SAVANNA FIRE AND THE ORIGINS OF THE "UNDERGROUND FORESTS" OF AFRICA

Olivier Maurin[1, *], T. Jonathan Davies[1, 2, *], John E. Burrows[3, 4], Barnabas H. Daru[1], Kowiyou Yessoufou[1, 5], A. Muthama Muasya[6], Michelle van der Bank[1] and William J. Bond[6, 7]

[1]African Centre for DNA Barcoding, Department of Botany & Plant Biotechnology, University of Johannesburg, PO Box 524 Auckland Park 2006, Johannesburg, Gauteng, South Africa; [2]Department of Biology, McGill University, 1205 ave Docteur Penfield, Montreal, QC H3A 0G4, Quebec, Canada; [3]Buffelskloof Herbarium, P.O. Box 710, Lydenburg, 1120, South Africa; [4]Department of Plant Sciences, University of Pretoria, Private Bag X20 Hatfield 0028, Pretoria, South Africa; [5]Department of Environmental Sciences, University of South Africa, Florida campus, Florida 1710, Gauteng, South Africa; [6]Department of Biological Sciences and [7]South African Environmental Observation Network, University of Cape Town, Rondebosch, 7701, Western Cape, South Africa

*These authors contributed equally to the study

Author for correspondence:
T. Jonathan Davies
Tel: +1 514 398 8885
Email: j.davies@mcgill.ca

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SUMMARY

1. The origin of fire-adapted lineages is a long-standing question in ecology. Although phylogeny can provide a significant contribution to the ongoing debate, its use has been precluded by the lack of comprehensive DNA data. Here we focus on the 'underground trees' (= geoxyles) of southern Africa, one of the most distinctive growth forms characteristic of fire-prone savannas.
2. We placed geoxyles within the most comprehensive dated phylogeny for the regional flora comprising over 1400 woody species. Using this phylogeny, we tested whether African geoxyles evolved concomitantly with those of the South American cerrado and used their phylogenetic position to date the appearance of humid savannas.
3. We found multiple independent origins of the geoxyle life-form mostly from the Pliocene, a period consistent with the origin of cerrado, with the majority of divergences occurring within the last 2 Ma. When contrasted with their tree relatives, geoxyles occur in regions characterized by higher rainfall and greater fire frequency.
4. Our results indicate that the geoxylic growth form may have evolved in response to the interactive effects of frequent fires and high precipitation. As such, geoxyles may be regarded as markers of fire-maintained savannas occurring in climates suitable for forests.

Keywords: Geoxylic suffrutex, fire adaptation, Pliocene, phylogeny, trees of southern Africa

INTRODUCTION

Savannas, ecosystems with continuous grass cover and variable woody cover, are one of the world's major biomes, reaching their greatest extent in the seasonally dry tropics. Over large parts of their climate range, savannas occur in mosaics with forests leading to the idea that they are products of anthropogenic fire and deforestation. However, there is accumulating evidence that, worldwide, savannas are of ancient origin. Dated molecular phylogenies point to the origins of the C_4 grasses that dominate savannas in the Oligocene (earliest at 32 Ma) with considerable diversification already occurring by the Miocene (Christin *et al*., 2008, 2014; Edwards *et al*., 2010; Bouchenak-Khelladi *et al*., 2014). The savanna biome first became a prominent component of tropical vegetation from the late Miocene (~8 Ma) according to isotopic evidence from palaeosols and fossil teeth (Cerling *et al*., 1997). Thus, savannas were a major component of tropical vegetation millions of years before humans began to fell and burn forests. Studies indicated that once savannas began to spread, they expanded rapidly reaching their maximum extent during Pleistocene glacial periods. Today, they cover about 20% of the world's vegetated land surface (Collinson, 1988; Bond, 2008).

The causes of this rapid spread and the long delay between origins of C_4 grass lineages and their expansion into the savanna biome, has been the topic of intense research interest over the past 20 years (Cerling *et al*., 1997; Sage, 2004; Keeley & Rundel, 2005; Beerling & Osborne, 2006; Osborne, 2008; Edwards *et al*., 2010; Scheiter *et al.,* 2012). Ehleringer *et al*. (1997) were the first to suggest a general hypothesis for the appearance of C_4 grasses arguing from photosynthetic considerations that C_4 grasses would first have outcompeted their C_3 precursors in low latitudes with warm growing seasons and when atmospheric CO_2 dropped below 500 ppm. They suggested that this threshold was passed in the late Miocene, explaining the rapid global expansion of savannas from that time. However, subsequent studies, using a variety of proxies, have shown that CO_2 dropped below the 500 ppm threshold in the Oligocene, much earlier than the rise of the savanna biome, but consistent with the origin of C_4 grasses and other lineages with CO_2 concentrating mechanisms (Pagani *et al*., 2002; Arakaki *et al*., 2011; Beerling & Royer, 2011).

While photosynthetic advantage may explain how C_3 grasses were outcompeted by C_4 grasses, it does not, however, explain how grasses outcompete trees, and therefore why grasslands replaced ancestral forests. C_4 grasses are

intolerant of shading and are rare or absent in closed forest understories (Ehleringer, 1978; Sage, 2001). For the savanna biome to have expanded, forests would have had to retreat. Increasing aridity is one potential pathway to forest retreat. Phytolith studies in central North America have shown that forests were replaced by C_3 grasslands, which were in turn replaced by C_4 grasses during the late Miocene (Strömberg, 2005). The mechanism for forest retreat has been attributed to increasing aridity from the Oligocene. Forest retreat due to growing aridity has also been invoked to explain the spread of grasses in Pakistan and Europe (Strömberg, 2011).

However, a climate-based hypothesis for the distribution of savannas does not explain why many contemporary C_4 savannas occur as alternative states to closed forests in tropical landscapes (Hirota *et al*., 2011; Lehmann *et al*., 2011; Staver *et al*., 2011a). The presence of forests indicates climatic conditions that can support closed vegetation. Fire is increasingly recognised as a key factor maintaining contemporary grasslands where the climate can support forests (Bond *et al*., 2005; Lehmann *et al*., 2011; Staver *et al*., 2011b, Hoffmann *et al*., 2012). C_4 grassy biomes currently account for about 80% of the world's burnt area per year (Chuvieco *et al*., 2008; van der Werf *et al*., 2010), and many humid savannas burn several times in a decade and some burn twice within a year (Chuvieco *et al*., 2008; Archibald *et al.,* 2013). The combination of high grass productivity given sufficient moisture, low decomposition rates of C_4 grasses and a dry season suitable for burning every year provide the essential ingredients for the frequent fires characteristic of C_4 savannas (Bond *et al*., 2003; Bond, 2008). Savanna fires can penetrate forest margins and, depending on the rates of postburn forest recovery, facilitate savanna advance into forest habitat (Kellman, 1984; Hoffmann *et al*., 2009, 2012; Murphy & Bowman, 2012). Because tree recovery from injury, such as fire damage, is particularly slow at low CO_2, there may additionally have been synergies between fire-maintained savannas versus closed forests and atmospheric composition (Bond & Midgley 2000, 2012; Beerling & Osborne 2006; Kgope *et al*., 2010; Scheiter *et al.,* 2012).

Demonstrating an empirical link between fire and the advance of savanna into forest has been a challenge. Charcoal records from marine cores show an exponential increase in fire activity coincident with the expansion of the savanna biome (Herring, 1985; Keeley & Rundel, 2005; Morley & Richards, 1992; Hoetzel *et al*., 2013). Unfortunately, there is no equivalent terrestrial fossil record. The landscapes where fires are currently most prominent are deeply weathered and not conducive to fossil

preservation. Thus, the fossil evidence is currently weighted towards the aridity route for forest retreat and savanna expansion (Strömberg, 2011). Dated molecular phylogenies provide an alternative tool for exploring the origins of fire adapted lineages and biomes (e.g. Bytebier *et al.*, 2011; He *et al.*, 2011; Midgley & Bond, 2011).

Simon *et al.* (2009) and Simon & Pennington (2012) used phylogenetic methods to infer the history of fire activity in Brazilian savannas (cerrado), and estimated the origin of woody plants restricted to the cerrado as less than 10 Ma with most savanna lineages dated as less than 5 Ma, consistent with isotopic evidence for the timing of the spread of C_4 grassy biomes. Thus, far from being an ancient vegetation type (e.g. Cole, 1986), cerrado is more likely a recently evolved biome. Savanna lineages differ from their forest relatives in a suite of fire-adapted traits: thick bark, reduced height, and large underground storage organs (Coutinho, 1982, 1990; Hoffmann *et al.*, 2003, 2004, 2009, 2012). One of the most distinctive growth forms characteristic of savannas is the geoxylic suffrutex (White, 1979; "geoxyle" of Simon & Pennington, 2012). These are functionally herbaceous plants with “woody xylopodia underground but only limited and often short lived aerial shoots” (Simon & Pennington, 2012; see also Coutinho, 1982, 1990; Appezzato-da-Glória *et al.*, 2008). Xylopodia are underground structures consisting of "a lignified complex of root and shoot tissue with a high capacity to resprout and produce new shoot buds" (Appezzato-da-Glória *et al.,* 2008), and may provide an alternative adaptive escape route from fire. White (1979) described this growth form for African savannas and likened these plants to underground trees with branches buried and only the shoot tips and leaves emerging – he referred to them eloquently as Africa’s “underground forests”. We use the term ‘geoxyles’ for underground trees hereafter.

Here, we locate the origins of the geoxyle life-form on the first comprehensive phylogeny of African woody plants to explore the origins of African savannas. First, we test whether woody species with this putatively fire-adapted growth form emerged at similar times to those of South American cerrado. Second, we explore the origins of the geoxyle life-form and consider whether these species provide a marker for the appearance of humid savannas through the fire mechanism of forest retreat. Last, we contrast the diversity of lineages contributing to the woody flora of African savannas with the flora of the South American cerrado.

MATERIALS AND METHODS

Our study area includes the Zambezian region between 8°5' S and 34°5' S latitude and 11°7' W and 40°9' E longitude. It encompasses twelve countries including Angola, Botswana, DRC, Lesotho, Malawi, Mozambique, Namibia, South Africa, Swaziland, Tanzania, Zambia, and Zimbabwe with the Atlantic and the Indian Oceans delimiting the region in the west and east, respectively.

Taxon Sampling

A total of 1,400 (of the ~2200) woody plant species comprising 117 families and 562 genera (Coates Palgrave, 2002; Schmidt *et al*., 2007; Boon, 2010; Van Wyk *et al*., 2011; Germishuizen & Meyer, 2013) were sampled over a period of six years in southern Africa (Note 1), including 53 of the ~200 geoxyle taxa recorded for the region (Note 2). We follow White's (1976) definition of geoxyles as plants that have a perennial below-ground woody root/stem, flowering and fruiting on seasonal and short-lived (resprouted) stems that do not exceed 1 m tall, and occur in areas receiving annual rainfall above 750 mm. As construed by White (1976), the term 'geoxylic suffrutex' is confined to those woody underground trees that belong to genera whose species are mainly otherwise trees and shrubs. He excluded from his definition those genera that have similar subterranean growth forms but which lack large tree relatives e.g. *Acalypha, Eriosema*, *Gnidia, Hypericum, Indigofera*, *Phyllanthus, Syncolostemon, Tephrosia* and *Vernonia.* White's definition includes the most striking examples of closely related tall trees and functionally herbaceous "underground trees" (Figures 1-3).

Phylogeny Reconstruction

DNA extractions from leaf material, polymerase chain reactions and sequencing for the two-plant DNA barcoding regions (*rbcLa* and *matK*) (CBOL Plant Working Group, 2009) were conducted using standard protocols (Hajibabaei *et al*., 2005; Ivanova *et al*., 2008). Complementary strands were assembled and edited using Sequencher v.4.8 (Gene Codes, Ann Arbor, Michigan, USA). The *matK* alignment was performed using Transalign (Bininda-Emonds, 2005). The combined data set comprised 552 and 942 base pairs for *rbcLa* and *matK* respectively. Voucher specimen information and GenBank accession numbers are listed in Note 2 and on the

BOLD DataSystem (www.boldsystems.org). The phylogeny was reconstructed using 1,400 taxa representing 117 families and 562 genera of Gymnosperms and Angiosperms. A total of 53 geoxyle taxa representing 22 APG families were included in the matrix.

A maximum likelihood (ML) analysis was performed on the combined data set using RAxML-HPC2 v.7.2.6 (Stamatakis *et al*., 2008) on the CIPRES cluster (Miller *et al*., 2009), and enforcing topological constraints assuming the APG III backbone from Phylomatic v.3 (Webb & Donoghue, 2005). The phylogeny was rooted using representatives of *Acrogymnospermae* (*Callitris, Cupressus, Cycas*, *Encephalartos*, *Juniperus*, *Pinus*, *Podocarpus*, *Stangeria, Widdringtonia,* and *Zamia*) (Cantino *et al*., 2007; Soltis *et al*., 2011). Branch lengths were then calibrated in millions of years using a Bayesian MCMC approach implemented in BEAST v.1.4.8 (Drummond & Rambaut, 2007), keeping the tree topology fixed. First, the RAxML starting tree was adjusted so that branch lengths satisfied all fossil prior constraints, using PATHd8 v.1.0 (Britton *et al*., 2007). Second, we assumed an uncorrelated lognormal (UCLN) model for rate variation among branches and the GTR + I + Γ model of sequence evolution for each partition based on the Akaike information criterion evaluated using Modeltest v.2.3 (Nylander, 2004). Third, we used 28 fossil calibration points from Bell *et al.* (2010) (Table S1) as minimum age constraints on the stem node of each group, except for the root of the Eudicots, which was set at 124 myr, with a log normal distribution following Bell *et al*. (2010). We performed four independent runs of Markov chain Monte Carlo (MCMC) each for 100 million generations, sampling every 1000 generations. We assessed the MCMC log files for convergence using the effective sample size statistics in Tracer v.1.5 (Drummond & Rambaut, 2007). The BEAST analysis reported ESS values > 100, indicating that the posterior estimates were not unduly influenced by autocorrelation. We combined the resulting tree files from the four runs in LogCombiner v.1.7.5, downsampling 1 in 20,000 trees, and discarding the first 25% trees as burn-in. The maximum clade consensus tree, with means and 95% highest posterior density (HPD) intervals, was generated with TreeAnnotator v.1.7.5.

Statistical Analysis

To explore the divergences between African forest and savanna trees, we categorized each species as occurring predominantly in one of savanna, forest, or the fynbos of

Cape Floristic Region (CFR). Savannas were characterized by the presence of a C_4 grassy layer which forests lack (Ratnam *et al*., 2011), and defined as tree-grass mixtures where C_4 grasses form a near-continuous herbaceous layer (Ratnam *et al*., 2011). Forests, in contrast, were defined as closed woody vegetation casting too much shade to support a continuous C_4 grassy layer. We did not distinguish between the different forest types such as rainforests, dry deciduous forests or Afro-temperate evergreen forests. The biomes of the Cape Floristic Region are open shrublands including fynbos, a fire-prone heathland, and succulent shrublands (Mucina & Rutherford, 2006). We then used the phylogeny to identify sister species pairs falling exclusively within one biome type, and extracted their times of divergence. The phylogeny for southern African trees represents a regional sample of arborescent species, i.e. a particular small sample of angiosperms, thus making ancestral state reconstruction problematic due to the very large number of missing species (i.e. non-tree species, and trees found outside of southern Africa). Importantly, our estimates of divergence times are conservative because nodes subtending sister pairs are less likely to be split by missing taxa than nodes deeper in the tree. For example, it will be less common for sister species found within the African savanna biome to have a closer relative outside southern Africa – which would bias us towards overestimating divergence times. We assume that the sampling is equal among biomes (forest 44.3%, savanna 48.4%, and fynbos 7.3%), a reasonable assumption given the sampling protocol. We note that the shrubland vegetation of the fynbos is naturally tree-species poor.

We compare the distribution of evolutionary ages between African savanna and forest sister taxa using a Wilcoxon rank sum test. For the reasons described above, we do not attempt to reconstruct ancestral ecologies directly, but we suggest that if sister taxa occur within the same biome, it is probable that they diverged within this biome. The oldest sister divergence within a biome may thus provide an approximate minimum age for the biome. Next, we examine evolutionary splits between geoxyles and their tree sisters. Here, we include only unambiguous independent shifts to a geoxyle life-form, where a geoxyle species is nested within a more inclusive tree clade (Table 1), thereby allowing us to infer directionality. The geoxyle life-form has apparently arisen multiple times in a few clades, possibly accompanied by reversals to a tree life-form (e.g. *Fadogia*, *Clerodendrum*, *Elephantorrhiza* and *Salacia*) (Figure 1). However, taxon sampling within these

Table 1. Ecological and environmental data characterizing southern African geoxyles and their tree sister groups

Scientific Name (Voucher)	Sisters	Max height (m)	Spines	Poisonous	Fruit type coding (0=drv; 1=fleshv)	Fruit volume (cm^3)*	Seed size (cm)§	Fire return interval	MAP** (mm)	MAT*** (°C)	Mean elevation (m)
Carissa praetermisa (OM2650)	2	3	1	0	1	NA	0.5	3.3	968	24.1	60
Carissa tetramera (RBN210)	2	3	1	0	1	0.52	NA	2.5	759	21.8	NA
Caesaria sp. (BB12551)	1	1	0	0	0	4.19	NA	1.7	1081	24.8	220
Casearia sp. nov. (Abbott9191)	1	20	0	0	0	4.189	NA	2.2	924	17.8	630
Combretum engleri (OM1025)	3	4	0	0	0	14.14	NA	2.6	499	21.8	1120
Combretum platypetalum (OM2092)	3	3	0	0	0	28.51	NA	4.0	986	21.3	1070
Dichapetalum cymosum (OM2117)	4	0.5	0	0	0	13.09	NA	2.6	496	20.9	1070
Dichapetalum barbosae (OM2374)	4	NA	0	0	0	0.79	NA	NA	NA	NA	90
Dissotis canescens (BB12691)	5	1.8	0	0	0	0.00013	0.75	3.6	1015	22.0	780
Dissotis princeps (OM3806)	5	3	0	0	0	0.00045	NA	2.8	932	20.0	790
Erythrina abyssinica (OM2095)	6	10	1	0	0	NA	1.2	2.9	779	20.3	920
Erythrina acanthocarpa (OM3916B)	6	2	1	0	0	0.36	NA	1.7	647	15.7	1030
Erythrina caffra (BS0057)	6	20	1	1	0	NA	0.8	1.8	737	18.3	410
Erythrina humeana (OM741)	7	4	1	0	0	NA	0.8	2.5	807	19.1	680
Erythrina zeyheri (OM1589)	7	0.5	1	0	0	0.042	1.7	2.5	750	16.6	1450

Eugenia albanensis (BB7021)	8	0.4	0	0	1	1.77	NA	2.2	845	20.1	390
Eugenia capensis A (BB12289)	9	4	0	0	1	1.77	NA	2.4	778	23.3	70
Eugenia capensis (Abbott9225)	9	4	0	0	1	4.19	NA	2.6	860	21.2	NA
Eugenia verdoorniae (Abbott9122)	8	3	0	0	1	4.19	NA	2.3	1027	17.7	470
Ficus capreifolia (OM2566)	10	7	0	0	1	6.28	NA	3.0	743	22.7	420
Ficus pygmaea (MWC20237)	10	3	0	0	1	1.15	NA	4.7	1111	21.4	990
Gardenia cornuta (OM2241)	11	5	0	0	1	9.42	NA	2.3	830	19.9	470
Gardenia resiniflua (OM1272)	11	7	0	0	1	0.0014	0.35	2.6	619	21.5	800
Gardenia subacaulis (BB12202)	11	0.3	0	0	1	85.08	0.5	3.7	1063	21.4	1070
Jasminum fluminense (OM273)	12	9	0	0	1	NA	NA	2.1	602	20.7	830
Jasminum quinatum (T416)	12	0.4	0	0	1	NA	NA	2.5	772	16.3	1440
Lannea discolor (RL1235)	13	15	0	0	1	0.26	NA	2.6	648	20.4	950
Lannea edulis (OM1991)	13	0.3	0	0	1	0.40	NA	4.1	1008	21.3	1020
Leptactina benguelensis (BB11158)	14	0.4	0	0	1	1.51	0.3	4.3	1124	21.3	1090
Leptactina delagoensis (OM1598)	14	4	0	0	1	0.0080	NA	2.7	736	23.3	220
Leucospermum gerrardii (MWC26648)	15	0.4	0	0	0	NA	NA	3.1	974	17.2	900
Leucospermum saxosum (BB12687)	15	2	0	0	0	NA	NA	2.4	995	18.2	1090
Lopholaena coriifolia (OM & MvdB41)	16	2	0	0	0	NA	NA	2.4	709	18.3	1270
Lopholaena disticha (OM3909)	16	1	0	0	0	NA	NA	2.6	837	17.8	1080

Maerua andradae (LT1802)	17	0.3	0	NA	1	NA	NA	3.6	1053	25.3	290
Maerua juncea (OM1592)	17	5	0	NA	1	14.73	NA	2.0	611	21.5	570
Maerua rosmarinoides (OM1476)	17	5	0	NA	1	NA	NA	2.5	841	18.7	770
Milletia makoudensis (LT1723)	18	1.2	0	0	0	8.25	NA	1.9	1059	24.9	250
Millettia usaramensis (OM2433)	18	10	0	0	0	22.16	0.6	3.3	889	22.7	520
Morella brevifolia (OM3812)	19	0.4	0	0	1	0.014	NA	2.8	833	16.4	1050
Morella serrate (Abbott9173)	19	10	0	0	1	0.014	NA	2.6	716	18.0	960
Ochna arborea (CS03)	20	12	0	0	1	0.26	NA	NA	NA	NA	810
Ochna confuse (OM3828)	20	2	0	0	1	0.34	NA	3.0	1015	20.5	1090
Ozoroa sp. (BB8074)	21	0.6	0	0	1	0.11	NA	2.7	961	20.3	590
Ozoroa albicans (BB8988)	21	1	0	0	1	NA	NA	1.5	694	21.1	580
Ozoroa laetans (BF12423)	21	1.5	0	0	1	0.28	NA	1.8	706	20.5	670
Ozoroa paniculosa (OM1948)	21	6	0	0	1	0.37	NA	2.0	523	19.9	1050
Parinari capensis subsp. *incohata* (OM3613)	22	2.5	0	0	1	0.79	NA	2.2	796	22.6	100
Parinari excels (BB10672)	22	35	0	0	1	13.09	NA	NA	NA	NA	NA
Paropsia braunii (BB10672)	34	10	0	0	0	0.79	NA	2.6	742	23.9	180
Paropsia brazenana (Fishwick sn)	34	1	0	0	0	3.39	NA	4.6	1046	21.5	1000
Protea gaguedi (Turpin471)	24	10	0	0	0	NA	NA	NA	NA	NA	1140
Protea parvula (OM3817)	24	0.16	0	0	0	NA	NA	2.5	878	16.6	1340
Ritchiea capparoides (LT1805)	25	4	0	NA	1	NA	NA	NA	NA	NA	NA

Ritchiea pygmae (LT1801)	25	0.4	0	NA	1	NA	NA	3.0	1074	25.1	210
Searsia dentata (OM2251)	28	5	0	0	1	0.034	0.25	NA	NA	NA	1250
Searsia leptodictya (RL1655)	27	9	0	0	1	0.065	0.25	2.3	609	19.0	1110
Searsia pendulina (OM1984)	26	10	0	0	1	0.014	0.63	NA	NA	NA	970
Searsia pondoensis (BT10242)	26	1	0	0	1	0.065	0.25	2.6	890	17.6	980
Searsia pygmaea (BL7355)	27	0.2	0	0	1	0.059	0.25	3.0	1114	17.6	1050
Searsia tumulicola subsp. *meeseana* (OM3818)	28	0.7	0	0	1	0.11	0.21	2.3	875	17.4	1280
Searsia wilmsii (OM3910)	26	0.5	0	0	1	0.065	0.25	2.4	826	18.9	940
Tetracera boiviniana (BB9126)	29	4.5	0	0	0	0.94	0.05	NA	NA	NA	NA
Tetracera masuiana (BB11174)	29	1	0	0	0	1.33	0.45	3.9	1169	22.3	990
Ziziphus abyssinica (OM2582)	30	13	1	0	1	14.14	0.7	3.4	774	23.0	650
Ziziphus zeyheriana (OM3913)	30	1.2	1	0	1	0.27	0.5	2.3	637	19.3	1020

* Assuming spheroid fruits; ** MAP = Mean annual precipitation; *** MAT = Mean annual temperature ; §Seed size is measured as the longest axis of the seed; NA = not available.

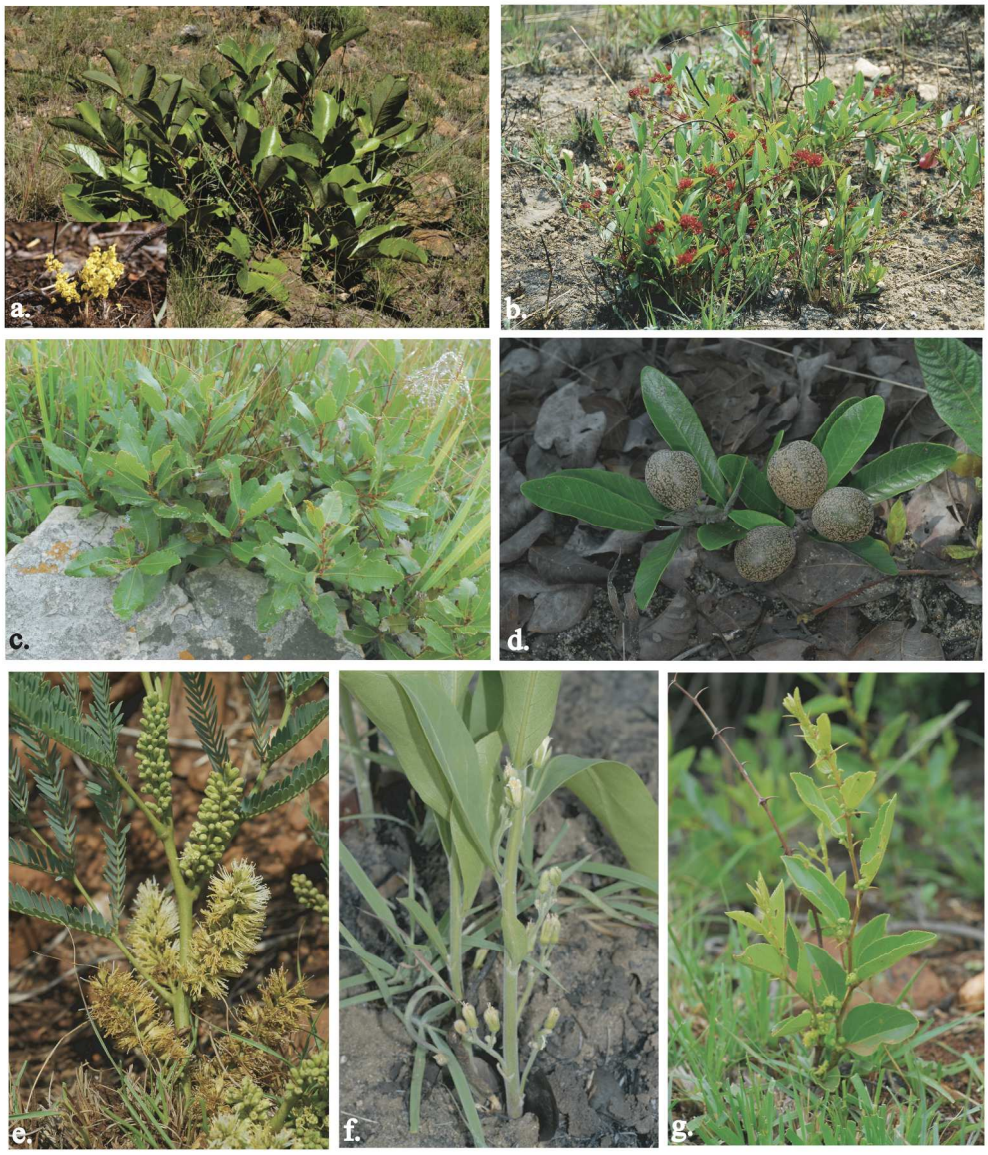

Fig. 1 Examples of geoxyles: a. Lannea edulis (Anacardiaceae); b. Combretum platypetalum subsp. oatesii (Combretaceae); c. Morella pilulifera (Myricaceae); d. Parinari capensis subsp. capensis (Chrysobalanaceae); e. Elephantorrhiza elephantina (Fabaceae); f. Dichapetalum cymosum (Dichapetalaceae); g. Ziziphus zeyheriana (Rhamnaceae) – Photographs: a. John Burrows; b-g. Olivier Maurin
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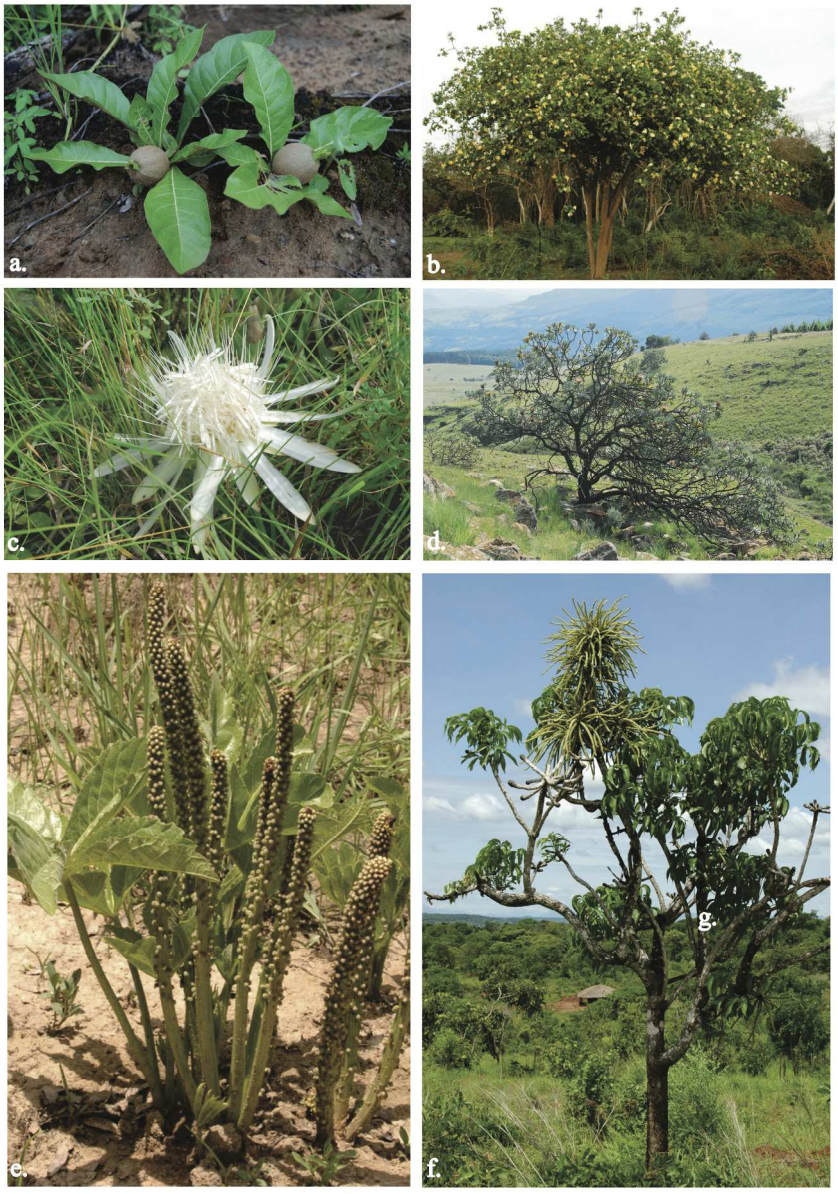

Fig. 2 Geoxyles and their tree relatives: a. Gardenia subacaulis (Rubiaceae); b. Gardenia ternifolia; c. Protea paludosa subsp. secundifolia (Proteaceae); d. Protea roupelliae subsp. roupelliae; e. Cussonia corbisieri (Araliaceae); f. Cussonia arborea – Photographs: a, b, e, f. John Burrows, c, d. Olivier Maurin
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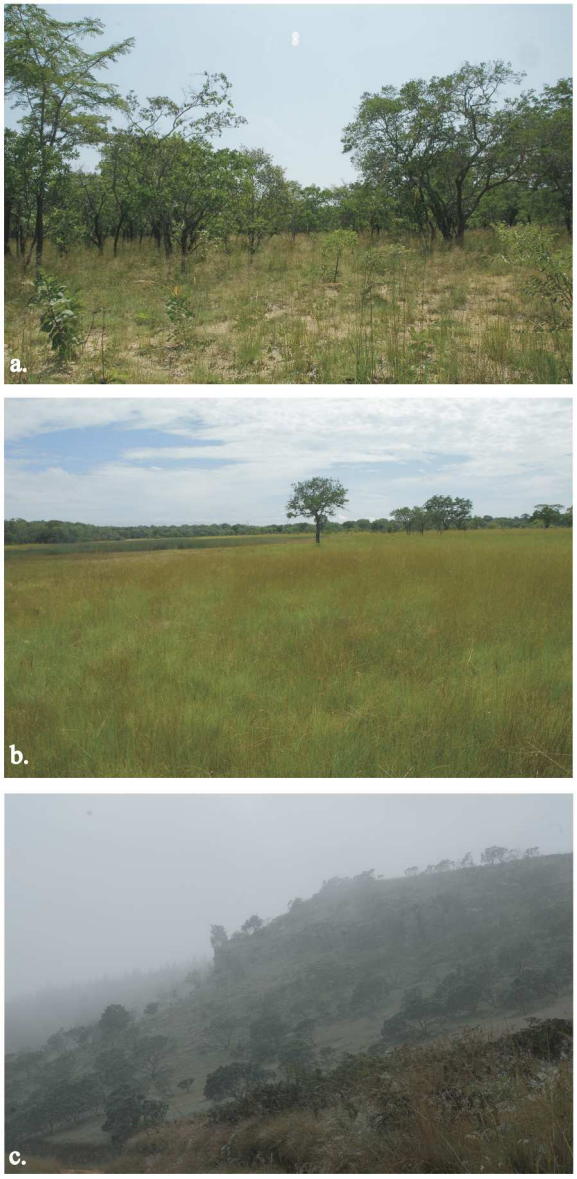

Fig. 3 Three habitats rich in geoxyles a. Open woodland in North West Zambia; b. Seasonally waterlogged grassland in North West Zambia; c. Highveld habitat in Lydenburg, illustrating the misty conditions characteristic of the South African highveld – Photographs: Olivier Maurin
147x296mm (300 x 300 DPI)

lineages was insufficient to accurately reconstruct the location of evolutionary transitions, and we therefore restricted our analysis to the unambiguous shifts in life-form identified between sister groups.

For each tree-geoxyle pair, we contrasted differences in ecological traits (spines, toxicity, fruit type, root type, and seed size) and environment across their geographical distribution (mean annual precipitation, mean annual temperature, mean elevation and fire frequency) (Table 1). Trait data were recorded from the literature (Coates Palgrave, 2002; Schmidt *et al*., 2007; Plants of southern Africa, 2012). Fire frequency, precipitation, temperature, and elevation variables were obtained by extracting the mean, minimum and maximum values within each species distribution. Precipitation, temperature and elevation variables were obtained from the worldclim database (Hijmans *et al*., 2005); and fire return frequency from Archibald *et al*. (2010). Statistical significance was evaluated using McNemar's test for binary traits, and a Wilcoxon signed rank test for continuous variables (Wilcoxon, 1945). When one of the sisters contained more than one species, contrasts were taken using the average of the species values. Our sister-pair approach parallels Felsenstein's (1985) method of independent contrasts, and although it does not make use of all the information contained within the phylogenetic tree, sister comparisons provide a statistically robust method for comparative analyses (Barraclough *et al*., 1998).

Cerrado versus African Savanna

To compare the phylogenetic affinities between the woody vegetation of the Brazilian cerrado and that of the African savanna, we extracted the list of woody plants and shrubs native to African savanna from the barcode phylogeny described above (586 species), and matching life-forms for cerrado listed by Ratter *et al*., 2012 (http://cerrado.rbge.org.uk/; 848 species). We then reconstructed a supertree of African savanna plus cerrado species using the Phylomatic online tool (Webb & Donoghue, 2005), and transformed branch lengths into millions of years using the BLADJ algorithm as implemented in Phylocom version 4.2 (Webb *et al*., 2008) calibrated with node dates from Wikström *et al*. (2001). Taxonomic mismatches (i.e. species or genera that could not be matched to higher taxa currently recognized by the Angiosperm Phylogeny Group [APG III, 2009]) reduced the final species set to 548 and 809 species for African savanna and cerrado, respectively.

Phylogenetic structure for the regional floras was first assessed by evaluating the proportion of shared branch lengths between floras using the PhyloSor index of phylogenetic beta-diversity following Bryant *et al.* (2008), as implemented in the Picante R-library (Kembel *et al.*, 2010). Significance was determined by randomizing the placement of taxa across the phylogeny (999 replicates). Second, we compared the standardized effect size of the mean pairwise phylogenetic distance between species (the net relatedness index [NRI] of Webb *et al.*, 2002) within each flora to a null model in which the same number of species are drawn at random from the phylogeny.

RESULTS

Evolutionary splits between African savanna tree sister species are significantly younger than between forest tree species (1.36 Ma vs 3.15 Ma, median age for savanna splits and forest splits respectively; $W = 4555$, $p<0.001$, Figure 4), suggesting that speciation events in African savanna have been more recent than in forest, and/or that some forest tree species might either have closest relatives outside southern Africa or non-tree relatives.

The distribution of the geoxyle life-form in Africa is phylogenetically dispersed (Figure 5), indicating multiple independent evolutionary origins across disparate branches of the angiosperm tree-of-life, matching observations in cerrado Fabaceae, within the species-rich genus *Mimosa*, and more generally evidenced by the occurrence of cerrado geoxyles across numerous genera and families (Simon *et al.*, 2009). Frequently, a single geoxyle species is nested within a species-rich tree clade, suggesting recent origins of the life-form. Geoxyles have evolved independently in all major lineages (orders) of eudicots, occurring in 30 plant families collected in our study, and arising multiple times in Fabaceae and Rubiaceae. In a few lineages (e.g. *Fadogia*), we observed multiple origins of the geoxyle habit, suggesting a complex evolutionary history, possibly including reversal to a tree habit, but current taxon sampling does not allow us to accurately resolve independent origins at such fine scales, and we therefore restrict our analysis to single congeneric transitions.

We identified 30 independent transitions to a geoxyle life-form occurring across 26 genera (Table 1). Geoxyles have a median divergence date of 2.28 Ma, with a maximum age of 15.15 Ma for *Dissotis canescens*, which is unusual in that it tends to favour marshy environments. The vast majority of divergences have occurred within the last 2 Ma (Figure 6). We find no significant ecological differences in

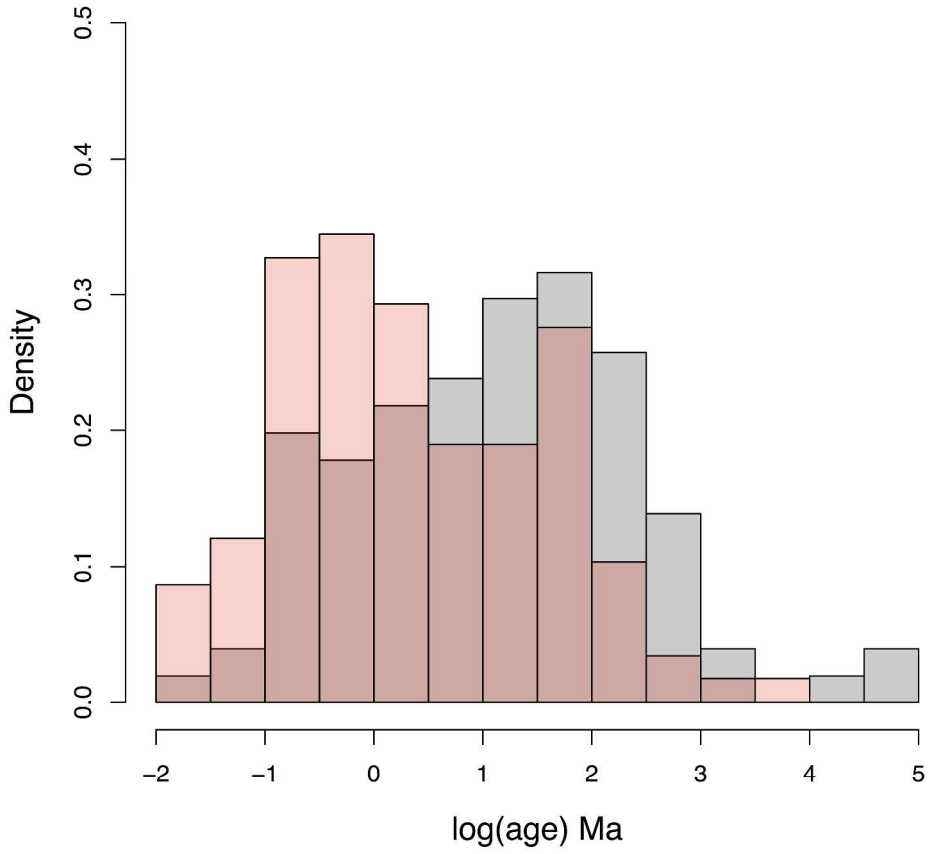

Fig. 4 Distribution of evolutionary splits, in millions of years, between savanna (red) and forest (grey) sister taxa from the dated phylogenetic tree of southern African trees.
175x175mm (600 x 600 DPI)

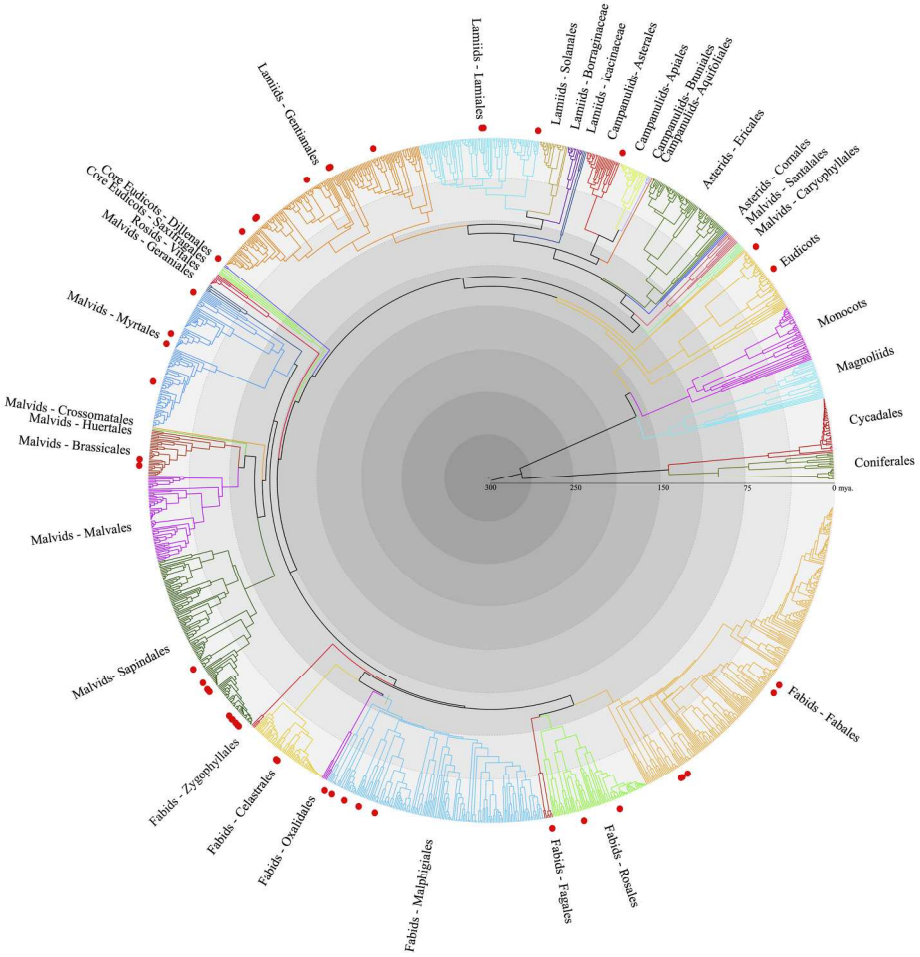

Fig. 5 Phylogeny of southern African woody flora reconstructed based on DNA barcodes using a maximum likelihood approach after transforming branch lengths to millions of years by enforcing a relaxed molecular clock and multiple calibrations. Phylogenetic position of geoxyle life-form indicated in red.
207x206mm (300 x 300 DPI)

Table 2 Sister group contrasts between geoxyle life-forms and their tree relatives for various ecological and climatic variables

Variable	test*	test statistic	p-value
Height	Wilcoxon	V = 378	<0.01
Spines	McNemar	NA	n.s.
Poisonous	McNemar	NA	n.s.
Fruit type	McNemar	NA	n.s.
Seed size	Wilcoxon	V = 78.5	0.78
Mean fire frequency	Wilcoxon	V = 57	0.02
Mean annual precipitation	Wilcoxon	V = 31	<0.01
Mean annual temperature	Wilcoxon	V = 133	0.85
Mean elevation	Wilcoxon	V = 133	0.85

*Wilcoxon = Wilcoxon signed rank test. McNemar = McNemar's Chi squared test; NA = not available

geoxyles when compared to their tree-sisters (Table 2); they are indistinguishable in fruit type, seed size, root type and herbivore defenses. The principal ecological feature that distinguishes geoxyles from their close relatives is their large difference in height ($V = 378$, $p<0.01$). However, geoxyles differ significantly in their geographic distribution, being found in regions characterized by higher average rainfall ($V = 31$, $p<0.01$) and greater fire frequency ($V = 57$, $p = 0.02$) than their tree relatives (Table 2). Furthermore, we observe a striking latitudinal gradient in divergence times (Figure 6). The mean age of evolutionary splits is significantly younger moving towards more southerly latitudes ($F = 9.10$, $p = 0.005$, $r^2 = 0.23$ for the phylogenetic regression between latitude and log age implemented in the caper R library [Orme *et al*., 2012] and allowing lambda to take its maximum likelihood value). However, the correlation is driven by an absence of older splits at high southern latitudes, whereas at more tropical latitudes we find both young and old divergences.

In the supertree of the woody taxa of the cerrado and African savanna (Figure S1) we find that, unsurprisingly, there is less phylogenetic overlap between the two floras than expected by chance (PhyloSor index = 0.15 in comparison to the null expectation of 0.266, min = 0.246, max = 0.284). However, whilst cerrado taxa show phylogenetic under-dispersion (NRI = 1.747, $p = 0.038$), perhaps reflecting some *in situ* radiations within a few lineages, the reverse is not true, African savanna taxa are not significantly clustered on the phylogeny (NRI = 0.339, $p>0.05$).

DISCUSSION

We have shown that the geoxyle habit evolved independently multiple times in Africa; however, it is always associated with the savanna biome; if we can identify the driving forces in the evolution of this life-form, we might, therefore, also provide insights into the origin and spread of savanna.

Previous work has suggested that shifts from forest to savanna were likely frequent in the South American cerrado (Pennington *et al*., 2006; Simon *et al*., 2009). Here we show that African savanna trees represent an even more phylogenetically dispersed set of taxa, suggesting shifts from the forest to savanna biome in Africa were at least as frequent. A paucity of endemic genera in both cerrado (Simon *et al.,* 2009) and African savanna further support parallels in the evolutionary origins of these biomes and a history of frequent shifts from forest to savanna with only few radiations within the savanna biome (see also Oliviera-Filho *et al.*, 2013). In addition,

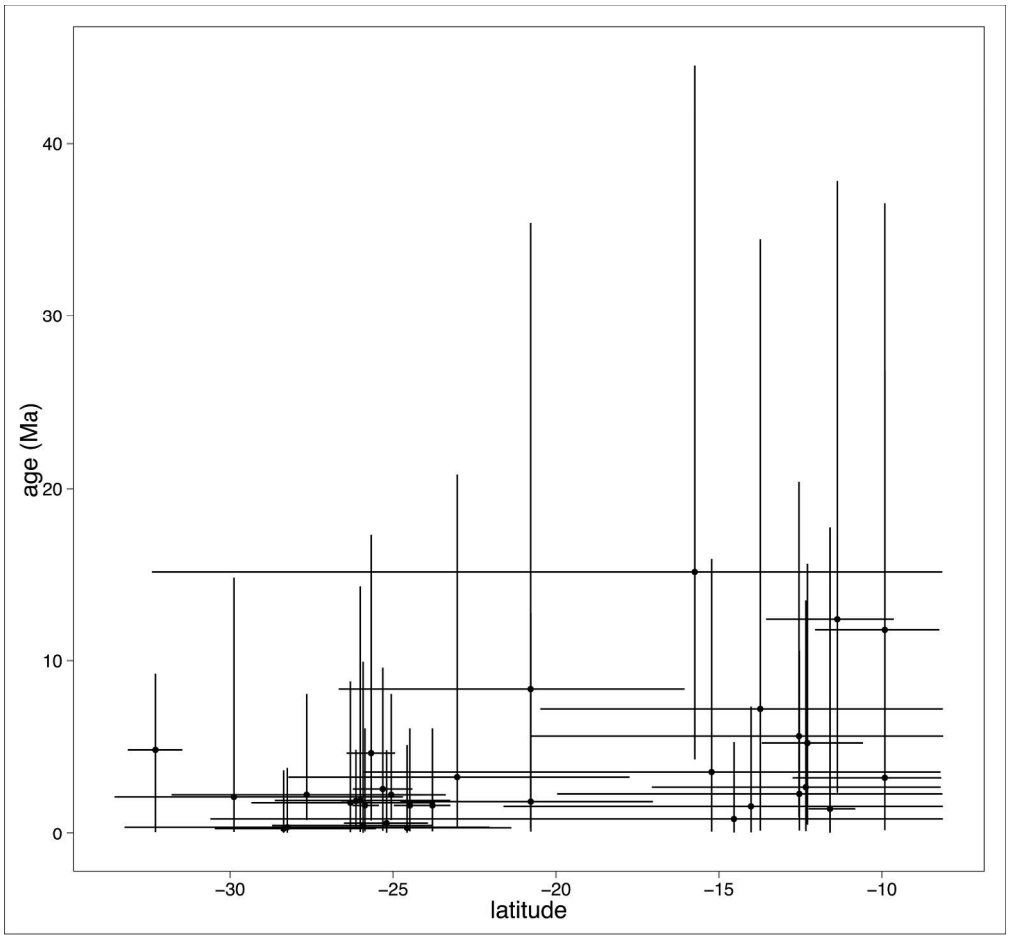

Fig. 6 Scatter plot of divergence times (Ma) between geoxyle life-forms and their tree sister-groups against latitudinal mid-point of the geoxyle geographic distributions (n = 36). Horizontal error bars represent latitudinal range extents of geographic distribution, vertical error bars indicate maximum and minimum divergence time estimates between sister groups from the Bayesian posterior distribution of dated trees.
219x203mm (300 x 300 DPI)

we find that evolutionary divergences between African savanna trees are younger than those between forest trees. If we assume that evolutionary splits between extant species both occupying the same habitat type indicate a shared ancestor within that habitat, then our results support a relatively young age for the African savanna biome – that is an absence of older splits between African savanna trees reflects limits to the upper age of the biome. Geoxyles have a median divergence time of 2.28 Ma, but with origins of many taxa dated to within the last two million years, perhaps indicative of a more recent expansion of savanna. Further, we find a latitudinal gradient in age of geoxyle origins in Africa, with an absence of older ages in the south. If the evolution of the geoxyle life-form can be used as a marker for the presence of fire-maintained savanna ecosystems, our results would suggest a gradual expansion of African savanna from the equator to higher latitudes over the past few million years.

The evolution of "underground trees"

Four major factors have, at various times, been put forward as evolutionary drivers of the geoxyle habit in Africa. Burtt Davy (1922) hypothesized that winter frost on the South African Highveld was the main factor responsible for woody plant species escaping underground; in the South African context, cold temperatures may well have been a contributing factor to the evolution of underground trees. It is also possible that some woody species evolved the geoxyle habit in response to mammal herbivory, particularly on the grassy plains of the South African Highveld (Steenkamp *et al.*, 2001). Africa, with its historically vast herds of antelope and other grazing ungulates, would have had much of its open areas subjected to incidents of severe herbivory. However, the region of greatest geoxyle diversity, the northern areas of the Zambezian Domain (White, 1983), receives little or no frost and the Zambezian Region is dominated by miombo woodlands, a habitat type noted for its paucity of herbivores due to poor nutritional quality of its forage (Frost, 1996), and a long, harsh dry season of almost seven months (Rodgers *et al.*, 1996). Further, we find no general relationship between the geoxyle life-form and temperature or elevation, and the prevalence of herbivore defences (e.g. presence of spines or poisons) do not differ between geoxyles and their tree relatives. It would seem, therefore, that neither frost nor herbivory have been the major selective pressure in the evolution of the geoxyle habit.

Frank White, in his landmark paper on the underground forests of Africa (White, 1976), attributed the rise of the geoxyle habit mainly to edaphic factors. He pointed out that the open grassy edaphic seasonal wetlands that are a characteristic feature of the south-central African landscape support a number of geoxyles, particularly along the margins of these open wetlands or 'dambos'. These seasonally waterlogged grassy depressions often occur on sandy, oligotrophic soils, which are anaerobic when waterlogged. However, while a handful of geoxyles (*Ficus pygmaea*, *Syzygium guineense* subsp. *huillens*e, *Erythrina baumii*, *Protea baumii*) are confined to dambos, the majority is not. For example, the region of high geoxyle diversity in north-eastern South Africa (this paper) have no endemic wetland geoxyle species, while in the geoxyle-rich coastal grasslands of the Maputaland region, the geoxyles grow away from the numerous wetland depressions (Matthews *et al*., 1999). Notably, these grassy dambos are subjected to frequent burning, and it is possible that the open, sunny environment of the dambos would also provide advantages to a dwarf woody plant that would otherwise be shaded in the taller adjacent woodlands. This link with fire brings us to our final putative driver of the geoxyle habit.

Geoxyles in Africa are restricted to savanna habitats or upland grasslands (geoxyles are absent from closed forests). They occur almost exclusively in higher rainfall savannas with frequent fires (White, 1979). Indeed, the seasonal or regular burning of the woodlands and grasslands of Africa is the most often quoted factor driving the evolution of the geoxylic suffrutex habit in Africa (White, 1976 [in part]; Vollesen, 1981; Lock, 1998, 2006; Matthews *et al*., 1999) as well as in the South American cerrado (Simon *et al*., 2009; Simon & Pennington, 2012). While the majority of savanna trees have developed features to withstand fire (thick bark, fire-resistant shoots), geoxyles may have escaped fire by developing their woody component below ground, thus minimizing their resource input into annual vegetative growth to the benefit of flower and fruit production. Most conclusive is that it is clear that, wherever geoxylic suffrutices occur in Africa, fire is a regular feature in the landscape. Our results show that occurrence of the geoxyle life-form correlates significantly with fire and precipitation, suggesting both may have contributed to driving trees underground.

How would precipitation and fire select for trees developing underground? Areas of high precipitation should favour forest development and the proportion of African landscapes covered by forest increases along a precipitation gradient

(Lehmann *et al.,* 2011; Staver *et al.,* 2011a). However, greater precipitation also correlates with high grass productivity, thus favouring frequent fire occurrence that maintains the savanna state (Bond, 2008; Staver *et al*., 2011a, b; Lehmann *et al*., 2011). Fire is a major selective pressure. Population studies have shown that a key demographic bottleneck for savanna trees is the transition from juvenile plants growing below the flame zone to adult plants taller than flame height and resistant to fire damage. Saplings may persist for decades in the flame zone (the "firetrap") without growing into mature trees (Trollope, 1984; Scholes & Archer, 1997; Williams *et al*., 1999; Higgins *et al*., 2000, 2007; Werner *et al*., 2006; Prior *et al*., 2009; Werner & Franklin, 2010; Bond *et al*., 2012; Werner & Prior, 2013).

We suggest that the geoxylic growth form is advantageous in areas experiencing the interactive effects of frequent fires and high precipitation. The underground trees of Africa can be regarded as markers of fire-maintained savannas occurring in climates suitable for forests (extensive African savannas also occur in arid climates where fires are rare; Lehmann *et al*., 2011). Poor growing conditions that reduce growth rates of juvenile trees would also result in reduced probabilities of reaching fire-proof sizes and transitioning to tall mature trees. Geoxyles are common where site conditions reduce growth rates such as on seasonally waterlogged and/or low nutrient soils, or, in South Africa, at high altitude sites with cold winters (White, 1979). Thus geoxyles appear to be an example of heterochrony (a change in the relative timing and/or rate of developmental processes; Li & Johnston, 2000) with ancestral tree growth forms adopting a dwarf stature from which, unlike their tree ancestors, they are able to flower and fruit.

Fire and the savanna biome

Our prime aim in this study was to use the origin of geoxyles to help date the emergence and spread of fire-dependent African savannas. But the limited literature on geoxyles, especially in Africa, raises other questions, including the general nature of fire adaptations in savannas. Fire adaptive traits have been extensively studied in crown fire regimes, especially in Mediterranean-type shrublands (Keeley *et al*., 2012). Fire adaptive traits in the surface fire regimes of savannas are not nearly as well studied or understood. As noted by White (1979), geoxyles appear to be a convergent life form in South American and African savannas. The link with fire in cerrado has been elaborated by Simon *et al.* (2009) and Simon & Pennington (2012). For African

savannas, we have argued above that the growth form has evolved in response to the selective pressures imposed by frequent grass-fuelled fires and soil or climatic conditions that slow woody growth rates. Curiously, geoxyles are absent in northern Australian savannas despite similar fire regimes and soils to those of Africa and Brazil (White, 1979). They have also not been reported, perhaps because they have not been recognised, in the higher rainfall savannas of south and south-east Asia (White, 1979) or the pine savannas of North America (Noss, 2012). Within Africa, White noted a striking difference in the richness and abundance of geoxyles in the savannas of the Zambesian region (this study) contrasting with savannas of the Sudanian region (north of the equator) where they are rare and poor in species. The patchy occurrence of geoxyles in savannas from different geographic regions is perhaps to be expected given the youth of the biome. As we note above, both African savannas and the cerrado have few if any endemic genera, consistent with a young age for the biome in both regions (Simon *et al*., 2009; this study). The coincidence of a largely Pliocene age for flammable savanna origins in Africa and cerrado is striking. The causes of the abrupt and, apparently, near simultaneous assembly and spread of these fire-dependent savannas is unknown but an area of active research (Keeley & Rundel, 2005; Scheiter *et al*., 2012).

CONCLUSIONS

We explored the origin of mesic savannas in Africa, using geoxylic suffrutices, White's underground forests of Africa, as markers for fire-maintained ecosystems. Our results suggest that these savannas first appeared in the tropics with more recent speciation at lower latitudes in southern Africa. Dates of origin of the geoxyles are mostly from the Pliocene (< 5.3 Ma) consistent with the appearance of woody fire-maintained cerrado plants in Brazil (Simon *et al*., 2009; Simon & Pennington, 2012). Since the taphonomy of fossil savanna sites biases against detection of fire-maintained savannas, we suggest that phylogenetic approaches are particularly useful in tracing the origin of more humid savannas. As more complete phylogenies become available for clades from the African fire-maintained savannas, and as more species are sampled for fire-adaptive traits, more refined dates of origin should become available. Nevertheless, this study provides the first evidence for dates of emergence of higher rainfall savannas in Africa and supports the role of fire in their origins. Furthermore, our study suggests independent origins of this growth form from those

of Brazilian cerrado. The fire frequencies characteristic of seasonally humid savannas are perhaps the highest in earth history. The diverse responses of plants to this extreme selective regime warrant further study.

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Fig. S1. Phylogenetic distribution of Cerrado (red) and Savanna taxa on the Phylomatic supertree with branch lengths scaled to millions of years.

Table S1. Calibration points and age constraints used in divergence time estimations (MRCA = most recent common ancestor). Placement of the fossil was assigned to the MRCA of the listed taxa.

References for Table S1

LEGENDS TO NOTES

Note 1. Provisional list of African geoxylic suffrutices occurring south of the Equator (taxa included in this study indicated in Bold)

Note 2. List of taxa included in phylogeny with voucher information and GenBank accession numbers. Numbers in bold are newly generated sequences in this study.

Supporting Information Table S1 and Fig. S1

Table S1 Calibration points and age constraints used in divergence time estimations (MRCA = most recent common ancestor). Placement of the fossil was assigned to the MRCA of the listed taxa.

Fossil (Clade)	**Minimum Age (Ma)**	**MRCA**	**Reference(s)**	**Mean (SD)**
Unnamed (Hamamelidaceae)	84	*Daphniphyllum* and *Itea*	Magalón-Puebla *et al*., 1996 Magallón *et al*., 2001	1.5 (0.5)
Unnamed (Laurales)	108.8	*Idiosperma* and *Sassafras*	Crane *et al*., 1994	2.1 (0.5)
Pandanus sp. (Pandanales)	65	*Stemona* and *Barbacenia*	Muller, 1981	1.8 (0.5)
Dicolpopollis malensianus (Arecales)	65	*Phoenix* and *Metroxylon*	Pan *et al*., 2006	1.8 (0.5)
Restio sp. (Poales)	68.1	*Zea* and *Puya*	Muller, 1981	1.8 (0.5)
Spirematospermum chandlerae (Zingiberales)	83.5	*Musa* and *Zingiber*	Friis, 1988	1.8 (0.5)
Retitricolpites microreticulatus (Gunneraceae)	88.2	*Myrothamnus* and *Gunnera*	Muller, 1981	1.5 (0.5)
Unnamed (Caryophyllales)	83.5	*Rhabdodendron* and *Spinacia*	Collinson *et al*., 1993	1.5 (0.5)
Dillenites sp. (Dilleniaceae)	51.9	*Dillenia* and *Tetracera*	Collinson *et al*., 1993	1.5 (0.5)
Unnamed (Santalales)	51.9	*Schoepfia* and *Santalum*	Collinson *et al*., 1993	1.5 (0.5)
Unnamed (Ericales)	91.2	*Impatiens* and *Arbutus*	Nixon & Crepet, 1993	1.5 (0.5)
Fraxinus wilcoxiana (Lamiales)	44.3	*Olea* and *Pedicularis*	Call & Dilcher, 1992	1.5 (0.5)
Cantisolanum daturoides (Solanales)	44.3	*Nolana* and *Schizanthus*	Collinson *et al*., 1993	1.5 (0.5)
Ilexpollenites sp. (Aquifoliaceae)	85	*Ilex* and *Gonocaryum*	Muller, 1981	1.5 (0.5)
Unnamed (Vitaceae)	57.9	*Leea* and *Vitis*	Collinson *et al*., 1993	1.5 (0.5)

Esqueiria futabensis (Myrtales)	88.2	*Epilobium* and *Qualea*	Takahashi *et al*., 1999	1.5 (0.5)
Unnamed (Sapindales)	65	*Citrus* and *Bursera*	Knobloch & Mai, 1986	1.5 (0.5)
Unnamed (Fabales)	59.9	*Pisum* and *Polygala*	Herendeen & Crane, 1992	1.5 (0.5)
Unnamed (Cercidiphyllaceae)	65	*Cercidipyllum* and *Crassula*	Magallón-Puebla *et al*., 1999	1.5 (0.5)
Divisestylus sp. (Iteaceae)	89.3	*Ribes* and *Itea*	Hermsen *et al*., 2003	1.5 (0.5)
Ailanthus sp. (Simaroubaceae/Rutaceae, Meliaceae)	50	*Ailanthus* and *Swietenia*	Corbett & Manchester, 2004	1.5 (0.5)
Burseraceae/Anacardiaceae	50	*Bursera* and *Schinus*	Collinson & Cleal, 2001	1.5 (0.5)
Parbombacaceoxylon sp. (Malvales s.l.)	65.5	*Thymea* and *Bombax*	Wheeler *et al*., 1987; 1994	1.5 (0.5)
Perisyncolporites sp. (Malpighiales)	49	*Dicella* and *Malpighia*	Jaramillo & Dilcher, 2001	1.5 (0.5)
Unnamed (Cornales)	86	*Cornus* and *Nyssa*	Crane *et al*., 1990	1.5 (0.5)
Platanocarpus brookensis (Proteales)	98	*Platanus* and *Nelumbo*	Crane *et al*., 1993	1.5 (0.5)
Unnamed (Buxaceae)	98	*Didymeles* and *Buxus*	Drinnan *et al*., 1991	1.5 (0.5)
Unnamed (Bignoniaceae)	35	*Catalpa* and *Campsis*	Manchester, 1999	1.5 (0.5)
Eudicots	124		Anderson *et al*., 2005	

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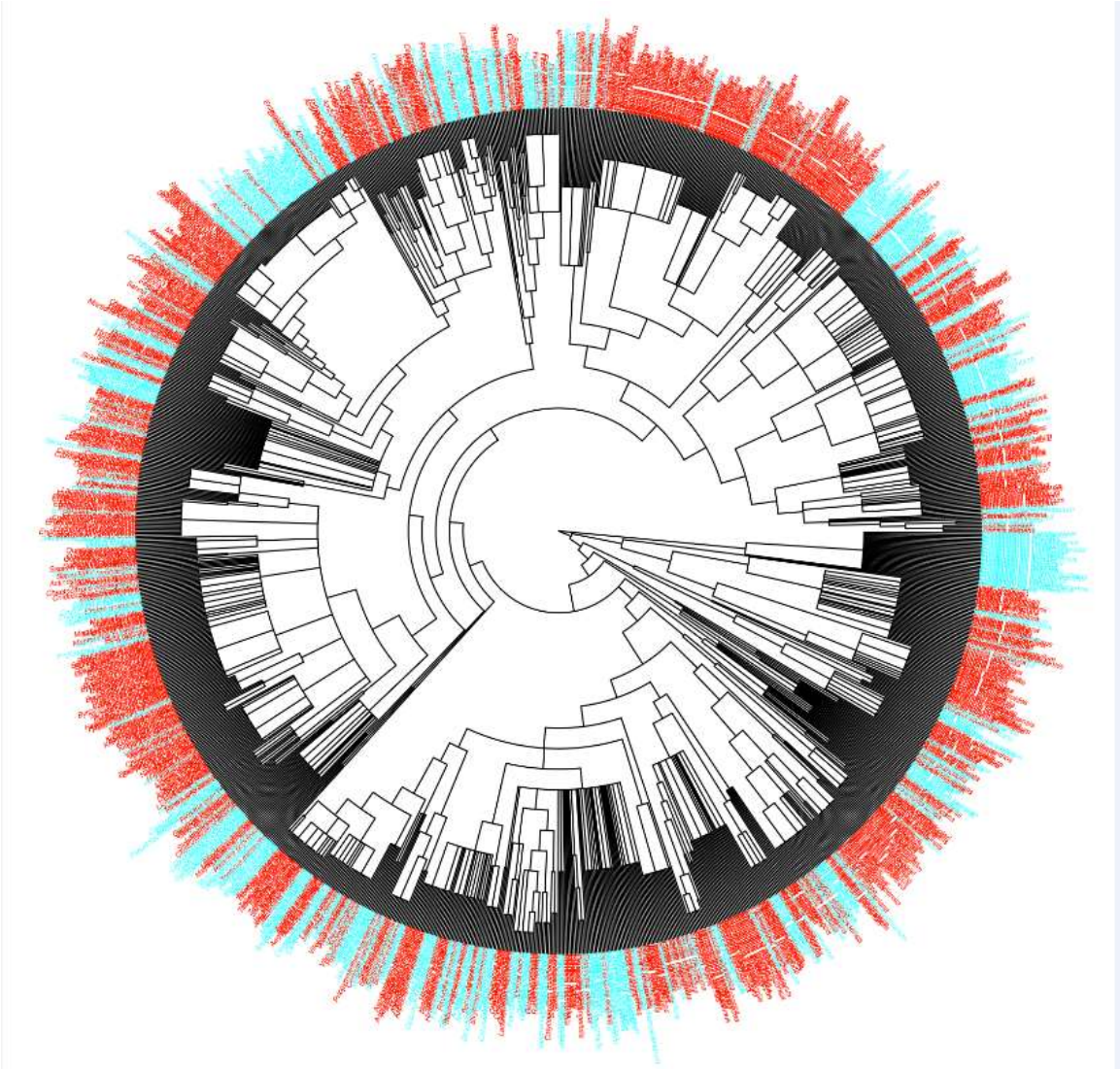
Fig. S1 Phylogenetic distribution of Cerrado and Savanna taxa on the Phylomatic supertree with branch lengths scaled to millions of years.



Supporting Information Notes S1 Provisional list of African geoxylic suffrutices occurring south of the Equator (taxa included in this study indicated in bold)

ANACARDIACEAE
***Lannea edulis* (Sond.) Engl.**
Lannea gossweileri Exell & Mendonça var. *gossweileri*
Lannea gossweileri Exell & Mendonça var. *tomentella* R.Fern. & A.Fern.
Lannea katangensis Van der Veken
Lannea virgata R.Fern. & A.Fern.
***Ozoroa albicans* R.Fern. & A.Fern.**
***Ozoroa barbertonensis* Retief**
Ozoroa bredoi R.Fern. & A.Fern.
Ozoroa homblei (De Wild.) R.Fern. & A.Fern.
Ozoroa kassneri (Engl. & Brehm.) R.Fern. & A.Fern. var. *kassneri*
Ozoroa kassneri (Engl. & Brehm.) R.Fern. & A.Fern. var. *rhodesiaca* R.Fern. & A.Fern.
Ozoroa macrophylla R.Fern. & A.Fern.
Ozoroa marginata (Van der Veken) R. Fern. & A. Fern.
Ozoroa nigricans (Van der Veken) R. Fern. & A. Fern.
Ozoroa nitida (Engl. & Brehmer) R. Fern. & A. Fern.
Ozoroa pwetoensis (Van der Veken) R.Fern. & A.Fern. var. *angustifolia* R.Fern. & A.Fern.
Ozoroa pwetoensis (Van der Veken) R.Fern. & A.Fern. var. *nitidula* R.Fern. & A.Fern.
Ozoroa pwetoensis (Van der Veken) R.Fern. & A.Fern. var. *pwetoensis*
***Ozoroa* sp. A of FTEA**
Ozoroa sp. nov, Ebutsini
Ozoroa stenophylla (Engl. & Brehmer) R. Fern. & A. Fern.
Ozoroa viridis R. Fern. & A. Fern.
***Searsia discolor* (E.Mey. ex Sond.) Moffett**
Searsia fanshawei (R. Fern. & A. Fern.) Moffett
Searsia harveyi (Moffett) Moffett
Searsia kirkii (Oliv.) Moffett
Searsia kwangoensis (Van der Veken) Moffett
Searsia kwazuluana (Moffett) Moffett
Searsia magalismontana (Sond.) Moffett
Searsia ochracea Meikle var. *ochracea*
Searsia ochracea Meikle var. *saxicola* R.Fern. & A.Fern.
***Searsia pondoensis* (Schönland) Moffett**
***Searsia pygmaea* (Moffett) Moffett**
Searsia rudatisii (Engl.) Moffett
Searsia anchietae (Meikle) Moffett forma *suffruticosa* (Meikle) Moffett
Searsia tumulicola (S.Moore) Moffett var tumulicola subsp. meeuseana
Searsia wilmsii (R. Fern. & A. Fern.) Moffett

ANISOPHYLLEACEAE
Anisophyllea quangensis Engl. ex Henriq.

ANNONACEAE
Anonna stenophylla Engl. & Diels subsp. *stenophylla*
Anonna stenophylla Engl. & Diels subsp. *longipetiolata* (R.E.Fr.) N.Robson
Anonna stenophylla Engl. & Diels subsp. *nana* (Exell) N.Robson
Xylopia tomentosa Exell (syn. *X. mendoncae*)

APIACEAE
Heteromorpha involucrata Conrath
Heteromorpha kassneri H.Wolff
Steganotaenia hockii (Norman) Norman

APOCYNACEAE
***Carissa praetermissa* Kupicha**
Chamaeclitandra henriquesiana (Hallier f.) Pichon
Landolphia cuneifolia Pichon
Rauvolfia nana E.A.Bruce
Strophanthus angusii F.White

ARALIACEAE
Cussonia corbisieri De Wild.

ASTERACEAE
***Lopholaena disticha* (N.E.Br.) S.Moore**

CAPPARACEAE
***Maerua andradae* Wild**
***Ritchiea pygmaea* (Gilg) DeWolf** *(syn. Maerua pygmaea* Gilg)

CELASTRACEAE
Gymnosporia markwardii Jordaan
Salacia bussei Loes.
***Salacia kraussii* (Harv.) Harv.**
Salacia luebbertii Loes.
***Salacia rehmannii* Schinz**

CHRYSOBALANACEAE
Magnistipula sapinii De Wild.
Parinari capensis Harv. subsp. *capensis*
***Parinari capensis* Harv. subsp. *incohata* F.White**

CLUSIACEAE
Garcinia buchneri Engl.

COMBRETACEAE
Combretum argyrotrichum Welw. ex M.A.Lawson

Combretum platypetalum Welw. ex M.A.Lawson subsp. *baumii* (Engl. & Gilg) Exell
Combretum platypetalum Welw. ex M.A.Lawson subsp. *oatesii* (Rolfe) Exell
Combretum platypetalum* Welw. ex M.A.Lawson subsp. *platypetalum
Combretum platypetalum Welw. ex M.A.Lawson subsp. *virgatum* Exell
Combretum viscosum Exell

CONNARACEAE
Rourea coccinea (Thonn. & Schumach.) Benth. subsp. *coccinea* (suffrutex form)

DICHAPETALACEAE
Dichapetalum bangii (F.Didr.) Engl.
Dichapetalum crassifolium Chodat
***Dichapetalum cymosum* (Hook.) Engl. (syn. *D. bullockii*)**
Dichapetalum rhodesicum Sprague & Hutch.

DILLENIACEAE
***Tetracera masuiana* De Wild. & Th.Dur.**

EBENACEAE
Diospyros anitae F.White
Diospyros chamaethamnus Dinter & Mildbr.
Diospyros galpinii (Hiern) De Winter
Diospyros virgata (Gürke) Brenan
Euclea crispa (Thunb.) Gürke subsp. *crispa* (suffrutex form or syn. *Euclea dekindtii* Gürke)
Euclea sekhukhuniensis Retief, Siebert & A.E.van Wyk

EUPHORBIACEAE
Clutia monticola S.Moore
Clutia sp. 1 of White (1962)
Oldfieldia dactylophylla (Oliv.) J.Léonard (geosuff form)
Microstachys acetosella (Milne-Redh.) Esser (syn. *Sapium acetosellum* Milne-Redh.)
Sclerocroton oblongifolius (Müll-Arg.) Kruijt & Roebers

FABACEAE
Abrus melanospermum Hassk. subsp. *suffruticosus* (Boutique) D.K.Harder
Bauhinia mendoncae Torre & Hillc.
Brachystegia astlei Hoyle & Brummitt
Brachystegia michelmorei Hoyle
Brachystegia russelliae I.M.Johnst.
Copaifera baumiana Harms
Cryptosepalum exfoliatum De Wild. subsp. *suffruticans* (P.A.Duvign.) P.A.Duvign.
Cryptosepalum maraviense Oliv.

***Elephantorrhiza elephantina* (Burch.) Skeels**
***Elephantorrhiza obliqua* Burtt Davy**
*Elephantorrhiza woodi*i E.Phillips
Entada arenaria Schinz subsp. *arenaria*
Entada arenaria Schinz subsp. *microcarpa* (Brenan) J.H.Ross
Entada dolichorrhachis Brenan
Entada nana Harms
***Erythrina acanthocarpa* E.Mey.**
Erythrina baumii Harms
***Erythrina zeyheri* Harv.**
***Millettia makondensis* Harms**
Mucuna stans Welw. ex Baker
Tephrosia dasyphylla Baker subsp. *amplissima* Brummitt
Tephrosia dasyphylla Baker subsp. *dasyphylla*
Tephrosia hockii De Wild. subsp. *hirsutostylosa* (Dewit) J.B.Gillett
*Tephrosia hocki*i De Wild. subsp. *hockii*
Tephrosia laxiflora R.E.Fr.
Tephrosia muenzneri Harms subsp. *pedalis* Brummitt
Tephrosia zambiana Brummitt

FLACOURTIACEAE
Caloncoba suffruticosa (Milne-Redh.) Exell & Sleumer (syn. *Oncoba suffruticosa* (Milne-Redh.) S. Hul & Breteler)
***Casearia* sp. nov. (Palma)**

HYPERICACEAE
Psorospermum mechowii Engl.

IRVINGIACEAE
Phyllocosmus candidus (Engl. & Gilg) Hallier.f.

LAMIACEAE
Clerodendrum abilioi R.Fern.
Clerodendrum baumii Gürke
Clerodendrum buchneri Gürke
Clerodendrum formicarum Gürke
***Clerodendrum incisum* Klotzsch**
Clerodendrum lutambense Verdc.
Clerodendrum pusillum Gürke
Clerodendrum robustum Klotzsch
***Clerodendrum ternatum* Schinz**
Kalaharia uncinata (Schinz) Moldenke
Rotheca cuneiformis (Moldenke) P.P.J.Herman & Retief
Rotheca hirsuta (Hochst.) R.Fern.
Rotheca louwalbertsii (P.P.J.Herman) P.P.J.Herman & Retief
Rotheca luembensis (De Wild.) R.Fern. subsp. *luembensis* (numers varieties &

forms)
Rotheca pilosa (H.Pearson) P.P.J.Herman & Retief
Rotheca prittwitzii (B.Thomas) Verdc.
Vitex madiensis Oliv. subsp. *milanjensis* (Britten) F.White

LECYTHIDACEAE
Napoleonaea gossweileri Baker f.

LINACEAE
Hugonia gossweileri Baker f.

MALVACEAE
Grewia avellana Hiern
Grewia decemovulata Merxm.
Grewia falcistipula K.Schum.
Grewia herbacea Hiern

MALPIGHIACEAE
Sphedamnocarpus angolensis (A.Juss.) Planch. ex Oliv.

MELASTOMATACEAE
Dissotis canescens (E. Mey. ex Graham) Hook. f. (syn. Heterotis canescens (E. Mey. ex Graham) Jacq.-Fel.)

MELIACEAE
Ekebergia pumila I.M.Johnst.
Trichilia quadrivalvis C.DC.

MORACEAE
***Ficus pygmaea* Welw. ex Hiern**

MYRICACEAE
***Morella brevifolia* (E. Mey. ex C. DC.) Killick**
Morella chimanimaniana Verdc. & Polhill

MYRTACEAE
***Eugenia albanensis* Sond. (*Eugenia capensis* subsp. *albanensis* (Sond.) F.White)**
***Eugenia capensis* (Eckl. & Zeyh.) Harv. subsp. A.**
Eugenia malangensis (O.Hoffman) Niedenzu (syn. *Eugenia angolensis* Engl.)
Eugenia pusilla N.E.Br.
Syzygium guineense (Willd.) DC. subsp. *huillense* (Hiern) F.White

OCHNACEAE
Brackenridgea arenaria (De Wild. & Dur.) N.Robson
Ochna angustifolia (Vahl) Kuntze

***Ochna confusa* Burtt Davy & Greenway**
Ochna katangensis De Wild
Ochna leptoclada Oliv.
Ochna macrocalyx (Oliv.)
Ochna manikensis De Wild. (syn. *O. angolensis* I.M.Johnst.)
Ochna pygmaea Hiern
Ochna richardsiae N.Robson

OLEACEAE
***Jasminum quinatum* Schinz**

PASSIFLORACEAE
Adenia erecta de Wilde
Adenia goetzei Harms
Adenia tuberifera R.E.Fr.
Adenia ovata de Wilde
Adenia volkensii Harms
Adenia repanda (Burch.) Engl.
***Paropsia brazzeana* Baill.**

PROTEACEAE
***Leucospermum gerrardii* Stapf**
Protea angolensis Welw. subsp. *angolensis*
Protea angolensis Welw. subsp. *roseola* Chisumpa & Brummitt
Protea argyrea Hauman subsp. *zambiana* Chisumpa & Brummitt
Protea baumii Engl. & Gilg subsp. *robusta* Chisumpa & Brummitt
Protea enervis Wild
Protea heckmanniana Engl. subsp. *heckmanniana*
Protea humifusa Meisn.
Protea inyanganiensis Beard (*P. dracomontana* sensu Rourke 1982)
Protea kibarensis Hauman subsp. *cuspidata* (Beard) Chisumpa & Brummitt
Protea lemairei De Wild.
Protea linearifolia Engl.
Protea matonchiana Chisumpa & Brummitt
Protea micans Welw. subsp. *micans*
Protea micans Welw. subsp. *makutuensis* Chisumpa & Brummitt
Protea micans Welw. subsp. *trichophylla* (Engl. & Gilg) Chisumpa & Brummitt
Protea minima Hauman
Protea ongotium Beard
Protea paludosa (Hiern) Engl. subsp. *secundifolia* (Hauman) Chispmpa & Brummitt
***Protea parvula* Beard**
Protea poggei Engl. subsp. *mwinilungensis* Chisumpa & Brummitt
Protea praticola Engl.
Protea roupelliae Meisn. subsp. *hamiltonii* Beard ex Rourke
Protea suffruticosa Beard (syn. *Protea micans* subsp. *suffruticosa* (Beard)

Chisumpa & Brummitt)

RHAMNACEAE
***Ziziphus zeyheriana* Sond.**

RUBIACEAE
Ancylanthos rubiginosus Desf.
Catunaregam pygmaea Vollesen
***Eriosemopsis subanisophylla* Robyns**
Fadogia ancylantha Schweinf.
Fadogia arenicola K.Schum. & K.Krause
Fadogia chlorantha K.Schum. var. *chlorantha*
Fadogia chlorantha K.Schum. var. *thamnus* (K.Schum.) Verdc.
Fadogia cienkowskii Schweinf.
Fadogia elskensii De Wild.
Fadogia fuchsioides Schweinf. ex Oliv.
Fadogia glaberrima Hiern
Fadogia gossweileri Robyns
***Fadogia homblei* De Wild.**
Fadogia luangwae Verdc.
Fadogia schmitzii Verdc.
Fadogia stenophylla Welw. ex Hiern subsp. *odorata* (Krause) Verdc.
Fadogia tetraquetra* K.Krause var. *tetraquetra
Fadogia tetraquetra K.Krause var. *grandiflora* (Robyns) Verdc.
Fadogia tomentosa De Wild. var. *tomentosa*
Fadogia tomentosa De Wild. var. *calvescens* (Verdc.) Verdc.
Fadogia tomentosa De Wild. var. *flaviflora* (Robyns) Verdc.
Fadogia triphylla* Baker var. *triphylla
Fadogia triphylla Baker var. *giorgii* (De Wild.) Verdc.
Fadogia triphylla Baker var. *gracilifolia* Verdc.
Fadogia triphylla Baker var. *pubicaulis* Verdc.
Fadogia variifolia Robyns
Fadogia verdcourtii Tennant
*Fadogia verdickii*De Wild. & T.Durand
Fadogia vollesenii Verdc.
Fadogia sp. A of FTEA
***Fadogiella rogersii* (Wernham) Bridson**
***Fadogiella stigmatoloba* (K.Schum.) Robyns**
Gardenia brachythamnus (K.Schum.) Launert
***Gardenia subacaulis* Stapf & Hutch.**
Leptactina benguelensis* (Welw. ex Hook f.) R.D.Good subsp. *benguelensis
Leptactina benguelensis (Welw. ex Hook f.) R.D.Good subsp. *pubescens* Verdc.
Leptactina epinyctios Bullock ex Verdc.
Mitriostigma greenwayii Bridson (suffrutex form)
Morinda angolensis (R.D.Good) F.White
Multidentia concrescens (Bullock) Bridson & Verdc.

Pachystigma albosetulosum Verdc. (syn. *Vangueria albosetulosa* (Verdc.) Lantz)
***Pachystigma coeruleum* Robyns (syn. *Vangueria coerulea* (Robyns) Lantz)**
Pachystigma latifolium Sond. (syn. *Vangueria latifolia* (Sond.) Sond.)
Pachystigma micropyren Verdc. (syn. *Vangueria micropyren* (Verdc.) Lantz)
Pachystigma pygmaeum (Schltr.) Robyns (syn. *Vangueria pygmaea* Schltr.)
***Pachystigma thamnus* Robyns (syn. *Vangueria thamnus* (Robyns) Lantz)**
***Pachystigma venosum* Hochst. (syn. *Vangueria venosa* (Hochst.) Sond.)**
Pavetta decumbens K.Schum. & K.Krause
Pavetta pumila N.E.Br.
Pavetta pygmaea Bremek.
Pavetta radicans Hiern
Pavetta schumanniana F.Hoffm. ex K.Schum. (suffrutex form)
Pavetta vanwykiana Bridson
Psychotria diversinodula (Verdc.) Verdc.
Psychotria kikwitensis De Wild.
Psychotria mwinilungae Verdc.
***Psychotria peduncularis* (Salisb.) Steyerm.**
Psychotria pumila* Hiern var. *pumila
Psychotria spithamea S.Moore
***Pygmaeothamnus chamaedendrum* (Kuntze) Robyns**
Pygmaeothamnus zeyheri (Sond.) Robyns var. *zeyheri*
Pygmaeothamnus zeyheri (Sond.) Robyns var. *rogersii* Robyns
Sericanthe suffruticosa (Hutch.) Robbr.
Tapiphyllum cistifolium (Welw. ex Hien) Robyns var. *latifolium* Verdc.
Tapiphyllum molle Robyns
Tapiphyllum verticillatum Robyns (syn. *Vangueria verticillata* (Robyns) Lantz)
Tricalysia cacondensis Hiern (syn. *Empogona cacondensis* (Hiern) Tosh & Robbr.)
Tricalysia repens Robbr.

SAPINDACEAE
Deinbollia fanshawei Exell

STRYCHNACEAE
Strychnos gossweileri Exell
Strychnos spinosa Lam. (geosuff form)

URTICACEAE
Pouzolzia parasitica (Forssk.) Schweinf.

Supporting Information Notes S2 List of taxa included in phylogeny with voucher information and GenBank accession numbers. Numbers in bold are newly generated sequences in this study.

Taxon Author	**Order**	**Family APG**	**Voucher (Herbarium)**	**Genbank *rbcLa***	**Genbank *matK***
Abutilon angulatum (Guill. & Perr.) Mast.	Malvales	Malvaceae	OM1934 *(JRAU)*	**JX572177**	**JX517944**
Abutilon sonneratianum (Cav.) Sweet	Malvales	Malvaceae	LTM034 *(JRAU)*	**JX572178**	**JX518201**
Acacia baileyana F.Muell.	Fabales	Fabaceae	MvdB0057 *(JRAU)*	**JX572184**	**JX517809**
Acacia cyclops G.Don	Fabales	Fabaceae	BS0068 *(JRAU)*	JQ412305	JQ412187
Acacia elata Benth.	Fabales	Fabaceae	OM1900 *(JRAU)*	**JX572190**	**JX517661**
Acacia mearnsii De Wild.	Fabales	Fabaceae	RMK0006 *(JRAU)*	**JX572209**	**JX517946**
Acacia melanoxylon R.Br.	Fabales	Fabaceae	OM1985 *(JRAU)*	**JX572210**	**JX517503**
Acacia podalyriifolia G.Don	Fabales	Fabaceae	OM1898 *(JRAU)*	**JX572219**	**JX970902**
Acacia saligna (Labill.) Wendl.	Fabales	Fabaceae	Gómez-Acevedo s.n *(MEXU,USCG)*	-	HM020727
Acalypha chirindica S.Moore	Malpighiales	Euphorbiaceae	OM2341 *(JRAU)*	**JX572236**	**JX518178**
Acalypha glabrata f. *pilosior* (Kuntze) Prain & Hutch.	Malpighiales	Euphorbiaceae	OM1979 *(JRAU)*	**JX572238**	**JX518120**
Acalypha glabrata Thunb.	Malpighiales	Euphorbiaceae	OM0441 *(JRAU)*	**JX572237**	**JX517655**
Acokanthera oblongifolia (Hochst.) Benth. & Hook.f. ex B.D.Jacks.	Gentianales	Apocynaceae	OM2240 *(JRAU)*	**JX572239**	**JX517911**
Acokanthera oppositifolia (Lam.) Codd	Gentianales	Apocynaceae	OM3240 *(JRAU)*	**JX572240**	**JX517680**
Acokanthera rotundata (Codd) Kupicha	Gentianales	Apocynaceae	OM2009 *(JRAU)*	**JF265266**	**JF270623**
Acridocarpus natalitius A.Juss.	Malpighiales	Malpighiaceae	OM2034 *(JRAU)*	**JF265267**	**JF270624**
Adansonia digitata L.	Malvales	Malvaceae	OM1306 *(JRAU)*	**JQ025018**	**JQ024933**
Adenia fruticosa Burtt Davy	Malpighiales	Passifloraceae	OM1950 *(JRAU)*	**JX572241**	**JX905957**
Adenia gummifera (Harv.) Harms	Malpighiales	Passifloraceae	OM2473 *(JRAU)*	**JX572242**	**JX517347**
Adenia spinosa Burtt Davy	Malpighiales	Passifloraceae	OM1618 *(JRAU)*	**JF265269**	**JX905950**
Adenium multiflorum Klotzsch	Gentianales	Apocynaceae	OM1161 *(JRAU)*	**JX572243**	**JX517509**
Adenium swazicum Stapf	Gentianales	Apocynaceae	OM1172 *(JRAU)*	**JX572244**	**JX517457**

Adenopodia spicata (E.Mey.) C.Presl	Fabales	Fabaceae	MWC28710 *(K)*	**JX572245**	**JX517808**
Afrocanthium lactescens (Hiern) Lantz	Gentianales	Rubiaceae	Luke&Luke 9045 *(UPS)*	-	HM119502
Afrocanthium mundianum (Cham. & Schltdl.) Lantz	Gentianales	Rubiaceae	Abbott9224 *(BNRH)*	**JX572367**	**JX517319**
Afrocanthium racemulosum (S.Moore) Lantz	Gentianales	Rubiaceae	OM2592 *(JRAU)*	**JX572246**	**JX517417**
Afrocarpus falcatus (Thunb.) C.N.Page	Pinales	Podocarpaceae	Adelaide BG G870288	AF249589	AF457111
Afzelia quanzensis Welw.	Fabales	Fabaceae	OM2113 *(JRAU)*	**JX572247**	**JX518045**
Agave americana L.	Asparagales	Asparagaceae	JG048 *(JRAU)*	**JX572248**	**JX517987**
Agave sisalana Perrine	Asparagales	Asparagaceae	RMK0026 *(JRAU)*	**JX572249**	**JX517955**
Ailanthus altissima (Mill.) Swingle	Sapindales	Simaroubaceae	JG032 *(JRAU)*	**JX572250**	**JX517969**
Alangium chinense (Lour.) Harms	Cornales	Cornaceae	US Natl. Arb. 49003 / Arnold Arb. #15866	L11209.2	JF308671
Alberta magna E.Mey.	Gentianales	Rubiaceae	Abbott9117 *(BNRH)*	**JX572251**	**JX517760**
Albizia adianthifolia (Schum.) W.Wight	Fabales	Fabaceae	OM2610 *(JRAU)*	**JX572252**	**JX518130**
Albizia amara subsp. *sericocephala* (Benth.) Brenan	Fabales	Fabaceae	OM2136 *(JRAU)*	**JX572253**	**JX517531**
Albizia anthelmintica Brongn.	Fabales	Fabaceae	OM2576 *(JRAU)*	**JX572254**	**JX517977**
Albizia brevifolia Schinz	Fabales	Fabaceae	OM0826 *(JRAU)*	**JF265276**	**JF270632**
Albizia forbesii Benth.	Fabales	Fabaceae	OM0331 *(JRAU)*	**JX572255**	**JX517431**
Albizia glaberrima (Schum. & Thonn.) Benth.	Fabales	Fabaceae	OM2605 *(JRAU)*	**JX572256**	**JX518104**
Albizia harveyi E.Fourn.	Fabales	Fabaceae	OM0773 *(JRAU)*	**JX572257**	**JX518176**
Albizia petersiana subsp. *evansii* (Burtt Davy) Brenan	Fabales	Fabaceae	OM1378 *(JRAU)*	**JX572258**	**JX517499**
Albizia suluensis Gerstner	Fabales	Fabaceae	OM2227 *(JRAU)*	**JX572259**	**JX517858**
Albizia tanganyicensis Baker f.	Fabales	Fabaceae	OM1972 *(JRAU)*	**JF265280**	**JF270636**
Albizia versicolor Oliv.	Fabales	Fabaceae	OM2535 *(JRAU)*	**JX572260**	**JX518194**
Albizia zimmermannii Harms	Fabales	Fabaceae	OM2363 *(JRAU)*	**JX572261**	**JX517424**
Alchornea hirtella f. *glabrata* (Müll.Arg.)	Malpighiales	Euphorbiaceae	MWC36209 *(K)*	**JX572262**	**JX518052**

Pax & K.Hoffm.					
Alchornea laxiflora (Benth.) Pax & K.Hoffm.	Malpighiales	Euphorbiaceae	OM2330 *(JRAU)*	**JX572263**	**JX517659**
Allocassine laurifolia (Harv.) N.Robson	Celastrales	Celastraceae	Abbott9147 *(BNRH)*	**JX572264**	**JX517481**
Allophylus africanus P.Beauv.	Sapindales	Sapindaceae	Abbott9141 *(BNRH)*	**JX572265**	**JX518006**
Allophylus decipiens (E.Mey.) Radlk.	Sapindales	Sapindaceae	OM1846 *(JRAU)*	**JF265283**	**JF270639**
Allophylus dregeanus (Sond.) De Winter	Sapindales	Sapindaceae	Abbott9136 *(BNRH)*	**JX572266**	**JX518230**
Allophylus natalensis (Sond.) De Winter	Sapindales	Sapindaceae	OM2224 *(JRAU)*	**-**	**JX905946**
Allophylus rubifolius (Hochst. ex A.Rich.) Engl.	Sapindales	Sapindaceae	OM2348 *(JRAU)*	**JX572267**	**JX517604**
Aloe africana Mill.	Asparagales	Xanthorrhoeaceae	OM3190 *(JRAU)*	**JX572268**	**JX518056**
Aloe angelica Pole-Evans	Asparagales	Xanthorrhoeaceae	OM2960 *(JRAU)*	**-**	**JQ024109**
Aloe arborescens Mill.	Asparagales	Xanthorrhoeaceae	Abbott9167 *(BNRH)*	**JX572272**	**JX518144**
Aloe barberae Dyer	Asparagales	Xanthorrhoeaceae	Abbott9219 *(BNRH)*	**JX572274**	**JX518237**
Aloe castanea Schönland	Asparagales	Xanthorrhoeaceae	OM2961 *(JRAU)*	**-**	**JQ024120**
Aloe comosa Marloth & A.Berger	Asparagales	Xanthorrhoeaceae	BHD385 *(JRAU)*	**JQ024499**	**JQ024124**
Aloe dichotoma Masson	Asparagales	Xanthorrhoeaceae	OM2953 *(JRAU)*	**JQ024501**	**JQ024126**
Aloe dichotoma subsp. *pillansii* (L.Guthrie) Zonn.	Asparagales	Xanthorrhoeaceae	BHD390 *(JRAU)*	**JQ024502**	**JQ024127**
Aloe dichotoma subsp. *ramosissima* (Pillans) Zonn.	Asparagales	Xanthorrhoeaceae	OM2954 *(JRAU)*	**JQ024503**	**JQ024128**
Aloe excelsa A.Berger	Asparagales	Xanthorrhoeaceae	OM1621 *(JRAU)*	**JF265284**	**JF270640**
Aloe ferox Mill.	Asparagales	Xanthorrhoeaceae	Abbott9235 *(BNRH)*	**JX572282**	**JX518209**
Aloe hexapetala Salm-Dyck.	Asparagales	Xanthorrhoeaceae	BHD394 *(JRAU)*	**JQ024515**	**JQ024141**
Aloe marlothii A.Berger	Asparagales	Xanthorrhoeaceae	OM1490 *(JRAU)*	**JF265285**	**JF270641**
Aloe plicatilis (L.) Mill.	Asparagales	Xanthorrhoeaceae	BHD193 *(JRAU)*	**JQ024531**	**JQ024159**
Aloe pluridens Haw.	Asparagales	Xanthorrhoeaceae	Abbott9217 *(BNRH)*	**JX572293**	**JX518078**
Aloe spicata L.f.	Asparagales	Xanthorrhoeaceae	OM1522 *(JRAU)*	**JF265286**	**JF270642**
Aloe thraskii Baker	Asparagales	Xanthorrhoeaceae	BHD411 *(JRAU)*	**JQ024542**	**JQ024170**
Amblygonocarpus andongensis (Oliv.)	Fabales	Fabaceae	OM2609 *(JRAU)*	**JX572301**	**JX517615**

Exell & Torre					
Anacardium occidentale L.	Sapindales	Anacardiaceae	Mori24142 *(NYBG)*	-	AY594459
Anastrabe integerrima E.Mey. ex Benth.	Lamiales	Scrophulariaceae	OM2197 *(JRAU)*	KF147454	KF147376
Ancylobothrys capensis (Oliv.) Pichon	Gentianales	Apocynaceae	OM1615 *(JRAU)*	**JX572303**	**JX517602**
Androstachys johnsonii Prain	Malpighiales	Euphorbiaceae	OM3354 *(JRAU)*	-	**JX517380**
Anginon difforme (L.) B.L.Burtt	Apiales	Apiaceae	OM2292 *(JRAU)*	**JX572304**	**JX518113**
Anisotes formosissimus (Klotzsch) Milne-Redh.	Lamiales	Acanthaceae	OM0868 *(JRAU)*	**JF265288**	**JF270643**
Annona senegalensis Pers.	Magnoliales	Annonaceae	OM2732 *(JRAU)*	**JX572305**	**JX517836**
Anthocleista grandiflora Gilg	Gentianales	Gentianaceae	OM2671 *(JRAU)*	**JX572306**	**JX518238**
Antidesma venosum E.Mey. ex Tul.	Malpighiales	Euphorbiaceae	223021 *(IBSC)*	-	HQ415372
Aphloia theiformis (Vahl) Benn.	Crossosomatales	Aphloiaceae	OM3397 *(JRAU)*	**JX572308**	**JX518161**
Apodytes dimidiata E.Mey. ex Arn.	Icacinales	Icacinaceae	OM2485 *(JRAU)*	**JX572309**	**JX517375**
Ardisia crenata Sims	Ericales	Primulaceae	Davis570 *(FLAS)*	GU135270	GU134982
Argomuellera macrophylla Pax	Malpighiales	Euphorbiaceae	Gereau6285 *(MO)*	AB267915	AB268019
Artabotrys brachypetalus Benth.	Magnoliales	Annonaceae	OM2697 *(JRAU)*	**JX572311**	**JX517688**
Aspalathus linearis (Burm.f.) R.Dahlgren	Fabales	Fabaceae	AMM4783 *(BOL)*	**JX572312**	**JX517437**
Aspalathus pendula R.Dahlgren	Fabales	Fabaceae	AMM4066 *(BOL)*	**JX572313**	**JX518088**
Atalaya alata (Sim) H.M.L.Forbes	Sapindales	Sapindaceae	Chase1126 *(K)*	AY724345	AY724274
Atalaya natalensis R.A.Dyer	Sapindales	Sapindaceae	Abbott9212 *(BNRH)*	**JX572315**	**JX517838**
Avicennia marina (Forssk.) Vierh.	Lamiales	Acanthaceae	OM2475 *(JRAU)*	**JX572318**	**JX518100**
Azanza garckeana (F.Hoffm.) Exell & Hillc.	Malvales	Malvaceae	OM2525 *(JRAU)*	**JX572319**	**JX517364**
Azima tetracantha Lam.	Brassicales	Salvadoraceae	OM1315 *(JRAU)*	**JX572320**	**JX517351**
Bachmannia woodii (Oliv.) Gilg	Brassicales	Capparaceae	MWC35838 *(K)*	**JX572321**	**JX518041**
Baikiaea plurijuga Harms	Fabales	Fabaceae	M660 *(JRAU)*	**JX572322**	**JX517704**
Balanites aegyptiaca (L.) Delile	Zygophyllales	Zygophyllaceae	OM3548 *(JRAU)*	**JX572323**	**JX517722**
Balanites maughamii Sprague	Zygophyllales	Zygophyllaceae	OM0994 *(JRAU)*	**JX572324**	**JX517309**
Balanites pedicellaris Mildbr. & Schltr.	Zygophyllales	Zygophyllaceae	OM0901 *(JRAU)*	**JF265297**	**JF270651**

Baphia massaiensis subsp. *obovata* (Schinz) Brummitt	Fabales	Fabaceae	RBN130 *(KNP)*	**JF265298**	**JF270652**
Baphia racemosa (Hochst.) Baker	Fabales	Fabaceae	OM2221 *(JRAU)*	-	**JX517582**
Barleria albostellata C.B.Clarke	Lamiales	Acanthaceae	OM0899 *(JRAU)*	**JF265299**	**JF270653**
Barleria rotundifolia Oberm.	Lamiales	Acanthaceae	OM1327 *(JRAU)*	**JF265300**	**JF270654**
Barringtonia racemosa (L.) Spreng.	Ericales	Lecythidaceae	OM1830 *(JRAU)*	**JX572325**	**JX517528**
Bauhinia galpinii N.E.Br.	Fabales	Fabaceae	Forest347 *(NBG)*	EU361875	AM234262
Bauhinia natalensis Hook.	Fabales	Fabaceae	CS07 *(JRAU)*	**JX572326**	**JX518033**
Bauhinia petersiana Bolle	Fabales	Fabaceae	OM2243 *(JRAU)*	**JX572327**	**JX517937**
Bauhinia tomentosa L.	Fabales	Fabaceae	OM2391 *(JRAU)*	**JX572328**	**JX517621**
Bauhinia variegata L.	Fabales	Fabaceae	Abbott24907 *(FLAS)*	GU135196	GU135033
Berchemia discolor (Klotzsch) Hemsl.	Rosales	Rhamnaceae	OM2437 *(JRAU)*	**JX572329**	**JX517834**
Berchemia zeyheri (Sond.) Grubov	Rosales	Rhamnaceae	OM1165 *(JRAU)*	**JX572330**	**JX517781**
Bersama lucens (Hochst.) Szyszyl.	Geraniales	Melianthaceae	OM1562 *(JRAU)*	**JF265304**	**JF270657**
Bersama swinnyi Phillips	Geraniales	Melianthaceae	OM2205 *(JRAU)*	-	KF147377
Bersama tysoniana Oliv.	Geraniales	Melianthaceae	OM1891 *(JRAU)*	**JX572331**	**JX517517**
Berzelia lanuginosa (L.) Brongn.	Bruniales	Bruniaceae	OM3091 *(JRAU)*	**JX572332**	**JX517959**
Bivinia jalbertii Tul.	Malphigiales	Salicaceae	OM2418 *(JRAU)*	**JX572333**	**JX517831**
Blighia unijugata Baker	Sapindales	Sapindaceae	OM1856 *(JRAU)*	**JX572334**	**JX517638**
Bobgunnia madagascariensis (Desv.) J.H.Kirkbr. & Wiersema	Fabales	Fabaceae	OM3566 *(JRAU)*	**JX572335**	**JX518002**
Bolusanthus speciosus (Bolus) Harms	Fabales	Fabaceae	OM0240 *(JRAU)*	**JF265305**	**JF270658**
Boscia albitrunca (Burch.) Gilg & Benedict	Brassicales	Capparaceae	OM1274 *(JRAU)*	**JX572338**	**JX518051**
Boscia angustifolia var. *corymbosa* (Gilg) DeWolf	Brassicales	Capparaceae	OM2069 *(JRAU)*	-	**JX517529**
Boscia foetida Schinz	Brassicales	Capparaceae	OM0296 *(JRAU)*	**JF265309**	**JF270662**
Boscia foetida subsp. *filipes* (Gilg) Lötter.	Brassicales	Capparaceae	OM1916 *(JRAU)*	**JX572339**	**JX518084**
Boscia mossambicensis Klotzsch	Brassicales	Capparaceae	OM0250 *(JRAU)*	**JX572340**	**JX517670**
Boscia salicifolia Oliv.	Brassicales	Capparaceae	OM2543 *(JRAU)*	**JX572341**	**JX518071**

Bowkeria cymosa MacOwan	Lamiales	Scrophulariaceae	OM2026 *(JRAU)*	**JX572342**	**JX517768**
Bowkeria verticillata (Eckl. & Zeyh.) Druce	Lamiales	Scrophulariaceae	OM&MvdB72 *(JRAU)*	**JX572343**	**JX517524**
Brabejum stellatifolium L.	Proteales	Proteaceae	OM2257 *(JRAU)*	**JX572344**	**JX517823**
Brachylaena discolor DC.	Asterales	Asteraceae	BS0103 *(JRAU)*	**JQ412332**	**JQ412216**
Brachylaena discolor var. *transvaalensis* (E.Phillips & Schweick.) Beentje.	Asterales	Asteraceae	OM0571 *(JRAU)*	**JF265312**	**JF270665**
Brachylaena elliptica (Thunb.) Less.	Asterales	Asteraceae	Koekemoer&Funk 1971 *(PRE)*	EU384952	EU385330
Brachylaena huillensis O.Hoffm.	Asterales	Asteraceae	OM0247 *(JRAU)*	**JF265311**	**JF270664**
Brachylaena neriifolia (L.) R.Br.	Asterales	Asteraceae	OM3093 *(JRAU)*	**JX572345**	**JX517590**
Brachylaena rotundata S.Moore	Asterales	Asteraceae	OM1938 *(JRAU)*	**JX572346**	**JX518142**
Brachystegia boehmii Taub.	Fabales	Fabaceae	OM3534 *(JRAU)*	**JX572347**	**JX518131**
Brachystegia bussei Harms	Fabales	Fabaceae	Herendeen 20-XII-97-2 *(US)*	-	EU361887
Brachystegia stipulata De Wild.	Fabales	Fabaceae	OM2043 *(BNRH)*	KF147455	KF147378
Brackenridgea zanguebarica Oliv.	Malpighiales	Ochnaceae	OM2377 *(BNRH)*	KF147456	KF147379
Breonadia salicina (Vahl) Hepper & J.R.I.Wood	Gentianales	Rubiaceae	OM2571 *(JRAU)*	**JX572348**	**JX518162**
Brexia madagascariensis (Lam.) Thouars ex Ker Gawl.	Celastrales	Celastraceae	OM2676 *(JRAU)*	**JX572349**	**JX517980**
Bridelia atroviridis Müll.Arg.	Malpighiales	Euphorbiaceae	Mwangoka1371 *(M)*	-	FJ439961
Bridelia cathartica Bertol.	Malpighiales	Euphorbiaceae	OM0455 *(JRAU)*	**JX572350**	**JX517968**
Bridelia micrantha (Hochst.) Baill.	Malpighiales	Euphorbiaceae	OM1435 *(JRAU)*	**JF265315**	**JF270668**
Bridelia mollis Hutch.	Malpighiales	Euphorbiaceae	OM1958 *(JRAU)*	**JX572351**	**JX518053**
Bridelia tenuifolia Müll.Arg.	Malpighiales	Euphorbiaceae	Leyens&Lobin206 *(M)*	-	FJ439963
Bruguiera gymnorhiza (L.) Lam.	Malpighiales	Rhizophoraceae	OM2487 *(JRAU)*	**JX905966**	AF105088
Brunia albifora Phillips	Bruniales	Bruniaceae	OM3116 *(JRAU)*	**JX572352**	**JX517948**
Buddleja dysophylla (Benth.) Radlk.	Lamiales	Scrophulariaceae	OM2296 *(JRAU)*	**JX572353**	**JX518066**
Buddleja saligna Willd.	Lamiales	Scrophulariaceae	OM1783 *(JRAU)*	**JX572354**	**JX518195**

Buddleja salviifolia (L.) Lam.	Lamiales	Scrophulariaceae	OM1780 *(JRAU)*	**JX572355**	**JX517705**
Burchellia bubalina (L.f.) Sims	Gentianales	Rubiaceae	OM3160 *(JRAU)*	**JX572356**	**JX517467**
Burkea africana Hook.	Fabales	Fabaceae	OM2128 *(JRAU)*	**JX572357**	**JX517992**
Burttdavya nyasica Hoyle	Gentianales	Rubiaceae	OM1666 *(JRAU)*	**JX572358**	**JX517314**
Buxus macowanii Oliv.	Buxales	Buxaceae	OM1762 *(JRAU)*	**JX572359**	**JX517876**
Buxus natalensis (Oliv.) Hutch.	Buxales	Buxaceae	OM1768 *(JRAU)*	**JX572360**	**JX517505**
Cadaba aphylla (Thunb.) Wild	Brassicales	Capparaceae	OM3203 *(JRAU)*	**JX572361**	**JX517921**
Cadaba kirkii Oliv.	Brassicales	Capparaceae	OM3579 *(JRAU)*	**JX572362**	**JX517687**
Cadaba termitaria N.E.Br.	Brassicales	Capparaceae	OM1930 *(JRAU)*	**JF265318**	**JF270671**
Caesalpinia bonduc (L.) Roxb.	Fabales	Fabaceae	OM3615 *(JRAU)*	-	**JX517899**
Caesalpinia decapetala (Roth) Alston	Fabales	Fabaceae	PS1589MT01 *(IMPLAD)*	-	HM049555
Callistemon viminalis (Sol. ex Gaertn.) G.Don ex Loudon	Myrtales	Myrtaceae	BS0179 *(JRAU)*	**JX905973**	**JX970912**
Callitris endlicheri (Parl.) F.M.Bailey	Pinales	Cupressaceae	Miller4 *(BH)*	AY988231	AY988331
Calodendrum capense (L.f.) Thunb.	Sapindales	Rutaceae	OM1542 *(JRAU)*	**JF265319**	**JF270672**
Calpurnia aurea (Aiton) Benth.	Fabales	Fabaceae	OM1532 *(JRAU)*	**JF265320**	**JF270673**
Calpurnia sericea Harv.	Fabales	Fabaceae	Abbott9196 *(BNRH)*	**JX572364**	**JX518205**
Camellia sinensis (L.) Kuntze	Ericales	Theaceae	Prince s.n. *(UNC*) / Erixon&Bremer40 *(UPS)*	AF380037	AJ429305
Canthium armatum (K.Schum.) Lantz	Gentianales	Rubiaceae	OM1548 *(JRAU)*	**JX572859**	**JX517643**
Canthium ciliatum (D.Dietr.) Kuntze	Gentianales	Rubiaceae	OM1741 *(JRAU)*	**JX572365**	**JX518137**
Canthium inerme (L.f.) Kuntze	Gentianales	Rubiaceae	OM1547 *(JRAU)*	**JX572366**	**JX517491**
Canthium setiflorum Hiern	Gentianales	Rubiaceae	OM0574 *(JRAU)*	**JX572368**	**JX518042**
Canthium spinosum (Klotzsch ex Eckl. & Zeyh.) Kuntze	Gentianales	Rubiaceae	Abbott9256 *(BNRH)*	**JX572369**	**JX517559**
Canthium suberosum Codd	Gentianales	Rubiaceae	Abbott9239 *(BNRH)*	**JX572370**	**JX517637**
Canthium vanwykii Tilney & Kok	Gentianales	Rubiaceae	Abbott9155 *(BNRH)*	**JX572371**	**JX517690**
Capparis erythrocarpos Isert	Brassicales	Capparaceae	OM2332 *(JRAU)*	**JX572372**	**JX517706**
Capparis fascicularis DC.	Brassicales	Capparaceae	OM1640 *(JRAU)*	**JF265323**	**JF270676**
Capparis sepiaria var. *subglabra* (Oliv.)	Brassicales	Capparaceae	OM2746 *(JRAU)*	**JX572373**	**JX517328**

DeWolf					
Capparis tomentosa Lam.	Brassicales	Capparaceae	OM1112 *(JRAU)*	**JX572374**	**JX518213**
Carissa bispinosa (L.) Desf. ex Brenan	Gentianales	Apocynaceae	OM0409 *(JRAU)*	**JX572375**	**JX518098**
Carissa haematocarpa (Eckl.) A.DC.	Gentianales	Apocynaceae	OM3065 *(JRAU)*	KF147457	KF147380
Carissa macrocarpa (Eckl.) A.DC.	Gentianales	Apocynaceae	OM1751 *(JRAU)*	**JX572377**	**JX517764**
Carissa praetermissa Kupicha	Gentianales	Apocynaceae	OM2650 *(JRAU)*	**JX572378**	**JX518202**
Carissa spinarum L.	Gentianales	Apocynaceae	RL1148 *(JRAU)*	**JX572376**	**JX517623**
Carissa tetramera (Sacleux) Stapf	Gentianales	Apocynaceae	RBN210 *(KNP)*	**JX572379**	**JX517545**
Carpolobia goetzei Gürke	Fabales	Polygalaceae	OM2459 *(JRAU)*	**JX572380**	**JX517551**
Casearia gladiiformis Mast.	Malphigiales	Salicaceae	OM2323 *(JRAU)*	**JX572383**	**JX517926**
Casearia sp. nov. Abbott	Malphigiales	Salicaceae	Abbott9191 *(BNRH)*	**JX573112**	**JX905955**
Casearia sp. nov. Burrows	Malphigiales	Salicaceae	Burrows12551 *(BNRH)*	KF147458	-
Cassia abbreviata Oliv.	Fabales	Fabaceae	OM2047 *(JRAU)*	**JX572384**	**JX517898**
Cassia abbreviata subsp. *beareana* (Holmes) Brenan	Fabales	Fabaceae	OM3388 *(JRAU)*	**JX572385**	**JX518172**
Cassia afrofistula Brenan	Fabales	Fabaceae	OM2629 *(JRAU)*	**JX572386**	**JX518010**
Cassine crocea (Thunb.) C.Presl.	Celastrales	Celastraceae	Abbott9197 *(BNRH)*	**JX572546**	**JX517420**
Cassine matabelica (Loes.) Steedman	Celastrales	Celastraceae	Archer s.n. *(PRE)*	-	DQ217537
Cassine peragua L.	Celastrales	Celastraceae	Abbott9178 *(BNRH)*	**JX572546**	**JX517420**
Cassine reticulata (Eckl. & Zeyh.) Codd	Celastrales	Celastraceae	Proches s.n. *(PRE)*	-	DQ217535
Cassine schinoides (Spreng.) R.H.Archer	Celastrales	Celastraceae	Van Jaarsveld s.n. *(PRE)*	-	DQ217536
Cassine transvaalensis (Burtt Davy) Codd.	Celastrales	Celastraceae	OM1229 *(JRAU)*	**JX572547**	**JX517826**
Cassinopsis ilicifolia (Hochst.) Sleumer	Icacinales	Icacinaceae	OM1892 *(JRAU)*	**JF265330**	**JF270683**
Cassinopsis tinifolia Harv.	Icacinales	Icacinaceae	Abbott9166 *(BNRH)*	**JX572388**	**JX517588**
Cassipourea gummiflua Tul.	Malpighiales	Rhizophoraceae	OM1882 *(JRAU)*	**JX572389**	**JX517458**
Cassipourea malosana (Baker) Alston	Malpighiales	Rhizophoraceae	Abbott9115 *(BNRH)*	**JX572390**	**JX517355**
Casuarina cunninghamiana Miq.	Fagales	Casuarinaceae	JG061 *(JRAU)*	**JX572391**	**JX517494**
Casuarina equisetifolia L.	Fagales	Casuarinaceae	Abbott24914 *(FLAS)*	GU135200	GU135038
Catha abbottii A.E.van Wyk & M.Prins	Celastrales	Celastraceae	Abbott9242 *(BNRH)*	**JX572741**	**JX517339**
Catha edulis (Vahl) Endl.	Celastrales	Celastraceae	OM2079 *(JRAU)*	**JX572392**	**JX517954**

Catunaregam obovata (Hochst.) A.E.Gon.	Gentianales	Rubiaceae	OM3277 *(JRAU)*	**JX572393**	**JX517479**
Catunaregam swynnertonii (S.Moore) Bridson	Gentianales	Rubiaceae	OM2353 *(JRAU)*	**JX572394**	**JX517530**
Cavacoa aurea (Cavaco) J.Léonard	Malpighiales	Euphorbiaceae	OM2035 *(JRAU)*	**JX572395**	**JX518036**
Ceiba pentandra (L.) Gaertn.	Malvales	Malvaceae	Alverson s.n. *(SP)*	-	HQ696701
Celtis africana Burm.f.	Rosales	Ulmaceae	OM1225 *(JRAU)*	**JF265333**	**JF270686**
Celtis gomphophylla Baker	Rosales	Ulmaceae	Abbott9159 *(BNRH)*	**JX572396**	**JX517812**
Celtis mildbraedii Engl.	Rosales	Ulmaceae	OM1567 *(JRAU)*	**JX572397**	**JX517381**
Celtis sinensis Pers.	Rosales	Ulmaceae	Song s.n. *(PE)*	-	AF345316
Cephalanthus natalensis Oliv.	Gentianales	Rubiaceae	OM1583 *(JRAU)*	**JF265334**	**JF270687**
Ceraria fruticulosa H.Pearson & Stephens	Caryophyllales	Portulacaceae	EJE96 *(YU)*	AY875218	AY875371
Ceriops tagal (Perr.) C.B.Rob.	Malpighiales	Rhizophoraceae	SetoguchiS93028 *(MAK)* / Chang 9711902 *(SYS)*	AF006756	AF105089
Cestrum elegans (Brongn. ex Neumann) Schltdl.	Solanales	Solanaceae	Chase12217 *K*	-	AJ585891
Cestrum laevigatum Schltdl.	Solanales	Solanaceae	OM1773 *(JRAU)*	**JX572398**	**JX517961**
Chaetachme aristata Planch.	Rosales	Ulmaceae	OM1530 *(JRAU)*	**JX572399**	**JX517429**
Chazaliella abrupta (Hiern) E.M.A.Petit & Verdc.	Gentianales	Oleaceae	OM2440 *(JRAU)*	**JX572400**	**JX518149**
Chionanthus foveolatus (E.Mey.) Stearn	Lamiales	Oleaceae	OM1832 *(JRAU)*	**JF265336**	**JF270689**
Chionanthus peglerae (C.H.Wright) Stearn	Lamiales	Oleaceae	OM1766 *(JRAU)*	**JF265337**	**JF270690**
Chromolaena DC.	Asterales	Asteraceae	Panero8841 *(TENN)*	-	EU337052
Chrysanthemoides monilifera (L.) Norl.	Asterales	Asteraceae	Abbott9171 *(BNRH)*	**JX572403**	**JX517413**
Chrysophyllum viridifolium J.M.Wood & Franks	Ericales	Sapotaceae	OM2668 *(JRAU)*	**JX572404**	**JX518108**
Cinnamomum camphora (L.) J.Presl	Laurales	Lauraceae	904158 *(IBSC)*	HQ427259	HQ427401
Cissus cactiformis Gilg	Vitales	Vitaceae	OM1316 *(JRAU)*	**JX572405**	**JX517930**
Cissus cornifolia (Baker) Planch.	Vitales	Vitaceae	OM2542 *(JRAU)*	**JX572406**	**JX517833**
Cissus integrifolia (Baker) Planch.	Vitales	Vitaceae	OM2397 *(JRAU)*	**JX572407**	**JX517840**
Citrus limon (L.) Burm. f.	Sapindales	Rutaceae	JG043 *(JRAU)*	**JX572408**	**JX517803**

Citrus sinensis (L.) Osbeck	Sapindales	Rutaceae	n.a.	-	AB071323
Cladostemon kirkii (Oliv.) Pax & Gilg	Brassicales	Capparaceae	OM2389 *(JRAU)*	**JX572409**	**JX517981**
Clausena anisata (Willd.) Hook.f. ex Benth.	Sapindales	Rutaceae	Abbott9249 *(BNRH)*	**JX572410**	**JX517957**
Cleistanthus polystachyus subsp. milleri (Dunkley) Radcl.-Sm.	Malpighiales	Euphorbiaceae	Festo457 *(MO)*	-	FJ439971
Cleistanthus schlechteri (Pax) Hutch.	Malpighiales	Euphorbiaceae	OM2539 *(JRAU)*	**JX572411**	**JX970903**
Cleistochlamys kirkii (Benth.) Oliv.	Magnoliales	Annonaceae	OM2339 *(JRAU)*	**JX572412**	**JX517486**
Clematis brachiata Thunb.	Ranunculales	Ranunculaceae	OM1974 *(JRAU)*	**JF265340**	**JF270693**
Clerodendrum eriophyllum Gürke	Lamiales	Lamiaceae	OM2759 *(JRAU)*	**JX572413**	**JX517512**
Clerodendrum glabrum E.Mey.	Lamiales	Lamiaceae	Abbott9161 *(BNRH)*	**JX572414**	**JX517832**
Clerodendrum incisum Klotzsch	Lamiales	Lamiaceae	Burrows11018 *(BNRH)*	KF147459	KF147381
Clerodendrum ternatum Schinz	Lamiales	Lamiaceae	Burrows12422 *(BNRH)*	KF147460	KF147382
Clutia abyssinica Jaub. & Spach	Malpighiales	Euphorbiaceae	Abbott9231 *(BNRH)*	**JX572415**	**JX518174**
Clutia Boerh. sp. nov.	Malpighiales	Euphorbiaceae	Abbott9205 *(BNRH)*	**JX572417**	**JX517450**
Clutia monticola S.Moore	Malpighiales	Euphorbiaceae	Burrows12688 *(BNRH)*	KF147461	-
Clutia pulchella L.	Malpighiales	Euphorbiaceae	Abbott9112 *(BNRH)*	**JX572416**	**JX517825**
Cnestis polyphylla Lam.	Oxalidales	Connaraceae	Abbott9113 *(BNRH)*	**JX572418**	**JX517860**
Cocculus DC.	Ranunculales	Menispermaceae	Hong YP H419 *(PE)*	HQ260774	EF143860
Coddia rudis (E.Mey. ex Harv.) Verdc.	Gentianales	Rubiaceae	OM2687 *(JRAU)*	**JX572419**	**JX517674**
Coffea arabica L.	Gentianales	Rubiaceae	Swensen228 *(USNC)* / n.a.	HM446782	AM412456
Coffea ligustroides S.Moore	Gentianales	Rubiaceae	MWC16159 *(K)*	-	**JX517673**
Coffea racemosa Lour.	Gentianales	Rubiaceae	OM2434 *(JRAU)*	**JX572420**	**JX517631**
Coffea salvatrix Swynn. & Philipson	Gentianales	Rubiaceae	MWC19445 *(K)*	**JX572421**	**JX517922**
Cola greenwayi Brenan	Malvales	Malvaceae	OM2160 *(JRAU)*	-	**JX517703**
Cola mossambicensis Wild	Malvales	Malvaceae	OM2321 *(JRAU)*	**JX572422**	**JX517410**
Cola natalensis Oliv.	Malvales	Malvaceae	OM1860 *(JRAU)*	**JX572423**	**JX518169**
Coleonema album (Thunb.) Bartl. & H.L.Wendl.	Sapindales	Rutaceae	OM3124 *(JRAU)*	**JX572424**	**JX517370**

Colophospermum mopane (Benth.) Leonard	Fabales	Fabaceae	RL1558 *(JRAU)*	**JX572425**	**JX517743**
Colubrina asiatica (L.) Brongn.	Rosales	Rhamnaceae	J.R. Abbott 24812 *(FLAS)*	GU135186	GU135023
Combretum adenogonium Steud. ex A.Rich.	Myrtales	Combretaceae	OM2123 *(JRAU)*	EU338151	JX517478
Combretum albopunctatum Suess.	Myrtales	Combretaceae	OM1038 *(JRAU)*	**JX572427**	**JX517725**
Combretum apiculatum Sond.	Myrtales	Combretaceae	OM1018 *(JRAU)*	**JX572429**	**JX517366**
Combretum apiculatum subsp. *leutweinii* (Schinz) Exell	Myrtales	Combretaceae	OM2066 *(JRAU)*	**JX572428**	**JX517678**
Combretum bracteosum (Hochst.) Engl. & Diels	Myrtales	Combretaceae	OM1676 *(JRAU)*	**JX572430**	**JX517513**
Combretum caffrum (Eckl. & Zeyh.) Kuntze	Myrtales	Combretaceae	OM1750 *(JRAU)*	**JX572431**	**JX517848**
Combretum celastroides subsp. *orientale* Exell	Myrtales	Combretaceae	OM1917 *(JRAU)*	**JX572426**	**JX517779**
Combretum celastroides Welw. ex M.A.Lawson	Myrtales	Combretaceae	OM&MvdB28 *(JRAU)*	**JX572432**	**JX517316**
Combretum collinum subsp. *gazense* (Swynn. & Baker f.) Okafa	Myrtales	Combretaceae	OM1024 *(JRAU)*	EU338158	OM1024
Combretum collinum subsp. *suluense* (Engl. & Diels) Okafa	Myrtales	Combretaceae	OM&MvdB34 *(JRAU)*	**JX572434**	**JX517634**
Combretum collinum subsp. *taborense* (Engl.) Okafa	Myrtales	Combretaceae	RBN170 *(KNP)*	**JX572435**	**JX517383**
Combretum edwardsii Exell	Myrtales	Combretaceae	OM1584 *(JRAU)*	**JX572436**	**JX517430**
Combretum elaeagnoides Klotzsch	Myrtales	Combretaceae	OM1028 *(JRAU)*	**JX572437**	**JX517727**
Combretum engleri Schinz, De Wild. & T.Durand	Myrtales	Combretaceae	OM1025 *(JRAU)*	**JX572438**	**JX517943**
Combretum erythrophyllum (Burch.) Sond.	Myrtales	Combretaceae	RL1344 *(JRAU)*	**JX572439**	**JX517552**
Combretum hereroense Schinz	Myrtales	Combretaceae	OM2400 *(JRAU)*	**JX572440**	**JX517597**

Combretum imberbe Wawra	Myrtales	Combretaceae	OM1019 *(JRAU)*	**JX572441**	**JX517371**
Combretum kirkii M.A.Lawson	Myrtales	Combretaceae	OM2714 *(JRAU)*	**JX572442**	**JX518242**
Combretum kraussii Hochst.	Myrtales	Combretaceae	OM1582 *(JRAU)*	**JX572443**	**JX517576**
Combretum microphyllum Klotzsch	Myrtales	Combretaceae	OM2038 *(JRAU)*	**JX572444**	**JX517523**
Combretum mkuzense J.D.Carr & Retief	Myrtales	Combretaceae	OM1569 *(JRAU)*	**JX572445**	**JX517806**
Combretum moggii Exell	Myrtales	Combretaceae	OM1586 *(JRAU)*	**JX572446**	**JX517385**
Combretum molle R.Br. ex G.Don	Myrtales	Combretaceae	RL1644 *(JRAU)*	**JX572447**	**JX517775**
Combretum mossambicense (Klotzsch) Engl.	Myrtales	Combretaceae	OM2068 *(JRAU)*	**JX572448**	**JX517652**
Combretum nelsonii Dummer	Myrtales	Combretaceae	MvdB0026 *(JRAU)*	EU338135	**JX517805**
Combretum oxystachyum Welw. ex M.A.Lawson	Myrtales	Combretaceae	OM1056 *(JRAU)*	**JX572449**	**JX517306**
Combretum padoides Engl. & Diels	Myrtales	Combretaceae	OM2388 *(JRAU)*	**JX572450**	**JX517793**
Combretum paniculatum Vent.	Myrtales	Combretaceae	RL1661 *(JRAU)*	**JQ025035**	**JQ024950**
Combretum petrophilum Retief	Myrtales	Combretaceae	OM2007 *(JRAU)*	**JX572451**	**JX518046**
Combretum pisoniiflorum (Klotzsch) Engl.	Myrtales	Combretaceae	OM2600 *(JRAU)*	**JX572452**	**JX518020**
Combretum platypetalum Welw. ex M.A.Lawson	Myrtales	Combretaceae	OM2092 *(JRAU)*	**JX572453**	**JX517352**
Combretum psidioides subsp. *dinteri* (Schinz, De Wild. & T.Durand) Exell	Myrtales	Combretaceae	OM1039 *(JRAU)*	**JX572455**	**JX517603**
Combretum psidioides Welw.	Myrtales	Combretaceae	OM2052 *(JRAU)*	**JX572454**	**JX518060**
Combretum stylesii O.Maurin, Jordaan & A.E.van Wyk	Myrtales	Combretaceae	OM0997 *(JRAU)*	HM208690	HM208689
Combretum tenuipes Engl.	Myrtales	Combretaceae	OM1089 *(JRAU)*	**JX572456**	**JX517521**
Combretum vendae A.E.van Wyk	Myrtales	Combretaceae	OM&MvdB09 *(JRAU)*	**JX572457**	**JX517642**
Combretum wattii Exell	Myrtales	Combretaceae	OM0995 *(JRAU)*	**JX572458**	**JX517772**
Combretum woodii Dummer	Myrtales	Combretaceae	OM1646 *(JRAU)*	**JX572459**	**JX517558**
Combretum zeyheri Sond.	Myrtales	Combretaceae	RL1440 *(JRAU)*	**JX572460**	**JX518241**
Commiphora africana (A.Rich.) Endl.	Sapindales	Burseraceae	OM0334 *(JRAU)*	**JX572461**	**JX518153**
Commiphora edulis (Klotzsch) Engl.	Sapindales	Burseraceae	OM1309 *(JRAU)*	**JX572462**	**JX517660**

Commiphora glandulosa Schinz	Sapindales	Burseraceae	RBN160 *(KNP)*	**JF265359**	**JF270712**
Commiphora harveyi (Engl.) Engl.	Sapindales	Burseraceae	OM1455 *(JRAU)*	**JX572463**	**JX517769**
Commiphora marlothii Engl.	Sapindales	Burseraceae	OM1587 *(JRAU)*	**JF265361**	**JF270714**
Commiphora mollis (Oliv.) Engl.	Sapindales	Burseraceae	OM1275 *(JRAU)*	**JX572464**	**JX517798**
Commiphora neglecta Verd.	Sapindales	Burseraceae	RL1343 *(JRAU)*	**JF265363**	**JF270716**
Commiphora pyracanthoides Engl.	Sapindales	Burseraceae	OM1310 *(JRAU)*	**JX572465**	**JX517515**
Commiphora schimperi (O.Bergman) Engl.	Sapindales	Burseraceae	OM1361 *(JRAU)*	**JF265364**	**JF270717**
Commiphora schlechteri Engl.	Sapindales	Burseraceae	OM3599 *(JRAU)*	KF147462	KF147383
Commiphora serrata Engl.	Sapindales	Burseraceae	OM2660 *(JRAU)*	**JX572466**	**JX517449**
Commiphora woodii Engl.	Sapindales	Burseraceae	OM2276 *(JRAU)*	**JX572467**	**JX517409**
Commiphora zanzibarica (Baill.) Engl.	Sapindales	Burseraceae	OM2432 *(JRAU)*	**JX572468**	**JX517960**
Coptosperma littorale (Hiern) Degreef	Gentianales	Rubiaceae	OM3775 *(JRAU)*	KF147463	KF147384
Coptosperma rhodesiacum (Bremek.) Degreef	Gentianales	Rubiaceae	CS24 *(JRAU)*	**JX572559**	**JX517753**
Coptosperma supra-axillare (Hemsl.) Degreef	Gentianales	Rubiaceae	RBN302 *(KNP)*	**JX572470**	**JX517476**
Coptosperma zygoon (Bridson) Degreef	Gentianales	Rubiaceae	OM1908 *(JRAU)*	**JF265621**	**JF270963**
Cordia africana Lam.	Boraginales	Boraginaceae	OM1983 *(JRAU)*	**JX572471**	**JX517865**
Cordia caffra Sond.	Boraginales	Boraginaceae	OM1561 *(JRAU)*	**JF265366**	**JF270719**
Cordia grandicalyx Oberm.	Boraginales	Boraginaceae	OM0837 *(JRAU)*	**JF265367**	**JF270720**
Cordia monoica Roxb.	Boraginales	Boraginaceae	OM0353 *(JRAU)*	**JX572472**	**JX517641**
Cordia sinensis Lam.	Boraginales	Boraginaceae	OM0354 *(JRAU)*	**JF265370**	**JF270723**
Cordia stuhlmannii Gürke	Boraginales	Boraginaceae	OM2410 *(JRAU)*	**JX572473**	**JX517742**
Cordia torrei E.S.Martins	Boraginales	Boraginaceae	OM2588 *(JRAU)*	**JX572474**	**JX517572**
Cordyla africana Lour.	Fabales	Fabaceae	OM2745 *(JRAU)*	**JX572475**	**JX517855**
Cotoneaster franchetii Bois	Rosales	Rosaceae	JG027 *(JRAU)*	**JX572476**	**JX517527**
Cotoneaster pannosus Franch.	Rosales	Rosaceae	DXP033 *(IRVC)*	-	AF288098
Craibia brevicaudata subsp. *baptistarum* (Buttner) J.B.Gillett	Fabales	Fabaceae	OM1813 *(JRAU)*	**JX572477**	**JX517315**
Craibia zimmermannii (Harms) Dunn	Fabales	Fabaceae	OM2230 *(JRAU)*	**JX572478**	**JX518072**

Crassula arborescens (Mill.) Willd.	Saxifragales	Crassulaceae	JG053 *(JRAU)*	**JX572479**	**JX517536**
Craterispermum schweinfurthii Hiern	Gentianales	Rubiaceae	OM2654 *(JRAU)*	**JX572480**	**JX517952**
Crossopteryx febrifuga (Afzel. ex G.Don) Benth.	Gentianales	Rubiaceae	OM2347 *(JRAU)*	**JX572481**	**JX517365**
Crotalaria agatiflora Schweinf.	Fabales	Fabaceae	MvdB0040 *(JRAU)*	**JX572482**	**JX518228**
Crotalaria capensis Jacq.	Fabales	Fabaceae	OM3786 *(JRAU)*	**JX905970**	**JX905953**
Crotalaria laburnifolia subsp. *australis* (Baker f.) Polhill	Fabales	Fabaceae	OM0608 *(JRAU)*	**JF265373**	**JF270726**
Crotalaria monteiroi Baker f.	Fabales	Fabaceae	MlR008 *(JRAU)*	**JQ041241**	**JQ041083**
Croton gratissimus Burch.	Malpighiales	Euphorbiaceae	OM1946 *(JRAU)*	**JX572483**	**JX517905**
Croton madandensis S.Moore	Malpighiales	Euphorbiaceae	RL1539 *(JRAU)*	**JX572484**	**JX517472**
Croton megalobotrys Müll.Arg.	Malpighiales	Euphorbiaceae	RL1574 *(JRAU)*	**JX572485**	**JX517792**
Croton menyharthii Pax	Malpighiales	Euphorbiaceae	OM2552 *(JRAU)*	KF147464	KF147385
Croton pseudopulchellus Pax	Malpighiales	Euphorbiaceae	RBN262 *(KNP)*	**JX572486**	**JX517535**
Croton steenkampianus Gerstner	Malpighiales	Euphorbiaceae	RBN151 *(KNP)*	**JX572487**	**JX517563**
Croton sylvaticus Hochst.	Malpighiales	Euphorbiaceae	OM2246 *(JRAU)*	**JX572488**	**JX517596**
Cryptocarya latifolia Sond.	Laurales	Lauraceae	Abbott9255 *(BNRH)*	**JX572489**	**JX518146**
Cryptocarya liebertiana Engl.	Laurales	Lauraceae	OM2300 *(JRAU)*	**JX572490**	**JX517403**
Cryptocarya myrtifolia Stapf	Laurales	Lauraceae	Abbott9137 *(BNRH)*	**JX572491**	**JX517396**
Cryptocarya natalensis (Ross) Kosterm.	Laurales	Lauraceae	Abbott9240 *(BNRH)*	**JX572498**	**JX517839**
Cryptocarya woodii Engl.	Laurales	Lauraceae	Abbott9116 *(BNRH)*	**JX572492**	**JX518198**
Cryptocarya wyliei Stapf	Laurales	Lauraceae	Abbott9110 *(BNRH)*	**JX572493**	**JX517616**
Cunonia capensis L.	Oxalidales	Cunoniaceae	Abbott9237 *(BNRH)*	**JX572494**	**JX517913**
Cupressus lusitanica Mill.	Pinales	Cupressaceae	Adams7072 *(BAYLU)*	AY380889	AY988351
Curtisia dentata (Burm.f.) C.A.Sm.	Cornales	Cornaceae	OM3167 *(JRAU)*	**JX572495**	**JX517790**
Cussonia arborea Hochst. ex A.Rich.	Apiales	Araliaceae	BDV010 *(JRAU)*	**JX905967**	**JX970898**
Cussonia arenicola Strey	Apiales	Araliaceae	BDV105 *(JRAU)*	**-**	**JX970904**
Cussonia natalensis Sond.	Apiales	Araliaceae	OM0975 *(JRAU)*	**JF265381**	**JF270733**
Cussonia nicholsonii Strey	Apiales	Araliaceae	BDV077 *(JRAU)*	-	KF147386
Cussonia paniculata subsp. *sinuata*	Apiales	Araliaceae	BDV082 *(JRAU)*	-	KF147387

(Reyneke & Kok) De Winter					
Cussonia sphaerocephala Strey	Apiales	Araliaceae	OM3747 *(JRAU)*	-	KF147388
Cussonia spicata Thunb.	Apiales	Araliaceae	OM1553 *(JRAU)*	**JF265382**	**JF270734**
Cussonia thyrsiflora Thunb.	Apiales	Araliaceae	OM3100 *(JRAU)*	**JX572496**	**JX517785**
Cussonia transvaalensis Reyneke	Apiales	Araliaceae	BDV058 *(JRAU)*	**JX905963**	**JX970897**
Cussonia zuluensis Strey	Apiales	Araliaceae	BDV022 *(JRAU)*	-	KF147389
Cycas thouarsii R.Br.	Cycadales	Cycadaceae	Gaudichaud100422 *(HEID)* / n.a.	AF394336	AB116589
Cyclopia genistoides (L.) Vent.	Fabales	Fabaceae	JWB022 *(NH)*	**JX572497**	**JX518243**
Cyphomandra betacea (Cav.) Miers	Solanales	Solanaceae	Cy001 *(BGN)*	-	EF438983
Cytisus scoparius (L.) Link	Fabales	Fabaceae	Schaefer 2008/445 *(BM)* / Wojciechowski1000 *(ASU)*	HM849943	AY386902
Dais cotinifolia L.	Malvales	Thymelaeaceae	OM1708 *(JRAU)*	-	**JX517520**
Dalbergia arbutifolia Baker	Fabales	Fabaceae	OM2712 *(JRAU)*	**JX572499**	**JX517956**
Dalbergia armata E.Mey.	Fabales	Fabaceae	OM3271 *(JRAU)*	**JX572500**	**JX517400**
Dalbergia boehmii Taub.	Fabales	Fabaceae	OM2452 *(JRAU)*	**JX572501**	**JX517962**
Dalbergia melanoxylon Guill. & Perr.	Fabales	Fabaceae	OM2394 *(JRAU)*	**JX572502**	**JX517916**
Dalbergia multijuga E.Mey.	Fabales	Fabaceae	Abbott9158 *(BNRH)*	**JX572503**	**JX517995**
Dalbergia nitidula Baker	Fabales	Fabaceae	OM2534 *(JRAU)*	-	**JX970899**
Dalbergia obovata E.Mey.	Fabales	Fabaceae	Abbott9170 *(BNRH)*	**JX572504**	**JX517804**
Dalbergiella nyassae Baker f.	Fabales	Fabaceae	Lavin s.n. *(K)* / HU1074 *(USDA)*	AF308724	AF142706
Deinbollia oblongifolia (E.Mey.) Radlk.	Sapindales	Sapindaceae	RL1351 *(JRAU)*	**JX572505**	**JX517693**
Deinbollia xanthocarpa (Klotzsch) Radlk.	Sapindales	Sapindaceae	OM2067 *(JRAU)*	**JX572506**	**JX518221**
Derris trifoliata Lour.	Fabales	Fabaceae	PS0263MT01 *(IMPLAD)*	-	**HM049528**
Dialium schlechteri Harms	Fabales	Fabaceae	OM2498 *(JRAU)*	**JX572507**	**JX517752**
Dichapetalum barbosae Torre	Malpighiales	Dichapetalaceae	OM2374 *(JRAU)*	KF147466	-
Dichapetalum cymosum (Hook.) Engl.	Malpighiales	Dichapetalaceae	OM2117 *(JRAU)*	KF147465	-
Dichrostachys cinerea subsp. *africana*	Fabales	Fabaceae	RBN359 *(KNP)*	**JF265387**	**JF270739**

Brenan & Brummitt					
Dichrostachys cinerea subsp. *nyassana* (Taub.) Brenan	Fabales	Fabaceae	OM0283 *(JRAU)*	**JX572508**	**JX517857**
Didelta spinosa (L.f.) Aiton	Asterales	Asteraceae	MWC27188 *(K)*	**JX572509**	**JX517877**
Dioscorea elephantipes (L'Hér.) Engl.	Dioscoreales	Dioscoreaceae	LTM019 *(JRAU)*	**JX572510**	**JX517322**
Dioscorea strydomiana Wilkin	Dioscoreales	Dioscoreaceae	AMM6124 *(BOL)*	KF147467	KF147390
Diospyros abyssinica (Hiern) F.White	Ericales	Ebenaceae	Gilbert&Sebseke 8803 *(K)*	-	DQ923990
Diospyros batocana Hiern	Ericales	Ebenaceae	MWC21210 *(K)*	-	**JX518223**
Diospyros dichrophylla (Gand.) De Winter	Ericales	Ebenaceae	Abbott9162 *(BNRH)*	**JX572512**	**JX517311**
Diospyros ferrea (Willd.) Bakh.	Ericales	Ebenaceae	MWC21193 *(K)*	-	**JX517320**
Diospyros glabra (L.) De Winter	Ericales	Ebenaceae	OM2933 *(JRAU)*	**JX572513**	**JX517984**
Diospyros inhacaensis F.White	Ericales	Ebenaceae	OM2225 *(JRAU)*	**JX572514**	**JX518070**
Diospyros loureiroana G.Don	Ericales	Ebenaceae	OM2145 *(JRAU)*	**JX572515**	**JX517697**
Diospyros lycioides Desf.	Ericales	Ebenaceae	OM2126 *(JRAU)*	**JX572516**	**JX517594**
Diospyros lycioides subsp. *guerkei* (Kuntze) De Winter	Ericales	Ebenaceae	RBN343 *(KNP)*	**JX572517**	**JX517451**
Diospyros mespiliformis Hochst. ex A.DC.	Ericales	Ebenaceae	OM0218 *(JRAU)*	**JF265390**	**JF270742**
Diospyros natalensis (Harv.) Brenan	Ericales	Ebenaceae	OM1763 *(JRAU)*	**JF265391**	**JF270743**
Diospyros natalensis subsp. *nummularia* (Brenan) F. White	Ericales	Ebenaceae	OM1838 *(JRAU)*	**JX572518**	**JX518127**
Diospyros rotundifolia Hiern	Ericales	Ebenaceae	OM2468 *(JRAU)*	**JX572519**	**JX517440**
Diospyros scabrida (Harv. ex Hiern) De Winter	Ericales	Ebenaceae	Abbott9246 *(BNRH)*	**JX572520**	**JX517782**
Diospyros simii (Kuntze) De Winter	Ericales	Ebenaceae	Abbott9204 *(BNRH)*	**JX572521**	**JX517301**
Diospyros squarrosa Klotzsch	Ericales	Ebenaceae	OM3485 *(JRAU)*	**JX572511**	**JX517402**
Diospyros verrucosa Hiern	Ericales	Ebenaceae	OM2379 *(JRAU)*	**JX572522**	**JX517758**
Diospyros villosa (L.) De Winter	Ericales	Ebenaceae	OM1575 *(JRAU)*	**JF265392**	**JF270744**
Diospyros villosa var. *parvifolia* De Winter	Ericales	Ebenaceae	OM1365 *(JRAU)*	**JX572523**	**JX517761**
Diospyros whyteana (Hiern) P.White	Ericales	Ebenaceae	OM&MvdB59 *(JRAU)*	**JX572524**	**JX517711**

Diplorhynchus condylocarpon (Müll.Arg.) Pichon	Gentianales	Apocynaceae	OM2073 *(JRAU)*	**JX572525**	**JX517728**
Dissotis princeps (Kunth) Triana	Myrtales	Melastomataceae	OM3806 *(JRAU)*	KF147469	KF147392
Distephanus divaricatus (Steetz) H.Rob. & B.Kahn	Asterales	Asteraceae	OM2758 *(JRAU)*	**JX572526**	**JX517719**
Dodonaea viscosa Jacq.	Sapindales	Sapindaceae	Abbott9229 *(BNRH)*	**JX572528**	**JX517889**
Dodonaea viscosa subsp. *angustifolia* (L.f.) J.G.West.	Sapindales	Sapindaceae	OM2129 *(JRAU)*	**JX572527**	**JX517975**
Dombeya autumnalis Verd.	Malvales	Malvaceae	OM2004 *(JRAU)*	**JX572529**	**JX518097**
Dombeya burgessiae Gerrard ex Harv. & Sond.	Malvales	Malvaceae	OM1537 *(JRAU)*	**JX572530**	**JX517847**
Dombeya cymosa Harv.	Malvales	Malvaceae	OM1507 *(JRAU)*	**JX572531**	**JX518206**
Dombeya rotundifolia Planch.	Malvales	Malvaceae	OM0489 *(JRAU)*	**JQ025044**	**JQ024959**
Dombeya tiliacea (Endl.) Planch.	Malvales	Malvaceae	Abbott9252 *(BNRH)*	**JX572532**	**JX517694**
Dovyalis caffra (Hook. f. & Harv.) Warb.	Malphigiales	Salicaceae	RBN286 *(KNP)*	**JX572533**	**JX518128**
Dovyalis hispidula Wild	Malphigiales	Salicaceae	OM2581 *(JRAU)*	**JX572534**	**JX518035**
Dovyalis longispina Warb.	Malphigiales	Salicaceae	OM2602 *(JRAU)*	**JX572535**	**JX517689**
Dovyalis lucida Sim	Malphigiales	Salicaceae	Abbott9221 *(BNRH)*	**JX572536**	**JX517715**
Dovyalis rhamnoides (Burch. ex DC.) Burch. ex Harv. & Sond.	Malphigiales	Salicaceae	Chase271 *(NCU)*	Z75677	EF135529
Dovyalis xanthocarpa Bullock	Malphigiales	Salicaceae	OM2442 *(JRAU)*	**JX572537**	**JX517323**
Dracaena aletriformis (Haw.) Bos	Asparagales	Asparagaceae	Abbott9145 *(BNRH)*	**JX572538**	**JX517850**
Dracaena mannii Baker	Asparagales	Asparagaceae	OM1828 *(JRAU)*	**JX572539**	**JX517338**
Dracaena transvaalensis Baker	Asparagales	Asparagaceae	OM2008 *(JRAU)*	**JX572540**	**JX517732**
Drypetes arguta (Müll.Arg.) Hutch.	Malpighiales	Euphorbiaceae	Abbott9149 *(BNRH)*	**JX572541**	**JX905959**
Drypetes gerrardii Hutch.	Malpighiales	Euphorbiaceae	OM1840 *(JRAU)*	**JF265399**	KF147393
Drypetes reticulata Pax	Malpighiales	Euphorbiaceae	RBN270 *(KNP)*	**JF265400**	**JF270750**
Duranta erecta L.	Lamiales	Verbenaceae	RBN217 *(KNP)*	**JX572542**	**JX517883**
Ehretia amoena Klotzsch	Boraginales	Boraginaceae	OM2533 *(JRAU)*	**JX572543**	**JX518091**
Ehretia rigida (Thunb.) Druce	Boraginales	Boraginaceae	OM0396 *(JRAU)*	**JX572544**	**JX518014**

Ekebergia pterophylla (C.DC.) Hofmeyr	Sapindales	Meliaceae	OM3263 *(JRAU)*	**JX572545**	**JX517845**
Elephantorrhiza burkei Benth.	Fabales	Fabaceae	OM1945 *(JRAU)*	**JX572548**	**JX517971**
Elephantorrhiza elephantina (Burch.) Skeels	Fabales	Fabaceae	OM0483 *(JRAU)*	**JF265409**	**JF270759**
Elephantorrhiza goetzei (Harms) Harms	Fabales	Fabaceae	OM1207 *(JRAU)*	**JX572549**	**JX517358**
Elephantorrhiza obliqua Burtt Davy	Fabales	Fabaceae	McCleland828 *(BNRH)*	-	KF147394
Embelia xylocarpa P.Halliday	Ericales	Primulaceae	OM2653 *(JRAU)*	**JX572550**	**JX517939**
Empleurum unicapsulare (L. f.) Skeels	Sapindales	Rutaceae	DGE129-26.03.2011 *(JRAU)*	KF147470	KF147395
Empogona coriacea (Sond.) Tosh & Robbr.	Gentianales	Rubiaceae	OM3281 *(JRAU)*	**JX573062**	**JX517841**
Empogona kirkii subsp. *junodii* (Schinz) Tosh & Robbr.	Gentianales	Rubiaceae	OM1601 *(JRAU)*	**JX573060**	**JX517789**
Empogona lanceolata (Sond.) Tosh & Robbr.	Gentianales	Rubiaceae	MWC24261 *(K)*	**JX573061**	**JX517571**
Encephalartos aemulans Vorster	Cycadales	Zamiaceae	PR861 *(JRAU)*	**JQ025439**	**JQ046261**
Encephalartos altensteinii Lehm.	Cycadales	Zamiaceae	PR668 *(JRAU)*	**JQ025442**	**JQ046260**
Encephalartos arenarius R.A.Dyer	Cycadales	Zamiaceae	PR854 *(JRAU)*	**JQ025455**	**JQ046257**
Encephalartos brevifoliolatus Vorster	Cycadales	Zamiaceae	Xdk2 *(JRAU)*	**JQ025459**	**JQ046253**
Encephalartos chimanimaniensis R.A.Dyer & Verdoorn	Cycadales	Zamiaceae	PR888 *(JRAU)*	**JQ025476**	**JQ046247**
Encephalartos concinnus R.A.Dyer & Verdoorn	Cycadales	Zamiaceae	PR890 *(JRAU)*	**JQ025479**	**JQ046246**
Encephalartos cupidus R.A.Dyer	Cycadales	Zamiaceae	PR691 *(JRAU)*	**JQ025481**	**JQ046245**
Encephalartos dolomiticus Lavranos & D.L.Goode	Cycadales	Zamiaceae	PR865 *(JRAU)*	**JQ025489**	**JQ046242**
Encephalartos dyerianus Lavranos & D.L.Goode	Cycadales	Zamiaceae	PR731 *(JRAU)*	**JQ025491**	**JQ046241**
Encephalartos eugene-maraisii Verd.	Cycadales	Zamiaceae	PR872 *(JRAU)*	**JQ025502**	**JQ046238**

Encephalartos ferox G.Bertol.	Cycadales	Zamiaceae	PR844 *(JRAU)*	**JQ025506**	**JQ046236**
Encephalartos friderici-guilielmi Lehm.	Cycadales	Zamiaceae	PR853 *(JRAU)*	**JQ025512**	**JQ046234**
Encephalartos ghellinckii Lem.	Cycadales	Zamiaceae	PR773 *(JRAU)*	**JQ025518**	**JQ046232**
Encephalartos heenanii R.A.Dyer	Cycadales	Zamiaceae	PR775 *(JRAU)*	**JQ025528**	**JQ046229**
Encephalartos hirsutus P.J.H.Hurter	Cycadales	Zamiaceae	PR718 *(JRAU)*	**JQ025534**	**JQ046226**
Encephalartos inopinus R.A.Dyer	Cycadales	Zamiaceae	PR864 *(JRAU)*	**JQ025547**	**JQ046221**
Encephalartos laevifolius Stapf & Burtt Davy	Cycadales	Zamiaceae	PR845 *(JRAU)*	**JQ025555**	**JQ046215**
Encephalartos lanatus Stapf & Burtt Davy	Cycadales	Zamiaceae	PR828 *(JRAU)*	**JQ025562**	**JQ046213**
Encephalartos latifrons Lehm.	Cycadales	Zamiaceae	PR811 *(JRAU)*	**JQ025566**	**JQ046211**
Encephalartos lebomboensis Verd.	Cycadales	Zamiaceae	PR831 *(JRAU)*	**JQ025580**	**JQ046207**
Encephalartos lehmannii Lehm.	Cycadales	Zamiaceae	PR780 *(JRAU)*	**JQ025583**	**JQ046205**
Encephalartos longifolius (Jacq.) Lehm.	Cycadales	Zamiaceae	PR873 *(JRAU)*	**JQ025592**	**JQ046203**
Encephalartos manikensis (Gilliland) Gilliland	Cycadales	Zamiaceae	PR903 *(JRAU)*	**JQ025597**	**JQ046201**
Encephalartos middelburgensis Vorster, Robbertse & S.van der Westh.	Cycadales	Zamiaceae	PR726 *(JRAU)*	**JQ025608**	**JQ046199**
Encephalartos msinganus Vorster	Cycadales	Zamiaceae	PR701 *(JRAU)*	**JQ025610**	**JQ046198**
Encephalartos natalensis R.A.Dyer & Verdoorn	Cycadales	Zamiaceae	PR802 *(JRAU)*	**JQ025619**	**JQ046194**
Encephalartos nubimontanus P.J.H.Hurter	Cycadales	Zamiaceae	PR704 *(JRAU)*	**JQ025629**	**JQ046190**
Encephalartos paucidentatus Stapf & Burtt Davy	Cycadales	Zamiaceae	PR849 *(JRAU)*	**JQ025636**	**JQ046283**
Encephalartos princeps R.A.Dyer	Cycadales	Zamiaceae	PR871 *(JRAU)*	**JQ025639**	**JQ046185**
Encephalartos relictus P.J.H.Hurter	Cycadales	Zamiaceae	PR732 *(JRAU)*	**JQ025643**	**JQ025643**
Encephalartos senticosus Vorster	Cycadales	Zamiaceae	PR833 *(JRAU)*	**JQ025652**	**JQ046181**
Encephalartos transvenosus Stapf & Burtt Davy	Cycadales	Zamiaceae	PR832 *(JRAU)*	**JQ025667**	**JQ046178**
Encephalartos villosus Lem.	Cycadales	Zamiaceae	PR838 *(JRAU)*	**JQ025594**	**JQ046172**
Encephalartos woodii Sander	Cycadales	Zamiaceae	PR875 *(JRAU)*	**JQ025701**	**JQ046169**

Englerodaphne ovalifolia (Meisn.) E.Phillips	Malvales	Thymelaeaceae	Abbott9108 *(BNRH)*	**JX572551**	**JX517508**
Englerodaphne pilosa Burtt Davy	Malvales	Thymelaeaceae	OM1893 *(JRAU)*	**JX572552**	**JX518068**
Englerophytum magalismontanum (Sond.) T.D.Penn.	Ericales	Sapotaceae	MvdB18 *(JRAU)*	**JX572553**	**JX517982**
Englerophytum natalense (Sond.) T.D.Penn.	Ericales	Sapotaceae	OM1544 *(JRAU)*	**JX572554**	**JX517936**
Ensete ventricosum (Welw.) Cheesman	Zingiberales	Musaceae	CS02 *(JRAU)*	**JX572555**	**JX517741**
Entada abyssinica A.Rich.	Fabales	Fabaceae	OM2316 *(JRAU)*	**JX572556**	**JX517780**
Entada rheedii Spreng.	Fabales	Fabaceae	OM2417 *(JRAU)*	**JQ025045**	**JQ024960**
Entada wahlbergii Harv.	Fabales	Fabaceae	OM2586 *(JRAU)*	**JX572557**	**JX517580**
Entandrophragma caudatum (Sprague) Sprague	Sapindales	Meliaceae	OM1342 *(JRAU)*	**JX572558**	**JX517565**
Ephippiocarpa orientalis (S.Moore) Markgr.	Gentianales	Apocynaceae	OM2181 *(JRAU)*	**JX572363**	**JX517331**
Ephippiocarpa orientalis (S.Moore) Markgr.	Gentianales	Apocynaceae	OM2181 *(JRAU)*	**JX572363**	**JX517331**
Erica caffra L.	Ericales	Ericaceae	OM2307 *(JRAU)*	**JX572560**	**JX517891**
Erica natalitia Bolus	Ericales	Ericaceae	Abbott9208 *(BNRH)*	**JX572561**	**JX518173**
Erica triflora L.	Ericales	Ericaceae	MWC23115 *(K)*	-	**JX518211**
Eriobotrya japonica (Thunb.) Lindl.	Rosales	Rosaceae	JG051 *(JRAU)*	**JX572562**	**JX517887**
Eriosemopsis subanisophylla Robyns	Gentianales	Rubiaceae	Burrows12318 *(BNRH)*	-	KF147396
Erythrina abyssinica DC.	Fabales	Fabaceae	OM2095 *(JRAU)*	**JX572563**	**JX518054**
Erythrina acanthocarpa E.Mey.	Fabales	Fabaceae	OM3916B *(JRAU)*	KF147471	KF147397
Erythrina caffra Thunb.	Fabales	Fabaceae	BS0057 *(JRAU)*	**JQ412356**	**JQ412236**
Erythrina humeana Spreng.	Fabales	Fabaceae	OM0741 *(JRAU)*	**JF265413**	**JF270763**
Erythrina livingstoniana Baker	Fabales	Fabaceae	OM2354 *(JRAU)*	**JX572564**	**JX517778**
Erythrina lysistemon Hutch.	Fabales	Fabaceae	RBN329 *(KNP)*	**JF265415**	**JF270764**
Erythrina zeyheri Harv.	Fabales	Fabaceae	OM1589 *(JRAU)*	**JX572565**	**JX517714**

Erythrococca Benth. sp.nov.	Malpighiales	Euphorbiaceae	Abbott9148 *(BNRH)*	**JX572566**	**JX517713**
Erythrococca menyharthii (Pax) Prain	Malpighiales	Euphorbiaceae	OM2431 *(JRAU)*	**JX572567**	**JX517550**
Erythrophleum africanum (Benth.) Harms	Fabales	Fabaceae	OM2537 *(JRAU)*	**JX572568**	**JX517525**
Erythrophleum suaveolens (Guill. & Perr.) Brenan	Fabales	Fabaceae	OM2674 *(JRAU)*	**JX572569**	**JX517934**
Erythroxylum delagoense Schinz	Malpighiales	Erythroxylaceae	OM1499 *(JRAU)*	**JF265416**	**JF270765**
Erythroxylum emarginatum Thonn.	Malpighiales	Erythroxylaceae	OM1545 *(JRAU)*	**JX572570**	**JX517436**
Erythroxylum pictum E.Mey. ex Harv. & Sond.	Malpighiales	Erythroxylaceae	Abbott9129 *(BNRH)*	**JX572571**	**JX517740**
Eucalyptus camaldulensis Dehnh.	Myrtales	Myrtaceae	n.a.	-	HQ995676
Eucalyptus diversicolor F.Muell.	Myrtales	Myrtaceae	DN1438 *(UTH)*	-	HQ287623
Euclea coriacea A.DC.	Ericales	Ebenaceae	MWC22169 *(K)*	**JX572573**	**JX517506**
Euclea crispa (Thunb.) Gürke	Ericales	Ebenaceae	OM2254 *(JRAU)*	**JX572574**	**JX517391**
Euclea divinorum Hiern	Ericales	Ebenaceae	OM1102 *(JRAU)*	**JF265418**	**JF270767**
Euclea natalensis A.DC.	Ericales	Ebenaceae	OM0936 *(JRAU)*	**JX572575**	**JX517663**
Euclea natalensis A.DC. subsp. *rotundifolia* F.White	Ericales	Ebenaceae	OM3606 *(BNRH)*	KF147472	KF147398
Euclea natalensis subsp. *angustifolia* F. White	Ericales	Ebenaceae	RBN287 *(KNP)*	**JX572576**	**JX517900**
Euclea natalensis subsp. *obovata* F.White	Ericales	Ebenaceae	OM2658 *(JRAU)*	**JX572577**	**JX517787**
Euclea pseudebenus E.Mey. ex A.DC.	Ericales	Ebenaceae	MWC21190 *(K)*	**JX572578**	**JX517308**
Euclea racemosa L.	Ericales	Ebenaceae	OM1538 *(JRAU)*	**JX572579**	**JX518155**
Euclea racemosa subsp. daphnoides (Hiern) F.White	Ericales	Ebenaceae	OM1381 *(JRAU)*	**JF265422**	**JF270771**
Euclea undulata Thunb.	Ericales	Ebenaceae	OM1572 *(JRAU)*	**JQ025046**	**JQ024962**
Eugenia capensis (Eckl. & Zeyh.) Harv.	Myrtales	Myrtaceae	Abbott9225 *(BNRH)*	**JX572580**	**JX517357**
Eugenia capensis (Eckl. & Zeyh.) Sond. subsp. A	Myrtales	Myrtaceae	Burrows12289 *(BNRH)*	KF147474	KF147400
Eugenia capensis subsp. *albanensis* (Sond.) F.White	Myrtales	Myrtaceae	Burrows7021 *(BNRH)*	KF147473	KF147399

Eugenia capensis subsp. *natalitia* (Sond.) F.White	Myrtales	Myrtaceae	OM2699 *(JRAU)*	**JX572582**	**JX517466**
Eugenia capensis subsp. *zeyheri* (Harv.) F.White	Myrtales	Myrtaceae	OM1800 *(JRAU)*	**JX572587**	**JX517750**
Eugenia erythrophylla Strey	Myrtales	Myrtaceae	Abbott9121 *(BNRH)*	**JX572581**	**JX517830**
Eugenia L. sp. nov. C	Myrtales	Myrtaceae	Abbott9151 *(BNRH)*	**JX572583**	**JX517627**
Eugenia umtamvunensis A.E.van Wyk	Myrtales	Myrtaceae	Abbott9120 *(BNRH)*	**JX572584**	**JX517784**
Eugenia uniflora L.	Myrtales	Myrtaceae	PGW1335 *(NSW)*	-	AF368207_2
Eugenia verdoorniae A.E.van Wyk	Myrtales	Myrtaceae	Abbott9122 *(BNRH)*	**JX572585**	**JX517398**
Eugenia woodii Dummer	Myrtales	Myrtaceae	OM1795 *(JRAU)*	**JX572586**	**JX518025**
Eugenia zuluensis Dummer	Myrtales	Myrtaceae	Abbott9188 *(BNRH)*	**JX572588**	**JX517795**
Euphorbia cooperi N.E.Br. ex A.Berger	Malpighiales	Euphorbiaceae	OM1464 *(JRAU)*	**JF265425**	**JF270774**
Euphorbia espinosa Pax	Malpighiales	Euphorbiaceae	RBN189 *(KNP)*	**JF265426**	**JF270775**
Euphorbia guerichiana Pax ex Engl.	Malpighiales	Euphorbiaceae	OM0894 *(JRAU)*	**JX572589**	**JX517679**
Euphorbia matabelensis Pax	Malpighiales	Euphorbiaceae	OM2416 *(JRAU)*	**JX572590**	**JX517557**
Euphorbia rowlandii R.A.Dyer	Malpighiales	Euphorbiaceae	RBN263 *(KNP)*	**JF265427**	**JF270776**
Euphorbia tirucalli L.	Malpighiales	Euphorbiaceae	OM0569 *(JRAU)*	**JX572591**	**JX518075**
Euphorbia triangularis Desf. ex A.Berger	Malpighiales	Euphorbiaceae	Abbott9222 *(BNRH)*	**JX572592**	**JX517682**
Excoecaria bussei (Pax) Pax	Malpighiales	Euphorbiaceae	OM2385 *(JRAU)*	**JX572593**	**JX518133**
Excoecaria simii (Kuntze) Pax	Malpighiales	Euphorbiaceae	Abbott9211 *(BNRH)*	**JX572594**	**JX517636**
Fadogia homblei De Wild.	Gentianales	Rubiaceae	Burrows7120 *(BNRH)*	KF147475	KF147401
Fadogia tetraquetra K.Schum. & K.Krause	Gentianales	Rubiaceae	OM3266 *(JRAU)*	**JX572912**	**JX518047**
Fadogia triphylla Baker	Gentianales	Rubiaceae	Burrows6809 *(BNRH)*	KF147476	KF147402
Fadogiella rogersii (Wernham) Bridson	Gentianales	Rubiaceae	Burrows9589 *(BNRH)*	KF147477	-
Fadogiella stigmatoloba (K.Schum.) Robyns	Gentianales	Rubiaceae	Burrows9578 *(BNRH)*	-	KF147403
Faidherbia albida (Delile) A.Chev.	Fabales	Fabaceae	RBN165 *(KNP)*	**JF265429**	**JF270778**
Faurea galpinii E.Phillips	Proteales	Proteaceae	OM1818 *(JRAU)*	**JX572595**	**JX517907**
Faurea macnaughtonii E.Phillips	Proteales	Proteaceae	Abbott9123 *(BNRH)*	**JX572596**	**JX517418**

Faurea rochetiana (A.Rich.) Chiov. ex Pic.Serm.	Proteales	Proteaceae	OM1461 *(JRAU)*	**JX572597**	**JX517828**
Faurea saligna Harv.	Proteales	Proteaceae	MvdB0027 *(JRAU)*	**JF265431**	**JF270780**
Fernandoa magnifica Seem.	Lamiales	Bignoniaceae	OM2336 *(JRAU)*	**JX572598**	**JX517318**
Ficus abutilifolia (Miq.) Miq.	Rosales	Moraceae	OM0280 *(JRAU)*	**JX572599**	**JX517731**
Ficus bizanae Hutch. & Burtt Davy	Rosales	Moraceae	Abbott9218 *(BNRH)*	**JX572600**	**JX518182**
Ficus burkei (Miq.) Miq.	Rosales	Moraceae	OM0972 *(JRAU)*	**JF265432**	**JF270781**
Ficus burtt-davyi Hutch.	Rosales	Moraceae	MWC20234 *(K)*	-	**JX517875**
Ficus bussei Warb. ex Mildbr. & Burret	Rosales	Moraceae	OM2444 *(JRAU)*	**JX573113**	**JX970907**
Ficus capreifolia Delile	Rosales	Moraceae	OM2566 *(JRAU)*	**JX572601**	**JX517811**
Ficus cordata subsp. *salicifolia* (Vahl) C.C.Berg	Rosales	Moraceae	OM2005 *(JRAU)*	**JX572609**	**JX518207**
Ficus cordata Thunb.	Rosales	Moraceae	OM1481 *(JRAU)*	-	**JF270784**
Ficus craterostoma Warb. ex Mildbr. & Burret	Rosales	Moraceae	Abbott9168 *(BNRH)*	**JX572602**	**JX517933**
Ficus glumosa Delile	Rosales	Moraceae	OM0564 *(JRAU)*	**JX572603**	**JX517465**
Ficus ilicina (Sond.) Miq.	Rosales	Moraceae	MWC20240 *(K)*	**JX572604**	**JX517393**
Ficus ingens (Miq.) Miq.	Rosales	Moraceae	OM0593 *(JRAU)*	**JF265434**	**JF270782**
Ficus lutea Vahl	Rosales	Moraceae	OM1822 *(JRAU)*	**JX572605**	**JX517686**
Ficus natalensis Hochst.	Rosales	Moraceae	OM2229 *(JRAU)*	KF147478	KF147404
Ficus polita Vahl	Rosales	Moraceae	OM1823 *(JRAU)*	**JX572607**	**JX518117**
Ficus pygmaea Welw. ex Hiern	Rosales	Moraceae	MWC20237 *(K)*	**JX572608**	**JX517453**
Ficus rokko Warb. & Schweinf	Rosales	Moraceae	OM2249 *(JRAU)*	-	**JX517518**
Ficus sansibarica Warb.	Rosales	Moraceae	OM2752 *(JRAU)*	KF147479	KF147405
Ficus stuhlmannii Warb.	Rosales	Moraceae	OM0749 *(JRAU)*	**JF265437**	**JF270785**
Ficus sur Forssk.	Rosales	Moraceae	OM1556 *(JRAU)*	**JF265438**	**JF270786**
Ficus sycomorus L.	Rosales	Moraceae	RBN197 *(KNP)*	**JX572610**	**JX518017**
Ficus tettensis Hutch.	Rosales	Moraceae	RBN265 *(KNP)*	**JX572611**	**JX517998**
Ficus thonningii Blume	Rosales	Moraceae	RL1487 *(JRAU)*	**JX572606**	**JX518112**
Ficus tremula Warb.	Rosales	Moraceae	OM2738 *(JRAU)*	**JX573114**	**JX970900**

Ficus trichopoda Baker	Rosales	Moraceae	OM1817 *(JRAU)*	**JX572612**	**JX517724**
Filicium decipiens (Wight & Arn.) Thwaites	Sapindales	Sapindaceae	Chase2128 *(K)*	AY724352	AY724294
Flacourtia indica (Burm. f.) Merr.	Malphigiales	Salicaceae	RL1216 *(JRAU)*	**JX572613**	**JX518082**
Flueggea virosa (Roxb. ex Willd.) Royle	Malpighiales	Euphorbiaceae	OM0362 *(JRAU)*	**JX572614**	**JX517340**
Fockea Endl.	Gentianales	Apocynaceae	MWC03853 *(K)*	**JX572615**	**JX518200**
Fraxinus americana L.	Lamiales	Oleaceae	BS0213 *(JRAU)*	**JX905968**	**JX905945**
Fraxinus pennsylvanica Marshall	Lamiales	Oleaceae	AP270 *(COLG)*	-	HQ593301
Freylinia lanceolata (L.) G.Don	Lamiales	Scrophulariaceae	OM2306 *(JRAU)*	**JX572616**	**JX517908**
Friesodielsia obovata (Benth.) Verdc.	Magnoliales	Annonaceae	OM2395 *(JRAU)*	**JX572617**	**JX517635**
Funtumia africana (Benth.) Stapf	Gentianales	Apocynaceae	LeymanS3855 *(BR)*	-	EF456323
Galpinia transvaalica N.E.Br.	Myrtales	Lythraceae	OM0319 *(JRAU)*	**JF265443**	**JF270791**
Garcinia gerrardii Harv. ex Sim	Malpighiales	Clusiaceae	OM2242 *(JRAU)*	-	**JX517432**
Garcinia livingstonei T.Anderson	Malpighiales	Clusiaceae	OM1189 *(JRAU)*	**JX572619**	**JX517696**
Gardenia cornuta Hemsl.	Gentianales	Rubiaceae	OM2241 *(JRAU)*	**JX572620**	**JX517901**
Gardenia resiniflua Hiern	Gentianales	Rubiaceae	OM1272 *(JRAU)*	**JX572621**	**JX517583**
Gardenia subacaulis Stapf & Hutch.	Gentianales	Rubiaceae	Burrows12202 *(BNRH)*	KF147480	KF147406
Gardenia ternifolia Schumach. & Thonn.	Gentianales	Rubiaceae	OM2356 *(JRAU)*	**JX572622**	**JX517388**
Gardenia thunbergia Thunb.	Gentianales	Rubiaceae	OM3222 *(JRAU)*	**JX572623**	**JX517827**
Gardenia volkensii K.Schum.	Gentianales	Rubiaceae	OM1966 *(JRAU)*	**JX572624**	**JX518233**
Gerrardina foliosa Oliv.	Huerteales	Gerrardinaceae	Abbott9228 *(BNRH)*	**JX572625**	**JX517543**
Gleditsia triacanthos L.	Fabales	Fabaceae	JG033 *(JRAU)*	**JX572626**	**JX517819**
Glenniea africana (Radlk.) Leenh.	Sapindales	Sapindaceae	OM1857 *(JRAU)*	**JX572627**	**JX518034**
Gloveria integrifolia (L.f.) Jordaan	Celastrales	Celastraceae	MWC32835 *(K)*	**JX572628**	**JX518163**
Glyphaea tomentosa Mast.	Malvales	Malvaceae	OM2599 *(JRAU)*	**JX572629**	**JX517593**
Gonioma kamassi E.Mey.	Gentianales	Apocynaceae	OM3158 *(JRAU)*	**JX572630**	**JX517633**
Gossypium herbaceum subsp. *africanum* (G.Watt) Vollesen	Malvales	Malvaceae	YBK109 *(JRAU)*	**JX572631**	**JX517350**
Grevillea banksii R.Br.	Proteales	Proteaceae	n.a.	-	AF542583_2
Grevillea robusta A.Cunn. ex R.Br.	Proteales	Proteaceae	n.a. / Anderson9 *(UPS)*	AF193973	EU169631

Grewia bicolor Juss.	Malvales	Malvaceae	RL1583 *(JRAU)*	**JX572633**	**JX518121**
Grewia caffra Meisn.	Malvales	Malvaceae	OM2329 *(JRAU)*	**JX572634**	**JX517589**
Grewia flavescens Juss.	Malvales	Malvaceae	RL1365 *(JRAU)*	**JX572635**	**JX517463**
Grewia gracillima Wild	Malvales	Malvaceae	OM0870 *(JRAU)*	**JF265451**	**JF270798**
Grewia hexamita Burret	Malvales	Malvaceae	OM0351 *(JRAU)*	**JF265452**	**JF270799**
Grewia inaequilatera Garcke	Malvales	Malvaceae	OM0872 *(JRAU)*	**JF265453**	**JF270800**
Grewia lasiocarpa E.Mey. ex Harv.	Malvales	Malvaceae	Abbott9236 *(BNRH)*	**JX572636**	**JX518043**
Grewia lepidopetala Garcke	Malvales	Malvaceae	OM2456 *(JRAU)*	**JX572637**	**JX517945**
Grewia micrantha Bojer	Malvales	Malvaceae	OM2448 *(JRAU)*	**JX572638**	**JX517762**
Grewia microcarpa K.Schum.	Malvales	Malvaceae	OM2324 *(JRAU)*	**JX572639**	**JX517607**
Grewia microthyrsa K.Schum. ex Burret	Malvales	Malvaceae	OM1286 *(JRAU)*	**JX572640**	**JX517514**
Grewia monticola Sond.	Malvales	Malvaceae	RL1114 *(JRAU)*	**JX572641**	**JX517425**
Grewia occidentalis L.	Malvales	Malvaceae	OM3228 *(JRAU)*	**JX572642**	**JX517699**
Grewia pondoensis Burret	Malvales	Malvaceae	Abbott9105 *(BNRH)*	**JX572643**	**JX518171**
Grewia sulcata Mast.	Malvales	Malvaceae	RL1496 *(JRAU)*	**JX572644**	**JX517675**
Grewia transzambesica Wild	Malvales	Malvaceae	OM2628 *(JRAU)*	**JX572645**	**JX517601**
Grewia vernicosa Schinz	Malvales	Malvaceae	OM1999 *(JRAU)*	**JX572632**	**JX518099**
Grewia villosa Willd.	Malvales	Malvaceae	RL1523 *(JRAU)*	**JX572646**	**JX517723**
Greyia flanaganii Bolus	Geraniales	Melianthaceae	OM2294 *(JRAU)*	**JX572647**	**JX517681**
Greyia sutherlandii Hook. & Harv.	Geraniales	Melianthaceae	OM&MvdB73 *(JRAU)*	**JX572648**	**JX518196**
Guettarda speciosa L.	Gentianales	Rubiaceae	OM2491 *(JRAU)*	**JX572649**	**JX517544**
Guibourtia coleosperma (Benth.) Leonard	Fabales	Fabaceae	OM2116 *(JRAU)*	**JX572650**	**JX518076**
Guibourtia conjugata (Bolle) J.Leonard	Fabales	Fabaceae	OM1287 *(JRAU)*	**JF265457**	**JF270804**
Gymnosporia bachmannii Loes.	Celastrales	Celastraceae	Abbott9144 *(BNRH)*	**JX572652**	**JX518062**
Gymnosporia buxifolia (L.) Szyszyl.	Celastrales	Celastraceae	RL1397 *(JRAU)*	**JX572653**	**JX517419**
Gymnosporia devenishii Jordaan	Celastrales	Celastraceae	Abbott9244 *(BNRH)*	**JX572654**	**JX517493**
Gymnosporia harveyana Loes.	Celastrales	Celastraceae	NQ1 *(JRAU)*	**JX572655**	**JX518059**
Gymnosporia heterophylla (Eckl. & Zeyh.) Loes.	Celastrales	Celastraceae	OM0623 *(JRAU)*	**JF265458**	**JF270805**
Gymnosporia maranguensis (Loes.) Loes.	Celastrales	Celastraceae	OM1637 *(JRAU)*	**JF265459**	**JF270806**

Gymnosporia mossambicensis (Klotzsch) Loes.	Celastrales	Celastraceae	OM2633 *(JRAU)*	**JX572656**	**JX518105**
Gymnosporia nemorosa (Eckl. & Zeyh.) Szyszyl.	Celastrales	Celastraceae	Abbott9187 *(BNRH)*	**JX572657**	**JX517324**
Gymnosporia oxycarpa (N.Robson) Jordaan	Celastrales	Celastraceae	RBN282 *(KNP)*	**JX572658**	**JX517648**
Gymnosporia polyacantha (Sond.) Szyszyl.	Celastrales	Celastraceae	OM2248 *(JRAU)*	**JX572659**	**JX517462**
Gymnosporia pubescens (N.Robson) Jordaan	Celastrales	Celastraceae	OM1929 *(JRAU)*	**JF265461**	**JF270808**
Gymnosporia putterlickioides Loes.	Celastrales	Celastraceae	OM0909 *(JRAU)*	**JX572660**	**JX517707**
Gymnosporia senegalensis (Lam.) Loes.	Celastrales	Celastraceae	RBN285 *(KNP)*	**JX572661**	**JX517756**
Gymnosporia tenuispina (Sond.) Szyszyl.	Celastrales	Celastraceae	NQ2 *(JRAU)*	-	**JX970906**
Gyrocarpus americanus Jacq.	Laurales	Hernandiaceae	OM0874 *(JRAU)*	**JF265465**	**JF270812**
Haematoxylum L.	Fabales	Fabaceae	HastonV200308 *(RBGE)* / Wojciechowski 953 *(ASU)*	AY904386	AY386905|
Hakea gibbosa Cav.	Proteales	Proteaceae	PG54 *(JRAU)*	**JX572663**	**JX518065**
Hakea sericea Schrad. & J.C.Wendl.	Proteales	Proteaceae	MWC26714 *(K)*	**JX572664**	**JX517394**
Halleria lucida L.	Lamiales	Scrophulariaceae	OM2269 *(JRAU)*	**JX572665**	**JX517441**
Haplocoelum foliolosum (Hiern) Bullock	Sapindales	Sapindaceae	OM1849 *(JRAU)*	**JX572666**	**JX517599**
Harpephyllum caffrum Bernh. ex C.Krauss	Sapindales	Anacardiaceae	OM1555 *(JRAU)*	**JF265467**	**JF270814**
Heeria argentea Meisn.	Sapindales	Anacardiaceae	PG16 *(JRAU)*	**JX572667**	**JX518129**
Heinsia crinita subsp. *parviflora* (K.Schum. & K.Krause) Verdc.	Gentianales	Rubiaceae	RBN129 *(KNP)*	**JF265467**	**JF270814**
Helinus integrifolius (Lam.) Kuntze	Rosales	Rhamnaceae	OM2430 *(JRAU)*	**JX572668**	**JX518160**
Hemizygia albiflora (N.E.Br.) Ashby	Lamiales	Lamiaceae	OM2021 *(JRAU)*	-	**JX517856**
Heritiera littoralis Aiton	Malvales	Malvaceae	Alverson s.n. *(WIS)*	-	AY321181
Heteromorpha arborescens Cham. & Schltdl.	Apiales	Apiaceae	OM2726 *(JRAU)*	**JX572669**	**JX517406**
Heteromorpha arborescens var. *frutescens*	Apiales	Apiaceae	OM1430 *(JRAU)*	**JX572670**	**JX517330**

P. Winter					
Heteropyxis natalensis Harv.	Myrtales	Myrtaceae	OM1944 *(JRAU)*	**JX572671**	**JX518023**
Heterotis canescens (E. Mey. ex Graham) Jacq.-Fél.	Myrtales	Melastomataceae	Burrows12691 *(BNRH)*	KF147468	KF147391
Hexalobus monopetalus (A.Rich.) Engl. & Diels	Magnoliales	Annonaceae	OM1284 *(JRAU)*	**JX572672**	**JX517754**
Heywoodia lucens Sim	Malpighiales	Euphorbiaceae	CS09 *(JRAU)*	**JX572673**	**JX518107**
Hibiscus calyphyllus Cav.	Malvales	Malvaceae	RBN108 *(KNP)*	**JX572674**	**JX517307**
Hibiscus micranthus L.f.	Malvales	Malvaceae	OM1608 *(JRAU)*	**JX572675**	**JX518190**
Hibiscus tiliaceus L.	Malvales	Malvaceae	OM2157 *(JRAU)*	**JX572676**	**JX517796**
Hippobromus pauciflorus Radlk.	Sapindales	Sapindaceae	OM1996 *(JRAU)*	**JX572677**	**JX518197**
Hippocratea crenata K. Schum. & Loes.	Celastrales	Celastraceae	OM2441 *(JRAU)*	**JX572678**	**JX517629**
Hippocratea indica Willd.	Celastrales	Celastraceae	OM1925 *(JRAU)*	**JX572921**	**JX517591**
Hirtella zanzibarica Oliv.	Malpighiales	Chrysobalanaceae	OM2649 *(JRAU)*	**JX572679**	**JX518073**
Holarrhena pubescens Wall.	Gentianales	Apocynaceae	OM2083 *(JRAU)*	**JX572680**	**JX517447**
Homalium dentatum Warb.	Malphigiales	Salicaceae	OM1420 *(JRAU)*	**JX572681**	**JX517416**
Homalium rufescens Benth.	Malphigiales	Salicaceae	Abbott9215 *(BNRH)*	**JX572682**	**JX517770**
Hugonia busseana Engl.	Malpighiales	Linaceae	OM2364 *(JRAU)*	**JX572683**	**JX518087**
Hugonia orientalis Engl.	Malpighiales	Linaceae	RBN145 *(KNP)*	**JF265478**	**JF270825**
Hunteria zeylanica (Retz.) Gardner ex Thwaites	Gentianales	Apocynaceae	OM2380 *(JRAU)*	-	**JX517717**
Hyaenanche globosa (Gaertn.) Lamb. & Vahl	Malpighiales	Euphorbiaceae	OM1873 *(JRAU)*	**JX572684**	**JX905949**
Hymenaea verrucosa Gaertn.	Fabales	Fabaceae	n.a / Herendeen11-XII-97-3 *(US)*	L08480	EU361974
Hymenocardia ulmoides Oliv.	Malpighiales	Euphorbiaceae	OM2686 *(JRAU)*	**JX572685**	**JX517929**
Hymenodictyon floribundum (Hochst. & Steud.) B.L.Rob.	Gentianales	Rubiaceae	Anderson s.n. *(GB)*	AY538488	AY538392
Hymenodictyon parvifolium Oliv.	Gentianales	Rubiaceae	OM1250 *(JRAU)*	**JX572686**	**JX517708**
Hyperacanthus amoenus (Sims) Bridson	Gentianales	Rubiaceae	RBN320 *(KNP)*	**JX572687**	**JX517662**

Hyphaene coriacea Gaertn.	Arecales	Arecaceae	OM2427 *(JRAU)*	**JX572688**	**JX518101**
Hyphaene petersiana Klotzsch ex Mart.	Arecales	Arecaceae	OM1296 *(JRAU)*	**JX572689**	**JX517767**
Hypocalyptus sophoroides (P.J.Bergius) Baill.	Fabales	Fabaceae	OM3051 *(JRAU)*	**JX572690**	**JX518069**
Ilex L.	Aquifoliales	Aquifoliaceae	shawpc0988K *(HKU)*	JN407234.2	JN407088
Indigofera filifolia Thunb.	Fabales	Fabaceae	Stirton13192 *(BOL)*	**JX572691**	**JX517626**
Indigofera frutescens L.f.	Fabales	Fabaceae	CS01 *(JRAU)*	**JX572692**	**JX517595**
Indigofera fulgens Baker	Fabales	Fabaceae	OM2382 *(JRAU)*	**JX572693**	**JX518024**
Indigofera natalensis Bolus	Fabales	Fabaceae	Abbott9172 *(BNRH)*	**JX572694**	**JX518009**
Indigofera rhynchocarpa Baker	Fabales	Fabaceae	OM0669 *(JRAU)*	**JX905964**	**JX905943**
Indigofera sanguinea N.E.Br.	Fabales	Fabaceae	Burrows12693 *(BNRH)*	KF147481	KF147407
Indigofera suffruticosa Mill.	Fabales	Fabaceae	HU1102 *(USDA)*	-	AF142697
Indigofera tinctoria L.	Fabales	Fabaceae	OM1933 *(JRAU)*	**JF265485**	**JF270832**
Inhambanella henriquezii (Engl. & Warb.) Dubard	Ericales	Sapotaceae	OM2760 *(JRAU)*	**JX572695**	**JX517677**
Ipomoea fistulosa Mart. ex Choisy	Solanales	Convolvulaceae	Abbott 25278 *(FLAS)*	GU135243	GU135080
Itea L.	Saxifragales	Iteaceae	1204041 *(XB)*	-	HQ415356
Ixora narcissodora K.Schum.	Gentianales	Rubiaceae	OM2673 *(JRAU)*	**JX572696**	**JX517349**
Jacaranda mimosifolia D.Don	Lamiales	Bignoniaceae	OM3454 *(JRAU)*	**JX572697**	**JX518220**
Jasminum fluminense Vell.	Lamiales	Oleaceae	OM0273 *(JRAU)*	**JQ025057**	**JQ024970**
Jasminum multipartitum Hochst.	Lamiales	Oleaceae	OM0782 *(JRAU)*	**JX572698**	**JX517738**
Jasminum quinatum Schinz	Lamiales	Oleaceae	Turpin416 *(BNRH)*	KF147482	KF147408
Jasminum stenolobum Rolfe	Lamiales	Oleaceae	RBN133 *(KNP)*	**JX572699**	**JX517716**
Jatropha curcas L.	Malpighiales	Euphorbiaceae	OM1182 *(JRAU)*	**JX572700**	**JX518021**
Jatropha gossypiifolia var. *elegans* (Pohl) Müll.Arg.	Malpighiales	Euphorbiaceae	PS0192MT01 *(IMD)*	-	GU441803
Jubaeopsis caffra Becc.	Arecales	Arecaceae	Sikhakhane139 *(NH)*	AJ829876	AM114633
Julbernardia globiflora (Benth.) Troupin	Fabales	Fabaceae	OM2517 *(JRAU)*	**JX572701**	**JX517829**
Juniperus procera Hochst. ex Endl.	Pinales	Cupressaceae	BU-6187 *(LZU)*	HM024324	HM024046
Juniperus virginiana L.	Pinales	Cupressaceae	BU-6187 *(LZU)*	HM024343	HM024065

Justicia aconitiflora (A.Meeuse) Cubey	Lamiales	Acanthaceae	OM1816 *(JRAU)*	**JF265402**	**JF270752**
Justicia adhatodoides (Nees) V.A.W.Graham	Lamiales	Acanthaceae	OM1759 *(JRAU)*	**JF265403**	**JF270753**
Justicia campylostemon T. Anders.	Lamiales	Acanthaceae	OM2299 *(JRAU)*	**JX572702**	**JX518170**
Karomia speciosa (Hutch. & Corbishley) R.Fern.	Lamiales	Lamiaceae	OM0700 *(JRAU)*	**JF265489**	**JF270836**
Keetia gueinzii (Sond.) Bridson	Gentianales	Rubiaceae	Abbott9160 *(BNRH)*	**JX572703**	**JX518184**
Khaya anthotheca (Welw.) C.DC.	Sapindales	Meliaceae	OM2604 *(JRAU)*	**JX572704**	**JX517573**
Kigelia africana (Lam.) Benth.	Lamiales	Bignoniaceae	OM3497 *(JRAU)*	**JX572705**	**JX517880**
Kiggelaria africana L.	Malphigiales	Salicaceae	OM2260 *(JRAU)*	**JX572706**	**JX518019**
Kirkia acuminata Oliv.	Sapindales	Kirkiaceae	OM2720 *(JRAU)*	**JX572707**	**JX517399**
Kirkia wilmsii Engl.	Sapindales	Kirkiaceae	RL1230 *(JRAU)*	**JF265493**	**JF270840**
Kraussia floribunda Harv.	Gentianales	Rubiaceae	OM1180 *(JRAU)*	**JX572708**	**JX517560**
Lachnostylis bilocularis R.A.Dyer	Malpighiales	Euphorbiaceae	Kurzweil 83/88 *(K)*	-	AY552431
Lagynias dryadum (S.Moore) Robyns	Gentianales	Rubiaceae	OM0896 *(JRAU)*	**JF265495**	**JF270842**
Landolphia kirkii Dyer	Gentianales	Apocynaceae	RBN295 *(KNP)*	**JX905972**	**JX905958**
Lannea antiscorbutica (Hiern) Engl.	Sapindales	Anacardiaceae	OM2704 *(JRAU)*	**JX572709**	**JX518185**
Lannea discolor (Sond.) Engl.	Sapindales	Anacardiaceae	RL1235 *(JRAU)*	**JF265496**	**JF270843**
Lannea edulis (Sond.) Engl.	Sapindales	Anacardiaceae	OM1991 *(JRAU)*	**JX572710**	**JX518111**
Lannea schweinfurthii (Engl.) Engl.	Sapindales	Anacardiaceae	OM2446 *(JRAU)*	**JX572711**	**JX517613**
Lantana camara L.	Lamiales	Verbenaceae	OM0739 *(JRAU)*	**JF265499**	**JF270846**
Lantana rugosa Thunb.	Lamiales	Verbenaceae	OM0459 *(JRAU)*	**JX572712**	**JX517746**
Lasiodiscus pervillei Baill.	Rosales	Rhamnaceae	OM2345 *(JRAU)*	**JX572713**	**JX517978**
Laurophyllus capensis Thunb.	Sapindales	Anacardiaceae	MWC28623 *(K)*	**JX572714**	**JX517726**
Lebeckia sericea Thunb.	Fabales	Fabaceae	Boatwright151 *(JRAU)* / van der Meruve215 *(K)*	EU347924	GQ246144
Lecaniodiscus fraxinifolius Baker	Sapindales	Sapindaceae	OM2365 *(JRAU)*	**JX572715**	**JX518177**
Leonotis leonurus (L.) R.Br.	Lamiales	Lamiaceae	LTM032 *(JRAU)*	**JQ025060**	**JQ024972**
Lepisanthes senegalensis (Poir.) Leenh.	Sapindales	Sapindaceae	Callmander 627 *(MO)*	-	EU720654
Leptactina benguelensis (Welw. ex Benth.	Gentianales	Rubiaceae	Burrows11158 *(BNRH)*	KF147483	KF147409

& Hook.f.) R.D.Good					
Leptactina delagoensis K.Schum.	Gentianales	Rubiaceae	OM1598 *(JRAU)*	**JF265502**	**JF270849**
Leucadendron argenteum (L.) R. Br.	Proteales	Proteaceae	OM2263 *(JRAU)*	**JX572716**	**JX517459**
Leucadendron coniferum Meisn.	Proteales	Proteaceae	OM2313 *(JRAU)*	**JX572717**	**JX517657**
Leucadendron galpinii E.Phillips & Hutch.	Proteales	Proteaceae	MWC25211 *(K)*	**JX572718**	**JX517879**
Leucadendron macowanii E.Phillips	Proteales	Proteaceae	MWC28334 *(K)*	**JX572719**	**JX518193**
Leucadendron pubescens R. Br.	Proteales	Proteaceae	MWC28389 *(K)*	**JX572720**	**JX517455**
Leucadendron rubrum Burm. f.	Proteales	Proteaceae	PG63 *(JRAU)*	**JX572721**	**JX518007**
Leucadendron salicifolium I.A. Williams	Proteales	Proteaceae	PG56 *(JRAU)*	**JX572722**	**JX518063**
Leucadendron strobilinum Druce	Proteales	Proteaceae	MWC28010 *(K)*	**JX572723**	**JX517923**
Leucaena leucocephala (Lam.) de Wit	Fabales	Fabaceae	JG056 *(JRAU)*	**JX572724**	**JX517864**
Leucosidea sericea Eckl. & Zeyh.	Rosales	Rosaceae	OM&MvdB48 *(JRAU)*	**JX572725**	**JX518044**
Leucospermum conocarpodendron (L.) H.St.John	Proteales	Proteaceae	OM3102 *(JRAU)*	**JX572726**	**JX517516**
Leucospermum conocarpodendron subsp. *viridum* Rourke	Proteales	Proteaceae	MWC27983 *(K)*	-	**JX518219**
Leucospermum cuneiforme Rourke	Proteales	Proteaceae	OM2267 *(JRAU)*	**JX572727**	**JX517928**
Leucospermum gerrardii Stapf	Proteales	Proteaceae	MWC26648 *(K)*	**JX572728**	**JX517341**
Leucospermum rodolentum Rourke	Proteales	Proteaceae	OM2812 *(JRAU)*	**JX572729**	**JX518225**
Leucospermum saxosum S.Moore	Proteales	Proteaceae	BB12687 *(BNRH)*	KF227398	KF227399
Ligustrum japonicum Thunb.	Lamiales	Oleaceae	JG038 *(JRAU)*	**JX572731**	**JX517970**
Ligustrum lucidum W.T.Aiton	Lamiales	Oleaceae	BS0102 *(JRAU)*	**JQ412380**	**JQ412257**
Ligustrum ovalifolium Hassk.	Lamiales	Oleaceae	Schaefer2008/251 *(BM)*	HM850124	HM850980
Ligustrum sinense Lour.	Lamiales	Oleaceae	Abbott23510 *(FLAS)*	GU135150	GU134986
Ligustrum vulgare L.	Lamiales	Oleaceae	LegMedMO35 *(MOD)*	HQ619759	HQ619820
Liparia hirsuta Thunb.	Fabales	Fabaceae	JWB020 *(NH)*	**JX572732**	**JX517359**
Liparia myrtifolia Thunb.	Fabales	Fabaceae	JWB039 *(NH)*	**JX572733**	**JX517632**
Liparia rafnioides A.L.Schutte	Fabales	Fabaceae	JWB033 *(NH)*	**JX572734**	**JX517668**
Lippia javanica (Burm.f.) Spreng.	Lamiales	Verbenaceae	RBN348 *(KNP)*	**JX572735**	**JX517480**
Litsea glutinosa (Lour.) C.B. Rob.	Laurales	Lauraceae	PS5037MT01 *(GXCM)*	HM019482	HM019342

Lopholaena coriifolia (Sond.) E.Phillips & C.A.Sm.	Asterales	Asteraceae	OM&MvdB41 *(JRAU)*	**JX572736**	**JX517496**
Lopholaena disticha (N.E.Br.) S.Moore	Asterales	Asteraceae	OM3909 *(BNRH)*	KF147484	KF147410
Loxostylis alata Spreng. ex Rchb.	Sapindales	Anacardiaceae	OM1827 *(JRAU)*	**JX572737**	**JX517988**
Ludwigia octovalvis (Jacq.) P.H.Raven	Myrtales	Onagraceae	OM0213 *(JRAU)*	**JF265505**	**JX517844**
Lumnitzera racemosa Willd.	Myrtales	Combretaceae	OM2478 *(JRAU)*	**JX572738**	**JX517488**
Lycium afrum L.	Solanales	Solanaceae	BS0140 *(JRAU)*	**JQ412384**	**JQ412259**
Lycium cinereum Thunb.	Solanales	Solanaceae	Gubb12801 *(PRE)*	-	AB036623
Lycium ferocissimum Miers	Solanales	Solanaceae	OM2993 *(JRAU)*	**JX572739**	**JX517342**
Lycium oxycarpum Dunal	Solanales	Solanaceae	OM2936 *(JRAU)*	**JX572740**	**JX517868**
Lycium schizocalyx C.H.Wright	Solanales	Solanaceae	Gubb12489 *(PRE)*	-	AB036622
Lycium villosum Schinz	Solanales	Solanaceae	McDonald77/64 *(PRE)*	-	AB036624
Lydenburgia cassinoides N. Robson	Celastrales	Celastraceae	Archer&Archer 2570 *(PRE)*	-	DQ217548
Mackaya bella Harv.	Lamiales	Acanthaceae	CS14 *(JRAU)*	**JX572742**	**JX518061**
Maclura africana (Bureau) Corner	Rosales	Moraceae	OM2106 *(JRAU)*	**JX572743**	**JX518158**
Macphersonia gracilis var. *hildebrandtii* (O. Hoffm.) Capuron	Sapindales	Sapindaceae	Rabenantonadro1081 *(MO)*	-	EU720697
Maerua andradae Wild	Brassicales	Capparaceae	Lotter1802 *(LYD)*	KF147485	KF147411
Maerua angolensis DC.	Brassicales	Capparaceae	OM1449 *(JRAU)*	**JX572744**	**JX518208**
Maerua cafra Pax	Brassicales	Capparaceae	OM3189 *(JRAU)*	**JX572745**	**JX517702**
Maerua decumbens (Brongn.) DeWolf	Brassicales	Capparaceae	OM2097 *(JRAU)*	**JX572746**	**JX517701**
Maerua juncea subsp. *crustata* Wild	Brassicales	Capparaceae	OM1592 *(JRAU)*	**JX572747**	**JX517737**
Maerua parvifolia Pax	Brassicales	Capparaceae	RL1199 *(JRAU)*	-	**JX518011**
Maerua rosmarinoides Gilg & Ben.	Brassicales	Capparaceae	OM1476 *(JRAU)*	**JX572748**	**JX517903**
Maesa lanceolata Forssk.	Ericales	Primulaceae	OM2020 *(JRAU)*	**JF265513**	**JF270859**
Mallotus oppositifolius (Geiseler) Müll.Arg.	Malpighiales	Euphorbiaceae	Okoli25 *(JRAU)*	**-**	**JX517554**
Mangifera indica L.	Sapindales	Anacardiaceae	75538 *(KUH)*	-	EF205595_2
Manihot esculenta Crantz	Malpighiales	Euphorbiaceae	Okoli24 *(JRAU)*	-	**JX517554**

Manilkara concolor (Harv.) Gerstner	Ericales	Sapotaceae	OM0989 *(JRAU)*	**JX572750**	**JX517949**
Manilkara discolor (Sond.) J.H.Hemsl.	Ericales	Sapotaceae	OM2642 *(JRAU)*	**JX572752**	**JX518015**
Manilkara mochisia (Baker) Dubard	Ericales	Sapotaceae	OM1392 *(JRAU)*	**JF265514**	**JF270860**
Manilkara nicholsonii A.E.van Wyk	Ericales	Sapotaceae	Abbott9202 *(BNRH)*	**JX572753**	**JX517570**
Maprounea africana Müll.Arg.	Malpighiales	Euphorbiaceae	OM2619 *(JRAU)*	**JX572754**	**JX517335**
Margaritaria discoidea (Baill.) G.L.Webster	Malpighiales	Euphorbiaceae	OM2639 *(JRAU)*	**JX572755**	**JX518168**
Margaritaria discoidea var. *nitida* (Pax) Radcl.-Sm.	Malpighiales	Euphorbiaceae	OM1922 *(JRAU)*	**JF265515**	**JF270861**
Markhamia obtusifolia (Baker) Sprague	Lamiales	Bignoniaceae	OM2375 *(JRAU)*	**JX572756**	**JX517405**
Markhamia zanzibarica (Bojer ex DC.) K.Schum.	Lamiales	Bignoniaceae	OM3500 *(JRAU)*	**JX572757**	**JX517896**
Mascarenhasia arborescens A.DC.	Gentianales	Apocynaceae	OM2664 *(JRAU)*	**JX572758**	**JX517477**
Maurocenia frangula Mill.	Celastrales	Celastraceae	Archer2169 *(PRE)*	AM234957	DQ217538
Maytenus abbottii A.E.van Wyk	Celastrales	Celastraceae	Abbott9139 *(BNRH)*	**JX572759**	**JX517940**
Maytenus acuminata (L.f.) Loes.	Celastrales	Celastraceae	Abbott9201 *(BNRH)*	**JX572760**	**JX517555**
Maytenus albata (N.E.Br.) E.Schmidt bis & Jordaan	Celastrales	Celastraceae	OM1855 *(JRAU)*	**JX572761**	**JX517851**
Maytenus cordata (E.Mey. ex Sond.) Loes.	Celastrales	Celastraceae	Abbott9138 *(BNRH)*	**JX572762**	**JX517915**
Maytenus oleoides (Lam.) Loes.	Celastrales	Celastraceae	OM2262 *(JRAU)*	**JX572763**	**JX517991**
Maytenus peduncularis Loes.	Celastrales	Celastraceae	MWC27163 *(K)*	**JX572764**	**JX517460**
Maytenus procumbens (L. f.) Loes.	Celastrales	Celastraceae	OM3602 *(JRAU)*	-	**JX970911**
Maytenus sp. nov. A	Celastrales	Celastraceae	Abbott9140 *(BNRH)*	**JX572765**	**JX517794**
Maytenus undata (Thunb.) Blakelock	Celastrales	Celastraceae	OM2644 *(JRAU)*	**JX572766**	**JX517671**
Meiostemon tetrandrus (Exell) Exell & Stace	Myrtales	Combretaceae	OM1653 *(JRAU)*	**JX572767**	**JX518048**
Melia azedarach L.	Sapindales	Meliaceae	OM1735 *(JRAU)*	**JX905969**	**JX517878**
Memecylon natalense Markg.	Myrtales	Melastomataceae	MWC35866 *(K)*	-	**JX517426**
Metalasia densa (Lam.) P.O.Karis	Asterales	Asteraceae	BS0166 *(JRAU)*	**JQ412390**	**JQ412265**
Metalasia muricata (L.) D.Don	Asterales	Asteraceae	AM0154 *(JRAU)*	**JX572769**	**JX517917**

Metarungia longistrobus (C.B.Clarke) Baden	Lamiales	Acanthaceae	CS15 *(JRAU)*	**JF265518**	**JF270864**
Metrosideros angustifolia (L.) Sm.	Myrtales	Myrtaceae	OM2303 *(JRAU)*	**JX572770**	**JX517871**
Micrococca capensis (Baill.) Prain	Malpighiales	Euphorbiaceae	Abbott9111 *(BNRH)*	KF147486	KF147412
Milicia excelsa (Welw.) C.C.Berg	Rosales	Moraceae	OM2696 *(JRAU)*	**JX572771**	**JX517997**
Millettia grandis (E.Mey.) Skeels	Fabales	Fabaceae	OM1757 *(JRAU)*	-	**JX517504**
Millettia makondensis Harms	Fabales	Fabaceae	Lotter1723 *(LYD)*	KF147487	KF147413
Millettia mossambicensis J.B.Gillett	Fabales	Fabaceae	OM2335 *(JRAU)*	**JX572772**	**JX517618**
Millettia stuhlmannii Taub.	Fabales	Fabaceae	OM2522 *(JRAU)*	**JX572773**	**JX517411**
Millettia usaramensis Taub.	Fabales	Fabaceae	OM2433 *(JRAU)*	**JX905971**	**JX905956**
Mimetes arboreus Rourke	Proteales	Proteaceae	Latimer 27107 *(NBG)*	GQ248642	GQ248156
Mimetes fimbriifolius Salisb. ex Knight	Proteales	Proteaceae	AM0151 *(JRAU)*	**JX572774**	**JX518183**
Mimosa pigra L.	Fabales	Fabaceae	OM3598 *(JRAU)*	**JX572775**	**JX517729**
Mimusops caffra E.Mey. ex A.DC.	Ericales	Sapotaceae	OM2472 *(JRAU)*	**JX572776**	**JX517777**
Mimusops obovata Sond.	Ericales	Sapotaceae	OM1554 *(JRAU)*	**JX572777**	**JX517628**
Mimusops obtusifolia Lam.	Ericales	Sapotaceae	OM2627 *(JRAU)*	**JX572778**	**JX518165**
Mimusops zeyheri Sond.	Ericales	Sapotaceae	RBN248 *(KNP)*	**JX572779**	**JX517445**
Mitriostigma axillare Hochst.	Gentianales	Rubiaceae	Abbott9153 *(BNRH)*	**JX572780**	**JX517739**
Monanthotaxis buchananii (Engl.) Verdc.	Magnoliales	Annonaceae	OM2624 *(JRAU)*	**JX572781**	**JX517585**
Monanthotaxis caffra Verdc.	Magnoliales	Annonaceae	OM0276 *(JRAU)*	**JF265520**	**JF270866**
Mondia Skeels	Gentianales	Apocynaceae	Sennblad 215 *(TL)*	-	AY899941
Monodora junodii Engl. & Diels	Magnoliales	Annonaceae	RBN288 *(KNP)*	**JX572782**	**JX518164**
Monodora junodii Engl. & Diels var. *macrantha*	Magnoliales	Annonaceae	RBN159 *(KNP)*	**JX572783**	**JX517853**
Monodora stenopetala Oliv.	Magnoliales	Annonaceae	OM2358 *(JRAU)*	**JX572784**	**JX518064**
Monotes glaber Sprague	Malvales	Dipterocarpaceae	OM2130 *(JRAU)*	**JX572785**	**JX517931**
Montinia caryophyllacea Thunb.	Solanales	Montiniaceae	Bremer3521 *(UPS)*	-	AJ429359
Morella brevifolia (E. Mey. ex C. DC.) Killick	Fagales	Myricaceae	OM3812 *(BNRH)*	KF147488	KF147414
Morella cordifolia (L.) Killick	Fagales	Myricaceae	OM2290 *(JRAU)*	**JX572786**	**JX517650**

Morella pilulifera (Rendle) Killick	Fagales	Myricaceae	OM2024 *(JRAU)*	**JF265521**	**JF270867**
Morella serrata (Lam.) Killick	Fagales	Myricaceae	Abbott9173 *(BNRH)*	**JX572787**	**JX517577**
Moringa oleifera Lam.	Brassicales	Moringaceae	Iltis 30501 *(WIS)*	L11359.2	AY483223
Moringa ovalifolia Dinter & A.Berger	Brassicales	Moringaceae	2000_0148-09 *(BR)*	-	AY461577
Morus alba L.	Rosales	Moraceae	BS0124 *(JRAU)*	**JQ412393**	**JQ412268**
Morus australis	Rosales	Moraceae	ME-0158 *(n.a.)*	GU145573	GU145559
Mundulea sericea (Willd.) A.Chev.	Fabales	Fabaceae	OM2625 *(JRAU)*	**JX572788**	**JX517667**
Mussaenda arcuata Poir.	Gentianales	Rubiaceae	McPherson16213 *(MO)*	Y11854	HM119551
Myrsine africana L.	Ericales	Primulaceae	OM2822 *(JRAU)*	**JX572789**	**JX518081**
Mystroxylon aethiopicum (Thunb.) Loes. subsp. *burkeanum* (Sond.) R.H.Archer	Celastrales	Celastraceae	WB0002 *(JRAU)*	KF147489	KF147415
Mystroxylon aethiopicum subsp. *schlechteri* (Loes.) R.H. Archer	Celastrales	Celastraceae	RBN355 *(KNP)*	**JX572790**	**JX517904**
Necepsia Prain	Malpighiales	Euphorbiaceae	Schmidt3474 *(MO)*	-	AB233764
Nectaropetalum capense Stapf & Boodle	Malpighiales	Erythroxylaceae	Abbott9146 *(BNRH)*	**JX572791**	**JX970913**
Nectaropetalum zuluense (Schönland) Corbishley	Malpighiales	Erythroxylaceae	OM2161 *(JRAU)*	KF147490	KF147416
Neoboutonia mannii Benth. & Hook.f.	Malpighiales	Euphorbiaceae	Fay 6701 *(MO)*	AY794896	AB233777
Nerium oleander L.	Gentianales	Apocynaceae	BS0125 *(JRAU)*	**JQ412398**	**JQ412271**
Newtonia buchananii (Baker) G.C.C.Gilbert & Boutiqu	Fabales	Fabaceae	BNBG69-6494 *(BR)*	-	AF521847
Newtonia hildebrandtii (Vatke) Torre	Fabales	Fabaceae	BNBG73-2891 *(BR)*	-	AF521848
Nicotiana africana Merxm.	Solanales	Solanaceae	Clarkson020 *(BM)*	-	AJ585881
Nicotiana glauca Graham	Solanales	Solanaceae	OM3016 *(JRAU)*	**JX572792**	**JX517989**
Nuxia congesta R.Br. ex Fresen.	Lamiales	Scrophulariaceae	OM&MvdB52 *(JRAU)*	**JF265525**	**JF270871**
Nuxia floribunda Benth.	Lamiales	Scrophulariaceae	OM2025 *(JRAU)*	**JF265526**	**JF270872**
Nuxia oppositifolia (Hochst.) Benth.	Lamiales	Scrophulariaceae	OM2648 *(JRAU)*	**JX572793**	**JX517443**
Nylandtia Dumort.	Fabales	Polygalaceae	Forest250 *(K,NBG)*	GQ248650	AM889730
Nymania capensis Lindb.	Sapindales	Meliaceae	OM1096 *(JRAU)*	**JX572794**	**JX518038**
Obetia tenax Friis	Rosales	Urticaceae	OM0567 *(JRAU)*	**JX572795**	**JX518232**

Ochna angustata N.Robson	Malpighiales	Ochnaceae	OM2659 *(BNRH)*		
Ochna arborea Burch. ex DC.	Malpighiales	Ochnaceae	CS03 *(JRAU)*	KF147491	KF147417
Ochna confusa Burtt Davy & Greenway	Malpighiales	Ochnaceae	OM3828 *(BNRH)*	KF147492	KF147418
Ochna holstii Engl.	Malpighiales	Ochnaceae	OM2286 *(JRAU)*	KF147493	
Ochna inermis (Forssk.) Schweinf. ex Penz.	Malpighiales	Ochnaceae	OM1196 *(JRAU)*	KF147494	KF147419
Ochna natalitia (Meisn.) Walp.	Malpighiales	Ochnaceae	OM2228 *(JRAU)*	**JF265529**	KF147420
Ochna pulchra Hook.	Malpighiales	Ochnaceae	OM2127 *(JRAU)*	KF147495	KF147421
Ochna serrulata Walp.	Malpighiales	Ochnaceae	H. Schaefer 2008/796 *(BM)*	-	HM850999
Ocotea bullata (Burch.) E. Meyer in Drege	Laurales	Lauraceae	Abbott9194 *(BNRH)*	**JQ025066**	**JQ024978**
Olax dissitiflora Oliv.	Santalales	Olacaceae	OM2070 *(JRAU)*	**JX572796**	**JX517428**
Oldenburgia grandis (Thunb.) Baill.	Asterales	Asteraceae	Trinder-Smith s.n. *(BOL)*	-	EU385379
Olea capensis L.	Lamiales	Oleaceae	OM3183 *(JRAU)*	**JX572797**	**JX517691**
Olea capensis subsp. *hochstetteri* (Baker) Friis & P.S.Green	Lamiales	Oleaceae	OM2677 *(JRAU)*	**JX572798**	**JX518236**
Olea europaea L.	Lamiales	Oleaceae	OM2818 *(JRAU)*	**JX572799**	**JX518175**
Olea exasperata Jacq.	Lamiales	Oleaceae	OM3219 *(JRAU)*	**JX572800**	**JX518125**
Olea woodiana Knobl.	Lamiales	Oleaceae	OM1527 *(JRAU)*	**JX572801**	**JX517442**
Olinia capensis Klotzsch	Myrtales	Penaeaceae	Schoenenberger 519 *(Z, BOL)*	AM235624	AY151569
Olinia emarginata Burtt Davy	Myrtales	Penaeaceae	OM2252 *(JRAU)*	**JX572802**	**JX970901**
Olinia radiata Hofmeyr & E.Phillips	Myrtales	Penaeaceae	Abbott9119 *(BNRH)*	**JX572803**	**JX517492**
Olinia vanguerioides Baker f.	Myrtales	Penaeaceae	Blarer s.n. *(Z)*	AM235626	AY151572
Olinia ventosa (L.) Cufod.	Myrtales	Penaeaceae	OM3184 *(JRAU)*	**JX572804**	**JX517344**
Oncinotis tenuiloba Stapf	Gentianales	Apocynaceae	Abbott9254 *(BNRH)*	**JX572805**	**JX517556**
Oncoba spinosa Forssk.	Malphigiales	Salicaceae	RBN322 *(KNP)*	**JX572806**	**JX517821**
Opilia Roxb.	Santalales	Opiliaceae	Chase 1903 *(K)*	-	AY042621
Opuntia ficus-indica (L.) Mill.	Caryophyllales	Cactaceae	JG047 *(JRAU)*	**JX572807**	**JX517861**
Oreobambos buchwaldii K.Schum.	Poales	Poaceae	Kare s.n. *(TCD)*	-	EU434272

Ormocarpum kirkii S.Moore	Fabales	Fabaceae	OM2014 *(JRAU)*	**JX572809**	**JX517953**
Ormocarpum trichocarpum (Taub.) Engl.	Fabales	Fabaceae	OM2508 *(JRAU)*	**JX572810**	**JX517885**
Osyris compressa A.DC.	Santalales	Santalaceae	Abbott9227 *(BNRH)*	**JX572811**	**JX517721**
Osyris lanceolata Hochst. & Steud.	Santalales	Santalaceae	OM2016 *(JRAU)*	**JX572812**	**JX517317**
Otholobium caffrum (Eckl. & Zeyh.) C.H.Stirt.	Fabales	Fabaceae	Abbott9245 *(BNRH)*	**JX572813**	**JX970905**
Otholobium spicatum (L.) C.H.Stirt.	Fabales	Fabaceae	AMM3445 *(BOL)*	**JX572814**	**JX517502**
Otholobium wilmsii (Harms) C.H.Stirt.	Fabales	Fabaceae	AMM3782 *(BOL)*	**JX572815**	**JX517354**
Oxyanthus latifolius Sond.	Gentianales	Rubiaceae	OM2344 *(JRAU)*	**JX572816**	**JX517392**
Oxyanthus pyriformis (Hochst.) Skeels	Gentianales	Rubiaceae	OM2191 *(JRAU)*	**JX572817**	**JX517942**
Oxyanthus speciosus subsp. *gerrardii* (Sond.) Bridson	Gentianales	Rubiaceae	Abbott9253 *(BNRH)*	**JX572818**	**JX517484**
Oxytenanthera abyssinica (A.Rich.) Munro	Poales	Poaceae	OM2572 *(JRAU)*	**JX572819**	**JX905952**
Ozorea laetans Retief	Sapindales	Anacardiaceae	Burrows12423 *(BNRH)*	KF147499	-
Ozoroa albicans R.Fern. & A.Fern.	Sapindales	Anacardiaceae	Burrows8988 *(BNRH)*	KF147498	-
Ozoroa barbertonensis Retief	Sapindales	Anacardiaceae	Burrows8069 *(BNRH)*	-	KF147424
Ozoroa Delile sp. nov	Sapindales	Anacardiaceae	Burrows8074 *(BNRH)*	KF147497	KF147423
Ozoroa engleri R.Fern. & A.Fern.	Sapindales	Anacardiaceae	OM1169 *(JRAU)*	**JX572820**	**JX518126**
Ozoroa obovata (Oliv.) R. Fern. & A. Fern.	Sapindales	Anacardiaceae	OM2511 *(JRAU)*	**JX572821**	**JX517800**
Ozoroa paniculosa var. *paniculosa* R.Fern. & A.Fern.	Sapindales	Anacardiaceae	OM1948 *(JRAU)*	**JX572822**	**JX517435**
Ozoroa sphaerocarpa R.Fern. & A.Fern.	Sapindales	Anacardiaceae	OM1106 *(JRAU)*	**JX572823**	**JX517468**
Pachypodium namaquanum (Wyley ex Harv.) Welw.	Gentianales	Apocynaceae	OM2796 *(JRAU)*	**JX572824**	**JX517791**
Pachypodium saundersii N.E.Br.	Gentianales	Apocynaceae	OM1149 *(JRAU)*	**JX572825**	**JX517532**
Pancovia golungensis (Hiern) Exell & Mendonça	Sapindales	Sapindaceae	OM2208 *(JRAU)*	**JX572826**	**JX517712**
Pandanus Parkinson	Pandanales	Pandanaceae	shawpc0686L *(CUHK)*	JN407333	JN407167.2

Pappea capensis Eckl. & Zeyh.	Sapindales	Sapindaceae	OM0230 *(JRAU)*	**JX572827**	**JX517327**
Paranomus bracteolaris Salisb. ex Knight	Proteales	Proteaceae	MWC28485 *(K)*	**JX572828**	**JX517606**
Paranomus tomentosus N.E. Br.	Proteales	Proteaceae	MWC28312 *(K)*	**JX572829**	**JX517966**
Parinari capensis Harv. subsp. *incohata* F.White	Malpighiales	Chrysobalanaceae	OM3613 *(JRAU)*	-	**JX905947**
Parinari curatellifolia Planch. ex Benth.	Malpighiales	Chrysobalanaceae	OM2621 *(JRAU)*	**JX572830**	**JX517369**
Parinari excelsa Sabine	Malpighiales	Chrysobalanaceae	Burrows10672 *(BNRH)*	KF147501	-
Parkinsonia aculeata L.	Fabales	Fabaceae	Hawkins 94/5 9 *(RBGE)* / Salywon 668 *(ASU)*	AY904403	AY386917
Paropsia braunii Gilg	Malpighiales	Passifloraceae	Zyhra 949 *(WIS)*	-	EF135576
Paropsia brazzaeana Baill.	Malpighiales	Passifloraceae	Fishwick s.n._5369010 *(BNRH)*	KF147502	KF147429
Passerina corymbosa Eckl. ex C.H. Wright	Malvales	Thymelaeaceae	OM3106 *(JRAU)*	**JX572831**	**JX517973**
Passerina filiformis L.	Malvales	Thymelaeaceae	Abbott9175 *(BNRH)*	**JX572832**	**JX518022**
Passerina montana Thoday	Malvales	Thymelaeaceae	OM3400 *(JRAU)*	**JX572833**	**JX517533**
Passerina rigida Wikstr.	Malvales	Thymelaeaceae	OM1753 *(JRAU)*	**JX572834**	**JX518094**
Pauridiantha symplocoides (S.Moore) Bremek.	Gentianales	Rubiaceae	Cable1389 *(K)*	-	AY538410
Pavetta bowkeri Harv.	Gentianales	Rubiaceae	Abbott9184 *(BNRH)*	**JX572836**	**JX518106**
Pavetta catophylla K.Schum.	Gentianales	Rubiaceae	OM0335 *(JRAU)*	**JX572837**	**JX517846**
Pavetta edentula Sond.	Gentianales	Rubiaceae	OM2504 *(JRAU)*	**JX572838**	**JX517382**
Pavetta galpinii Bremek.	Gentianales	Rubiaceae	Abbott9251 *(BNRH)*	**JX572839**	**JX518147**
Pavetta inandensis Bremek.	Gentianales	Rubiaceae	Abbott9250 *(BNRH)*	**JX572840**	**JX517852**
Pavetta lanceolata Eckl.	Gentianales	Rubiaceae	OM2234 *(JRAU)*	**JX572841**	**JX518143**
Pavetta revoluta Hochst.	Gentianales	Rubiaceae	OM2195 *(JRAU)*	**JX572842**	**JX517474**
Pavetta schumanniana F.Hoffm. ex K.Schum.	Gentianales	Rubiaceae	OM0941 *(JRAU)*	**JX572843**	**JX518179**
Pavetta zeyheri Sond.	Gentianales	Rubiaceae	OM1939 *(JRAU)*	**JX572844**	**JX518055**
Peddiea africana Harv.	Malvales	Thymelaeaceae	OM2469 *(JRAU)*	**JX572845**	**JX518167**
Peltophorum africanum Sond.	Fabales	Fabaceae	OM2401 *(JRAU)*	**JX572846**	**JX517837**

Pereskia aculeata Mill.	Caryophyllales	Cactaceae	OM3711 *(JRAU)*	**JX905965**	**JX905944**
Phaeoptilum spinosum Radlk.	Caryophyllales	Nyctaginaceae	OM2957 *(JRAU)*	**JX572847**	**JX518227**
Philenoptera bussei (Harms) Schrire	Fabales	Fabaceae	OM2376 *(JRAU)*	**JX572848**	**JX518116**
Philenoptera violacea (Klotzsch) Schrire	Fabales	Fabaceae	OM0242 *(JRAU)*	**JF265547**	**JF270890**
Phoenix reclinata Jacq.	Arecales	Arecaceae	OM1122 *(JRAU)*	**JX572849**	**JX518180**
Phylica buxifolia L.	Rosales	Rhamnaceae	OM3096 *(JRAU)*	**JX572850**	**JX488292**
Phylica oleaefolia Vent.	Rosales	Rhamnaceae	MWC03273 *(K)*	**JX572851**	**JX517337**
Phylica paniculata Willd.	Rosales	Rhamnaceae	Abbott9174 *(BNRH)*	**JX572852**	**JX517422**
Phylica villosa Thunb.	Rosales	Rhamnaceae	MWC03309 *(K)*	-	**JX517300**
Phyllanthus hutchinsonianus S.Moore	Malpighiales	Euphorbiaceae	Poilecot 7974 *(G, K)*	-	AY936601
Phyllanthus inflatus Hutch.	Malpighiales	Euphorbiaceae	OM1884 *(JRAU)*	**JX572853**	**JX518030**
Phyllanthus ovalifolius Forssk.	Malpighiales	Euphorbiaceae	OM2455 *(JRAU)*	**JX572854**	**JX518152**
Phyllanthus pinnatus (Wight) G.L.Webster	Malpighiales	Euphorbiaceae	OM0843 *(JRAU)*	**JF265549**	**JF270892**
Phyllanthus reticulatus Poir.	Malpighiales	Euphorbiaceae	OM0224 *(JRAU)*	**JF265550**	**JF270893**
Phymaspermum acerosum (DC.) Källersjö	Asterales	Asteraceae	Magee306 *(NH)*	**JX572855**	**JX517882**
Phytolacca dioica L.	Caryophyllales	Phytolaccaceae	OM2000 *(JRAU)*	**JX572856**	**JX517912**
Pinus canariensis C.Sm.	Pinales	Pinaceae	BU-10230 *(LZU)*	AB019823	AB084494
Pinus halepensis Mill.	Pinales	Pinaceae	BS0081 *(JRAU)*	-	**JX905942**
Pinus patula Schiede ex Schltdl. & Cham.	Pinales	Pinaceae	n.a.	AB063381	AB063513
Pinus pinaster Aiton	Pinales	Pinaceae	Wang s.n. *(NF)*	AB019818	AB084493
Pinus pinea L.	Pinales	Pinaceae	Wang s.n. *(NF)*	AB019822	AB084496
Pinus radiata D.Don	Pinales	Pinaceae	n.a.	AB063383	AB080934
Pinus roxburghii Sarg.	Pinales	Pinaceae	n.a.	AB064339	AB084495
Pinus taeda L.	Pinales	Pinaceae	n.a.	-	AY724750
Piper L.	Piperales	Piperaceae	Chao&Zhang s.n. *(SHMU)* / Tamura & Fuse10016 *(OSA)*	EF450315	AB040153.2
Pittosporum undulatum Vent.	Apiales	Pittosporaceae	Schaefer 2008/117 *(BM)*	HM850262	HM850707
Pittosporum viridiflorum Sims	Apiales	Pittosporaceae	OM2815 *(JRAU)*	**JX572857**	**JX517842**
Platylophus trifoliatus D. Don	Oxalidales	Cunoniaceae	OM3163 *(JRAU)*	**JX572858**	**JX517817**

Pleiocarpa pycnantha (K.Schum.) Stapf	Gentianales	Apocynaceae	OM2652 *(JRAU)*	**JX572860**	**JX517964**
Pleioceras orientale Vollesen	Gentianales	Apocynaceae	Jongkind2131 *(MO)*	-	EF456364
Pleurostylia capensis Oliv.	Celastrales	Celastraceae	OM1867 *(JRAU)*	**JX572861**	**JX517549**
Pluchea dioscoridis (L.) DC.	Asterales	Asteraceae	OM2428 *(JRAU)*	**JX572909**	**JX517666**
Plumbago auriculata Lam.	Caryophyllales	Plumbaginaceae	OM1686 *(JRAU)*	EU002283	**JF270896**
Podalyria calyptrata (Retz.) Willd.	Fabales	Fabaceae	MWC16091 *(K)*	**JX572864**	**JX518039**
Podalyria myrtillifolia Willd.	Fabales	Fabaceae	AMM5052 *(BOL)*	**JX572865**	**JX517747**
Podocarpus elongatus (Aiton) L'Hér. ex Pers.	Pinales	Podocarpaceae	n.a.	HM593643	HM593746
Podocarpus henkelii Stapf ex Dallim. & B.D.Jacks.	Pinales	Podocarpaceae	Adelaide BG 842959	AF249610	HM593751
Podocarpus latifolius (Thunb.) R.Br. ex Mirb.	Pinales	Podocarpaceae	Mt Lofty BG G900695	AF249612	HM593754
Polygala myrtifolia L.	Fabales	Polygalaceae	MWC18613 *(K)*	**JX572866**	**JX517548**
Polygala virgata var. *decora* (Sond.) Harv.	Fabales	Polygalaceae	Abbott9243 *(BNRH)*	**JX572868**	**JX517329**
Polyscias fulva (Hiern) Harms	Apiales	Araliaceae	OM1896 *(JRAU)*	**JX572870**	**JX517735**
Polysphaeria lanceolata Hiern	Gentianales	Rubiaceae	OM2647 *(JRAU)*	**JX572871**	**JX518079**
Populus alba L.	Malpighiales	Salicaceae	H. Schaefer 2008/422 *(BM)*	HM850277	AM889739
Populus canescens (Aiton) Sm.	Malpighiales	Salicaceae	OM3468 *(JRAU)*	**JX572872**	**JX970910**
Populus deltoides W. Bartram ex Marshall	Malpighiales	Salicaceae	JG023 *(JRAU)*	**JX572873**	**JX517356**
Populus nigra var. *italica* Koehne	Malpighiales	Salicaceae	Schaefer 2008/423 *(BM)* / n.a.	HM850278	AB038186
Portulacaria afra Jacq.	Caryophyllales	Portulacaceae	OM3198 *(JRAU)*	**JX572874**	**JX517924**
Pouteria adolfi-friedericii subsp. *australis* (J.H.Hemsl.) L.Gaut.	Ericales	Sapotaceae	NH200203 *(TL)*	-	FJ037946
Pouzolzia mixta Solms	Rosales	Urticaceae	OM1417 *(JRAU)*	**JQ025073**	**JQ024983**
Premna mooiensis (H.Pearson) W.Piep.	Lamiales	Lamiaceae	OM1645 *(JRAU)*	**JX572875**	**JX517986**
Prionostemma delagoensis (Loes.) N.Hallé	Celastrales	Celastraceae	OM3738 *(JRAU)*	-	**JX517579**
Pristimera longipetiolata (Oliv.) N. Hallé	Celastrales	Celastraceae	OM1098 *(JRAU)*	**JX572876**	**JX517581**

Prosopis glandulosa var. *torreyana* (L.D.Benson) M.C.Johnst.	Fabales	Fabaceae	Wojciechowski 875 *(ASU)*	-	AY386851
Prosopis velutina Wooton	Fabales	Fabaceae	R. Gutierrez 658 *(ASU)*	-	EU025910
Protea aurea subsp. *aurea* Rourke	Proteales	Proteaceae	MWC24059 *(K)*	**JX572877**	**JX517773**
Protea caffra Meisn.	Proteales	Proteaceae	Abbott9234 *(BNRH)*	**JX572878**	**JX517909**
Protea coronata Lam.	Proteales	Proteaceae	MWC25806 *(K)*	**JX572879**	**JX517822**
Protea gaguedi J.F.Gmel.	Proteales	Proteaceae	Turpin471 *(BNRH)*	KF147503	KF147430
Protea glabra Thunb.	Proteales	Proteaceae	MWC25805 *(K)*	**JX572880**	**JX517612**
Protea laurifolia Thunb.	Proteales	Proteaceae	MWC25802 *(K)*	**JX572881**	**JX517919**
Protea mundii Klotzsch	Proteales	Proteaceae	MWC24058 *(K)*	**JX572882**	**JX517639**
Protea neriifolia R.Br.	Proteales	Proteaceae	Anderson10 *(UPS)*	-	EU169659
Protea nitida Mill.	Proteales	Proteaceae	MWC25791 *(K)*	**JX572883**	**JX517372**
Protea parvula Beard	Proteales	Proteaceae	OM3817 *(BNRH)*	KF147504	KF147431
Protea punctata Meisn.	Proteales	Proteaceae	MWC24085 *(K)*	**JX572884**	**JX517553**
Protea repens L.	Proteales	Proteaceae	OM3109 *(JRAU)*	**JQ025075**	**JX905940**
Protea roupelliae subsp. *roupelliae* Meisn.	Proteales	Proteaceae	Abbott9165 *(BNRH)*	**JX572885**	**JX517802**
Protea welwitschii Engl.	Proteales	Proteaceae	MvdB0024 *(JRAU)*	**JX905962**	**JX970896**
Protorhus longifolia (Bernh.) Engl.	Sapindales	Anacardiaceae	OM1764 *(JRAU)*	**JX572886**	**JX517542**
Prunus africana (Hook. f.) Kalkman	Rosales	Rosaceae	OM1568 *(JRAU)*	**JQ025076**	**JQ024985**
Prunus persica (L.) Stokes	Rosales	Rosaceae	OM1899 *(JRAU)*	**JX572887**	**JX518003**
Prunus serotina Ehrh.	Rosales	Rosaceae	Beyersdorfer 8-84 *(US)* / AP269 *(COLG)*	DQ006123	HQ593401
Pseudarthria hookeri Wight & Arn.	Fabales	Fabaceae	OM1473 *(JRAU)*	**JF265559**	**JF270902**
Pseudobersama mossambicensis (Sim) Verdc.	Sapindales	Meliaceae	OM2645 *(JRAU)*	**JX572888**	**JX517407**
Pseudolachnostylis maprouneifolia Pax	Malphigiales	Euphorbiaceae	OM2071 *(JRAU)*	KF147505	KF147432
Pseudophyllanthus ovalis (E.Mey. ex Sond.) Voronts. & Petra Hoffm.	Malpighiales	Euphorbiaceae	Muller & Scheepers 4286 *(K)*	-	AY830260
Pseudosalacia streyi Codd	Celastrales	Celastraceae	Abbott9248 *(BNRH)*	**JX572889**	**JX517644**
Psidium cattleianum Afzel. ex Sabine	Myrtales	Myrtaceae	Abbott24905 *(FLAS)*	GU135194	GU135031

Psidium guajava L.	Myrtales	Myrtaceae	CS36 *(JRAU)*	**JQ025077**	**JQ024986**
Psoralea aphylla L.	Fabales	Fabaceae	AMM3400 *(BOL)*	**JX572890**	**JX517348**
Psoralea arborea Sims	Fabales	Fabaceae	AMM3407 *(BOL)*	**JX572895**	**JX517541**
Psoralea axillaris L.f.	Fabales	Fabaceae	AMM5874 *(BOL)*	**JX572891**	**JX518186**
Psoralea filifolia Eckl. & Zeyh.	Fabales	Fabaceae	AMM4321 *(BOL)*	**JX572892**	**JX517464**
Psoralea glabra E.Mey.	Fabales	Fabaceae	AMM3646 *(BOL)*	**JX572893**	**JX517873**
Psoralea pinnata L.	Fabales	Fabaceae	OM3107 *(JRAU)*	**JX572894**	**JX517859**
Psychotria capensis (Eckl.) Vatke	Gentianales	Rubiaceae	OM1577 *(JRAU)*	**JX572896**	**JX517469**
Psychotria kirkii Hiern	Gentianales	Rubiaceae	OM3487 *(JRAU)*	**JX572835**	**JX518135**
Psychotria peduncularis (Salisb.) Steyerm.	Gentianales	Rubiaceae	OM2666 *(BNRH)*	KF147506	KF147433
Psychotria pumila Hiern	Gentianales	Rubiaceae	Burrows11719 *(BNRH)*	KF147507	KF147434
Psydrax locuples (K.Schum.) Bridson	Gentianales	Rubiaceae	OM2483 *(JRAU)*	**JX572897**	**JX518031**
Psydrax micans (Bullock) Bridson	Gentianales	Rubiaceae	OM2678 *(JRAU)*	**JX572898**	**JX517914**
Psydrax obovata (Klotzsch ex Eckl. & Zeyh.) Bridson	Gentianales	Rubiaceae	OM1756 *(JRAU)*	**JX572899**	**JX970909**
Ptaeroxylon obliquum (Thunb.) Radlk.	Sapindales	Rutaceae	OM1326 *(JRAU)*	**JQ025079**	**JQ024988**
Pteleopsis anisoptera (Welw. ex M.A.Lawson) Engl. & Diels	Myrtales	Combretaceae	OM1656 *(JRAU)*	**JX572900**	**JX517605**
Pteleopsis myrtifolia (M.A.Lawson) Engl. & Diels	Myrtales	Combretaceae	OM2368 *(JRAU)*	**JX572901**	**JX517526**
Pterocarpus angolensis DC.	Fabales	Fabaceae	OM2717 *(JRAU)*	**JX572902**	**JX517843**
Pterocarpus brenanii Barbosa & Torre	Fabales	Fabaceae	OM2510 *(JRAU)*	**JX572903**	**JX517771**
Pterocarpus rotundifolius (Sond.) Druce	Fabales	Fabaceae	RBN174 *(KNP)*	**JX572904**	**JX517562**
Pterocarpus rotundifolius subsp. *polyanthus* (Harms) Mendonca & Sousa	Fabales	Fabaceae	OM2317 *(JRAU)*	**JX572905**	**JX518110**
Pterocelastrus echinatus N.E.Br.	Celastrales	Celastraceae	OM1868 *(JRAU)*	**JX572906**	**JX517334**
Pterocelastrus rostratus Walp.	Celastrales	Celastraceae	Abbott9203 *(BNRH)*	**JX572907**	**JX517539**
Pterocelastrus tricuspidatus Walp.	Celastrales	Celastraceae	Abbott9213 *(BNRH)*	**JX572908**	**JX517816**
Pterolobium stellatum (Forssk.) Brenan	Fabales	Fabaceae	RBN219 *(KNP)*	-	**JF270908**
Putterlickia pyracantha (L.) Endl.	Asterales	Celastraceae	AM0234 *(JRAU)*	**JX572910**	**JX517305**

Putterlickia retrospinosa A.E.van Wyk & Mostert	Celastrales	Celastraceae	Abbott9126 *(BNRH)*	**JX572911**	**JX518119**
Putterlickia verrucosa (E. Mey. ex Sond.) Szyszyl.	Celastrales	Celastraceae	OM1404 *(JRAU)*	**JF265566**	**JF270909**
Pycnostachys urticifolia Hook.f.	Celastrales	Lamiaceae	OM1992 *(JRAU)*	**JF265567**	**JF270910**
Pygmaeothamnus chamaedendrum (Kuntze) Robyns	Lamiales	Rubiaceae	Burrows12689 *(BNRH)*	KF147508	KF147435
Pyracantha coccinea M. Roem.	Rosales	Rosaceae	Atha5823 *(YU)* / Kenneth & Hills 5274 *(ILLS)*	JQ391058	DQ860472
Pyrostria bibracteata (Baker) Cavaco	Gentianales	Rubiaceae	OM2679 *(JRAU)*	**JX572914**	**JX517448**
Pyrostria hystrix (Bremek.) Bridson	Gentianales	Rubiaceae	OM1195 *(JRAU)*	**JX572915**	**JX517362**
Quisqualis parviflora Gerrard ex Sond.	Myrtales	Combretaceae	Abbott8891 *(BNRH)*	**JX572916**	**JX517360**
Rapanea melanophloeos (L.) Mez	Ericales	Primulaceae	OM3166 *(JRAU)*	**JQ025081**	**JQ024989**
Raphia australis Oberm. & Strey	Arecales	Arecaceae	CS18 *(JRAU)*	**JX572917**	**JX517810**
Raphia farinifera (Gaertn.) Hyl.	Arecales	Arecaceae	MWC14927 *(K)*	MWC14927	MWC14927
Raspalia trigyna Dummer	Bruniales	Bruniaceae	De Lange6 *(NBG)*	-	AY490925
Rauvolfia caffra Sond.	Gentianales	Apocynaceae	OM1376 *(JRAU)*	**JQ025082**	**JQ024990**
Rawsonia lucida Harv. & Sond.	Malphigiales	Salicaceae	OM2662 *(JRAU)*	**JX572920**	**JX517624**
Rhamnus prinoides L'Hér.	Rosales	Rhamnaceae	OM3174 *(JRAU)*	**JX572922**	**JX518229**
Rhigozum obovatum Burch.	Lamiales	Bignoniaceae	OM2942 *(JRAU)*	**JX572923**	**JX517487**
Rhigozum zambesiacum Baker	Lamiales	Bignoniaceae	OM1590 *(JRAU)*	**JX572924**	**JX517751**
Rhizophora mucronata Lam.	Malphigiales	Rhizophoraceae	OM2479 *(BNRH)*	KF147509	KF147436
Rhodognaphalon schumannianum A.Robyns.	Malvales	Malvaceae	OM2342 *(JRAU)*	**JX572336**	**JX517920**
Rhoicissus digitata (L. f.) Gilg & M. Brandt	Vitales	Vitaceae	Abbott9200 *(BNRH)*	**JX572925**	**JX518018**
Rhoicissus revoilii Planch.	Vitales	Vitaceae	OM2657 *(JRAU)*	**JX572926**	**JX517321**
Rhoicissus sp. nov. A	Vitales	Vitaceae	Abbott9206 *(BNRH)*	**JX572928**	**JX517692**
Rhoicissus tomentosa (Lam.) Wild & R.B. Drumm.	Vitales	Vitaceae	OM1546 *(JRAU)*	**JF265573**	**JF270916**

Rhoicissus tridentata (L. f.) Wild & R.B. Drumm.	Vitales	Vitaceae	OM0452 *(JRAU)*	**JQ025083**	**JQ024991**
Rhynchocalyx lawsonioides Oliv.	Myrtales	Penaeaceae	Abbott9125 *(BNRH)*	**JX572931**	**JX517938**
Rhynchosia monophylla Schltr.	Fabales	Fabaceae	Burrows12692 *(BNRH)*	KF147510	KF147437
Ricinus communis L.	Malpighiales	Euphorbiaceae	OM1359 *(JRAU)*	**JF265575**	**JF270918**
Rinorea angustifolia (Thouars) Baill.	Malpighiales	Violaceae	Abbott9152 *(BNRH)*	**JX572932**	**JX517564**
Rinorea domatiosa A.E.van Wyk	Malpighiales	Violaceae	Abbott9186 *(BNRH)*	**JX573115**	**JX905954**
Rinorea elliptica (Oliv.) Kuntze	Malpighiales	Violaceae	OM2333 *(JRAU)*	**JX572933**	**JX517999**
Rinorea ilicifolia (Welw. ex Oliv.) Kuntze	Malpighiales	Violaceae	Enti_sp644 *(MO)*	-	AB354504
Ritchiea capparoides (Andrews) Britten	Brassicales	Capparaceae	Lotter1805 *(LYN)*	KF147511	KF147438
Ritchiea pygmaea (Gilg) DeWolf	Brassicales	Capparaceae	Lotter1801 *(LYN)*	KF147512	KF147439
Robinia pseudoacacia L.	Fabales	Fabaceae	MvdB0058 *(JRAU)*	**JX572934**	**JX517993**
Robsonodendron eucleiforme (Eckl. & Zeyh.) R.H.Archer	Celastrales	Celastraceae	Abbott9132 *(BNRH)*	**JX572935**	**JX517361**
Robsonodendron maritimum (Bolus) R.H.Archer	Celastrales	Celastraceae	MWC28690 *(K)*	-	**JX518231**
Rosa rubiginosa L.	Rosales	Rosaceae	OM3451 *(JRAU)*	**JX572936**	**JX970908**
Rotheca myricoides (Hochst.) Steane & Mabb.	Lamiales	Lamiaceae	OM2598 *(JRAU)*	**JX572937**	**JX517676**
Rothmannia capensis Thunb.	Gentianales	Rubiaceae	OM1786 *(JRAU)*	**JX572938**	**JX517592**
Rothmannia fischeri (K.Schum.) Bullock ex Oberm.	Gentianales	Rubiaceae	OM1611 *(JRAU)*	**JX572939**	**JX518115**
Rothmannia globosa (Hochst.) Keay	Gentianales	Rubiaceae	OM1887 *(JRAU)*	**JX572940**	**JX517976**
Rothmannia manganjae (Hiern) Keay	Gentianales	Rubiaceae	OM2185 *(JRAU)*	-	**JX517759**
Rourea orientalis Baill.	Oxalidales	Connaraceae	OM2513 *(JRAU)*	**JX572941**	**JX518032**
Ruspolia hypocrateriformis (Vahl) Milne-Redh.	Lamiales	Acanthaceae	OM1345 *(JRAU)*	**JX572942**	**JX517979**
Ruttya ovata Harv.	Lamiales	Acanthaceae	OM1150 *(JRAU)*	**JF265578**	**JF270921**
Salacia gerrardii Harv. & Sprague	Celastrales	Celastraceae	Abbott9241 *(BNRH)*	**JX572944**	**JX517567**
Salacia kraussii (Harv.) Harv.	Celastrales	Celastraceae	RBN102 *(KNP)*	**JF265579**	**JF270922**

Salacia rehmannii Schinz	Celastrales	Celastraceae	Burrows7426 *(BNRH)*	KF147513	KF147440
Salix babylonica L.	Malpighiales	Salicaceae	n.a.	-	AJ849593
Salix fragilis L.	Malpighiales	Salicaceae	Chase 991 *(K)* / n.a.	AJ418841	AJ849589
Salix mucronata Thunb.	Malpighiales	Salicaceae	OM1198 *(JRAU)*	**JF265580**	**JF270923**
Salvadora australis Schweick.	Brassicales	Salvadoraceae	OM1317 *(JRAU)*	**JF265581**	**JF270924**
Salvadora persica Wall.	Brassicales	Salvadoraceae	OM0824 *(JRAU)*	**JF265582**	**JF270925**
Schefflera goetzenii Harms	Apiales	Araliaceae	BDV015 *(BNRH)*		KF147441
Schefflera umbellifera (Sond.) Baill.	Apiales	Araliaceae	OM2187 *(JRAU)*	**JX572950**	**JX517700**
Schinus molle L.	Sapindales	Anacardiaceae	MvdB0046 *(JRAU)*	**JX572951**	**JX517745**
Schinus terebinthifolia Raddi	Sapindales	Anacardiaceae	OM1982 *(JRAU)*	**JX572952**	**JX518124**
Schinziophyton rautanenii (Schinz) Radcl.-Sm.	Malpighiales	Euphorbiaceae	OM2449 *(JRAU)*	**JX572953**	**JX518188**
Schotia afra (L.) Thunb.	Fabales	Fabaceae	OM2274 *(JRAU)*	**JX572954**	**JX517439**
Schotia brachypetala Sond.	Fabales	Fabaceae	OM1166 *(JRAU)*	**JQ025087**	**JQ024995**
Schotia capitata Bolle	Fabales	Fabaceae	OM1159 *(JRAU)*	**JF265584**	**JF270927**
Schotia latifolia Jacq.	Fabales	Fabaceae	Bruneau s.n. *(K)*	-	EU362039
Schrebera alata (Hochst.) Welw.	Lamiales	Oleaceae	OM1221 *(JRAU)*	**JX572955**	**JX517941**
Schrebera trichoclada Welw.	Lamiales	Oleaceae	OM2636 *(JRAU)*	**JX572956**	**JX517454**
Sclerocarya birrea subsp. *caffra* (Sond.) Kokwaro	Sapindales	Anacardiaceae	OM0498 *(JRAU)*	**JF265586**	**JF270929**
Sclerochiton harveyanus Nees	Lamiales	Acanthaceae	Abbott9185 *(BNRH)*	**JX572957**	**JX517343**
Sclerochiton kirkii (T. Anderson) C.B. Clarke	Lamiales	Acanthaceae	OM2359 *(JRAU)*	**JX572958**	**JX518192**
Sclerocroton integerrimus Hochst.	Malpighiales	Euphorbiaceae	OM2489 *(JRAU)*	**JX572947**	**JX517685**
Scolopia mundii Warb.	Malphigiales	Salicaceae	OM2309 *(JRAU)*	**JX572959**	**JX517610**
Scolopia stolzii Gilg	Malphigiales	Salicaceae	OM2675 *(JRAU)*	**JX572960**	**JX518217**
Scolopia zeyheri (Nees) Szyszyl.	Malphigiales	Salicaceae	OM1781 *(JRAU)*	**JX572945**	**JX517872**
Scutia myrtina (Burm. f.) Kurz	Rosales	Rhamnaceae	OM3232 *(JRAU)*	**JX572961**	**JX517733**
Searsia acocksii (Moffett) Moffett	Sapindales	Anacardiaceae	Abbott9154 *(BNRH)*	**JX572962**	**JX517985**
Searsia angustifolia (L.) F.A.Barkley	Sapindales	Anacardiaceae	OM2847 *(JRAU)*	**JX572963**	**JX517801**

Searsia chirindensis (Baker f.) Moffett	Sapindales	Anacardiaceae	OM2284 *(JRAU)*	**JX572964**	**JX517658**
Searsia crenata (Thunb.) Moffett	Sapindales	Anacardiaceae	OM1986 *(JRAU)*	**JX572965**	**JX517881**
Searsia dentata (Thunb.) F.A.Barkley	Sapindales	Anacardiaceae	OM2251 *(JRAU)*	KF147514	-
Searsia discolor (E.Mey. ex Sond.) Moffett	Sapindales	Anacardiaceae	OM3911 *(BNRH)*	KF147515	KF147442
Searsia fastigiata (Eckl. & Zeyh.) Moffett	Sapindales	Anacardiaceae	Abbott9135 *(BNRH)*	**JX572966**	**JX517893**
Searsia glauca (Thunb.) Moffett	Sapindales	Anacardiaceae	OM1826 *(BNRH)*	-	KF227400
Searsia gueinzii (Sond.) F.A.Barkley	Sapindales	Anacardiaceae	OM0265 *(JRAU)*	**JX572967**	**JX517709**
Searsia incisa (L.f.) F.A.Barkley	Sapindales	Anacardiaceae	OM3059 *(JRAU)*	**JX572968**	**JX517587**
Searsia laevigata (L.) F.A.Barkley	Sapindales	Anacardiaceae	OM3214 *(JRAU)*	**JX572969**	**JX518086**
Searsia laevigata (L.) F.A.Barkley var. *villosa* (L.f.) Moffett	Sapindales	Anacardiaceae	JWB509 *(NBG)*	**JQ412420**	-
Searsia lancea (L. f.) F.A. Barkley	Sapindales	Anacardiaceae	OM1942 *(JRAU)*	**JX572970**	**JX518157**
Searsia leptodictya (Diels) T.S.Yi, A.J.Mill. & J.Wen	Sapindales	Anacardiaceae	RL1655 *(JRAU)*	**JX572971**	**JX517890**
Searsia longispina (Eckl. & Zeyh.) Moffett	Sapindales	Anacardiaceae	AM0243 *(JRAU)*	**JX572972**	**JX517438**
Searsia lucida (L.) F.A.Barkley	Sapindales	Anacardiaceae	MWC05809 *(K)*	**JX905961**	**JX905941**
Searsia magalismontana (Sond.) Moffett	Sapindales	Anacardiaceae	OM1836 *(JRAU)*	**JF265591**	**JF270934**
Searsia natalensis (Bernh. ex C.Krauss) F.A.Barkley	Sapindales	Anacardiaceae	OM2655 *(JRAU)*	**JX572973**	**JX518140**
Searsia nebulosa (Schönland) Moffett	Sapindales	Anacardiaceae	Abbott9106 *(BNRH)*	**JX572974**	**JX517862**
Searsia pendulina (Jacq.) Moffett	Sapindales	Anacardiaceae	OM1984 *(JRAU)*	**JX572975**	**JX517444**
Searsia pentheri (Zahlbr.) Moffett	Sapindales	Anacardiaceae	OM0945 *(JRAU)*	**JX572976**	**JX517813**
Searsia pondoensis (Schönland) Moffett	Sapindales	Anacardiaceae	Burrows10242 *(BNRH)*	KF147516	KF147443
Searsia pygmaea (Moffett) Moffett	Sapindales	Anacardiaceae	Burrows7355 *(BNRH)*	KF147517	-
Searsia pyroides (Burch.) Moffett	Sapindales	Anacardiaceae	OM1236 *(JRAU)*	**JX572977**	**JX517333**
Searsia pyroides var. *integrifolia* (Engl.) Moffett.	Sapindales	Anacardiaceae	OM2477 *(JRAU)*	**JX572929**	**JX517483**
Searsia transvaalensis (Engl.) Moffett	Sapindales	Anacardiaceae	RL1427 *(JRAU)*	**JX572930**	**JX518204**

Searsia tumulicola (S.Moore) Moffett	Sapindales	Anacardiaceae	OM3813 *(BNRH)*	KF147519	KF147445
Searsia tumulicola (S.Moore) Moffett var. *meeuseana* (R.& A.Fern.) Moffett forma *meeuseana*	Sapindales	Anacardiaceae	OM3818 *9BNRH)*	KF147518	KF147444
Searsia undulata (Jacq.) T.S.Yi, A.J.Mill. & J.Wen	Sapindales	Anacardiaceae	OM2940 *(JRAU)*	**JQ025088**	**JQ024996**
Searsia wilmsii (Diels) Moffett	Sapindales	Anacardiaceae	OM3910 *(BNRH)*	KF147520	KF147446
Searsia zeyheri (Sond.) Moffett	Sapindales	Anacardiaceae	OM2256 *(JRAU)*	**JX572979**	**JX905948**
Securidaca longipedunculata Fresen.	Fabales	Polygalaceae	OM3358 *(JRAU)*	**JX572980**	**JX517755**
Seemannaralia gerrardii (Seem.) R.Vig.	Apiales	Araliaceae	MWC28187 *(K)*	**JX572981**	**JX517534**
Senegalia adenocalyx Brenan & Exell	Fabales	Fabaceae	OM2439 *(JRAU)*	**JX572179**	**JX518166**
Senegalia ataxacantha DC.	Fabales	Fabaceae	RL1326 *(JRAU)*	**JX572182**	**JX517415**
Senegalia brevispica Harms	Fabales	Fabaceae	RL1333 *(JRAU)*	**JF265244**	**JF270602**
Senegalia burkei Benth.	Fabales	Fabaceae	RL1479 *(JRAU)*	**JX572186**	**JX517664**
Senegalia caffra (Thunb.) Willd.	Fabales	Fabaceae	RL1335 *(JRAU)*	**JX572187**	**JX518058**
Senegalia chariessa Milne-Redh.	Fabales	Fabaceae	MvdB2158 *(JRAU)*	**JX572188**	**JX518001**
Senegalia cinerea Schinz	Fabales	Fabaceae	RL1328 *(JRAU)*	**JX572193**	**JX517897**
Senegalia eriocarpa Brenan	Fabales	Fabaceae	MvdB2157 *(JRAU)*	**JX572191**	**JX518050**
Senegalia erubescens Oliv.	Fabales	Fabaceae	OM0780 *(JRAU)*	**JF265248**	**JF270605**
Senegalia galpinii Burtt Davy	Fabales	Fabaceae	RL1304 *(JRAU)*	**JX572194**	**JX518092**
Senegalia goetzei subsp. *goetzei* Harms	Fabales	Fabaceae	RL1320 *(JRAU)*	**JX572196**	**JX517303**
Senegalia goetzei subsp. *microphylla* Brenan	Fabales	Fabaceae	RL1322 *(JRAU)*	-	**JQ230131**
Senegalia hereroensis Engl.	Fabales	Fabaceae	RL1332 *(JRAU)*	**JX572202**	**JX517996**
Senegalia kraussiana Benth.	Fabales	Fabaceae	RL1287 *(JRAU)*	**JX572206**	**JX517710**
Senegalia mellifera (M.Vahl) Benth.	Fabales	Fabaceae	OM1060 *(JRAU)*	**JX572212**	**JX518210**
Senegalia mellifera subsp. *detinens* (Burch.) Brenan	Fabales	Fabaceae	RL1329 *(JRAU)*	**JX572211**	**JX517310**
Senegalia montis-usti Merxm. & A.Schreib.	Fabales	Fabaceae	OM1065 *(JRAU)*	**JX572213**	**JX517640**

Senegalia nigrescens Oliv.	Fabales	Fabaceae	RBN314 *(KNP)*	**JX572216**	**JX518103**
Senegalia polyacantha subsp. *campylacantha* (A.Rich.) Brenan	Fabales	Fabaceae	RL1323 *(JRAU)*	-	GQ872241
Senegalia reficiens Wawra	Fabales	Fabaceae	Acaref *(JRAU)*	**JX572220**	**JX518096**
Senegalia robynsiana Merxm. & A.Schreib.	Fabales	Fabaceae	OM1066 *(JRAU)*	**JX572224**	**JX517895**
Senegalia schweinfurthii Brenan & Exell	Fabales	Fabaceae	OM1539 *(JRAU)*	**JX572225**	**JX517495**
Senegalia senegal (L.) Willd.	Fabales	Fabaceae	OM0255 *(JRAU)*	**JF265258**	**JF270615**
Senegalia senegal var. *leiorhachis* Brenan	Fabales	Fabaceae	OM0866 *(JRAU)*	**JX572227**	**JX517568**
Senegalia welwitschii subsp. *delagoensis* (Harms) J.H.Ross & Brenan	Fabales	Fabaceae	OM2548 *(JRAU)*	**JX572234**	**JX518159**
Senna bicapsularis (L.) Roxb.	Fabales	Fabaceae	Marazzi&AlvdrezBM159 *(PMA, STRI, Z)*	-	AM086849
Senna corymbosa (Lam.) H.S.Irwin & Barneby	Fabales	Fabaceae	MarazziBM103 *(CTES,Z)*	-	AM086856
Senna didymobotrya (Fresen.) H.S.Irwin & Barneby	Fabales	Fabaceae	n.a. / Irwin&Bameby s.n. *(Z)*	Z70154	AM086860
Senna hirsuta (L.) H.S.Irwin & Barneby	Fabales	Fabaceae	Salywon1374 *(ASU)*	-	EU025912
Senna occidentalis (L.) Link	Fabales	Fabaceae	Marazzi et al. BM060 *(PY, CTES, Z)*	-	AM086883
Senna pendula (Willd.) H.S.Irwin & Barneby	Fabales	Fabaceae	Davis0496 *(FLAS)*	GU135268	GU135101
Senna petersiana (Bolle) Lock	Fabales	Fabaceae	OM2515 *(JRAU)*	**JX572982**	**JX517765**
Senna septemtrionalis (Viv.) H.S.Irwin & Barneby	Fabales	Fabaceae	OM0910 *(JRAU)*	**JX572983**	**JX517744**
Senna spectabilis (DC.) H.S.Irwin & Barneby	Fabales	Fabaceae	Marazzietal.BM029 *(PMA, STRI, Z)*	-	AM086900
Seriphium plumosum L.	Asterales	Asteraceae	OM1785 *(JRAU)*	**JX572997**	**JX517389**
Sesamothamnus lugardii N.E.Br. ex Stapf	Lamiales	Pedaliaceae	OM1622 *(JRAU)*	**JF265597**	**JF270939**
Sesbania bispinosa (Jacq.) W.Wight	Fabales	Fabaceae	OM0675 *(JRAU)*	**JX572984**	**JX517377**

Sesbania cinerascens Baker	Fabales	Fabaceae	Smith *4127(K)*	-	HQ730423
Shirakiopsis elliptica (Hochst.) Esser	Malpighiales	Euphorbiaceae	OM1843 *(JRAU)*	**JX572946**	**JX517498**
Sideroxylon inerme subsp. *inerme*	Ericales	Sapotaceae	OM0266 *(JRAU)*	**JX572985**	**JX517620**
Smelophyllum capense Radlk.	Sapindales	Sapindaceae	Forest755 *(NBG)* / KE506 *(JCT)*	AM235131	AY724330
Solanecio mannii (Hook.f.) C.Jeffrey	Asterales	Asteraceae	Knox 555 *(L)*	-	AF459994
Solanum aculeastrum Dunal	Solanales	Solanaceae	OM2755 *(JRAU)*	**JQ025091**	**JQ024998**
Solanum catombelense Peyr.	Solanales	Solanaceae	OM0934 *(JRAU)*	**JF265599**	**JF270941**
Solanum giganteum Jacq.	Solanales	Solanaceae	Abbott9142 *(BNRH)*	**JX572986**	**JX517374**
Solanum lichtensteinii Willd.	Solanales	Solanaceae	OM1904 *(JRAU)*	**JF265600**	**JF270942**
Solanum mauritianum Scop.	Solanales	Solanaceae	OM0916 *(JRAU)*	**JX572987**	**JX517446**
Solanum panduriforme E. Mey.	Solanales	Solanaceae	OM0326 *(JRAU)*	**JF265601**	**JF270943**
Sonneratia alba Sm.	Myrtales	Lythraceae	n.a.	-	EF408669
Sparmannia africana L.f.	Malvales	Malvaceae	Alverson 4000 *(WIS)*	-	AY321194
Spirostachys africana Sond.	Malpighiales	Euphorbiaceae	OM2396 *(JRAU)*	**JX572988**	**JX517519**
Stadmania oppositifolia Lam.	Sapindales	Sapindaceae	OM0863 *(JRAU)*	**JF265603**	**JF270945**
Stangeria eriopus (Kunze) Baill.	Cycadales	Stangeriaceae	PR706 *(JRAU)*	**JQ025707**	**JQ046267**
Steganotaenia araliacea Hochst.	Apiales	Apiaceae	OM2540 *(JRAU)*	**JX572989**	**JX517647**
Sterculia africana (Lour.) Fiori	Malvales	Malvaceae	OM2362 *(JRAU)*	**JX572990**	**JX517698**
Sterculia alexandri Harv.	Malvales	Malvaceae	OM1864 *(JRAU)*	**JX572991**	**JX517774**
Sterculia appendiculata K.Schum. ex Engl.	Malvales	Malvaceae	OM2360 *(JRAU)*	**JX572992**	**JX517368**
Sterculia murex Hemsl.	Malvales	Malvaceae	OM1133 *(JRAU)*	**JX572993**	**JX517910**
Sterculia quinqueloba (Garcke) K.Schum.	Malvales	Malvaceae	OM2314 *(JRAU)*	**JX572994**	**JX518037**
Sterculia rogersii N.E.Br.	Malvales	Malvaceae	OM1227 *(JRAU)*	**JF265606**	**JF270948**
Stereospermum kunthianum Cham.	Lamiales	Bignoniaceae	OM2086 *(JRAU)*	**JX572995**	**JX517630**
Stoeberia utilis (L.Bolus) van Jaarsv.	Caryophyllales	Aizoaceae	AM0034 *(JRAU)*	**JX572996**	**JX518027**
Streblus Lour.	Rosales	Moraceae	PS1238MT01 *(IMDY)*	-	GQ434235
Strelitzia alba (L.f.) Skeels	Zingiberales	Strelitziaceae	Pedersen1154 *(C)*	-	AF434874
Strelitzia nicolai Regel & K.Koch	Zingiberales	Strelitziaceae	OM1678 *(JRAU)*	**JX572998**	**JX517866**
Strophanthus kombe Oliv.	Gentianales	Apocynaceae	OM2111 *(JRAU)*	**JX572999**	**JX517906**

Strophanthus petersianus Klotzsch	Gentianales	Apocynaceae	OM1616 *(JRAU)*	**JF265608**	**JF270950**
Strophanthus speciosus (Ward & Harv.) Reber	Gentianales	Apocynaceae	Abbott9180 *(BNRH)*	**JX573000**	**JX517730**
Strychnos cocculoides Baker	Gentianales	Loganiaceae	HG4080 *(JRAU)*	**JX573001**	**JX517336**
Strychnos decussata (Pappe) Gilg	Gentianales	Loganiaceae	OM1259 *(JRAU)*	**JX573002**	**JX517983**
Strychnos henningsii Gilg	Gentianales	Loganiaceae	Abbott9223 *(BNRH)*	**JX573003**	**JX518189**
Strychnos madagascariensis Poir.	Gentianales	Loganiaceae	OM2443 *(JRAU)*	**JX573004**	**JX517867**
Strychnos mitis S.Moore	Gentianales	Loganiaceae	OM1870 *(JRAU)*	-	**JX518090**
Strychnos panganensis Gilg	Gentianales	Loganiaceae	OM2646 *(JRAU)*	**JX573005**	**JX517363**
Strychnos potatorum L.f.	Gentianales	Loganiaceae	OM2390 *(JRAU)*	**JX573006**	**JX517683**
Strychnos pungens Soler.	Gentianales	Loganiaceae	MvdB0022 *(JRAU)*	**JF265612**	**JF270954**
Strychnos spinosa Lam.	Gentianales	Loganiaceae	OM2438 *(JRAU)*	**JX573007**	**JX517766**
Strychnos usambarensis Gilg	Gentianales	Loganiaceae	OM2593 *(JRAU)*	**JX573008**	**JX517734**
Strychnos xantha Leeuwenb.	Gentianales	Loganiaceae	OM2756 *(JRAU)*	**JX573009**	**JX517510**
Suregada africana (Sond.) Müll.Arg.	Malpighiales	Euphorbiaceae	OM1839 *(JRAU)*	**JF265615**	**JF270957**
Suregada procera (Prain) Croizat	Malpighiales	Euphorbiaceae	OM1829 *(JRAU)*	**JX573010**	**JX518080**
Suregada zanzibariensis Baill.	Malpighiales	Euphorbiaceae	OM1845 *(JRAU)*	**JX573011**	**JX518191**
Synadenium cupulare L.C. Wheeler	Malpighiales	Euphorbiaceae	OM1511 *(JRAU)*	**JQ025098**	**JQ025004**
Synadenium kirkii N.E.Br.	Malpighiales	Euphorbiaceae	OM2556 *(JRAU)*	**JX573012**	**JX905960**
Synaptolepis alternifolia Oliv.	Malvales	Thymelaeaceae	OM2747 *(JRAU)*	**JX573013**	**JX518008**
Synsepalum brevipes (Baker) T.D.Penn.	Ericales	Sapotaceae	OM2694 *(JRAU)*	**JX573014**	**JX517918**
Synsepalum passargei (Engl.) T.D.Penn.	Ericales	Sapotaceae	OM1879 *(JRAU)*	**JX573015**	**JX517799**
Syzygium cordatum Hochst. ex Krauss	Myrtales	Myrtaceae	OM1470 *(JRAU)*	**JX573016**	**JX517332**
Syzygium cumini (L.) Skeels	Myrtales	Myrtaceae	Hahn5897 *(WIS)*	-	AY525140
Syzygium gerrardii (Harv. ex Hook.f.) Burtt Davy	Myrtales	Myrtaceae	OM1799 *(JRAU)*	**JX573017**	**JX517397**
Syzygium guineense (Willd.) DC.	Myrtales	Myrtaceae	MWC37683 *(K)*	**JX573018**	**JX517609**
Syzygium guineense subsp. *afromontana* F. White	Myrtales	Myrtaceae	OM2297 *(JRAU)*	**JX573021**	**JX517489**
Syzygium guineense subsp. *barotsense* F.	Myrtales	Myrtaceae	MWC37689 *(K)*	**JX573019**	**JX517990**

White					
Syzygium guineense subsp. *macrocarpum* (Engl.) F. White	Myrtales	Myrtaceae	MWC37688 *(K)*	**JX573020**	**JX517695**
Syzygium jambos (L.) Alston	Myrtales	Myrtaceae	Biffin42 *(CANB)*	-	DQ088583
Syzygium legatii Burtt Davy & Greenway	Myrtales	Myrtaceae	OM1792 *(JRAU)*	**JX573022**	**JX518187**
Syzygium masukuense (Baker) R.E.Fr.	Myrtales	Myrtaceae	Gadek s.n. *(JCT)*	-	DQ088591
Syzygium paniculatum Gaertn.	Myrtales	Myrtaceae	Richardson et al.49a *(CANB)*	-	DQ088598
Syzygium pondoense Engl.	Myrtales	Myrtaceae	OM1798 *(JRAU)*	**JX573023**	**JX518226**
Tabernaemontana elegans Stapf	Gentianales	Apocynaceae	OM2144 *(JRAU)*	**JX573024**	**JX517818**
Tabernaemontana ventricosa Hochst. ex A.DC.	Gentianales	Apocynaceae	OM2235 *(JRAU)*	**JX573025**	**JX518222**
Tacazzea apiculata Oliv.	Gentianales	Apocynaceae	Venter9188 *(MSTR)* / Venter9188 *(TL)*	AJ419764	AY899945
Tamarindus indica L.	Fabales	Fabaceae	OM2447 *(JRAU)*	**JX573026**	**JX517967**
Tamarix usneoides E.Mey. ex Bunge	Caryophyllales	Tamaricaceae	MWC28701 *(K)*	**JX573027**	**JX517452**
Tannodia swynnertonii (S.Moore) Prain	Malpighiales	Euphorbiaceae	OM1858 *(JRAU)*	**JX573028**	**JX517763**
Tapura fischeri Engl.	Malpighiales	Dichapetalaceae	OM3496 *(JRAU)*	**JX572337**	**JX518005**
Tarchonanthus camphoratus L.	Asterales	Asteraceae	OM1515 *(JRAU)*	**JQ025099**	**JQ025005**
Tarchonanthus trilobus DC.	Asterales	Asteraceae	OM3270 *(JRAU)*	**JX573029**	**JX517783**
Tarenna pavettoides (Harv.) Sim	Gentianales	Rubiaceae	Abbott9247 *(BNRH)*	**JX573030**	**JX517414**
Teclea gerrardii Verd.	Sapindales	Rutaceae	Abbott9183 *(BNRH)*	**JX573031**	**JX517313**
Teclea natalensis Engl.	Sapindales	Rutaceae	Abbott9193 *(BNRH)*	**JX573032**	**JX518224**
Tecoma stans (L.) Juss. ex Kunth	Lamiales	Bignoniaceae	OM3432 *(JRAU)*	**JX573034**	**JX517475**
Tecomaria capensis (Thunb.) Spach	Lamiales	Bignoniaceae	OM0454 *(JRAU)*	**JX573033**	**JX517434**
Tephrosia pondoensis (Codd) Schrire	Fabales	Fabaceae	Abbott9232 *(BNRH)*	**JX573035**	**JX517379**
Terminalia brachystemma Welw. ex Hiern	Myrtales	Combretaceae	OM&MvdB18 *(JRAU)*	FJ381810	**JX518028**
Terminalia catappa L.	Myrtales	Combretaceae	OM1578 *(JRAU)*	**JX573036**	**JX518026**
Terminalia mollis M.A.Lawson	Myrtales	Combretaceae	OM1032 *(JRAU)*	**JX573037**	**JX518150**
Terminalia phanerophlebia Engl. & Diels	Myrtales	Combretaceae	OM1191 *(JRAU)*	**JX573038**	**JX517994**

Terminalia prunioides M.A.Lawson	Myrtales	Combretaceae	OM1061 *(JRAU)*	**JF265625**	**JF270967**
Terminalia randii Baker f.	Myrtales	Combretaceae	OM2115 *(JRAU)*	**JX573039**	**JX518067**
Terminalia sambesiaca Engl. & Diels	Myrtales	Combretaceae	OM2392 *(JRAU)*	**JX573040**	**JX517421**
Terminalia sericea Burch. ex DC.	Myrtales	Combretaceae	OM1037 *(JRAU)*	**JX573041**	**JX517972**
Terminalia stenostachya Engl. & Diels	Myrtales	Combretaceae	OM2059 *(JRAU)*	**JX573042**	**JX517373**
Terminalia trichopoda Diels	Myrtales	Combretaceae	OM1657 *(JRAU)*	**JX573043**	**JX517390**
Tetracera boiviniana Baill.	Dilleniales	Dilleniaceae	Burrows9126 *(BNRH)*	KF147521	KF147447
Tetracera masuiana De Wild. & T.Durand	Dilleniales	Dilleniaceae	Burrows11174 *(BNRH)*	KF147522	KF147448
Tetradenia riparia (Hochst.) Codd	Lamiales	Lamiaceae	OM0881 *(JRAU)*	**JF265627**	**JF270969**
Thamnocalamus tessellatus (Nees) Soderstr. & R.P.Ellis	Poales	Poaceae	OM2308 *(JRAU)*	**JX573044**	**JX518203**
Thespesia acutiloba (Baker f.) Exell & Mendonca	Malvales	Malvaceae	OM2492 *(JRAU)*	**JX573045**	**JX518214**
Thevetia peruviana (Pers.) K.Schum.	Gentianales	Apocynaceae	Sennblad223 *(UPS)*	X91773	Z70188
Thilachium africanum Scott-Elliot	Brassicales	Capparaceae	OM2549 *(JRAU)*	**JX573046**	**JX517312**
Tiliacora funifera (Miers) Oliv.	Ranunculales	Menispermaceae	OM2328 *(JRAU)*	**JX573047**	**JX517404**
Tinnea barbata Vollesen	Lamiales	Lamiaceae	OM2288 *(JRAU)*	**JX573048**	**JX518083**
Tinnea rhodesiana S.Moore	Lamiales	Lamiaceae	RBN143 *(KNP)*	**JX573049**	**JX518148**
Tinospora caffra (Miers) Troupin	Ranunculales	Menispermaceae	OM2373 *(JRAU)*	**JX573050**	**JX517395**
Tinospora tenera Miers	Ranunculales	Menispermaceae	OM1369 *(JRAU)*	**JX573051**	**JX517669**
Tithonia diversifolia (Hemsl.) A.Gray	Asterales	Asteraceae	OM3435 *(JRAU)*	**JX573052**	**JX517326**
Toddalia asiatica (L.) Lam.	Sapindales	Rutaceae	OM2688 *(JRAU)*	**JX573053**	**JX518156**
Toona ciliata M.Roem.	Sapindales	Meliaceae	MWC22907 *(K)*	-	**JX518246**
Tournefortia argentea L. f.	Boraginales	Boraginaceae	FI9205 *(BGF)*	-	EU599648
Toxicodendron succedaneum (L.) Kuntze	Sapindales	Anacardiaceae	n.a.	HQ427194	HQ427343
Trema orientalis (L.) Blume	Rosales	Ulmaceae	OM2500 *(JRAU)*	**JX573054**	**JX518199**
Triaspis glaucophylla Engl.	Malpighiales	Malpighiaceae	OM2003 *(JRAU)*	**JX573055**	**JX518181**
Triaspis hypericoides Burch.	Malpighiales	Malpighiaceae	OM1336 *(JRAU)*	**JX573056**	**JX517622**
Tricalysia capensis (Meisn. ex Hochst.) Sim	Gentianales	Rubiaceae	Abbott9182 *(BNRH)*	**JX573057**	**JX517423**

Tricalysia coriacea subsp. *angustifolia* (J.G.García) Robbr.	Gentianales	Rubiaceae	OM1842 *(BNRH)*	KF147523	KF147449
Tricalysia delagoensis Schinz	Gentianales	Rubiaceae	MWC24252 *(K)*	**JX573058**	**JX517378**
Tricalysia jasminiflora (Klotzsch) Benth. & Hook.f. ex Hiern	Gentianales	Rubiaceae	OM2340 *(JRAU)*	**JX573059**	**JX517757**
Trichilia capitata Klotzsch	Sapindales	Meliaceae	OM2460 *(JRAU)*	**JX573063**	**JX518085**
Trichilia dregeana Sond.	Sapindales	Meliaceae	OM1793 *(JRAU)*	**JF265635**	**JF270976**
Trichilia emetica Vahl	Sapindales	Meliaceae	OM2103 *(JRAU)*	JQ025100	JQ025007
Trichocladus crinitus Pers.	Saxifragales	Hamamelidaceae	OM1767 *(JRAU)*	**JX573064**	**JX518141**
Trichocladus ellipticus Eckl. & Zeyh.	Saxifragales	Hamamelidaceae	Abbott9189 *(BNRH)*	**JX573065**	**JX517927**
Trichocladus grandiflorus Oliv.	Saxifragales	Hamamelidaceae	Abbott9207 *(BNRH)*	**JX573066**	**JX517614**
Trimeria grandifolia (Hochst.) Warb.	Malphigiales	Salicaceae	OM1549 *(JRAU)*	**JF265637**	**JF270978**
Triplochiton zambesiacus Milne-Redh.	Malvales	Malvaceae	OM2124 *(JRAU)*	**JX573068**	**JX518093**
Turraea floribunda Hochst.	Sapindales	Meliaceae	OM3278 *(JRAU)*	**JX573069**	**JX517433**
Turraea nilotica Kotschy & Peyr.	Sapindales	Meliaceae	OM1491 *(JRAU)*	**JX573070**	**JX517345**
Turraea obtusifolia Hochst.	Sapindales	Meliaceae	OM0744 *(JRAU)*	**JF265641**	**JF270982**
Tylecodon paniculatus (L.f.) Toelken	Saxifragales	Crassulaceae	JWB508 *(NH)*	**JQ412433**	**JQ412300**
Uapaca nitida Müll.Arg.	Malphigiales	Euphorbiaceae	OM2623 *(BNRH)*	KF147524	-
Uapaca sansibarica Pax	Malphigiales	Euphorbiaceae	OM2614 *(BNRH)*	KF147525	-
Ulex europaeus L.	Fabales	Fabaceae	Schaefer2008/659 *(BM)*	HM850431	HM851132
Umtiza listerana Sim	Fabales	Fabaceae	OM1802 *(JRAU)*	**JX573071**	**JX517963**
Urera trinervis (Hochst.) Friis & Immelman	Rosales	Urticaceae	Abbott9169 *(BNRH)*	**JX573072**	**JX517974**
Uvaria caffra E.Mey. ex Sond.	Magnoliales	Annonaceae	RBN148 *(KNP)*	**JX573073**	**JX517820**
Uvaria gracilipes N.Robson	Magnoliales	Annonaceae	RBN365 *(KNP)*	**JX573074**	**JX517815**
Uvaria lucida subsp. *virens* (N.E.Br.) Verdc.	Magnoliales	Annonaceae	OM1863 *(JRAU)*	**JX572310**	**JX517870**
Vaccinium L.	Ericales	Ericaceae	n.a.	-	AB623177
Vachellia amythethophylla A.Rich.	Fabales	Fabaceae	RL1314 *(JRAU)*	**JX572180**	**JX518139**

Vachellia arenaria Schinz	Fabales	Fabaceae	OM1048 *(JRAU)*	**JX572181**	**JX517408**
Vachellia borleae Burtt Davy	Fabales	Fabaceae	OM1902 *(JRAU)*	**JX572185**	**JX518132**
Vachellia davyi N.E.Br.	Fabales	Fabaceae	RL1315 *(JRAU)*	**JF265247**	**JF270604**
Vachellia dyeri P.P.Sw. ex Coates Palgr	Fabales	Fabaceae	RL1309 *(JRAU)*	**JX572189**	**JX517665**
Vachellia erioloba E.Mey.	Fabales	Fabaceae	RL1298 *(JRAU)*	**JX572192**	**JX517384**
Vachellia exuvialis Verd.	Fabales	Fabaceae	OM0260 *(JRAU)*	**JF265249**	**JF270606**
Vachellia farnesiana (L.) Willd.	Fabales	Fabaceae	Entwisle2708 *(MEL)*	-	AF523115
Vachellia gerrardii Benth.	Fabales	Fabaceae	OM0315 *(JRAU)*	**JX572195**	**JX517886**
Vachellia grandicornuta Gerstner	Fabales	Fabaceae	RL1286 *(JRAU)*	**JX572197**	**JX517869**
Vachellia haematoxylon Willd.	Fabales	Fabaceae	OM1069 *(JRAU)*	**JX572198**	**JX517376**
Vachellia hebeclada subsp. *chobiensis* Schreib.	Fabales	Fabaceae	OM1034 *(JRAU)*	**JX572199**	**JX517672**
Vachellia hebeclada subsp. *hebeclada* DC.	Fabales	Fabaceae	RL1317 *(JRAU)*	**JX572200**	**JX517617**
Vachellia hebeclada subsp. *tristis* A.Schreib.	Fabales	Fabaceae	OM1049 *(JRAU)*	**JX572201**	**JX517346**
Vachellia karroo Hayne	Fabales	Fabaceae	OM3013 *(JRAU)*	**JX572203**	**JX517490**
Vachellia kirkii Oliv.	Fabales	Fabaceae	RL1307 *(JRAU)*	**JX572204**	**JX517387**
Vachellia kosiensis P.P.Sw.	Fabales	Fabaceae	RL1305 *(JRAU)*	**JX572205**	**JX518109**
Vachellia luederitzii Engl.	Fabales	Fabaceae	RL1500 *(JRAU)*	**JX572207**	**JX518240**
Vachellia luederitzii var. *retinens* (Sim) J. Ross & Brenan	Fabales	Fabaceae	RL1285 *(JRAU)*	**JX572208**	**JX517653**
Vachellia montana P.P.Sw.	Fabales	Fabaceae	RL1313 *(JRAU)*	**JX572231**	**JX517894**
Vachellia natalitia E.Mey.	Fabales	Fabaceae	RL1330 *(JRAU)*	**JX572214**	**JX517566**
Vachellia nebrownii Burtt Davy	Fabales	Fabaceae	OM1050 *(JRAU)*	**JX572215**	**JX517304**
Vachellia nilotica (L.) Delile	Fabales	Fabaceae	RL1302 *(JRAU)*	**JX572217**	**JX517797**
Vachellia ormocarpoides P.J.H.Hurter	Fabales	Fabaceae	RL1293 *(JRAU)*	**JX572218**	**JX517884**
Vachellia permixta Burtt Davy	Fabales	Fabaceae	Johan2 *(JRAU)*	-	GQ872240
Vachellia rehmanniana Schinz	Fabales	Fabaceae	RL1288 *(JRAU)*	**JX572221**	**JX517925**
Vachellia robbertsei P.P.Sw	Fabales	Fabaceae	RL1289 *(JRAU)*	-	GQ872244
Vachellia robusta Burch.	Fabales	Fabaceae	RL1310 *(JRAU)*	**JX572223**	**JX517736**

Vachellia robusta subsp. *clavigera* (E.Mey.) Brenan	Fabales	Fabaceae	RBN354 *(KNP)*	**JF265249**	**JF270606**
Vachellia robusta subsp. *usambarensis* (Taub.) Brenan	Fabales	Fabaceae	OM2458 *(JRAU)*	**JX572222**	**JX517547**
Vachellia sekhukhuniensis P.J.H.Hurter	Fabales	Fabaceae	RL1296 *(JRAU)*	**JX572226**	**JX518234**
Vachellia sieberiana DC.	Fabales	Fabaceae	OM1029 *(JRAU)*	**JX572228**	**JX517353**
Vachellia sieberiana var. *woodii* (Burtt Davy) Keay & Brenan	Fabales	Fabaceae	OM0966 *(JRAU)*	**JF265259**	**JF270616**
Vachellia stuhlmannii Taub.	Fabales	Fabaceae	RL1294 *(JRAU)*	**JX572230**	**JX517951**
Vachellia swazica Burtt Davy	Fabales	Fabaceae	RL1327 *(JRAU)*	**JF265260**	**JF270617**
Vachellia torrei Brenan	Fabales	Fabaceae	OM2429 *(JRAU)*	**JX572232**	**JX518215**
Vachellia tortilis subsp. *heteracantha* (Burch.) Brenan	Fabales	Fabaceae	RL1337 *(JRAU)*	**JX572233**	**JX517619**
Vachellia xanthophloea Benth.	Fabales	Fabaceae	OM2579 *(JRAU)*	**JX572235**	**JX517302**
Vangueria bowkeri (Robyns) Lantz	Gentianales	Rubiaceae	OM3841 *(BNRH)*	KF147526	KF147450
Vangueria coerulea (Robyns) Lantz	Gentianales	Rubiaceae	Burrows09297 *(BNRH)*	KF147500	KF147425
Vangueria esculenta S.Moore	Gentianales	Rubiaceae	OM2435 *(JRAU)*	**JX573075**	**JX517807**
Vangueria infausta Burch.	Gentianales	Rubiaceae	OM2409 *(JRAU)*	**JX573076**	**JX517485**
Vangueria macrocalyx Sond.	Gentianales	Rubiaceae	Burrows11043 *(BNRH)*	-	KF147426
Vangueria madagascariensis J.F.Gmel.	Gentianales	Rubiaceae	OM2018 *(JRAU)*	**JF265645**	**JF270986**
Vangueria parvifolia Sond.	Gentianales	Rubiaceae	MvdB0040 *(JRAU)*	**JX573077**	**JX517776**
Vangueria randii S.Moore	Gentianales	Rubiaceae	OM3751 *(JRAU)*	**JX573078**	**JX517473**
Vangueria thamnus (Robyns) Lantz	Gentianales	Rubiaceae	Maserumule121 *(BNRH)*	-	KF147427
Vangueria venosa (Hochst.) Sond.	Gentianales	Rubiaceae	Burrows12325 *(BNRH)*	-	KF147428
Vangueriopsis lanciflora (Hiern) Robyns	Gentianales	Rubiaceae	OM1659 *(JRAU)*	KF147527	-
Vepris bachmannii (Engl.) Mziray	Sapindales	Rutaceae	OM2168 *(JRAU)*	**JX572808**	**JX517461**
Vepris bremekampii (I. Verd.) Mziray	Sapindales	Rutaceae	RBN366 *(JRAU)*	JF265630	-
Vepris reflexa Verd.	Sapindales	Rutaceae	OM1299 *(JRAU)*	**JX573080**	**JX517574**

Vepris undulata Verdoorn & C. A. Sm.	Sapindales	Rutaceae	OM3224 *(JRAU)*	**JX573079**	**JX517578**
Vernonia natalensis Sch.Bip. ex Walp.	Asterales	Asteraceae	Burrows12690 *(JRAU)*	KF147528	KF147451
Virgilia divaricata Adamson	Fabales	Fabaceae	OM3169 *(JRAU)*	**JX573081**	**JX517500**
Vismia orientalis Engl.	Malphigiales	Hypericaceae	Burrows12535 *(BNRH)*	KF147529	-
Vitellariopsis dispar (N.E.Br.) Aubrév.	Ericales	Sapotaceae	OM2178 *(JRAU)*	**JX573082**	**JX518040**
Vitex buchananii Baker ex Gürke	Lamiales	Lamiaceae	OM2751 *(JRAU)*	**JX573083**	**JX517569**
Vitex doniana Sweet	Lamiales	Lamiaceae	OM2615 *(BNRH)*	KF147530	KF147452
Vitex ferruginea Schumach. & Thonn.	Lamiales	Lamiaceae	RBN141 *(KNP)*	**JF265650**	**JF270991**
Vitex harveyana H.Pearson	Lamiales	Lamiaceae	OM1501 *(JRAU)*	**JX573084**	**JX518136**
Vitex patula E.A.Bruce	Lamiales	Lamiaceae	OM0839 *(JRAU)*	**JX573085**	**JX517538**
Vitex payos (Lour.) Merr.	Lamiales	Lamiaceae	OM1819 *(JRAU)*	**JX573086**	**JX518012**
Vitex petersiana Klotzsch	Lamiales	Lamiaceae	OM2725 *(JRAU)*	**JX573087**	**JX517600**
Vitex rehmannii Gürke	Lamiales	Lamiaceae	RL1385 *(JRAU)*	**JX573088**	**JX517958**
Vitis rhomboidea (E. Mey. ex Harv.) Szyszyl.	Vitales	Vitaceae	Abbott9181 *(BNRH)*	**JX572927**	**JX518114**
Voacanga africana Stapf ex Scott-Elliot	Gentianales	Apocynaceae	OM1876 *(JRAU)*	**JX573089**	**JX905951**
Voacanga thouarsii Roem. & Schult.	Gentianales	Apocynaceae	Abbott9118 *(BNRH)*	**JX573090**	**JX517507**
Warburgia salutaris (G.Bertol.) Chiov.	Canellales	Canellaceae	OM1853 *(JRAU)*	**JF265653**	**JF270994**
Widdringtonia nodiflora (L.) E.Powrie	Pinales	Cupressaceae	Hardy277 *(Z,BH)*	AY988266	AY988364
Widdringtonia schwarzii (Marloth) Mast.	Pinales	Cupressaceae	UNSW23247 *(SYD)*	-	AF152218
Wrightia natalensis Stapf	Gentianales	Apocynaceae	OM1580 *(JRAU)*	**JX573091**	**JX517947**
Xanthocercis zambesiaca (Baker) Dumaz-le-Grand	Fabales	Fabaceae	OM2735 *(JRAU)*	**JX573092**	**JX517427**
Xeroderris stuhlmannii (Taub.) Mendonca & Sousa	Fabales	Fabaceae	OM2398 *(JRAU)*	**JX573093**	**JX517470**
Xerophyta retinervis Baker	Pandanales	Velloziaceae	OM1591 *(JRAU)*	JQ025106	JQ025013
Ximenia americana L.	Santalales	Olacaceae	OM0299 *(JRAU)*	**JX573094**	**JX517654**
Ximenia caffra Sond.	Santalales	Olacaceae	RL1182 *(JRAU)*	**JX573095**	**JX518138**
Xylia torreana Brenan	Fabales	Fabaceae	OM2612 *(JRAU)*	**JX573096**	**JX518118**
Xylopia parviflora Spruce	Magnoliales	Annonaceae	RBN255 *(KNP)*	**JF265661**	**JF271002**

Xylotheca kraussiana Hochst.	Malphigiales	Salicaceae	OM2210 *(JRAU)*	**JX573097**	**JX517892**
Xylotheca tettensis (Klotzsch) Gilg	Malphigiales	Salicaceae	OM2370 *(JRAU)*	**JX573098**	**JX517814**
Xymalos monospora (Harv.) Baill.	Laurales	Monimiaceae	OM1748 *(JRAU)*	**JX573099**	**JX517511**
Zanthoxylum capense (Thunb.) Harv.	Sapindales	Rutaceae	OM3231 *(JRAU)*	**JX573100**	**JX517645**
Zanthoxylum davyi Waterm.	Sapindales	Rutaceae	Abbott9195 *(BNRH)*	**JX573101**	**JX517950**
Zanthoxylum holtzianum (Engl.) P.G. Waterman	Sapindales	Rutaceae	OM2357 *(JRAU)*	**JX573102**	**JX518057**
Zanthoxylum humile Waterm.	Sapindales	Rutaceae	OM0708 *(JRAU)*	**JX573103**	**JX517824**
Zanthoxylum leprieurii Guill. & Perr.	Sapindales	Rutaceae	RBN131 *(KNP)*	**JX573104**	**JX517932**
Ziziphus abyssinica Hochst. ex A.Rich.	Rosales	Rhamnaceae	OM2582 *(JRAU)*	**JX573105**	**JX517646**
Ziziphus mauritiana Lam.	Rosales	Rhamnaceae	OM2037 *(JRAU)*	**JX573106**	**JX518013**
Ziziphus mucronata Willd.	Rosales	Rhamnaceae	OM2031 *(JRAU)*	**JX573107**	**JX518049**
Ziziphus pubescens Oliv.	Rosales	Rhamnaceae	OM2325 *(JRAU)*	**JX573108**	**JX517471**
Ziziphus rivularis Codd	Rosales	Rhamnaceae	OM1380 *(JRAU)*	**JX573109**	**JX518212**
Ziziphus zeyheriana Sond.	Rosales	Rhamnaceae	OM3913 *(JRAU)*	KF147531	KF147453