman (Péda, Watchi); kowounpti (Natimba ); tikotaduôti, m'bôôtakam (Ditamari).

**Common names:** Morelle de Guinée, morelle noire (French); Huckleberry (English).

**Description and variation:** Annual herb or short lived perennial herb; *S. scabrum* is up to 50-100 cm tall. The leaves are rhomboid to ovate to lanceolate. Flowers are white or slightly violet. Fruit is a globose berry 10-16 mm large black violet and shiny.

**Status:** Cultivated.

**Agro-ecology:** *S. scabrum* is cultivated on a wide range of soil type but it prefers fertile soil with high nitrogen content and rich in organic matters. Rainfall requirement is 500 mm. The optimum temperature for growth is 20-30°C and for seed germination is 15-30°C.

**Darwin Initiative 15/003 Project specimen collected from:** Agnavo (Dogbo); Banigri (Tchaourou); Dabou (Parakou); Kpassa (Tchaourou); Pouya (Natitingou).

**Production areas and systems:** *Solanum scabrum* is a more or less important leafy vegetable in Benin. Cultivation occurs in all agroecological zones and nearly among all sociolinguistic groups mainly in home garden and subsistence cultivation.

**Utilisations:** *Solanum scabrum* is a leafy vegetable widely cultivated and consumed in Benin. Leaves and stems are the plant parts consumed frequently or rarely depending on sociolinguistic groups and are available in rainy season. Commercialization of leaves is reported. The specie is also used as medicinal plant. It is used against abscess and used as anti-helminthic as well.

**Threat on genetic resources:** There is no danger of genetic erosion local cultivars of nightshade.

**Further readings:** Grubben and Denton (2004); Schippers (2004).

## Sterculiaceae

*Cola millenii* K. Schum

Syn. *C. trogoensis*

**Local names:** Aziokèkè (Aizo); aлови aton, afutu kolo, aze loko, bangbo, fafoli (Fon)

**Common names:** Kola du singe (French)

**Description and variation:** Rare consumption of leave of this tree specie is reported only among Aizo ethnic group in South Benin. Young leave are collected from wild plant. Trees are found in semi-deciduous tropical forest and swamp forest in Guinean and sudanu-guinean phytogeographic zones. The plant is said to have medicinal uses. It is used against icter and many shin diseases.

**Status:** Wild

**Habitat:**

**Distribution:** Dangbo ; Ifangni ; Badjamè ; Pobè ; Aplahoué (Akoègninou et al. 2006)

**Darwin Initiative 15/003 Project specimen collected from:** Gomé (Toffo)

**Reproductive biology:**

**Utilisations:**

**Threat on genetic resources:**

**Further readings:**

*Sterculia tragacantha* Lindl.

**Local names:** Dagba, gbokpodjè (Mahi); gadjèkpo, guétchibo, goukalow (Anii); Hongbede (Fon, Aizo, Cotafon); loluide, adédjonman (Adja); Kadarabobo (Kotocoli); akaman kodjèkpo (Ifè, Idatcha); akèman (Idatcha)

**Common names:** Sobou, tragacante africain (French)

**Description and variation:** It is a small tree 10 to 15 m in savannah but can reach 25 m in forest. It also grows in fallows fields. Fresh and young are leafy vegetable for many people of Central and South Benin. Those people collect leave from the wild in rainy when available. Consumption is frequent or rare depending on ethnic group.

**Status:** Wild

**Habitat:**

**Distribution:** Owodé; Cocotomey; Bembè; Houéyogbé; Ita-Djebou (Akègninou et al. 2006)

**Darwin Initiative 15/003 Project specimen collected from:** Agbandonou (Allada); Agnavo (Dogbo); Akarade (Bassila); Assedji (Athiémé); Barikini (Bassila); Bognongon (Zogbodomey); Ekpa (Savalou); Ileman (Dassa-zoumè); Kodowari (Bassila); Kpakpaza (Glazoué); Mondji (Savalou); Okunfo (Save); Penelan (Bassila); Tamba (Savalou); Vossa (Ouèssè);

**Reproductive biology:**

**Utilisations:**

**Threat on genetic resources:**

**Further readings:**

*Triplochiton scleroxylon* **K. Schum.**

**Local names:** Atiouvié, atiwe (Catafon); gbii (Boko), xwetin (Fon)

**Common names:** Samba (French); Odoun (English).

**Description and variation:** *Triplochiton scleroxylon* is tree specie of tropical semi-deciduous forest which can reach 50 m in height. In South Benin, it is a sacred wood. Nethertheless, Cotafo report rare or occasional consumption of its leaves as vegetable in dry season. It is also the case of Boko ethnic group in eastern north. Leave are harvested from the wild but its cultivation is reported among Cotafo

**Status:** Wild

**Habitat:**

**Distribution:** Dangbo; Pobè; Kpédjilé Agada; Glo; Pahouian; Sakété (Akoègninou et al. 2006)

**Darwin Initiative 15/003 Project specimen collected from:** Assedji (Athiémé); Bensekou (Kandi);

**Reproductive biology:**

**Utilisations:**

**Threat on genetic resources:**

**Further readings:**

## Thymelaeaceae

*Synaptolepis retusa* **H.H.W.Pearson**

**Local names:** Igbam, m'ba (Kotokoli)

**Common names:**

**Description and variation:**

**Status:** Wild

**Habitat:**

**Distribution:** Ina ; Assotè ; Mts Atacora ; Perma ; Tora ; Koussoukouingou ; Guinagourou (Akoègninou et al. 2006)

**Darwin Initiative 15/003 Project specimen collected from:** Akarade (Bassila); Tchimbere (Bassila).

**Reproductive biology:**

**Utilisations:**

**Threat on genetic resources:**

**Further readings:**



## Tiliaceae

*Corchorus aestans* L.

**Syn.** *Corchorus acutangulus* Lam.

**Local names:** Eyogbè (Ifè); agonlinninu (Fon); anuwin (Bariba)

**Description and variation:** It is an annual or perennial herb found in nearly all agroecological zones of Benin. It grows in fallow fields, savannah and degraded forest. In north Benin among Bariba, *C. aestuans* is collected from the wild and consumed as leafy vegetable. In South Benin, Watchi and Saxwè cultivate it in rainy season for consumption. However commercialization of this indigenous vegetable is not reported. Consumption level is frequent or rare or occasional depending on ethnic groups and localities.

**Status:** Wild

**Habitat:**

**Distribution:** Porto-Novo ; Ahamè ; Pahou ; Abomey-Calavi ; Ségbana (Akoègninou et al. 2006)

**Darwin Initiative 15/003 Project specimen collected from:** Banigri (Tchaourou); Kpassa (Tchaourou);

**Reproductive biology:**

**Utilisations:**

**Threat on genetic resources:**

**Further readings:**

*Corchorus olitorius* L.

**Local names:** ninnouwi (Fon) ; ayoyo(Ifè) ; ooyo( Tchabè) ; yoyo( idatcha) ; nénouwi (Mahi); adémmain (Cotafon), aluilui (Wémè); ayoyo, yoyo (Anii, Dendi, Ifè, Idatcha, Kotocoli, Lokpa); démi (Adja); èyo (Holly); minapouwopouwona (Gourmanthé), ninnouwi (Fon, Mahi); oyo (Tchabè, Yoruba); yoyora, sékéfèèma (Wama); tifanhanti (Ditamari); Yôyôkoun (Bariba); Yôyôgoula (Boko).

**Common names:** Corette potagère, mauve du juif, jute à longs fruits, jute potager (French) ; nalta jute, tussa jute (English)

**Description and variation:** *Corchorus olitorius* is an important micilagenous leafy vegetable in Benin. This annual herb is cultivated by people in all agroecological zones. But *Corchorus olitorius* wild types are found in savannah, fallow and farm fields usually close to humid stations, streams and swamps. Ethnic groups boiled its leave into glutinous sauce comparable to the one of *Abelmoschus esculentus*. It is widely used throughout the country, during the rainy season or even year-round, depending on the village or ethnic group. Indeed the plant has been integrated in urban and periurban agricultural systems and thus produced even in dry season.



With a frequent consumption level, *C. olitorius* is commercialized in local and regional markets. It contribute to income generation for producers.

**Status:** Cultivated

**Agro-ecology:** Porto-Novu; Igana; kouffo; Maréguita; Kalalé; Nalohou; Djougou (Akoègninou et al. 2006)

**Darwin Initiative 15/003 Project specimen collected from:** Afomayi (Lalo); Agbandonou (Allada); Agnavo (Dogbo); Akarade (Bassila); Akpate (Pobè); Assedji (Athiémé); Ayetedjou (Kétou); Banigri (Tchaourou); Barikini (Bassila); Batia (Tanguiéta); Bensekou (Kandi); Bognongon (Zogbodomey); Cotiakou (Tanguieta); Dabou (Parakou); Ekpa (Savalou); Ganro (Bembèrèkè); Gbeko (Dangbo); Gogbo (Adjohoun); Gome (Toffo); Ikemon (Ouèssè); Ileman (Dassa-zoumè); Kargui (Karimama); Kodowari (Bassila); Kpakpaza (Glazoué); Kpassa (Tchaourou); Mareguinta (Kalale); Mondji (Savalou); Moupemou (Natitingou) Okunfo (Save); Penelan (Bassila); Pouya (Natitingou); Sohounme (Houéyogbé); Soubado (Pèrèrè); Sovlegni (Djidja); Tagaye (Natitingou); Tamba (Savalou); Tankougou (Kandi); Tanongou (Tanguiéta); Tchimbere (Bassila); Torozogou (Malanville); Vossa (Ouèssè); Wellan (Bassila); Zonmon (Zagnanado);

**Production areas and systems:**

**Utilisations:** Treat ulcer and pain. It used as vermifuge and contains vitamin.

**Threat on genetic resources:**

**Further readings:** Grubben and Denton (2004).

### *Corchorus tridens* L.

**Local names:** Azataluga/glénonmandovodu (Fon); itcho (Ifè); djogodo (Idatcha); alanlin (Mahi); untcho, Itcho (Ifè); éiyó (Holly); èyo aguidan (Holly); alonlouin (Watchi); bawounna guimanhannain (Anii); djaga (Tchabè); faakouwô (Peulh); fakou (Dendi); fanwounfanti (Natimba); fêêman (Wama), fouassimou (Berba); gagalouaga, halanèhoui, nèwivè (Saxwè); gnainriké, nonmonnon (Bariba); ifanhanyéi (Ditamari); lonlouin (Adja); koxolanhouin (Lokpa); nonmonron (Yom); tignanlifaré (Gourmantche); tixanté (M'bermin); wiwonla (Boko)

**Common names:**

**Description and variation:** *C. tridens* is an herbaceous plant spared in farm fields. It is however widely cultivated Benin people. It has same utilisation with *C. olitorius* but is less appreciated.

**Status:** Cultivated

**Agro-ecology:** Togbin; Ouidah; Guéné; Samiondji; Niaouili; Tchaourou (Akoègninou et al. 2006)

**Darwin Initiative 15/003 Project specimen collected from:** Afomayi (Lalo); Agnavo (Dogbo); Batia (Tanguiéta); Bognongon (Zogbodomey); Ekpa (Savalou); Garou-Tedji (Malanville); Gome (Toffo); Ileman (Dassa-zoumè); Kargui (Karimama); Kodowari (Bassila); Kpakpaza (Glazoué); Kpassa (Tchaourou); Loumbou-Loumbou (Karimama) Mondji (Savalou); Moupemou (Natitingou) Poto (Banikoara); Pouya

(Natitingou); Sohounme (Houéyogbé); Sovlegni (Djidja); Tagaye (Natitingou); Tamba (Savalou); Tankougou (Kandi); Tanongou (Tanguiéta); Torozogou (Malanville); Vossa (Ouèssè); Wellan (Bassila); Zalimey (Zogbodomey); Zonmon (Zagnanado);

**Production areas and systems:**

**Utilisations:**

**Threat on genetic resources:**

**Further readings:**

*Grewia mollis*

**Local names:** Orè (Ifè, Idatcha); Lili (Fon, mahi); sola (Ifè); lili (Fon, Mahi); gourounmo, guérihounbié (Anii); liyouani (Gourmantché), moussannoum (Ditamari)

**Common names:**

**Description and variation:** It is a shrub or a small tree found in savannah, forest and fallow. Its distribution area covers all phytogeographic zones of Benin. Leave of this shrub are indigeous vegetable for some people comprising Ifè, Mahi, Fo, Idatcha in central region and Ditamari, Gourmantché and Anii in north. Among this later ethnic group, consumption level is rare. Available in rainy season, leaves are not commercialized.

**Status:** Cultivated.

**Agro-ecology:** Ouomè ; Cocotomey ; Calavi ; Pobè ; Zogbodomey ; Pénélan ; Goro ; Pédarou ; Adjrala (Akoègninou et al. 2006)

**Darwin Initiative 15/003 Project specimen collected from:** Akarade (Bassila); Barikini (Bassila); Batia (Tanguiéta); Ekpa (Savalou); Ileman (Dassa-zoumè); Kpakpaza (Glazoué); Mondji (Savalou); Moupemou (Natitingou) Sovlegni (Djidja); Tagaye (Natitingou); Tamba (Savalou); Tankougou (Kandi); Tchimbere (Bassila); Wellan (Bassila);

**Production areas and systems:**

**Utilisations:**

**Threat on genetic resources:**

**Further readings:**

## Urticaceae

*Laportea aestuans* (L.) Chew

Syn. *Urtica aestuans* L.

**Local names:** Kpannankpon (Adja); kpofobo (Anii); tikpaakpaati (Otamari); tikpanankpananti (Ditamari); dogbo, dokpo (Cotafon) ; trinnonmasodo (Watchi)

**Common names:**

**Description and variation:**

**Status:** Wild

**Habitat:**

**Distribution:** Houengbo Nagot ; Ikpéguilé-Agada ; Ouando ; Dogbo ; Kétou à Ewé ; Dassa-zoumè (Akoègninou et al. 2006)

**Darwin Initiative 15/003 Project specimen collected from:**

**Reproductive biology:**

**Utilisations:** It is an annual herb found in forest, ruderal station and in fallows. *Laportea aestuans* is well spread in all three phytogeographic zones of Benin. It is also an indigenous leafy vegetable but is not very appreciated. Leave are harvested from the wild in rainy season. But in many localities the plant is said to be cultivated by people. Consumption level is occasional, rare or frequent depending on ethnic group. But leave are not yet commercialized. Those ethnic groups are Anii, Ditamari and Otamari in western north and Adja, Watchi and Cotafon in western south Benin.

**Threat on genetic resources:**

**Further readings:**

## Verbenaceae

### *Lippia multiflora* Moldenke

Syn.: *Lippia adoensis* Baker

**Local names:** Tchagara (Ifè); kinwunkinwu (Tchabè); kanwu (Idatcha); aklala (Mahi); yinya (Fon).

**Description and variation:** Perennial herb with aromatic leaves. It can reach 4 m tall. The stems are pubescent, rough or subglandular.

**Status:** Wild; domestication underway.

**Habitat:** The plant thrives in savannas.

**Distribution:** Monsourou ; Atchérigbé ; Godomey (Akouègninou *et al.* 2006).

**Darwin Initiative 15/003 Project Specimen collected from:** Banigri (Tchaourou); Barikini (Bassila); Ekpa (Savalou); Ikemon (Ouèssè); Ileman (Dassa-zoumè); Kodowari (Bassila); Kpakpaza (Glazoué); Mondji (Savalou); Penelan (Bassila); Sovlegni (Djidja); Tamba (Savalou); Vossa (Ouèssè); Wellan (Bassila).

**Reproductive biology:** The species reproduces by seeds but also vegetatively.

**Utilisation:** *Lippia multiflora* is an aromatic plant used as tea. Many sociolinguistic groups use the leave and inflorescences with immature fruits as vegetable. Consumption occurs mainly in rainy season but could be frequent or rare. Commercialization of plant parts is not reported. The plant is used to treat malaria, stomachache, fever, nausea. It is also used as vermifuge, laxative and antibiotic.

**Threat on genetic resources:** Not evaluated.

### *Stachytarpheta indica* (L.) Vahl

Syn.: *Verbena indica* L.

**Local names:** *Gninmondu* (Fon, Mahi, Wémè); *dagbalogné, ogafa* (Holly); *ganxwa* (Cotafon); *oruhandètcho* (Idatcha); *ogafa* (Holly); *gahuaman* (Mahi); *yaranduya* (Wama).

**Description and variation:** The plant is a much ramified herb which can reach 1 m tall. The leaves are lanceolate, oblong with denticulate margins. The inflorescence is long and can reach 40 cm. The flowers are blue with a white colour in the centre.

**Status:** Wild.

**Habitat:** The species is found in ruderal areas, farm fields and forest zones with high annual rainfall.

**Distribution:** Agbodjedo ; Adjohoun ; Adjarala ; Aplahoué ; Dannou ; Azowlissè ; Samiondji ; Karimama (Akoègninou et al. 2006).

**Darwin Initiative 15/003 Project Specimen collected from:** Afomayi (Lalo); Agbandonou (Allada); Agnavo (Dogbo); Assedji (Athiémé); Ayetedjou (Kétou); Bognongon (Zogbodomey); Dabou (Parakou); Gbeko (Dangbo); Gogbo (Adjohoun); Gome (Toffo); Ileman (Dassa-zoumè); Kpakpaza (Glazoué); Pouya (Natitingou); Sohounme (Houéyogbé); Sovlegni (Djidja); Tchimbere (Bassila); Zalimey (Zogbodomey); Zonmon (Zagnanado).

**Reproductive biology:** The plant reproduces by seeds.

**Utilisation:** The species is mainly used as leafy vegetable. It is frequently consumed in communities such as Fon, Aizo and Wama sociolinguistic groups. In Cotafon group a laxative property is attributed to *S. indica*.

**Threat on genetic resources:** Not evaluated.

### *Vitex doniana* Sweet

**Local names:** *Fonkounman/Fonman, fontin* (Adja/Aizo, Cotafon, Fon, Oueme, Mahi); *Tchimarou, Tchigbaro* (Kotokoli); *Akon, ori, Okoun* (Holly); *kunonku, konnoukou, gnankounougou, Yaro, Gnanrou* (Bariba); *gusudonon, Goutéssi, gutesere* (Anii); *kousanla, kula* (Boko); *yinrikuntu* (Wama); *djagumanlakpa* (Ife); *aku/akumanlakpa, léwèman* (Tchabe/Idatcha); *Mumantonmu, timantonti* (Otammari) *bugnanbu* (Gourmantche); *Bokoikossou* (Dendi).

**Commons names:** Prune des savanes, prunier noir (French) ; black plum (English)

**Description and variation:** The plant is a tree of 10-12 m tall. The branches are glabrous and the leaves coriaceous. It produces a subglobular fruit covered with a cupule and black sweet at maturity.

**Status:** Wild.

**Habitat:** *V. doniana* is found in all ecological regions of Benin. It is a savanna tree which grows as well in riparian vegetations.

**Distribution:** Porto Novo; Libantè; Atchanou; Aplahoué; Gamia (Akoègninou et al. 2006).

**Darwin Initiative 15/003 Project Specimen collected from:** Afomayi (Lalo); Agbandonou (Allada); Agnavo (Dogbo); Akarade (Bassila); Akpate (Pobè); Assedji (Athiémé); Ayetedjou (Kétou); Banigri (Tchaourou); Barikini (Bassila); Bensekou (Kandi); Bognongon (Zogbodomey); Cotiakou (Tanguieta); Dabou (Parakou); Ekpa

(Savalou); Ganro (Bembèrèkè); Gbeko (Dangbo); Gogbo (Adjohoun); Gome (Toffo); Ikemon (Ouèssè); Ileman (Dassa-zoumè); Keremou (Banikoara); Kodowari (Bassila); Kpakpaza (Glazoué); Kpassa (Tchaourou); Mareguinta (Kalale); Mondji (Savalou); Moupemou (Natitingou); Penelan (Bassila); Poto (Banikoara); Sohounme (Houéyogbé); Soubado (Pèrèrè); Sovlegni (Djidja); Tagaye (Natitingou); Tamba (Savalou); Tankougou (Kandi); Tanongou (Tanguiéta); Tchimbere (Bassila); Torozogou (Malanville); Vossa (Ouèssè); Wellan (Bassila); Zalimey (Zogbodomey); Zonmon (Zagnanado); Zougou-Pantrossi (Gogounou).

**Reproductive biology:** The plant regenerates naturally by seeds and root suckers. Seed germination within the framework of the Darwin Initiative project resulted in low percentages. Seeds need a very long time to germinate (Yarou 2007). Germination is most successful with fresh seeds. Forest fires may help break the seed coat before germination (Arbonnier 2002). Yarou (2007) investigated dormancy in *Vitex doniana* and concluded that physical damage on seeds gave better result which resulted in only 20% germination rate.

**Utilisation:** *Vitex doniana* is one of the major leafy vegetables in Benin and other countries in West Africa. The tree is only found wild and no domestication practice has been reported in the country yet. Because of its economic importance there is a high pressure on the plant which leaves are pre-cooked and sold in almost all markets as source of income for many households. This species is consumed by nearly all sociolinguistic groups. The black fruit is edible. The species is also used in pharmacopeia against diseases such as mouth's candidose, fever, ear infection, stomachache, diarrhoea, and dysenterie. It is used as antibiotic to heal wounds and eliminate blood clots.

**Threat on genetic resources:** *Vitex doniana* is overlooked and wild populations continuously eroded.

**Further readings:** Arbonnier (2002), Yarou (2007).

## Violaceae

*Hybanthus enneaspermus* (L.) F. Muell.

**Syn.** *Viola enneasperma* L.

**Local names:** Gogokou, Gogohoun (Bariba)

**Common names:**

**Description and variation:**

**Status:** Wild

**Habitat:**

**Distribution:** Cotonou; Agbodjedu; Adjarala; Abira; Dassa; Ouari-Marou; Parakou; Pèrèrè (Akouègninou et al. 2006)

**Darwin Initiative 15/003 Project specimen collected from:** Ganro (Bembèrèkè); Soubado (Pèrèrè);

**Reproductive biology:**

**Utilisations:**

**Threat on genetic resources:**

**Further readings:**

## Vitaceae

*Cayratia gracilis* (Guill. & Perr.) Suss.

**Syn.** *Cissus gracilis* (Guill. & Perr.)

**Local names:** tiyaakoonti (Otammari); Gobia, Sinsambou (Bariba); gokolugawandja, Wountchiinlaunkolé (Anii); tankoruminsuku (Wama)

**Common names:**

**Description and variation:**

**Status:** Wild

**Habitat:**

**Distribution:** Pendjari; Lama; Pobè; Kétou; Sinendé; Koudokou Boukoubé (Akouègninou et al. 2006)

**Darwin Initiative 15/003 Project specimen collected from:** Barikini (Bassila); Cotiakou (Tanguieta); Keremou (Banikoara); Penelan (Bassila); Tagaye (Natitingou); Tanongou (Tanguiéta); Zougou-Pantrossi (Gogounou);

**Reproductive biology:**

**Utilisations:** Treat some wound, malaria and help children to grow up tooth. It is used as galactonic and against venimo

**Threat on genetic resources:**

**Further readings:**

*Cissus populnea* Guill. & Perr.

**Local names:** saanru, Sanro, sararu, Gnonsanou (Bariba); gbogolo (Anii); lidjangnaliyuani (Gourmantche); zanla, zaa (Boko); tchokugbolo, kpolakpola (Ife); orlo/ djawawa (Tchabe/Idatcha); assan/asan (Mahi/ Fon); diyua'ndi (Otammari)

**Common names:**

**Description and variation:**

**Status:** Wild

**Habitat:**

**Distribution:** Komté; Ouaké; Lanta; Attakè; Savalou; Sakabansi; Campus d'Abomey-Calavi; Pendjari (Akoègninou et al. 2006)

**Darwin Initiative 15/003 Project specimen collected from:** Banigri (Tchaourou); Barikini (Bassila); Batia (Tanguiéta); Bensekou (Kandi); Ekpa (Savalou); Ikemon (Ouèssè); Ileman (Dassa-zoumè); Keremou (Banikoara); Kpakpaza (Glazoué); Kpassa (Tchaourou); Mareguinta (Kalale); Mondji (Savalou); Moupemou (Natitingou);

Okunfo (Save); Sovlegni (Djidja); Tamba (Savalou); Tankougou (Kandi); Tanongou (Tanguiéta); Vossa (Ouèssè); Wellan (Bassila);

**Reproductive biology:**

**Utilisations:** Treat diarrhoea, headache and whitlow. It is used as aphrodisiac

**Threat on genetic resources:**

**Further readings:**



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Annex A. Local names in alphabetical order

Local Names	Linguistic groups	Scientific names	Authorship	Family
Aagou	Ife	<i>Ceiba pentandra</i>	(L.) Gaertn.	Bombacaceae
Aagun	Tchabe	<i>Bombax costatum</i>	Pellegr. & Vuillet	Bombacaceae
Aagun	Tchabe	<i>Bombax costatum</i>	Pellegr. & Vuillet	Bombacaceae
Abafi	Anii	<i>Celosia argentea</i>	L.	Amaranthaceae
Abahoham	Dendi	<i>Amaranthus cruentus</i>	L.	Amaranthaceae
Abofroufrou	Anii	<i>Chromolaena odorata</i>	(L.) R. M. King	Asteraceae
Abokpaba	Gourmantche	<i>Basella alba</i>	L.	Basellaceae
Abonoukodjoflonou	Kotokoli	<i>Emilia praetermissa</i>	Milne-Rredh.	Asteraceae
Abonu	Bariba	<i>Abelmoschus esculentus</i>	(L.) Moench.	Malvaceae
Abotian	Bariba	<i>Ocimum americanum</i>	L.	Lamiaceae
Abotian	Bariba	<i>Ocimum basilicum</i>	L.	Lamiaceae
Abotian	Bariba	<i>Ocimum sp.</i>		Lamiaceae
Aboualènan	Gourmantche	<i>Portulaca oleracea</i>	L.	Portulacaceae
Aboutchan	Ife	<i>Solanum aethiopicum</i>	L.	Solanaceae
Aburokuseri	Bariba	<i>Heliotropium indicum</i>	L.	Boraginaceae
Achoukpa	Holly	<i>Alternanthera sessilis</i>	(L.) R. Br. Ex Roth	Amaranthaceae
Achoukpa	Holly	<i>Struchium sparganophorum</i>	(L.) Kuntze	Asteraceae
Adaca	Ife	<i>Vernonia amygdalina</i>	Delile	Asteraceae
Adakatin	Cotafon	<i>Entada africana</i>	Guill. & Perr.	Leguminosae-Mimosoideae
Adannou	Cotafon	<i>Synedrella nodiflora</i>	(L.) Gaertn.	Asteraceae
Adéfò	Otammari	<i>Amaranthus cruentus</i>	L.	Amaranthaceae
Adéfò	Otammari	<i>Celosia argentea</i>	L.	Amaranthaceae
Adègbola	Kotokoli	<i>Grewia cissoides</i>	Hutch. & Dalziel	Tiliaceae
Ademe	Cotafon	<i>Corchorus olitorius</i>	L.	Tiliaceae
Adjagboman	Mahi	<i>Solanum americanum</i>	Mill.	Solanaceae
Adjagoun	Idatcha	<i>Manihot esculenta</i>	Crantz	Euphorbiaceae
Adjagu	Mahi	<i>Manihot esculenta</i>	Crantz	Euphorbiaceae
Adjagulu	Tchabe	<i>Senna occidentalis</i>	(L.) Link	Leguminosae-Caesalpinioideae
Adjangou	Idatcha	<i>Manihot esculenta</i>	Crantz	Euphorbiaceae
Adjan'gulu	Tchabe	<i>Senna occidentalis</i>	(L.) Link	Leguminosae-Caesalpinioideae
Adjankpi	Aizo	<i>Chrysanthellum indicum</i>	DC.	Asteraceae
Adjèfè	Ife	<i>Crassocephalum rubens</i>	(Jacq.) S.Moore	Asteraceae
Adjèlè (Akogbo)	Ife	<i>Crassocephalum rubens</i>	(Jacq.) S.Moore	Asteraceae
Adjèmanwofoo	Tchabe	<i>Celosia trigyna</i>	L.	Amaranthaceae
Adjèmanwofoo	Idatcha	<i>Celosia trigyna</i>	L.	Amaranthaceae
Adjèmanwofoo	Tchabe	<i>Celosia trigyna</i>	L.	Amaranthaceae
Adjobodo	Tchabe	<i>Celosia argentea</i>	L.	Amaranthaceae
Adjobodo	Tchabe	<i>Celosia argentea</i>	L.	Amaranthaceae

Adjogodo	Ife	<i>Amaranthus cruentus</i>	L.	Amaranthaceae
Adondon	Bariba	<i>Talinum triangulare</i>	(Jacq.) Willd.	Portulacaceae
Adoukoigbo	Holly	<i>Vernonia colorata</i>	(Willd.) Drake	Asteraceae
Adubadu	Anii	<i>Carica papaya</i>	L.	Caricaceae
Aféfokenka	Anii	<i>Celosia argentea</i>	L.	Amaranthaceae
Afobokpaba	Gourmantche	<i>Portulaca oleracea</i>	L.	Portulacaceae
Afonnou	Bariba	<i>Amaranthus cruentus</i>	L.	Amaranthaceae
Afonnou	Bariba	<i>Amaranthus cruentus</i>	L.	Amaranthaceae
Afonnou	Bariba	<i>Celosia argentea</i>	L.	Amaranthaceae
Afonnu	Bariba	<i>Amaranthus cruentus</i>	L.	Amaranthaceae
Afonnu	Bariba	<i>Amaranthus cruentus</i>	L.	Amaranthaceae
Afonou	Bariba	<i>Amaranthus cruentus</i>	L.	Amaranthaceae
Afonoussouan	Bariba	<i>Celosia argentea</i>	L.	Amaranthaceae
Agariyana	Gourmantche	<i>Cleome rutidosperma</i>	DC.	Capparaceae
Agariyana	Gourmantche	<i>Cleome rutidosperma</i>	DC.	Capparaceae
Agatoun	Holly	<i>Chromolaena odorata</i>	(L.) R. M. King	Asteraceae
Agbankpèdè	Fon	<i>Hallea stipulosa</i>	(DC.) J.-F.Leroy	Rubiaceae
Agbaouforo	Ife	<i>Ficus sp.</i>		Moraceae
Agbèdè	Tchabe	<i>Ficus abutilifolia</i>	(Miq.) Miq.	Moraceae
Agbèdè	Tchabe	<i>Ficus abutilifolia</i>	(Miq.) Miq.	Moraceae
Agbitchan	Mahi	<i>Solanum aethiopicum</i>	L.	Solanaceae
Agblele	Aizo	<i>Vernonia colorata</i>	(Willd.) Drake	Asteraceae
Agblo A Feuille Large	Aizo	<i>Sesamum radiatum</i>	Schumach.& Thonn.	Pedaliaceae
Agblonave	Aizo	<i>Sesamum sp.</i>		Pedaliaceae
Agblonave	Aizo	<i>Vernonia ambigua</i>	Kotschy & Peyr.	Asteraceae
Agblossi	Aizo	<i>Stachytarpheta indica</i>	(L.) Vahl	Verbenaceae
Agbo	Idatcha	<i>Ceratotheca sesamoides</i>	Endl.	Pedaliaceae
Agbo	Mahi	<i>Ceratotheca sesamoides</i>	Endl.	Pedaliaceae
Agbo	Mahi	<i>Sesamum indicum</i>	L.	Pedaliaceae
Agbo	Mahi	<i>Sesamum indicum</i>	L.	Pedaliaceae
Agbon	Adja	<i>Ceratotheca sesamoides</i>	Endl.	Pedaliaceae
Agbon	Adja	<i>Sesamum radiatum</i>	Schumach.& Thonn.	Pedaliaceae
Agbossouwanlui	Cotafon	<i>Senna occidentalis</i>	(L.) Link	Leguminosae- Caesalpinioideae
Agnagna	Mahi	<i>Bombax costatum</i>	Pellegr. & Vuillet	Bombacaceae
Agni	Tchabe	<i>Anogeissus leiocarpus</i>	(DC.) Guill. & Perr.	Combretaceae
Agnigbandjowelo	Cotafon	<i>Amaranthus viridis</i>	L.	Amaranthaceae
Agonlinninnu	Fon	<i>Corchorus sp.</i>		Tiliaceae
Agouagnanan	Gourmantche	<i>Hibiscus sabdariffa</i>	L.	Malvaceae
Agouè	Oueme	<i>Alternanthera sessilis</i>	(L.) R. Br. Ex Roth	Amaranthaceae
Agougou	Idatcha	<i>Ceiba pentandra</i>	(L.) Gaertn.	Bombacaceae
Agougou	Idatcha	<i>Dalbergia saxatilis</i>	Hook.f.	Leguminosae- Papilionoideae

## LOCAL NAMES

Agoulasala	Kotokoli	<i>Detarium microcarpum</i>	Guill. & Perr.	Leguminosae- Caesalpinioideae
Agoussi	Bariba	<i>Citrullus lanatus</i>	(Thunb.) matsum. & Nakai	Cucurbitaceae
Agoussi	Bariba	<i>Citrullus lanatus</i>	(Thunb.) matsum. & Nakai	Cucurbitaceae
Agoussi (Gbèhè)	Bariba	<i>Citrullus lanatus</i>	(Thunb.) matsum. & Nakai	Cucurbitaceae
Aguidi	Holly	<i>Cucurbita moschata</i>	Duchesne	Cucurbitaceae
Aguidi	Holly	<i>Cucurbita pepo</i>	L.	Cucurbitaceae
Aguidigbèdjè	Idatcha	<i>Cucurbita pepo</i>	L.	Cucurbitaceae
Agunmonliyè	Tchabe	<i>Moringa oleifera</i>	Lam.	Moringaceae
Agusi	Holly	<i>Citrullus lanatus</i>	(Thunb.) matsum. & Nakai	Cucurbitaceae
Agusi	Gourmantche	<i>Citrullus lanatus</i>	(Thunb.) matsum. & Nakai	Cucurbitaceae
Agussi	Holly	<i>Citrullus lanatus</i>	(Thunb.) matsum. & Nakai	Cucurbitaceae
Agutchan	Fon	<i>Solanum aethiopicum</i>	L.	Solanaceae
Ahokponou	Cotafon	<i>Eclipta prostrata</i>	(L.) L.	Asteraceae
Aiya	Mahi	<i>Cleome rutidosperma</i>	DC.	Capparaceae
Akanman Kodjèkpo	Ife	<i>Sterculia tragacantha</i>	Lindl.	Sterculiaceae
Akanmanku	Fon	<i>Sesamum indicum</i>	L.	Pedaliaceae
Akaya	Ife	<i>Cleome gynandra</i>	L.	Capparaceae
Akaya	Mahi	<i>Cleome gynandra</i>	L.	Capparaceae
Akaya	Fon	<i>Cleome gynandra</i>	L.	Capparaceae
Akaya	Mahi	<i>Cleome gynandra</i>	L.	Capparaceae
Akaya	Mahi	<i>Cleome gynandra</i>	L.	Capparaceae
Akèman	Idatcha	<i>Sterculia tragacantha</i>	Lindl.	Sterculiaceae
Akemon Kodjèkpo	Idatcha	<i>Sterculia tragacantha</i>	Lindl.	Sterculiaceae
Akémonkodjèékpo	Ife	<i>Sterculia tragacantha</i>	Lindl.	Sterculiaceae
Akèmonkodjèékpo	Tchabe	<i>Sterculia tragacantha</i>	Lindl.	Sterculiaceae
Aklakui	Fon	<i>Lagenaria siceraria</i>	(Molina) Standl.	Cucurbitaceae
Aklala	Mahi	<i>Lippia multiflora</i>	Moldenke	Verbenaceae
Aklala	Mahi	<i>Lippia multiflora</i>	Moldenke	Verbenaceae
Aklamkpa Kaku	Mahi	<i>Lagenaria siceraria</i>	(Molina) Standl.	Cucurbitaceae
Akluibugula	Gourmantche	<i>Lagenaria siceraria</i>	(Molina) Standl.	Cucurbitaceae
Akobobogo	Fon	<i>Emilia sonchifolia</i>	(L.) DC. Ex Wight	Asteraceae
Akogbo	Aizo	<i>Crassocephalum rubens</i>	(Jacq.) S.Moore	Asteraceae
Akogbo	Cotafon	<i>Crassocephalum rubens</i>	(Jacq.) S.Moore	Asteraceae
Akogbo	Fon	<i>Crassocephalum rubens</i>	(Jacq.) S.Moore	Asteraceae
Akogbo	Mahi	<i>Crassocephalum rubens</i>	(Jacq.) S.Moore	Asteraceae
Akogbo	Fon	<i>Crassocephalum rubens</i>	(Jacq.) S.Moore	Asteraceae
Akohoun	Idatcha	<i>Ocimum basilicum</i>	L.	Lamiaceae
Akohoun	Idatcha	<i>Ocimum basilicum</i>	L.	Lamiaceae
Akohoun	Mahi	<i>Ocimum basilicum</i>	L.	Lamiaceae
Akohoun	Aizo	<i>Ocimum basilicum</i>	L.	Lamiaceae

TRADITIONAL VEGETABLES OF BENIN

Akohun	Fon	<i>Ocimum canum</i>	L.	Lamiaceae
Akohun	Mahi	<i>Ocimum canum</i>	L.	Lamiaceae
Akolohuntanko	Anii	<i>Hibiscus sabdariffa</i>	L.	Malvaceae
Akon	Holly	<i>Vitex doniana</i>	Sweet	Verbenaceae
Akouéta	Oueme	<i>Heliotropium indicum</i>	L.	Boraginaceae
Akoussimekpe	Holly	<i>Asystasia gangetica</i>	(L.) T. Anderson	Acanthaceae
Akpatin	Idatcha	<i>Bombax costatum</i>	Pellegr. & Vuillet	Bombacaceae
Akpignikokonan	Gourmantche	<i>Amaranthus spinosus</i>	L.	Amaranthaceae
Aku	Tchabe	<i>Vitex doniana</i>	Sweet	Verbenaceae
Akumanlakpa	Idatcha	<i>Vitex doniana</i>	Sweet	Verbenaceae
Akunbo	Anii	<i>Abelmoschus esculentus</i>	(L.) Moench.	Malvaceae
Alakalakafiana	Gourmantche	<i>Boerhavia erecta</i>	L.	Nyctaginaceae
Alanlin	Mahi	<i>Corchorus tridens</i>	L.	Tiliaceae
Alatotwe	Aizo	<i>Launea taraxacifolia</i>	(Willd.) Amin ex C. Jeffrey	Asteraceae
Aléchou	Ife	<i>Vernonia sp.</i>		Asteraceae
Aléfo	Kotokoli	<i>Amaranthus cruentus</i>	L.	Amaranthaceae
Aléfo	Anii	<i>Amaranthus cruentus</i>	L.	Amaranthaceae
Aléfo	Dendi	<i>Amaranthus viridis</i>	L.	Amaranthaceae
Aléfo	Kotokoli	<i>Celosia argentea</i>	L.	Amaranthaceae
Aléfo	Anii	<i>Celosia argentea</i>	L.	Amaranthaceae
Aléfo	Dendi	<i>Celosia argentea</i>	L.	Amaranthaceae
Aléfo	Anii	<i>Talinum triangulare</i>	(Jacq.) Willd.	Portulacaceae
Alefò	Otammari	<i>Celosia argentea</i>	L.	Amaranthaceae
Alefo (Fotètè Monto)	Otammari	<i>Amaranthus sp.</i>		Amaranthaceae
Alingbowounkoun	Cotafon	<i>Deinbollia pinnata</i>	(Poir.) Schumach.& Thonn.	Sapindaceae
Aloman	Cotafon	<i>Vernonia amygdalina</i>	Delile	Asteraceae
Aloman	Aizo	<i>Vernonia amygdalina</i>	Delile	Asteraceae
Aloman	Fon	<i>Vernonia amygdalina</i>	Delile	Asteraceae
Aloman	Mahi	<i>Vernonia amygdalina</i>	Delile	Asteraceae
Aloman	Mahi	<i>Vernonia amygdalina</i>	Delile	Asteraceae
Aloman	Mahi	<i>Vernonia amygdalina</i>	Delile	Asteraceae
Alomangbo	Oueme	<i>Vernonia amygdalina</i>	Delile	Asteraceae
Alouloui	Oueme	<i>Melochia corchorifolia</i>	L.	Sterculiaceae
Aloviatoon	Oueme	<i>Croton lobatus</i>	L.	Euphorbiaceae
Aluohunkonnan	Gourmantche	<i>Solanum eriathum</i>	D.Don	Solanaceae
Amanvive	Aizo	<i>Vernonia amygdalina</i>	Delile	Asteraceae
Amanvivè	Fon	<i>Vernonia amygdalina</i>	Delile	Asteraceae
Ambaba	Holly	<i>Ocimum gratissimum</i>	L.	Lamiaceae
Am'baba	Holly	<i>Ocimum gratissimum</i>	L.	Lamiaceae
Amélikaka	Anii	<i>Cucumeropsis mannii</i>	Naud	Cucurbitaceae
Anoukoro	Holly	<i>Vernonia amygdalina</i>	Delile	Asteraceae
Anroubaba	Holly	<i>Ocimum gratissimum</i>	L.	Lamiaceae
Anuko	Holly	<i>Vernonia amygdalina</i>	Delile	Asteraceae
Anuwin	Bariba	<i>Corchorus aestuans</i>	L.	Tiliaceae

## LOCAL NAMES

Anuwin	Bariba	<i>Corchorus aestuans</i>	L.	Tiliaceae
Aribara	Idatcha	<i>Ocimum gratissimum</i>	L.	Lamiaceae
Aribara	Idatcha	<i>Ocimum gratissimum</i>	L.	Lamiaceae
Arigbisso	Ife	<i>Phyllanthus amarus</i>	Schumach.& Thonn.	Euphorbiaceae
Arigbisso	Ife	<i>Phyllanthus amarus</i>	Schumach.& Thonn.	Euphorbiaceae
Arikoro	Idatcha	<i>Vernonia colorata</i>	(Willd.) Drake	Asteraceae
Arikoro	Ife	<i>Vernonia sp.</i>		Asteraceae
Aroman	Idatcha	<i>Vernonia amygdalina</i>	Delile	Asteraceae
Aroman	Idatcha	<i>Vernonia amygdalina</i>	Delile	Asteraceae
Aroman	Ife	<i>Vernonia amygdalina</i>	Delile	Asteraceae
Aroowotchè	Idatcha	<i>Citrullus lanatus</i>	(Thunb.) matsum. & Nakai	Cucurbitaceae
Arounbam'ba	Ife	<i>Ocimum gratissimum</i>	L.	Lamiaceae
Arumonba	Ife	<i>Ocimum gratissimum</i>	L.	Lamiaceae
Asan	Fon	<i>Cissus populnea</i>	Guill. & Perr.	Vitaceae
Asro	Fon	<i>Irvingia gabonensis</i>	(Aubry-Lecomte ex O'Rorke) Baill.	Irvingiaceae
Asrokui	Fon	<i>Irvingia gabonensis</i>	(Aubry-Lecomte ex O'Rorke) Baill.	Irvingiaceae
Assan	Mahi	<i>Cissus populnea</i>	Guill. & Perr.	Vitaceae
Assan	Mahi	<i>Cissus populnea</i>	Guill. & Perr.	Vitaceae
Assro	Mahi	<i>Irvingia gabonensis</i>	(Aubry-Lecomte ex O'Rorke) Baill.	Irvingiaceae
Atakpa	Mahi	<i>Securidaca longepedunculata</i>	Fresen.	Polygalaceae
Atapòra	Otammari	<i>Solanum sp.</i>		Solanaceae
Atchakabo	Anii	<i>Vigna unguiculata</i>	(L.) Walp.	Leguminosae- Papilionoideae
Atchélekman	Anii	<i>Asystasia gangetica</i>	(L.) T. Anderson	Acanthaceae
Atchélikan	Anii	<i>Asystasia gangetica</i>	(L.) T. Anderson	Acanthaceae
Atchiwilibenan	Anii	<i>Basilicum polystachyon</i>	(L.) Moench.	Lamiaceae
Atihadji	Aizo	<i>Manihot esculenta</i>	Crantz	Euphorbiaceae
Atiwe	Cotafon	<i>Triplochiton scleroxylon</i>	K.Schum.	Sterculiaceae
Atoo	Holly	<i>Cucumeropsis mannii</i>	Naud	Cucurbitaceae
Atooilé	Holly	<i>Lagenaria siceraria</i>	(Molina) Standl.	Cucurbitaceae
Atukuluesuan	Anii	<i>Alternanthera sessilis</i>	(L.) R. Br. Ex Roth	Amaranthaceae
Avlounvé	Oueme	<i>Celosia argentea</i>	L.	Amaranthaceae
Avognanman	Oueme	<i>Stachytarpheta indica</i>	(L.) Vahl	Verbenaceae
Avounvo	Cotafon	<i>Celosia argentea</i>	L.	Amaranthaceae
Avousigan	Mahi	<i>Celosia sp.</i>		Amaranthaceae
Avunvo	Mahi	<i>Celosia argentea</i>	L.	Amaranthaceae
Awha	Mahi	<i>Parkia biglobosa</i>	(Jacq.) R.Br.ex Benth.	Leguminosae- Mimosoideae
Awontimefoun	Cotafon	<i>Passiflora foetida</i>	L.	Passifloraceae

TRADITIONAL VEGETABLES OF BENIN

Awonto	Cotafon	<i>Launea taraxacifolia</i>	(Willd.) Amin ex C. Jeffrey	Asteraceae
Awoundjagbe	Cotafon	<i>Amaranthus spinosus</i>	L.	Amaranthaceae
Axha	Fon	<i>Parkia biglobosa</i>	(Jacq.) R.Br.ex Benth.	Leguminosae- Mimosoideae
Axha	Mahi	<i>Parkia biglobosa</i>	(Jacq.) R.Br.ex Benth.	Leguminosae- Mimosoideae
Axha	Fon	<i>Parkia biglobosa</i>	(Jacq.) R.Br.ex Benth.	Leguminosae- Mimosoideae
Axha	Mahi	<i>Parkia biglobosa</i>	(Jacq.) R.Br.ex Benth.	Leguminosae- Mimosoideae
Axhuassamandjè	Fon	<i>Acalypha ciliata</i>	Forssk.	Euphorbiaceae
Ayahouènu	Fon	<i>Senna occidentalis</i>	(L.) Link	Leguminosae- Caesalpinioideae
Ayahuènu	Fon	<i>Senna occidentalis</i>	(L.) Link	Leguminosae- Caesalpinioideae
Ayawenou	Aizo	<i>Senna sophera</i>	(L.) Roxb.	Leguminosae- Caesalpinioideae
Ayiku	Mahi	<i>Vigna unguiculata</i>	(L.) Walp.	Leguminosae- Papilionoideae
Ayiman	Adja	<i>Vigna unguiculata</i>	(L.) Walp.	Leguminosae- Papilionoideae
Ayiman	Cotafon	<i>Vigna unguiculata</i>	(L.) Walp.	Leguminosae- Papilionoideae
Ayiman	Aizo	<i>Vigna unguiculata</i>	(L.) Walp.	Leguminosae- Papilionoideae
Ayiman	Fon	<i>Vigna unguiculata</i>	(L.) Walp.	Leguminosae- Papilionoideae
Ayiman	Mahi	<i>Vigna unguiculata</i>	(L.) Walp.	Leguminosae- Papilionoideae
Ayiman	Fon	<i>Vigna unguiculata</i>	(L.) Walp.	Leguminosae- Papilionoideae
Ayiman	Mahi	<i>Vigna unguiculata</i>	(L.) Walp.	Leguminosae- Papilionoideae
Ayiman	Oueme	<i>Vigna unguiculata</i>	(L.) Walp.	Leguminosae- Papilionoideae
Ayinkpinnan	Gourmantche	<i>Amaranthus cruentus</i>	L.	Amaranthaceae
Ayinkpinnan	Gourmantche	<i>Amaranthus spinosus</i>	L.	Amaranthaceae
Ayinkpinnan	Gourmantche	<i>Celosia argentea</i>	L.	Amaranthaceae
Ayinyèrè	Ife	<i>Moringa oleifera</i>	Lam.	Moringaceae
Ayodogo	Aizo	<i>Amaranthus viridis</i>	L.	Amaranthaceae
Ayoyo	Anii	<i>Corchorus olitorius</i>	L.	Tiliaceae
Ayoyo	Ife	<i>Corchorus olitorius</i>	L.	Tiliaceae
Ayoyo	Ife	<i>Corchorus olitorius</i>	L.	Tiliaceae
Ayoyo	Kotokoli	<i>Corchorus olitorius</i>	L.	Tiliaceae
Ayoyo	Kotokoli	<i>Corchorus olitorius</i>	L.	Tiliaceae
Ayoyo	Dendi	<i>Corchorus olitorius</i>	L.	Tiliaceae



## LOCAL NAMES

Ayoyo	Dendi	<i>Corchorus olitorius</i>	L.	Tiliaceae
Azatalouga	Aizo	<i>Corchorus olitorius</i>	L.	Tiliaceae
Azataluga	Fon	<i>Corchorus tridens</i>	L.	Tiliaceae
Azataluga	Mahi	<i>Corchorus tridens</i>	L.	Tiliaceae
Azataluga	Mahi	<i>Corchorus tridens</i>	L.	Tiliaceae
Azataluga; Glénonmandovodu	Fon	<i>Corchorus tridens</i>	L.	Tiliaceae
Aziguidigokui	Aizo	<i>Macrosphyra longistyla</i>	(DC.) Hiern	Rubiaceae
Aziokeke	Aizo	<i>Cola millenii</i>	K.Schum.	Sterculiaceae
Azohan Ou Goussi	Aizo	<i>Cucumeropsis mannii</i>	Naud	Cucurbitaceae
Azokunman	Aizo	<i>Rothmannia longiflora</i>	Salisb.	Rubiaceae
Azonhongogoé	Cotafon	<i>Macrosphyra longistyla</i>	(DC.) Hiern	Rubiaceae
Azuigbe	Cotafon	<i>Tridax procumbens</i>	L.	Asteraceae
Babanon	Wama	<i>Solanum sp.</i>		Solanaceae
Babarifaatu	Wama	<i>Solanum sp.</i>		Solanaceae
Bahatogo	Bariba	<i>Annona senegalensis</i>	Pers.	Annonaceae
Bako	Kotokoli	<i>Piliostigma thonningii</i>	(Schumach.) Milne-Redh.	Leguminosae- Caesalpinioideae
Balabalodè	Kotokoli	<i>Burkea africana</i>	Hook.	Leguminosae- Caesalpinioideae
Banan	Anii	<i>Corchorus olitorius</i>	L.	Tiliaceae
Ban'ctchi	Kotokoli	<i>Manihot glaziovii</i>	Müll.Arg.	Euphorbiaceae
Bangani	Kotokoli	<i>Xanthosoma maffafa</i>	Schott	Araceae
Banho	Bariba	<i>Opilia amentacea</i>	Roxb.	Opiliaceae
Baountchi	Ife	<i>Manihot esculenta</i>	Crantz	Euphorbiaceae
Baratoko	Bariba	<i>Annona senegalensis</i>	Pers.	Annonaceae
Barichiri	Dendi	<i>Acalypha ciliata</i>	Forssk.	Euphorbiaceae
Baroman	Wama	<i>Momordica charantia</i>	L.	Cucurbitaceae
Batamaé	Dendi	<i>Lagenaria siceraria</i>	(Molina) Standl.	Cucurbitaceae
Batokowurusu	Bariba	<i>Annona senegalensis</i>	Pers.	Annonaceae
Bawokonan	Boko	<i>Boerhavia erecta</i>	L.	Nyctaginaceae
Bawounna	Anii	<i>Corchorus olitorius</i>	L.	Tiliaceae
Bawounnaguimanhan nin	Anii	<i>Corchorus tridens</i>	L.	Tiliaceae
Bèbèyabu	Wama	<i>Launaea nudicaulis</i>	(L.) Hook.f.	Asteraceae
Bèbiré	Wama	<i>Gardenia sp.</i>		Rubiaceae
Béhountché	Kotokoli	<i>Manihot esculenta</i>	Crantz	Euphorbiaceae
Benkéni	Anii	<i>Xanthosoma maffafa</i>	Schott	Araceae
Bentchi	Anii	<i>Manihot esculenta</i>	Crantz	Euphorbiaceae
Béyintchi	Anii	<i>Manihot esculenta</i>	Crantz	Euphorbiaceae
Bigbèmbèrè	Kotokoli	<i>Hibiscus sabdariffa</i>	L.	Malvaceae
Blaa	Boko	<i>Vigna unguiculata</i>	(L.) Walp.	Leguminosae- Papilionoideae
Blaa	Boko	<i>Vigna unguiculata</i>	(L.) Walp.	Leguminosae- Papilionoideae
Blaca	Fon	<i>Hexalobus monopetalus</i>	(A.Rich)	Annonaceae
Blaokona	Boko	<i>Boerhavia diffusa</i>	L.	Nyctaginaceae

TRADITIONAL VEGETABLES OF BENIN

Bloala	Boko	<i>Cyphostemma adenocaula</i>	(Steud.) Desc.	Vitaceae
Bobo	Boko	<i>Solanum macrocarpon</i>	L.	Solanaceae
Bobo	Boko	<i>Solanum macrocarpon</i>	L.	Solanaceae
Bobobobo	Anii	<i>Physalis angulata</i>	L.	Solanaceae
Boboyo	Anii	<i>Bidens pilosa</i>	L.	Asteraceae
Bogobogo	Anii	<i>Talinum triangulare</i>	(Jacq.) Willd.	Portulacaceae
Bokangala	Anii	<i>Anogeissus leiocarpus</i>	(DC.) Guill. & Perr.	Combretaceae
Bokangala	Anii	<i>Anogeissus leiocarpus</i>	(DC.) Guill. & Perr.	Combretaceae
Bokoboko	Anii	<i>Talinum triangulare</i>	(Jacq.) Willd.	Portulacaceae
Bokoboko	Anii	<i>Talinum triangulare</i>	(Jacq.) Willd.	Portulacaceae
Bokoïkossou	Dendi	<i>Vitex doniana</i>	Sweet	Verbenaceae
Bola	Kotokoli	<i>Fadogia erythrophloea</i>	(K.Schum. & K.Krause) Hutch. & Dalziel	Rubiaceae
Bola	Kotokoli	<i>Grewia mollis</i>	Juss.	Tiliaceae
Bola	Kotokoli	<i>Grewia mollis</i>	Juss.	Tiliaceae
Bolo	Adja	<i>Crassocephalum rubens</i>	(Jacq.) S.Moore	Asteraceae
Bonakpanbo	Gourmantche	<i>Azelia africana</i>	Sm.	Leguminosae-Caesalpinioideae
Bonourégou	Bariba	<i>Ocimum basilicum</i>	L.	Lamiaceae
Bonourékou	Bariba	<i>Ocimum basilicum</i>	L.	Lamiaceae
Bonourogou	Bariba	<i>Ocimum gratissimum</i>	L.	Lamiaceae
Bootaman	Wama	<i>Hibiscus asper</i>	Hook.f.	Malvaceae
Bootaman	Wama	<i>Hibiscus asper</i>	Hook.f.	Malvaceae
Boroumènou	Kotokoli	<i>Cnestis ferruginea</i>	Vahl ex DC.	Connaraceae
Bossaman/Soman	Mahi	<i>Celosia sp.</i>		Amaranthaceae
Boufobou	Gourmantche	<i>Bombax costatum</i>	Pellegr. & Vuillet	Bombacaceae
Boukamkambou	Gourmantche	<i>Ficus thonningii</i>	Blume	Moraceae
Boulangakassi	Dendi	<i>Tapinanthus sp.</i>		Loranthaceae
Bouloubouli	Gourmantche	<i>Moringa oleifera</i>	Lam.	Moringaceae
Boupoukanbou	Gourmantche	<i>Ceiba pentandra</i>	(L.) Gaertn.	Bombacaceae
Bourgbèmèrè	Kotokoli	<i>Melastomastrum segregatum</i>	(Benth.) A.&R.Fern.	Melastomataceae
Bousamsambou	Gourmantche	<i>Celtis toka</i>	(Forssk.) Hepper & J.R.I. Wood	Celtidaceae
Bueru	Bariba	<i>Afraegle paniculata</i>	(Schumach.& Thonn.)	Rutaceae
Bufuobu	Gourmantche	<i>Bombax costatum</i>	Pellegr. & Vuillet	Bombacaceae
Bugnanbu	Gourmantche	<i>Vitex doniana</i>	Sweet	Verbenaceae
Bugnanbu	Gourmantche	<i>Vitex doniana</i>	Sweet	Verbenaceae
Bukankanbu	Gourmantche	<i>Ficus ingens</i>	(Miq.) Miq.	Moraceae
Bunasoobu	Gourmantche	<i>Gardenia sp.</i>		Rubiaceae
Bupugumbu	Gourmantche	<i>Bombax costatum</i>	Pellegr. & Vuillet	Bombacaceae
Bupuobu	Gourmantche	<i>Tamarindus indica</i>	L.	Leguminosae-Caesalpinioideae
Busoron'bu	Wama	<i>Cochlospermum</i>	Hook.f.	Cochlospermaceae

## LOCAL NAMES

Busoron'bu	Wama	<i>planchoni</i> <i>Cochlospermum tinctorium</i>	A.Rich.	ae Cochlospermaceae
Butuobu	Gourmantche	<i>Adansonia digitata</i>	L.	Bombacaceae
Cacaacra	Idatcha	<i>Lagenaria siceraria</i>	(Molina) Standl.	Cucurbitaceae
Canwun	Idatcha	<i>Lippia multiflora</i>	Moldenke	Verbenaceae
Celiman	Aizo	<i>Moringa oleifera</i>	Lam.	Moringaceae
Chanmndidoué	Cotafon	<i>Ocimum gratissimum</i>	L.	Lamiaceae
Chanmndidoué	Aizo	<i>Ocimum gratissimum</i>	L.	Lamiaceae
Chlochlodin	Cotafon	<i>Heliotropium indicum</i>	L.	Boraginaceae
Chyiao	Aizo	<i>Ocimum gratissimum</i>	L.	Lamiaceae
Cochlossoudinkpatcha	Aizo	<i>Heliotropium indicum</i>	L.	Boraginaceae
Coclossoudinkpatcha	Mahi	<i>Heliotropium indicum</i>	L.	Boraginaceae
Cooko	Anii	<i>Colocasia esculenta</i>	(L.) Schott	Araceae
Daboukonkondi	Gourmantche	<i>Amaranthus spinosus</i>	L.	Amaranthaceae
Dadohissirè	Mahi	<i>Vernonia colorata</i>	(Willd.) Drake	Asteraceae
Dagba	Mahi	<i>Sterculia tragacantha</i>	Lindl. (Poir.)	Sterculiaceae
Damandafitin	Aizo	<i>Deinbollia pinnata</i>	Schumach.& Thonn.	Sapindaceae
Damando	Kotokoli	<i>Swartzia madagascariensis</i>	Desv.	Leguminosae- Papilionoideae
Damandodjè	Oueme	<i>Justicia anselliana</i>	(Ness)	Acanthaceae
Damandodjè	Aizo	<i>Justicia anselliana</i>	(Ness)	Acanthaceae
Danbakaru	Bariba	<i>Ocimum gratissimum</i>	L.	Lamiaceae
Darouafounou	Bariba	<i>Hydrolea macrosepala</i>	A.W.	Hydrophyllaceae
Dègbodi	Aizo	<i>Stachytarpheta indica</i>	(L.) Vahl	Verbenaceae
Dèhouiman	Mahi	<i>Bombax costatum</i>	Pellegr. & Vuillet	Bombacaceae
Dèhounkan	Oueme	<i>Portulaca oleracea</i>	L.	Portulacaceae
Demi	Adja	<i>Corchorus olitorius</i>	L.	Tiliaceae
Demi	Adja	<i>Corchorus olitorius</i>	L.	Tiliaceae
Dèmin	Cotafon	<i>Corchorus olitorius</i>	L.	Tiliaceae
Dèminvê	Cotafon	<i>Corchorus olitorius</i>	L.	Tiliaceae
Dendèlè	Kotokoli	<i>Ricinus communis</i>	L.	Euphorbiaceae
Deyouman	Aizo	<i>Asystasia gangetica</i>	(L.) T. Anderson	Acanthaceae
Digbèmèrè	Kotokoli	<i>Hibiscus sabdariffa</i>	L.	Malvaceae
Dipeeri	Otammari	<i>Cucurbita pepo</i>	L.	Cucurbitaceae
Direm	Bariba	<i>Blighia sapida</i>	König	Sapindaceae
Direm	Bariba	<i>Blighia sapida</i>	König	Sapindaceae
Dirénou	Bariba	<i>Blighia sapida</i>	König	Sapindaceae
Dirérou	Bariba	<i>Blighia sapida</i>	König	Sapindaceae
Diyua'ndi	Otammari	<i>Cissus populnea</i>	Guill. & Perr. (Ness) T.	Vitaceae Acanthaceae
Djadjagoun	Gourmantche	<i>Justicia tenella</i>	Anderson (Ness) T.	Acanthaceae
Djagoudjagou	Ife	<i>Justicia tenella</i>	Anderson (Ness) T.	Acanthaceae
Djagounmanlakpa	Ife	<i>Vitex doniana</i>	Sweet	Verbenaceae
Djagudjagu	Ife	<i>Justicia tenella</i>	(Ness) T.	Acanthaceae

Djagudjagu	Tchabe	<i>Justicia tenella</i>	Anderson (Ness) T.	Acanthaceae
Djagudjagu	Tchabe	<i>Justicia tenella</i>	Anderson (Ness) T.	Acanthaceae
Djagumanlakpa	Ife	<i>Vitex doniana</i>	Sweet	Verbenaceae
Djakpatagbe	Cotafon	<i>Tridax procumbens</i>	L.	Asteraceae
Djankoui	Adja	<i>Bidens pilosa</i>	L.	Asteraceae
Djawawa	Idatcha	<i>Cissus populnea</i>	Guill. & Perr.	Vitaceae
Djawawa	Idatcha	<i>Cissus populnea</i>	Guill. & Perr.	Vitaceae
Djendjé	Holly	<i>Celosia trigyna</i>	L.	Amaranthaceae
Djén'djé	Holly	<i>Cleome gynandra</i>	L.	Capparaceae
Djètinman	Fon	<i>Chassalia kolly</i>	(Schumach.) Hepper	Rubiaceae
Djindje	Holly	<i>Celosia trigyna</i>	L.	Amaranthaceae
Djirèbou	Bariba	<i>Blighia sapida</i>	König	Sapindaceae
Djogbolo	Mahi	<i>Celosia argentea</i>	L.	Amaranthaceae
Djogodo	Idatcha	<i>Corchorus tridens</i>	L.	Tiliaceae
Djogodo	Idatcha	<i>Corchorus tridens</i>	L.	Tiliaceae
Djomankougbedé	Oueme	<i>Basella alba</i>	L.	Basellaceae
Dodo Ikpokpo	Holly	<i>Talinum triangulare</i>	(Jacq.) Willd.	Portulacaceae
Dodoyikpokpo	Holly	<i>Talinum triangulare</i>	(Jacq.) Willd.	Portulacaceae
Dofoukela	Boko	<i>Ipomoea sp.</i>		Convolvulaceae
Dogbo	Cotafon	<i>Laportea aestuans</i>	(L.) Chew	Urticaceae
Dogo	Bariba	<i>Manihot esculenta</i>	Crantz	Euphorbiaceae
Dohi	Bariba	<i>Sesamum radiatum</i>	Schumach.& Thonn.	Pedaliaceae
Dohoungbaana	Boko	<i>Sesamum indicum</i>	L.	Pedaliaceae
Dokui	Mahi	<i>Ipomoea batatas</i>	(L.) Lam.	Convolvulaceae
Domp	Bariba	<i>Parkia biglobosa</i>	(Jacq.) R.Br.ex Benth.	Leguminosae- Mimosoideae
Donbukohundu	Bariba	<i>Parkia biglobosa</i>	(Jacq.) R.Br.ex Benth.	Leguminosae- Mimosoideae
Donwada	Fon	<i>Adenia lobata</i>	(Jacq.) Engl.	Passifloraceae
Doobu	Wama	<i>Parkia biglobosa</i>	(Jacq.) R.Br.ex Benth.	Leguminosae- Mimosoideae
Doogo	Bariba	<i>Manihot esculenta</i>	Crantz	Euphorbiaceae
Dopua	Boko	<i>Citrullus lanatus</i>	(Thunb.) matsum. & Nakai	Cucurbitaceae
Dorontouan	Bariba	<i>Struchium sparganophorum</i>	(L.) Kuntze	Asteraceae
Dossé	Tchabe	<i>Sesamum sp.</i>		Pedaliaceae
Dossi	Boko	<i>Ceratotheca sesamoides</i>	Endl.	Pedaliaceae
Dossi	Bariba	<i>Sesamum indicum</i>	L.	Pedaliaceae
Dossi	Bariba	<i>Sesamum indicum</i>	L.	Pedaliaceae
Dossi	Bariba	<i>Sesamum radiatum</i>	Schumach.& Thonn.	Pedaliaceae

## LOCAL NAMES

Dossi	Bariba	<i>Sesamum radiatum</i>	Schumach.& Thonn.	Pedaliaceae
Dossi	Bariba	<i>Sesamum radiatum</i>	Schumach.& Thonn.	Pedaliaceae
Dossi	Bariba	<i>Sesamum radiatum</i>	Schumach.& Thonn.	Pedaliaceae
Dossi	Bariba	<i>Sesamum radiatum</i>	Schumach.& Thonn.	Pedaliaceae
Dossila	Boko	<i>Ceratotheca sesamoides</i>	Endl.	Pedaliaceae
Dosso	Mahi	<i>Combretum collinum</i>	Fresen	Combretaceae
Dougba	Cotafon	<i>Senna sophera</i>	(L.) Roxb.	Leguminosae- Caesalpinioideae
Doulou	Kotokoli	<i>Entada africana</i>	Guill. & Perr.	Leguminosae- Mimosoideae
Doundoutchili	Dendi	<i>Ipomoea batatas</i>	(L.) Lam.	Convolvulaceae
Drele	Adja	<i>Moringa oleifera</i>	Lam.	Moringaceae
Drele	Adja	<i>Moringa oleifera</i>	Lam.	Moringaceae
Eayetailler	Holly	<i>Croton lobatus</i>	L.	Euphorbiaceae
Ecola	Kotokoli	<i>Salacia sp.</i>		Celastraceae
Eéwo	Tchabe	<i>Vernonia amygdalina</i>	Delile	Asteraceae
Eéwo	Tchabe	<i>Vernonia amygdalina</i>	Delile	Asteraceae
Effoignanri	Holly	<i>Launea taraxacifolia</i>	(Willd.) Amin ex C. Jeffrey	Asteraceae
Effooko	Holly	<i>Cleome gynandra</i>	L.	Capparaceae
Effooko	Holly	<i>Cleome gynandra</i>	L.	Capparaceae
Efo	Boko	<i>Amaranthus cruentus</i>	L.	Amaranthaceae
Efo	Idatcha	<i>Cleome gynandra</i>	L.	Capparaceae
Efo	Idatcha	<i>Cleome gynandra</i>	L.	Capparaceae
Efo	Holly	<i>Launea taraxacifolia</i>	(Willd.) Amin ex C. Jeffrey	Asteraceae
Efo Docteur	Tchabe	<i>Amaranthus cruentus</i>	L.	Amaranthaceae
Efo/Aléfo	Anii	<i>Celosia argentea</i>	L.	Amaranthaceae
Efun	Ife	<i>Cleome gynandra</i>	L.	Capparaceae
Eguèkè	Mahi	<i>Manihot esculenta</i>	Crantz	Euphorbiaceae
Egusi Accra	Tchabe	<i>Lagenaria siceraria</i>	(Molina) Standl.	Cucurbitaceae
Egusi Bara	Tchabe	<i>Citrullus lanatus</i>	(Thunb.) matsum. & Nakai	Cucurbitaceae
Egusi Ilè	Tchabe	<i>Lagenaria siceraria</i>	(Molina) Standl.	Cucurbitaceae
Egusi Itoo	Tchabe	<i>Cucumeropsis mannii</i>	Naud	Cucurbitaceae
Egusi Itoo	Tchabe	<i>Cucumeropsis mannii</i>	Naud	Cucurbitaceae
Egusi Kaka	Tchabe	<i>Lagenaria siceraria</i>	(Molina) Standl.	Cucurbitaceae
Egusi Ougba	Tchabe	<i>Lagenaria siceraria</i>	(Molina) Standl.	Cucurbitaceae
Eiyo	Holly	<i>Corchorus tridens</i>	L.	Tiliaceae
Eléguédé	Tchabe	<i>Cucurbita maxima</i>	Duchesne	Cucurbitaceae
Eminnin	Holly	<i>Ipomoea aquatica</i>	Forssk.	Convolvulaceae
Eminninodo	Holly	<i>Ipomoea aquatica</i>	Forssk.	Convolvulaceae
Episséwé	Anii	<i>Conyza sumatrensis</i>	(Retz.) E.H.Walker	Asteraceae

TRADITIONAL VEGETABLES OF BENIN

Eriere	Holly	<i>Spigelia anthelmia</i>	L.	Loganiaceae
Esidakika	Anii	<i>Citrullus lanatus</i>	(Thunb.) matsum. & Nakai	Cucurbitaceae
Essèdakaka	Anii	<i>Citrullus lanatus</i>	(Thunb.) matsum. & Nakai	Cucurbitaceae
Etayi	Holly	<i>Cleome rutidosperma</i>	DC.	Capparaceae
Etiologbo	Holly	<i>Emilia praetermissa</i>	Milne-Rredh.	Asteraceae
Etiologbo	Holly	<i>Emilia sonchifolia</i>	(L.) DC. Ex Wight	Asteraceae
Evoun	Adja	<i>Ficus asperifolia</i>	Miq.	Moraceae
Ewa	Idatcha	<i>Vigna unguiculata</i>	(L.) Walp.	Leguminosae- Papilionoideae
Ewa	Idatcha	<i>Vigna unguiculata</i>	(L.) Walp.	Leguminosae- Papilionoideae
Ewa	Tchabe	<i>Vigna unguiculata</i>	(L.) Walp.	Leguminosae- Papilionoideae
Ewa	Holly	<i>Vigna unguiculata</i>	(L.) Walp.	Leguminosae- Papilionoideae
Ewe Eleguede	Holly	<i>Cucurbita pepo</i>	L.	Cucurbitaceae
Ewe Iroun	Holly	<i>Ocimum basilicum</i>	L.	Lamiaceae
Ewe Kpaki	Holly	<i>Manihot esculenta</i>	Crantz	Euphorbiaceae
Ewe Kpaki	Holly	<i>Manihot esculenta</i>	Crantz	Euphorbiaceae
Ewe Orou	Holly	<i>Croton lobatus</i>	L.	Euphorbiaceae
Ewedoki Ou Eminnin	Holly	<i>Ipomoea batatas</i>	(L.) Lam.	Convolvulaceae
Eweewa	Holly	<i>Vigna unguiculata</i>	(L.) Walp.	Leguminosae- Papilionoideae
Ewèèwa	Holly	<i>Vigna unguiculata</i>	(L.) Walp.	Leguminosae- Papilionoideae
Ewegoussi	Holly	<i>Citrullus lanatus</i>	(Thunb.) matsum. & Nakai	Cucurbitaceae
Ewèidokui	Holly	<i>Ipomoea batatas</i>	(L.) Lam.	Convolvulaceae
Ewéidou	Holly	<i>Solanum americanum</i>	Mill.	Solanaceae
Eweikoko	Holly	<i>Xanthosoma maffafa</i>	Schott	Araceae
Ewèikoko	Holly	<i>Xanthosoma maffafa</i>	Schott	Araceae
Eweila	Holly	<i>Abelmoschus esculentus</i>	(L.) Moench.	Malvaceae
Eyitayi	Holly	<i>Cleome rutidosperma</i>	DC.	Capparaceae
Eyo	Holly	<i>Corchorus olitorius</i>	L.	Tiliaceae
Eyo Aguidan	Holly	<i>Corchorus tridens</i>	L.	Tiliaceae
Eyogbè	Ife	<i>Corchorus sp.</i>		Tiliaceae
Eyouro	Holly	<i>Vernonia amygdalina</i>	Delile	Asteraceae
Faczao	Kotokoli	<i>Psorospermum febrifugum</i>	Spach	Clusiaceae
Fakou	Dendi	<i>Corchorus tridens</i>	L.	Tiliaceae
Fakou	Dendi/ Djerma	<i>Corchorus tridens</i>	L.	Tiliaceae
Fakou	Dendi	<i>Corchorus tridens</i>	L.	Tiliaceae
Fannan	Kotokoli	<i>Ochna schweinfurthiana</i>	F. Hoffm.	Ochnaceae
Fèèman	Wama	<i>Corchorus sp.</i>		Tiliaceae
Fèèman	Wama	<i>Corchorus tridens</i>	L.	Tiliaceae



## LOCAL NAMES

Fééokuta	Tchabe	<i>Ocimum canum</i>	L.	Lamiaceae
Feigniman	Oueme	<i>Manihot esculenta</i>	Crantz	Euphorbiaceae
Feignin	Mahi	<i>Manihot esculenta</i>	Crantz	Euphorbiaceae
Fetri	Adja	<i>Abelmoschus esculentus</i>	(L.) Moench.	Malvaceae
Fetri	Adja	<i>Abelmoschus esculentus</i>	(L.) Moench.	Malvaceae
Feuyito	Dendi	<i>Ceratotheca sesamoides</i>	Endl.	Pedaliaceae
Fevi	Aizo	<i>Abelmoschus esculentus</i>	(L.) Moench.	Malvaceae
Févi	Fon	<i>Abelmoschus esculentus</i>	(L.) Moench.	Malvaceae
Févi	Fon	<i>Abelmoschus esculentus</i>	(L.) Moench.	Malvaceae
Févi	Mahi	<i>Abelmoschus esculentus</i>	(L.) Moench.	Malvaceae
Féviman	Oueme	<i>Abelmoschus esculentus</i>	(L.) Moench.	Malvaceae
Féviman	Aizo	<i>Abelmoschus esculentus</i>	(L.) Moench.	Malvaceae
Fingninman	Aizo	<i>Manihot esculenta</i>	Crantz	Euphorbiaceae
Finyin	Fon	<i>Manihot esculenta</i>	Crantz	Euphorbiaceae
Finyin	Fon	<i>Manihot esculenta</i>	Crantz (Poir.)	Euphorbiaceae
Flefitchi	Adja	<i>Deinbollia pinnata</i>	Schumach.& Thonn. (Poir.)	Sapindaceae
Flefitchi	Adja	<i>Deinbollia pinnata</i>	Schumach.& Thonn.	Sapindaceae
Fodibembèrè	Kotokoli	<i>Hibiscus asper</i>	Hook.f.	Malvaceae
Fodou	Bariba	<i>Sterculia setigera</i>	Delile	Sterculiaceae
Foïbi	Dendi	<i>Solanum americanum</i>	Mill.	Solanaceae
Fokiwonfatu	Wama	<i>Manihot esculenta</i>	Crantz	Euphorbiaceae
Fola	Kotokoli	<i>Bombax costatum</i>	Pellegr. & Vuillet	Bombacaceae
Fola	Kotokoli	<i>Bombax costatum</i>	Pellegr. & Vuillet	Bombacaceae
Fonkouman	Adja	<i>Vitex doniana</i>	Sweet	Verbenaceae
Fonla	Boko	<i>Adansonia digitata</i>	L.	Bombacaceae
Fonla	Boko	<i>Adansonia digitata</i>	L.	Bombacaceae
Fonman	Cotafon	<i>Vitex doniana</i>	Sweet	Verbenaceae
Fonman	Cotafon	<i>Vitex doniana</i>	Sweet	Verbenaceae
Fonman	Aizo	<i>Vitex doniana</i>	Sweet	Verbenaceae
Fonman	Aizo	<i>Vitex doniana</i>	Sweet	Verbenaceae
Fonman	Fon	<i>Vitex doniana</i>	Sweet	Verbenaceae
Fonman	Mahi	<i>Vitex doniana</i>	Sweet	Verbenaceae
Fonman	Mahi	<i>Vitex doniana</i>	Sweet	Verbenaceae
Fonman	Oueme	<i>Vitex doniana</i>	Sweet	Verbenaceae
Fonman	Aizo	<i>Vitex doniana</i>	Sweet	Verbenaceae
Fonti	Fon	<i>Vitex doniana</i>	Sweet	Verbenaceae
Fontin	Mahi	<i>Vitex doniana</i>	Sweet	Verbenaceae
Fôodou	Bariba	<i>Sterculia setigera</i>	Delile	Sterculiaceae
Fookubu	Wama	<i>Bombax costatum</i>	Pellegr. & Vuillet	Bombacaceae
Foroukpètè	Anii	<i>Basella alba</i>	L.	Basellaceae
Forowontèma	Wama	<i>Ipomoea batatas</i>	(L.) Lam.	Convolvulaceae
Fotete	Aizo	<i>Amaranthus cruentus</i>	L.	Amaranthaceae
Fotete	Aizo	<i>Amaranthus cruentus</i>	L.	Amaranthaceae
Fotètè	Fon	<i>Amaranthus cruentus</i>	L.	Amaranthaceae



Fotètè	Idatcha	<i>Amaranthus cruentus</i>	L.	Amaranthaceae
Fotètè	Mahi	<i>Amaranthus cruentus</i>	L.	Amaranthaceae
Fotètè	Fon	<i>Amaranthus cruentus</i>	L.	Amaranthaceae
Fotètè	Mahi	<i>Amaranthus cruentus</i>	L.	Amaranthaceae
Fotètê	Cotafon	<i>Amaranthus cruentus</i>	L.	Amaranthaceae
Fotètêvovo	Cotafon	<i>Celosia argentea</i>	L.	Amaranthaceae
Fouadobaga	Bariba	<i>Leptadenia hastata</i>	(Pers.) Decne.	Asclepiadaceae
Fouadobagarou	Bariba	<i>Cassythia filiformis</i>	L.	Lauraceae
Foulbé	Dendi	<i>Cleome gynandra</i>	L.	Capparaceae
Founkounman	Adja	<i>Vitex doniana</i>	Sweet	Verbenaceae
Fraké	Holly	<i>Terminalia superba</i>	Engl. & Diels	Combretaceae
Frou	Kotokoli	<i>Ficus asperifolia</i>	Miq.	Moraceae
Fufurubo	Anii	<i>Ageratum conizoides</i>	L.	Asteraceae
Gaboboé	Anii	<i>Physalis minima</i>	L.	Solanaceae
Gadjèkpo	Anii	<i>Sterculia tragacantha</i>	Lindl.	Sterculiaceae
Gafitire	Anii	<i>Ocimum sp.</i>		Lamiaceae
Gagalouaga	Cotafon	<i>Corchorus tridens</i>	L.	Tiliaceae
Gahuaman	Mahi	<i>Stachytarpheta indica</i>	(L.) Vahl	Verbenaceae
Gakakao	Anii	<i>Strychnos spinosa</i>	Lam.	Loganiaceae
Gakolo	Anii	<i>Momordica foetida</i>	Schumach.	Cucurbitaceae
Gakolugawandja	Anii	<i>Cayratia gracilis</i>	(Guill. & Perr.) Suess.	Vitaceae
Gakpélékpélé	Anii	<i>Secamone afzelii</i>	(Schult.) K. Schum.	Asclepiadaceae
Ganapèn'ta	Anii	<i>Ipomoea vagans</i>	Baker	Convolvulaceae
Ganbaaga	Gourmantche	<i>Moringa oleifera</i>	Lam.	Moringaceae
Gandafoi	Dendi	<i>Ceratotheca sesamoides</i>	Endl.	Pedaliaceae
Gangan	Bariba	<i>Abelmoschus esculentus</i>	(L.) Moench.	Malvaceae
Ganganhoun	Bariba	<i>Abelmoschus esculentus</i>	(L.) Moench.	Malvaceae
Gangansikénou	Bariba	<i>Boerhavia diffusa</i>	L.	Nyctaginaceae
Gangansikénou	Bariba	<i>Boerhavia diffusa</i>	L.	Nyctaginaceae
Gangassigourou	Bariba	<i>Boerhavia diffusa</i>	L.	Nyctaginaceae
Gankonnoukou	Bariba	<i>Ficus sycomorus</i>	L.	Moraceae
Gannou	Bariba	<i>Ficus sp.</i>		Moraceae
Ganxwa	Cotafon	<i>Stachytarpheta indica</i>	(L.) Vahl	Verbenaceae
Gaou Guininman	Dendi	<i>Cayratia gracilis</i>	(Guill. & Perr.) Suess.	Vitaceae
Gapèpè	Anii	<i>Gardenia sp.</i>		Rubiaceae
Garibé	Dendi	<i>Balanites aegyptiaca</i>	(L.) Delile	Zygophyllaceae
Garsia	Bariba	<i>Cleome gynandra</i>	L.	Capparaceae
Garsia	Wama	<i>Cleome gynandra</i>	L.	Capparaceae
Gasakman	Anii	<i>Bombax costatum</i>	Pellegr. & Vuillet	Bombacaceae
Gasia	Boko	<i>Amaranthus cruentus</i>	L.	Amaranthaceae
Gasiala	Boko	<i>Celosia argentea</i>	L.	Amaranthaceae
Gasokinmè	Anii	<i>Bombax costatum</i>	Pellegr. & Vuillet	Bombacaceae
Gassaman	Dendi	<i>Ocimum gratissimum</i>	L.	Lamiaceae
Gassia	Bariba	<i>Celosia argentea</i>	L.	Amaranthaceae
Gassira	Bariba	<i>Amaranthus viridis</i>	L.	Amaranthaceae

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Gatongaboi	Anii	<i>Adansonia digitata</i>	L.	Bombacaceae
Gbahounkeki	Adja	<i>Ipomoea triloba</i>	L.	Convolvulaceae
Gbahounkeki	Adja	<i>Pergularia daemia</i>	(Forssk.) Chiov.	Asclepiadaceae
Gbaka	Bariba	<i>Lagenaria siceraria</i>	(Molina) Standl.	Cucurbitaceae
Gbannan	Anii	<i>Corchorus olitorius</i>	L.	Tiliaceae
Gbanro	Bariba	<i>Opilia amentacea</i>	Roxb.	Opiliaceae
Gbatchi	Ife	<i>Manihot esculenta</i>	Crantz	Euphorbiaceae
Gbèa	Boko	<i>Manihot esculenta</i>	Crantz	Euphorbiaceae
Gbeala	Boko	<i>Manihot esculenta</i>	Crantz	Euphorbiaceae
Gbèba	Bariba	<i>Canavalia ensiformis</i>	(L.) DC.	Leguminosae- Papilionoideae
Gbébou	Bariba	<i>Photo arbre</i>		
Gbebuseri	Bariba	<i>Azafia africana</i>	Sm.	Leguminosae- Caesalpinioideae
Gbebuseri	Bariba	<i>Azafia africana</i>	Sm.	Leguminosae- Caesalpinioideae
Gbégnamin	Mahi	<i>Solanum aethiopicum</i>	L.	Solanaceae
Gbele	Aizo	<i>Vernonia colorata</i>	(Willd.) Drake	Asteraceae
Gbéman	Kotokoli	<i>Solanum macrocarpon</i>	L.	Solanaceae
Gbéman	Kotokoli	<i>Solanum macrocarpon</i>	L.	Solanaceae
Gbéman	Anii	<i>Solanum macrocarpon</i>	L.	Solanaceae
Gbéman	Anii	<i>Solanum macrocarpon</i>	L.	Solanaceae
Gbéou	Bariba	<i>Daniellia oliveri</i>	(Rolfe) Hutch. & Dalziel	Leguminosae- Caesalpinioideae
Gbèrékoundou	Kotokoli	<i>Hexalobus monopetalus</i>	(A.Rich)	Annonaceae
Gbessabo	Adja	<i>Cleome rutidosperma</i>	DC.	Capparaceae
Gbessenou	Bariba	<i>Cucumeropsis mannii</i>	Naud	Cucurbitaceae
Gbesseru	Bariba	<i>Lagenaria siceraria</i>	(Molina) Standl.	Cucurbitaceae
Gbesseru	Bariba	<i>Lagenaria siceraria</i>	(Molina) Standl.	Cucurbitaceae
Gbéssouan	Bariba	<i>Maerua angolensis</i>	DC.	Capparaceae
Gbetokaya	Cotafon	<i>Cleome rutidosperma</i>	DC.	Capparaceae
Gbétu	Tchabe	<i>Cochlospermum planchoni</i>	Hook.f.	Cochlospermaceae
Gbétu	Tchabe	<i>Cochlospermum planchoni</i>	Hook.f.	Cochlospermaceae
Gbii	Boko	<i>Triplochiton scleroxylon</i>	K.Schum.	Sterculiaceae
Gbissan	Aizo	<i>Solanum aethiopicum</i>	L.	Solanaceae
Gblé	Fon	<i>Vernonia colorata</i>	(Willd.) Drake	Asteraceae
Gblegbe	Adja	<i>Amaranthus viridis</i>	L.	Amaranthaceae
Gblo	Aizo	<i>Crassocephalum crepidiodes</i>	(Benth.) S.Moore	Asteraceae
Gblo	Oueme	<i>Crassocephalum rubens</i>	(Jacq.) S.Moore	Asteraceae
Gbo	Mahi	<i>Solanum aethiopicum</i>	L.	Solanaceae
Gbodo	Holly	<i>Solanum macrocarpon</i>	L.	Solanaceae
Gbodoglin/Tchiayo	Fon	<i>Ocimum gratissimum</i>	L.	Lamiaceae
Gbodoku	Holly	<i>Solanum macrocarpon</i>	L.	Solanaceae
Gbodoognibo	Holly	<i>Solanum macrocarpon</i>	L.	Solanaceae

TRADITIONAL VEGETABLES OF BENIN

Gbofu	Anii	<i>Momordica cissoides</i>	Planch.ex Benth.	Cucurbitaceae
Gbofusoro	Anii	<i>Cayratia gracilis</i>	(Guill. & Perr.) Suess.	Vitaceae
Gbogbogui	Adja	<i>Ipomoea triloba</i>	L.	Convolvulaceae
Gbogboloki	Idatcha	<i>Basella alba</i>	L.	Basellaceae
Gbogodo	Tchabe	<i>Solanum sp.</i>		Solanaceae
Gbogolo	Anii	<i>Cissus populnea</i>	Guill. & Perr.	Vitaceae
Gbogolo	Anii	<i>Cissus populnea</i>	Guill. & Perr.	Vitaceae
Gboholou	Aizo	<i>Amaranthus cruentus</i>	L.	Amaranthaceae
Gbokpodjè	Mahi	<i>Sterculia tragacantha</i>	Lindl.	Sterculiaceae
Gbolo	Holly	<i>Crassocephalum crepidiodes</i>	(Benth.) S.Moore	Asteraceae
Gbolo	Tchabe	<i>Crassocephalum rubens</i>	(Jacq.) S.Moore	Asteraceae
Gbolo	Idatcha	<i>Crassocephalum rubens</i>	(Jacq.) S.Moore	Asteraceae
Gbolo	Idatcha	<i>Crassocephalum rubens</i>	(Jacq.) S.Moore	Asteraceae
Gbolo	Tchabe	<i>Crassocephalum rubens</i>	(Jacq.) S.Moore	Asteraceae
Gbolo( Voir Kogbo)	Holly	<i>Crassocephalum rubens</i>	(Jacq.) S.Moore	Asteraceae
Gboma	Adja	<i>Solanum macrocarpon</i>	L.	Solanaceae
Gboma	Adja	<i>Solanum macrocarpon</i>	L.	Solanaceae
Gboman	Cotafon	<i>Solanum macrocarpon</i>	L.	Solanaceae
Gboman	Cotafon	<i>Solanum macrocarpon</i>	L.	Solanaceae
Gboman	Aizo	<i>Solanum macrocarpon</i>	L.	Solanaceae
Gboman	Aizo	<i>Solanum macrocarpon</i>	L.	Solanaceae
Gboman	Fon	<i>Solanum macrocarpon</i>	L.	Solanaceae
Gboman	Idatcha	<i>Solanum macrocarpon</i>	L.	Solanaceae
Gboman	Idatcha	<i>Solanum macrocarpon</i>	L.	Solanaceae
Gboman	Mahi	<i>Solanum macrocarpon</i>	L.	Solanaceae
Gboman	Tchabe	<i>Solanum macrocarpon</i>	L.	Solanaceae
Gboman	Fon	<i>Solanum macrocarpon</i>	L.	Solanaceae
Gboman	Mahi	<i>Solanum macrocarpon</i>	L.	Solanaceae
Gboman	Mahi	<i>Solanum macrocarpon</i>	L.	Solanaceae
Gboman	Anii	<i>Solanum macrocarpon</i>	L.	Solanaceae
Gboman	Oueme	<i>Solanum macrocarpon</i>	L.	Solanaceae
Gboman	Aizo	<i>Solanum macrocarpon</i>	L.	Solanaceae
Gbomanalatontonon	Mahi	<i>Solanum sp.</i>		Solanaceae
Gbonkèfru	Boko	<i>Celosia trigyna</i>	L.	Amaranthaceae
Gbonkèfula	Boko	<i>Celosia trigyna</i>	L.	Amaranthaceae
Gbonourékou	Bariba	<i>Ocimum basilicum</i>	L.	Lamiaceae
Gboo	Tchabe	<i>Cucurbita pepo</i>	L.	Cucurbitaceae
Gboro	Bariba	<i>Lagenaria siceraria</i>	(Molina) Standl.	Cucurbitaceae
Gboro	Bariba	<i>Lagenaria siceraria</i>	(Molina) Standl.	Cucurbitaceae
Gboro	Bariba	<i>Lagenaria siceraria</i>	(Molina) Standl.	Cucurbitaceae
Gbotoé	Mahi	<i>Ipomoea sp.</i>		Convolvulaceae
Gbovo	Aizo	<i>Melochia corchorifolia</i>	L.	Sterculiaceae
Gboyame	Adja	<i>Solanum villosum</i>		Solanaceae
Gboyame	Cotafon	<i>Solanum villosum</i>		Solanaceae
Gboyi	Cotafon	<i>Solanum americanum</i>	Mill.	Solanaceae

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Genandanu	Anii	<i>Eclipta prostrata</i>	(L.) L.	Asteraceae
Genandènin	Anii	<i>Ludwigia perennis</i>	L.	Asteraceae
Gidjenkalo	Anii	<i>Lippia multiflora</i>	Moldenke	Verbenaceae
Gikpayinpi	Anii	<i>Annona senegalensis</i>	Pers.	Annonaceae
Gikunu	Anii	<i>Abelmoschus esculentus</i>	(L.) Moench.	Malvaceae
Girifoonon't	Anii	<i>Ageratum conizoides</i>	L.	Asteraceae
Gitchantchunpè	Anii	<i>Senna occidentalis</i>	(L.) Link	Leguminosae- Caesalpinioideae
Glassiman	Oueme	<i>Talinum triangulare</i>	(Jacq.) Willd.	Portulacaceae
Glassiman	Aizo	<i>Talinum triangulare</i>	(Jacq.) Willd.	Portulacaceae
Glassoue	Cotafon	<i>Talinum triangulare</i>	(Jacq.) Willd.	Portulacaceae
Glassueman	Aizo	<i>Talinum triangulare</i>	(Jacq.) Willd.	Portulacaceae
Glassuman	Mahi	<i>Talinum triangulare</i>	(Jacq.) Willd.	Portulacaceae
Glazuhoui	Adja	<i>Talinum triangulare</i>	(Jacq.) Willd.	Portulacaceae
Glazuhoui	Adja	<i>Talinum triangulare</i>	(Jacq.) Willd.	Portulacaceae
Glegbofitin	Aizo	<i>Psychotria calva</i>	Hiern	Rubiaceae
Glin	Fon	<i>Colocasia esculenta</i>	(L.) Schott	Araceae
Glin	Mahi	<i>Colocasia esculenta</i>	(L.) Schott	Araceae
Glin	Fon	<i>Colocasia esculenta</i>	(L.) Schott	Araceae
Glin	Mahi	<i>Colocasia esculenta</i>	(L.) Schott	Araceae
Glinman	Cotafon	<i>Xanthosoma maffafa</i>	Schott	Araceae
Glinman	Aizo	<i>Xanthosoma maffafa</i>	Schott	Araceae
Glinman	Oueme	<i>Xanthosoma maffafa</i>	Schott	Araceae
Glinman	Aizo	<i>Xanthosoma maffafa</i>	Schott	Araceae
Glinman Ou Dogbiwo	Aizo	<i>Xanthosoma maffafa</i>	Schott	Araceae
Gnagninou	Bariba	<i>Senna occidentalis</i>	(L.) Link	Leguminosae- Caesalpinioideae
Gnambifan	Bariba	<i>Celosia trigyna</i>	L.	Amaranthaceae
Gnambinoufagarou	Bariba	<i>Celosia trigyna</i>	L.	Amaranthaceae
Gnandodou	Adja	<i>Ocimum gratissimum</i>	L.	Lamiaceae
Gnangba	Fon	<i>Hibiscus sabdariffa</i>	L.	Malvaceae
Gnangninon	Bariba	<i>Senna occidentalis</i>	(L.) Link	Leguminosae- Caesalpinioideae
Gnangninou	Bariba	<i>Senna occidentalis</i>	(L.) Link	Leguminosae- Caesalpinioideae
Gnangnon	Bariba	<i>Senna occidentalis</i>	(L.) Link	Leguminosae- Caesalpinioideae
Gnanguinon	Bariba	<i>Senna occidentalis</i>	(L.) Link	Leguminosae- Caesalpinioideae
Gnankounougou	Bariba	<i>Vitex doniana</i>	Sweet	Verbenaceae
Gnankounougou	Bariba	<i>Vitex doniana</i>	Sweet	Verbenaceae
Gnankounougou	Bariba	<i>Vitex doniana</i>	Sweet	Verbenaceae
Gnannou	Bariba	<i>Daniellia oliveri</i>	(Rolfe) Hutch. & Dalziel	Leguminosae- Caesalpinioideae
Gnanri	Holly	<i>Launea taraxacifolia</i>	(Willd.) Amin ex C. Jeffrey	Asteraceae
Gnanrou	Bariba	<i>Vitex doniana</i>	Sweet	Verbenaceae

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Gnanrougninou	Bariba	<i>Senna occidentalis</i>	(L.) Link	Leguminosae- Caesalpinioideae
Gnianrou	Bariba	<i>Cucurbita maxima</i>	Duchesne	Cucurbitaceae
Gniman	Oueme	<i>Ethulia conyzoides</i>	L.f.	Asteraceae
Gnimondou	Adja	<i>Stachytarpheta indica</i>	(L.) Vahl	Verbenaceae
Gnimondou	Aizo	<i>Stachytarpheta indica</i>	(L.) Vahl	Verbenaceae
Gningui	Bariba	<i>Corchorus tridens</i>	L.	Tiliaceae
Gningui	Bariba	<i>Corchorus tridens</i>	L.	Tiliaceae
Gninman	Oueme	<i>Struchium sparganophorum</i>	(L.) Kuntze	Asteraceae
Gninmondu	Fon	<i>Stachytarpheta indica</i>	(L.) Vahl	Verbenaceae
Gninmondu	Fon	<i>Stachytarpheta indica</i>	(L.) Vahl	Verbenaceae
Gnisinkin	Mahi	<i>Momordica charantia</i>	L.	Cucurbitaceae
Gnonsanou	Bariba	<i>Cissus populnea</i>	Guill. & Perr. (Guill. & Perr.) Suess.	Vitaceae
Gobia	Bariba	<i>Cayratia gracilis</i>	(L.) Roxb.	Leguminosae- Caesalpinioideae
Goborobo	Anii	<i>Senna alata</i>	Endl.	Pedaliaceae
Gofoundé	Anii	<i>Ceratotheca sesamoides</i>	L.	Lamiaceae
Gofounnoutouré	Anii	<i>Ocimum basilicum</i>	(L.) F. Muell.	Violaceae
Gogohoun	Bariba	<i>Hybanthus enneaspermus</i>	(L.) F. Muell.	Violaceae
Gogokou	Bariba	<i>Hybanthus enneaspermus</i>	(L.) F. Muell.	Violaceae
Goho	Anii	<i>Bombax costatum</i>	Pellegr. & Vuillet (Lam.) Zeppernick & Timler	Bombacaceae
Goka	Anii	<i>Zanthoxylum zanthoxyloides</i>	L.	Rutaceae
Gokolo	Anii	<i>Hibiscus sabdariffa</i>	Endl.	Malvaceae
Golo	Tchabe	<i>Ceratotheca sesamoides</i>	(L.) R. Br. Ex Roth	Pedaliaceae
Gomi	Adja	<i>Alternanthera sessilis</i>	(L.) R. Br. Ex Roth	Amaranthaceae
Gomi	Adja	<i>Alternanthera sessilis</i>	(L.) R. Br. Ex Roth (Guill. & Perr.) Suess.	Amaranthaceae
Gommilu	Gourmantche	<i>Cayratia gracilis</i>	(Guill. & Perr.) Suess.	Vitaceae
Goratonou	Bariba	<i>Moringa oleifera</i>	Lam. (Jacq.) R.Br.ex Benth.	Moringaceae
Goré	Anii	<i>Parkia biglobosa</i>	Moldenke	Leguminosae- Mimosoideae
Goroumè	Anii	<i>Lippia multiflora</i>	Moldenke	Verbenaceae
Gosanafunu	Anii	<i>Sesamum indicum</i>	L.	Pedaliaceae
Gosassala	Anii	<i>Bridelia ferruginea</i>	Benth	Euphorbiaceae
Gotamta	Anii	<i>Physalis angulata</i>	L.	Solanaceae
Gotantara	Anii	<i>Solanum americanum</i>	Mill.	Solanaceae
Gotonbo	Anii	<i>Adansonia digitata</i>	L.	Bombacaceae
Goudélé	Anii	<i>Ficus vallis-choudae</i>	Delile	Moraceae
Goudjèmè	Anii	<i>Ocimum gratissimum</i>	L.	Lamiaceae
Goudjènè	Anii	<i>Ocimum gratissimum</i>	L.	Lamiaceae
Goufoumon	Anii	<i>Ceratotheca sesamoides</i>	Endl.	Pedaliaceae
Goure Ou Ebede	Holly	<i>Talinum triangulare</i>	(Jacq.) Willd.	Portulacaceae
Gouroumon	Anii	<i>Lippia multiflora</i>	Moldenke	Verbenaceae

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Gousouhouanko	Anii	<i>Vernonia amygdalina</i>	Delile	Asteraceae
Gousounouko	Anii	<i>Vernonia amygdalina</i>	Delile	Asteraceae
Goussi	Aizo	<i>Citrullus lanatus</i>	(Thunb.) matsum. & Nakai	Cucurbitaceae
Goussi	Aizo	<i>Citrullus lanatus</i>	(Thunb.) matsum. & Nakai	Cucurbitaceae
Goutchérimè	Anii	<i>Piliostigma thonningii</i>	(Schumach.) Milne-Redh.	Leguminosae- Caesalpinioideae
Goutelowè	Anii	<i>Zanthoxylum zanthoxyloides</i>	(Lam.) Zeppernick & Timler	Rutaceae
Goutessi	Anii	<i>Vitex doniana</i>	Sweet	Verbenaceae
Goutéssi	Anii	<i>Vitex doniana</i>	Sweet	Verbenaceae
Gouukalow	Anii	<i>Sterculia tragacantha</i>	Lindl.	Sterculiaceae
Gubodjunon	Anii	<i>Chassalia kolly</i>	(Schumach.) Hepper	Rubiaceae
Guchi	Adja	<i>Citrullus lanatus</i>	(Thunb.) matsum. & Nakai	Cucurbitaceae
Guchi	Adja	<i>Lagenaria siceraria</i>	(Molina) Standl.	Cucurbitaceae
Gudjémé	Anii	<i>Ocimum gratissimum</i>	L.	Lamiaceae
Gudjémé	Anii	<i>Ocimum gratissimum</i>	L.	Lamiaceae
Guédéhounsou	Mahi	<i>Ceiba pentandra</i>	(L.) Gaertn.	Bombacaceae
Guédjékangara	Anii	<i>Hoslundia opposita</i>	Vahl	Lamiaceae
Guèfudiré	Anii	<i>Ocimum basilicum</i>	L.	Lamiaceae
Guéparagnepi	Anii	<i>Annona senegalensis</i>	Pers.	Annonaceae
Guérou	Bariba	<i>Cucumeropsis mannii</i>	Naud	Cucurbitaceae
Guérou	Bariba	<i>Cucumeropsis mannii</i>	Naud	Cucurbitaceae
Guései	Anii	<i>Vigna unguiculata</i>	(L.) Walp.	Leguminosae- Papilionoideae
Guétchibo	Anii	<i>Sterculia tragacantha</i>	Lindl.	Sterculiaceae
Guétchibo	Anii	<i>Sterculia tragacantha</i>	Lindl.	Sterculiaceae
Guéwé	Anii	<i>Paullinia pinnata</i>	(Poir.) Schumach.& Thonn.	Sapindaceae
Gufunougutolo	Anii	<i>Sesamum indicum</i>	L.	Pedaliaceae
Guifokèla	Anii	<i>Combretum comosum var. hispidum</i>	G. Don var(M. Lawson) Jongkind	Combretaceae
Guigbanirè	Anii	<i>Annona senegalensis</i>	Pers.	Annonaceae
Guinééné	Anii	<i>Alternanthera sessilis</i>	(L.) R. Br. Ex Roth	Amaranthaceae
Guinnindanou	Anii	<i>Alternanthera sessilis</i>	(L.) R. Br. Ex Roth	Amaranthaceae
Guinru	Bariba	<i>Cucumeropsis mannii</i>	Naud	Cucurbitaceae
Guirihunbi	Anii	<i>Grewia mollis</i>	Juss.	Tiliaceae
Guissiman	Dendi/ Djerma	<i>Hibiscus sabdariffa</i>	L.	Malvaceae
Guissiman	Dendi	<i>Hibiscus sabdariffa</i>	L.	Malvaceae
Guitchaabo	Anii	<i>Lippia multiflora</i>	Moldenke	Verbenaceae
Guitohunkiwè	Anii	<i>Trema orientalis</i>	(L.) Blume	Celtidaceae



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Guiwéguifonon	Anii	<i>Amaranthus cruentus</i>	L.	Amaranthaceae
Guiwéguifonon	Anii	<i>Amaranthus cruentus</i>	L.	Amaranthaceae
Guiyobolo	Anii	<i>Afzelia africana</i>	Sm.	Leguminosae- Caesalpinioideae
Gukurutchibo	Anii	<i>Heliotropium indicum</i>	L.	Boraginaceae
Gulè	Anii	<i>Blighia sapida</i>	König	Sapindaceae
Gulèkahunbo	Anii	<i>Blighia sapida</i>	König	Sapindaceae
Gulubi	Ife	<i>Platostoma africanum</i>	P. Beauv.	Lamiaceae
Guobole	Anii	<i>Daniellia oliveri</i>	(Rolfe) Hutch. & Dalziel	Leguminosae- Caesalpinioideae
Guoô	Anii	<i>Bombax costatum</i>	Pellegr. & Vuillet	Bombacaceae
Gurumon	Anii	<i>Grewia mollis</i>	Juss.	Tiliaceae
Gusudonon	Anii	<i>Vitex doniana</i>	Sweet	Verbenaceae
Gusunko	Anii	<i>Vernonia amygdalina</i>	Delile	Asteraceae
Gutantaro	Anii	<i>Solanum americanum</i>	Mill.	Solanaceae
Gutesere	Anii	<i>Vitex doniana</i>	Sweet	Verbenaceae
Guwa	Anii	<i>Ceiba pentandra</i>	(L.) Gaertn.	Bombacaceae
Gwè (Rampant De Bas-Fonds)	Mahi	<i>Alternanthera sessilis</i>	(L.) R. Br. Ex Roth	Amaranthaceae
Handoukpo	Mahi	<i>Amaranthus dubius</i>	Mart. Ex Thell.	Amaranthaceae
Handoukpo	Mahi	<i>Amaranthus spinosus</i>	L.	Amaranthaceae
Hansihanga	Dendi	<i>Ipomoea vagans</i>	Baker	Convolvulaceae
Haoudénin	Dendi/ Djerma	<i>Portulaca oleracea</i>	L.	Portulacaceae
Hèdougboognin	Mahi	<i>Solanum sp.</i>		Solanaceae
Hlatchio	Aizo	<i>Hoslundia opposita</i>	Vahl	Lamiaceae
Hlinwéwé	Fon	<i>Phyllanthus amarus</i>	Schumach.& Thonn.	Euphorbiaceae
Hodokponou	Aizo	<i>Ethulia conyzoides</i>	L.f.	Asteraceae
Honbwe	Cotafon	<i>Ficus thonningii</i>	Blume	Moraceae
Hongbede	Cotafon	<i>Sterculia tragacantha</i>	Lindl.	Sterculiaceae
Hongbede	Aizo	<i>Sterculia tragacantha</i>	Lindl.	Sterculiaceae
Hongbèdè	Fon	<i>Sterculia tragacantha</i>	Lindl.	Sterculiaceae
Honhogui	Mahi	<i>Crassocephalum rubens</i>	(Jacq.) S.Moore	Asteraceae
Honton-Azizuin	Cotafon	<i>Crateva adansonii</i>	DC.	Capparaceae
Honton-Azizuin	Aizo	<i>Crateva adansonii</i>	DC.	Capparaceae
Hossoudugble	Adja	<i>Acalypha ciliata</i>	Forssk.	Euphorbiaceae
Hossoudugble	Adja	<i>Acalypha ciliata</i>	Forssk.	Euphorbiaceae
Houecoute	Cotafon	<i>Manihot glaziovii</i>	Müll.Arg.	Euphorbiaceae
Houngbè	Aizo	<i>Alternanthera sessilis</i>	(L.) R. Br. Ex Roth	Amaranthaceae
Houngogoé	Cotafon	<i>Afraegle paniculata</i>	(Schumach.& Thonn.)	Rutaceae
Huhualawé	Mahi	<i>Crassocephalum rubens</i>	(Jacq.) S.Moore	Asteraceae
Hunsimanvovo	Fon	<i>Vernonia cinerea</i>	(L.) Less.	Asteraceae



## LOCAL NAMES

Hunsimanwéwé	Fon	<i>Vernonia cinerea</i>	(L.) Less.	Asteraceae
Ibalgi	Gourmantche	<i>Hibiscus sabdariffa</i>	L.	Malvaceae
Iboborimi	Anii	<i>Cochlospermum tinctorium</i>	A.Rich.	Cochlospermaceae
Ibonon	Anii	<i>Daniellia oliveri</i>	(Rolfe) Hutch. & Dalziel	Leguminosae-Caesalpinioideae
Icencenpè	Anii	<i>Senna occidentalis</i>	(L.) Link	Leguminosae-Caesalpinioideae
Ichin	Holly	<i>Blighia sapida</i>	König	Sapindaceae
Ichin	Holly	<i>Blighia sapida</i>	König	Sapindaceae
Idé	Holly	<i>Alternanthera sessilis</i>	(L.) R. Br. Ex Roth	Amaranthaceae
Idjabo	Tchabe	<i>Ceratotheca sesamoides</i>	Endl.	Pedaliaceae
Idjabo	Idatcha	<i>Ceratotheca sesamoides</i>	Endl.	Pedaliaceae
Idjabo	Tchabe	<i>Ceratotheca sesamoides</i>	Endl.	Pedaliaceae
Idoki	Holly	<i>Ipomoea batatas</i>	(L.) Lam.	Convolvulaceae
Ifanyè	Otammari	<i>Corchorus tridens</i>	L.	Tiliaceae
Ifofonon	Anii	<i>Amaranthus cruentus</i>	L.	Amaranthaceae
Iforana	Anii	<i>Celosia argentea</i>	L.	Amaranthaceae
Igba	Holly	<i>Lagenaria siceraria</i>	(Molina) Standl.	Cucurbitaceae
Igba	Holly	<i>Lagenaria siceraria</i>	(Molina) Standl.	Cucurbitaceae
Igba	Holly	<i>Parkia biglobosa</i>	(Jacq.) R.Br.ex Benth.	Leguminosae-Mimosoideae
Igbam	Kotokoli	<i>Synaptolepis retusa</i>	H.H.W.Pearson	Thymelaeaceae
Igbéako	Tchabe	<i>Heliotropium indicum</i>	L.	Boraginaceae
Igboman	Ife	<i>Solanum macrocarpon</i>	L.	Solanaceae
Ignin	Gourmantche	<i>Sesamum alatum</i>	Thonn.	Pedaliaceae
Ikan	Idatcha	<i>Solanum erianthum</i>	D.Don	Solanaceae
Ikan	Idatcha	<i>Solanum erianthum</i>	D.Don	Solanaceae
Ikin	Tchabe	<i>Solanum aethiopicum</i>	L.	Solanaceae
Ikoko	Holly	<i>Colocasia esculenta</i>	(L.) Schott	Araceae
Ikounnin	Anii	<i>Abelmoschus esculentus</i>	(L.) Moench.	Malvaceae
Ikounnin	Anii	<i>Abelmoschus esculentus</i>	(L.) Moench.	Malvaceae
Ikpo	Anii	<i>Ocimum sp.</i>		Lamiaceae
Ila	Ife	<i>Abelmoschus esculentus</i>	(L.) Moench.	Malvaceae
Ila	Tchabe	<i>Abelmoschus esculentus</i>	(L.) Moench.	Malvaceae
Ila	Idatcha	<i>Abelmoschus esculentus</i>	(L.) Moench.	Malvaceae
Ila	Idatcha	<i>Abelmoschus esculentus</i>	(L.) Moench.	Malvaceae
Ila	Tchabe	<i>Abelmoschus esculentus</i>	(L.) Moench.	Malvaceae
Ila	Holly	<i>Abelmoschus esculentus</i>	(L.) Moench.	Malvaceae
Ila	Holly	<i>Abelmoschus esculentus</i>	(L.) Moench.	Malvaceae
Iman	Idatcha	<i>Solanum aethiopicum</i>	L.	Solanaceae
Iman (Gboyamin)	Idatcha	<i>Solanum aethiopicum</i>	L.	Solanaceae
Immani	Gourmantche	<i>Abelmoschus esculentus</i>	(L.) Moench.	Malvaceae
Imonruèyè	Ife	<i>Solanum americanum</i>	Mill.	Solanaceae
Iroko	Holly	<i>Telfairia occidentalis</i>	Hook.f.	Cucurbitaceae
Isidikaka	Anii	<i>Citrullus lanatus</i>	(Thunb.) matsum. & Nakai	Cucurbitaceae

TRADITIONAL VEGETABLES OF BENIN

Itchegba	Idatcha	<i>Citrullus lanatus</i>	(Thunb.) matsum. & Nakai	Cucurbitaceae
Itchègba	Holly	<i>Citrullus lanatus</i>	(Thunb.) matsum. & Nakai	Cucurbitaceae
Itchin	Idatcha	<i>Blighia sapida</i>	König	Sapindaceae
Itchin	Idatcha	<i>Blighia sapida</i>	König	Sapindaceae
Itchin	Holly	<i>Blighia sapida</i>	König	Sapindaceae
Itcho	Ife	<i>Corchorus tridens</i>	L.	Tiliaceae
Ito	Idatcha	<i>Cucumeropsis mannii</i>	Naud	Cucurbitaceae
Ito	Idatcha	<i>Cucumeropsis mannii</i>	Naud	Cucurbitaceae
Itukulusuan	Anii	<i>Gomphrena celosioides</i>	Mart.	Amaranthaceae
Ituni/Egusi	Gourmantche	<i>Citrullus lanatus</i>	(Thunb.) matsum. & Nakai	Cucurbitaceae
Joskuèkuèfa	Wama	<i>Basella alba</i>	L.	Basellaceae
Kadara	Kotokoli	<i>Adansonia digitata</i>	L.	Bombacaceae
Kadara	Kotokoli	<i>Adansonia digitata</i>	L.	Bombacaceae
Kadarabobo	Kotokoli	<i>Sterculia tragacantha</i>	Lindl.	Sterculiaceae
Kagbokligbokli	Anii	<i>Stereospermum kunthianum</i>	Cham.	Bignoniaceae
Kagoussi	Aizo	<i>Lagenaria siceraria</i>	(Molina) Standl.	Cucurbitaceae
Kaka	Idatcha	<i>Lagenaria siceraria</i>	(Molina) Standl.	Cucurbitaceae
Kaka	Idatcha	<i>Lagenaria siceraria</i>	(Molina) Standl.	Cucurbitaceae
Kaka N'to	Ife	<i>Cucumeropsis mannii</i>	Naud	Cucurbitaceae
Kaka Acra	Ife	<i>Lagenaria siceraria</i>	(Molina) Standl.	Cucurbitaceae
Kaka Aklankpa	Ife	<i>Lagenaria siceraria</i>	(Molina) Standl.	Cucurbitaceae
Kaka Arotchè	Ife	<i>Citrullus lanatus</i>	(Thunb.) matsum. & Nakai	Cucurbitaceae
Kaka Igba	Ife	<i>Lagenaria siceraria</i>	(Molina) Standl.	Cucurbitaceae
Kaka Itoo	Ife	<i>Cucumeropsis mannii</i>	Naud	Cucurbitaceae
Kaka Orotchè	Ife	<i>Citrullus lanatus</i>	(Thunb.) matsum. & Nakai	Cucurbitaceae
Kaka Ungba	Ife	<i>Lagenaria siceraria</i>	(Molina) Standl.	Cucurbitaceae
Kakawaabu	Wama	<i>Vernonia amygdalina</i>	Delile	Asteraceae
Kakawaabu	Wama	<i>Vernonia amygdalina</i>	Delile	Asteraceae
Kaku	Mahi	<i>Lagenaria siceraria</i>	(Molina) Standl.	Cucurbitaceae
Kakui	Fon	<i>Lagenaria siceraria</i>	(Molina) Standl.	Cucurbitaceae
Kambaguinda	Gourmantche	<i>Solanum macrocarpon</i>	L.	Solanaceae
Kanhin	Boko	<i>Cucurbita pepo</i>	L.	Cucurbitaceae
Kansin	Boko	<i>Cucurbita pepo</i>	L.	Cucurbitaceae
Kantchéunsu	Wama	<i>Solanum aethiopicum</i>	L.	Solanaceae
Kantchéunsu	Wama	<i>Solanum sp.</i>		Solanaceae
Kanwu	Idatcha	<i>Lippia multiflora</i>	Moldenke	Verbenaceae
Kapoo	Boko	<i>Bombax costatum</i>	Pellegr. & Vuillet	Bombacaceae
Karaouikpérou	Bariba	<i>Leptadenia hastata</i>	(Pers.) Decne.	Asclepiadaceae
Karatchitou	Kotokoli	<i>Amaranthus cruentus</i>	L.	Amaranthaceae
Karikoobu	Wama	<i>Zanthoxylum zanthoxyloides</i>	(Lam.) Zeppernick & Timler	Rutaceae

## LOCAL NAMES

Kasalantoro	Anii	<i>Pandiaka involucrata</i>	(Moq.) Hook.f.	Amaranthaceae
Kasonki	Bariba	<i>Lagenaria siceraria</i>	(Molina) Standl.	Cucurbitaceae
Kasoungui	Bariba	<i>Cucumeropsis mannii</i>	Naud	Cucurbitaceae
Kasoungui	Bariba	<i>Lagenaria siceraria</i>	(Molina) Standl.	Cucurbitaceae
Kassoungui	Bariba	<i>Lagenaria siceraria</i>	(Molina) Standl.	Cucurbitaceae
Katakpa	Tchabe	<i>Launea taraxacifolia</i>	(Willd.) Amin ex C. Jeffrey	Asteraceae
Katakpa	Tchabe	<i>Launea taraxacifolia</i>	(Willd.) Amin ex C. Jeffrey	Asteraceae
Katchokolodé	Anii	<i>Luffa aegyptiaca</i>	(L.) M. Roem.	Cucurbitaceae
Katchudayi	Cotafon	<i>Boerhavia diffusa</i>	L.	Nyctaginaceae
Katchuingahi	Cotafon	<i>Boerhavia diffusa</i>	L.	Nyctaginaceae
Katchunyayi	Aizo	<i>Boerhavia diffusa</i>	L.	Nyctaginaceae
Katre	Adja	<i>Crescentia cujete</i>	L.	Bignoniaceae
Kaya	Cotafon	<i>Cleome gynandra</i>	L.	Capparaceae
Kèemè	Kotokoli	<i>Azelia africana</i>	Sm.	Leguminosae- Caesalpinioideae
Kelesuan	Boko	<i>Stylochaeton hypogeum</i>	Lepr.	Araceae
Kèrè	Kotokoli	<i>Cucumeropsis mannii</i>	Naud	Cucurbitaceae
Kèrè	Kotokoli	<i>Cucumeropsis mannii</i>	Naud	Cucurbitaceae
Kétchilan'gan	Kotokoli	<i>Morinda lucida</i>	Benth.	Rubiaceae
Kétékousso	Bariba	<i>Stylochaeton hypogeum</i>	Lepr.	Araceae
Ketekuso	Bariba	<i>Stylochaeton hypogeum</i>	Lepr.	Araceae
Ketekuso	Bariba	<i>Stylochaeton hypogeum</i>	Lepr.	Araceae
Kiagborou	Bariba	<i>Stachytarpheta indica</i>	(L.) Vahl	Verbenaceae
Kiagbosu	Bariba	<i>Crassocephalum rubens</i>	(Jacq.) S.Moore	Asteraceae
Kiayo	Mahi	<i>Ocimum gratissimum</i>	L.	Lamiaceae
Kiborga	Gourmantche	<i>Mikania chenopodifolia</i>	Wild	Asteraceae
Kikpaovlan	Boko	<i>Heliotropium indicum</i>	L.	Boraginaceae
Kilovi	Adja	<i>Citrullus lanatus</i>	(Thunb.) matsum. & Nakai	Cucurbitaceae
Kimbrékoudjondjo	Kotokoli	<i>Celosia argentea</i>	L.	Amaranthaceae
Kinanzorou	Kotokoli	<i>Ocimum gratissimum</i>	L.	Lamiaceae
Kingbo	Aizo	<i>Solanum aethiopicum</i>	L.	Solanaceae
Kinunubidjaga	Gourmantche	<i>Ocimum gratissimum</i>	L.	Lamiaceae
Kinwunkinwu	Tchabe	<i>Lippia multiflora</i>	Moldenke	Verbenaceae
Kiooyo	Mahi	<i>Ocimum gratissimum</i>	L.	Lamiaceae
Kissiadje	Adja	<i>Croton lobatus</i>	L.	Euphorbiaceae
Kitchintchin	Kotokoli	<i>Senna occidentalis</i>	(L.) Link	Leguminosae- Caesalpinioideae
Kitchintchin	Kotokoli	<i>Senna occidentalis</i>	(L.) Link	Leguminosae- Caesalpinioideae
Kiyoyo	Mahi	<i>Ocimum gratissimum</i>	L.	Lamiaceae
Klaba	Cotafon	<i>Manihot glaziovii</i>	Müll.Arg.	Euphorbiaceae
Kobéré Eru	Ife	<i>Abelmoschus esculentus</i>	(L.) Moench.	Malvaceae
Kobsa	Bariba	<i>Abelmoschus esculentus</i>	(L.) Moench.	Malvaceae
Kodago	Bariba	<i>Ipomoea batatas</i>	(L.) Lam.	Convolvulaceae

TRADITIONAL VEGETABLES OF BENIN

Kodagou	Bariba	<i>Ipomoea batatas</i>	(L.) Lam.	Convolvulaceae
Kodukwè	Mahi	<i>Ocimum basilicum</i>	L.	Lamiaceae
Kofoloko	Anii	<i>Corchorus tridens</i>	L.	Tiliaceae
Kogbo	Mahi	<i>Crassocephalum rubens</i>	(Jacq.) S.Moore	Asteraceae
Koguede	Cotafon	<i>Spigelia anthelmia</i>	L.	Loganiaceae
Kohinan	Boko	<i>Cayratia gracilis</i>	(Guill. & Perr.) Suess.	Vitaceae
Kohun	Mahi	<i>Ocimum canum</i>	L.	Lamiaceae
Kohuntohunbiré	Anii	<i>Colocasia esculenta</i>	(L.) Schott	Araceae
Koklossoudinkpatcha	Cotafon	<i>Heliotropium indicum</i>	L.	Boraginaceae
Koklowontin	Mahi	<i>Croton lobatus</i>	L.	Euphorbiaceae
Koko	Tchabe	<i>Colocasia esculenta</i>	(L.) Schott	Araceae
Kokoobu	Wama	<i>Colocasia esculenta</i>	(L.) Schott	Araceae
Kokotagou	Bariba	<i>Ipomoea batatas</i>	(L.) Lam.	Convolvulaceae
Kokoula	Boko	<i>Ocimum basilicum</i>	L.	Lamiaceae
Kokpaki	Bariba	<i>Lagenaria siceraria</i>	(Molina) Standl.	Cucurbitaceae
Komiré	Kotokoli	<i>Ceiba pentandra</i>	(L.) Gaertn.	Bombacaceae
Kongovira	Kotokoli	<i>Strychnos spinosa</i>	Lam.	Loganiaceae
Konnoukou	Bariba	<i>Vitex doniana</i>	Sweet	Verbenaceae
Kontonbo	Anii	<i>Adansonia digitata</i>	L.	Bombacaceae
Kôô	Dendi	<i>Adansonia digitata</i>	L.	Bombacaceae
Koobsa (Gnanbonon)	Bariba	<i>Abelmoschus esculentus</i>	(L.) Moench.	Malvaceae
Koobuyonku	Bariba	<i>Kedrostis foetidissima</i>	(Jacq.) Cogn.	Cucurbitaceae
Kookatchore	Wama	<i>Heliotropium indicum</i>	L.	Boraginaceae
Koolou	Kotokoli	<i>Bridelia ferruginea</i>	Benth	Euphorbiaceae
Kootibitirinan	Wama	<i>Ipomoea triloba</i>	L.	Convolvulaceae
Korokutu	Wama	<i>Solanum americanum</i>	Mill.	Solanaceae
Kororou	Bariba	<i>Calotropis procera</i>	(Aiton) W. T. Aiton	Asclepiadaceae
Kota	Dendi	<i>Cochlospermum tinctorium</i>	A.Rich.	Cochlospermaceae
Kota	Dendi/ Djerma	<i>Cochlospermum tinctorium</i>	A.Rich.	Cochlospermaceae
Kota	Dendi	<i>Cochlospermum tinctorium</i>	A.Rich.	Cochlospermaceae
Kotakédé	Fon	<i>Deinbollia pinnata</i>	(Poir.) Schumach.& Thonn.	Sapindaceae
Kotana	Dendi	<i>Solanum aethiopicum</i>	L.	Solanaceae
Kotchiodo	Kotokoli	<i>Citrullus lanatus</i>	(Thunb.) matsum. & Nakai	Cucurbitaceae
Kotchiodo	Kotokoli	<i>Citrullus lanatus</i>	(Thunb.) matsum. & Nakai	Cucurbitaceae
Kotombré	Anii	<i>Xanthosoma maffafa</i>	Schott	Araceae
Kotoroku	Wama	<i>Solanum americanum</i>	Mill.	Solanaceae
Kotoroku	Wama	<i>Solanum scabrum</i>	Mill.	Solanaceae
Kouagniboubougou	Gourmantche	<i>Sesamum indicum</i>	L.	Pedaliaceae

## LOCAL NAMES

Koubologoun	Gourmantche	<i>Cochlospermum tinctorium</i>	A.Rich.	Cochlospermaceae
Koudéhoun	Bariba	<i>Ipomoea batatas</i>	(L.) Lam.	Convolvulaceae
Koudoola	Boko	<i>Ipomoea batatas</i>	(L.) Lam.	Convolvulaceae
Kouetchivigbe	Adja	<i>Stachytarpheta indica</i>	(L.) Vahl	Verbenaceae
Kouganrou	Gourmantche	<i>Ceratotheca sesamoides</i>	Endl.	Pedaliaceae
Koula	Boko	<i>Vitellaria paradoxa</i>	C.F.Gaertn.	Sapotaceae
Koumankoussolè	Ife	<i>Ceratotheca sesamoides</i>	Endl.	Pedaliaceae
Kounonkou	Bariba	<i>Vitex doniana</i>	Sweet	Verbenaceae
Kounonsorou	Kotokoli	<i>Ocimum gratissimum</i>	L.	Lamiaceae
Kourokountonou	Bariba	<i>Justicia tenella</i>	(Ness) T. Anderson	Acanthaceae
Kourokountonou	Bariba	<i>Justicia tenella</i>	(Ness) T. Anderson	Acanthaceae
Kourokouro	Idatcha	<i>Justicia tenella</i>	(Ness) T. Anderson	Acanthaceae
Kourokouro	Idatcha	<i>Justicia tenella</i>	(Ness) T. Anderson	Acanthaceae
Kourokoutonou	Boko	<i>Justicia tenella</i>	(Ness) T. Anderson	Acanthaceae
Kousanla	Boko	<i>Vitex doniana</i>	Sweet	Verbenaceae
Kouta	Aizo	<i>Margaritaria discoidea</i>	(Baill.) Webster	Euphorbiaceae
Koutéman	Cotafon	<i>Manihot esculenta</i>	Crantz	Euphorbiaceae
Koutouga	Dendi	<i>Adansonia digitata</i>	L.	Bombacaceae
Koutouman	Adja	<i>Manihot esculenta</i>	Crantz	Euphorbiaceae
Koutounga	Dendi/ Djerma	<i>Adansonia digitata</i>	L.	Bombacaceae
Koya	Aizo	<i>Telosma africana</i>	(N.E.Br.) N.E.Br.	Asclepiadaceae
Kpahunmarogu	Gourmantche	<i>Justicia insularis</i>	T. Anderson	Acanthaceae
Kpake	Bariba	<i>Manihot esculenta</i>	Crantz	Euphorbiaceae
Kpaki	Tchabe	<i>Manihot esculenta</i>	Crantz	Euphorbiaceae
Kpaki	Tchabe	<i>Manihot esculenta</i>	Crantz	Euphorbiaceae
Kpaki	Holly	<i>Manihot esculenta</i>	Crantz	Euphorbiaceae
Kpakiwurusu	Bariba	<i>Manihot esculenta</i>	Crantz	Euphorbiaceae
Kpakiwurusu	Bariba	<i>Manihot esculenta</i>	Crantz	Euphorbiaceae
Kpakossu	Mahi	<i>Solanum sp.</i>		Solanaceae
Kpakpa	Tchabe	<i>Hibiscus sabdariffa</i>	L.	Malvaceae
Kpakpa	Mahi	<i>Hibiscus sabdariffa</i>	L.	Malvaceae
Kpakpaa	Tchabe	<i>Hibiscus sabdariffa</i>	L.	Malvaceae
Kpakpara	Ife	<i>Hibiscus sabdariffa</i>	L.	Malvaceae
Kpakpkara	Idatcha	<i>Hibiscus sabdariffa</i>	L.	Malvaceae
Kpalaari	Anii	<i>Momordica charantia</i>	L.	Cucurbitaceae
Kpalaré	Anii	<i>Momordica charantia</i>	L.	Cucurbitaceae
Kpalayi	Tchabe	<i>Momordica charantia</i>	L.	Cucurbitaceae
Kpalayi	Tchabe	<i>Momordica charantia</i>	L.	Cucurbitaceae
Kpalo	Kotokoli	<i>Entada africana</i>	Guill. & Perr.	Leguminosae-Mimosoideae
Kpalouman	Mahi	<i>Moringa oleifera</i>	Lam.	Moringaceae
Kpannankpon	Adja	<i>Laportea aestuans</i>	(L.) Chew	Urticaceae

TRADITIONAL VEGETABLES OF BENIN

Kpannankpon	Adja	<i>Laportea aestuans</i>	(L.) Chew	Urticaceae
Kpansandé	Wama	<i>Solanum aethiopicum</i>	L.	Solanaceae
Kpanuman	Fon	<i>Moringa oleifera</i>	Lam.	Moringaceae
Kpanuman	Mahi	<i>Moringa oleifera</i>	Lam.	Moringaceae
Kpanuyédédé	Fon	<i>Moringa oleifera</i>	Lam.	Moringaceae
Kpassa	Aizo	<i>Adansonia digitata</i>	L.	Bombacaceae
Kpassa	Fon	<i>Adansonia digitata</i>	L.	Bombacaceae
Kpassa	Fon	<i>Adansonia digitata</i>	L.	Bombacaceae
Kpassa	Mahi	<i>Adansonia digitata</i>	L.	Bombacaceae
Kpatakunkpakun	Tchabe	<i>Solanum macrocarpon</i>	L.	Solanaceae
Kpatakunkpakun	Tchabe	<i>Solanum macrocarpon</i>	L.	Solanaceae
Kpatidewoun	Aizo	<i>Bombax costatum</i>	Pellegr. & Vuillet	Bombacaceae
Kpatindewoun	Aizo	<i>Bombax costatum</i>	Pellegr. & Vuillet	Bombacaceae
Kpatotwe	Cotafon	<i>Passiflora foetida</i>	L.	Passifloraceae
Kpatovi	Cotafon	<i>Moringa oleifera</i>	Lam.	Moringaceae
Kpatovigbe	Cotafon	<i>Moringa oleifera</i>	Lam.	Moringaceae
Kpayola	Holly	<i>Jatropha curcas</i>	L.	Euphorbiaceae
Kpe	Boko	<i>Abelmoschus esculentus</i>	(L.) Moench.	Malvaceae
Kpé	Boko	<i>Abelmoschus esculentus</i>	(L.) Moench.	Malvaceae
Kpèborè	Wama	<i>Adansonia digitata</i>	L.	Bombacaceae
Kpèborè	Wama	<i>Adansonia digitata</i>	L.	Bombacaceae
Kpédanbakarou	Bariba	<i>Ocimum gratissimum</i>	L.	Lamiaceae
Kpèhloussou	Bariba	<i>Ipomoea asarifolia</i>	(Desr.) Roem. & Schult.	Convolvulaceae
Kpékatodan	Bariba	<i>Gmelina arborea</i>	Roxb (Poir.)	Verbenaceae
Kpèkolokpèkolo	Holly	<i>Deinbollia pinnata</i>	Schumach. & Thonn.	Sapindaceae
Kpékonan	Bariba	<i>Lagenaria siceraria</i>	(Molina) Standl.	Cucurbitaceae
Kpékonan	Bariba	<i>Lagenaria siceraria</i>	(Molina) Standl.	Cucurbitaceae
Kpela	Boko	<i>Abelmoschus esculentus</i>	(L.) Moench.	Malvaceae
Kpélé	Mahi	<i>Vernonia sp.</i>		Asteraceae
Kpéléonèrozo	Kotokoli	<i>Rytigynia senegalensis</i>	Blume (K.Schum. & K.Krause) Hutch. & Dalziel	Rubiaceae
Kpèlléroulénazo	Kotokoli	<i>Fadogia erythrophloea</i>		Rubiaceae
Kpèloutchkoloko	Kotokoli	<i>Erythrina senegalensis</i>	DC.	Leguminosae-Papilionoideae
Kpéouka	Bariba	<i>Solanum americanum</i>	Mill.	Solanaceae
Kpéronra	Bariba	<i>Solanum americanum</i>	Mill.	Solanaceae
Kpewonka	Bariba	<i>Solanum scabrum</i>	Mill.	Solanaceae
Kpewonka	Bariba	<i>Solanum scabrum</i>	Mill.	Solanaceae
Kpéwonka	Bariba	<i>Solanum scabrum</i>	Mill.	Solanaceae
Kpéwounra	Bariba	<i>Solanum americanum</i>	Mill.	Solanaceae
Kpezo	Kotokoli	<i>Blighia sapida</i>	König	Sapindaceae
Kpinsiao	Boko	<i>Solanum americanum</i>	Mill.	Solanaceae
Kpinsio	Boko	<i>Solanum americanum</i>	Mill.	Solanaceae



## LOCAL NAMES

Kpodo	Idatcha	<i>Talinum triangulare</i>	(Jacq.) Willd.	Portulacaceae
Kpodo	Idatcha	<i>Talinum triangulare</i>	(Jacq.) Willd.	Portulacaceae
Kpofobo	Anii	<i>Laportea aestuans</i>	(L.) Chew	Urticaceae
Kpoiba	Aizo	<i>Manihot esculenta</i>	Crantz	Euphorbiaceae
Kpolakpola	Ife	<i>Cissus populnea</i>	Guill. & Perr.	Vitaceae
Kpoman Alawiniwini	Mahi	<i>Solanum sp.</i>		Solanaceae
Kponnikponni	Aizo	<i>Talinum triangulare</i>	(Jacq.) Willd.	Portulacaceae
Kprakpraka	Kotokoli	<i>Lophira lanceolata</i>	Tiegh.ex Keay	Ochnaceae
Kuaan'gu	Gourmantche	<i>Sesamum indicum</i>	L.	Pedaliaceae
Kuan'gu	Gourmantche	<i>Ceratotheca sesamoides</i>	Endl.	Pedaliaceae
Kuanla	Boko	<i>Vernonia amygdalina</i>	Delile	Asteraceae
Kuanonman	Wama	<i>Crotalaria macrocalyx</i>	Benth.	Leguminosae- Papilionoideae
Kufelugu	Gourmantche	<i>Cucurbita pepo</i>	L.	Cucurbitaceae
Kufoagnagu	Gourmantche	<i>Sesamum indicum</i>	L.	Pedaliaceae
Kugberigu	Gourmantche	<i>Hibiscus asper</i>	Hook.f.	Malvaceae
Kugunfa	Wama	<i>Bombax costatum</i>	Pellegr. & Vuillet	Bombacaceae
Kula	Boko	<i>Vitex doniana</i>	Sweet	Verbenaceae
Kuliabuga	Gourmantche	<i>Solanum americanum</i>	Mill.	Solanaceae
Kumalikoungu	Gourmantche	<i>Crotalaria macrocalyx</i>	Benth.	Leguminosae- Papilionoideae
Kumalikoungu	Gourmantche	<i>Crotalaria macrocalyx</i>	Benth.	Leguminosae- Papilionoideae
Kumanfagu	Gourmantche	<i>Abelmoschus esculentus</i>	(L.) Moench.	Malvaceae
Kumanfagu	Gourmantche	<i>Abelmoschus esculentus</i>	(L.) Moench.	Malvaceae
Kumonku	Ife	<i>Ceratotheca sesamoides</i>	Endl.	Pedaliaceae
Kunonku	Bariba	<i>Vitex doniana</i>	Sweet	Verbenaceae
Kunonku	Bariba	<i>Vitex doniana</i>	Sweet	Verbenaceae
Kunuruku	Otammari	<i>Abelmoschus esculentus</i>	(L.) Moench.	Malvaceae
Kuokuma	Wama	<i>Asystasia sp.</i>		Acanthaceae
Kuokuntu	Wama	<i>Talinum triangulare</i>	(Jacq.) Willd.	Portulacaceae
Kuotina	Wama	<i>Ipomoea triloba</i>	L.	Convolvulaceae
Kupanuonku	Otammari	<i>Ocimum basilicum</i>	L.	Lamiaceae
Kurokuntonnu	Bariba	<i>Justicia tenella</i>	(Ness) T. Anderson	Acanthaceae
Kurokuntonnu	Boko	<i>Justicia tenella</i>	(Ness) T. Anderson	Acanthaceae
Kute	Cotafon	<i>Manihot esculenta</i>	Crantz	Euphorbiaceae
Kutuman	Adja	<i>Manihot esculenta</i>	Crantz	Euphorbiaceae
Kuyuamongu	Gourmantche	<i>Grewia mollis</i>	Juss.	Tiliaceae
Kwesivi	Cotafon	<i>Stachytarpheta indica</i>	(L.) Vahl	Verbenaceae
Lafé	Dendi	<i>Abelmoschus esculentus</i>	(L.) Moench.	Malvaceae
Lafoï	Dendi	<i>Abelmoschus esculentus</i>	(L.) Moench.	Malvaceae
Lafoï	Dendi/ Djerma	<i>Abelmoschus esculentus</i>	(L.) Moench.	Malvaceae
Lagalaga	Tchabe	<i>Moringa oleifera</i>	Lam.	Moringaceae
Lakouta	Dendi	<i>Sesamum radiatum</i>	Schumach.& Thonn.	Pedaliaceae



TRADITIONAL VEGETABLES OF BENIN

Lakuta	Dendi/ Djerma	<i>Sesamum radiatum</i>	Schumach.& Thonn.	Pedaliaceae
Langalanga	Idatcha	<i>Moringa oleifera</i>	Lam.	Moringaceae
Langali	Idatcha	<i>Moringa oleifera</i>	Lam.	Moringaceae
Lanman	Adja	<i>Solanum scabrum</i>	Mill.	Solanaceae
Lanti	Dendi/ Djerma	<i>Sesamum alatum</i>	Thonn.	Pedaliaceae
Lasia	Boko	<i>Ipomoea fistulosa</i>	Mart. ex choisy (Willd.) Amin ex C. Jeffrey	Convolvulaceae
Latotoé	Mahi	<i>Launea taraxacifolia</i>		Asteraceae
Lele	Boko	<i>Blighia sapida</i>	König	Sapindaceae
Lelebe	Boko	<i>Blighia sapida</i>	König	Sapindaceae
Leptanda	Dendi	<i>Cucurbita maxima</i>	Duchesne	Cucurbitaceae
Leptanda	Dendi	<i>Leptadenia hastata</i>	(Pers.) Decne.	Asclepiadaceae
Léwèman	Idatcha	<i>Vitex doniana</i>	Sweet	Verbenaceae
Libokpabli	Gourmantche	<i>Basella alba</i>	L.	Basellaceae
Libokpabli	Gourmantche	<i>Portulaca oleracea</i>	L.	Portulacaceae
Lidjangnaliyuani	Gourmantche	<i>Cissus populnea</i>	Guill. & Perr.	Vitaceae
Lidjangnaliyuani	Gourmantche	<i>Cissus populnea</i>	Guill. & Perr.	Vitaceae
Lifèli	Gourmantche	<i>Cucurbita maxima</i>	Duchesne	Cucurbitaceae
Lifrubiale	Gourmantche	<i>Acmella uliginosa</i>	(Sw.) Cass.	Asteraceae
Lifrubiale	Gourmantche	<i>Acmella uliginosa</i>	(Sw.) Cass.	Asteraceae
Lifrubiale	Gourmantche	<i>Zanthoxylum zanthoxyloides</i>	(Lam.) Zeppernick & Timler	Rutaceae
Lili	Mahi	<i>Grewia mollis</i>	Juss.	Tiliaceae
Lili	Fon	<i>Grewia mollis</i>	Juss.	Tiliaceae
Liman	Adja	<i>Asystasia gangetica</i>	(L.) T. Anderson (Poir.)	Acanthaceae
Lingbooukoun	Cotafon	<i>Deinbollia pinnata</i>	Schumach.& Thonn.	Sapindaceae
Lisayani	Gourmantche	<i>Cochlospermum planchoni</i>	Hook.f.	Cochlospermaceae
Lituokali	Gourmantche	<i>Adansonia digitata</i>	L.	Bombacaceae
Liyani	Gourmantche	<i>Grewia mollis</i>	Juss.	Tiliaceae
Logo	Dendi	<i>Manihot esculenta</i>	Crantz	Euphorbiaceae
Logo	Bariba	<i>Manihot esculenta</i>	Crantz	Euphorbiaceae
Loki	Idatcha	<i>Ipomoea batatas</i>	(L.) Lam.	Convolvulaceae
Loki	Anii	<i>Ipomoea batatas</i>	(L.) Lam.	Convolvulaceae
Lokikabo	Anii	<i>Ipomoea batatas</i>	(L.) Lam.	Convolvulaceae
Loko	Aizo	<i>Telfairia occidentalis</i>	Hook.f.	Cucurbitaceae
Lokohouegbe	Aizo	<i>Telfairia occidentalis</i>	Hook.f.	Cucurbitaceae
Lokohoueton	Aizo	<i>Telfairia occidentalis</i>	Hook.f.	Cucurbitaceae
Lokoyovo	Aizo	<i>Passiflora edulis</i>	Sims	Passifloraceae
Lokoyovo	Aizo	<i>Passiflora edulis</i>	Sims	Passifloraceae
Lokpo	Fon	<i>Telfairia occidentalis</i>	Hook.f.	Cucurbitaceae
Lokpo	Mahi	<i>Telfairia occidentalis</i>	Hook.f.	Cucurbitaceae
Lolouide	Adja	<i>Sterculia tragacantha</i>	Lindl.	Sterculiaceae
Loman	Adja	<i>Vernonia amygdalina</i>	Delile	Asteraceae

## LOCAL NAMES

Loman	Adja	<i>Vernonia amygdalina</i>	Delile	Asteraceae
Loman	Cotafon	<i>Vernonia amygdalina</i>	Delile	Asteraceae
Loman	Aizo	<i>Vernonia amygdalina</i>	Delile	Asteraceae
Lomboukou	Kotokoli	<i>Cochlospermum planchonii</i>	Hook.f.	Cochlospermaceae
Lonloui	Adja	<i>Corchorus tridens</i>	L.	Tiliaceae
Lonloui	Adja	<i>Corchorus tridens</i>	L.	Tiliaceae
Lotché	Mahi	<i>Citrullus lanatus</i>	(Thunb.) matsum. & Nakai	Cucurbitaceae
Louakpin	Boko	<i>Portulaca oleracea</i>	L.	Portulacaceae
Maande	Wama	<i>Abelmoschus esculentus</i>	(L.) Moench.	Malvaceae
Makana	Adja	<i>Xanthosoma maffafa</i>	Schott	Araceae
Makana	Adja	<i>Xanthosoma maffafa</i>	Schott	Araceae
Makani	Cotafon	<i>Xanthosoma maffafa</i>	Schott	Araceae
Mamfaman	Wama	<i>Abelmoschus esculentus</i>	(L.) Moench.	Malvaceae
Mangani	Bariba	<i>Colocasia esculenta</i>	(L.) Schott	Araceae
Mangani	Bariba	<i>Colocasia esculenta</i>	(L.) Schott	Araceae
Mangani	Anii	<i>Colocasia esculenta</i>	(L.) Schott	Araceae
Mangani	Bariba	<i>Colocasia esculenta</i>	(L.) Schott	Araceae
Mangani	Bariba	<i>Stylochaeton hypogeum</i>	Lepr.	Araceae
Mangani	Bariba	<i>Xanthosoma maffafa</i>	Schott	Araceae
Manganni	Idatcha	<i>Colocasia esculenta</i>	(L.) Schott	Araceae
Manganni	Idatcha	<i>Colocasia esculenta</i>	(L.) Schott	Araceae
Manganou	Bariba	<i>Stylochaeton hypogeum</i>	Lepr.	Araceae
Mangari	Bariba	<i>Xanthosoma maffafa</i>	Schott	Araceae
Mangari	Bariba	<i>Xanthosoma maffafa</i>	Schott	Araceae
Mango	Kotokoli	<i>Mangifera indica</i>	L.	Anacardiaceae
Mankanni	Ife	<i>Colocasia esculenta</i>	(L.) Schott	Araceae
Mannan	Kotokoli	<i>Abelmoschus esculentus</i>	(L.) Moench.	Malvaceae
Manya	Wama	<i>Abelmoschus esculentus</i>	(L.) Moench.	Malvaceae
Masamanbu	Wama	<i>Moringa oleifera</i>	Lam.	Moringaceae
M'ba	Kotokoli	<i>Synaptolepis retusa</i>	H.H.W.Pearson	Thymelaeaceae
Mèfòdòmmè	Otammari	<i>Blighia sapida</i>	König	Sapindaceae
Mèkokummè	Otammari	<i>Croton lobatus</i>	L.	Euphorbiaceae
Mèldè	Kotokoli	<i>Abelmoschus esculentus</i>	(L.) Moench.	Malvaceae
Mèsanyenkumè	Otammari	<i>Celosia sp.</i>		Amaranthaceae
M'gbinnou	Kotokoli	<i>Cissus quadrangularis</i>	L.	Vitaceae
Mikpehoue	Adja	<i>Tridax procumbens</i>	L.	Asteraceae
Mikpekagma	Gourmantche	<i>Vernonia amygdalina</i>	Delile	Asteraceae
Minapuopuoma	Gourmantche	<i>Corchorus olitorius</i>	L.	Tiliaceae
Minsitu	Wama	<i>Hibiscus sabdariffa</i>	L.	Malvaceae
Minsitu	Wama	<i>Hibiscus sabdariffa</i>	L.	Malvaceae
Monrorou	Bariba	<i>Photo arbre</i>		
Moto	Oueme	<i>Amaranthus viridis</i>	L.	Amaranthaceae
Moulannou	Bariba	<i>Bombax costatum</i>	Pellegr. & Vuillet	Bombacaceae
Mouloumanhadjè	Dendi	<i>Portulaca oleracea</i>	L.	Portulacaceae
Mourou Mandjé	Dendi	<i>Portulaca oleracea</i>	L.	Portulacaceae

TRADITIONAL VEGETABLES OF BENIN

Moussoukoubaagou	Bariba	<i>Croton lobatus</i>	L.	Euphorbiaceae
Mubuo	Otammari	<i>Zanthoxylum zanthoxyloides</i>	(Lam.) Zeppernick & Timler	Rutaceae
Mubuo	Otammari	<i>Zanthoxylum zanthoxyloides</i>	(Lam.) Zeppernick & Timler	Rutaceae
Mufodoomu	Otammari	<i>Blighia sapida</i>	König	Sapindaceae
Mukomu	Otammari	<i>Bombax costatum</i>	Pellegr. & Vuillet	Bombacaceae
Mumantonmu	Otammari	<i>Vitex doniana</i>	Sweet	Verbenaceae
Mupetènonmu	Otammari	<i>Ficus sp.</i>		Moraceae
Musaatimu	Otammari	<i>Grewia mollis</i>	Juss.	Tiliaceae
Musannum	Otammari	<i>Grewia mollis</i>	Juss.	Tiliaceae
Mutanmutimu	Otammari	<i>Annona senegalensis</i>	Pers.	Annonaceae
Mutorumu	Otammari	<i>Adansonia digitata</i>	L.	Bombacaceae
Mutoun	Wama	<i>Justicia insularis</i>	T. Anderson	Acanthaceae
Nafanafa	Gourmantche	<i>Amaranthus viridis</i>	L.	Amaranthaceae
Nafanafa/Piwejeja	Gourmantche	<i>Celosia trigyna</i>	L.	Amaranthaceae
Nanfama	Wama	<i>Abelmoschus esculentus</i>	(L.) Moench.	Malvaceae
Nantorobu	Wama	<i>Ipomoea vagans</i>	Baker	Convolvulaceae
Natinnonman	Wama	<i>Sida alba</i>	L.	Malvaceae
N'boubouroumin	Anii	<i>Cochlospermum tinctorium</i>	A.Rich.	Cochlospermaceae
Nehoun	Cotafon	<i>Abelmoschus esculentus</i>	(L.) Moench.	Malvaceae
Nennuwi	Mahi	<i>Corchorus olitorius</i>	L.	Tiliaceae
Nènoun	Oueme	<i>Corchorus olitorius</i>	L.	Tiliaceae
Nenouwi	Aizo	<i>Corchorus olitorius</i>	L.	Tiliaceae
Nénouwi	Mahi	<i>Corchorus olitorius</i>	L.	Tiliaceae
Nevalalawa	Kotokoli	<i>Smilax kraussiana</i>	Willd.	Smilacaceae
N'fulumana	Anii	<i>Pupalia lappacea</i>	(L.) Juss.	Amaranthaceae
N'gboman	Ife	<i>Solanum macrocarpon</i>	L.	Solanaceae
Nigalia	Kotokoli	<i>Gymnosporia senegalensis</i>	(Lam.) Loes.	Celastraceae
Nigobou	Bariba	<i>Pistia stratiotes</i>	L.	Araceae
Ninhouin	Aizo	<i>Abelmoschus esculentus</i>	(L.) Moench.	Malvaceae
Ninhouin	Aizo	<i>Corchorus olitorius</i>	L.	Tiliaceae
Ninhouinaman	Aizo	<i>Corchorus olitorius</i>	L.	Tiliaceae
Ninhoun	Cotafon	<i>Abelmoschus esculentus</i>	(L.) Moench.	Malvaceae
Ninnibu	Wama	<i>Cucurbita pepo</i>	L.	Cucurbitaceae
Ninnibu	Wama	<i>Lagenaria siceraria</i>	(Molina) Standl.	Cucurbitaceae
Ninnou	Mahi	<i>Corchorus olitorius</i>	L.	Tiliaceae
Ninnouwi	Fon	<i>Corchorus olitorius</i>	L.	Tiliaceae
Ninnouwi	Fon	<i>Corchorus olitorius</i>	L.	Tiliaceae
Nisotti	Kotokoli	<i>Ceratotheca sesamoides</i>	Endl.	Pedaliaceae
Nisotti	Kotokoli	<i>Ceratotheca sesamoides</i>	Endl.	Pedaliaceae
N'la	Ife	<i>Abelmoschus esculentus</i>	(L.) Moench.	Malvaceae
Nobileleri	Gourmantche	<i>Ipomoea mauritiana</i>	Jacq.	Convolvulaceae
Nonfaro	Kotokoli	<i>Ozoroa pulcherrima</i>	(Schweinf.) R. & A. Fernandes	Anacardiaceae

**LOCAL NAMES**

Nonman	Wama	<i>Sesamum indicum</i>	L.	Pedaliaceae
Nonman	Wama	<i>Sesamum indicum</i>	L.	Pedaliaceae
Nonnou	Mahi	<i>Abelmoschus esculentus</i>	(L.) Moench.	Malvaceae
Nonnu	Mahi	<i>Abelmoschus esculentus</i>	(L.) Moench.	Malvaceae
Nontaakutè	Wama	<i>Ceratotheca sesamoides</i>	Endl.	Pedaliaceae
Noubadjosorom	Kotokoli	<i>Desmodium ramosissimum</i>	G.Don	Leguminosae-Papilionoideae
Nounougou	Dendi	<i>Ocimum gratissimum</i>	L.	Lamiaceae
N'tchin	Ife	<i>Blighia sapida</i>	König	Sapindaceae
Nuanzua	Boko	<i>Ocimum gratissimum</i>	L.	Lamiaceae
Obaléran (Voir Tokpédé)	Holly	<i>Basella alba</i>	L.	Basellaceae
Obeodundun	Holly	<i>Corchorus olitorius</i>	L.	Tiliaceae
Obeyofunfun	Holly	<i>Corchorus olitorius</i>	L.	Tiliaceae
Obeyoloyo	Holly	<i>Corchorus olitorius</i>	L.	Tiliaceae
Oché	Holly	<i>Adansonia digitata</i>	L.	Bombacaceae
Odjogodo	Ife	<i>Celosia sp.</i>		Amaranthaceae
Ododo	Ife	<i>Launea taraxacifolia</i>	(Willd.) Amin ex C. Jeffrey	Asteraceae
Ododo	Idatcha	<i>Launea taraxacifolia</i>	(Willd.) Amin ex C. Jeffrey	Asteraceae
Ododo	Idatcha	<i>Launea taraxacifolia</i>	(Willd.) Amin ex C. Jeffrey	Asteraceae
Ododo	Ife	<i>Talinum triangulare</i>	(Jacq.) Willd.	Portulacaceae
Odondon	Bariba	<i>Talinum triangulare</i>	(Jacq.) Willd.	Portulacaceae
Ofin	Tchabe	<i>Ocimum canum</i>	L.	Lamiaceae
Ogafa	Holly	<i>Stachytarpheta indica</i>	(L.) Vahl	Verbenaceae
Ogbonfufu	Ife	<i>Pergularia daemia</i>	(Forssk.) Chiov.	Asclepiadaceae
Ogbonfufu	Idatcha	<i>Pergularia daemia</i>	(Forssk.) Chiov.	Asclepiadaceae
Ogbonfufu	Ife	<i>Pergularia daemia</i>	(Forssk.) Chiov.	Asclepiadaceae
Ogosu	Bariba	<i>Abelmoschus esculentus</i>	(L.) Moench.	Malvaceae
Ogroufè	Idatcha	<i>Bombax costatum</i>	Pellegr. & Vuillet	Bombacaceae
Ogudu	Tchabe	<i>Dalbergia saxatilis</i>	Hook.f.	Leguminosae-Papilionoideae
Ogufè	Ife	<i>Bombax costatum</i>	Pellegr. & Vuillet	Bombacaceae
Ogufè	Holly	<i>Bombax costatum</i>	Pellegr. & Vuillet	Bombacaceae
Okoun	Holly	<i>Vitex doniana</i>	Sweet	Verbenaceae
Okpoto	Ife	<i>Ficus asperifolia</i>	Miq.	Moraceae
Okpoto	Holly	<i>Ficus sur</i>	Forssk.	Moraceae
Oléé	Holly	<i>Stachytarpheta indica</i>	(L.) Vahl	Verbenaceae
Olo'ngobiè	Anii	<i>Crassocephalum rubens</i>	(Jacq.) S.Moore	Asteraceae
Olowon'djèdja	Tchabe	<i>Amaranthus cruentus</i>	L.	Amaranthaceae
Olowoundjedja Ou Djetandoye	Holly	<i>Alternanthera brasiliiana</i>	(L.) Kuntze	Amaranthaceae
Omronlugboko	Ife	<i>Cochlospermum planchonii</i>	Hook.f.	Cochlospermaceae
Ooyo	Tchabe	<i>Corchorus olitorius</i>	L.	Tiliaceae

TRADITIONAL VEGETABLES OF BENIN

Ooyo	Tchabe	<i>Corchorus olitorius</i>	L.	Tiliaceae
Ordondon	Tchabe	<i>Talinum triangulare</i>	(Jacq.) Willd.	Portulacaceae
Ordondon	Tchabe	<i>Talinum triangulare</i>	(Jacq.) Willd.	Portulacaceae
Orè	Ife	<i>Grewia mollis</i>	Juss.	Tiliaceae
Orè	Idatcha	<i>Grewia mollis</i>	Juss.	Tiliaceae
Orè	Idatcha	<i>Grewia mollis</i>	Juss.	Tiliaceae
Ori	Holly	<i>Vitex doniana</i>	Sweet	Verbenaceae
Orkpokpoou	Tchabe	<i>Jatropha curcas</i>	L.	Euphorbiaceae
Orlo	Tchabe	<i>Cissus populnea</i>	Guill. & Perr.	Vitaceae
Orlo	Tchabe	<i>Cissus populnea</i>	Guill. & Perr.	Vitaceae
Oro	Idatcha	<i>Irvingia gabonensis</i>	(Aubry-Lecomte ex O'Rorke) Baill.	Irvingiaceae
Oro	Idatcha	<i>Irvingia gabonensis</i>	(Aubry-Lecomte ex O'Rorke) Baill.	Irvingiaceae
Oro	Holly	<i>Irvingia gabonensis</i>	(Aubry-Lecomte ex O'Rorke) Baill.	Irvingiaceae
Oroyèfoun	Holly	<i>Irvingia gabonensis</i>	(Aubry-Lecomte ex O'Rorke) Baill.	Irvingiaceae
Oru	Holly	<i>Croton lobatus</i>	L.	Euphorbiaceae
Oruhandètcho	Idatcha	<i>Stachytarpheta indica</i>	(L.) Vahl	Verbenaceae
Oruhandètcho	Idatcha	<i>Stachytarpheta indica</i>	(L.) Vahl	Verbenaceae
Ossoun	Holly	<i>Solanum macrocarpon</i>	L.	Solanaceae
Ossounodo	Holly	<i>Solanum sp.</i>		Solanaceae
Ossun	Holly	<i>Solanum villosum</i>		Solanaceae
Osun	Holly	<i>Solanum aethiopicum</i>	L.	Solanaceae
Osun Dudu	Holly	<i>Struchium sparganophorum</i>	(L.) Kuntze	Asteraceae
Otangoumbo	Gourmantche	<i>Manihot esculenta</i>	Crantz	Euphorbiaceae
Otan'ta	Anii	<i>Dicoma sessiflora</i>	Harv.	Asteraceae
Otché	Ife	<i>Adansonia digitata</i>	L.	Bombacaceae
Otché	Tchabe	<i>Adansonia digitata</i>	L.	Bombacaceae
Otché	Idatcha	<i>Adansonia digitata</i>	L.	Bombacaceae
Otché	Idatcha	<i>Adansonia digitata</i>	L.	Bombacaceae
Otché	Ife	<i>Adansonia digitata</i>	L.	Bombacaceae
Otché	Holly	<i>Adansonia digitata</i>	L.	Bombacaceae
Otoo	Holly	<i>Cucumeropsis mannii</i>	Naud	Cucurbitaceae
Ouédaman	Oueme	<i>Achyranthes aspera</i>	L.	Amaranthaceae
Oyo	Gourmantche	<i>Corchorus olitorius</i>	L.	Tiliaceae
Parbatukpékériya	Wama	<i>Justicia tenella</i>	(Ness) T. Anderson	Acanthaceae
Parbatukpékériya	Wama	<i>Justicia tenella</i>	(Ness) T. Anderson	Acanthaceae
Pinwè	Boko	<i>Cucumeropsis mannii</i>	Naud	Cucurbitaceae
Plompo	Bariba	<i>Calotropis procera</i>	(Aiton) W. T. Aiton	Asclepiadaceae
Pobunga	Gourmantche	<i>Asystasia gangetica</i>	(L.) T. Anderson	Acanthaceae
Potoka	Wama	<i>Strychnos innocua</i>	Delile	Loganiaceae
Potoka	Wama	<i>Strychnos innocua</i>	Delile	Loganiaceae

**LOCAL NAMES**

Pouanla	Boko	<i>Vernonia amygdalina</i>	Delile	Asteraceae
Purumbu	Wama	<i>Blighia sapida</i>	König	Sapindaceae
Puru'nta	Wama	<i>Blighia sapida</i>	König	Sapindaceae
Pusika	Wama	<i>Tamarindus indica</i>	L.	Leguminosae- Caesalpinioideae
Quitchininnin	Anii	<i>Chrysanthellum indicum</i>	DC.	Asteraceae
Roba	Aizo	<i>Manihot glaziovii</i>	Müll.Arg.	Euphorbiaceae
Roko	Holly	<i>Telfairia occidentalis</i>	Hook.f.	Cucurbitaceae
Saanru	Bariba	<i>Cissus populnea</i>	Guill. & Perr.	Vitaceae
Sabo	Adja	<i>Cleome gynandra</i>	L.	Capparaceae
Sabo	Adja	<i>Cleome gynandra</i>	L.	Capparaceae
Sagourou	Bariba	<i>Amaranthus spinosus</i>	L.	Amaranthaceae
Sambinon	Bariba	<i>Solanum macrocarpon</i>	L.	Solanaceae
Sambinou	Bariba	<i>Solanum macrocarpon</i>	L.	Solanaceae
Sambinou	Bariba	<i>Solanum macrocarpon</i>	L.	Solanaceae
Sambinou	Bariba	<i>Solanum macrocarpon</i>	L.	Solanaceae
Sambinoutééna	Bariba	<i>Solanum aethiopicum</i>	L.	Solanaceae
Sambinu	Bariba	<i>Solanum macrocarpon</i>	L.	Solanaceae
Sambo	Cotafon	<i>Cleome rutidosperma</i>	DC.	Capparaceae
Sanbinu	Bariba	<i>Solanum macrocarpon</i>	L.	Solanaceae
Sanbinu	Bariba	<i>Solanum macrocarpon</i>	L.	Solanaceae
Sangasanga	Gourmantche	<i>Senna occidentalis</i>	(L.) Link	Leguminosae- Caesalpinioideae
Sanpota	Bariba	<i>Solanum macrocarpon</i>	L.	Solanaceae
Sanro	Bariba	<i>Cissus populnea</i>	Guill. & Perr.	Vitaceae
Sanro	Bariba	<i>Ipomoea asarifolia</i>	(Desr.) Roem. & Schult.	Convolvulaceae
Sansande	Bariba	<i>Hibiscus asper</i>	Hook.f.	Malvaceae
Sararu	Bariba	<i>Cissus populnea</i>	Guill. & Perr.	Vitaceae
Sèéma	Boko	<i>Hibiscus sabdariffa</i>	L.	Malvaceae
Sèéna	Boko	<i>Hibiscus asper</i>	Hook.f.	Malvaceae
Sééri	Bariba	<i>Hibiscus sabdariffa</i>	L.	Malvaceae
Sééri Pigaa	Bariba	<i>Hibiscus sabdariffa</i>	L.	Malvaceae
Sééri Suan	Bariba	<i>Hibiscus sabdariffa</i>	L.	Malvaceae
Seiiyaba	Boko	<i>Cassytha filiformis</i>	L.	Lauraceae
Séinan	Boko	<i>Hibiscus sabdariffa</i>	L.	Malvaceae
Séinanbolezian	Boko	<i>Hibiscus asper</i>	Hook.f.	Malvaceae
Sekefèman	Wama	<i>Corchorus olitorius</i>	L.	Tiliaceae
Siandala	Boko	<i>Senna occidentalis</i>	(L.) Link	Leguminosae- Caesalpinioideae
Sihaadòmpèi	Otammari	<i>Sesamum indicum</i>	L.	Pedaliaceae
Simonba	Tchabe	<i>Ocimum gratissimum</i>	L.	Lamiaceae
Simonba	Tchabe	<i>Ocimum gratissimum</i>	L.	Lamiaceae
Sinkosirekou	Bariba	<i>Nelsonia canescens</i>	(Lam.) Spreng.	Acanthaceae
Sinkouségou	Bariba	<i>Nelsonia canescens</i>	(Lam.) Spreng.	Acanthaceae
Sinkpika	Bariba	<i>Hibiscus sabdariffa</i>	L.	Malvaceae



TRADITIONAL VEGETABLES OF BENIN

Sinku	Fon	<i>Abelmoschus esculentus</i>	(L.) Moench.	Malvaceae
Sinku	Fon	<i>Hibiscus sabdariffa</i>	L.	Malvaceae
Sinnenou	Aizo	<i>Corchorus tridens</i>	L.	Tiliaceae
Sinni	Bariba	<i>Hibiscus sabdariffa</i>	L.	Malvaceae
Sinni	Bariba	<i>Hibiscus sabdariffa</i>	L.	Malvaceae
Sinnin	Bariba	<i>Hibiscus sabdariffa</i>	L.	Malvaceae
Sinri	Bariba	<i>Hibiscus sabdariffa</i>	L.	Malvaceae
Sinri	Bariba	<i>Hibiscus sabdariffa</i>	L.	Malvaceae
Sinri	Bariba	<i>Hibiscus sabdariffa</i>	L.	Malvaceae
Sinsambou	Bariba	<i>Cayratia gracilis</i>	(Guill. & Perr.) Suess.	Vitaceae
Sinsouan	Bariba	<i>Hibiscus sabdariffa</i>	L.	Malvaceae
Sintikpi	Bariba	<i>Hibiscus asper</i>	Hook.f.	Malvaceae
Sisikou	Kotokoli	<i>Combretum molle</i>	R.Br. Ex G.Don	Combretaceae
Sissi	Mahi	<i>Blighia sapida</i>	König	Sapindaceae
Sodjagbe	Cotafon	<i>Amaranthus spinosus</i>	L.	Amaranthaceae
Sogbe	Adja	<i>Amaranthus spinosus</i>	L.	Amaranthaceae
Sogbe	Adja	<i>Amaranthus viridis</i>	L.	Amaranthaceae
Soko	Bariba	<i>Lippia multiflora</i>	Moldenke	Verbenaceae
Sola	Ife	<i>Grewia mollis</i>	Juss.	Tiliaceae
Solo	Kotokoli	<i>Parkia biglobosa</i>	(Jacq.) R.Br.ex Benth.	Leguminosae- Mimosoideae
Soman	Oueme	<i>Amaranthus cruentus</i>	L.	Amaranthaceae
Soman	Adja	<i>Celosia argentea</i>	L.	Amaranthaceae
Soman	Aizo	<i>Celosia argentea</i>	L.	Amaranthaceae
Soman	Aizo	<i>Celosia argentea</i>	L.	Amaranthaceae
Soman	Fon	<i>Celosia argentea</i>	L.	Amaranthaceae
Soman	Idatcha	<i>Celosia argentea</i>	L.	Amaranthaceae
Soman	Mahi	<i>Celosia argentea</i>	L.	Amaranthaceae
Soman	Fon	<i>Celosia argentea</i>	L.	Amaranthaceae
Soman	Holly	<i>Celosia argentea</i>	L.	Amaranthaceae
Sombékékéssou	Bariba	<i>Celosia trigyna</i>	L.	Amaranthaceae
Sombekekesu	Bariba	<i>Celosia trigyna</i>	L.	Amaranthaceae
Sonan	Bariba	<i>Adansonia digitata</i>	L.	Bombacaceae
Sonanfadé	Kotokoli	<i>Vigna unguiculata</i>	(L.) Walp.	Leguminosae- Papilionoideae
Sonki	Bariba	<i>Citrullus lanatus</i>	(Thunb.) matsum. & Nakai	Cucurbitaceae
Sonki	Bariba	<i>Citrullus lanatus</i>	(Thunb.) matsum. & Nakai	Cucurbitaceae
Sonmou	Bariba	<i>Adansonia digitata</i>	L.	Bombacaceae
Sonnan	Bariba	<i>Adansonia digitata</i>	L.	Bombacaceae
Sonnan	Bariba	<i>Adansonia digitata</i>	L.	Bombacaceae
Sonnan	Bariba	<i>Adansonia digitata</i>	L.	Bombacaceae
Sonnan	Bariba	<i>Adansonia digitata</i>	L.	Bombacaceae
Sonnan	Bariba	<i>Adansonia digitata</i>	L.	Bombacaceae
Sonnan	Bariba	<i>Adansonia digitata</i>	L.	Bombacaceae



**LOCAL NAMES**

Sonru	Bariba	<i>Parkia biglobosa</i>	(Jacq.) R.Br.ex Benth.	Leguminosae-Mimosoideae
Soonou	Anii	<i>Adenia lobata</i>	(Jacq.) Engl.	Passifloraceae
Sououla	Boko	<i>Senna obtusifolia</i>	(L.) H.S.Irwin & Barneby	Leguminosae-Caesalpinioideae
Soua	Kotokoli	<i>Terminalia brownii</i>	xxx	Combretaceae
Souadobagarou	Bariba	<i>Leptadenia hastata</i>	(Pers.) Decne.	Asclepiadaceae
Souadobararou	Bariba	<i>Leptadenia hastata</i>	(Pers.) Decne.	Asclepiadaceae
Souadobarga	Bariba	<i>Leptadenia hastata</i>	(Pers.) Decne.	Asclepiadaceae
Souadoberékenou	Bariba	<i>Leptadenia hastata</i>	(Pers.) Decne.	Asclepiadaceae
Souadogbérékérou	Bariba	<i>Leptadenia hastata</i>	(Pers.) Decne.	Asclepiadaceae
Souaka	Kotokoli	<i>Vernonia amygdalina</i>	Delile	Asteraceae
Souaka	Dendi	<i>Vernonia amygdalina</i>	Delile	Asteraceae
Soumon	Bariba	<i>Adansonia digitata</i>	L.	Bombacaceae
Soungui	Bariba	<i>Amaranthus viridis</i>	L.	Amaranthaceae
Souwaka	Kotokoli	<i>Vernonia amygdalina</i>	Delile	Asteraceae
Sowadobaragaru	Boko	<i>Leptadenia hastata</i>	(Pers.) Decne.	Asclepiadaceae
Suiwurusu	Bariba	<i>Vigna unguiculata</i>	(L.) Walp.	Leguminosae-Papilionoideae
Suiwurusu	Bariba	<i>Vigna unguiculata</i>	(L.) Walp.	Leguminosae-Papilionoideae
Suninrima	Wama	<i>Celosia sp.</i>		Amaranthaceae
Taanidò'nti	Otammari	<i>Ceratotheca sesamoides</i>	Endl.	Pedaliaceae
Taanonma	Wama	<i>Sesamum indicum</i>	L.	Pedaliaceae
Tabarabu	Wama	<i>Cissus palmatifida</i>	(Baker) Planch.	Vitaceae
Tampuobu	Wama	<i>Zanthoxylum zanthoxyloides</i>	(Lam.) Zeppernick & Timler	Rutaceae
Tankoruminsuku	Wama	<i>Cayratia gracilis</i>	(Guill. & Perr.) Suess.	Vitaceae
Tarèyka	Kotokoli	<i>Cryptolepis oblongifolia</i>	(Meisn.) Schltr.	Asclepiadaceae
Tataya	Wama	<i>Boerhavia diffusa</i>	L.	Nyctaginaceae
Tchaati	Ife	<i>Momordica charantia</i>	L.	Cucurbitaceae
Tchaati	Ife	<i>Momordica charantia</i>	L.	Cucurbitaceae
Tchagara	Ife	<i>Lippia multiflora</i>	Moldenke	Verbenaceae
Tchagara	Ife	<i>Lippia multiflora</i>	Moldenke	Verbenaceae
Tchakpa	Mahi	<i>Hibiscus sabdariffa</i>	L.	Malvaceae
Tchalawaré	Kotokoli	<i>Aganope stuhlmannii</i>	(Taub.) Adema	Leguminosae-Papilionoideae
Tchalè	Kotokoli	<i>Daniellia oliveri</i>	(Rolfe) Hutch. & Dalziel	Leguminosae-Caesalpinioideae
Tchanmandido	Cotafon	<i>Ocimum gratissimum</i>	L.	Lamiaceae
Tchapya	Kotokoli	<i>Gymnosporia senegalensis</i>	(Lam.) Loes.	Celastraceae
Tcharipokoma	Wama	<i>Chrysanthellum indicum</i>	DC.	Asteraceae
Tchatchala	Boko	<i>Momordica charantia</i>	L.	Cucurbitaceae
Tchayo	Oueme	<i>Ocimum gratissimum</i>	L.	Lamiaceae

Tchegba	Adja	<i>Cucumeropsis mannii</i>	Naud	Cucurbitaceae
Tchègba	Fon	<i>Citrullus lanatus</i>	(Thunb.) matsum. & Nakai	Cucurbitaceae
Tchègba	Fon	<i>Citrullus lanatus</i>	(Thunb.) matsum. & Nakai	Cucurbitaceae
Tchègba	Mahi	<i>Citrullus lanatus</i>	(Thunb.) matsum. & Nakai	Cucurbitaceae
Tchèlè	Kotokoli	<i>Daniellia oliveri</i>	(Rolfe) Hutch. & Dalziel	Leguminosae-Caesalpinioideae
Tchiayo	Fon	<i>Ocimum gratissimum</i>	L.	Lamiaceae
Tchidifulè	Tchabe	<i>Solanum aethiopicum</i>	L.	Solanaceae
Tchidifulè	Tchabe	<i>Solanum aethiopicum</i>	L.	Solanaceae
Tchiffoou	Kotokoli	<i>Gmelina arborea</i>	Roxb	Verbenaceae
Tchigbaro	Kotokoli	<i>Vitex doniana</i>	Sweet	Verbenaceae
Tchilili	Kotokoli	<i>Fadogia cienkowskii</i>	Scweinf.	Rubiaceae
Tchimandidé	Aizo	<i>Ocimum gratissimum</i>	L.	Lamiaceae
Tchimarou	Kotokoli	<i>Vitex doniana</i>	Sweet	Verbenaceae
Tchindjinan	Kotokoli	<i>Maerua angolensis</i>	DC.	Capparaceae
Tchinguili	Kotokoli	<i>Burkea africana</i>	Hook.	Leguminosae-Caesalpinioideae
Tchirothé	Dendi	<i>Amaranthus viridis</i>	L.	Amaranthaceae
Tchitchiribu	Wama	<i>Plumbago zeylanica</i>	L.	Plumbaginaceae
Tchobodouè	Mahi	<i>Celosia trigyna</i>	L.	Amaranthaceae
Tchokoagbodjouba	Holly	<i>Amaranthus cruentus</i>	L.	Amaranthaceae
Tchokoognibo	Holly	<i>Celosia argentea</i>	L.	Amaranthaceae
Tchokoto	Oueme	<i>Celosia argentea</i>	L.	Amaranthaceae
Tchokoto	Aizo	<i>Celosia argentea</i>	L.	Amaranthaceae
Tchokototovè	Aizo	<i>Celosia argentea</i>	L.	Amaranthaceae
Tchokoyokoto	Ife	<i>Celosia argentea</i>	L.	Amaranthaceae
Tchokugbolo	Ife	<i>Cissus populnea</i>	Guill. & Perr.	Vitaceae
Tcholi	Idatcha	<i>Cochlospermum planchoni</i>	Hook.f.	Cochlospermaceae
Tchomboulouzo	Kotokoli	<i>Stachytarpheta indica</i>	(L.) Vahl	Verbenaceae
Tchoosikpékéfa	Wama	<i>Basella alba</i>	L.	Basellaceae
Tchotchodè	Kotokoli	<i>Annona senegalensis</i>	Pers.	Annonaceae
Tchoutchoudè	Kotokoli	<i>Annona senegalensis</i>	Pers.	Annonaceae
Tcidudju	Adja	<i>Terminalia glaucescens</i>	Planch.ex Benth.	Combretaceae
Tekpadjeluyologa	Gourmantche	<i>Acalypha ciliata</i>	Forssk.	Euphorbiaceae
Tekpegnonkonkondé	Gourmantche	<i>Amaranthus dubius</i>	Mart. Ex Thell.	Amaranthaceae
Tekpegnonkonkondé	Gourmantche	<i>Amaranthus sp.</i>		Amaranthaceae
Télénou	Bariba	<i>Hibiscus asper</i>	Hook.f.	Malvaceae
Tengantenga	Kotokoli	<i>Combretum sericeum</i>	G.Don	Combretaceae
Tereguenu	Bariba	<i>Amaranthus viridis</i>	L.	Amaranthaceae
Tèrenou	Bariba	<i>Hibiscus asper</i>	Hook.f.	Malvaceae
Tete	Adja	<i>Amaranthus cruentus</i>	L.	Amaranthaceae
Tete	Adja	<i>Amaranthus cruentus</i>	L.	Amaranthaceae
Tete	Cotafon	<i>Amaranthus cruentus</i>	L.	Amaranthaceae

## LOCAL NAMES

Tètè	Mahi	<i>Amaranthus cruentus</i>	L.	Amaranthaceae
Tètè	Aizo	<i>Amaranthus viridis</i>	L.	Amaranthaceae
Tètè	Oueme	<i>Celosia trigyna</i>	L.	Amaranthaceae
Tete Elegou	Holly	<i>Amaranthus spinosus</i>	L.	Amaranthaceae
Tete Ibile	Holly	<i>Amaranthus viridis</i>	L.	Amaranthaceae
Tete Ognibo	Holly	<i>Amaranthus cruentus</i>	L.	Amaranthaceae
Tètèdudu	Holly	<i>Amaranthus cruentus</i>	L.	Amaranthaceae
Tètèlègoun	Holly	<i>Amaranthus spinosus</i>	L.	Amaranthaceae
Tètèfounfoun	Holly	<i>Amaranthus cruentus</i>	L.	Amaranthaceae
Tètèfufu	Holly	<i>Amaranthus cruentus</i>	L.	Amaranthaceae
Tetegbe	Aizo	<i>Amaranthus viridis</i>	L.	Amaranthaceae
Tètèkpkpo	Tchabe	<i>Celosia argentea</i>	L.	Amaranthaceae
Tèwon	Wama	<i>Cleome rutidosperma</i>	DC.	Capparaceae
Tèyontè	Otammari	<i>Parkia biglobosa</i>	(Jacq.) R.Br.ex Benth.	Leguminosae- Mimosoideae
Tibagnalifaré	Gourmantche	<i>Corchorus olitorius</i>	L.	Tiliaceae
Tibòdayati	Otammari	<i>Ocimum gratissimum</i>	L.	Lamiaceae
Tibooti	Otammari	<i>Zanthoxylum zanthoxyloides</i>	(Lam.) Zeppernick & Timler	Rutaceae
Tiborafuuti	Otammari	<i>Commelina benghalensis</i>	L.	Commelinaceae
Tibòsèyenti	Otammari	<i>Ocimum gratissimum</i>	L.	Lamiaceae
Tibuoti	Otammari	<i>Margaritaria discoidea</i>	(Baill.) Webster	Euphorbiaceae
Ticefunti	Otammari	<i>Cleome rutidosperma</i>	DC.	Capparaceae
Ticefunti	Otammari	<i>Cleome rutidosperma</i>	DC.	Capparaceae
Tide'ndeti	Otammari	<i>Ipomoea triloba</i>	L.	Convolvulaceae
Tifaanti	Otammari	<i>Corchorus olitorius</i>	L.	Tiliaceae
Tifaanti	Otammari	<i>Corchorus olitorius</i>	L.	Tiliaceae
Tifefari	Gourmantche	<i>Cucurbita pepo</i>	L.	Cucurbitaceae
Tifinhòuti	Otammari	<i>Vernonia amygdalina</i>	Delile	Asteraceae
Tifònuòti	Otammari	<i>Manihot esculenta</i>	Crantz	Euphorbiaceae
Tigberti	Gourmantche	<i>Hibiscus asper</i>	Hook.f.	Malvaceae
Tignaliféri	Gourmantche	<i>Corchorus tridens</i>	L.	Tiliaceae
Tigohundi	Gourmantche	<i>Hibiscus sabdariffa</i>	L.	Malvaceae
Tiguande	Gourmantche	<i>Hibiscus sabdariffa</i>	L.	Malvaceae
Tihaadò'nti	Otammari	<i>Ceratotheca sesamoides</i>	Endl.	Pedaliaceae
Tihòrenhònti	Otammari	<i>Ipomoea triloba</i>	L.	Convolvulaceae
Tikaamboònti	Otammari	<i>Hibiscus asper</i>	Hook.f.	Malvaceae
Tikaanti	Otammari	<i>Solanum macrocarpon</i>	L.	Solanaceae
Tikahunti	Otammari	<i>Solanum macrocarpon</i>	L.	Solanaceae
Tikansibuooti	Otammari	<i>Hibiscus asper</i>	Hook.f.	Malvaceae
Tikòkònuonti	Otammari	<i>Ipomoea batatas</i>	(L.) Lam.	Convolvulaceae
Tikòkùti	Otammari	<i>Sesamum indicum</i>	L.	Pedaliaceae
Tikonfaati	Otammari	<i>Bombax costatum</i>	Pellegr. & Vuillet	Bombacaceae
Tikòonti	Otammari	<i>Hibiscus sabdariffa</i>	L.	Malvaceae
Tikòonti	Otammari	<i>Hibiscus sabdariffa</i>	L.	Malvaceae
Tikòtaduonti	Otammari	<i>Solanum americanum</i>	Mill.	Solanaceae

Tikpaakpaati	Otammari	<i>Laportea aestuans</i>	(L.) Chew	Urticaceae
Tikpahunkpadi	Gourmantche	<i>Senna obtusifolia</i>	(L.) H.S.Irwin & Barneby	Leguminosae-Caesalpinioideae
Tikpalala	Idatcha	<i>Boerhavia diffusa</i>	L.	Nyctaginaceae
Tikpalala	Idatcha	<i>Boerhavia diffusa</i>	L.	Nyctaginaceae
Tikpankpandi	Gourmantche	<i>Senna obtusifolia</i>	(L.) H.S.Irwin & Barneby	Leguminosae-Caesalpinioideae
Tikpankpandi	Gourmantche	<i>Senna obtusifolia</i>	(L.) H.S.Irwin & Barneby	Leguminosae-Caesalpinioideae
Tikpedola	Holly	<i>Boerhavia diffusa</i>	L.	Nyctaginaceae
Tikpignikpowokode	Gourmantche	<i>Ipomoea argentaurata</i>	Hallier f.	Convolvulaceae
Tikpinninla	Holly	<i>Boerhavia diffusa</i>	L.	Nyctaginaceae
Tikpinsindi	Gourmantche	<i>Luffa acutangula</i>	(L.) Roxb.	Cucurbitaceae
Tikpinsindi	Gourmantche	<i>Trichosanthes cucumerina</i>	L.	Cucurbitaceae
Tikuntiti	Otammari	<i>Vernonia amygdalina</i>	Delile	Asteraceae
Tiluomugbadi	Gourmantche	<i>Macrosphyra longistyla</i>	(DC.) Hiern	Rubiaceae
Timammuti	Otammari	<i>Cymbopogon giganteus</i>	(Hochst.) Chiov.	Poaceae
Timantibankoman	Boko	<i>Trichosanthes cucumerina</i>	L.	Cucurbitaceae
Timantonti	Otammari	<i>Vitex doniana</i>	Sweet	Verbenaceae
Timanuòti	Otammari	<i>Ipomoea batatas</i>	(L.) Lam.	Convolvulaceae
Timati	Holly	<i>Trichosanthes cucumerina</i>	L.	Cucurbitaceae
Timeiti	Otammari	<i>Gardenia sp.</i>		Rubiaceae
Timenmuti	Otammari	<i>Cymbopogon giganteus</i>	(Hochst.) Chiov.	Poaceae
Timunurdi	Gourmantche	<i>Ocimum basilicum</i>	L.	Lamiaceae
Timutiti	Otammari	<i>Annona senegalensis</i>	Pers.	Annonaceae
Tinacanti	Otammari	<i>Citrullus lanatus</i>	(Thunb.) matsum. & Nakai	Cucurbitaceae
Tinamò'nti	Otammari	<i>Jatropha gossypifolia</i>	L.	Euphorbiaceae
Tinan	Bariba	<i>Cassia sieberiana</i>	DC.	Leguminosae-Caesalpinioideae
Tinanlifaadi	Gourmantche	<i>Corchorus tridens</i>	L.	Tiliaceae
Tinanlifaadi	Gourmantche	<i>Corchorus tridens</i>	L.	Tiliaceae
Tinkourégou	Bariba	<i>Nelsonia canescens</i>	(Lam.) Spreng.	Acanthaceae
Tinoncanti	Otammari	<i>Citrullus lanatus</i>	(Thunb.) matsum. & Nakai	Cucurbitaceae
Tinonyanti	Otammari	<i>Celosia sp.</i>		Amaranthaceae
Tinufaati	Otammari	<i>Abelmoschus esculentus</i>	(L.) Moench.	Malvaceae
Tinukunti	Otammari	<i>Justicia tenella</i>	(Ness) T. Anderson	Acanthaceae
Tionkoroya	Wama	<i>Crassocephalum rubens</i>	(Jacq.) S.Moore	Asteraceae
Tionkoroya	Wama	<i>Crassocephalum rubens</i>	(Jacq.) S.Moore	Asteraceae
Tipaakaadonti	Otammari	<i>Sesamum indicum</i>	L.	Pedaliaceae
Tipèikanti	Otammari	<i>Talinum triangulare</i>	(Jacq.) Willd.	Portulacaceae
Tipètènoni	Otammari	<i>Boerhavia erecta</i>	L.	Nyctaginaceae
Tipètènoni	Otammari	<i>Ficus ingens</i>	(Miq.) Miq.	Moraceae

## LOCAL NAMES

Tipeti	Otammari	<i>Cucurbita maxima</i>	Duchesne	Cucurbitaceae
Tipétipésiiti	Otammari	<i>Cucurbita pepo</i>	L.	Cucurbitaceae
Tipiepiebri	Gourmantche	<i>Commelina benghalensis</i>	L.	Commelinaceae
Tipiepiebri	Gourmantche	<i>Commelina benghalensis</i>	L.	Commelinaceae
Tipuuti	Otammari	<i>Vernonia galamensis</i>	(Cass.) Less.	Asteraceae
Tisanpoti	Otammari	<i>Amaranthus spinosus</i>	L.	Amaranthaceae
Titankunti	Otammari	<i>Cissus palmatifida</i>	(Baker) Planch.	Vitaceae
Titayanyandi	Gourmantche	<i>Acalypha ciliata</i>	Forssk.	Euphorbiaceae
Titénnonti	Otammari	<i>Boerhavia erecta</i>	L.	Nyctaginaceae
Titembauti	Otammari	<i>Margaritaria discoidea</i>	(Baill.) Webster	Euphorbiaceae
Titookanti	Otammari	<i>Adansonia digitata</i>	L.	Bombacaceae
Titouokaré	Gourmantche	<i>Adansonia digitata</i>	L.	Bombacaceae
Titukòuti	Otammari	<i>Senna occidentalis</i>	(L.) Link	Leguminosae- Caesalpinioideae
Titukpindi	Gourmantche	<i>Vigna unguiculata</i>	(L.) Walp.	Leguminosae- Papilionoideae
Titukpindi	Gourmantche	<i>Vigna unguiculata</i>	(L.) Walp.	Leguminosae- Papilionoideae
Titukpòòti	Otammari	<i>Senna occidentalis</i>	(L.) Link	Leguminosae- Caesalpinioideae
Titu'nti	Otammari	<i>Vigna unguiculata</i>	(L.) Walp.	Leguminosae- Papilionoideae
Tituti	Otammari	<i>Vigna unguiculata</i>	(L.) Walp.	Leguminosae- Papilionoideae
Tiyayaakoonti	Otammari	<i>Cayratia gracilis</i>	(Guill. & Perr.) Suess.	Vitaceae
Todokuikan	Mahi	<i>Ipomoea aquatica</i>	Forssk.	Convolvulaceae
Togba	Fon	<i>Amaranthus dubius</i>	Mart. Ex Thell.	Amaranthaceae
Togbalo	Adja	<i>Stachytarpheta indica</i>	(L.) Vahl	Verbenaceae
Togbédéssindji	Mahi	<i>Talinum triangulare</i>	(Jacq.) Willd.	Portulacaceae
Togle	Aizo	<i>Senna occidentalis</i>	(L.) Link	Leguminosae- Caesalpinioideae
Togouti	Adja	<i>Emilia sonchifolia</i>	(L.) DC. Ex Wight	Asteraceae
Tohonto	Cotafon	<i>Emilia sonchifolia</i>	(L.) DC. Ex Wight	Asteraceae
Tohossoumanou	Cotafon	<i>Spigelia anthelmia</i>	L.	Loganiaceae
Tokounme	Cotafon	<i>Celosia argentea</i>	L.	Amaranthaceae
Tokpédé	Fon	<i>Talinum triangulare</i>	(Jacq.) Willd.	Portulacaceae
Tokpédé Fonton	Fon	<i>Talinum triangulare</i>	(Jacq.) Willd.	Portulacaceae
Tokpéssindji	Mahi	<i>Talinum triangulare</i>	(Jacq.) Willd.	Portulacaceae
Tokpodé	Ife	<i>Talinum triangulare</i>	(Jacq.) Willd.	Portulacaceae
Tokpodé Yovoton	Fon	<i>Basella alba</i>	L.	Basellaceae
Tolo	Cotafon	<i>Struchium sparganophorum</i>	(L.) Kuntze	Asteraceae
Toloman	Oueme	<i>Blumea aurita</i>	(Linn. f.) DC	Asteraceae
Toloman	Aizo	<i>Blumea aurita</i>	(Linn. f.) DC	Asteraceae
Toloman	Adja	<i>Ludwigia perennis</i>	L.	Onagraceae

TRADITIONAL VEGETABLES OF BENIN

Toloman	Aizo	<i>Struchium sparganophorum</i>	(L.) Kuntze	Asteraceae
Toloman	Fon	<i>Struchium sparganophorum</i>	(L.) Kuntze	Asteraceae
Toloman	Mahi	<i>Struchium sparganophorum</i>	(L.) Kuntze	Asteraceae
Toloman	Aizo	<i>Struchium sparganophorum</i>	(L.) Kuntze	Asteraceae
Tomadohoungbè	Cotafon	<i>Alternanthera sessilis</i>	(L.) R. Br. Ex Roth	Amaranthaceae
Tooku	Fon	<i>Cucumeropsis mannii</i>	Naud	Cucurbitaceae
Tooku	Fon	<i>Cucumeropsis mannii</i>	Naud	Cucurbitaceae
Touan	Bariba	<i>Vernonia amygdalina</i>	Delile	Asteraceae
Touan	Bariba	<i>Vernonia amygdalina</i>	Delile	Asteraceae
Touan	Bariba	<i>Vernonia amygdalina</i>	Delile	Asteraceae
Touan	Bariba	<i>Vernonia amygdalina</i>	Delile	Asteraceae
Touan	Bariba	<i>Vernonia amygdalina</i>	Delile	Asteraceae
Touan	Bariba	<i>Vernonia colorata</i>	(Willd.) Drake	Asteraceae
Toumougou	Boko	<i>Lagenaria siceraria</i>	(Molina) Standl.	Cucurbitaceae
Toutoufari	Gourmantche	<i>Vigna unguiculata</i>	(L.) Walp.	Leguminosae-Papilionoideae
Towé	Oueme	<i>Persicaria acuminata</i>	(Kunth) M. Gomez	Polygonaceae
Towé	Aizo	<i>Persicaria acuminata</i>	(Kunth) M. Gomez	Polygonaceae
Towèlican	Cotafon	<i>Ipomoea aquatica</i>	Forssk.	Convolvulaceae
Towelikan	Cotafon	<i>Ipomoea aquatica</i>	Forssk.	Convolvulaceae
Towonto	Adja	<i>Emilia sonchifolia</i>	(L.) DC. Ex Wight	Asteraceae
Toyiman	Fon	<i>Psophocarpus palustris</i>	Desv.	Leguminosae-Papilionoideae
Toyovogboman	Cotafon	<i>Talinum triangulare</i>	(Jacq.) Willd.	Portulacaceae
Tumugu	Boko	<i>Lagenaria siceraria</i>	(Molina) Standl.	Cucurbitaceae
Tunwan	Bariba	<i>Vernonia sp.</i>		Asteraceae
Tunwan	Bariba	<i>Vernonia sp.</i>		Asteraceae
Ukangu	Gourmantche	<i>Solanum macrocarpon</i>	L.	Solanaceae
Unkpéhoun	Ife	<i>Ocimum basilicum</i>	L.	Lamiaceae
Unkpékaraman	Gourmantche	<i>Vernonia sp.</i>		Asteraceae
Unonbuboko	Bariba	<i>Ocimum gratissimum</i>	L.	Lamiaceae
Unranafunfunma	Anii	<i>Ehretia cymosa</i>	(Thonn.ex Schum. (Schumach.) Milne-Redh.	Boraginaceae
Untchérima	Anii	<i>Piliostigma thonningii</i>		Leguminosae-Caesalpinioideae
Untcho	Ife	<i>Corchorus tridens</i>	L.	Tiliaceae
Viohounda	Boko	<i>Corchorus olitorius</i>	L.	Tiliaceae
Viola	Boko	<i>Corchorus olitorius</i>	L.	Tiliaceae
Viola	Boko	<i>Corchorus olitorius</i>	L.	Tiliaceae
Vo	Fon	<i>Ficus polita</i>	Vahl	Moraceae
Vo	Mahi	<i>Ficus polita</i>	Vahl	Moraceae
Vo	Fon	<i>Ficus sur</i>	Forssk.	Moraceae
Voi	Cotafon	<i>Momordica cissoides</i>	Planch.ex Benth.	Cucurbitaceae
Voman	Aizo	<i>Ficus thonningii</i>	Blume	Moraceae



## LOCAL NAMES

Voman	Aizo	<i>Ficus trichopoda</i>	Baker	Moraceae
Vounvo	Aizo	<i>Celosia argentea</i>	L.	Amaranthaceae
Voyi	Adja	<i>Momordica cissoides</i>	Planch.ex Benth.	Cucurbitaceae
Voyi	Adja	<i>Momordica cissoides</i>	Planch.ex Benth.	Cucurbitaceae
Waguiiri	Bariba	<i>Moringa oleifera</i>	Lam.	Moringaceae
Wanwambago	Bariba	<i>Ocimum gratissimum</i>	L.	Lamiaceae
Waraou	Dendi	<i>Hibiscus sabdariffa</i>	L.	Malvaceae
Warima	Wama	<i>Ocimum gratissimum</i>	L.	Lamiaceae
Warri	Bariba	<i>Ceratotheca sesamoides</i>	Endl.	Pedaliaceae
Warri	Bariba	<i>Ceratotheca sesamoides</i>	Endl.	Pedaliaceae
Warri	Bariba	<i>Ceratotheca sesamoides</i>	Endl.	Pedaliaceae
Wèwèssou	Bariba	<i>Citrullus lanatus</i>	(Thunb.) matsum. & Nakai	Cucurbitaceae
Wèwèssou	Bariba	<i>Citrullus lanatus</i>	(Thunb.) matsum. & Nakai	Cucurbitaceae
Wianru	Bariba	<i>Cucurbita pepo</i>	L.	Cucurbitaceae
Windi Boundou	Dendi	<i>Moringa oleifera</i>	Lam.	Moringaceae
Windi Boundou	Dendi/ Djerma	<i>Moringa oleifera</i>	Lam.	Moringaceae
Windiboundou	Dendi	<i>Moringa oleifera</i>	Lam.	Moringaceae
Wlassi	Cotafon	<i>Melanthera scandens</i>	(Schumach.& Thonn.) Roberty	Asteraceae
Wlassi	Cotafon	<i>Melanthera scandens</i>	(Schumach.& Thonn.) Roberty	Asteraceae
Wlatchi	Adja	<i>Melanthera scandens</i>	(Schumach.& Thonn.) Roberty	Asteraceae
Wogoo	Bariba	<i>Abelmoschus esculentus</i>	(L.) Moench.	Malvaceae
Wogoo	Bariba	<i>Abelmoschus esculentus</i>	(L.) Moench.	Malvaceae
Wogoo	Bariba	<i>Abelmoschus esculentus</i>	(L.) Moench.	Malvaceae
Wonanvwe	Cotafon	<i>Hoslundia opposita</i>	Vahl	Lamiaceae
Wonto	Cotafon	<i>Launea taraxacifolia</i>	(Willd.) Amin ex C. Jeffrey	Asteraceae
Wonto	Aizo	<i>Launea taraxacifolia</i>	(Willd.) Amin ex C. Jeffrey	Asteraceae
Wontu	Adja	<i>Launea taraxacifolia</i>	(Willd.) Amin ex C. Jeffrey	Asteraceae
Wontu	Adja	<i>Launea taraxacifolia</i>	(Willd.) Amin ex C. Jeffrey	Asteraceae
Wori	Bariba	<i>Ceratotheca sesamoides</i>	Endl.	Pedaliaceae
Wori	Bariba	<i>Ceratotheca sesamoides</i>	Endl.	Pedaliaceae
Worougbo	Bariba	<i>Ammannia baccifera</i>	L.	Lythraceae
Worousolola	Boko	<i>Moringa oleifera</i>	Lam.	Moringaceae
Worri	Bariba	<i>Ceratotheca sesamoides</i>	Endl.	Pedaliaceae
Worri	Bariba	<i>Ceratotheca sesamoides</i>	Endl.	Pedaliaceae
Worri	Bariba	<i>Ceratotheca sesamoides</i>	Endl.	Pedaliaceae
Worri 1	Bariba	<i>Sesamum indicum</i>	L.	Pedaliaceae
Worri 2	Bariba	<i>Ceratotheca sesamoides</i>	Endl.	Pedaliaceae
Worukoho	Wama	<i>Ammannia baccifera</i>	L.	Lythraceae



TRADITIONAL VEGETABLES OF BENIN

Woso	Boko	<i>Moringa oleifera</i>	Lam.	Moringaceae
Wountchiinlaoungkolé	Anii	<i>Cayratia gracilis</i>	(Guill. & Perr.) Suess.	Vitaceae
Wowonnifa	Wama	<i>Ocimum sp.</i>		Lamiaceae
Wronwron	Bariba	<i>Ocimum gratissimum</i>	L.	Lamiaceae
Wronwronbago	Bariba	<i>Ocimum gratissimum</i>	L.	Lamiaceae
Wutchi	Tchabe	<i>Blighia sapida</i>	König	Sapindaceae
Xizixan	Mahi	<i>Vernonia colorata</i>	(Willd.) Drake	Asteraceae
Xwasse	Adja	<i>Boerhavia diffusa</i>	L.	Nyctaginaceae
Xwayoue	Cotafon	<i>Aspilia africana</i>	(Pers.) Adams	Asteraceae
Yaaya	Kotokoli	<i>Rourea coccinea</i>	(Thonn.ex Schumach.) Benth	Connaraceae
Yabagassirou	Bariba	<i>Celosia argentea</i>	L.	Amaranthaceae
Yabonu	Bariba	<i>Abelmoschus esculentus</i>	(L.) Moench.	Malvaceae
Yaha	Idatcha	<i>Uvaria chamae</i>	P. Beauv.	Annonaceae
Yaha	Idatcha	<i>Uvaria chamae</i>	P. Beauv.	Annonaceae
Yakiporiduya	Wama	<i>Celosia sp.</i>		Amaranthaceae
Yanayikpadja	Holly	<i>Jatropha curcas</i>	L.	Euphorbiaceae
Yanditiré	Wama	<i>Lagenaria siceraria</i>	(Molina) Standl.	Cucurbitaceae
Yandodoui, Lolouide	Adja	<i>Ocimum gratissimum</i>	L.	Lamiaceae
Yangutu	Wama	<i>Vigna unguiculata</i>	(L.) Walp.	Leguminosae- Papilionoideae
Yannuyinnon	Bariba	<i>Senna occidentalis</i>	(L.) Link	Leguminosae- Caesalpinioideae
Yannuyinnon	Bariba	<i>Senna occidentalis</i>	(L.) Link	Leguminosae- Caesalpinioideae
Yantoto	Fon	<i>Launea taraxacifolia</i>	(Willd.) Amin ex C. Jeffrey	Asteraceae
Yantoto	Mahi	<i>Launea taraxacifolia</i>	(Willd.) Amin ex C. Jeffrey	Asteraceae
Yantoto	Fon	<i>Launea taraxacifolia</i>	(Willd.) Amin ex C. Jeffrey	Asteraceae
Yantoto	Mahi	<i>Launea taraxacifolia</i>	(Willd.) Amin ex C. Jeffrey	Asteraceae
Yaran'duya	Wama	<i>Stachytarpheta indica</i>	(L.) Vahl	Verbenaceae
Yaro	Bariba	<i>Vitex doniana</i>	Sweet	Verbenaceae
Yayakrombou	Bariba	<i>Luffa aegyptiaca</i>	(L.) M. Roem.	Cucurbitaceae
Yayin	Wama	<i>Citrullus lanatus</i>	(Thunb.) matsum. & Nakai	Cucurbitaceae
Yayinnon	Wama	<i>Senna occidentalis</i>	(L.) Link	Leguminosae- Caesalpinioideae
Yebe	Holly	<i>Solanum americanum</i>	Mill.	Solanaceae
Yèbè	Holly	<i>Solanum americanum</i>	Mill.	Solanaceae
Yèbè	Holly	<i>Solanum americanum</i>	Mill.	Solanaceae
Yèkodiè	Otammari	<i>Solanum aethiopicum</i>	L.	Solanaceae
Yèkotenko	Otammari	<i>Colocasia esculenta</i>	(L.) Schott	Araceae
Yènurè	Otammari	<i>Abelmoschus esculentus</i>	(L.) Moench.	Malvaceae

## LOCAL NAMES

Yèsoso	Otammari	<i>Luffa acutangula</i>	(L.) Roxb.	Cucurbitaceae
Yètookpèrè	Otammari	<i>Adansonia digitata</i>	L.	Bombacaceae
Yewonto	Cotafon	<i>Emilia sonchifolia</i>	(L.) DC. Ex Wight	Asteraceae
Yeyiman	Cotafon	<i>Centrosema plumieri</i>	(Turpin ex Pers.) Benth.	Leguminosae- Papilionoideae
Yèyiman	Cotafon	<i>Centrosema plumieri</i>	(Turpin ex Pers.) Benth.	Leguminosae- Papilionoideae
Yifaayéyi	Otammari	<i>Corchorus tridens</i>	L.	Tiliaceae
Yifoliunfoni	Gourmantche	<i>Commelina diffusa</i>	Burm.f.	Commelinaceae
Yiman	Cotafon	<i>Vigna unguiculata</i>	(L.) Walp.	Leguminosae- Papilionoideae
Yimanni	Gourmantche	<i>Abelmoschus esculentus</i>	(L.) Moench.	Malvaceae
Yinkitiumpu	Wama	<i>Sphenostylis schweinfurthii</i>	Harms	Leguminosae- Papilionoideae
Yinrike	Bariba	<i>Corchorus tridens</i>	L.	Tiliaceae
Yinrikuntu	Wama	<i>Vitex doniana</i>	Sweet	Verbenaceae
Yinya	Fon	<i>Lippia multiflora</i>	Moldenke	Verbenaceae
Yiviman	Aizo	<i>Vigna unguiculata</i>	(L.) Walp.	Leguminosae- Papilionoideae
Yodo	Dendi/ Djerma	<i>Ceratotheca sesamoides</i>	Endl.	Pedaliaceae
Yodou	Bariba	<i>Lannea acida</i>	A.Rich. S.l.	Anacardiaceae
Yogoti	Bariba	<i>Annona senegalensis</i>	Pers.	Annonaceae
Yonbita	Wama	<i>Amaranthus cruentus</i>	L.	Amaranthaceae
Yonbita	Wama	<i>Amaranthus dubius</i>	Mart. Ex Thell.	Amaranthaceae
Yonbtèna	Wama	<i>Amaranthus cruentus</i>	L.	Amaranthaceae
Yonguitu	Wama	<i>Vigna unguiculata</i>	(L.) Walp.	Leguminosae- Papilionoideae
Yonman	Wama	<i>Amaranthus cruentus</i>	L.	Amaranthaceae
Yonni	Boko	<i>Talinum triangulare</i>	(Jacq.) Willd.	Portulacaceae
Yooda	Boko	<i>Basella alba</i>	L.	Basellaceae
Yoriarikoobu	Wama	<i>Acmella uliginosa</i>	(Sw.) Cass.	Asteraceae
Yorikungufa	Wama	<i>Moringa oleifera</i>	Lam.	Moringaceae
Yoritampobu	Wama	<i>Acmella uliginosa</i>	(Sw.) Cass.	Asteraceae
Yoro Ara	Bariba	<i>Moringa oleifera</i>	Lam.	Moringaceae
Yoro Ara	Bariba	<i>Moringa oleifera</i>	Lam.	Moringaceae
Yorouké	Bariba	<i>Basella alba</i>	L.	Basellaceae
Yorouyara	Bariba	<i>Moringa oleifera</i>	Lam.	Moringaceae
Yorouyara	Bariba	<i>Moringa oleifera</i>	Lam.	Moringaceae
Yorouyara	Bariba	<i>Moringa oleifera</i>	Lam.	Moringaceae
Youbna	Kotokoli	<i>Opilia amentacea</i>	Roxb.	Opiliaceae
Younkpotoun	Aizo	<i>Jatropha gossypifolia</i>	L.	Euphorbiaceae
Yovogbomangbé	Cotafon	<i>Talinum triangulare</i>	(Jacq.) Willd.	Portulacaceae
Yovogbomanhouégbé	Cotafon	<i>Basella alba</i>	L.	Basellaceae
Yovoglassi	Aizo	<i>Basella alba</i>	L.	Basellaceae
Yovoglassiman	Aizo	<i>Euphorbia heterophylla</i>	L.	Euphorbiaceae
Yovokpatin	Aizo	<i>Moringa oleifera</i>	Lam.	Moringaceae
Yovokpatin	Mahi	<i>Moringa oleifera</i>	Lam.	Moringaceae

TRADITIONAL VEGETABLES OF BENIN

Yovokpatin	Oueme	<i>Moringa oleifera</i>	Lam.	Moringaceae
Yovokpatin	Aizo	<i>Moringa oleifera</i>	Lam.	Moringaceae
Yoyo	Idatcha	<i>Corchorus olitorius</i>	L.	Tiliaceae
Yoyo	Idatcha	<i>Corchorus olitorius</i>	L.	Tiliaceae
Yoyogunan	Boko	<i>Corchorus olitorius</i>	L.	Tiliaceae
Yoyokun	Bariba	<i>Corchorus olitorius</i>	L.	Tiliaceae
Yoyokun	Bariba	<i>Corchorus olitorius</i>	L.	Tiliaceae
Yoyora	Wama	<i>Corchorus olitorius</i>	L.	Tiliaceae
Yroyrogou	Bariba	<i>Corchorus olitorius</i>	L.	Tiliaceae
Yroyrokou	Bariba	<i>Corchorus olitorius</i>	L.	Tiliaceae
Yroyrokou	Bariba	<i>Corchorus olitorius</i>	L.	Tiliaceae
Yroyrokou	Bariba	<i>Corchorus olitorius</i>	L.	Tiliaceae
Za	Fon	<i>Daniellia oliveri</i>	(Rolfe) Hutch. & Dalziel	Leguminosae-Caesalpinioideae
Zaa	Boko	<i>Cissus populnea</i>	Guill. & Perr.	Vitaceae
Zaman	Adja	<i>Daniellia oliveri</i>	(Rolfe) Hutch. & Dalziel	Leguminosae-Caesalpinioideae
Zanla	Boko	<i>Cissus populnea</i>	Guill. & Perr.	Vitaceae
Zeblichoun	Aizo	<i>Macrosphyra longistyla</i>	(DC.) Hiern	Rubiaceae
Zibibéri	Dendi	<i>Boerhavia erecta</i>	L.	Nyctaginaceae
Ziman	Cotafon	<i>Combretum mucronatum</i>	Schumach. & Thonn	Combretaceae
Zinzoun	Cotafon	<i>Adansonia digitata</i>	L.	Bombacaceae
Zohan	Mahi	<i>Cucumeropsis mannii</i>	Naud	Cucurbitaceae
Zomali	Adja	<i>Ehretia cymosa</i>	(Thonn.ex Schum.	Boraginaceae
Zoula	Boko	<i>Commelina benghalensis</i>	L.	Commelinaceae
Zounhan	Mahi	<i>Cucumeropsis mannii</i>	Naud	Cucurbitaceae
Zounzon	Mahi	<i>Adansonia digitata</i>	L.	Bombacaceae
	Bariba	<i>Ipomoea asarifolia</i>	(Desr.) Roem. & Schult.	Convolvulaceae
	Otamari	<i>Vernonia cinerea</i>	(L.) Less.	Asteraceae

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