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A checklist of vascular plants of the Amatole Mountains, eastern Cape Province/Ciskei

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ABSTRACT

A checklist of vascular plants of the Amatole Mountains is presented. The physical environment, climate and vegetation of the study area and the history of its botanical exploration are described. The mountains form part of the Winterberg Range in the eastern Cape/Ciskei region of south-eastern Africa, and cover an area of approximately 900 km^2. The altitude ranges from about 700 m to 2 000 m above sea level, and the topography is very varied. The climate is warm temperate and supports various vegetation types including forest, sclerophyllous shrubland, grassland and marshland. The checklist records the occurrence of 1 215 taxa. The largest families and genera in the area contain predominantly grassland herbs. Many of the characteristic families of the Cape Floristic Region and of the arid areas of southern Africa are poorly represented in the Amatole Mountains.

UITTREKSEL

'n Kontrolelys van vaatplante van die Amatoleberge word verskaf. Die fisiese omgewing, klimaat en plantegroei van die studiegebied en die geskiedenis van die plantkundige verkenning daarvan, word beskryf. Hierdie berge vorm deel van die Winterberg-reeks in die Oos-Kaap/Ciskei-gebied van suidoostelike Afrika en beslaan ongeveer 900 km^2. Die hoogte bo seespieël strek vanaf ongeveer 700 m tot 2 000 m en die topografie is baie variërend. Die klimaat is warm gematig en onderhou verskeie plantegroeitipes waaronder woud, sklerofiele struikveld, grasveld en vleiland. Daar is 1 215 taksons op die kontrolelys aangeteken. Die grootste families en genusse in die gebied bevat oorwegend grasveldkruide. Baie van die kenmerkende families van die Kaapse Flora-gebied en van die dorre gebiede van die suidelike Afrika is swak verteenwoordig in die Amatoleberge.

INTRODUCTION

The Amatole Mountains in the south-east of southern Africa are of particular botanical and ecological interest for a number of reasons. The Mountains lie in a region where six major African phytochoria meet. These are the Indian Ocean Coastal Belt, the Sudano-Zambezian Region, the Karoo-Namib Region, the Cape Region and the Afro-montane archipelago with its associated Afro-alpine areas (Werger 1978). The Mountains receive a relatively high rainfall, and act as an important drainage sponge for the neighbouring lower lying semi-arid areas. The indigenous forests and marshlands are believed to be particularly important in this respect.

State forestry plantations and residential areas are responsible for the introduction of many exotic species, some of which have become naturalized. The establishment of forest plantations and the encroachment of exotics into natural vegetation have had a very significant effect on the indigenous flora and on the ecology of the area as a whole.

The Amatole Mountains have been known to botanists since the early nineteenth century, and have gradually become relatively thoroughly explored. They have long been recognized as an area with a high species diversity, but little precise information has been available about their flora.

The aim of this work is to provide a reliable and comprehensive checklist of the vascular plants of the Amatole Mountains which can serve as a basic reference for taxonomic, floristic and ecological research, and for educational purposes in the future.

STUDY AREA

Physical Environment

The name Amatole (or Amatola) Mountains has been applied to a vaguely-defined section of the Winterberg Range, centred on the well known Hogsback Ridges. In the present study they are defined as bounded by the Kat and Esk Rivers in the north-west and the Thomas and Keiskamma Rivers in the east. The bottom edge of the escarpment forms the southern edge, while an arbitrary line across the African surface plateau connecting the Esk and Thomas Rivers forms the northern boundary (Figure 1). Defined in this way the Amatole Mountains form an area of about 900 km^2, lying within the latitudes 32° and 33° S, and longitudes 26° and 28° E.

The Amatole Mountains are part of a long outlying spur of the high interior plateau of southern Africa. The spur extends south-east and then east from the Great Escarpment, gradually loosing height and disappearing near the town of Stutterheim. It has been breached by the Fish River, which separates the Amatoles and other mountains of the Winterberg Range to the east from the Bankberg, Bruintjeshoogte and Tandjesberg Ranges to the west.

The Winterberg Range has a steep, irregular escarpment facing south, which rises above the 'Post-African' erosion surface. To the north of the escarp-

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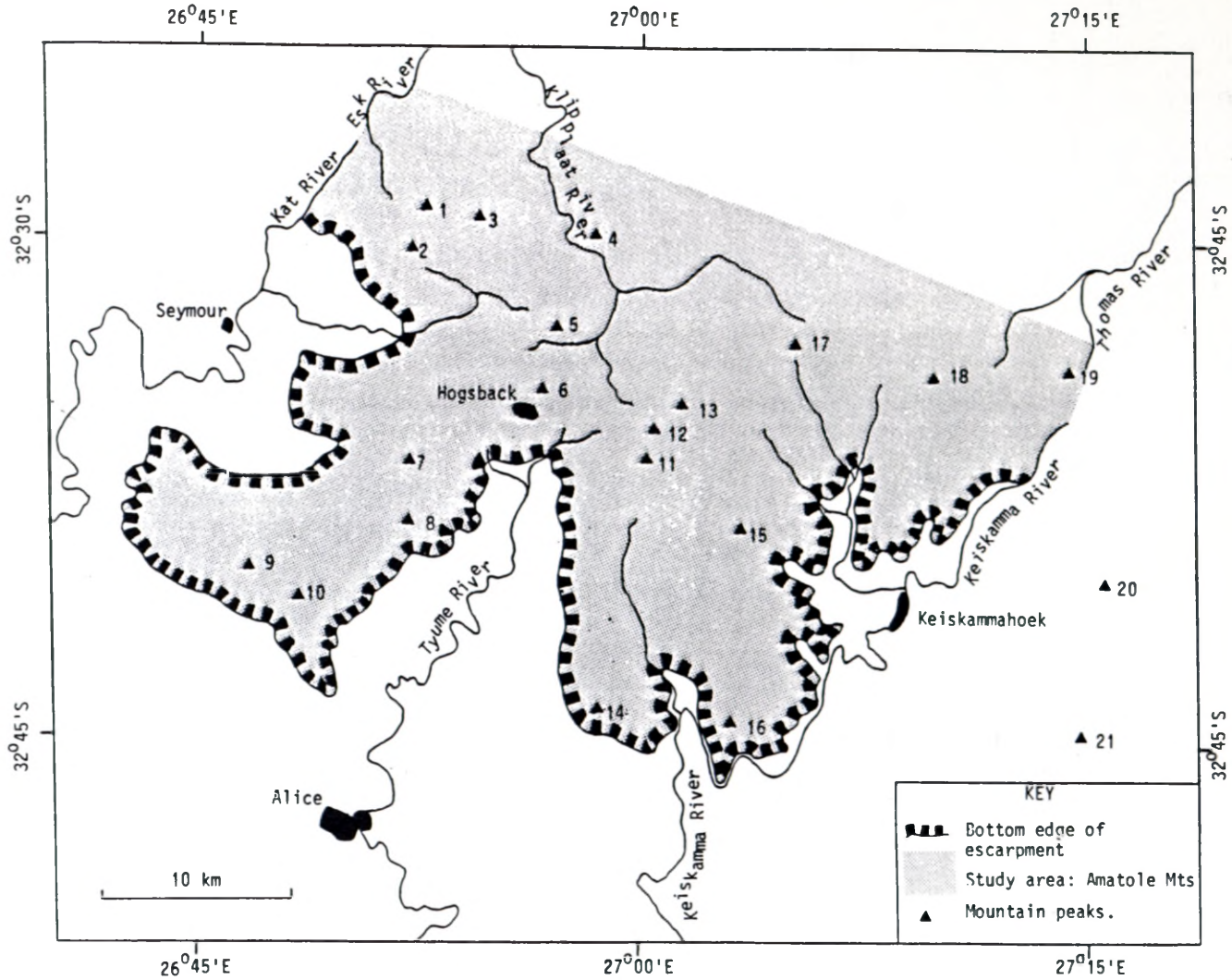

FIGURE 1. — Map of the study area showing the main mountain peaks, rivers and settlements. Amatole Mountains, main peaks: Elandsberg 1(2 017 m), 2(1 960 m), 3(1 877 m); unnamed, 4(1 800 m); Gaika's Kop 5(1 963 m); Tor Doone 6(1 565 m); Menziesberg, 7(1 645 m); Pefferskop, 8(1 086 m); Juanasberg, 9(1 411 m), Tyume Peak 10(1 481 m); Hogsback Peaks, 11(1 836 m), 12(1 826 m), 13(1 937 m); Iron Rock, 14(1 089 m); Gxulu Kop, 15(1 427 m); Mount Macdonald, 16(991 m); Geju Mountain, 17(1 868 m); Cata Mountain, 18(1 641 m); Mount Thomas 19(1 616 m). Pirie Mountains, main peaks: Mount Kempt, 20(1 420 m); Pirie Mountain, 21(1 270 m).

ment, the land, which forms part of the older 'African' erosion surface, slopes gradually into the basins of the Fish and Kei Rivers. Remnants of the still older 'Gondwana' erosion surface remain as scattered peaks, ridges and mesas above the African surface plateau.

The escarpment of the Amatole Mountains falls from the African surface plateau at about 1 500 m to between 700 and 1 000 m, broken in many places by an intermediate platform at about 1 250 m. Above the plateau the highest mountain peaks reach about 2 000 m. The most prominent of the peaks are shown in Figure 1.

The Winterberg Range consists of dolerite sheets, dikes and sills intruded into weak shales and sandstones of the Karoo sequence (Beaufort Group). The resistant dolerite has strongly influenced the landscape, helping to maintain the prominent escarpment and the Gondwana remains, and also causing a number of less important features. The geomorphology of the Hogsback area was described in more detail by Agnew (1958).

Climate

The climate of the Amatole Moutains is warm temperate, characterized by high rainfall, cold winters and moderately warm summers relative to other parts of southern Africa.

Moist air from the south is forced upwards by the escarpment and results in rainfall of between 750 and 1 500 mm per annum, increasing from lower to higher altitudes (Story 1952). Behind the escarpment and on north-facing slopes the rain shadow decreases the rainfall, while local topographic effects may increase it in certain places. Rainfall is more evenly spread throughout the year than is common in many parts of southern Africa, although it is highest in summer, with a peak in February. On the escarpment and south-facing mountain slopes fog is common, and mist gauges have recorded 20 – 30% gains over the standard precipitation (S. Russell pers. comm.).

At the Hogsback settlement (about 1 250 m) the annual average temperature is about 15 °C, with absolute maxima and minima of 40° in summer and -6°

in winter respectively, with some snow falling in most years. Obviously altitude and topography influence temperatures, and very much colder conditions are found at the summits of the main peaks.

Vegetation

The vegetation of the Amatole Mountains is predominantly Afro-montane in affinity (White 1978, 1983), and many typical Afro-montane species reach their southern limit in this region. In addition the Mountains contain a significant Cape element in their flora, together with many SE African endemics. They fall within an area of Highland and Dohne Sourveld in the vegetation classification of Acocks (1975).

The high rainfall in the Amatole Mountains is able to support well developed high forest. These forests are floristically rich, containing both evergreen and deciduous species, with large specimens of *Podocarpus falcatus* being particularly prominent. Well preserved forest is present on most of the escarpment slopes, and in some areas of the intermediate platform. On the mountain peaks, above the plateau, some forest/woodland patches are found in sheltered areas, mainly in south-facing positions. These patches are poor in species and are probably above the altitudinal limit for many forest tree species in this region.

The plateau areas and mountain slopes are largely grass-covered. This 'sour' grassland has provided good grazing land for domestic stock, and this has given rise to the Mountains' name. Amatole (or Amatola) is derived from the Xhosa word *amathole,* the plural of *ithole,* meaning calves. Oral history describes the large herds of cattle owned by pastoralists in the days of Paramount Chief Sandile. These herds thrived on the rich grassland and produced many calves, and the area eventually became known as the 'mountains of calves' *(iintabe zakwamathole)* (Pahl pers. comm.). Excessive grazing by domestic stock can severely reduce grass cover, and this may lead to soil erosion. Serious erosion has occurred in some localities, particularly near the base of the escarpment. At higher altitudes bare ground does not appear prone to excessive erosion, and is usually colonized by unpalatable herbs and small shrubs which help to stabilize the soil surface. *Helichrysum argyrophyllum,* in particular, covers large areas that have been overgrazed, and once it is established, regrowth of grasses appears to be very slow. Grassland in the Amatole Mountains contains a large number of herbs which are highly responsive to fire, being inconspicuous in moribund grassland, but flowering prolifically after burning.

In many places the vegetation is dominated by sclerophyllous shrubs growing up to about 3 m tall. Such areas are relatively poor in species, with *Cliffortia* spp., *Erica brownleeae, Passerina* spp. and *Stoebe* spp. predominating. These communities are often referred to as 'false-macchia' to distinguish them from the true macchia (fynbos) of the Cape region and can colonize grassland areas very rapidly. It is not certain whether they represent a climax stage, or merely a step in the succession from grassland to forest. In many localities old stands of false-macchia may contain forest pioneer species such as *Buddleja salvifolia, Halleria lucida* and *Rapanea melanophloeos,* and probably in the more sheltered localities the succession could procede to forest, while in the more exposed areas a mixed false-macchia/woodland may result. The false-macchia communities are very sensitive to fire, and controlled burning programmes have been employed successfully in eliminating sclerophyllous shrubs and promoting the re-establishment of pasture grasses. Overgrazing pratices may encourage the encroachment of false-macchia. The agricultural management of vegetation in the Amatole Mountains has been discussed by Trollope (1973).

The summits of the highest peaks reach into the Sub-alpine Belt of the Afro-alpine Region (Killick 1978), where a montane moorland vegetation occurs. On rocky areas this consists of small sclerophyllous shrubs, growing to a height of about 0,5 m, often with scattered small trees of *Protea subvestita.* These shrubs may include *Arrowsmithia styphelioides, Chrysocoma tenuifolia, Cliffortia paucistaminea, Erica* spp., *Euryops dyeri, Muraltia* spp. and *Passerina montana,* with *Restio sejunctus* and *Thamnocalamus tesselata* also common. Elsewhere on the summits grassland may occur with *Agrostis* spp., *Aristida junciformis* subsp. *galpinii* and *Festuca* spp. predominating. Little is known about the ecology of the summit vegetation.

Depressions in level areas may support patches of marshland. These are usually dominated by species of Cyperaceae, although the invasion of some marshes near Gaika's Kop by *Phragmites australis* has been noted.

Man has certainly had a significant influence on the vegetation of the Amatole Mountains over a long period of time. Since about 1850 forestry activities and the development of the Hogsback residential/recreational area have caused the introduction of a large number of exotic species. A number of economically important forest trees have been planted in the region, and some of these have become naturalized. The Hogsback settlement is well known as a place where temperate garden plants will flourish, and some of these have also become naturalized. Most of the naturalized exotics in the Amatole Mountains are confined to disturbed ground near plantations and cultivated ground, and most have failed to encroach significantly on the natural vegetation. Important exceptions are *Acacia mearnsii, Pinus* spp., *Rubus fruticosus* and certain grasses, notably *Stipa trichotoma,* which have become widespread.

HISTORY OF BOTANICAL EXPLORATION IN THE AMATOLE MOUNTAINS

The earliest known preserved botanical specimens from the Amatole Mountains are those collected by C. F. Ecklon and C. L. P. Zeyher in 1831/2. Their contemporary, J. F. Drège, and earlier collectors such as W. J. Burchell and C. P. Thunberg collected in neighbouring areas, but did not actually visit the Amatole Mountains (Gunn & Codd 1981). Ecklon and Zeyher collected on 'Schumiberg', the mountain

now known as Juanasberg. While collecting in the area they probably stayed at Tyumie Mission, which had been founded by Rev. J. Brownlee in 1820. Brownlee was himself a keen amateur botanist, but he only started preserving plant specimens after moving to King William's Town in 1825 (Gunn & Codd 1981). During this early period the Amatole Mountains must have been very inaccessible, and further botanical exploration was probably prevented by the series of frontier wars which continued until 1847. In 1860 T. Cooper visited the area, and collected extensively, particularly on Elandsberg.

Soon a number of forest stations were set up along the Winterberg, and gradually the mountains became more accessible (Sim 1907). As botanical exploration of southern Africa proceeded, many important collectors of the late nineteenth century visited parts of the Winterberg, but little material was collected in the Amatole Mountains. The Pirie Mountains in the east, and the Boschberg to the west of the Winterberg were extensively explored by T. R. Sim and P. Macowan respectively. J. Buchanan collected grasses and ferns in the Amatole Mountains while he was stationed at Lovedale Mission from 1876 to 1877, and Sim and W. G. Bennie also made some collections in the area (Sim 1915; Gunn & Codd 1981). However, in general the flora of the area remained poorly known.

In the early part of the twentieth century G. Rattray made extensive collections in the Amatole Mountains, mainly at Hogsback, and some other important collectors visited the area at this time. In 1934 systematic botanical exploration of the Mountains commenced with the appointment of M. H. Giffen as the lecturer in Botany at the nearby South African Native College (now the University of Fort Hare). Giffen collected extensively during the 1930's and 1940's but unfortunately did not distribute duplicate specimens. His main interest was in diatoms and his collections of other plant groups did not receive the attention they deserved (M.H. Giffen pers. comm.).

In 1947 R. Story commenced a botanical survey of the Keiskammahoek District, which includes a portion of the Amatole Mountains, but also includes part of the Pirie Mountains and some lower lying areas (Story 1952). This work is important, not only with respect to the specimens collected, but also in providing a basic ecological account of the District.

Since the mid-1950's regular student field excursions to the Hogsback area have been organized by A. R. A. Noel, A. Jacot Guillarmod and R. A. Lubke of Rhodes University, Grahamstown, which formed the basis of an unpublished checklist. Specimens collected on these visits are housed at RUH, but have not been critically identified. Since 1975 staff and students at the University of Fort Hare have continued collecting in the Amatole Mountains, and a number of ecological research projects have been carried out. Field work undertaken for the present study was concentrated on the more poorly collected localities, habitats and taxa, in order to give a more thorough coverage of the flora of the area. The Giffen collections were finally identified and labelled and his duplicate specimens and other collections were distributed by G. E. Gibbs Russell. By July 1986 nearly 3000 specimens of vascular plants from the Amatole Mountains had accumulated in the Herbarium of the Department of Plant Sciences at the University (UFH), and these form the basis of the present checklist.

The Amatole Mountains have been visited by many botanists from other institutions during the past 20 to 30 years, and they have become botanically well explored in comparison with many areas of southern Africa.

CHECKLIST

The present checklist of vascular plants was compiled from a number of sources. The specimens at UFH have been examined and identified using the relevant Floras and monographs. In problematic cases comparison of material with authentically determined specimens in other herbaria has been made. In many cases, specimens of taxa currently under revision have been seen by or discussed with the taxonomists concerned. Specimens at UFH thus form the basis of the checklist. Duplicate material has been distributed to many other herbaria, but the main duplicate sets are held at K, MO and PRE.

Records of additional taxa have been obtained directly from taxonomic literature where a locality within the study area has been specifically mentioned. An extensive search of the available literature was made for such records, and these have been cited in full in the checklist.

No attempt has been made to systematically search for material from the Amatole Mountains in other herbaria, however a comparison was made with the computerized record (PRECIS) of the collections at PRE. Duplicates of the historically important Cooper, Sim and Rattray collections, together with many recent collections, are listed and these were checked against the present checklist. In a sample section of about a sixth of the PRECIS record no additional taxa were found.

In the course of field work for the present study a few sight records of additional taxa were made, and these are given in the checklist.

Nomenclature follows the list of accepted taxa at PRE (Gibbs Russell *et al.* 1984, 1985), except where more recent treatments are available. Every effort has been made to ensure that the checklist was taxonomically and nomenclaturally up-to-date on completion in December 1986.

DISCUSSION

The checklist includes 1 215 taxa, 65 pteridophytes, 4 gymnosperms, 328 monocots and 818 dicots. The largest families (with over 50 taxa) are the Asteraceae (208 taxa, 17%), Poaceae (83 taxa, 7%), Fabaceae (67 taxa, 6%), Cyperaceae (62 taxa, 5%), Liliaceae (54 taxa, 4%) and Orchidaceae (53 taxa,4%). The two largest genera are *Senecio* (50 taxa, 4%) and *Helichrysum* (49 taxa, 4%), both members of the Asteraceae. No other genus has

more than 14 recorded taxa, but the following have 10 or more: *Argyrolobium, Asplenium, Cheilanthes, Crassula, Disa, Erica, Geranium, Hypoxis, Indigofera, Pelargonium, Rhus, Stachys* and *Wahlenbergia.*

Most of the largest families and genera are groups containing predominantly grassland herbs, notably the Asteraceae and the Poaceae, and this reflects the high diversity of species found in this habitat in the Amatole Mountains. There is also a large number of species of Cyperaceae, a family characteristic of marshland habitats. Taxa typical of forest habitats are only represented, in these figures, by the relatively small genera *Asplenium* and *Cheilanthes* (both Pteridophytes), and the sclerophyllous vegetation only by the genus *Erica.*

Comparison of the figures given above with those given by Goldblatt (1978) for the whole of southern Africa show some similarities in the relative proportions of many taxa. The most noticeable differences in the flora of the Amatole Mountains is the low number of species of Ericaceae, Proteaceae and Restionaceae, characteristic families of the Cape Floral Region, and of Mesembryanthemaceae (included in Aizoaceae by Goldblatt), which are concentrated in arid areas.

Some specimens belonging to genera which are currently in a state of taxonomic confusion or currently under revision could not be identified, these include *Alchemilla, Erica, Harveya, Hypoxis, Indigofera, Lotononis, Pentaschistis, Senecio* and *Wahlenbergia.* Other genera contain probable new species, these include *Cliffortia, Cineraria, Conium, Crassula, Fuirena, Helichrysum, Passerina, Pentzia, Stoebe* and *Watsonia.* Some naturalized exotics recorded in the Amatole Mountains, but lacking voucher specimens, were not identified to species level, and the record of *Othonna* sp. is based on an unsubstantiated literature reference. In some cases, specimens of species divided into varieties or subspecies could not be assigned to these taxa with certainty.

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CHECKLIST

The checklist is divided into four sections: section 1 deals with the Pteridophyta, each genus prefixed with 'P' and numbered according to the sequence in Anthony & Schelpe (1985); sections 2, 3 and 4, which deal with the Gymnospermae, Angiospermae–Monocotyledoneae and Angiospermae–Dicotyledoneae respectively, are numbered according to the system used in the *Flora of southern Africa* (Dyer 1975, 1976). This is based on that of De Dalle Torre & Harms (1963), except the Poaceae which are numbered according to the Kew system, each genus prefixed with 'K'. In the checklist the voucher specimens cited are specimens at UFH, unless otherwise stated or unless a literature citation is given. The following abbreviations for collectors's names are used: *Br* = E.D. Brown, *Fu* = H.D. Furness, *GR* = G.E. Gibbs Russell, *Gi* = M.H. Giffen, *Hu* = A. Hutchings, *Ph* = P.B. Phillipson and *Tu* = M. Tusenius.

PTERIDOPHYTA

LYCOPODIACEAE
P2 Lycopodium
clavatum *L. Fu & Ph 146; GR 3481; Gi 36, 235, 582; Ph 408; Rayment s.n.*
gnidioides *L. f. Gi 236, 1050, 1569, s.n.; Grierson s.n.; Ph 593.*
saururus *Lam. Fu & Ph 42; Ph & Hu 120.*
verticillatum *L. f. Gi 237, s.n.; Rayment s.n.*

SELAGINELLACEAE
P3 Selaginella
caffrorum *(Milde) Hieron. Gi 124; Ph 830.*
kraussiana *(Kunze) A. Br. ex Kuhn Bryant s.n.; Gi 807; Mgudlwa 29.*

OPHIOGLOSSACEAE
P6 Ophioglossum polyphyllum *A. Br. Gi 1502.*

GLEICHENIACEAE
P10 Gleichenia polypodioides *(L.) J.E. Sm. Gi s.n.; Ph 343.*

SCHIZAEACEAE
P12 Schizaea pectinata *(L.) Swartz Rayment s.n.*
P14 Mohria caffrorum *(L.) Desv. Fu & Ph 214; Gi 805, s.n.*

CYATHEACEAE
P19 Cyathea capensis *(L. f.) J.E. Sm. Gi 604, 779, s.n.*

HYMENOPHYLLACEAE
P20 Trichomanes pyxidiferum L. var. melanotrichum *(Schlechtd.) Schelpe GR 3828; Gi 774.*

DENNSTAEDTIACEAE
P23 Histiopteris incisa *(Thunb.) J. Sm. Ph 1505.*
P24 Pteridium aquilinum *(L.) Kuhn* subsp. aquilinum *Fu & Ph 223; GR 3484; Gi s.n.*
P26 Hypolepis sparsisora *(Schrad.) Kuhn Gi s.n.*

ADIANTACEAE/PTERIDACEAE
P32 Adiantum
capillus-veneris *L. Gi 590; Ph 877.*
poiretii *Wikstr.* var. poiretii *Gi 554, s.n.*
P33 Pteris
cretica *L. Gi 553, 798, 799, 1472.*
dentata *Forssk. GR 3810; Gi s.n.*
P34 Cheilanthes
bergiana *Schlechtd. Gi 552, s.n.; Ph 115.*
capensis *(Thunb.) Swartz,* Chumie Forest, *Young sub TRV 190* (PRE), Tor Doone, *Giffen 1278a* (PRE) (Anthony 1984: 102).
concolor *(Langsd. & Fisch.) R. & A. Tryon Gi 3.*
eckloniana *(Kunze) Mett. Gi 796, 845; Ph 1040.*
hirta *Swartz GR 3042; Gi 1457, s.n.; Ph 832.*
multifida *(Swartz) Swartz* subsp. multifida *Gi 1463.*
quadripinnata *(Forssk.) Kuhn Gi 783, s.n.; Ph 1006.*
viridis *(Forssk.) Swartz* var. glauca *(Sim) Schelpe & N.C. Anthony Gi s.n.*
viridis *(Forssk.) Swartz* var. macrophylla *(Kuntze) Schelpe & N.C. Anthony Gi 791, 793, 794, s.n.; Ph 113.*
viridis *(Forssk.) Swartz* var. viridis *GR 3015; Gi s.n.*
P35 Pellaea calomelanos *(Swartz) Link Gi s.n.*

POLYPODIACEAE
P42 Polypodium
polypodioides *(L.) Hitchc.* subsp. ecklonii *(Kunze) Schelpe GR 3815, 3817; Gi 802, 803, s.n.*
vulgare *L. Gi 800, 801, 1341, s.n., Ph 824.*
P43 x Pleopodium simianum *Schelpe & N.C. Anthony Gi 511.*
P44 Pleopeltis
macrocarpa *(Bory ex Willd.) Kaulf. Gi s.n.*
schraderi *(Mett.) Tardieu Fu & Ph 43; Gi 61, s.n.*

ASPLENIACEAE
P52 Asplenium
aethiopicum *(Burm. f.) Becherer Gi 2, 787, 1462, s.n.*
boltonii *Hook. ex Schelpe GR 3829; Gi 786, s.n.*
erectum *Bory ex Willd.* var. erectum *GR 3820; Gi 551, 785, s.n.*
lunulatum *Swartz Gi 528, s.n.*
monanthes *L. Gi 784, s.n.*
platyneuron *(L.) Oakes Gi 1473, s.n.*
protensum *Schrad. Gi s.n.*
rutifolium *(Berg.) Kunze GR 3827; Gi s.n.*
stoloniferum *Bory GR 3826; Gi s.n.*

theciferum *(H.B.K.) Mett.* var. concinnum *(Schrad.) C. Chr. Gi 789.*
trichomanes *L. Ph 878.*
varians *Wall. ex Hook. & Grev.* subsp. fimbriatum *(Kunze) Schelpe Gi s.n.*
P53 Ceterach cordatum *(Thunb.) Desv. Gi 42.*

THELYPTERIDACEAE
P54 Thelypteris
bergiana *(Schlechtd.) Ching Gi 471, 555, s.n.; Ph 917.*
confluens *(Thunb.) Morton Ph 1284.*
pozoi *(Lagasca) Morton Gi 472, 775, s.n.*

ATHYRIACEAE
P61 Cystopteris fragilis *(L.) Bernh. Gi 138, s.n.*

LOMARIOPSIDACEAE
P62 Elaphoglossum acrostichoides *(Hook. & Grev.) Schelpe Gi 759, 804, s.n.; Ph 1270.*

ASPIDIACEAE/DRYOPTERIDACEAE
P66 Dryopteris inaequalis *(Schlechtd.) Kuntze Gi s.n.; Ph 939.*
P67 Cyrtomium caryotideum *(Wall. ex Hook. & Grev.) Presl* var. micropterum *(Kunze) C. Chr. Gi 777, 780, s.n.*
P68 Polystichum
luctuosum *(Kunze) T. Moore GR 3832; Gi 843, s.n.*
monticola *Schelpe & N.C. Anthony Fu & Ph 49; Gi s.n.*
pungens *(Kaulf.) Presl Gi 776, 1426a.*
transkeiense *Jacobsen*, Hogsback, *Jacobsen 4546* (Jacobsen 1978: 170).
P69 Arachnoides foliosa *(C. Chr.) Schelpe*, Hogsback, *Jacobsen 4544* (Jacobsen 1983: 450).
P70 Rumohra adiantiformis *(G. Forst.) Ching Gi s.n.*

BLECHNACEAE
P75 Blechnum
australe *L.* var. australe *Gi 781, 1464, s.n.; Ph 337.*
capense *(L.) Schlechtd. Ph 955.*
giganteum *(Kaulf.) Schlechtd. Gi 782, 1436, s.n.*
tabulare *(Thunb.) Kuhn Gi s.n.*

GYMNOSPERMAE

PODOCARPACEAE
13 Podocarpus
falcatus *(Thunb.) R. Br. ex Mirb. Fu s.n.; Fu & Ph 250; GR 3825, 3835; Gi 75.*
latifolius *(Thunb.) R. Br. ex Mirb. Gi 870; Ph 571.*

PINACEAE
22 Pinus spp. Seen naturalized in many places.

CUPRESSACEAE
38 Widdringtonia nodiflora *(L.) Powrie Gi 234.*

ANGIOSPERMAE — MONOCOTYLEDONEAE

POTAMOGETONACEAE
58 Potamogeton pusillus *L. Fu & Ph 197.*

POACEAE
K2 Coix lacryma-jobi *L. Ph 135.*
K10 Ischaemum fasciculatum *Brongn. Ph 1486.*
K28 Elionurus muticus *(Spreng.) Kunth Fu & Ph 100; GR 3414, 3453, 3490a; Ph & Hu 93.*
K29 Coelorhachis capensis *Stapf Ph 1323.*
K38 Miscanthus capensis *(Nees) Anderss.* var. capensis *Fu & Ph 299; Gi 660, s.n.*
K53 Eulalia villosa *(Thunb.) Nees Ph 1016.*
K71 Andropogon appendiculatus *Nees Br 42, 159; Fu* et al. *10, 11; GR 3477; Gi 1280; Ph & Hu 59.*
K72 Cymbopogon nardus *(L.) Rendle Fu & Ph 222, 300; GR 3133, 3540; Gi 1284, s.n.*
K73 Hyparrhenia hirta *Stapf Gi s.n.*
K78 Trachypogon spicatus *(L. f.) Kuntze Br 10, 15; Fu & Ph 249; Gi 1283.*
K80 Heteropogon contortus *(L.) Roem. & Schult. GR 3445; Ph 979.*
K83 Themeda triandra *Forssk. Br 18, 33; Fu & Ph 244; GR 3452.*
K89 Digitaria
diagonalis *(Nees) Stapf* var. diagonalis *Ph 1469.*
sanguinalis *(L.) Scop. Mahlobo 9.*
setifolia *Stapf Fu & Ph 212; GR 3492a.*
ternata *(A. Rich.) Stapf Gi s.n.*
K94 Alloteropsis semialata *(R. Br.) Hitchc.* subsp. eckloniana *(Nees) Gibbs Russell GR 3447; Ph 1193.*
K104 Brachiaria eruciformis *(J.E. Sm.) Griseb. Ph 1050.*
K107 Paspalum scrobiculatum *L. Gi s.n.*
K112 Echinochloa crus-galli *(L.) Beauv. Gi s.n.*
K115 Oplismenus hirtellus *(L.) Beauv. Gi 659, 1442, s.n.*
K116 Panicum
aequinerve *Nees Fu & Ph 225; GR 3416, 3489a; Gi s.n.*
deustum *Thunb. GR 3130; Gi 163, 512; Ph 105.*
ecklonii *Nees GR 3411, 3454; Ph 1155.*
hymeniochilum *Nees Ph 1324.*
K128 Setaria
sphacelata *(Schumach.) Moss* var. sericea *(Stapf) Clayton Ph 957.*
sphacelata *(Schumach.) Moss* var. sphacelata *Ph 1057.*
K132a Rhynchelytrum nerviglume *(Franch.) Chiov. Ph 964.*
K139 Pennisetum
clandestinum *Chiov. Ph 394.*
macrourum *Trin. Br 19; Fu 681; Fu & Ph 26, 177, 211.*
thunbergii *Kunth Br 01, 17, 24, 113; Fu & Ph 78, 80, 82, 121, 135, 147.*
K160 Ehrharta
calycina *J.E. Sm.* var. calycina *Fu & Ph 357.*
erecta *Lam.* var. erecta *Mdzeke 21; Ph 931.*
K163 Phalaris
angusta *Nees ex Trin. Ph 506.*
arundinacea *L. Fu & Ph 170.*
K164 Anthoxanthum
ecklonii *(Nees ex Trin.) Stapf Dyer 339* (GRA); *Rattray 204* (GRA).
odoratum *L. Ph 906.*
K173 Arundinella nepalensis *Trin. Br 40; Fu 756; Fu* et al. *44; Gi s.n.; Ph 1058.*
K174 Tristachya leucothrix *Nees Br 34, 43; Fu* et al. *12; Fu & Ph 330; GR 3409; Ph & Hu 62.*
K192 Holcus lanatus *L. Fu & Ph 178.*
K197 Helictrotrichon hirtulum *(Steud.) Schweick. GR 3518; Ph 1028.*
K204c Merxmuellera drakensbergensis *(Schweick.) Conert Ph & Hu 1.*
K205 Pentaschistis
setifolia *(Thunb.) McClean Br 16; Fu & Ph 213.*
tysonii *Stapf Fu & Ph 97; GR 3507a.*
sp. *Fu & Ph 358.*
K214 Phragmites australis *(Cav.) Steud. Fu 759; Fu & Ph 175.*
K243 Agrostis
barbuligera *Stapf* var. barbuligera *Br 09; Fu 724; GR 3418.*
bergiana *Trin.* var. bergiana *Mdzeke 17.*
K262 Aristida junciformis *Trin. & Rupr.* subsp. galpinii *(Stapf) De Winter Br 20, 38, 157; Fu* et al. *48; Gi s.n.; Mdzeke 06.*
K263 Stipa
dregeana *Steud.* var. elongata *(Nees) Stapf Ph 797.*
trichotoma *Nees Fu & Ph 317.*
K283 Sporobolus centrifugus *(Trin.) Nees GR 3487a; Gi 1282; Ph & Hu 87.*
K286 Eragrostis
caesia *Stapf Gi s.n.*
capensis *(Thunb.) Trin. Br 134; Fu* et al. *45; GR 3446; Ph 978; Ph & Hu 60.*

curvula *(Schrad.) Nees GR 3444; Ph 1487.*
planiculmis *Nees Fu 752.*
racemosa *(Thunb.) Steud. Ph & Hu 96; Ph 1257.*
K294 Microchloa caffra *Nees Gi s.n.*
K296 Cynodon dactylon *(L.) Pers. Fu & Ph 281; Gi s.n.*
K298 Harpochloa falx *(L. f.) Kuntze Br 158; Fu & Ph 58; GR 3438; Gi 1279a; Ph & Hu 67.*
K371 Fingerhuthia sesleriiformis *Nees Br 12; Fu 722; Fu* et al. *07; Fu & Ph 81, 96.*
K374 Koeleria capensis *(Steud.) Nees Fu & Ph 99; GR 3412; Ph & Hu 86.*
K386 Melica racemosa *Thunb. GR 3519.*
K399 Lasiochloa longifolia *(Schrad.) Kunth Ph 1135; Ph & Hu 162.*
K400 Stiburus alopecuroides *(Hack.) Stapf Br 77.*
K404 Briza
maxima *L. Ph 1525.*
minor *L. Ph 507.*
K407 Poa
annua *L. Mdzeke 20.*
binata *Nees Ph 1347.*
heterogama *Hack. Ph 1169.*
pratensis *L. Fu & Ph 328.*
K417 Festuca
caprina *Nees* var. caprina *Br 118, 153; Fu & Ph 98.*
caprina *Nees* var. irrasa *Stapf GR 3408.*
costata *Nees* var. costata *Br 123; Ph & Hu 89.*
longipes *Stapf Ph 791.*
K418 Vulpia
bromoides *(L.) S.F. Gray Fu* et al. *39.*
myuros *(L.) C.C. Gmel. Fu & Ph 321.*
K428 Bromus
molliformis *Lloyd Fu & Ph 320.*
speciosus *Nees Fu & Ph 132; GR 3413, 3494a; Ph & Hu 92.*
unioloides *H.B.K. Mdzeke 28.*
K432 Brachypodium flexum *Nees GR 3024; Gi s.n.; Russell 2354.*
K433 Lolium multiflorum *Lam. Fu & Ph 343.*
K457 Thamnocalamus tesselata *(Nees) Soderstrom & Ellis Gi 280; Ph 434.*

CYPERACEAE
454 Ascolepis capensis *(Kunth) Ridley Br 109, 135, 147; Fu 735; Fu* et al. *53; Fu & Ph 173, 332.*
456 Carpha
bracteosa *C.B. Cl. Fu & Ph 182, 347.*
glomerata *(Thunb.) Nees Ph 935.*
459 Cyperus
albostriatus *Schrad. GR 3023; Gi 1589.*
difformis *L. Ph 572.*
obtusiflorus *Vahl* var. flavissimus *Boeck. Ph 99, 1298.*
pulcher *Thunb. Ph 110, 950.*
schlechteri *C.B. Cl. Ph 1165.*
semitrifidus *Schrad. Ph 1005, 1164; Ph & Hu 165.*
tenellus *L.* var. tenellus *Gi 1596; Ph 344.*
459a Pycreus
betschuanus *(Boeck.) C.B. Cl. Fu & Ph 122, 157, 200.*
cooperi *C.B. Cl. Br 25, 140; Fu* et al. *14; Fu & Ph 123, 156, 169, 179, 205.*
macranthus *C.B. Cl. Fu & Ph 158, 207.*
mundtii *Nees Fu & Ph 163, 187.*
nitidus *(Lam.) J. Raynal Fu & Ph 102, 164, 171; Ph 237, 238.*
oakfortensis *C.B. Cl. Fu & Ph 28.*
unioloides *(R. Br.) Urb. Fu* et al. *06, 51.*
459c Mariscus
congestus *(Vahl) C.B. Cl. GR 3007; Gi 1593; Ph 156, 239, 1035.*
grantii *C.B. Cl. Ph 1254.*
owanii *(Boeck.) C.B. Cl. Ph 398.*
tabularis *(Schrad.) C.B. Cl. Ph 1299.*
thunbergii *(Vahl) Schrad. Fu & Ph 192.*
462 Kyllinga
elatior *Kunth Ph 109.*
erecta *Schumach. Fu & Ph 186.*
melanosperma *Nees Ph 1296.*
pauciflora *Ridley Br 26, 136, 168; Fu & Ph 159; Ph 242.*
pulchella *Kunth Ph 1188.*
465 Ficinia
bergiana *Kunth Ph 921.*
cinnamomea *C.B. Cl. Gi 3509a; Ph 944.*
fascicularis *Nees Gi 1597, s.n.; Ph 426.*
stolonifera *Boeck. Ph & Hu 76.*
tristachya *(Rottb.) Nees GR 3469.*
467 Fuirena
pubescens *(Poir.) Kunth Fu* et al. *54; Fu & Ph 208; GR 3510a.*
sp. *Ph 1498.*
468 Scirpus
falsus *C.B. Cl. Ph & Hu 17.*
ficinioides *Kunth Br 02, 30, 87, 101, 103; Fu* et al. *29; Fu & Ph 79, 335.*
inanis *(Thunb.) Steud. Fu & Ph 125.*
468a Schoenoplectus paludicola *(Kunth) Palla ex J. Raynal Ph 1328.*
468b Isolepis
cernua *(Vahl) Roem. & Schult. Fu 692; Fu* et al. *40; Fu & Ph 77, 189.*
costata *(Boeck.) A. Rich. Br 167; Fu 693, 719; Fu* et al. *03, 41, 42; Fu & Ph 124; GR 3003.*
fluitans *(L.) R. Br. Fu & Ph 01, 134; Ph 1225.*
ludwigii *Kunth Fu & Ph 162.*
natans *(Thunb.) Dietr. Fu & Ph 29, 131, 201, 209.*
sepulcralis *Steud. GR 3513a; Ph 493.*
469 Eleocharis acutangula *(Roxb.) Schult. Fu & Ph 193.*
471 Fimbristylis complanata *(Retz.) Link Ph 236, 1203.*
471a Bulbostylis
humilis *(Kunth) C.B. Cl. Fu & Ph 7; Ph 1350.*
schoenoides *(Kunth) C.B. Cl. Fu & Ph 83, 103, 333.*
471b Abildgaardia ovata *(Burm. f.) Kral Ph 1310.*
492 Rhynchospora brownii *Roem. & Schult. Fu 728, 733; Fu* et al. *5; Fu & Ph 14, 160.*
494 Tetraria
cuspidata *(Rottb.) C.B. Cl. Fu & Ph 118, 248; GR 3514a; Ph 562.*
macowaniana *B.L. Burtt Fu & Ph 234; Ph 557.*
521 Schoenoxiphium
lehmannii *(Nees) Steud. Gi 513, 1588; Ph 930.*
perdensum *Kukkonen*, Keiskammahoek, near Ghulu Kop, 4,000 ft *Dyer 245a* (K) (Kukkonen 1983: 822).
rufum *Nees Ph & Hu 112; Robinson s.n.*
sparteum *(Wahlenb.) C.B. Cl. Ph & Hu 16, 83, 166.*
sp. aff. S. schweickerdtii *Merxm. & Podlech Ph 430; Ph & Hu 18.*
525 Carex
acutiformis *Ehrh. Br 98; Fu 688, 745, 746; Fu* et al. *52; Fu & Ph 86.*
clavata *Thunb. Fu & Ph 128, 172; Gi 1586.*
petitiana *A. Rich. Ph 940.*
schlechteri *Nelmes Ph 788.*
zuluensis *C.B. Cl. Ph 1170.*

ARACEAE
748 Zantedeschia
aethiopica *(L.) Spreng. GR 3500; Gi 885.*
albomaculata *(Hook.) Baill.* subsp. albomaculata *Ph 1098.*

RESTIONACEAE
804 Restio sejunctus *Mast. Ph 323.*
804c Ischyrolepis distracta *(Mast.) Linder*, Gaika's Kop (Linder 1985: 404).
804j Calopsis paniculata *(Rottb.) Desv. Gi 1017; Ph 411.*
804p Hydrophilus rattrayi *(Pillans) Linder*, Hogsback (Linder 1985: 484).
807 Elegia asperiflora *(Nees) Kunth* var. lacerata *(Pillans) Pillans Fu & Ph 16, 176; Gi s.n.*

XYRIDACEAE
826 Xyris capensis *Thunb.* *Fu 734; Fu* et al. *02; Fu & Ph 30; Gi 273.*

ERIOCAULACEAE
828 Eriocaulon dregei *Hochst.* var. dregei *Br 29, 137; Fu 736; Fu* et al. *09; Fu & Ph 4; Ph 241.*

COMMELINACEAE
896 Commelina
africana *L.* var. africana *Br 21; Ph 142.*
africana*L.* var. krebsiana *(Kunth) C.B. Cl. Gi s.n.*

JUNCACEAE
936 Juncus
bufonius *L. Fu & Ph 202; Ph 499.*
capensis *Thunb. GR 3511a.*
dregeanus *Kunth Br 110, 126; Fu & Ph 3, 85, 101, 188; GR 3512a; Ph 494.*
effusus *L. Fu 714, 743, 744; Fu* et al. *30; Fu & Ph 130, 190; Ph 812.*
exsertus *Buchen. Fu & Ph 191.*
lomatophyllus *Spreng. Br 139; Fu 682, 723; Fu & Ph 08; GR 3002.*
oxycarpus *Kunth Fu* et al. *49; Fu & Ph 27, 129; GR 3504a; Ph 496.*
punctorius *L. f. Fu & Ph 165.*

LILIACEAE
969 Androcymbium longipes *Bak. Gi 640; Ph 1348.*
972 Wurmbea elatior *B. Nord. Br 13; Ph 1074.*
985 Bulbine
abyssinica *A. Rich. Ph 1290.*
lagopus *(Thunb.) N.E. Br. Ph 884, 1333.*
985a Trachyandra saltii *(Bak.) Oberm.* var. saltii *GR 3441; Ph & Hu 51.*
989 Anthericum angulicaule *Bak. Ph 1332.*
990 Chlorophytum
bowkeri *Bak. Ph 1191.*
comosum *(Thunb.) Jacq. Gi 620, 720, 1542.*
1002 Caesia contorta *(L. f.) Dur. & Schinz GR 3471; Ph 770.*
1011 Bowiea volubilis *Harv. ex Hook. f. Ph & Hu 100.*
1012 Eriospermum natalense *Bak. Gi 1106; Ph & Hu 98.*
1024 Kniphofia
baurii *Bak. Ph 1104.*
linearifolia *Bak. Ph 1319.*
northiae *Bak. Gi 564.*
parviflora *Kunth Ph 1277.*
triangularis *Kunth* subsp. triangularis *Fu & Ph 199; Gi 1352.*
uvaria *(L.) Hook. Ph 1078.*
1026 Aloe
arborescens *Mill. Ph 833.*
aristata *Haw. Ph 1138.*
ecklonis *Salm-Dyck Gi 1322.*
ferox *Mill.* Seen at lower altitudes near Mitchell's Pass.
maculata *All. Fu & Ph 313.*
1046 Agapanthus
campanulatus *Leighton* subsp. campanulatus *Ph 1266.*
praecox *Willd.* subsp. orientalis *(Leighton) Leighton GR 3507; Gi 1247.*
1047 Tulbaghia acutiloba *Harv. Gi s.n.; Ph & Hu 101.*
1072 Lilium formosanum *(Bak.) Wallace Ph 1044.*
1079 Albuca
caudata *Jacq. Gi 210; Ph & Hu 69.*
fastigiata *(L. f.) Dryand. Ph 1182.*
nelsonii *N.E. Br. Ph & Hu 66.*
setosa *Jacq. GR 3461; Ph 1139.*
1080 Urginea tenella *Bak. Ph & Hu 55.*
1082 Drimia elata *Jacq. Gi 1650.*
1086 Scilla nervosa *(Burch.) Jessop Fu & Ph 139.*
1088 Eucomis
autumnalis *(Mill.) Chitt.* subsp. autumnalis *GR 3491a.*
comosa *(Houtt.) Wehrh.* var. comosa *Fu & Ph 166; Gi 454.*
1089 Ornithogalum
conicum *Jacq.* subsp. conicum *Ph 941.*
graminifolium *Thunb. Ph & Hu 40.*
juncifolium *Jacq. Fu & Ph 117; Gi 281, 1165; Ph 943; Ph & Hu 39.*
longibracteatum *Jacq. Ph 887.*
paludosum *Bak.*, Elandsberg, *Cooper 219* (K) (Obermeyer 1978: 350).
tenuifolium *Delaroche* subsp. tenuifolium *Fu* et al. *16; Fu & Ph 340; GR 3467; Gi 1165a.*
1090a Ledebouria floribunda *(Bak.) Jessop Ph 968; Ph & Hu 1079.*
1101 Massonia echinata *L. f. Fu 680.*
1113 Protasparagus
aethiopicus *(L.) Oberm. Fu & Ph 263; Gi 849; Ph 884.*
africanus *(Lam.) Oberm. Ph 1136.*
densiflorus *(Kunth) Oberm. Ph 1102; Ph & Hu 64.*
denudatus *(Kunth) Oberm. Gi s.n.*
laricinus *(Burch.) Oberm. Ph 1103; Tu 138.*
macowanii *(Bak.) Oberm. Ph 1106.*
subulatus *(Thunb.) Oberm. Gi 848.*
virgatus *(Bak.) Oberm. Gi 453.*
1113a Myrsiphyllum
asparagoides *(L.) Willd. Fu & Ph 45; Gi 621, g799, 1115; Robinson 1065.*
ramosissimum *(Bak.) Oberm. Nete 21; Ph & Hu 5; Tyibilika 44.*
1147 Behnia reticulata *(Thunb.) Didr. Gi 494, 530, 645.*

AMARYLLIDACEAE
1167 Haemanthus albiflos *Jacq.*, Menziesberg, *Acocks 1114* (K, PRE); Hogsback Forest Reserve, *Dahlstrand 2935* (GRA, STE) (Snijman 1984: 63).
1167a Scadoxus puniceus *(L.) Friis & Nordal Ph 945.*
1175 Nerine undulata *(L.) Herb. GR 3027a; Gi 449, 1523; McGillivray 48; Ph 559, 1486.*
1191 Cyrtanthus
breviflorus *Harv.*, Umgaika Kop, *Cooper 255* (Reid & Dyer 1984: 14).
huttonii *Bak. Gi s.n.; Ph 1113.*
tuckii *Bak.* var. viridilobus *Verdoorn Ph 948.*

HYPOXIDACEAE
1230 Hypoxis
angustifolia *Lam. Fu & Ph 342.*
costata *Bak. GR 3456.*
filiformis *Bak. Br 107; Fu* et al. *47; Fu & Ph 12, 95.*
flanaganii *Bak. Ph 1011.*
hemerocallidea *Fisch. & Mey. GR 3482.*
multiceps *Buchinger Ph & Hu 91.*
rigidula *Bak.* var. rigidula *Ph & Hu 80.*
setosa *Bak. Fu & Ph 344.*
woodii *Bak. Ph 1194, 1496.*
sp. *Br 161; Fu & Ph 322; GR 3483; Ph 993.*

DIOSCOREACEAE
1252 Dioscorea
retusa *Mast. Ph 1192, 1316.*
rupicola *Kunth Gi 995, 1105.*
stipulosa *Uline ex Kunth Gi 1195, 1300; Ph 1227.*
sylvatica *(Kunth) Eckl.*, Hogsback Pass, *Archibald 7556* (GRA) (Archibald 1967: 36).

IRIDACEAE
1260 Syringodea concolor *(Bak.) De Vos Gi s.n.*
1261 Romulea
atrandra *G.J. Lewis* var. lewisiae *De Vos Ph 879.*
autumnalis *L. Bol.*, Summit of Hog's Back, *Scully 346* (SAM) (De Vos 1972: 205).
macowanii *Bak.* var. macowanii *Ph 826.*
1265 Moraea
elliottii *Bak. Fu & Ph 120.*
huttonii *(Bak.) Oberm. Gi 196; Makunga M31; Ph 400.*

muddii *N.E. Br. Ph 1268.*
reticulata *Goldbl. GR 3019; Gi s.n., 443; Ph 1054.*
stricta *Bak. Ph & Hu 36.*
1265a Dietes iridoides *(L.) Sweet ex Klatt Ph 954.*
1295 Aristea
anceps *Eckl. ex Klatt Ph & Hu 73.*
cognata *N.E. Br. ex Weim. Fu & Ph 91; Ph & Hu 72.*
ecklonii *Bak. Makunga M42.*
montana *Bak. Ph 1273.*
schizolaena *Harv. Fu & Ph 233; Gi 477, g1262; Ph & Hu 71.*
1299 Schizostylis coccinea *Backh. & Harv. Fu 684; GR 3136; Gi 165; Makunga M81.*
1301 Hesperantha
huttonii *(Bak.) Hilliard & Burtt Gi s.n. Ph 163.*
longituba *(Klatt) Bak. Gi s.n., Fu & Ph 38.*
pulchra *Bak. Ph 561.*
sp. *Br 88b.*
1302 Ixia orientalis *L. Bol. Br 106, 149, 152; Fu & Ph 88; Makunga M70.*
1303 Dierama
igneum *Klatt Fu & Ph 133; Ph 987.*
pendulum *(L. f.) Bak. Gi 726a; Ph 1343.*
pulcherrimum *(Hook f.) Bak. GR 3018.*
1306 Tritonia
disticha *(Klatt) Bak.* subsp. rubrolucens *(R.C. Fost.) De Vos Makunga M64; Ph & Hu 25.*
lineata *(Salisb.) Ker-Gawl.* var. lineata *Ph 387.*
1311 Gladiolus
dalenii *Van Geel Ph 1229.*
ecklonii *Lehm.* subsp. ecklonii *Makunga M42.*
longicollis *Bak.* var. longicollis *Br 108; Ph & Hu 2.*
ochroleucus *Bak.* var. macowanii *(Bak.) Oberm. Page & Tapson 20.*
ochroleucus *Bak.* var. ochroleucus *Ph 1219.*
1315 Watsonia
longifolia *J.W. Mathews & L. Bol. GR 3545; Gi 118, 726; Makunga M13; Ph & Hu 157, 158.*
pillansii *L. Bol. Gi 490.*
sp. *Fu & Ph 181; Ph & Hu 21, 58.*
1316a Anomatheca laxa *(Thunb.) Goldbl. Gi 142, s.n.; Ph 106.*

ORCHIDACEAE
1407 Stenoglottis fimbriata *Lindl. Gi s.n.*
1408 Holothrix
orthoceras *(Harv.) Reichb. f. Gi 1536, s.n.*
scopularia *(Lindl.) Reichb. f. Fu & Ph 110; Gi 215.*
1414 Huttonaea pulchra *Harv. Gi 604, 613, s.n.*
1422 Habenaria
falcicornis *(Burch. ex Lindl.) H. Bol.* var. caffra *(Schltr.) Renz & Schelpe Gi 605; Ph 1306.*
laevigata *Lindl.* subsp. laevigata *Gi 607.*
malacophylla *Reichb. f. Gi 1538.*
1422b Bonatea cassidea *Sond. Gi 86; Ph 904.*
1429 Neobolusia tysonii *(H. Bol.) Schltr. Ph 1291.*
1430 Satyrium
bracteatum *(L. f.) Thunb.*, Gaika's Kop, *Rattray s.n.* (BOL) (Hall 1982: 122).
cristatum *Sond.* var. cristatum, Hogsback Mtn, *Rattray s.n.* (BOL) (Hall 1982: 94).
hallackii *H. Bol* subsp. ocellatum *(H. Bol.) A.V. Hall*, Hogsback Mtn, *Rattray 15780* (BOL, PRE), *Rattray 86* (GRA) (Hall 1982: 57).
ligulatum *Lindl.*, Hogsback, *Barker 1488* (NBG) (Hall 1982: 46).
longicauda *Lindl.* var. jacottetianum *(Kraenzl.) A.V. Hall Gi 216, 617, 1315.*
longicauda *Lindl.* var. longicauda *Ph 612, 618, 1167.*
parviflorum *Swartz Gi 108; Ph 1267.*
1431 Schizochilus zeyheri *Sond. Gi 217, 603; Ph 1282.*
1433 Brownleea
coerulea *Harv. ex Lindl. Gi 444, 602; Ph 1317.*
macroceras *Sond. Ph 1265.*
parviflora *Harv. ex Lindl. Gi 158.*
recurvata *Sond. Gi 608.*
1434 Disa
aconitoides *Sond.* subsp. aconitoides *Gi 1314.*
chrysostachya *Swartz Gi 214.*
crassicornis *Lindl. GR 3005; Gi 109.*
pulchra *Sond. Ph & Hu 56* (KEI).
sagittalis *(L. f.) Swartz GR 3473; Gi 1162; Ph & Hu 44, 122; Robinson s.n.*
sanguinea *Sond.*, Amatole Mts (Linder 1981a: 70).
scullyi *H. Bol.*, Menziesberg, *Scully s.n.* (BM, BOL, K); Hogsback, *Batten s.n.* (BOL) (Linder 1981a: 119).
stricta *Sond. Gi 614.*
thodei *Schltr. ex Kraenzl.*, Gaika's Kop (Linder 1981a: 115).
tysonii *H. Bol.*, Quarter degree square 3227CA, land over 1500 m (from distribution map, Linder 1981a: 74).
versicolor *Reichb. f. Gi 245, 1319.*
1435 Herschelia venusta *(H. Bol.) Kraenzl.*, Hogsback Mtn, *Rattray* s.n. (BOL) (Linder 1981b: 378).
1436 Monadenia brevicornis *Lindl. Gi 606.*
1437 Disperis
lindleyana *Reichb. f. Gi 609.*
macowanii *H. Bol. Ph 1345.*
micrantha *Lindl. Gi s.n.*
stenoplectron *Reichb. f. Gi s.n.*
wealii *Reichb. f. Gi 1317.*
1440 Corycium
dracomontanum *Parkman & Schelpe Gi 1163; Ph & Hu 163.*
magnum *(Reichb. f.) Rolfe Gi 615.*
1565 Polystachya
ottoniana *Reichb. f. GR 3834; Gi 19, 556, 610.*
pubescens *Reichb. f. Gi 889.*
1648 Eulophia
aculeata *(L. f.) Spreng.* subsp. aculeata *GR 3474; Ph & Hu 131.*
aculeata *(L. f.) Spreng.* subsp. huttonii *(Rolfe) A.V. Hall Gi 1164, 1166, 1246; Ph & Hu 164.*
foliosa *(Lindl.) H. Bol.*, Chumie Peak, *Scully 172* (BOL) (Hall 1965: 228).
macowanii *Rolfe*, Chumie Peak, *Scully 173* (BOL) (Hall 1965: 232).
meleagris *Reichb. f. Ph & Hu 132.*
ovalis *Lindl.* subsp. ovalis *Ph & Hu 65.*
1828 Angraecum
conchiferum *Lindl. Gi 770.*
sacciferum *Lindl. Gi 601.*
1837 Mystacidium
flanaganii *(H. Bol.) H. Bol. Ph 114.*
gracile *(Reichb. f.) Harv. Gi 20, 611.*

ANGIOSPERMAE — DICOTYLEDONEAE

PIPERACEAE
1866 Peperomia
retusa *(L. f.) A. Dietr. Ph 1114.*
tetraphylla *(G. Forst.) Hook. & Arn. GR 3824; Gi 44, 893.*

SALICACEAE
1873 Salix
capensis *Thunb.* subsp. capensis *Gi 249.*
sp. *Tu 118.*

MYRICACEAE
1874 Myrica
brevifolia *E. Mey. ex DC. Fu & Ph 235; Gi 194; Ph 425.*
serrata *Lam.*, Hogsback, *Rattray 303* (PRE) (Killick 1969: 9).

BETULACEAE
1887 Betula sp. *GR 3813, 3814.*

FAGACEAE
1893 Quercus robur *L. Robinson 1058.*

ULMACEAE
1898 Celtis africana *Burm. f. Tu 183.*
1906 Chaetacme aristata *Planch. Ph 786.*

MORACEAE
1961 Ficus
burtt-davyi *Hutch. Fu & Ph 312.*
sur *Forssk. Fu s.n.; Gi s.n.*

URTICACEAE
1980 Laportea peduncularis *(Wedd.) Chew Gi 112, 400, 560, 869, 1019.*
2007 Parietaria micrantha *Ledeb. Ph 1340.*
2013 Droguetia iners *Forssk.* subsp. iners *Gi 1458, 1537.*
2014a Didymodoxa caffra *(Thunb.) Friis & Wilmot-Dear Gi 868, 1545.*

PROTEACEAE
2035 Protea
simplex *Phill. Gi 1160; Lyle 79.*
subvestita *N.E. Br. Gi 1353; Ph 567; Tu 250.*

LORANTHACEAE
2074a Tapinanthus prunifolius *(E. Mey. ex Harv.) V. Tieghem Gi 1065.*

VISCACEAE
2093 Viscum obscurum *Thunb. Fu & Ph 255.*

SANTALACEAE
2104 Colpoon compressum *Berg. Gi s.n.*
2116 Osyridocarpus schimperianus *(Hochst. ex A. Rich.) DC. Gi 478.*
2118 Thesium
pallidum *DC. Gi 230, 1261.*
triflorum *Thunb. ex L. f. Gi 581.*

POLYGONACEAE
2195 Rumex
angiocarpus *Murb. Br 86; Fu 747; Gi 1226, 1276.*
crispus *L. Ph 1287.*
dregeanus *Meisn.* var. dregeanus *Ph 1166.*
lanceolatus *Thunb. Ph 1187.*
sagittatus *Thunb. Gi 498; McGillivray 5; Ph 1036.*
steudelii *Hochst. Ph 1223, 1289.*
woodii *N.E. Br. Fu & Ph 136, 316.*
2201 Polygonum
lapathifolium *L.* var. maculatum *(S.F. Gray) T.-Dyer & Trin. Ph 1025.*
meisnerianum *Cham. & Schlechtd. Fu & Ph 196; Gi s.n.*
persicaria *L. GR 3000.*
salicifolium *Willd. Ph 1315.*

CHENOPODIACEAE
2223 Chenopodium multifidum *L. Ph 1046.*

AMARANTHACEAE
2312 Cyathula uncinulata *(Schrad.) Schinz Gi 863; Ph 1471.*
2328 Achyranthes sicula *(L.) All. Gi 544, 864.*

AIZOACEAE
2379 Psammotropha mucronata *(Thunb.) Fenzl* var. mucronata *Br 156; Gi 406, 1227.*

PHYTOLACCACEAE
2380 Phytolacca
heptandra *Retz. Ph 1301.*
octandra *L. Ph 264.*

MESEMBRYANTHEMACEAE
2405 Aptenia cordifolia *(L. f.) Schwant. Gi 1056.*

CARYOPHYLLACEAE
2429 Stellaria media *(L.) Vill. Ph 887.*
2430 Cerastium
capense *Sond. Br 100, 104, 145; Fu & Ph 331; Ph 926.*
indicum *Wight & Arn. Ph 1482.*
2490 Silene
burchellii *Otth* var. burchellii *Br 127; Ph 1281.*
undulata *Ait. Gi 1081.*
vulgaris *(Moench) Garcke* subsp. macrocarpa *(Marsden) Jones & Turrill Ph 1131.*
2502 Dianthus
basuticus *Burtt Davy* subsp. basuticus var. basuticus *Ph & Hu 168.*
crenatus *Thunb. Ph & Hu 150.*

RANUNCULACEAE
2541 Anemone caffra *Eckl. & Zeyh. Ph 1067; Ph & Hu 138.*
2541a Knowltonia cordata *H. Rasm. Ph 913.*
2542 Clematis brachiata *Thunb. Gi 1250; Mgudlwa 40; Ph 551; Tu 193.*
2546 Ranunculus
baurii *Macowan Ph 432.*
meyeri *Harv. Fu & Ph 2, 50, 334; Gi s.n.*
multifidus *Forssk. Br 102; Fu & Ph 75; GR 3497; Gi 441, 592, 593; Ph 423.*
2548 Thalictrum rhynchocarpum *Dill. & Rich. Gi 467.*

MENISPERMACEAE
2574 Cissampelos torulosa *E. Mey. ex Harv. Fu & Ph 256; Gi 1504; Ph 112.*

TRIMENIACEAE
2759a Xymalos monospora *(Harv.) Baill. Gi 73, g852 s.n.; Ph 869, 870.*

LAURACEAE
2813 Cryptocarya woodii *Engl. Gi 99.*

PAPAVERACEAE
2853 Papaver aculeatum *Thunb. Fu & Ph 87, 141.*

FUMARIACEAE
2858a Phacocapnos pruinosus *(E. Mey.) Bernh. Ph & Hu 167.*
2861 Fumaria muralis *Sond. ex Koch* subsp. muralis *Ph 1526.*

BRASSICACEAE
2875 Heliophila
elongata *(Thunb.) DC. Gi 284, 1245, s.n.; Ph 1097; Ph & Hu 34.*
rigidiuscula *Sond. Fu & Ph 108, 356; Gi 1117.*
2883 Lepidium ecklonii *Schrad.*, Hogsback, *Jacot Guillarmod 4523* (Marais 1970: 93).
2965 Rorippa nasturtium-aquaticum *(L.) Hayek GR 3823.*
2966 Cardamine africana *L. Ph 903.*

CAPPARACEAE
3112 Maerua racemulosa *(A. DC.) Gilg & Ben. Gi 534.*

DROSERACEAE
3136 Drosera aliciae *R. Hamet Fu & Ph 18; Gi 244, 272, 557; Ph & Hu 123.*

CRASSULACEAE
3164 Cotyledon orbiculata *L.* var. oblonga *(Haw.) DC. Ph 897.*
3168 Crassula
cordata *Thunb. Gi 476.*
dependens *H. Bol. Fu 697; Fu & Ph 31.*
natans *Thunb.* var. natans *Fu & Ph 204; Ph 1141.*
nemorosa *(Eckl. & Zeyh.) Walp. Gi 1029a; Ph 907.*
nudicaulis *L.* var. nudicaulis *Br 90; Gi 1332.*
obovata *Haw.* var. obovata *Gi 349.*
orbicularis *L. Ph 884.*

pellucida *L.* subsp. marginalis *(Dryand. in Ait.) Tölken Br 82; Gi 350, 1340; Russell 2351.*
sarcocaulis *Eckl. & Zeyh.* subsp. sarcocaulis *Gi 1577a, s.n.*
sediflora *(Eckl. & Zeyh.) Endl. ex Walp.* var. amatolica *(Schonl.) Tölken*, Cata Ridge, *Dyer 356* (GRA, K. LU, PRE) (Tölken 1977: 374).
spathulata *Thunb. Gi 1018, 1540.*
vaginata *Eckl. & Zeyh. Ph 1065.*
vaillantii *(Willd.) Roth. Ph 1483; Ph & Hu 145.*
sp. *Ph 564; Ph & Hu 53.*

ESCALLONIACEAE
3241 Choristylis rhamnoides *Harv. Gi 320, 1444, s.n.*

PITTOSPORACEAE
3252 Pittosporum viridiflorum *Sims Gi 98, s.n.; Ph 759; Tu 235.*

HAMAMELIDACEAE
3311 Trichocladus ellipticus *Eckl. & Zeyh. ex Walp. Fu s.n.; Gi 97, 890, s.n.; Ph 778, 1122.*

ROSACEAE
3353 Rubus
fruticosus *L. Gi 1348, 1351; Tu 91.*
immixtus *C.E. Gust. Fu & Ph 217; GR 3489; Gi 111, 1152; Tu 106.*
ludwigii *Eckl. & Zeyh.* subsp. ludwigii, Hogsback, *Rattray s.n.* (PRE) (Stirton 1984: 103).
phoenicolasius *Maxim. Ph 937.*
pinnatus *Willd. Gi 275; Ph 938.*
rigidus *Sm. Gi 185, 343; Ph 936.*
3355 Duchesnea indica *(Andr.) Focke GR 3026; Mahlobo 24; Mgudlwa 23.*
3365 Geum capense *Thunb. Gi 341; Ph 390.*
3375 Alchemilla
capensis *Thunb. Ph 512.*
elongata *Eckl. & Zeyh. Fu & Ph 168.*
hirsuto-petiolata *(De Wild.) Rothm. Gi 762; Ph & Hu 135.*
sp. 1 *Ph & Hu 28.*
sp. 2 *Fu 696, 755; Gi 1271; Ph 1320.*
3376 Agrimonia procera *Wallr. Br 176; Gi 402, 1026; Ph 1489.*
3379 Leucosidea sericea *Eckl. & Zeyh. Gi 538; Ph 410, 428; Robinson 1001, 1064; Tu 207, 215.*
3388 Cliffortia
linearifolia *Eckl. & Zeyh. Fu & Ph 305; Tu 92, 94, 95, 102, 103, 119, 126, 194, 221.*
paucistaminea *Weim. Fu & Ph 215, 242; GR 3493a; Gi 342; Tu 222, 229, 240, 244.*
serpyllifolia *Cham. & Schlechtd. Ph 508; Tu 214.*
strobilifera *Murray Tu 254.*
sp. (C. eriocephalina *Cham.* sensu Story 1952: 152) *Story 3318* (GRA).
3389 Rosa odorata *Sweet Ph 916, 1043.*
3396 Prunus
africana *(Hook. f.) Kalkm. Tu 197.*
spp. Introduced species have become naturalized, mainly along roads.

FABACEAE
3446 Acacia
karroo *Hayne Tu 269.*
mearnsii *De Wild. Ph 899.*
melanoxylon *R. Br. Ph 892.*
3468 Entada spicata *(E. Mey.) Druce Fu s.n.; Gi 1058; Tu 190.*
3506 Schotia latifolia *Jacq. Fu s.n.; Fu & Ph 267; Gi 532, 1157.*
3536 Cassia capensis *Thunb.* var. capensis *Gi 1061, 1149; Ph 95.*
3607 Calpurnia
aurea *(Ait.) Benth.* subsp. sylvatica *(Burch.) Brummitt Fu s.n.; Gi 527, g889; Tu 192.*
floribunda *Harv. Gi 161, 1454.*
3608 Virgilia divaricata *Adamson Tu 246.*
3657 Lotononis
carnosa *Benth. Gi 1172; Ph 959, 1094, 1230; Ph & Hu 141.*
cytisoides *Bak.* var. cytisoides *Br 180; Fu & Ph 60; GR 3516.*
sp. *Ph 1218, 1300.*
3662 Aspalathus
frankenioides *DC. Fu & Ph 238; Ph 1280.*
simii *H. Bol.* subsp. katbergensis *R. Dahlg. Ph 969.*
3663 Buchenroedera
holosericea *Benth. GR 3538; Ph 793, 996, 1221; Ph & Hu 14.*
multiflora *Eckl. & Zeyh. GR 3505a; Ph 418; Tu 249.*
tenuifolia *Eckl. & Zeyh.* var. tenuifolia *Ph 981; Tu 260.*
3665 Melolobium alpinum *Eckl. & Zeyh. Ph & Hu 149.*
3673 Argyrolobium
baptisioides *Walp. Br 170; GR 3499a.*
crassifolium *Eckl. & Zeyh. Tu 259.*
longifolium *Walp. Ph 1163, 1237.*
molle *Eckl. & Zeyh. Gi 1142; Ph 98.*
pilosum *Harv. GR 3470, 3506a; Gi 1326; Ph 1161.*
speciosum *Eckl. & Zeyh. Gi s.n.; Ph & Hu 50.*
stipulaceum *Eckl. & Zeyh. Ph 1216.*
sutherlandii *Harv. Ph 1162.*
tomentosum *(Andr.) Druce Gi 334, 763, 979.*
tuberosum *Eckl. & Zeyh. Fu* et al. *46; Ph 1295, 1349.*
3681 Ulex europaeus *L. Gi 34, s.n.*
3688 Medicago lupulina *L. Ph 920.*
3690 Trifolium
burchellianum *Ser.* subsp. burchellianum *GR 3494, 3502a; Gi 719, 1146; Ph 395.*
repens *L. GR 3816.*
3702 Indigofera
alpina *Eckl. & Zeyh. Br 116; Ph 417.*
amatolensis *Phillipson Ph 427; Ph & Hu 9, 139.*
cuneifolia *Eckl. & Zeyh. Gi 67, 335, 487, 1126, 1252; Ph 334; Robinson 1061; Tu 209.*
evansii *Schltr. Gi 1530; Ph 404.*
hedyantha *Eckl. & Zeyh. Br 166; Gi 1230; Ph & Hu 129.*
mollis *Eckl. & Zeyh. Ph & Hu 153.*
monostachya *Eckl. & Zeyh. Br 115; Fu & Ph 71, 353, 354.*
stricta *L. f. Gi 1098, 1647; Ph 146.*
woodii *H. Bol. Gi 239; Ph 1015.*
sp. *Ph 403.*
3703 Psoralea pinnata *L. Fu & Ph 220; GR 3495a, 3821; Gi 336, 493, g840, 1253, 1646; Ph 164, 340, 821.*
3703c Otholobium
caffrum *(Eckl. & Zeyh.) C.H. Stirton Fu & Ph 229; Gi 233, 1310; McGillivray 15.*
stachyerum *(Eckl. & Zeyh.) C.H. Stirton GR 3498a.*
3718 Tephrosia
capensis *(Jacq.) Pers.* var. capensis *Ph 1018.*
grandiflora *(Ait.) Pers. Gi 270; Ph 148, 956.*
macropoda *E. Mey. Ph 1238.*
marginella *H.M. Forbes Gi 1240.*
polystachya *E. Mey. Gi 162; Ph 1039.*
3754 Sutherlandia frutescens *R. Br. Ph 1134.*
3756 Lessertia
flexuosa *E. Mey. Fu & Ph 140.*
harveyana *L. Bol. Gi 1099.*
perennans *DC.* var. perennans *Gi 1113; Ph & Hu 125.*
3807 Desmodium repandum *(Vahl) DC. Gi 837; Ph 1038.*
3810 Alysicarpus rugosus *(Willd.) DC.* subsp. perennirufus *J. Leonard Gi 1070; Ph 1180.*
3852 Vicia spp. Seen at various localities as weeds of cultivation.
3897 Rhynchosia
angulosa *Schinz Ph 1309.*
argentea *Harv. Gi 1107, 1190, 1313.*
caribaea *(Jacq.) DC. Ph 1029.*
cooperi *(Harv. ex Bak. f.) Burtt Davy Ph 1189, 1302.*
harmsiana *Schltr. ex Zahlbr.* var. burchellii *Burtt Davy Ph 1312.*
3898 Eriosema acuminata *(Eckl. & Zeyh.) C.H. Stirton Ph 1019, 1184, 1314.*

3905 Vigna vexillata *(L.) A. Rich. Gi 1064; Ph 139.*
3909 Lablab purpureus *(L.) Sweet* subsp. uncinatus *Verdc. Gi 160, 817, g892.*
3910 Dolichos
angustifolius *Eckl. & Zeyh. Ph 1311.*
linearis *E. Mey. Ph 549, 1213.*

GERANIACEAE
3924 Geranium
amatolicum *Hilliard & Burtt Gi 311; Ph 933, 953, 1000; Ph & Hu 20, 118; Robinson 1062.*
baurianum *Knuth Br 105, 111; Fu & Ph 70; GR 3486; Gi 21; Ph 422, 999.*
caffrum *Eckl. & Zeyh. Gi 1133.*
contortum *Eckl. & Zeyh. Br 148; Gi 226.*
discolor *Hilliard & Burtt Fu & Ph 54, 228; GR 3505; Gi 193, 1112, 1306; Ph 976.*
harveyi *Briq. Ph 1144.*
molle *L. Ph & Hu 133.*
multisectum *N.E. Br. Ph 799; Ph & Hu 146.*
ornithopodon *Eckl. & Zeyh. Gi 505, 918, 1094; Ph 932.*
schlechteri *Knuth Fu 694.*
wakkerstroomianum *Knuth Gi 303, 1309; Ph 1007.*
3925 Monsonia emarginata *(L. f.) L'Hérit. Gi 301, 1143.*
3927 Erodium cicutarium *(L.) L'Hérit. ex Ait. Ph & Hu 134.*
3928 Pelargonium
alchemilloides *(L.) L'Hérit. Gi 95; Ph 143, 1068.*
althaeoides *(L.) L'Hérit. Ph & Hu 125.*
caffrum *(Eckl. & Zeyh.) Harv. Ph & Hu 137.*
cordifolium *(Cav.) Curt. Fu & Ph 224; Gi 308, 1121; Ph 419; Robinson 1060.*
grossularioides *(L.) L'Hérit. Gi 302; Ph 1073.*
iocastum *(Eckl. & Zeyh.) Steud. Gi 1183, 1329, s.n.; Ph & Hu 114.*
multicaule *Jacq.* subsp. multicaule *Gi 1136; Ph 971.*
peltatum *(L.) L'Hérit. Gi 139.*
ranunculophyllum *(Eckl. & Zeyh.) Bak. Ph 1476, 1540.*
reniforme *Curtis Ph 550.*
schizopetalum *Sweet Gi 1119; Ph & Hu 57.*
sidifolium *(Thunb.) Knuth Ph & Hu 142.*
zonale *(L.) L'Hérit. Gi 310, 867, 1100; Ph 151, 392; Tu 204.*

OXALIDACEAE
3936 Oxalis
bifurca *Lodd.* var. bifurca *Ph & Hu 151.*
corniculata *L. Ph 924.*
semiloba *Sond. Br 125; Fu & Ph 341; GR 3524; Ph 1029, 1228 (double flowers), 1275; Ph & Hu 70.*
smithiana *Eckl. & Zeyh. Br 88a; GR 3422; Ph 1064; Ph & Hu 37.*
tragopoda *Salter Gi 1460.*

LINACEAE
3943 Linum
bienne *Mill. Fu & Ph 183.*
thunbergii *Eckl. & Zeyh. Br 162, 184; Fu & Ph 116, 142; Gi 241, 300, 1074, 1234.*

RUTACEAE
3991 Xanthoxylum
capense *(Thunb.) Harv. Fu & Ph 288; Gi 1060.*
davyi *(Verdoorn) Waterm. Gi 1439; Ph 900a, 1462.*
4035 Calodendrum capense *(L. f.) Thunb. Ph 1048.*
4038 Agathosma ovata *(Thunb.) Pillans Ph 895.*
4076 Vepris lanceolata *(Lam.) G. Don Fu s.n.; Gi 895.*
4091 Clausena anisata *(Willd.) Hook. f. ex Benth. Gi 71.*

BURSERACEAE
4151 Commiphora woodii *Engl.* Pefferskop, *Acocks 11900* (Van der Walt 1973: 85).

PTAEROXYLACEAE
4157 Ptaeroxylon obliquum *(Thunb.) Radlk. Ph 1117.*

MELIACEAE
4193 Ekebergia capensis *Sparrm. Ph 1119.*

POLYGALACEAE
4273 Polygala
confusa *Macowan Gi 291; Ph 107.*
fruticosa *Berg. Ph 967.*
hispida *Burch. Fu & Ph 114; Gi 242, 287, 1088, 1304; Ph 393; Ph & Hu 22.*
hottentotta *Presl Br 173; Fu* et al. *13; Fu & Ph 115.*
myrtifolia *L. Gi 1565; Ph 894.*
ohlendorfiana *Eckl. & Zeyh. Br 151; Fu & Ph 55; Gi g718; Ph 391, 986.*
refracta *DC. Ph 1263.*
uncinata *E. Mey. ex Meisn. Fu & Ph 89.*
virgata *Thunb. Ph 582.*
4278 Muraltia
alticola *Schltr. Ph 439.*
macroceras *DC. GR 3492; Gi 195, 247, 1124, s.n.; Ph 414.*
saxicola *Chod. Ph 436.*
4279 Nylandtia spinosa *(L.) Dumort. Ph 1126.*

EUPHORBIACEAE
4299 Phyllanthus incurvus *Thunb. Ph 1232.*
4348 Croton rivularis *E. Mey. Gi 1468; Ph 835.*
4370 Adenocline
acuta *(Thunb.) Baill. Gi 1443, 1535.*
pauciflora *Turcz. Fu & Ph 359; Gi 232, g748.*
4372 Leidesia obtusa *(Thunb.) Muell. Arg. Gi 1546.*
4407 Acalypha
ecklonii *Baill. GR 3010; Ph 1183.*
peduncularis *E. Mey. ex Meisn. Fu & Ph 230, 352; Gi 992, 1024, 1028, 1154, 1181, 1264.*
4416a Ctenomeria capensis *(Thunb.) Harv. ex Sond. Gi 164, 883, 886, 976, 1506.*
4424 Ricinus communis *L. Ph 1049.*
4448 Clutia
affinis *Sond. GR 3822; Gi 41, 70, 412, 768, g886; Mahlobo 41; Ph 150.*
alaternoides *L.* (var. not determined) *Fu & Ph 345; Gi 416, 769; Ph 407; Tu 208.*
disceptata *Prain Gi 1169.*
heterophylla *Thunb. Fu & Ph 296; Gi 1111; Ph 1201; Ph & Hu 77.*
hirsuta *E. Mey. ex Sond.* var. hirsuta *Ph 962.*
katharinae *Pax Fu & Ph 39; Ph 558.*
natalensis *Bernh. ex Krauss Tu 168, 169, 171.*
pulchella *L.* var. pulchella *Fu & Ph 268; Ph 503; Tu 255.*
4498 Euphorbia
epicyparissias *E. Mey. ex Bioss.* var. epicyparissias *Fu 35; Gi 40, 765, 766; Ph 409; Tu 231.*
kraussiana *Bernh.* (var. not determined) *Gi 764; Mahlobo 42.*
pulvinata *Marloth.* Seen among rocks on Gaika's Kop and neighbouring peaks.
sclerophylla *Boiss. Fu & Ph 61; GR 3429.*
striata *Thunb. Fu & Ph 109.*
4498b Chamaesyce inaequilatera *(Sond.) Sojak Ph 1047.*

ANACARDIACEAE
4562 Harpephyllum caffrum *Bernh. Fu s.n.; Tu 188.*
4594 Rhus
chirindensis *Bak. f. Fu s.n.; Fu & Ph 252; Gi 579, 994, 1059.*
dentata *Thunb. Fu & Ph 284, 294; Gi g882, 991; Ph 548; Tu 141.*
dentata *Thunb.* x R. divaricata *Eckl. & Zeyh. Tu 136.*
discolor *E. Mey. ex Sond. Gi 1308; Ph 545.*
fastigiata *Eckl. & Zeyh. Fu & Ph 311; Ph 244.*
fastigiata *Eckl. & Zeyh.* x R. rehmanniana *Engl. Fu & Ph 310; Gi g884.*
incisa *L. f.* var. effusa *(Presl) R. Fernandes Ph 794.*
krebsiana *Presl ex Engl. Tu 270* (possibly crossed with R. divaricata Eckl. & Zeyh.).

pallens *Eckl. & Zeyh.* forma pallens *Robinson 1071.*
pyroides *Burch.* var. gracilis *(Engl.) Burtt Davy Gi 1241, 1294, 1305, 1349.*
pyroides *Burch.* var. pyroides *Gi 323, 324; Ph 552; Russell 2339; Tu 117, 120, 121, 129.*
rehmanniana *Engl. Fu & Ph 308; Gi g883.*
tomentosa *L. Ph 333; Robinson 1070, 1501, s.n.; Tu 239.*

AQUIFOLIACEAE
4614 Ilex mitis *(L.) Radlk. Fu s.n.; Gi 136.*

CELASTRACEAE
4626 Maytenus
acuminata *(L. f.) Loes* var. acuminata *Ph 761, 777, 868; Tu 210.*
heterophylla *(Eckl. & Zeyh.) N.K.B. Robson Fu & Ph 264; Ph 785, 795, 873; Tu 202.*
nemorosa *(Eckl. & Zeyh.) Marais Gi 496, 535, g851, 892; Ph 781, 881, 887; Tu 213.*
peduncularis *(Sond.) Loes. Ph 872, 882; Tu 216.*
undata *(Thunb.) Blakelock Ph 764.*
4628 Putterlickia verrucosa *(E. Mey. ex Sond.) Szyszyl. Gi 1102; Ph 896.*
4630 Pterocelastrus tricuspidatus *(Lam.) Sond. Gi 316.*
4641 Cassine
aethiopica *Thunb. Fu s.n.; Ph 901.*
papillosa *(Hochst.) Kuntze Fu s.n.; Fu & Ph 265; Gi 773; Ph 883, 900b, 1125.*
tetragona *(L. f.) Loes Ph 871.*

ICACINACEAE
4671 Cassinopsis ilicifolia *(Hochst.) Kuntze Fu s.n.; Ph 1124, 1318.*
4686 Apodytes dimidiata *E. Mey. ex Arn.* subsp. dimidiata *Tu 205.*

SAPINDACEAE
4734 Allophylus decipiens *(Sond.) Radlk. Fu s.n.; Fu & Ph 271; Ph 779; Tu 184.*
4836 Hippobromus pauciflorus *(L. f.) Radlk. Gi 533, 1036; Tu 178.*

MELIANTHACEAE
4854 Melianthus
dregeanus *Sond.* subsp. dregeanus *Gi g841, 1526; Ph 415; Tu 245.*
major *L. Gi s.n.*

BALSAMINACEAE
4856 Impatiens hochstetteri *Warb.* subsp. hochstetteri *GR 3128; Gi 312; Mgudlwa 25; Ph 162.*

RHAMNACEAE
4861 Ziziphus mucronata *Willd.* subsp. mucronata *Fu & Ph 291; Ph 104.*
4874 Scutia myrtina *(Burm. f.) Kurz Fu s.n.; Fu & Ph 295; Gi 1063; Mahlobo 12; Tu 203.*
4875 Rhamnus prinoides *L'Hérit. Fu s.n.; Gi 68, 251, 1520; Ph 553.*
4880 Noltia africana *(L.) Reichb. f. Fu & Ph 285; Gi 1585; Ph 589.*
4886 Phylica galpinii *Pillans Gi 276; Ph 566.*
4905 Helinus integrifolius *(Lam.) Kuntze Fu & Ph 254; Gi 1084; Ph 796.*

VITACEAE
4917 Rhoicissus
digitata *(L. f.) Gilg & Brandt Tu 189.*
microphylla *(Turcz.) Gilg & Brandt Ph 554, 1342; Tu 137, 142, 149.*
revoilii *Planch. Gi g881; Ph 763.*
tridentata *(L. f.) Wild & Drum.* subsp. cuneifolia *(Eckl. & Zeyh.) N.R. Urton Fu & Ph 258; Gi 573.*
4918a Cyphostemma cirrhosa *(Thunb.) Desc. Gi 578, 1067; Ph 147.*

TILIACEAE
4957 Sparrmannia ricinocarpa *(Eckl. & Zeyh.) Kuntze Gi 271.*
4966 Grewia occidentalis *L. Fu & Ph 274; Tu 191.*

MALVACEAE
4983 Abutilon sonneratianum *(Cav.) Sweet Ph 159.*
4986a Anisodontea scabrosa *(L.) Bates Ph 511.*
4998 Sida
rhombifolia *L. Ph 1033.*
ternata *L. f. Gi 1541; Russell 2356.*
5007 Pavonia columella *Cav. Gi g844; Ph 1042.*
5013 Hibiscus
aethiopicus *L.* var. aethiopicus *Gi 1083.*
trionum *L. Gi 1086; Ph 386.*

STERCULIACEAE
5056 Hermannia
erodioides *(Burch. ex DC.) Kuntze Ph 820, 914.*
geniculata *Eckl. & Zeyh. Ph 1475.*
velutina *DC. Gi 297; Ph 590; Tu 186.*

OCHNACEAE
5112 Ochna serrulata *(Hochst.) Walp. Fu s.n.; Fu & Ph 262; GR 3820; Gi 314; Ph 875.*

CLUSIACEAE
5168 Hypericum
aethiopicum *Thunb.* subsp. aethiopicum *GR 3428.*
lalandii *Choisy Br 27; Fu & Ph 143; Gi 299, 731, 1077.*
natalense *Wood & Evans Gi 1139.*

VIOLACEAE
5271 Hybanthus capensis *(Thunb.) Engl. Ph 1523.*
5274 Viola arvensis *Murray Ph 984; Ph & Hu 23.*

FLACOURTIACEAE
5296 Kiggelaria africana *L. Gi 285; Tu 131, 206.*
5304 Scolopia
mundii *(Eckl. & Zeyh.) Warb. Fu s.n.; Gi 891; Ph 760, 784.*
zeyheri *(Nees) Harv. Fu s.n.; Tu 268.*
5315 Trimeria
grandifolia *(Hochst.) Warb. Fu & Ph 260; Gi s.n.*
trinervis *Harv. Gi 1159; Ph 772, 798; Tu 185.*
5328 Dovyalis
lucida *Sim*, Hogsback, *Story 369* (Langenegger 1976: 90).
zeyheri *(Sond.) Warb. Ph 789; Tu 180.*

ACHARIACEAE
5374 Ceratiosicyos laevis *(Thunb.) A. Meeuse Gi 1022, 1441, 1654; Ph 502.*
5375 Acharia tragodes *Thunb. Ph 1197.*

CACTACEAE
5417 Opuntia spp. (seen occasionally in disturbed places).

THYMELAEACEAE
5435 Gnidia
baurii *C.H. Wr. GR 3440; Ph 563.*
nodiflora *Meisn. Gi 1109; Ph 389.*
phaeotricha *Gilg Gi 248; Ph & Hu 63, 95.*
pulchella *Meisn. Fu & Ph 286; Gi 250, 485; Ph 243; Tu 237.*
sericea *L.* var. sericea *Fu 677; Gi 415, 486; McGillivray 23; Ph 341, 405.*
5436 Struthiola parviflora *Bartl. ex Meisn. Ph 1202.*
5438 Englerodaphne pilosa *Burtt Davy Fu 58; Gi 208, 559.*
5461 Passerina
filiformis *L. Ph 1200.*
montana *Thoday Ph 1140; Tu 170.*
vulgaris *Thoday Gi s.n.; Tu 217.*

sp. Between the Wolf and Mnyameni Rivers (Story 1952: 99).
5465 Dais cotinifolia *L. Ph 736.*

LYTHRACEAE
5476 Lythrum hyssopifolium *L. Gi 1346.*

MYRTACEAE
5578 Eugenia zeyheri *Harv. Fu & Ph 251.*
5598 Eucalyptus sp. (seen naturalized, mainly near plantations).

ONAGRACEAE
5795 Epilobium capense *Buch. ex Hochst. Br 23, 160, 169, 178; Fu* et al. *15; Fu & Ph 226; Gi 221, 1178.*
Epilobium
hirsutum *L. Gi 975; Ph 1045.*
tetragonum *L.* subsp. tetragonum *Br 133, 175; Fu 717.*
5804 Oenothera rosea *Ait. Ph 397, 925.*

HALORAGACEAE
5833 Laurembergia repens *Berg.* (intermediate between subspecies, see Obermeyer 1973) *Fu & Ph 6; Ph 1325.*
5836 Gunnera perpensa *L. Gi 1042, 1244; Ph 396.*

ARALIACEAE
5872 Cussonia
paniculata *Eckl. & Zeyh. Gi 1161; Ph & Hu 66; Tu 140, 148.*
spicata *Thunb. Mgobozi 21; Tu 176.*

APIACEAE
5894 Centella
asiatica *(L.) Urb. GR 3404; Gi 362, 469, g887; Ph 336.*
glabrata *L.* var. natalensis *Adamson GR 3472; Gi 363, 1237.*
5918 Sanicula elata *Buch.-Ham. GR 3811; Gi 141, 366, s.n.*
5922 Alepidea
acutidens *Weim.*, Nyameni Location, near Keiskama Hoek, 3 500 ft, *Schonland 4461* (GRA, PRE) (Weimarck 1949: 245).
amatymbica *Eckl. & Zeyh.* var. amatymbica *GR 3502.*
amatymbica *Eckl. & Zeyh.* var. aquatica *(Kuntze) Weim. Fu* et al. *36; GR 224.*
capensis *(Berg.) R.A. Dyer* var. capensis *GR 3443, 3488a; Gi 506; Ph 1463, 1468.*
macowanii *Duemmer Ph 1269.*
pilifera *Weim. Fu & Ph 149, 349; Ph & Hu 52.*
serrata *Eckl. & Zeyh.* var. cathcartensis *(Kuntze) Weim. Gi 1260.*
serrata *Eckl. & Zeyh.* var. serrata *Gi 220, 1327; Ph & Hu 74.*
5970 Conium
chaerophylloides *(Thunb.) Sond. Fu & Ph 346.*
fontanum *Hilliard & Burtt* var. alticola *Hilliard & Burtt Ph 1001.*
fontanum *Hilliard & Burtt* var. fontanum, Thomas Mtn, *Hilliard & Burtt 14798* (E, NU) (Hilliard & Burtt 1985: 472).
sp. Hogsback Forest Reserve, *Hilliard & Burtt 10992* (E, NU) (Hilliard & Burtt 1985: 472).
5990 Lichtensteinia interrupta *(Thunb.) E. Mey. Ph 1186.*
5992 Heteromorpha arborescens *(Spreng.) Cham. & Schlechtd. Tu 267.*
5994 Bupleurum mundtii *Cham. & Schlechtd. GR 3508; Ph 1014; Ph & Hu 44* (KEI).
6004a Ciclospermum leptophyllum *(Pers.) Sprague Ph 1032.*
6017a Sonderina humilis *(Meisn.) Wolff Ph 905, 1033.*
6033 Pimpinella caffra *(Eckl. & Zeyh.) D. Dietr. Ph 825, 1061, 1283.*
6038 Sium repandum *Welw. ex Hiern Fu & Ph 195.*
6045 Polemannia
grossulariifolia *Eckl. & Zeyh. Gi 1296, s.n.; Tu 153.*
montana *Schltr. & Wolff.* Gaika's Kop, *Hilliard & Burtt 18805* (E, NU) (Hilliard & Burtt unpublished).
6078 Annesorrhiza schlechteri *Wolff Fu 20; Fu & Ph 25, 106.*
6078b Stenosemis angustifolia *Sond. Ph 1021.*
6116 Peucedanum
caffrum *(Meisn.) Phill. Ph & Hu 43.*
capense *(Thunb.) Sond.* var. lanceolatum *(E. Mey. ex Meisn.) Sond. Gi 69, 368; Ph & Hu 30; Tu 238.*
6142 Daucus carota *L. Tu 100.*

CORNACEAE
6156 Curtisia dentata *(Burm. f.) C.A. Sm. Gi g849.*

ERICACEAE
6237 Erica
alopecurus *Harv.* var. alopecurus *Gi s.n.; Ph 437, 570.*
brownleeae *H. Bol. Fu & Ph 20, 216, 241; GR 3496a; Gi 25, 1321; Ph & Hu 111.*
caespitosa *Hilliard & Burtt Fu & Ph 112, 239; Ph & Hu 12; Ph 1256.*
caffra *L. Gi 698a, s.n.*
caffrorum *H. Bol.* var. caffrorum *Ph 435, 441; Ph & Hu 8.*
frigida *H. Bol. Ph & Hu 6.*
leucopelta *Tausch.* var. leucopelta *Gi s.n.; Ph & Hu 147; Tu 251.*
maesta *H. Bol. Fu & Ph 40, 41; Gi 22; Ph & Hu 33.*
woodii *H. Bol.* subsp. woodii *Ph 1220.*
woodii *H. Bol.* subsp. platyura *Hilliard & Burtt*, Hogsback, *Rattray 216* (PRE) (Hilliard & Burtt 1986).
sp. *Ph 1142.*
6241 Ericinella multiflora *Klotzsch Fu & Ph 221; Gi 1320; Ph & Hu 110; Tu 248, 252.*

MYRSINACEAE
6283 Maesa alnifolia *Harv. Fu & Ph 261; Gi 65, 401, 531, 937.*
6313 Myrsine africana *L. GR 3021; Gi 146, 537; Ph 342, 424; Tu 139, 226.*
6314 Rapanea melanophloeos *(L.) Mez Fu s.n.; Gi 74; Tu 199.*

PRIMULACEAE
6330 Lysimachia nutans *Nees Gi 231, 771, 1135; Ph & Hu 117.*
6338 Anagallis huttonii *Harv. Br 177; Fu 690, 720; Fu 04; Fu & Ph 24.*

PLUMBAGINACEAE
6343 Plumbago auriculata *Lam. Ph 102.*

SAPOTACEAE
6386 Mimusops obovata *Sond. Fu & Ph 259; Ph 880.*

EBENACEAE
6404 Euclea
crispa *(Thunb.) Guerke* var. crispa *Fu & Ph 289; Ph 773; Tu 187, 232, 233.*
schimperi *A. DC.* var. schimperi *Ph 1120.*
undulata *Thunb.* var. undulata, Elandsberg (Story 1952: 93).
6406 Diospyros
austro-africana *De Winter* var. microphylla *(Burch.) De Winter Ph 547; Tu 143, 144, 147.*
dichrophylla *(Gand.) De Winter Gi 1528; Tu 262.*
lycioides *Desf.* subsp. sericea *(Bernh.) De Winter Fu & Ph 292.*
scabrida *(Harv. ex Hiern) De Winter* var. cordata *(E. Mey. ex A. DC.) De Winter Ph 889.*
simii *(Kuntze) De Winter Ph 776, 790.*
villosa *L.* var. villosa *Fu & Ph 253; Gi 978; Tu 201.*
whyteana *(Hiern) F. White Ph 1116; Tu 200.*

OLEACEAE
6428 Chionanthus foveolata *(E. Mey.) Stearn* subsp. foveolata *Fu s.n.; Gi g842.*
6434 Olea
capensis *L.* subsp. macrocarpa *(C.H. Wright) Verdoorn Fu s.n.*
europaea *L.* subsp. africana *(Mill.) P.S. Green Tu 271.*

LOGANIACEAE
6473 Buddleja
auriculata *Benth. Ph 828, 831.*
dysophylla *(Benth.) Radlk. Gi 413; Tu 175.*

saligna *Willd. Tu 173.*
salvifolia *(L.) Lam. Fu & Ph 46, 231; Gi 475, 536, 705; Tu 127, 128, 172.*

GENTIANACEAE
6481 Sebaea
hymenosepala *Gilg Fu & Ph 94; Gi 1141, 3504.*
longicaulis *Schinz Gi 1021, s.n.; Ph 141, 433.*
macrophylla *Gilg Gi 470, s.n.; McGillivray 30.*
repens *Schinz Br 78; Ph 438.*
sedoides *Gilg* var. confertiflora *(Schinz) Marais Fu & Ph 17; Ph 1271.*
thomasii *S. Moore Fu & Ph 48.*
6503 Chironia krebsii *Griseb. Fu & Ph 11, 92; Gi 1116; GR 3515a.*

APOCYNACEAE
6559 Carissa
bispinosa *(L.) Desf.* var. acuminata *(E. Mey.) Codd Gi 96, 930; Ph 111.*
bispinosa *(L.) Desf.* var. bispinosa *Fu & Ph 257.*
6688 Strophanthus speciosus *(Ward & Harv.) Reber Fu & Ph 270; Ph 829, 1154.*

ASCLEPIADACEAE
6777 Xysmalobium
involucratum *Decne. Ph 960; Ph & Hu 61.*
orbiculare *D. Dietr. Ph 1160.*
parviflorum *Harv. ex Scott Elliott Ph 1274; Ph & Hu 47.*
prunelloides *Turcz. Fu & Ph 355; Ph 977; Ph & Hu 97.*
stockenstromense *Scott Elliott Ph & Hu 152.*
undulatum *(L.) Ait. f. Ph 1195.*
6778 Schizoglossum
atropurpureum *E. Mey.* subsp. tridentatum *(Schltr.) Kupicha Gi 243; Ph 1307; Ph & Hu 102.*
cordifolium *E. Mey. Ph & Hu 140.*
hamatum *E. Mey.*, Hogsback Mtn, *Rattray 269* (BOL); *Rattray 15764* (BOL) (Kupicha 1984: 605).
6778a Aspidoglossum gracile *(E. Mey.) Kupicha Ph 1262.*
6779 Fanninia caloglossa *Harv. GR 3484a; Ph 1157.*
6787a Pachycarpus concolor *E. Mey. Ph 1231.*
6791 Asclepias
diploglossa *(Turcz.) Druce Gi s.n.; Ph 998; Ph & Hu 148.*
fruticosa *L. Gi 1038.*
gibba *(E. Mey.) Schltr. Gi 1156; Ph 775.*
peltigera *(E. Mey.) Schltr. Ph 1168.*
physocarpa *(E. Mey.) Schltr. Gr 3009; Gi 1057, 1078; Ph 958.*
stellifera *Schltr. Ph 1133.*
6834 Cynanchum ellipticum *(Harv.) R.A. Dyer Fu & Ph 269b; Gi 525.*
6849 Sarcostemma viminale *(L.) R. Br. Ph 1495.*
6860 Secamone
alpinii *Schultes Gi g839.*
filiformis *(L. f.) J.H. Ross Fu & Ph 269; Gi 1097.*
6861 Sisyranthus barbatus *(Turcz.) N.E. Br. GR 3480; Ph & Hu 99.*
6868 Anisotoma cordifolia *Fenzl Gi s.n.; Ph & Hu 85.*
6875 Riocreuxia torulosa *Decne. Gi 228, 1134, 1183a.*
6899 Tylophora
cordata *(Thunb.) Druce Gi 1104.*
flanaganii *Schltr. Ph 1118.*

CONVOLVULACEAE
6968 Cuscuta
appendiculata *Engelm. Gi 225.*
cassytoides *Nees ex Engelm. Gi s.n.*
6993 Convolvulus farinosus *L. Gi 1080; Ph 1308.*
7003 Ipomoea purpurea *(L.) Roth Ph 1330.*

BORAGINACEAE
7043 Ehretia rigida *(Thunb.) Druce Tu 179.*
7064 Cynoglossum
enerve *Turcz. Ph 1066, 1185.*
hispidum *Thunb. Gi 1027.*
lanceolatum *Forssk. Hughes and Mjwara 32; Ph 1492.*
spelaeum *Hilliard & Burtt Gi 722a; Ph 1294.*
7100 Myosotis
sylvatica *Hoffm. Fu & Ph 184.*
semiamplexicaulis *DC. Ph 1004.*
7109 Lithospermum papillosum *Thunb. Gi 1144, 1170; Ph 92.*
7118 Echium sp. Seen as a weed in ploughed land.

VERBENACEAE
7138 Verbena
bonariensis *L. Ph 1031; Russell 2348.*
venosa *Gill. & Hook. Ph 91.*
7153 Priva meyeri *Jaub. & Spach* var. meyeri *Ph 1236.*

LABIATAE
7211 Ajuga ophrydis *Burch. ex Benth. Fu & Ph 315; GR 3419.*
7212 Teucrium trifidum *Retz. Ph 1235.*
7238 Marrubium vulgare *L. Ph 1303.*
7264 Leonotis
leonurus *(L.) R. Br.* var. leonurus *Fu & Ph 290; Gi 908, 1518; McGillivray 34; Tu 265.*
ocymifolia *(Burm. f.) Iwarsson* var. ocymifolia *Fu & Ph 297; Ph 1214.*
ocymifolia *(Burm. f.) Iwarsson* var. raineriana *(Visiani) Iwarsson Gi 1438, 1519; Mahlobo 20, Ph 1041.*
7281 Stachys
aethiopica *L. Ph 1100, 1544; Ph & Hu 169.*
caffra *E. Mey. ex Benth. Gi s.n.*
flexuosa *Skan GR 3517; Ph 1478; Ph & Hu 11, 161.*
graciliflora *Presl Gi 574, g808, 1475, 1547; Ph 108, 1472.*
grandiflora *E. Mey. ex Benth. Ph 934, 1543, 1546; Ph & Hu 160.*
humifusa *Burch. ex Benth. Ph 1326.*
malacophylla *Skan Ph 1479.*
sp. 1 *Ph 963, 1234, 1464.*
sp. 2 *Ph 1547.*
sp. 3 *Ph 1002, 1259; Ph & Hu 41, 159.*
7290 Salvia
aurita *Thunb.* var. aurita, Tyumie Berg, *Ecklon* (Hedge 1974: 67).
aurita *Thunb.* var. galpinii *(Skan) Hedge Gi g896, 1476.*
repens *Burch. ex Benth.* var. repens *Gi 1140, 1511; Ph 97, 160; Ph & Hu 103.*
verbenaca *L. Ph 1129.*
7328 Mentha
aquatica *L. Br 174; Fu 739, 742; Gi 906.*
longifolia *(L.) Huds.* subsp. capensis *(Thunb.) Briq. Fu & Ph 76.*
7350 Plectranthus
ambiguus *(H. Bol.) Codd Ph 1250.*
ciliatus *E. Mey. ex Benth. Gi 1539.*
ecklonii *Benth. Gi 440, 580, 1459, 1541a; Ph 161.*
fruticosus *L'Hérit. Ph 1209.*
grallatus *Briq.*, Hogsback, *Johnson 1289, 1308* (Codd 1975: 419).
grandidentatus *Guerke Gi 1522.*
laxiflorus *Benth. Gi 827, 1467, 1534, 1547a; Mahlobo 25; Tyibilika 46.*
strigosus *Benth. Gi 492, g894, 1035.*
verticillatus *(L. f.) Druce Ph 1037.*
7350c Rabdosiella calycina *(Benth.) Codd Gi 1016, s.n.*
7359 Syncolostemon densiflorus *Benth. GR 3496, 3497a.*

SOLANACEAE
7400 Withania somnifera *(L.) Dun. Ph 966.*
7401 Physalis peruviana *L. Ph 1497.*
7407 Solanum
aculeatissimum *Jacq. Ph 1198.*
burbankii *Bitter Ph 1355.*
giganteum *Jacq. Gi 1086, 1437; Ph 1253.*
linnaeanum *Hepper & Jaeger Ph 949.*

pseudo-capsicum *L. Ph 1251.*
retroflexum *Dun. Ph 1077, 1354; Russell 2355.*
rigescens *Jacq. Ph 972.*
sarrachoides *Sendtner Ph 1353.*

SCROPHULARIACEAE (Part A)
7471 Diascia
mollis *Hilliard & Burtt*, Hogsback, Bongo Mts 5 000 ft, *Sidey 706* (PRE) (Hilliard & Burtt 1984: 291).
rigescens *Benth. GR 3485; Gi 720a, 1312; Ph 412; Ph & Hu 31; Robinson s.n.*
7476 Nemesia
melissifolia *Benth. Gi 719a; Ph 565, 886, 1024, 1059, 1261; Ph & Hu 126.*
umbonata *(Hiern) Hilliard & Burtt Fu & Ph 351; Gi g727; Ph & Hu 48, 128.*
7477 Diclis
reptans *Benth. Gi 278, 1299, 1600, 1601; Ph 335.*
rotundifolia *(Hiern) Hilliard & Burtt Ph 1172, 1465.*
7480 Linaria vulgaris *Mill. Ph 1088.*
7493 Halleria lucida *L. Fu & Ph 307; Gi 60, 1608; Tu 224.*
7494 Teedia lucida *Rudolphi Gi 192.*
7495 Phygelius capensis *E. Mey. ex Benth. Fu & Ph 283; Gi 268.*
7500 Bowkeria verticillata *(Eckl. & Zeyh.) Schinz Gi 143, 1248; Ph 769.*
7519 Sutera
aurantiaca *(Benth.) Hiern Ph 1101.*
campanulata *(Benth.) Hiern Ph 157.*
pauciflora *(Benth.) Kuntze Gi 1091.*
pinnatifida *Kuntze Ph 90, 158, 1331.*
7523 Zaluzianskya
angustifolia *Hilliard & Burtt Br 92; Gi 1440; Ph 421.*
ovata *(Benth.) Walp. Ph & Hu 143.*
spathacea *(Benth.) Walp. Gi 238; Ph 1278.*
7524 Mimulus gracilis *R. Br. Ph 1138.*
7558 Limosella
aquatica *L. Gi 64a.*
grandiflora *Benth. GR 3017.*
maior *Diels Fu & Ph 203; GR 3001; Gi 64b; Ph 495.*

SELAGINACEAE
7566 Hebenstretia
comosa *Hochst. Ph 1008.*
dura *Choisy GR 3521; Ph 429, 546; Tu 133.*
robusta *E. Mey. Gi 734a, 1125; Ph 406.*
7568 Selago
corymbosa *L. Fu & Ph 303; McGillivray 37.*
galpinii *Schltr. Ph & Hu 29; Rattray 260* (PRE); *Story 3505* (PRE).
7568a Walafrida polystachya *Rolfe Br 131; Fu & Ph 337.*

SCROPHULARIACEAE (Part B)
7579 Veronica anagallis-aquatica *L. Fu & Ph 185; Gi 1070a; Ph 136.*
7597 Melasma scabrum *Berg. Fu & Ph 155; Gi 1602; Ph 240.*
7597a Alectra
capensis *Thunb. Ph 1264.*
sessiliflora *(Vahl) Kuntze* var. sessiliflora *Ph 137.*
7614 Graderia scabra *(L. f.) Benth. Ph 1304.*
7616 Sopubia simplex *(Hochst.) Hochst. Ph 1279.*
7622 Buchnera
dura *Benth. Ph 1272.*
glabrata *Benth. Gi 1174.*
7623 Cycnium racemosum *Benth. Fu & Ph 138; Gi 209, 1122; Ph & Hu 10.*
7625 Striga bilabiata *(Thunb.) Kuntze Gi 223, 1071, 1173, 1606; Ph 138.*
7627 Harveya
coccinea *Schltr. Gi 213; Ph 801.*
huttonii *Hiern Fu & Ph 323.*
speciosa *Bernh. Fu 17; Gi 229, 1607.*
sp. aff. H. bolusii *Kuntze Gi 211, g706.*
7645 Bartsia trixago *L. Br 150; Gi 1182; Ph & Hu 26, 136.*

GESNERIACEAE
7823 Streptocarpus rexii *(Hook.) Lindl. Gi 39, 1548, s.n.*

LENTIBULARIACEAE
7901 Utricularia livida *E. Mey. Fu & Ph 32; Gi 1272, 1342, s.n.*

ACANTHACEAE
7941 Chaetacanthus setiger *(Pers.) Lindl. Ph 1233.*
7978 Sclerochiton odoratissimus *Hilliard Gi 1114; Ph 1190.*
8032 Hypoestes
forskaolii *(Vahl) R. Br. Gi 452.*
triflora *(Forssk.) Roem. & Schult. Gi 1009, 1543.*
8079 Isoglossa
cooperi *C.B. Cl. GR 3819; Gi g59, 1013; Ph 1115, 1199.*
eckloniana *(Nees) Lindau Gi 100, 829; Ph 1460.*
8094 Justicia campylostemon *(Nees) T. Anders. Ph 780.*

PLANTAGINACEAE
8116 Plantago
lanceolata *L. Fu & Ph 65.*
major *L. Ph 918.*

RUBIACEAE
8136 Kohautia amatymbica *Eckl. & Zeyh. Fu & Ph 350; GR 3479.*
8281 Burchellia bubalina *(L. f.) Sims GR 3500a; Gi 55, 56, 191, 1037, 1374.*
8283b Coddia rudis *(E. Mey. ex Harv.) Verdc. Ph 388.*
8285 Gardenia
amoena *Sims Gi s.n.; Ph 1127.*
thunbergii *L. f. Gi s.n.*
8285a Rothmannia capensis *Thunb. Ph 836.*
8348 Pentanisia prunelloides *(Klotzsch ex Eckl. & Zeyh.) Walp.* subsp. prunelloides *Fu* et al. *28; Fu & Ph 73; Gi 246.*
8352 Canthium
ciliatum *(Klotzsch) Kuntze Fu & Ph 272; Gi 508, 811, 888; Ph 504, 771, 787, 1123.*
inerme *(L. f.) Kuntze Fu s.n.; Fu & Ph 266, 276.*
mundianum *Cham. & Schlechtd. Fu s.n.; Fu & Ph 275; Gi 887.*
obovatum *Klotzsch Ph 1128.*
pauciflorum *(Klotzsch) Kuntze Fu & Ph 273.*
8383 Pavetta
capensis *(Houtt.) Brem.* subsp. komghensis *(Brem.) Kok Gi 1158.*
kotzei *Brem. GR 3501a.*
lanceolata *Eckl. Fu s.n.*
8399 Psychotria capensis *(Eckl.) Vatke GR 3835a; Ph 951.*
8435 Galopina
aspera *(Eckl. & Zeyh.) Walp. Ph 1461.*
circaeoides *Thunb. Fu 678; Gi 409; Russell 2357.*
8438 Anthospermum
herbaceum *L. f. Fu & Ph 104, 245; GR 3533; Gi 1025, 1075, 1228, 1445.*
paniculatum *Cruse Fu & Ph 63; GR 3529; Gi 1229.*
pumilum *Sond.* subsp. pumilum *Ph 96.*
spathulatum *Spreng.* subsp. spathulatum *Gi 147; Ph 413; Tu 236.*
8464 Richardia scabra *L. Ph 1051.*
8482 Sherardia arvensis *L. Fu & Ph 319; Ph & Hu 130.*
8486 Galium
amatymbicum *Eckl. & Zeyh. Ph & Hu 7.*
capense *Thunb.* subsp. capense *Fu 18; Ph 992.*
capense *Thunb.* subsp. garipense *(Sond.) Puff*, Hogsback, *Rattray 433* (PRE) (Puff 1978: 242).
scabrelloides *Puff Br 182; Fu & Ph 167; Gi 240, 371.*
thunbergianum *Eckl. & Zeyh.* var. hirsutum *(Sond.) Verdc. Ph 803.*
thunbergianum *Eckl. & Zeyh.* var. thunbergianum *Ph 1060.*
8489 Rubia petiolaris *DC. Gi 1095; Ph 544.*

VALERIANACEAE
8532 Valeriana capensis *Thunb. Fu & Ph 126; Gi 1177.*

DIPSACACEAE
8541 Cephalaria
humilis *(Thunb.) Roem. & Schult. Gi 1335; Ph 994.*
oblongifolia *(Kuntze) Szabo Fu & Ph 180; GR 3486a, 3515.*
8546 Scabiosa
columbaria *L. Fu & Ph 56, 59; Gi 1155; Ph 555, 988.*
tysonii *L. Bol. Gi 1191, 1301; Ph 556, 591; Russell 2340.*

CUCURBITACEAE
8564 Zehneria scabra *(L. f.) Sond.* subsp. scabra *GR 3501; Gi 282, 1194; Ph 1477.*
8628 Coccinea quinqueloba *(Thunb.) Cogn. Ph 1079.*

CAMPANULACEAE
8668 Wahlenbergia
capillacea *(L. f.) A. DC.* subsp. capillacea *Br 179; Ph 1339; Ph & Hu 121.*
cuspidata *V. Brehm. Ph 1258; Ph & Hu 4.*
huttonii *(Sond.) Thulin Fu & Ph 22.*
madagascariensis *A. DC. Gi 1090; Ph 923.*
paucidentata *Schinz GR 3523; Ph 989; Ph & Hu 35.*
procumbens *(Thunb.) A. DC. Gi s.n.; Ph 952, 1211.*
stellarioides *Cham. & Schlechtd. Ph 1208.*
undulata *(L. f.) A. DC. Ph 1226, 1240 (3-locular); Ph 1470 (2-locular).*
zeyheri *Eckl. & Zeyh. GR 3531; Gi 1072.*
sp. aff. W. undulata *Fu* et al. *56; Fu & Ph 72, 144.*
sp. *Ph 1327.*
8668a Craterocapsa montana *(A. DC.) Hilliard & Burtt Br 91; Fu & Ph 68; GR 3430; Gi 435; Ph 440, 912.*

LOBELIACEAE
8681 Cyphia natalensis *Phill. Gi 222; Ph 1179.*
8694 Lobelia
anceps *L. f. Ph 1207.*
angolensis *Engl. & Diels Fu 194.*
flaccida *(Presl) A. DC.* subsp. flaccida *Fu & Ph 69; GR 3493, 3513; Gi 500, 576; Ph 152, 500, 1205.*
preslii *A. DC. Ph & Hu 127.*
8695 Monopsis
decipiens *(Sond.) Thulin Br 22; Fu* et al. *01; Fu & Ph 107; Gi 277, 1270, 1328; Ph 491.*
scabra *(Thunb.) Urb. Fu & Ph 21, 57; Ph 144, 385, 497, 965, 1178, 1338, 1473.*
stellarioides *(Presl) Urb.* subsp. stellarioides *Fu 676; Ph 399; Russell 2353.*
unidentata *(Dryand.) E. Wimm.* subsp. intermedia *P.B. Phillipson Ph 145, 492, 498, 1474.*
8696 Grammatotheca bergiana *(Cham.) Presl* (var. not determined) *Fu 685; Fu & Ph 13, 119; Gi 1316; Ph 154, 1210.*
8699 Laurentia arabidea *(Presl) A. DC. Fu & Ph 9, 348.*

ASTERACEAE
8751 Vernonia
capensis *(Houtt.) Druce Gi 1130.*
dregeana *Sch. Bip. Ph 1181.*
hirsuta *Sch. Bip.* var. hirsuta *Gi 1185.*
natalensis *Sch. Bip. Ph & Hu 81.*
8818 Mikania cordata *(Burm. f.) B.L. Robinson Gi 916, 917.*
8866 Dichrocephala integrifolia *(L. f.) Kuntze Ph 1252.*
8900 Aster bakerianus *Burtt Davy ex C.A. Sm. Fu & Ph 74; GR 3434, 3526; Gi 274, 1131; Ph 101.*
8919 Felicia
filifolia *(Vent.) Burtt Davy* subsp. filifolia *Br 84; Fu & Ph 278; Tu 93, 96, 107, 110, 111, 112, 115.*
muricata *(Thunb.) Nees* subsp. muricata *Fu & Ph 338.*
quinquelobus *(Klatt) Grau Gi 1129, 1189.*
rosulata *Yeo Br 99; Ph 431.*
8921 Microglossa mespilifolia *(Less.) B.L. Robinson Gi 526.*
8925 Nidorella
auriculata *DC. Fu & Ph 227; Gi 389, 438, 1303, 1579.*
undulata *(Thunb.) Sond. ex Harv. Fu & Ph 43.*
sp. *Ph 1239.*
8926 Conyza
pinnata *(L. f.) Kuntze Fu & Ph 35; Gi 1277.*
scabrida *DC. Gi 390; Ph 140; Tu 181.*
sumatrensis *(Retz.) E.H. Walker Br 35, 39; GR 3013; Ph 810.*
8930 Chrysocoma tenuifolia *Berg. Ph 816; Tu 97, 113, 116, 146.*
8936 Brachylaena elliptica *(Thunb.) DC. Gi 977; Tu 174, 177.*
8949 Denekia capensis *Thunb. Fu 757; Fu & Ph 5, 127, 161.*
8992 Gnaphalium
austroafricanum *Hilliard*, Amatola Mts (Hilliard 1983: 20).
capense *Hilliard*, Amatola Mts (Hilliard 1983: 24).
coarctatum *Willd. Gi 140; Ph 501, 927.*
confine *Harv. Ph 1485.*
vestitum *Thunb. Gi s.n.*
8992b Troglophyton capillaceum *(Thunb.) Hilliard & Burtt* subsp. diffusum *(DC.) Hilliard Ph 1341.*
8992d Plecostachys polifolia *(Thunb.) Hilliard & Burtt Ph 510, 942.*
8992e Pseudognaphalium
luteo-album *(L.) Hilliard & Burtt GR 3138; Ph 505.*
undulatum *(L.) Hilliard & Burtt Br 03, 06, 31.*
9006 Helichrysum
adenocarpum *DC.* subsp. adenocarpum *Br 44; Fu 718; Gi 504, s.n.*
allioides *Less.*, Amatola Mts (Hilliard 1983: 239).
alticolum *H. Bol. Ph 822, 1063.*
anomalum *Less. Fu & Ph 279, 298; GR 3465, 3542; McGillivray 39; Ph 540.*
appendiculatum *(L. f.) Less. Fu & Ph 15; GR 3442; Gi 1148, 1187, 1256; Ph 94, 509; Ph & Hu 68.*
argyrophyllum *DC. Fu 675; Fu & Ph 240; Gi 442, s.n.; Ph 235; Zwane 101.*
asperum *(Thunb.) Hilliard & Burtt* var. appressifolium *(Moeser) Hilliard Ph 93, 1020.*
aureonitens *Sch. Bip. Br 07, 89, 122, 146; Fu & Ph 64.*
aureum *(Houtt.) Merrill* var. aureum *Br 83, 117; Gi 382, 1128, 1254; Ph 946.*
bellidiastrum *Moeser Ph & Hu 3.*
cephalodeum *DC. GR 3528; Ph 811, 1096.*
cymosum *(L.) D.Don* subsp. cymosum *Gi 439; Ph 103; Tu 195.*
dasycephalum *Hoffm. Fu & Ph 237.*
ecklonis *Sond. Fu & Ph 153; GR 3451; Robinson s.n.*
epapposum *H. Bol.*, Amatola Mts (Hilliard 1983: 74).
felinum *Less. GR 3486; Gi 1127; Ph 416; Robinson s.n.*
foetidum *(L.) Moench Br 08, 41, 94; Fu & Ph 232; GR 3144, 3503; Gi 276, 379, 1350; Ph 813* (Involucral bracts cream-coloured).
glomeratum *Klatt Br 36; Gi s.n.; Ph 808, 815.*
grandibracteatum *M.D. Henderson GR 3463; Gi 149; Ph 991; Robinson s.n.*
griseolanatum *Hilliard Fu & Ph 19, 37, 236; Gi 3532.*
herbaceum *(Andr.) Sweet Gi 1242; Ph 1017.*
intricatum *DC. Fu 689, 695.*
isolepis *H. Bol.*, Gaika's Kop, *Hilliard & Burtt 18791* (E, NU) (Hilliard & Burtt unpublished data).
krebsianum *Less. Fu* et al. *26; Gi 1255.*
miconiifolium *DC. Br 165; Fu & Ph 145.*
mixtum *(Kuntze) Moeser* var. mixtum *Br 164; Fu* et al. *24; Fu & Ph 219; GR 3459; Gi 1258.*
montis-cati *Hilliard Ph 420.*
mundtii *Harv. Fu* et al. *33; Gi 737.*
nudifolium *(L.) Less. Br 120; Fu* et al. *22; Fu & Ph 301, 302; GR 1324; Ph 538, 541, 1177.*
odoratissimum *(L.) Sweet Fu & Ph 111, 243; GR 3478; Gi s.n.; Ph 809, 1095.*
oxyphyllum *DC. Gi 1192.*
pallidum *DC. Fu* et al. *21; Fu & Ph 148.*
pedunculatum *DC. Ph 100.*

petiolare *Hilliard & Burtt Gi 1147; Tu 196, 242; Zwane 105.*
pilosellum *(L. f.) Less. Br 114, 129; Fu & Ph 325; GR 3439; Ph 990; Robinson s.n.*
platypterum *DC. Ph 823, 1070.*
psilolepis *Harv.* Fu et al. *23; Ph 149.*
rugulosum *Less. Br 04, 32, 112; Fu & Ph 62; GR 3475; Gi 1132.*
sessile *DC. Gi 374; Ph & Hu 32.*
simillimum *DC. Br 14, 37, 183; Fu* et al. *19; Gi 1311; Ph 543.*
spiralepis *Hilliard & Burtt Br 128; Fu* et al. *57; Fu & Ph 154; GR 3458, 3530; Gi 1259.*
splendidum *(Thunb.) Less. Fu & Ph 113; GR 3539; Russell 2341; Tu 101, 109, 247.*
subglomeratum *Less. Gi 1447, s.n.*
tenax *M.D. Henderson* var. tenax *Br 11; Fu & Ph 314; GR 3541; Gi 144; Robinson s.n.*
trilineatum *DC. Ph 867, 1062.*
umbraculigerum *Less. Fu* et al. *27; GR 3543; Gi 448, 1076, 1257; Ph 961, 1224.*
xerochrysum *DC. Gi 505; Ph 735.*
zeyheri *Less. Fu & Ph 277.*
sp. aff. H. mollifolium *Hilliard Ph & Hu 144.*

9037 Stoebe
vulgaris *Levyns* (S. plumosa sensu Story 1952: 98) *GR 3460; Gi s.n.; Ph 539; Tu 98, 108, 114, 256.*
sp. aff. S. vulgaris (S. cinerea sensu Story 1952: 98) *Fu & Ph 218; Gi 145; Tu 220, 223.*

9041 Elytropappus rhinocerotis *(L. f.) Less.*, between Chatha and Dontsa Forest Stations (Story 1952: 153).

9043 Metalasia muricata *(L.) D. Don Fu & Ph 34; Ph 326; Tu 266.*

9050 Relhania
pungens *L'Hérit.* subsp. angustifolia *(DC.) Bremer Fu & Ph 33.*
pungens *L'Hérit.* subsp. pungens *Gi 372, 1323.*

9052 Leysera gnaphalodes *(L.) L. Fu & Ph 52; Ph 542.*

9053 Macowania revoluta *Oliv. Gi 72; Tu 225, 227.*

9055 Athrixia
fontana *Macowan Fu & Ph 23.*
phylicoides *DC. Fu & Ph 304; Gi s.n.*

9058 Arrowsmithia styphelioides *DC. Fu & Ph 36; Gi 148, 212; McGillivray 43.*

9059 Printzia
huttonii *Harv. Gi 35, 385; Ph 765.*
pyrifolia *Less. Gi 1015; Ph 560.*

9078 Pulicaria scabra *(Thunb.) Druce Ph 1090.*

9155 Zinnia peruviana *(L.) L. Ph 1329.*

9311 Tagetes minuta *L. McGillivray 44; Tu 104.*

9320 Eriocephalus tenuifolius *DC. Ph 890.*

9321 Lasiospermum bipinnatum *(Thunb.) Druce Fu & Ph 51.*

9326 Athanasia dregeana *(DC.) Harv. Russell 2352; Ph 1055, 1072.*

9339 Matricaria
nigellifolia *DC.* var. tenuior *DC. Gi 1087; Ph 153.*
nigellifolia *DC.* var. nigellifolia *GR 4032.*

9340 Lepidostephium
asteroides *(H. Bol. & Schltr.) Kroner Gi s.n.*
denticulatum *Oliv. Fu & Ph 55; GR 3506; Gi 1180.*

9351 Cotula
heterocarpa *DC. Fu & Ph 10, 329; GR 3090, 3141, 3448, 3511; Ph 155.*
hispida *(DC.) Harv. GR 3512.*

9356 Schistostephium
crataegifolium *(DC.) Fenzl ex Harv. Ph 1071.*
flabelliforme *Less. Gi 474, 890, 1453.*
hippiifolium *(DC.) Hutch. Gi 43, 89, 1446; Tu 263.*

9358 Artemisia afra *Jacq. ex Willd. Fu & Ph 293; Gi 828; Tu 152, 163.*

9364 Gymnopentzia bifurcata *Benth. Ph 1351.*

9366 Pentzia
cooperi *Harv. Ph 819; Tu 130, 132.*
sp. *Ph 1196.*

9406 Cineraria
albicans *N.E. Br. Ph 814, 1092.*
sp. *Ph & Hu 156.*
aspera *Thunb. Ph 818.*
deltoidea *Sond. Gi 1274, 1297; Ph & Hu 115.*
sp. aff. C. geraniifolia *DC.* (C. geraniifolia sensu Hilliard 1977: 384) *Gi s.n.; Ph 1056, 1276, 1322.*

9411 Senecio
achilleifolius *DC. Ph 1292; Ph & Hu 24.*
adnatus *DC.*, Hogsback, *Hilliard & Burtt 10939* (E, NU) (Hilliard & Burtt unpublished data).
affinis *DC. Ph 1022.*
albanensis *DC.* var. doroniciflorus *(DC.) Harv. Ph 1215.*
asperulus *DC. Br 95; Fu & Ph 324.*
barbatus *DC. Br 143; Ph 1167.*
brevidentatus *M.D. Henderson Fu & Ph 151; GR 3450; Ph 1156, 1159; Ph & Hu 104.*
cathcartensis *Hoffm.* Discoid: *Pu 1222.* Rayed: *Fu & Ph 150; Ph 1260.*
caudatus *DC.*, Amatolas (Hilliard 1977: 467).
cissampelinus *(DC.) Sch. Bip.*, Amatolas (Hilliard 1977: 500).
coronatus *(Thunb.) Harv. Fu & Ph 90; Ph & Hu 84.*
decurrens *DC. Ph & Hu 108.*
deltoideus *Less. Ph 1480.*
digitalifolius *DC. Ph 1176.*
erubescens *Ait.* var crepidifolius *DC.*, Amatola Mts (Hilliard 1977: 422).
glaberrimus *DC. Gi s.n.; GR 3433; Ph 985; Ph & Hu 46, 82.*
gramineus *Harv. GR 3434, 3436; Ph 997.*
heliopsis *Hilliard & Burtt Gi s.n.*
hygrophilus *R.A. Dyer & C.A. Sm. Ph 947, 1175.*
hypochoerideus *DC. Ph & Hu 155.*
inaequidens *DC. Gi 866.*
isatideus *DC. Ph 800, 1023, 1174.*
juniperinus *L. f.* var. epitrachys *(DC.) Harv. Ph & Hu 27; Tu 90, 99, 105, 145, 150.*
lanceus *Ait. Ph 1321.*
latifolius *DC. Ph & Hu 106.*
lygodes *Hiern Gi s.n.; Ph 1091.*
macowaniana *Hilliard Ph & Hu 13.*
macrocephalus *DC. Fu & Ph 327; Ph 911; Robinson s.n.*; see also S. speciosus.
mikanioides *Otto ex Harv. Ph 1481.*
napifolius *Macowan Gi 1168.*
othonniflorus *DC. Ph 983; Ph & Hu 45.*
oxyodontus *DC. Gi 1093, 1263, 1521; Ph 1099; Tu 182.*
oxyriifolius *DC. Ph 1012; Ph & Hu 75.*
polyodon *DC.* var. polyodon *Fu & Ph 206.*
polyodon *DC.* var. subglaber *(Kuntze) Hilliard & Burtt Br 96; Fu & Ph 15, 93, 318; Gi 1267, 1336.*
pterophorus *DC. GR 3488; Gi 399.*
purpureus *L. Gi 1171; Ph & Hu 113.*
quinquelobus *(Thunb.) DC. Gi 1580.*
radicans *(L. f.) Sch. Bip. Ph 1484.*
retrorsus *DC. Ph 1171.*
serratuloides *DC.* var. gracilis *Harv. Fu 687; Fu & Ph 198; Gi s.n.; Ph 1089.*
serratuloides *DC.* var. serratuloides *Ph 1467, 1493.*
speciosus *Willd. Ph 1204* (This collection consists of a series of plants linking S. speciosus with S. macrocephalus), *1466.*
striatifolius *DC. Ph & Hu 105.*
subcoriaceus *Schltr. Br 85; Gi s.n. Ph 910.*
tamoides *DC. Gi 387; Nete 22; Tyibilika 45.*
sp. aff. S. cathcartensis *Hoffm. Ph & Hu 88.*
sp. aff. S. glutinosus *Thunb. Br 79, 119; Ph 339, 1143.*
sp. aff. S. hastatus *L. Fu & Ph 105, 326; Ph 982, 1069; Ph & Hu 15.*
sp. aff. S. speciosus (sensu Hilliard 1977: 432). Discoid: *Fu & Ph 360; GR 3427, 3520; Gi 1302; Ph 1009; Ph & Hu 78.* Rayed: *GR 3424; Gi 865, 1023, 1089, 1184, 1339, s.n.; Ph 1076, 1206; Ph & Hu 49, 109, 154; Robinson s.n.*

9417 Euryops
chrysanthemoides *(DC.) B. Nord.*, 1–2 miles along road to Ghulu Kop, Keiskamma Hoek, *Wells 3185* (GRA, PRE) (Nordenstam 1968: 368).
ciliatus *B. Nord. Ph 802, 827.*
dyeri *Hutch. Ph & Hu 19.*
galpinii *H. Bol. Ph 792.*
spathaceus *DC. Tu 257, 258, 261, 264.*

9420 Othonna sp. (possibly O. natalensis *Sch. Bip.*), Geju Mountain (Story 1952: 156, as O. amplexicaulis).

9426 Garuleum sonchifolium *(DC.) T. Norl. Gi g838; Ph 874.*

9427 Osteospermum
caulescens *Harv. GR 3425; Gi 150.*
grandidentatum *DC. Gi 66, 380, 451, 1176.*

9427b Chrysanthemoides monilifera *(L.) T. Norl.* subsp. pisifera *(L.) T. Norl. Gi 62, 393, 395, g846; Tu 198, 230, 243.*

9431 Ursinia
nana *DC.* subsp. nana *Ph 1494.*
tenuiloba *DC. GR 3432; Ph 1158; Robinson s.n.*

9432 Arctotis arctotoides *(L. f) Hoffm. Fu & Ph 47; Ph 817, 1490.*

9432 Haplocarpha
nervosa *(Thunb.) Beauv. Br 121; Fu & Ph 50, 53; Gi 63, 436.*
scaposa *Harv. Br 124, 141; Fu & Ph 66; GR 3403; Gi 1193; Ph 252.*

9434 Gazania
krebsiana *Less.* subsp. krebsiana, Hogsback, *Rattray 108* (PRE) (Roessler 1959: 403).
linearis *(Thunb.) Druce* var. linearis *Fu & Ph 280.*

9438 Berkheya
acanthopoda *(DC.) Roessl.*, Dontsa Pass, *Acocks 9581* (M,PRE) (Roessler 1959: 256).
bipinnatifida *(Harv.) Roessl.* subsp. bipinnatifida *Ph 834.*
buphthalmoides *(DC.) Schltr. Ph 1004.*
carduoides *(Less.) Hutch. Ph 1075.*
decurrens *(Thunb.) Willd. Ph 1313.*
onopordifolia *(DC.) Hoffm. ex Burtt Davy* var. onopordifolia *Ph 1093.*
purpurea *(DC.) Mast. GR 3534.*
rhapontica *(DC.) Hutch. & Burtt Davy* subsp. aristosa *(DC.) Roessl.* var. aristosa *Fu & Ph 137, 247; GR 3462, 3510; Gi 1345.*
speciosa *(DC.) Hoffm.* subsp. speciosa *GR 3486a, 3491; Gi 1179.*

9461 Carduus tenuiflorus *Curtis GR 3406.*

9462 Cirsium vulgare *(Savi) Ten. GR 3146.*

9528 Gerbera
kraussii *Sch. Bip. Ph 1545.*
parva *N.E. Br. Ph 1010.*

9528b Piloselloides hirsuta *(Forssk.) C. Jeffrey Gi 135, 373, 383.*

9561 Tolpis capensis *(L.) Sch. Bip. Br 138; Gi 1231; Ph 980.*

9572 Hypochoeris radicata *L. Br 154; Fu & Ph 67; GR 3012, 3405, 3522; Ph 928.*

9592 Taraxacum officinale *Weber Ph 995.*

9595 Sonchus
asper *(L.) Hill* subsp. asper *Ph 1288.*
dregeanus *DC. Ph 974, 975; Ph & Hu 90.*
oleraceus *L. Ph 919, 929, 1026.*
wilmsii *R.E. Fries Ph 1173.*

9596 Lactuca
capensis *Thunb. Ph & Hu 94.*
serriola *L. Ph 1027.*
tysonii *(Phill.) C. Jeffrey Ph & Hu 79.*

9605 Crepis hypochoeridea *(DC.) Thell. Ph 973.*