

Floristic analysis of the Mountain Zebra National Park, Eastern Cape

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As part of a larger project to assess the vegetation dynamics and conservation potential of the enlarged Mountain Zebra National Park, a checklist was produced to determine the plant species richness for this area. Six hundred and eighty species, represented by 333 genera and 87 families were identified. One hundred and eighty species belong to the Monocotyledoneae and 479 species to the Dicotyledoneae. By far the largest families are the Asteraceae with 129 and the Poaceae with 82 species. Thirteen Red Data species were recorded. A number of fynbos elements were encountered, the most noteworthy being two families endemic to the Cape Floristic Region, the Penaeaceae and Grubbiaceae. A very high species to square kilometre ratio of 5.05 supports the area's rich floristic composition.

Key words: Floristic analysis, species richness, plant species list, Mountain Zebra National Park.

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Introduction

The Mountain Zebra National Park (MZNP) was proclaimed a protected area in 1937 (Wahl & Naude 1996). It is situated in a zone transitional between the Nama Karoo Biome in the west and the Grassland Biome in the east (Hoffman 1998), but classified as being part of the Nama Karoo (Low & Rebelo 1998). The primary objective for this park is to conserve a viable, genetically uncontaminated, representative population of the Cape Mountain Zebra *Equus zebra zebra*. Secondary objectives are the conservation of a representative spectrum of the typical faunal elements under natural conditions, and secondly, vegetation types that are unique to this region (Van der Walt 1980).

In 1996, a process was initiated to incorporate adjacent farmland into the park. This will increase the park's area substantially, from the original 6 536 ha to approximately 18 000 ha (Brown & Bezuidenhout 2000),

once current negotiations have been completed. Two extensive vegetation studies have been conducted: a phytosociological reconnaissance of the original MZNP by Van der Walt (1980); and a phytosociological account, describing and mapping the plant communities of the newly acquired De Rust section of the MZNP (Brown & Bezuidenhout 2000). As part of a larger and long-term research project, the latter study aimed at assessing the habitat suitability to establish large herbivores on the new farms.

No annotated comprehensive plant species list of MZNP is available. Surveys of the floristic diversity and species richness of an area are fundamental to any wildlife management programme and conservation policy. A floristic database of an area serves as a permanent reference to establish site uniqueness and species richness, monitoring changes in species occurrence and the distribution of endemic and Red Data species. This study set out to provide a floristic checklist for the



Figure 1. Location of the study area.

(Bankberg 1 927 m and Rooiplaai 1 360 m above sea level. The Wilgerboom River traverses the central valley of the southern section and exits the park at 1 200 m a.s.l. to the north. The northwest (De Rust) is dominated by Salpeterkop (1 514 m a.s.l.), a typical mesa of the Karoo landscape with a steep gradient. This gives way to a mid-slope plateau, footslopes and an undulating plain with seasonally dry river beds towards the eastern and central part of the park, at approximately 1 000 m above sea level. The heterogeneous vegetation is co-dominated by dwarf shrubs and grasses, with patches of incipient forest in drainage lines and the extensive grass plain of Rooiplaai.

MZNP including the newly acquired farms De Rust, Doornhoek and Welgedacht.

Study area

Location

The MZNP is found in the Eastern Cape Province, situated 24 kilometres west of Cradock. The area under discussion extends from 32°06'50"–32°18'50"S and 25°24'00"–25°30'00"E and includes the former MZNP (6 536 ha), De Rust (1 712 ha), Doornhoek (4 027 ha) and Welgedacht (1 189 ha).

Topography

The southern parts of the MZNP are characterised by mountainous terrain with steep-sided drainage lines from mountaintops

Climate

The mean rainfall for the area is 382 mm per annum (1962–1998), ranging from the highest rainfall of 651 mm (1977) to the lowest rainfall of 153 mm (1966), as measured at the MZNP weather station. The rainy season occurs mostly in late summer and autumn, and the winters are relatively dry. Mean monthly minimum and maximum temperatures vary from 6–28 °C in summer (September–March) and from 0–20 °C during winter (April–August) (Brown & Bezuidenhout 2000). Extreme temperatures range from –7 °C to 37 °C and severe frost is likely during the period May–October (Van der Walt 1980). Van der Walt (1980), further states that the vegetation is subjected to continuous climatic variables due to the influence of an arid climate from the east and a more moderate climate from the west. The southern mountainous peaks are exposed to increased cloud cover, extreme temperature and moisture regimes, with local climate variations resulting in a number of microhabitats. Bankberg forms a barrier to cold winter fronts, thus a warmer climate is experienced in the sheltered val-

ley below whilst regular snowfall occurs on higher lying areas (Van der Walt 1980).

Geology and soil

Mudstone, sandstone and shale of the Beaufort Group of the Karoo Supergroup dominate the MZNP (Keyzer 1997). These mudstones and shales are relatively unstable and subject to mechanical and chemical weathering. The material derived from these processes is usually rich in clay and salts. In addition, the MZNP sediments have been penetrated on a large scale by Post-Karoo dolerite intrusions (Keyzer 1997), forming large sheets and a number of dykes. The southern part of the park is characterised by dolerite outcrops that are remnants of the former sheet, of which the resistant Bankberg is a prominent feature (Van der Walt 1980). Highly fertile clayey soils are also derived from the fairly resistant doleritic parent material. Calcareous bedrock (limestone) lines some river courses (*pers.obs.*), formed by chemical precipitation from sandstone or mudstone and found in tributaries of the Wilgerboom River from Kranskop peak (Brown & Bezuidenhout 2000).

Methods

Plant collections were undertaken over a two-year period during 1999 and 2000. The areas covered included De Rust, Doornhoek, Welgedacht and the following areas within the former MZNP: Rooiplaat, Kranskop, the top of Bankberg and along the kloofs down to Weltevrede and Fonteinkloof. Collection sites were selected randomly within the extensive area according to topography and plant phenology, ensuring that all variations in habitat were considered and sampled. All specimens were labelled, pressed and dried, then identified by the Selmar Schönland Herbarium in Grahamstown and form part of the collection of the Kimberley South African National Parks Herbarium. Selected duplicates are kept at the Selmar Schönland Herbarium and Technikon SA.

The final species list was compiled from various sources: Pond and Beesley's collection, van der Walt (1980) and a species list supplied by PRECIS (National Herbarium Pretoria Computerised Infor-

mation System) for the MZNP. Plant names were entered into and consolidated by SaS (2002), a database for the Cape and Karoo floras. While Arnold & De Wet (1993) served as a basis for nomenclature and arrangement, SaS introduced the latest taxonomic changes and appropriate author updates. Only identified species were listed. Red Data status, also produced by SaS, follows Hilton-Taylor (1996). Introduced species were included and are followed by an asterisk (*).

Results

The MZNP plant species list totals 680 species, which represent 333 genera and 87 families. Flowering plants are represented by Monocotyledoneae with 180 species in 14 families (16 % of the total number of families) and Dicotyledoneae with 479 species in 62 families (71 %). The Bryophytes with seven families (8 %) and the Pteridophytes with four families (5 %) represent non-flowering plants (Fig. 2). The complete species list, separated into the different plant divisions, sorted by family and indicating the species' Red Data status where applicable, appears as Appendix 1. This study added 100 new species to previous records for the MZNP. Introduced species were included in all floristic calculations.

The MZNP flora is represented by 87 families, as reflected in Table 1.

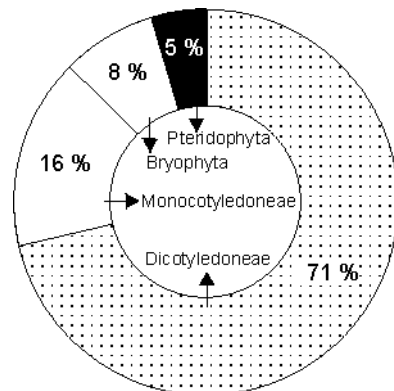


Fig. 2. Plant divisions reflected as a percentage of the total number of plant families.

Table 1
*An alphabetical list of plant families collected in the MZNP,
indicating the number of genera and species in each family*

Families	Genera	Species	Families	Genera	Species
BRYOPHYTES			Commelinaceae	2	2
Aytoniaceae	1	1	Convolvulaceae	3	3
Bryaceae	1	1	Crassulaceae	2	18
Fissidentaceae	1	1	Cucurbitaceae	2	3
Grimmiaceae	2	2	Dipsacaceae	1	2
Pottiaceae	2	2	Ebenaceae	2	5
Ptychomitriaceae	1	1	Ericaceae	1	5
Ricciaceae	1	2	Euphorbiaceae	2	10
PTERIDOPHYTES			Fabaceae	13	35
Anemiaceae	1	1	Gentianaceae	2	2
Aspleniaceae	1	2	Geraniaceae	4	21
Equisetaceae	1	1	Grubiaceae	1	1
Pteridaceae	2	7	Haloragaceae	1	1
MONOCOTYLEDONEAE			Kiggelariaceae	1	1
Alliaceae	1	1	Lamiaceae	7	13
Amaryllidaceae	5	9	Linaceae	1	1
Asparagaceae	1	12	Loranthaceae	1	1
Asphodelaceae	5	13	Malvaceae	5	15
Commelinaceae	2	3	Melianthaceae	1	1
Convallariaceae	2	2	Mesembryanthemac.	10	22
Cyperaceae	9	18	Molluginaceae	3	3
Hyacinthaceae	7	17	Myrsinaceae	2	2
Hypoxidaceae	2	3	Nyctaginaceae	1	1
Iridaceae	8	12	Oleaceae	1	1
Juncaceae	1	6	Orobanchaceae	1	1
Poaceae	47	82	Oxalidaceae	1	5
Potamogetonaceae	1	1	Papaveraceae	2	2
Tecophilaeaceae	1	1	Pedaliaceae	2	2
DICOTYLEDONEAE			Penaeaceae	1	2
Acanthaceae	2	3	Plantaginaceae	1	1
Aizoaceae	3	6	Polygalaceae	2	6
Amaranthaceae	5	10	Polygonaceae	2	2
Anacardiaceae	2	9	Portulacaceae	1	1
Apiaceae	6	6	Ranunculaceae	3	3
Apocynaceae	12	14	Rhamnaceae	1	1
Araliaceae	1	1	Rosaceae	1	1
Asteraceae	51	129	Rubiaceae	4	5
Bignoniaceae	1	1	Salicaceae	2	2
Boraginaceae	3	4	Santalaceae	1	1
Brassicaceae	10	13	Sapindaceae	1	1
Buddlejaceae	2	3	Scrophulariaceae	10	31
Campanulaceae	3	12	Solanaceae	5	12
Caryophyllaceae	3	4	Thymelaceae	2	3
Celastraceae	2	4	Urticaceae	1	2
			Verbenaceae	4	4
			Viscaceae	1	2
			Vitaceae	2	2
			Zygophyllaceae	2	2
			TOTAL	87	680

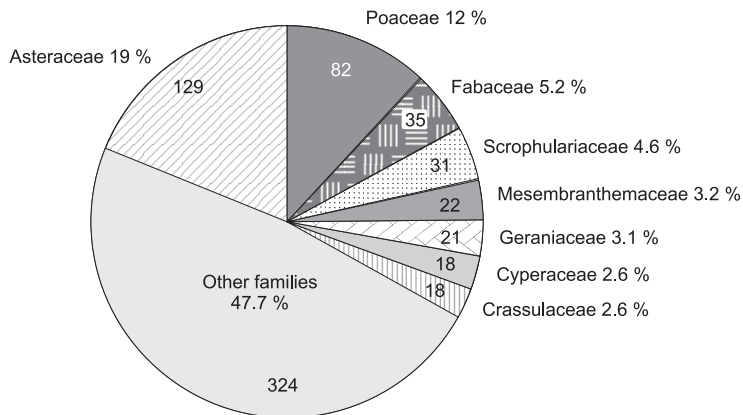


Fig. 3. Dominant plant families reflecting the number of species and percentage of the total flora

Eight families dominate the MZNP flora. By far the two largest families are the Asteraceae with 129 species, reflecting 19 % of the total flora and the Poaceae with 82 species (12 %). These are followed by much smaller, yet significant families, represented by the Fabaceae with 35 species (5.2 %), Scrophulariaceae 31 (4.6 %), Mesembryanthemaceae 22 (3.2 %), Geraniaceae 21 (3.1 %), Cyperaceae 18 (2.6 %) and the Crassulaceae also with 18 species and 2.6 % of the species total (Fig. 3). These eight fam-

ilies represent 52.3 % of the MZNP flora, while the other 79 families reflect the remaining 47.7 %.

Twenty-nine genera are represented by five or more species. These are listed in Table 2.

Thirteen Red Data species were found, representing 1.9 % of the MZNP flora (Fig. 4). Red Data species and the categorisation are indicated in the species list (Appendix 1). Symbols and terms used in Appendix 1:

Table 2
Dominant genera and number of species per genus

Genus	No of species	Genus	No of species
<i>Helichrysum</i>	20	<i>Juncus</i>	6
<i>Senecio</i>	17	<i>Lotononis</i>	6
<i>Pelargonium</i>	17	<i>Delosperma</i>	6
<i>Crassula</i>	14	<i>Cheilanthes</i>	6
<i>Asparagus</i>	12	<i>Oxalis</i>	5
<i>Euryops</i>	9	<i>Polygala</i>	5
<i>Euphorbia</i>	9	<i>Pentzia</i>	5
<i>Selago</i>	9	<i>Pteronia</i>	5
<i>Eragrostis</i>	8	<i>Erica</i>	5
<i>Rhus</i>	8	<i>Lessertia</i>	5
<i>Wahlenbergia</i>	8	<i>Felicia</i>	5
<i>Indigofera</i>	7	<i>Ornithogalum</i>	5
<i>Hermannia</i>	7	<i>Stachys</i>	5
<i>Jamesbrittania</i>	7	<i>Aristida</i>	5
		<i>Lycium</i>	5

Introduced species (*) amount to 46 (6.7 %) (Appendix 1). The majority of these belong to the Poaceae, represented by the genera: *Bromus*, *Chloris*, *Eleusine*, *Eragrostis*, *Hordeum*, *Melinis*, *Paspalum*, *Poa*, *Polygonum*, *Setaria*, *Tragus*, *Vulpia*; Amaranthaceae: *Alternanthera*, *Atriplex*, *Chenopodium*, *Salsola*; Asteraceae: *Anthemis*, *Bidens*, *Cirsium*, *Lactuca*, *Schkuhria*, *Verbesina*; Brassicaceae: *Capsella*, *Cardaria*, *Descurainia*, *Sisymbrium*; Caryophyllaceae: *Stellaria*; Convolvulaceae: *Cuscuta*; Malvaceae: *Malva*; Papaveraceae: *Argemone*; Plantaginaceae: *Plantago*; Anacardiaceae: *Schinus*; Apiaceae: *Ammis*, *Ciclospermum*; Cyperaceae: *Cyperus*; Polygonaceae: *Polygonum*; Salicaceae: *Populus*; Solanaceae: *Datura*, *Nicotiana*; Urticaceae: *Urtica*; Verbenaceae: *Verbena*.

Discussion

The Mountain Zebra National Park boasts 680 species, 333 genera and 87 families. This contrasts with the low plant species diversity for the Nama Karoo claimed by Hall, (1980) some 20 years ago. Other Nama Karoo floras compare as follows: Augrabies Falls National Park with 364 species, Karoo National Park (822), Karoo Nature Reserve (320) and of the Succulent Karoo: Goegap

Nature Reserve (550), Richtersveld National Park (537) and Tankwa Karoo National Park with 245 species (SaS 2002) (Table 3).

As illustrated in Fig. 3, the high presence of Asteraceae (19 %) corresponds with most floras of the sub-region and it is usually the largest family in floras of arid to semi-arid regions (Goldblatt & Manning 2000). The graminoids are strongly represented by the Poaceae (12 %). Rutherford & Westfall (1986) remark that hemicryptophytes of the Nama Karoo Biome are mainly C4 grasses, which are adapted to high temperatures and low water supply. This is relative, as the Eastern Mixed Nama Karoo has the highest rainfall of all the Karoo types and is thus ecotonal to grassland (Hoffman 1998). The relatively high proportion of Fabaceae (5.2 %) is not exceptional, as this family is well developed in most parts of the world. So is the wealth of Scrophulariaceae (4.6 %), which is reflected right across Africa, especially in the floras of drier areas (Goldblatt & Manning 2000).

There is a gradient of species replacement within the Dry Karoo from winter to summer rainfall. For example, the Mesembryanthemaceae, represented by 3.2 % in the MZNP, ranked amongst the dominant families. However, the Mesembryanthemaceae decline from the west (the centre of

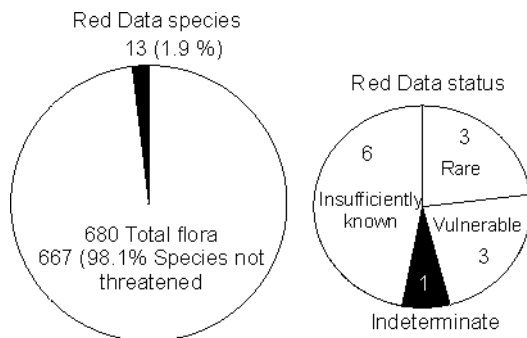


Fig. 4. Number and status of Red Data species according to Hilton-Taylor (1996).

endemism and species radiation) to the east, where they are replaced by other groups, such as the Crassulaceae, which make up 2.6 % of the MZNP flora.

Of the 87 plant families, 71 % are Dicotyledoneae and 16 % Monocotyledoneae (Fig. 2). Monocotyledoneae are generally herbaceous, whereas dicots are woody or herbaceous and in general much more diverse in habitat (Jones & Luchsinger, 1987), suggesting that they are also accustomed to greater edaphic and climatic variations. A ratio of 3.8 dicots to 1 monocot species for the MZNP is slightly higher than that of the Cape floristic region and the average for floras across the world at 3:1 (Goldblatt & Manning 2000). Although less diverse in habitat, monocot families have specialised to co-dominate in most floras of the sub-region. Graminoids, such as Restionaceae, Poaceae and Cyperaceae are respectively ranked as the 8th, 11th and 12th largest families of the Cape flora (Goldblatt & Manning 2000). Whilst the Restionaceae depend on winter rainfall and are less prominent east of the Cape Floral Kingdom, the Poaceae emerge in the more arid summer rainfall areas and rate as the 2nd largest family in the MZNP (12 % of the total flora). Hoffman & Cowling (1987) noted that an overall increase in grass cover from west to east correlated with an overall increase in rainfall and a decline in winter rainfall. The Cyperaceae (generally associated with impoverished sandstone soils of the Cape mountain ranges by Goldblatt & Manning, (2000) amount to 2.6 % of the flora (18 species) in the Mountain Zebra National Park.

Red Data species make up 1.9 % of the MZNP flora (Fig. 4; Appendix 1), which is low compared to Fynbos, for example, which displays an average of 3–7 % of Red Data species. Other Karoo floras, however, also display low numbers of Red Data species, e.g., Augrabies Falls National Park with 0.6 %, Karoo National Park 2.2 %, Karoo Nature Reserve 1.6 %, Tankwa Karoo National Park 2.4 %, Goegap Nature Reserve 2.4 %. Richtersveld National Park has a contrasting high of 6 % (Sas 2002).

Hall *et al.* (1980), also found the number of rare and endangered species for the Nama Karoo biome to be low.

A unique feature of MZNP is the occurrence of two families that are endemic to fynbos, i.e., the Penaeaceae and Grubbiaceae. Whilst *Penaea cneorum* has been recorded from the Kogelberg and Riviersonderend Mountains to Port Elizabeth, *Penaea acutifolia* is a new record, previously only recorded from the Outeniqua Mountains to George. Also, *Grubbia rosmarinifolia*, whose current range of distribution is restricted from the Koue Bokkeveld to the Tsitsikamma Mountains (Goldblatt & Manning 2000), is a fynbos element and has been recorded in the park.

Apart from the two records above, a number of fynbos elements were found in the park. According to Low (A.B. Low, P O Box 370, Rondebosch, 7701) (*pers. comm.* 2000), locally occurring genera, such as *Eriocephalus*, *Elytropappus*, *Euryops*, *Maytenus* and *Diospyros* are normally associated with Renosterveld (on shale), while *Passerina*, *Erica* and *Gnidia* as well as the Amaryllidaceae are also associated with Fynbos. *Passerina* and *Dodonaea* spp. are known to link summer and winter rainfall areas. In addition, arid Fynbos is normally characterised by the absence of Ericaceae, and yet, here it is found in the more arid Karoo. To the same extent, *Leucosidea sericea* that commonly occurs in Drakensberg streams has also been recorded in the Mountain Zebra National Park.

The floristic region of southern Africa (Botswana, Lesotho, Namibia, South Africa and Swaziland) has about 20 400 native vascular plant species in an area of 2 674 000 km². South Africa alone may have some 18 500 species of these, considered a particularly rich and diverse flora for a predominantly temperate region. The Cape Floristic Region (CFR) at 90 000 km², with 9 000 species, is striking by world standards (Goldblatt & Manning 2000). At a smaller scale, however, the MZNP study area (13 464 ha of the entire 18 000 ha) and other Karoo floras were compared in Table 3

Table 3
Comparison of the species/area ratio of selected protected areas in South Africa

Area	Size (ha)	Number of species	Species per 100 ha
Augrabies Falls National Park	18 600	364	1.95
Goegap Nature Reserve	14 531	550	3.78
Kalahari Gemsbok National Park	959 300	489	0.05
Karoo National Park	43 261	822	1.90
Karoo Nature Reserve	16 000	320	2.00
Mountain Zebra National Park	13 464	680	5.05
Richtersveld National Park	162 445	537	0.33
Tankwa Karoo National Park	27 064	245	0.90
Vaalbos National Park	22 696	334	1.47

(Zietsman & Bezuidenhout 1999; Zietsman *et al.* 1992; Van Rooyen & Bezuidenhout 1997; SaS 2002).

Plant species richness at 5.05 species per 100 ha is considerably higher when compared to the other parks and reserves. Thus the MZNP displays a rich floristic composition, a result of extreme habitat and substrate diversity, ranging from sandstones to shales and dolerite dykes to calcareous bedrock with extensive grass plains, shrublands, high altitude seeps and riverine thicket. Microclimatic conditions play an important role in the germination and establishment of seedlings of karoo plants (Roux & Theron 1987).

Geophytes seem best adapted to a seasonally extreme climate with a wet winter and dry summer, in semi-arid conditions (Goldblatt & Manning 2000). This is evident in the Succulent Karoo, where geophytes are most abundant, both in terms of species richness and cover (Hoffman & Cowling 1987). There is a high incidence of geophytes in the MZNP (8 % of the total flora) represented by the Alliaceae, Amaryllidaceae, Asphodelaceae, Hyacinthaceae, Hypoxydaceae and Iridaceae. Despite the fact that most of the park experiences a semi-arid climate with erratic rainfall that occurs mainly in summer, Hoffman & Cowling (1987) remark that geophytes are very conspicuous in the eastern Karoo.

Conclusion

The Eastern Mixed Nama Karoo comprises of 77 784 km², of which only 1.08 % is presently conserved (Low & Rebelo 1998). Complex soils, erratic rainfall and climate, as well as variations in altitude and habitat have driven the processes leading to a relatively high species richness for the Mountain Zebra National Park. It is clear that vegetation is much more than a list of plant species. This floristic account, together with the studies on plant communities (Van der Walt 1980; Brown & Bezuidenhout 2000), serves as a basis to develop a habitat management plan for the national park. Considered an ecotone between the Nama Karoo and Grassland Biomes, this area displays a rich variety of vegetation types and habitats in juxtaposition. The results of this study indicate that the newly enlarged Mountain Zebra National Park forms an important conservation area and is a noteworthy centre of biological diversity, including species richness, ecosystem complexity and genetic variation. It is therefore important that a detailed management plan be developed for the park to ensure the sustainable utilisation and conservation of the vegetation of the area.

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Appendix 1

Plant species list for the Mountain Zebra National Park

Appendix 1 .../

- E Endangered – taxa in danger of extinction if causal factors continue operating
- Ex Extinct – taxa which are no longer known to exist in the wild
-
- I Indeterminate –taxa known to be extinct, endangered, vulnerable or rare but information is insufficient to categorise them
- K Insufficiently known –taxa that are suspected to belong to any of the above categories but information is lacking
- R Rare – taxa with small world populations, presently not endangered or vulnerable but at risk that a threat could cause a critical decline
- V Vulnerable –taxa believed likely to move into the endangered category in the near future if the factors causing decline continue operating
- Us Unspecified –taxa previously threatened but are no longer in any of the above categories due to an increase in population size or to subsequent discoveries
- * Introduced species

Family	Species	Red Data Pres/Past
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BRYOPHYTES

AYTONIACEAE	<i>Plagiochasma rupestre</i> var. <i>rupestre</i> (G.Forst.) Steph.
BRYACEAE	<i>Bryum turbinatum</i> (Hedw.) Turner
FISSIDENTACEAE	<i>Fissidens rufescens</i> Hornsch.
GRIMMIACEAE	<i>Grimmia pulvinata</i> (Hedw.) Sm.
GRIMMIACEAE	<i>Schistidium apocarpum</i> (Hedw.) Bruch & Schimp.
POTTIACEAE	<i>Microbryum davallianum</i> (Sm.) R.H.Zander
POTTIACEAE	<i>Triquetrella tristicha</i> (C.Müll.) C.Müll.
PTYCHOMITRIACEAE	<i>Ptychomitrium subcrispatum</i> Thér. & P.Vard.
RICCIACEAE	<i>Riccia nigrella</i> DC.
RICCIACEAE	<i>Riccia simii</i> Perold

Complete list

Total species:	680
Total genera:	333
Total families:	87
Total red data species:	13

Selective list

Total species:	10
Total genera:	9
Total families:	7
Total red data species:	0

PTERIDOPHYTES

ANEMIACEAE	<i>Mohria vestita</i> Baker
ASPLENIACEAE	<i>Asplenium cordatum</i> (Thunb.) Sw.
ASPLENIACEAE	<i>Asplenium trichomanes</i> L.
EQUISETACEAE	<i>Equisetum ramosissimum</i> Desf.
PTERIDACEAE	<i>Cheilanthes bergiana</i> Schlecht.
PTERIDACEAE	<i>Cheilanthes eckloniana</i> (Kunze) Mett.
PTERIDACEAE	<i>Cheilanthes hirta</i> Sw.
PTERIDACEAE	<i>Cheilanthes induta</i> Kunze
PTERIDACEAE	<i>Cheilanthes multifida</i> (Sw.) Sw. subsp. <i>multifida</i>
PTERIDACEAE	<i>Cheilanthes parviloba</i> (Sw.) Sw.
PTERIDACEAE	<i>Pellaea calomelanos</i> (Sw.) Link var. <i>calomelanos</i>

Complete list

Selective list

Total species:	680	Total species:	11
Total genera:	333	Total genera:	5
Total families:	87	Total families:	4
Total red data species:	13	Total red data species:	0

MONOCOTYLEDONEAE

ALLIACEAE	<i>Tulbaghia galpinii</i> Schltr.	
AMARYLLIDACEAE	<i>Ammocharis coranica</i> (Ker Gawl.) Herb.	
AMARYLLIDACEAE	<i>Boophone disticha</i> (L.f.) Herb.	
AMARYLLIDACEAE	<i>Cyrtanthus contractus</i> N.E.Br.	
AMARYLLIDACEAE	<i>Cyrtanthus macowanii</i> Baker	Us
AMARYLLIDACEAE	<i>Cyrtanthus spiralis</i> Burch. ex Ker Gawl.	V
AMARYLLIDACEAE	<i>Cyrtanthus suaveolens</i> Schönland	K
AMARYLLIDACEAE	<i>Haemanthus albiflos</i> Jacq.	
AMARYLLIDACEAE	<i>Haemanthus humilis</i> subsp. <i>humilis</i> Jacq.	
AMARYLLIDACEAE	<i>Nerine huttoniae</i> Schönland	K
ASPARAGACEAE	<i>Asparagus acocksii</i> Jessop	
ASPARAGACEAE	<i>Asparagus capensis</i> var. <i>capensis</i> L.	
ASPARAGACEAE	<i>Asparagus cooperi</i> Baker	
ASPARAGACEAE	<i>Asparagus densiflorus</i> (Kunth) Jessop	
ASPARAGACEAE	<i>Asparagus denudatus</i> (Kunth) Baker	
ASPARAGACEAE	<i>Asparagus exuvialis</i> Burch. forma <i>exuvialis</i>	
ASPARAGACEAE	<i>Asparagus glaucus</i> Kies	
ASPARAGACEAE	<i>Asparagus mucronatus</i> Jessop	
ASPARAGACEAE	<i>Asparagus multiflorus</i> Baker	
ASPARAGACEAE	<i>Asparagus retrofractus</i> L.	
ASPARAGACEAE	<i>Asparagus striatus</i> (L.f.) Thunb.	
ASPARAGACEAE	<i>Asparagus suaveolens</i> Burch.	
ASPHODELACEAE	<i>Aloe striata</i> Haw. subsp. <i>striata</i>	
ASPHODELACEAE	<i>Aloe striatula</i> Haw. var. <i>caesia</i> Reynolds	
ASPHODELACEAE	<i>Aloe variegata</i> L.	
ASPHODELACEAE	<i>Bulbine abyssinica</i> A.Rich.	
ASPHODELACEAE	<i>Bulbine frutescens</i> (L.) Willd.	
ASPHODELACEAE	<i>Bulbine narcissifolia</i> Salm-Dyck	
ASPHODELACEAE	<i>Gasteria bicolor</i> Haw. var. <i>bicolor</i>	
ASPHODELACEAE	<i>Haworthia arachnoidea</i> (L.) Duval	
ASPHODELACEAE	<i>Haworthia deltoidea</i> (Hook.f.) Parr var. <i>deltoidea</i>	
ASPHODELACEAE	<i>Haworthia herbacea</i> (Mill.) Stearn var. <i>herbacea</i>	
ASPHODELACEAE	<i>Haworthia lockwoodii</i> Archibald	V
ASPHODELACEAE	<i>Kniphofia acraea</i> Codd	R
ASPHODELACEAE	<i>Kniphofia uvaria</i> (L.) Oken	
COMMELINACEAE	<i>Commelina africana</i> L. var. <i>africana</i>	
COMMELINACEAE	<i>Commelina africana</i> L. var. <i>lancispatha</i> C.B.Clarke	
COMMELINACEAE	<i>Cyanotis speciosa</i> (L.f.) Hassk.	
CONVALLARIACEAE	<i>Eriospermum corymbosum</i> Baker	
CONVALLARIACEAE	<i>Sansevieria aethiopica</i> Thunb.	
CYPERACEAE	<i>Bulbostylis humilis</i> (Kunth) C.B.Clarke	
CYPERACEAE	<i>Carex spicato-paniculata</i> C.B.Clarke	
CYPERACEAE	<i>Cyperus denudatus</i> L.f.	
CYPERACEAE	<i>Cyperus laevigatus</i> L.	
CYPERACEAE	<i>Cyperus rotundus</i> L.	*
CYPERACEAE	<i>Cyperus usitatus</i> Burch.	
CYPERACEAE	<i>Fuirena coerulescens</i> Steud.	
CYPERACEAE	<i>Isolepis costata</i> (Boeck.) A.Rich. var. <i>costata</i>	
CYPERACEAE	<i>Isolepis karroica</i> (C.B.Clarke) J.Raynal	

CYPERACEAE	<i>Isolepis setacea</i> (L.) R. Br.	
CYPERACEAE	<i>Kyllinga alata</i> Nees	
CYPERACEAE	<i>Kyllinga alba</i> Nees	
CYPERACEAE	<i>Kyllinga pulchella</i> Kunth	
CYPERACEAE	<i>Mariscus congestus</i> (Vahl) C.B. Clarke	
CYPERACEAE	<i>Mariscus sumatrensis</i> (Retz.) J. Raynal	
CYPERACEAE	<i>Mariscus uitenhagensis</i> Steud.	
CYPERACEAE	<i>Pseudoschoenus inanis</i> (Thunb.) Oteng-Yeboah	
CYPERACEAE	<i>Schoenoxiphium sparteum</i> (Wahlenb.) C.B. Clarke	
HYACINTHACEAE	<i>Albuca flaccida</i> Jacq.	
HYACINTHACEAE	<i>Albuca maxima</i> Burm.f.	
HYACINTHACEAE	<i>Albuca shawii</i> Baker	
HYACINTHACEAE	<i>Dipcadi ciliare</i> (Zeyh. ex Harv.) Baker	
HYACINTHACEAE	<i>Eucomis comosa</i> (Houtt.) H.R. Wehrh. var. <i>comosa</i>	
HYACINTHACEAE	<i>Lachenalia karooica</i> W.F. Barker ex G.D. Duncan	
HYACINTHACEAE	<i>Lachenalia variegata</i> W.F. Barker	
HYACINTHACEAE	<i>Ledebouria apertiflora</i> (Baker) Jessop	
HYACINTHACEAE	<i>Ledebouria cooperi</i> (Hook.f.) Jessop	
HYACINTHACEAE	<i>Ledebouria undulata</i> (Jacq.) Jessop	
HYACINTHACEAE	<i>Massonia echinata</i> L.f.	
HYACINTHACEAE	<i>Massonia pustulata</i> Jacq.	
HYACINTHACEAE	<i>Ornithogalum graminifolium</i> Thunb.	
HYACINTHACEAE	<i>Ornithogalum juncifolium</i> Jacq.	
HYACINTHACEAE	<i>Ornithogalum maculatum</i> Jacq.	
HYACINTHACEAE	<i>Ornithogalum paludosum</i> Baker	
HYACINTHACEAE	<i>Ornithogalum secundum</i> Jacq.	Us
HYPOXIDACEAE	<i>Empodium plicatum</i> (Thunb.) Garside	
HYPOXIDACEAE	<i>Hypoxis angustifolia</i> Lam. var. <i>angustifolia</i>	
HYPOXIDACEAE	<i>Hypoxis argentea</i> var. <i>argentea</i> Harv. ex Baker	
IRIDACEAE	<i>Dierama pendulum</i> (L.f.) Baker	
IRIDACEAE	<i>Gladiolus permeabilis</i> D. Delaroché	
IRIDACEAE	subsp. <i>edulis</i> (Burch. ex Ker Gawl.) Oberm.	
IRIDACEAE	<i>Hesperantha longituba</i> (Klatt) Baker	
IRIDACEAE	<i>Lapeirousia plicata</i> (Jacq.) Diels subsp. <i>plicata</i>	
IRIDACEAE	<i>Moraea elliotii</i> Baker	
IRIDACEAE	<i>Moraea polystachya</i> (Thunb.) Ker Gawl.	
IRIDACEAE	<i>Moraea simulans</i> Baker	
IRIDACEAE	<i>Romulea atrandra</i> G.J. Lewis var. <i>atrandra</i>	
IRIDACEAE	<i>Syringodea concolor</i> (Baker) M.P. de Vos	
IRIDACEAE	<i>Tritonia dubia</i> Eckl. ex Klatt	
IRIDACEAE	<i>Tritonia laxifolia</i> Benth. ex Baker	
IRIDACEAE	<i>Tritonia lineata</i> (Salisb.) Ker Gawl.	
JUNCACEAE	<i>Juncus dregeanus</i> Kunth	
JUNCACEAE	<i>Juncus effusus</i> L.	
JUNCACEAE	<i>Juncus oxycarpus</i> E. Mey. ex Kunth	
JUNCACEAE	<i>Juncus exsertus</i> Buchenau subsp. <i>exsertus</i>	
JUNCACEAE	<i>Juncus inflexus</i> L.	
JUNCACEAE	<i>Juncus rigidus</i> Desf.	
POACEAE	<i>Agrostis lachnantha</i> Nees var. <i>lachnantha</i>	
POACEAE	<i>Aristida adscensionis</i> L.	
POACEAE	<i>Aristida congesta</i> Roem. & Schult. subsp. <i>congesta</i>	
POACEAE	<i>Aristida diffusa</i> Trin. subsp. <i>burkei</i> (Stapf) Meld.	
POACEAE	<i>Aristida diffusa</i> Trin. subsp. <i>diffusa</i>	
POACEAE	<i>Aristida junciformis</i> Trin. & Rupr.	
POACEAE	<i>Bothriochloa radicans</i> (Lehm.) A. Camus	
POACEAE	<i>Bromus catharticus</i> Vahl	*

POACEAE	<i>Bromus pectinatus</i> Thunb.	*
POACEAE	<i>Cenchrus ciliaris</i> L.	
POACEAE	<i>Chloris virgata</i> Sw.	*
POACEAE	<i>Cymbopogon dieterlenii</i> Stapf ex E.Phillips	
POACEAE	<i>Cymbopogon marginatus</i> (Steud.) Stapf ex Burttt Davy	
POACEAE	<i>Cymbopogon plurinodis</i> (Stapf) Stapf ex Burttt Davy	
POACEAE	<i>Cynodon dactylon</i> (L.) Pers.	
POACEAE	<i>Cynodon incompletus</i> Nees	
POACEAE	<i>Digitaria eriantha</i> Steud.	
POACEAE	<i>Diplachne fusca</i> (L.) P.Beauv. ex Roem. & Schult.	
POACEAE	<i>Ehrharta calycina</i> J.E.Sm. var. <i>calycina</i>	
POACEAE	<i>Ehrharta erecta</i> Lam. var. <i>erecta</i>	
POACEAE	<i>Eleusine coracana</i> (L.) Gaertn.	*
POACEAE	<i>Elionurus muticus</i> (Spreng.) Kunth	
POACEAE	<i>Enneapogon scoparius</i> Stapf	
POACEAE	<i>Eragrostis barrelieri</i> Daveau	*
POACEAE	<i>Eragrostis bergiana</i> (Kunth) Trin.	
POACEAE	<i>Eragrostis chapelieri</i> (Kunth) Nees	
POACEAE	<i>Eragrostis chloromelas</i> Steud.	
POACEAE	<i>Eragrostis curvula</i> (Schrad.) Nees	
POACEAE	<i>Eragrostis lehmanniana</i> Nees var. <i>lehmanniana</i>	
POACEAE	<i>Eragrostis obtusa</i> Munro ex Ficalho & Hiern	
POACEAE	<i>Eragrostis plana</i> Nees	
POACEAE	<i>Eustachys paspaloides</i> (Vahl) Lanza & Mattei	
POACEAE	<i>Festuca scabra</i> Vahl	
POACEAE	<i>Fingerhuthia africana</i> Lehm.	
POACEAE	<i>Fingerhuthia sesleriiformis</i> Nees	
POACEAE	<i>Helictotrichon capense</i> Schweick.	
POACEAE	<i>Heteropogon contortus</i> (L.) P.Beauv. ex Roem. & Schult.	
POACEAE	<i>Hordeum stenostachys</i> Godr.	*
POACEAE	<i>Hyparrhenia hirta</i> (L.) Stapf	
POACEAE	<i>Koeleria capensis</i> (Steud.) Nees	
POACEAE	<i>Melica decumbens</i> Thunb.	
POACEAE	<i>Melica racemosa</i> Thunb.	
POACEAE	<i>Melinis nervigulumis</i> (Franch.) Zizka	
POACEAE	<i>Melinis repens</i> (Willd.) Ziska	*
POACEAE	<i>Merxmuellera disticha</i> (Nees) Conert	
POACEAE	<i>Merxmuellera stricta</i> (Schrad.) Conert	
POACEAE	<i>Microchloa caffra</i> Nees	
POACEAE	<i>Miscanthus capensis</i> (Nees) Andersson	
POACEAE	<i>Oropetium capense</i> Stapf	
POACEAE	<i>Panicum coloratum</i> L. var. <i>coloratum</i>	
POACEAE	<i>Panicum deustum</i> Thunb.	
POACEAE	<i>Panicum maximum</i> Jacq.	
POACEAE	<i>Panicum stapfianum</i> Fourc.	
POACEAE	<i>Paspalum dilatatum</i> Poir.	*
POACEAE	<i>Pennisetum macrourum</i> Trin.	
POACEAE	<i>Pennisetum sphaclatum</i> (Nees) T.Durand & Schinz	
POACEAE	<i>Pentaschistis airoides</i> (Nees) Stapf subsp. <i>airoides</i>	
POACEAE	<i>Pentaschistis airoides</i> (Nees) Stapf subsp. <i>jugorum</i> (Stapf) H.P.Linder	
POACEAE	<i>Pentaschistis curvifolia</i> (Schrad.) Stapf	
POACEAE	<i>Pentaschistis glandulosa</i> (Schrad.) H.P.Linder	
POACEAE	<i>Phragmites australis</i> (Cav.) Trin. ex Steud.	
POACEAE	<i>Poa annua</i> L.	*
POACEAE	<i>Polypogon monspeliensis</i> (L.) Desf.	*
POACEAE	<i>Schismus barbatus</i> (Loefl. ex L.) Thell.	

POACEAE	<i>Schismus inermis</i> (Stapf) C.E.Hubb.	
POACEAE	<i>Setaria nigrirostris</i> (Nees) T.Durand & Schinz	
POACEAE	<i>Setaria sphacelata</i> (Schum.) Stapf & C.E.Hubb. ex Moss var. <i>sphacelata</i>	
POACEAE	<i>Setaria verticillata</i> (L.) P.Beauv.	*
POACEAE	<i>Sporobolus africanus</i> (Poir.) Robyns & Tournay	
POACEAE	<i>Sporobolus discosporus</i> Nees	
POACEAE	<i>Sporobolus fimbriatus</i> (Trin.) Nees	
POACEAE	<i>Stipa dregeana</i> Steud. var. <i>dregeana</i>	
POACEAE	<i>Stipa dregeana</i> Steud. var. <i>elongata</i> (Nees) Stapf	
POACEAE	<i>Stipagrostis ciliata</i> (Desf.) De Winter	
POACEAE	<i>Stipagrostis obtusa</i> (Del.) Nees	
POACEAE	<i>Tetrachne dregei</i> Nees	
POACEAE	<i>Themeda triandra</i> Forssk.	
POACEAE	<i>Tragus berteronianus</i> Schult.	*
POACEAE	<i>Tragus koelerioides</i> Aschers.	
POACEAE	<i>Tribolium hispidum</i> (Thunb.) Desv.	
POACEAE	<i>Urochloa panicoides</i> P.Beauv.	
POACEAE	<i>Vulpia myuros</i> (L.) C.C.Gmel.	*
POTAMOGETONACEAE	<i>Potamogeton pusillus</i> L.	
TECOPHILAEACEAE	<i>Cyanella lutea</i> L.f.	

Complete list		Selective list	
Total species:	680	Total species:	180
Total genera:	333	Total genera:	92
Total families:	87	Total families:	14
Total red data species:	13	Total red data species:	5

DICOTYLEDONEAE

ACANTHACEAE	<i>Blepharis capensis</i> var. <i>capensis</i> (L.f.) Pers.	
ACANTHACEAE	<i>Blepharis villosa</i> (Nees) C.B.Clarke	
ACANTHACEAE	<i>Justicia orchioides</i> L.f. subsp. <i>glabrata</i> Immelman	Us
AIZOACEAE	<i>Aizoon glinoides</i> L.f.	
AIZOACEAE	<i>Galenia africana</i> L.	
AIZOACEAE	<i>Galenia procumbens</i> L.f.	
AIZOACEAE	<i>Galenia pubescens</i> var. <i>pubescens</i> (Eckl. & Zeyh.) Druce	
AIZOACEAE	<i>Galenia sarcophylla</i> Fenzl	
AIZOACEAE	<i>Tetragonia echinata</i> Aiton	
AMARANTHACEAE	<i>Alternanthera pungens</i> H.B.&K.	*
AMARANTHACEAE	<i>Atriplex semibaccata</i> R.Br.	*
AMARANTHACEAE	<i>Atriplex suberecta</i> I.Verd.	
AMARANTHACEAE	<i>Atriplex vestita</i> (Thunb.) Aellen	
AMARANTHACEAE	<i>Chenopodium mucronatum</i> Thunb.	*
AMARANTHACEAE	<i>Chenopodium murale</i> L.	*
AMARANTHACEAE	<i>Chenopodium schraderianum</i> Roem. & Schult.	*
AMARANTHACEAE	<i>Salsola aphylla</i> L.f.	
AMARANTHACEAE	<i>Salsola kali</i> L.	*
AMARANTHACEAE	<i>Suaeda fruticosa</i> (L.) Forssk.	
ANACARDIACEAE	<i>Rhus divaricata</i> Eckl. & Zeyh.	
ANACARDIACEAE	<i>Rhus dregeana</i> Sond.	
ANACARDIACEAE	<i>Rhus erosa</i> Thunb.	
ANACARDIACEAE	<i>Rhus gracillima</i> Engl.	
ANACARDIACEAE	<i>Rhus lancea</i> L.f.	

ANACARDIACEAE	<i>Rhus lucida</i> L.	
ANACARDIACEAE	<i>Rhus pyroides</i> Burch var. <i>pyroides</i> .	
ANACARDIACEAE	<i>Rhus undulata</i> Jacq.	
ANACARDIACEAE	<i>Schinus molle</i> L.	*
APIACEAE	<i>Ammis majus</i> L. var. <i>glaucofolium</i> (L.) Godron	*
APIACEAE	<i>Berula erecta</i> (Huds.) Coville subsp. <i>thunbergii</i> (DC.) B.L.Burt	
APIACEAE	<i>Bupleurum mundii</i> Cham. & Schlecht.	
APIACEAE	<i>Ciclospermum leptophyllum</i> (Pers.) Sprague	*
APIACEAE	<i>Deverra burchellii</i> (DC.) Eckl. & Zeyh.	
APIACEAE	<i>Heteromorpha arborescens</i> (Spreng.) Cham. & Schldtl.	
APOCYNACEAE	<i>Asclepias compressidens</i> (N.E.Br.) A.Nicholas	I
APOCYNACEAE	<i>Brachystelma circinatum</i> E.Mey.	
APOCYNACEAE	<i>Carissa haematocarpa</i> (Eckl.) A.DC.	
APOCYNACEAE	<i>Duvalia caespitosa</i> (Masson) Haw. var. <i>caespitosa</i>	
APOCYNACEAE	<i>Duvalia modesta</i> N.E.Br.	
APOCYNACEAE	<i>Gomphocarpus fruticosus</i> L.	
APOCYNACEAE	<i>Gomphocarpus tomentosus</i> Burch.	
APOCYNACEAE	<i>Huernia brevirostris</i> N.E.Br. subsp. <i>intermedia</i> N.E.Br.	
APOCYNACEAE	<i>Macroloma armatum</i> (Thunb.) Schltr. ex Gilg var. <i>armatum</i>	
APOCYNACEAE	<i>Pachycymbium miscellum</i> (N.E.Br.) M.Gilbert	Us
APOCYNACEAE	<i>Pachypodium succulentum</i> (L.f.) A.DC.	
APOCYNACEAE	<i>Sarcostemma viminale</i> (L.) R.Br. subsp. <i>viminale</i>	
APOCYNACEAE	<i>Schizoglossum aschersonianum</i> Schltr. var. <i>aschersonianum</i>	
APOCYNACEAE	<i>Stenostelma capense</i> Schltr.	
ARALIACEAE	<i>Cussonia paniculata</i> Eckl. & Zeyh. subsp. <i>paniculata</i>	
ASTERACEAE	<i>Amellus strigosus</i> (Thunb.) Less.	
ASTERACEAE	<i>Anthemis cotula</i> L.	*
ASTERACEAE	<i>Arctotheca calendula</i> (L.) Levyns	
ASTERACEAE	<i>Arctotis arctotooides</i> (L.f.) O.Hoffm.	
ASTERACEAE	<i>Arctotis microcephala</i> (DC.) P.Beauv.	
ASTERACEAE	<i>Berkheya armata</i> (Vahl) Druce	
ASTERACEAE	<i>Berkheya decurrens</i> (Thunb.) Willd.	
ASTERACEAE	<i>Bidens pilosa</i> L.	*
ASTERACEAE	<i>Chrysanthemoides monilifera</i> (L.) Norl. subsp. <i>subcanescens</i> (DC.) Norl.	
ASTERACEAE	<i>Chrysocoma ciliata</i> L.	
ASTERACEAE	<i>Cineraria aspera</i> Thunb.	
ASTERACEAE	<i>Cineraria geraniifolia</i> DC.	
ASTERACEAE	<i>Cineraria lobata</i> L'Her.	
ASTERACEAE	<i>Cirsium vulgare</i> (Savi) Ten.	*
ASTERACEAE	<i>Conyza podocephala</i> DC.	
ASTERACEAE	<i>Conyza scabrada</i> DC.	
ASTERACEAE	<i>Cotula heterocarpa</i> DC.	
ASTERACEAE	<i>Cotula nigellifolia</i> (DC.) Bremer & Humphries	
ASTERACEAE	<i>Cotula zeyheri</i> Fenzl	
ASTERACEAE	<i>Cuspidia cernua</i> (L.f.) B.L.Burt	
ASTERACEAE	<i>Dimorphotheca cuneata</i> (Thunb.) Less.	
ASTERACEAE	<i>Dimorphotheca zeyheri</i> Sond.	
ASTERACEAE	<i>Elytropappus rhinocerotis</i> (L.f.) Less.	
ASTERACEAE	<i>Eriocephalus africanus</i> L.	
ASTERACEAE	<i>Eriocephalus ericoides</i> (L.f.) Druce	
ASTERACEAE	<i>Eriocephalus eximius</i> DC.	
ASTERACEAE	<i>Eriocephalus punctulatus</i> DC.	
ASTERACEAE	<i>Euryops annae</i> E.Phillips	
ASTERACEAE	<i>Euryops annuus</i> Compton	
ASTERACEAE	<i>Euryops anthemoides</i> B.Nord. subsp. <i>anthemoides</i>	
ASTERACEAE	<i>Euryops dentatus</i> B.Nord.	R

ASTERACEAE	<i>Euryops floribundus</i> N.E.Br.	
ASTERACEAE	<i>Euryops lateriflorus</i> (L.f.) DC.	
ASTERACEAE	<i>Euryops oligoglossus</i> DC. subsp. <i>oligoglossus</i>	
ASTERACEAE	<i>Euryops spathaceus</i> DC.	
ASTERACEAE	<i>Euryops tenuissimus</i> (L.) DC.	
ASTERACEAE	<i>Felicia fascicularis</i> DC.	
ASTERACEAE	<i>Felicia filifolia</i> (Vent.) Burtt Davy subsp. <i>filifolia</i>	
ASTERACEAE	<i>Felicia muricata</i> (Thunb.) Nees subsp. <i>muricata</i>	
ASTERACEAE	<i>Felicia ovata</i> (Thunb.) Compton	
ASTERACEAE	<i>Felicia zeyheri</i> (Less.) Nees subsp. <i>linifolia</i> (Harv.) Grau	
ASTERACEAE	<i>Foveolina albida</i> (DC.) Kallersjo	
ASTERACEAE	<i>Garuleum bipinnatum</i> (Thunb.) Less.	
ASTERACEAE	<i>Garuleum pinnatifidum</i> (Thunb.) DC.	
ASTERACEAE	<i>Gazania krebsiana</i> Less. subsp. <i>arctotoides</i> (Less.) Roessler	
ASTERACEAE	<i>Gazania krebsiana</i> Less. subsp. <i>krebsiana</i>	
ASTERACEAE	<i>Gazania linearis</i> (Thunb.) Druce	
ASTERACEAE	<i>Geigeria ornativa</i> O.Hoffm.	
ASTERACEAE	<i>Gymnostephium papposum</i> Nesom	
ASTERACEAE	<i>Helichrysum anomalum</i> Less.	
ASTERACEAE	<i>Helichrysum asperum</i> (Thunb.) Hilliard & B.L.Burtt var. <i>asperum</i>	
ASTERACEAE	<i>Helichrysum cerastioides</i> DC. var. <i>cerastioides</i>	
ASTERACEAE	<i>Helichrysum dasycephalum</i> O.Hoffm.	
ASTERACEAE	<i>Helichrysum dregeanum</i> Sond. & Harv.	
ASTERACEAE	<i>Helichrysum epapposum</i> Bolus	
ASTERACEAE	<i>Helichrysum hamulosum</i> E.Mey. ex DC.	
ASTERACEAE	<i>Helichrysum lineatum</i> Bolus	
ASTERACEAE	<i>Helichrysum lucilioides</i> Less.	
ASTERACEAE	<i>Helichrysum montanum</i> DC.	
ASTERACEAE	<i>Helichrysum nudifolium</i> (L.) Less.	
ASTERACEAE	<i>Helichrysum odoratissimum</i> (L.) Sweet	
ASTERACEAE	<i>Helichrysum petiolare</i> Hilliard & B.L.Burtt	
ASTERACEAE	<i>Helichrysum rosam</i> (Berg.) Less. var. <i>rosam</i>	
ASTERACEAE	<i>Helichrysum rugulosum</i> Less.	
ASTERACEAE	<i>Helichrysum rutilans</i> (L.) D.Don	Us
ASTERACEAE	<i>Helichrysum splendidum</i> (Thunb.) Less.	
ASTERACEAE	<i>Helichrysum trilineatum</i> DC.	
ASTERACEAE	<i>Helichrysum umbraculigerum</i> Less.	
ASTERACEAE	<i>Helichrysum zeyheri</i> Less.	
ASTERACEAE	<i>Hertia pallens</i> (DC.) Kuntze	
ASTERACEAE	<i>Ifloga glomerata</i> (Harv.) Schltr.	
ASTERACEAE	<i>Kleinia longiflora</i> DC.	
ASTERACEAE	<i>Lactuca inermis</i> Forssk.	*
ASTERACEAE	<i>Lasiopogon muscoides</i> (Desf.) DC.	
ASTERACEAE	<i>Lasiospermum bipinnatum</i> (Thunb.) Druce	
ASTERACEAE	<i>Lasiospermum pedunculare</i> Lag.	
ASTERACEAE	<i>Marasmodes polycephalus</i> DC.	
ASTERACEAE	<i>Mikania cordata</i> (Burm.f.) B.L.Rob.	
ASTERACEAE	<i>Oldenburgia paradoxa</i> Less.	
ASTERACEAE	<i>Oligocarpus calendulaceus</i> (L.f.) Less.	
ASTERACEAE	<i>Oncosiphon piluliferum</i> (L.f.) Kallersjo	
ASTERACEAE	<i>Othonna auriculifolia</i> Licht. ex Less.	
ASTERACEAE	<i>Othonna cylindrica</i> (Lam.) DC.	
ASTERACEAE	<i>Othonna pavonia</i> E.Mey.	
ASTERACEAE	<i>Pegolettia retrofracta</i> (Thunb.) Kies	
ASTERACEAE	<i>Pentzia cooperi</i> Harv.	
ASTERACEAE	<i>Pentzia globosa</i> Less.	

ASTERACEAE	<i>Pentzia incana</i> (Thunb.) Kuntze	Us
ASTERACEAE	<i>Pentzia punctata</i> Harv.	
ASTERACEAE	<i>Pentzia sphaerocephala</i> DC.	
ASTERACEAE	<i>Phymaspermum aciculare</i> (E.Mey. ex Harv.) Benth. & Hook. ex Jackson	
ASTERACEAE	<i>Phymaspermum parvifolium</i> (DC.) Benth. & Hook. ex Jackson	
ASTERACEAE	<i>Pseudognaphalium luteo-album</i> (L.) Hilliard & B.L.Burt	
ASTERACEAE	<i>Pseudognaphalium undulatum</i> (L.) Hilliard & B.L.Burt	
ASTERACEAE	<i>Pteronia adenocarpa</i> Harv.	
ASTERACEAE	<i>Pteronia erythrochaeta</i> DC.	
ASTERACEAE	<i>Pteronia glauca</i> Thunb.	
ASTERACEAE	<i>Pteronia incana</i> (Burm.) DC.	
ASTERACEAE	<i>Pteronia staehelinoides</i> DC.	
ASTERACEAE	<i>Pulicaria scabra</i> (Thunb.) Druce	
ASTERACEAE	<i>Rosenia humilis</i> (Less.) Bremer	
ASTERACEAE	<i>Schkuhria pinnata</i> (Lam.) Cabr.	*
ASTERACEAE	<i>Senecio achilleifolius</i> DC.	
ASTERACEAE	<i>Senecio acutifolius</i> DC.	
ASTERACEAE	<i>Senecio agapetes</i> C.Jeffrey	
ASTERACEAE	<i>Senecio asperulus</i> DC.	
ASTERACEAE	<i>Senecio burchellii</i> DC.	
ASTERACEAE	<i>Senecio erysimoides</i> DC.	K
ASTERACEAE	<i>Senecio incomptus</i> DC.	
ASTERACEAE	<i>Senecio juniperinus</i> L.f. var. <i>juniperinus</i>	
ASTERACEAE	<i>Senecio lanifer</i> Mart. ex C.Jeffrey	
ASTERACEAE	<i>Senecio leptophyllus</i> DC.	
ASTERACEAE	<i>Senecio linifolius</i> L.	
ASTERACEAE	<i>Senecio oxyodontus</i> DC.	
ASTERACEAE	<i>Senecio radicans</i> (L.f.) Sch.Bip.	
ASTERACEAE	<i>Senecio ruwenzoriensis</i> S.Moore	
ASTERACEAE	<i>Senecio speciosus</i> Willd.	
ASTERACEAE	<i>Senecio striatifolius</i> DC.	
ASTERACEAE	<i>Senecio vimineus</i> DC.	
ASTERACEAE	<i>Sonchus dregeanus</i> DC.	
ASTERACEAE	<i>Tarhonanthus camphoratus</i> L.	
ASTERACEAE	<i>Tolpis capensis</i> (L.) Sch.Bip.	
ASTERACEAE	<i>Tripteris aghillana</i> DC. var. <i>aghillana</i>	
ASTERACEAE	<i>Troglophyton capillaceum</i> (Thunb.) Hilliard & B.L.Burt	
ASTERACEAE	<i>Ursinia montana</i> DC. subsp. <i>apiculata</i> (DC.) Prassler	
ASTERACEAE	<i>Ursinia nana</i> DC. subsp. <i>nana</i>	
ASTERACEAE	<i>Ursinia paleacea</i> (L.) Moench	
ASTERACEAE	<i>Ursinia trifida</i> (Thunb.) N.E.Br. forma <i>trifida</i>	
ASTERACEAE	<i>Verbesina encelioides</i> (Cav.) Benth. & Hook.	*
BIGNONIACEAE	<i>Rhigozum obovatum</i> Burch.	
BORAGINACEAE	<i>Anchusa capensis</i> Thunb.	
BORAGINACEAE	<i>Ehretia rigida</i> (Thunb.) Druce	
BORAGINACEAE	<i>Lithospermum cinereum</i> DC.	
BORAGINACEAE	<i>Lithospermum diversifolium</i> DC.	
BORAGINACEAE	<i>Boscia oleoides</i> (Burch. ex DC.) Toelken	
BRASSICACEAE	<i>Cadaba aphylla</i> (Thunb.) Wild	
BRASSICACEAE	<i>Capsella bursa-pastoris</i> (L.) Medik.	*
BRASSICACEAE	<i>Cardaria draba</i> (L.) Desv.	*
BRASSICACEAE	<i>Descurainia sophia</i> (L.) Webb ex Prantl	*
BRASSICACEAE	<i>Erucastrum strigosum</i> (Thunb.) O.E.Schulz	
BRASSICACEAE	<i>Heliophila cornuta</i> Sond. var. <i>squamata</i> (Schltr.) Marais	
BRASSICACEAE	<i>Heliophila suavissima</i> Burch. ex DC.	
BRASSICACEAE	<i>Lepidium africanum</i> (Burm. f.) DC. subsp. <i>divaricatum</i> (Aiton) Jonsell	

BRASSICACEAE	<i>Rorippa fluviatilis</i> (E.Mey. ex Sond.) Thell.	
BRASSICACEAE	<i>Sisymbrium burchellii</i> DC. var. <i>burchellii</i>	
BRASSICACEAE	<i>Sisymbrium capense</i> Thunb.	
BRASSICACEAE	<i>Sisymbrium orientale</i> L.	*
BUDDLEJACEAE	<i>Buddleja glomerata</i> H.L.Wendl.	
BUDDLEJACEAE	<i>Buddleja salviifolia</i> (L.) Lam.	
BUDDLEJACEAE	<i>Gomphostigma virgatum</i> (L.f.) Baill.	
CAMPANULACEAE	<i>Cyphia digitata</i> (Thunb.) Willd.	
CAMPANULACEAE	<i>Cyphia sylvatica</i> var. <i>sylvatica</i> Eckl.	
CAMPANULACEAE	<i>Lobelia flaccida</i> subsp. <i>flaccida</i> (C.Presl) A.DC.	
CAMPANULACEAE	<i>Lobelia neglecta</i> Roem. & Schult.	
CAMPANULACEAE	<i>Wahlenbergia albens</i> (Spreng. ex A.DC.) Lammers	Us
CAMPANULACEAE	<i>Wahlenbergia androsacea</i> A.DC.	
CAMPANULACEAE	<i>Wahlenbergia galpiniae</i> Schltr.	
CAMPANULACEAE	<i>Wahlenbergia neorigida</i> Lammers	
CAMPANULACEAE	<i>Wahlenbergia nodosa</i> (H.Buek) Lammers	
CAMPANULACEAE	<i>Wahlenbergia pyrophila</i> Lammers	
CAMPANULACEAE	<i>Wahlenbergia uitenhagensis</i> (H.Buek) Lammers	
CAMPANULACEAE	<i>Wahlenbergia undulata</i> (L.f.) A.DC.	
CARYOPHYLLACEAE	<i>Dianthus thunbergii</i> Hooper	
CARYOPHYLLACEAE	<i>Silene undulata</i> Aiton	
CARYOPHYLLACEAE	<i>Stellaria media</i> (L.) Vill.	*
CARYOPHYLLACEAE	<i>Stellaria pallida</i> (Dumort.) Piré	
CELASTRACEAE	<i>Gymnosporia buxifolia</i> (L.) Szeszyl.	
CELASTRACEAE	<i>Gymnosporia linearis</i> (L.f.) Loes. subsp. <i>linearis</i>	
CELASTRACEAE	<i>Maytenus polyacantha</i> (Sond.) Marais	
CELASTRACEAE	<i>Maytenus undata</i> (Thunb.) Blakelock	
COMMELINACEAE	<i>Commelina africana</i> L.	
COMMELINACEAE	<i>Cyanotis speciosa</i> (L.f.) Hassk.	
CONVOLVULACEAE	<i>Convolvulus sagittatus</i> Thunb.	
CONVOLVULACEAE	<i>Cuscuta campestris</i> Yunck.	*
CONVOLVULACEAE	<i>Ipomoea oenotheroides</i> (L.f.) Raf. ex Hallier f.	
CRASSULACEAE	<i>Cotyledon campanulata</i> Marloth	
CRASSULACEAE	<i>Cotyledon orbiculata</i> L. var. <i>oblonga</i> (Haw.) DC.	Us
CRASSULACEAE	<i>Cotyledon orbiculata</i> L. var. <i>orbiculata</i>	
CRASSULACEAE	<i>Cotyledon velutina</i> Hook.f.	Us
CRASSULACEAE	<i>Crassula capitella</i> Thunb. subsp. <i>capitella</i>	
CRASSULACEAE	<i>Crassula capitella</i> Thunb. subsp. <i>thyrsiflora</i> (Thunb.) Toelken	
CRASSULACEAE	<i>Crassula corallina</i> Thunb.	
CRASSULACEAE	<i>Crassula dependens</i> Bolus	
CRASSULACEAE	<i>Crassula exilis</i> Harv. subsp. <i>cooperi</i> (Regel) Toelken	
CRASSULACEAE	<i>Crassula lanuginosa</i> var. <i>pachystemon</i> Harv.	Us
CRASSULACEAE	<i>Crassula mesembryanthoides</i> (Haw.) Dietr.	
CRASSULACEAE	<i>Crassula muscosa</i> L. var. <i>muscosa</i>	
CRASSULACEAE	<i>Crassula obovata</i> Haw.	
CRASSULACEAE	<i>Crassula perforata</i> Thunb.	
CRASSULACEAE	<i>Crassula pubescens</i> Thunb. subsp. <i>rattrayi</i> (Schönland & Baker f.) Toelken	
CRASSULACEAE	<i>Crassula sarcocaulis</i> Eckl. & Zeyh.	
CRASSULACEAE	<i>Crassula tetragona</i> L. subsp. <i>acutifolia</i> (Lam.) Toelken	
CRASSULACEAE	<i>Crassula vaillantii</i> (Willd.) Roth	
CUCURBITACEAE	<i>Cucumis zeyheri</i> Sond.	
CUCURBITACEAE	<i>Kedrostis africana</i> (L.) Cogn.	
CUCURBITACEAE	<i>Kedrostis capensis</i> (Sond.) A.Meeuse	
DIPSACACEAE	<i>Scabiosa columbaria</i> L.	
DIPSACACEAE	<i>Scabiosa incisa</i> Mill.	
EBENACEAE	<i>Diospyros austro-africana</i> De Winter	
EBENACEAE	<i>Diospyros lycioides</i> Desf. subsp. <i>lycioides</i>	

EBENACEAE	<i>Diospyros scabrida</i> (Harv. ex Hiern) De Winter	
EBENACEAE	<i>Diospyros whyteana</i> (Hiern) F.White	
EBENACEAE	<i>Euclea crispa</i> (Thunb.) Guerke subsp. <i>ovata</i> (Burch.) F.White	
ERICACEAE	<i>Erica albens</i> L. var. <i>albens</i>	
ERICACEAE	<i>Erica fuscescens</i> (Klotzsch) E.G.H.Oliv.	
ERICACEAE	<i>Erica lanata</i> Andrews	
ERICACEAE	<i>Erica lehmannii</i> Klotzsch	K
ERICACEAE	<i>Erica leucopelta</i> Tausch	
EUPHORBIACEAE	<i>Clutia pulchella</i> L. var. <i>pulchella</i>	
EUPHORBIACEAE	<i>Euphorbia aggregata</i> A.Berger var. <i>aggregata</i>	
EUPHORBIACEAE	<i>Euphorbia arceuthobioides</i> Boiss.	
EUPHORBIACEAE	<i>Euphorbia caterviflora</i> N.E.Br.	
EUPHORBIACEAE	<i>Euphorbia clavarioides</i> Boiss. var. <i>clavarioides</i>	
EUPHORBIACEAE	<i>Euphorbia mauritanica</i> L. var. <i>mauritanica</i>	
EUPHORBIACEAE	<i>Euphorbia micracantha</i> Boiss.	
EUPHORBIACEAE	<i>Euphorbia ornithopus</i> Jacq.	K
EUPHORBIACEAE	<i>Euphorbia polycephala</i> Marloth	V
EUPHORBIACEAE	<i>Euphorbia tridentata</i> Lam.	
FABACEAE	<i>Acacia caffra</i> (Thunb.) Willd.	
FABACEAE	<i>Acacia fleckii</i> Schinz	
FABACEAE	<i>Acacia karroo</i> Hayne	
FABACEAE	<i>Argyrolobium collinum</i> Eckl. & Zeyh.	
FABACEAE	<i>Argyrolobium pauciflorum</i> Eckl. & Zeyh. var. <i>pauciflorum</i>	
FABACEAE	<i>Aspalathus acicularis</i> E.Mey. subsp. <i>acicularis</i>	
FABACEAE	<i>Dichilus gracilis</i> Eckl. & Zeyh.	
FABACEAE	<i>Dolichos angustifolius</i> Eckl. & Zeyh.	
FABACEAE	<i>Indigofera alpina</i> Eckl. & Zeyh.	
FABACEAE	<i>Indigofera alternans</i> DC. var. <i>alternans</i>	
FABACEAE	<i>Indigofera disticha</i> Eckl. & Zeyh.	
FABACEAE	<i>Indigofera mauritanica</i> (L.) Thunb.	
FABACEAE	<i>Indigofera procumbens</i> L.	
FABACEAE	<i>Indigofera rhytidocarpa</i> Benth. ex Harv. subsp. <i>rhytidocarpa</i>	
FABACEAE	<i>Indigofera sessilifolia</i> DC.	
FABACEAE	<i>Lebeckia macrantha</i> Harv.	
FABACEAE	<i>Lebeckia spinescens</i> Harv.	
FABACEAE	<i>Lessertia carnososa</i> Eckl. & Zeyh.	K
FABACEAE	<i>Lessertia depressa</i> Harv.	
FABACEAE	<i>Lessertia frutescens</i> (L.) Goldblatt & J.C.Manning	
FABACEAE	<i>Lessertia humilis</i> (E.Phillips & R.A.Dyer) Goldblatt & J.C.Manning	
FABACEAE	<i>Lessertia microphylla</i> (Burch. ex DC.) Goldblatt & J.C.Manning	
FABACEAE	<i>Lotononis caerulea</i> E.Mey.	
FABACEAE	<i>Lotononis divaricata</i> (Eckl. & Zeyh.) Benth.	
FABACEAE	<i>Lotononis laxa</i> Eckl. & Zeyh.	
FABACEAE	<i>Lotononis pulchella</i> (E.Mey.) B.-E. van Wyk	
FABACEAE	<i>Lotononis pumila</i> Eckl. & Zeyh.	
FABACEAE	<i>Lotononis pungens</i> Eckl. & Zeyh.	
FABACEAE	<i>Medicago laciniata</i> (L.) Mill. var. <i>laciniata</i>	
FABACEAE	<i>Melolobium candicans</i> (E. Mey.) Eckl. & Zeyh.	
FABACEAE	<i>Melolobium microphyllum</i> (L.f.) Eckl. & Zeyh.	
FABACEAE	<i>Melolobium obcordatum</i> Harv.	
FABACEAE	<i>Tephrosia angulata</i> E. Mey.	
FABACEAE	<i>Tephrosia capensis</i> (Jacq.) Pers.	
FABACEAE	<i>Trifolium burchellianum</i> Ser. subsp. <i>burchellianum</i>	
GENTIANACEAE	<i>Chironia jasminoides</i> L.	
GENTIANACEAE	<i>Sebaea elongata</i> E.Mey.	
GERANIACEAE	<i>Geranium harveyi</i> Briq.	
GERANIACEAE	<i>Geranium incanum</i> Burm.f.	

GERANIACEAE	<i>Monsonia emarginata</i> (L.f.) L'Her.	
GERANIACEAE	<i>Pelargonium abrotanifolium</i> (L.f.) Jacq.	
GERANIACEAE	<i>Pelargonium alchemilloides</i> (L.) L'Her.	
GERANIACEAE	<i>Pelargonium aridum</i> R.A.Dyer	
GERANIACEAE	<i>Pelargonium cordifolium</i> (Cav.) Curtis	
GERANIACEAE	<i>Pelargonium dichondrifolium</i> DC.	
GERANIACEAE	<i>Pelargonium glutinosum</i> (Jacq.) L'Her.	
GERANIACEAE	<i>Pelargonium grossularioides</i> (L.) L'Her.	
GERANIACEAE	<i>Pelargonium minimum</i> (Cav.) Willd.	
GERANIACEAE	<i>Pelargonium odoratissimum</i> (L.) L'Her.	
GERANIACEAE	<i>Pelargonium quercifolium</i> (L.f.) L'Her.	
GERANIACEAE	<i>Pelargonium ramosissimum</i> (Cav.) Willd.	
GERANIACEAE	<i>Pelargonium reniforme</i> Curtis	
GERANIACEAE	<i>Pelargonium scabrum</i> (L.) L'Her.	
GERANIACEAE	<i>Pelargonium sidoides</i> DC.	
GERANIACEAE	<i>Pelargonium tragacanthoides</i> Burch.	
GERANIACEAE	<i>Pelargonium vitifolium</i> (L.) L'Her.	
GERANIACEAE	<i>Pelargonium zonale</i> (L.) L'Hér.	
GERANIACEAE	<i>Sarcocaulon camdeboense</i> Moffett	
GRUBBIACEAE	<i>Grubbia rosmarinifolia</i> P.J.Bergius subsp. <i>rosmarinifolia</i>	
HALORAGACEAE	<i>Gunnera perpensa</i> L.	
KIGGELARIACEAE	<i>Kiggelaria africana</i> L.	
LAMIACEAE	<i>Ballota africana</i> (L.) Benth.	
LAMIACEAE	<i>Becium burchellianum</i> (Benth.) N.E.Br.	
LAMIACEAE	<i>Leonotis ocyimifolia</i> (Burm.f.) Iwarsson var. <i>ocyimifolia</i>	
LAMIACEAE	<i>Mentha longifolia</i> (L.) Huds. subsp. <i>capensis</i> (Thunb.) Briq.	
LAMIACEAE	<i>Salvia repens</i> Burch. ex Benth. var. <i>repens</i>	
LAMIACEAE	<i>Salvia stenophylla</i> Burch. ex Benth.	
LAMIACEAE	<i>Salvia verbenaca</i> L.	
LAMIACEAE	<i>Stachys aethiopica</i> L.	
LAMIACEAE	<i>Stachys cymbalaria</i> Briq.	
LAMIACEAE	<i>Stachys dregeana</i> Benth.	
LAMIACEAE	<i>Stachys linearis</i> Burch. ex Benth.	
LAMIACEAE	<i>Stachys rugosa</i> Aiton	
LAMIACEAE	<i>Teucrium africanum</i> Thunb.	
LINACEAE	<i>Linum thunbergii</i> Eckl. & Zeyh.	
LORANTHACEAE	<i>Moquiniella rubra</i> (A.Spreng.) Balle	
MALVACEAE	<i>Abutilon sonneratianum</i> (Cav.) Sweet	
MALVACEAE	<i>Grewia occidentalis</i> L. subsp. <i>occidentalis</i>	
MALVACEAE	<i>Grewia robusta</i> Burch.	
MALVACEAE	<i>Hermannia coccocarpa</i> (Eckl. & Zeyh.) Kuntze	
MALVACEAE	<i>Hermannia cuneifolia</i> Jacq. var. <i>cuneifolia</i>	
MALVACEAE	<i>Hermannia cuneifolia</i> Jacq. var. <i>glabrescens</i> (Harv.) I. Verd.	
MALVACEAE	<i>Hermannia filifolia</i> L.f. var. <i>filifolia</i>	
MALVACEAE	<i>Hermannia glabrata</i> L.f.	
MALVACEAE	<i>Hermannia linearifolia</i> Harv.	
MALVACEAE	<i>Hermannia vestita</i> Thunb.	
MALVACEAE	<i>Hibiscus aethiopicus</i> L.	
MALVACEAE	<i>Hibiscus pusillus</i> Thunb.	
MALVACEAE	<i>Hibiscus trionum</i> L.	
MALVACEAE	<i>Malva neglecta</i> Wallr.	*
MALVACEAE	<i>Malva parviflora</i> var. <i>parviflora</i> L.	*
MELIANTHACEAE	<i>Melianthus comosus</i> Vahl	
MESEMBRYANTHEMACEAE	<i>Chasmatophyllum musculinum</i> Haw.) Dinter & Schwantes	
MESEMBRYANTHEMACEAE	<i>Delosperma brevisepalum</i> L.Bolus var. <i>brevisepalum</i>	
MESEMBRYANTHEMACEAE	<i>Delosperma congestum</i> L.Bolus	

MESEMBRYANTHACEAE	<i>Delosperma floribundum</i> L. Bolus	
MESEMBRYANTHACEAE	<i>Delosperma frutescens</i> L. Bolus	
MESEMBRYANTHACEAE	<i>Delosperma gramineum</i> L. Bolus	
MESEMBRYANTHACEAE	<i>Delosperma subincanum</i> (Haw.) Schwantes	
MESEMBRYANTHACEAE	<i>Drosanthemum hispidum</i> (L.) Schwantes	
MESEMBRYANTHACEAE	<i>Drosanthemum jamesii</i> L. Bolus	
MESEMBRYANTHACEAE	<i>Eberlanzia cradockensis</i> (Kuntze) Schwantes	
MESEMBRYANTHACEAE	<i>Eberlanzia ferox</i> (L. Bolus) L. Bolus	
MESEMBRYANTHACEAE	<i>Malephora crocea</i> (Jacq.) Schwantes var. <i>crocea</i>	
MESEMBRYANTHACEAE	<i>Mestoklema elatum</i> N.E.Br. ex Glen	
MESEMBRYANTHACEAE	<i>Phyllobolus splendens</i> (L.) Gerbaulet subsp. <i>splendens</i>	
MESEMBRYANTHACEAE	<i>Psilocaulon coriarium</i> (Burch. ex N.E.Br.) N.E.Br.	
MESEMBRYANTHACEAE	<i>Psilocaulon junceum</i> (Haw.) Schwantes	
MESEMBRYANTHACEAE	<i>Psilocaulon liebenbergii</i> L. Bolus	
MESEMBRYANTHACEAE	<i>Ruschia unidens</i> (Haw.) Schwantes	
MESEMBRYANTHACEAE	<i>Ruschia utilis</i> (L. Bolus) L. Bolus var. <i>gifbergensis</i> L. Bolus	
MESEMBRYANTHACEAE	<i>Trichodiadema barbatum</i> (L.) Schwantes	
MESEMBRYANTHACEAE	<i>Trichodiadema pygmaeum</i> L. Bolus	R
MESEMBRYANTHACEAE	<i>Trichodiadema strumosum</i> (Haw.) L. Bolus	
MOLLUGINACEAE	<i>Hypertelis salsoloides</i> (Burch.) Adamson var. <i>salsoloides</i>	
MOLLUGINACEAE	<i>Limeum aethiopicum</i> Burm. subsp. <i>aethiopicum</i>	
MOLLUGINACEAE	<i>Pharnaceum trigonum</i> Eckl. & Zeyh.	
MYRSINACEAE	<i>Myrsine africana</i> L.	
MYRSINACEAE	<i>Rapanea melanophloeos</i> (L.) Mez	
NYCTAGINACEAE	<i>Boerhavia erecta</i> L.	
OLEACEAE	<i>Olea europaea</i> (L.) subsp. <i>africana</i> (Mill.) P.S.Green	
OROBANCHACEAE	<i>Hyobanche sanguinea</i> L.	
OXALIDACEAE	<i>Oxalis bifurca</i> Sond. var. <i>angustiloba</i> Lodd.	
OXALIDACEAE	<i>Oxalis bifurca</i> Lodd. var. <i>bifurca</i>	
OXALIDACEAE	<i>Oxalis depressa</i> Eckl. & Zeyh.	
OXALIDACEAE	<i>Oxalis stellata</i> Eckl. & Zeyh. var. <i>stellata</i>	
OXALIDACEAE	<i>Oxalis stenopetala</i> T.M. Salter	
PAPAVERACEAE	<i>Argemone ochroleuca</i> Sweet subsp. <i>ochroleuca</i>	*
PAPAVERACEAE	<i>Papaver aculeatum</i> Thunb.	
PEDALIACEAE	<i>Pterodiscus luridus</i> Hook.f.	
PEDALIACEAE	<i>Sesamum capense</i> Burm.f.	
PENAEACEAE	<i>Penaea acutifolia</i> A. Juss.	
PENAEACEAE	<i>Penaea cneorum</i> Meerb. subsp. <i>gigantea</i> R. Dahlgren	
PLANTAGINACEAE	<i>Plantago lanceolata</i> L.	*
POLYGALACEAE	<i>Muraltia macrocarpa</i> Eckl. & Zeyh.	
POLYGALACEAE	<i>Polygala ericaefolia</i> DC.	
POLYGALACEAE	<i>Polygala garcinii</i> DC.	
POLYGALACEAE	<i>Polygala leptophylla</i> Burch. var. <i>leptophylla</i>	
POLYGALACEAE	<i>Polygala uncinata</i> E. Mey. ex Meisn.	
POLYGALACEAE	<i>Polygala virgata</i> Thunb. var. <i>virgata</i>	
POLYGONACEAE	<i>Polygonum aviculare</i> L.	*
POLYGONACEAE	<i>Rumex lanceolatus</i> Thunb.	
PORTULACACEAE	<i>Anacampseros arachnoides</i> (Haw.) Sims	
RANUNCULACEAE	<i>Clematis brachiata</i> Thunb.	
RANUNCULACEAE	<i>Ranunculus multifidus</i> Forssk.	
RANUNCULACEAE	<i>Thalictrum minus</i> L.	
RHAMNACEAE	<i>Rhamnus prinoides</i> L'Her.	
ROSACEAE	<i>Leucosidea sericea</i> Eckl. & Zeyh.	
RUBIACEAE	<i>Anthospermum rigidum</i> Eckl. & Zeyh. subsp. <i>rigidum</i>	
RUBIACEAE	<i>Galium capense</i> Thunb. subsp. <i>capense</i>	
RUBIACEAE	<i>Galium tomentosum</i> Thunb.	

RUBIACEAE	<i>Nenax microphylla</i> (Sond.) T.M.Salter	
RUBIACEAE	<i>Rubia petiolaris</i> DC.	
SALICACEAE	<i>Populus alba</i> L. var. <i>alba</i>	*
SALICACEAE	<i>Salix mucronata</i> Thunb. subsp. <i>capensis</i> (Thunb.) Immelman	
SANTALACEAE	<i>Thesium galioides</i> A.DC.	
SAPINDACEAE	<i>Dodonaea angustifolia</i> L.f.	
SCROPHULARIACEAE	<i>Aptosimum procumbens</i> (Lehm.) Steud. var. <i>elongatum</i> (Hiern) Codd	
SCROPHULARIACEAE	<i>Aptosimum procumbens</i> (Lehm.) Steud. var. <i>procumbens</i>	
SCROPHULARIACEAE	<i>Diascia capsularis</i> Benth.	
SCROPHULARIACEAE	<i>Diascia integerrima</i> Benth.	Us
SCROPHULARIACEAE	<i>Hebenstretia dura</i> Choisy	
SCROPHULARIACEAE	<i>Jamesbrittenia atropurpurea</i> (Benth.) Hilliard	
SCROPHULARIACEAE	<i>Jamesbrittenia aurantiaca</i> (Burch.) Hilliard	
SCROPHULARIACEAE	<i>Jamesbrittenia crassicaulis</i> (Benth.) Hilliard	
SCROPHULARIACEAE	<i>Jamesbrittenia filicaulis</i> (Benth.) Hilliard	
SCROPHULARIACEAE	<i>Jamesbrittenia fruticosa</i> (Benth.) Hilliard	
SCROPHULARIACEAE	<i>Jamesbrittenia pinnatifida</i> (L.f.) Hilliard	
SCROPHULARIACEAE	<i>Jamesbrittenia tysonii</i> (Hiern) Hilliard	
SCROPHULARIACEAE	<i>Limosella grandiflora</i> Benth.	
SCROPHULARIACEAE	<i>Manulea crassifolia</i> Benth. subsp. <i>crassifolia</i>	
SCROPHULARIACEAE	<i>Nemesia affinis</i> Benth.	
SCROPHULARIACEAE	<i>Nemesia albiflora</i> N.E.Br.	
SCROPHULARIACEAE	<i>Nemesia fruticans</i> (Thunb.) Benth.	Us
SCROPHULARIACEAE	<i>Selago albida</i> Choisy	
SCROPHULARIACEAE	<i>Selago corymbosa</i> L.	
SCROPHULARIACEAE	<i>Selago divaricata</i> L.f.	
SCROPHULARIACEAE	<i>Selago dolosa</i> Hilliard	
SCROPHULARIACEAE	<i>Selago geniculata</i> L.f.	
SCROPHULARIACEAE	<i>Selago paniculata</i> Thunb.	
SCROPHULARIACEAE	<i>Selago saxatilis</i> E.Mey.	
SCROPHULARIACEAE	<i>Selago speciosa</i> Rolfe	
SCROPHULARIACEAE	<i>Selago zeyheri</i> Rolfe	
SCROPHULARIACEAE	<i>Sutera halimifolia</i> (Benth.) Kuntze	
SCROPHULARIACEAE	<i>Sutera laxiflora</i> (Benth.) Kuntze	
SCROPHULARIACEAE	<i>Sutera mollis</i> (Benth.) Hiern	
SCROPHULARIACEAE	<i>Veronica anagallis-aquatica</i> L.	
SOLANACEAE	<i>Datura stramonium</i> L.	*
SOLANACEAE	<i>Lycium cinereum</i> Thunb.	
SOLANACEAE	<i>Lycium ferocissimum</i> Miers	
SOLANACEAE	<i>Lycium oxycarpum</i> Dunal	
SOLANACEAE	<i>Lycium prunus-spinosa</i> Dunal	
SOLANACEAE	<i>Lycium schizocalyx</i> C.H.Wright	
SOLANACEAE	<i>Nicotiana glauca</i> Graham	*
SOLANACEAE	<i>Solanum capense</i> L.	
SOLANACEAE	<i>Solanum nigrum</i> L.	
SOLANACEAE	<i>Solanum retroflexum</i> Dunal	
SOLANACEAE	<i>Solanum tomentosum</i> L.	
SOLANACEAE	<i>Withania somnifera</i> (L.) Dunal	
THYMELAEACEAE	<i>Gnidia microphylla</i> Meisn.	
THYMELAEACEAE	<i>Gnidia polycephala</i> (C.A.Mey.) Gilg	
THYMELAEACEAE	<i>Passerina obtusifolia</i> Thoday	
URTICACEAE	<i>Urtica dioica</i> L.	*
URTICACEAE	<i>Urtica urens</i> L.	*
VERBENACEAE	<i>Chascanum pinnatifidum</i> (L.f.) E.Mey var. <i>pinnatifidum</i> .	
VERBENACEAE	<i>Lantana rugosa</i> Thunb.	
VERBENACEAE	<i>Lippia javanica</i> (Burm.f.) Spreng.	

VERBENACEAE	<i>Verbena tenuisecta</i> Briq.	*
VISCACEAE	<i>Viscum continuum</i> E.Mey. ex Sprague	
VISCACEAE	<i>Viscum rotundifolium</i> L.f.	
VITACEAE	<i>Cyphostemma quinatum</i> (Dryand.) Desc. ex Wild & R.B.Drumm.	
VITACEAE	<i>Rhoicissus tridentata</i> (L.f.) Wild & R.B.Drumm.	
ZYGOPHYLLACEAE	<i>Tribulus terrestris</i> L.	
ZYGOPHYLLACEAE	<i>Zygophyllum incrustatum</i> E.Mey. ex Sond.	

Complete list

Selective list

Total species:	680	Total species:	479
Total genera:	333	Total genera:	227
Total families:	87	Total families:	62
Total red data species:	13	Total red data species:	8
