Threatened plants of Southern Africa

A V Hall, M de Winter, B de Winter and S A/M van Oosterhout

A report of the Committee for Terrestrial Ecosystems
National Programme for Environmental Sciences

SOUTH AFRICAN NATIONAL SCIENTIFIC PROGRAMMES REPORT NO

45

MAY 1980

Issued by
Cooperative Scientific Programmes
Council for Scientific and Industrial Research
P O Box 395
PRETORIA
0001
South Africa
from whom copies of reports in this series are available on request.

Printed in 1980 in the Republic of South Africa
by the Graphic Arts Division of the CSIR

ISBN 0 7988 1780 1

Authors' addresses -

Dr A V Hall and Miss S A M van Oosterhout
Bolus Herbarium
University of Cape Town
RONDEBOSCH
7700
South Africa

Dr B de Winter and Mrs M de Winter
Botanical Research Institute
Private Bag X101
PRETORIA
0001
South Africa

PREFACE

The increasing threat to the survival of southern Africa's wild plants and animals is a problem of enormous magnitude. Steps are being taken within the National Programme for Environmental Sciences, one of several cooperative scientific programmes in South Africa administered by the CSIR, to collect data on threatened species, to promote research on them and to assist in finding the best ways to conserve them. This report is a first attempt to assess the threatened plant problem in southern Africa. It is a product of both an intensive survey in the Cape Province, and a preliminary compilation of data for the rest of southern Africa. It has been made both to assist conservation authorities in the region and to provide lists for the International Union for the Conservation of Nature and Natural Resources (IUCN). The lists are compatible with those being published for other parts of the world for the IUCN Threatened Plants Committee.

The report deals with Angiosperms, Gymnosperms and Pteridophytes, but not Bryophytes, Algae and Fungi, the taxonomy and distributions of which are still too poorly known. It deals with the area covered by the Flora of Southern Africa, which includes all of continental southern Africa south of (but excluding) Angola, Zimbabwe and Mozambique.

The plants listed include those known to be recently extinct in the wild (a few of these may still exist in some form in cultivation); endangered, vulnerable and critically rare taxa (these categories are jointly termed threatened); as well as many with either an indeterminate threatened status or probably threatened.

Three lists are provided. The first is an alphabetical list of threatened taxa within families; the second is a list for each political area (country or province) with its own conservation authority; and the third is a list for each degree-'square', taken as one degree of latitude by one degree of longitude. For each list, a distinction is made between the taxa endemic and non-endemic to the area in question (southern Africa in the first list, each country or province in the second and each degree-square in the third). The lists are cross-referenced by an index.

Future lists will doubtless show many changes. Some species were not included because they were too poorly known. Of those listed, several have shown changes of status, usually for the worse, during the preparation of this report.

ACKNOWLEDGEMENTS

The authors offer their thanks to the many persons who have so willingly given time and effort toward the production of this report. Special gratitude is due to the staff of the Botanical Research Institute for their help and advice on the many groups on which they have specialized knowledge, to the curators and staff of herbaria, field specialists and the authors of monographs for their invaluable help in compiling the lists of taxa. The authors are grateful for suggestions for the supporting text, especially from Dr R G Noble of the CSIR, and from Dr L E Morse and his co-workers at the New York Botanical Garden. Special thanks are due to the directors and staff of the state and provincial conservation authorities in southern Africa for their keen and willing cooperation and to the National Programme for Environmental Sciences for its help, encouragement and financial support.

CONTRIBUTORS

The late Mr J P H Acocks
Mr J M Anderson
Mr R J Anderson
Miss W F Barker
Mrs M Bates
Mr M B Bayer
Mrs P A Bean
Mr W Bond
Mr C Boucher
Mr P V Bruyns
Mr C J Burgers
Mr R Burroughs
Miss J Clarke
Dr L E W Codd
Mr A O Crook
Mrs L Crook
Dr R Dahlgren
Mr K St J Damstra
Prof G R Delpierre
Mr D R de Wet
Prof N du Plessis
Dr R A Dyer
Miss E Esterhuysen
Miss A K Forrester
Mr K A Foster
Mr S P Fourie
Mr R M I Frandsen
Miss J Froggatt
Mr A J Gardiner
Dr H F Glen
Mrs R P Glen
Dr P Goldblatt
Prof Dr J Grau
Mr A Gubb
Mr D S Hardy
Miss K Immelman
Prof W P U Jackson
Dr A Jacot Guillarmod
Mr W J Jankowitz
Mr J F Jooste
Mr J H Keet
Mr F J Kruger
Mr L C Leach
Miss A le Roux
Mr P Linder
Mrs A A Mauve
Mr P M Mbokodi
Miss G M Micklem
Mr A V Milewski
Mr D B Müller
Prof D Müller-Doblies
Mr E G H Oliver
Miss N Parkman
Miss C Peterson
Miss J Powis
Dr J P Rourke
Prof N Sauer
Mr R Schadle
Mrs S Schadle
Dr J C Scheepers
Prof E A C L E Schelpe
Mr P A Shepherd
Mr H C Taylor
Dr H Tölken
Mr P van der Merwe
Mrs E van Hoepen
Miss G M van Niekerk
Miss I C Verdoorn
Dr F von Breitenbach
Mr C J Ward
Miss W G Welman
Dr I J M Williams

PROPOSALS FOR NEXT EDITION

Proposals are invited for additions, deletions and changes to the lists for inclusion in the next edition of this report. Proposals, with supporting data, should be sent to:

Liaison Officer, Threatened Plants
Cooperative Scientific Programmes
C S I R
P O Box 395
PRETORIA
0001
South Africa

ABSTRACT

Lists are provided of 1 915 vascular plant taxa regarded to be either extinct or variously threatened in southern Africa, the region south of (but excluding) Angola, Zimbabwe and Mozambique. These include 39 recently extinct taxa, 105 endangered, 166 vulnerable and declining, 537 critically rare, 261 indeterminate but in one of the above categories, and 807 uncertain whether safe or not. Statistics and lists are given of the plants grouped by families, for countries and provinces, and for degree square areas. Methods and schedules used in the study of threatened plants and habitats are described. The findings are discussed in relation to the conservation strategies needed, in particular in the Cape Floristic Kingdom area which appears to be a major crisis zone for the loss of genetic diversity.

SAMEVATTING

Lyste word voorsien van 1 915 vaatplant-taksa wat beskou word as of uitgesterf of op een of ander manier bedreig in Suider-Afrika, die gebied suid van, maar wat Angola, Zimbabwe en Mosambiek uitsluit. Dit bevat 39 taksa wat onlangs uitgesterf het, 105 in gevaar, 166 kwesbaar en dalend, 537 krities skaars, 261 onbepaald maar in een van die vorige kategorieë, en 807 onseker of hulle veilig is of nie. Statistieke en lyste word gegee van die plante volgens families, volgens lande en provinsies en volgens graadkwadraatgebiede. Metode en opgawe-skemas vir die studie van bedreigde plante en habitatte word beskryf. Die bevindinge word aan die hand van bewaringstrategieë bespreek wat veral in die gebied van die Kaapse Floristiese Koninkryk benodig word.

TABLE OF CONTENTS

INTRODUCTION

The lists of threatened plants in this report were drawn up as part of a world-wide study promoted by the IUCN Threatened Plants Committee. The study arose from a concern about the apparently rising rates of extinction among the world's plants, apparently mostly caused by human disturbance and as signs of humanity's neglectful treatment of nature. The finality of the process is shown by the title of a recent book, Extinction is forever (Prance and Elias 1977). Once destroyed, the enormous complexity of a species cannot be re-created. Its potential for enriching the lives of other plants and animals, and humanity, becomes lost for all time.

The habitats needed by many wild species are shrinking drastically. By the early 1970's, 40 percent of the tropical moist forests had been lost and their area was shrinking by about eleven million hectares a year (Sommer 1976). This annual area of loss is equivalent to the whole of Liberia, or about four times that of Lesotho. By the year 2 000, most of the world's tropical humid forests will have been destroyed or disrupted by massive rates of exploitation (Myers 1976). Habitat destruction on this scale endangers many plants. Raven (1976) has estimated that about 50 000 species, or 30 percent of the world's tropical flowering plants, will reach endangered or extinct status by the end of the century. In temperate latitudes, habitat changes have already created pressures on a vast scale. These have mainly come about through replacement land-uses such as urban growth, farming and commercial forestry.

The socio-economic forces driving both the exploitation of nature and habitat destruction are deeply fixed. There are the rising demands of increasing human populations; the large commercial operations using natural plant life, often based in wealthier countries and acting multi-nationally; and the ever greater need to combat poverty and starvation in poorer countries where wild plants are exploited for their products and financial gain. Deflecting these forces away from nature amounts to an almost insoluble challenge (Eckholm 1978) and one may expect the loss of species to continue for a long time. Wealthier countries are able through research and conservation action to provide habitats in which threatened taxa might survive not only the next fifty years but the changes that might be expected in the next thousand years or more. Poor countries, however, are much less fortunate in this respect.

Pressures on wild plants and animals are widespread throughout Africa. The prime cause of this is a high rate of human population growth. Africa's 1976 population of 400 million persons is likely to double in only 27 years, by the year 2003. Until recently, South Africa had one of the highest growth rates for its population in the world, a monthly increase of about 60 000 persons (Talbot 1978). There are now encouraging signs of a fall in birth-rates, following a trend seen in many other countries but apparently not elsewhere in Africa (Population Reference Bureau 1976). Although most of the population increase in South Africa is in the towns and cities, increased populations rely on major construction projects and on greater production of food and other

essentials from the countryside, so that human land uses have to be made more intensive and to extend further into wild areas.

Without a large increase in effort in plant conservation in southern Africa, many more species will come to be at risk and within a short time, vanish. The territory being considered here is about 267 million hectares in area, which supports some 17 500 species of vascular plants. Of concern on a world scale is the worsening status of the Cape Floristic Kingdom, a distinct flora that lies in a narrow strip on the southern and south-western coast of the subcontinent. Here, some 6 000 species are concentrated in relict patches totalling 1,8 million hectares and about 70 percent of these species are found nowhere else (Good 1964, Hall 1978, Goldblatt 1978). Rich in endemics and forming one of the world's six major assemblages of plant life, many of its species are now threatened. Owners of wild land, officials and scientists have a heavy responsibility in looking after this vegetation, which is probably the most concentrated genetic resource in the world.

Surveys of threatened and rare plants for this report began in 1974 in the Cape Province and were later extended to the Transvaal and the Orange Free State. In order to extend the lists to other parts of southern Africa, surveys of herbarium records were undertaken and the advice of a number of specialists was sought. Some plants have long been known to be rare or threatened. For others, the information is scanty and urgently in need of amplification. This is reflected in the large number of taxa classified in the I (indeterminate) and U (uncertain whether safe or not) categories. Justification for including these is confirmed by field work in the Cape Province which is showing that well over half of the former U-category cases are turning out to be threatened.

METHODS

PROCEDURES FOLLOWED IN DRAWING UP THE LISTS

Herbarium records, literature and the advice of numbers of specialists form the chief basis of the list of threatened and rare species in this report. The list is probably far from complete in some areas, but it represents the best available data. The large numbers of plants in the I (indeterminate) and U (uncertain whether safe or not) categories reflect an approach that may have erred to the cautious side rather than risking over-statement. For example, the lists for the eastern Cape may only weakly reflect the rising pressures there on rare plants, due to an out-of-date image caused by a lack of recent herbarium collecting (A F M Jacot Guillarmod pers comm). A frequent problem was the immature state of the taxonomy. Where this was encountered, a positive effort was made to exclude taxa that were doubtfully distinct. In especially difficult cases, such as the Mesembryanthemaceae, it may be found that numbers of species will have to be added to future lists for this reason. Subspecies and varieties have been listed where it was felt that their populations showed both differing status levels and significantly distinct elements of genetic diversity. Records in the X, E, V and R categories (extinct, endangered, vulnerable and rare) are generally backed by recent field knowledge. Intensive studies of threatened plants and their habitats are helping to give an understanding of the strategies needed for their conservation. This work has been started on a small scale and needs to be more widely taken up elsewhere.

FIELD SURVEYS

For the many species concentrated in the south and south-western Cape, it was found necessary to provide an efficient information-handling system. This was carried out as follows. For each of the 1 500 species in the Cape survey, a file was made. This held, besides notes and maps, an A4-sized data card that could be slipped into a transparent folder and taken into the field. The card carried an illustration of the plant, a description, notes for distinguishing similar species, and statements on ecology, localities and dates of former collections. The local area of each site was given in terms of 0,25 x 0,25 degree units of latitude and longitude, after Edwards and Leistner (1971). The records of plants at the sites, totalling about 4 000 for the Cape, could then be indexed and used on a systematic basis. A small computer program was written for this, based on the BOLIR system for specimen-label data (Hall 1972, Hall in press). The program acted on a data-base in which a separate summary was given of each of the 4 000 records. Each summary was compressed into the fields of an 80-column card and gave no more than a single line on output. This conformed to the strategy of keeping the manuscript files as the basic store of information, the computer being given no more than was necessary for its role in indexing and sorting. The system gives a continually up-to-date source of guides for expeditions. Along any chosen route, it could list the species likely to be in flower in each 0,25 x 0,25

degree unit of latitude and longitude, at a particular time of the year. For each species, the computer printed a brief statement of the locality-names, the year last seen, and the ranges of months of both maximum and occasional flowering.

Studies at the sites of threatened and rare plants are aided by a standard checklist of items to be examined. The checklist used for the Cape Province survey is shown in Table 1. It owes its origin to a more detailed document developed at a Conference at the New York Botanical Garden in 1977 (Henifin et al in press).

HABITATS

The checklist in Table 1 was modified for use with threatened and rare habitats. The plants restricted to such habitats and unable to survive without them will themselves be rare or threatened. Reports on such plants become more significant if they are given in the context of a comparative habitat study. As an example, north of Cape Town there is a cluster of areas of a relict coastal fynbos habitat, totalling 4 500 hectares. The habitat is under immediate threats that could rapidly bring it to virtual extinction. It formerly covered about 600 000 hectares on the coastal plain and had been severely reduced by conversion to farmland and by replacement by invasive, thicket-forming exotics. The relict was found to carry a total of 28 species that were either rare or nearing extinction. The checklist used for threatened habitats is given in Table 2.

Table 1. Standard checklist of items investigated for each report on a threatened or rare plant species, after Henifin et al (in press).

SCIENTIFIC NAME, STATUS, ACTION PRIORITY

NOMENCLATURE

Family: scientific name, synonyms, common names

Species: scientific name, synonyms, common names

LEGAL STATUS FOR PROTECTION

National

Provincial

Other

DESCRIPTION

Field characters

Brief diagnostic description

Look-alikes, if any, with distinctive features

TAXONOMIC PROBLEMS, IF ANY

GEOGRAPHICAL DISTRIBUTION

Historical

Present known distribution

Other possible natural sites

HABITAT DESCRIPTION

Community structure

List of associated plants

Altitude ranges

Exposure, slope and aspect ranges

Edaphic factors including soil moisture

Habitat dynamics

Other habitat features of special interest

POPULATION BIOLOGY

Number of known populations

Numbers of individuals in each population

Types of reproduction

Age-class structure

Flowering and fruiting periods

Dispersal mechanisms

Pollinators

Other biological factors

Vigour, trends and status of known populations

RECOMMENDED ESSENTIAL HABITATS

Geographical boundaries essential to the survival of the taxon, including buffer zones and areas for required associates (such as pollinators and dispersers of seed) and areas through which associated animals migrate

THREATS TO SURVIVAL

Existing threats, with an indication of the destructive strength of each

Potential threats that may develop in the future

LAND OWNERSHIP AND STATUS

Owners and lessees of land bearing essential habitats

Legal status of this land

MANAGEMENT TO PROMOTE SURVIVAL OF THE TAXON

Action already taken

Suggestions for optimal action

Suggestions for alternative actions

CULTIVATION, SEED-STORAGE

Likelihood of present or potential maintenance of the taxon in cultivation

Locations, sizes, conditions and purposes of populations at present in cultivation

Arrangements, if any, made for seed storage and known or potential conservation value

SIGNIFICANCE OF TAXON

Evolutionary and ecological significance

Aesthetic, horticultural, agricultural, sylvicultural, medicinal, economic, recreational and scientific significance

SPECIALISTS

Names and addresses of those knowledgeable about the taxon

REFERENCES

List of published and unpublished references

APPENDICES

Copies of distribution maps, illustrations, original descriptions, floristic or monographic distributions, and if possible, popular literature

List of herbarium specimens giving label data and herbarium location

Map showing known distribution of populations and the boundaries of essential habitats and recommended buffer zones

AUTHOR OF REPORT AND DATE

Name and address of author, and date

OTHER SOURCES USED

Sources of information if other than any individual or reference cited above

ACTION REQUIRED BY FUTURE SURVEY TEAMS

Suggested interval for successive visits

Persons being informed of the need for conservation action, as expressed in this report

Other action

RECOMMENDED STATUS

World status in terms of IUCN definitions

Country or region status in terms of IUCN definitions

URGENCY FOR CONSERVATION

Statement of whether priority is maximum, high, medium or low, or whether monitoring alone is required

Table 2. Checklist of items investigated for each report on a threatened or rare habitat, developed from Henifin et al (in press).

HABITAT NAME, STATUS, ACTION PRIORITY

LOCATION OF HABITAT

Description by place-names

Description by longitudes and latitudes

IDENTIFICATION OF HABITAT

Distinctive features of habitat

Distinctive features of look-alikes

PHYSICAL FEATURES

Topography

Geology, soils and drainage

Climate

Other physical features

BIOTIC FEATURES

For each community within the habitat:

- Name of community
- Chief dominants and structures
- Special physical features
- Successional features
- Invasive alien species
- Threatened or rare species

Inter-dependance between communities

SIGNIFICANCE OF THE HABITAT

Evolutionary and ecological significance

Significance of contained threatened or rare plants and animals

Scientific, educational, aesthetic, recreational, economic or other significance

PRESSURES ON THE HABITAT

For each community within the habitat:

- Name of community
- Historical distribution
- Presently known distribution and trends
- Other possible sites
- Pressures, with strengths and rates of impact
- Likely future pressures

Effect of pressures on the inter-community systems

RECOMMENDED STATUS OF THE HABITAT

Either endangered, vulnerable and declining, rare, indeterminate, uncertain whether safe or not, in the same sense as used by the IUCN for threatened or rare species (refer to page 9)

BOUNDARIES RECOMMENDED FOR CONSERVATION OF THE HABITAT

Primary area and its buffer-zones

Supplementary areas and their buffer-zones

Possible alternative areas and their buffer-zones

OWNERSHIP, STATUS AND USES OF LAND WITHIN PROPOSED HABITAT BOUNDARIES

History

Legal status

Present owners and lessees

Current land-use

Possible future land-uses

Recommended changes for ownership, legal status and land-use

RESEARCH AND MANAGEMENT RECOMMENDATIONS

Research priorities with dates for completion

Management priorities with dates for completion

URGENCY FOR CONSERVATION ACTION

Either maximum, high, medium or low, with an indication of the date by which conservation action should be fully under way

SPECIALISTS KNOWLEDGEABLE ABOUT THE HABITAT

Names, addresses and special interests

REFERENCES ABOUT THE HABITAT

Lists of published and unpublished references

OTHER SOURCES USED

Sources of information if other than any individual or reference cited above

AUTHOR OF REPORT AND DATE

Author's name, address and date of report

APPENDICES

Copies of source documents, maps and diagrams giving background on

Physical features

General biotic features

Threatened and rare species

Detailed map of recommended habitat areas for conservation, showing primary area, supplementary areas and buffer-zones, with possible alternatives; the map also to show landmarks and ownership

REGIONAL LISTS

The lists of threatened and rare plants in administrative regions and 1 x 1-degree areas were prepared using the computer data-bank noted above. A small suite of programs was written that allows the listing of species alphabetically by category for each region.

The programs also determine whether the listed species is endemic to the region or not. Although some adjustments are needed where the boundaries of administrative regions cross degree squares, the system has provided a valuable aid. The index to all the entries in the lists, and to other items, was also given by the computer programs.

DEFINITIONS OF CONSERVATION STATUS CATEGORIES AND OTHER TERMS USED

CONSERVATION STATUS CATEGORIES

The various states of threat and rarity are defined for this report to follow the standards of the International Union for the Conservation of Nature and Natural Resources. Two of the code-letters have been changed for easier use (X=Ex, U=K). The term threatened is used in a general way to include all of the categories Extinct, Endangered, Vulnerable and Rare.

X: EXTINCT No longer known to exist in the wild, after repeated searches of all former and other possible localities. This category is also used for species that have vanished in the wild but survive in at least some form in cultivation.

E: ENDANGERED In immediate danger of extinction if the causal factors continue operating. Included are taxa whose populations are so critically reduced, that a breeding collapse due to a lack of genetic diversity becomes possible, whether or not they are threatened by human activity.

V: VULNERABLE AND DECLINING Used for a plant that was recently more widespread, but is on the decline, and is likely to become endangered if the causal factors for its decline continue operating.

R: RARE Used for a plant with a relatively small world population that is not declining and is under no known immediate threat. Because of its rarity, the plant should be checked regularly for a decline due to some unexpected pressure.

I: INDETERMINATE A temporary category for plants that are known to be either endangered, vulnerable or rare, but due to lack of study, cannot yet be placed convincingly in one category in preference to another.

U: UNCERTAIN WHETHER SAFE OR NOT A temporary category for plants that are so little known that there is an even chance that they could prove to be safe.

nt: NEITHER RARE NOR THREATENED Used for the world status of plants believed to be neither rare nor threatened where they occur naturally elsewhere. The plants are listed in this report because their populations in southern Africa are significant in some respect, and are threatened or rare within the territory.

e/ne: ENDEMIC, NON-ENDEMIC Used in a separate column to show whether a plant is, or is not, confined to within the area in question in that list. In the first list, endemism refers to southern Africa, in the second list to the country/province in question and in the third list to the degree square in question.

ALPHABETICAL LIST OF THREATENED TAXA IN SOUTHERN AFRICA

Taxa are listed alphabetically by families. The conservation status categories for southern Africa and the world are defined as on page 9: X = extinct, E = endangered, V = vulnerable, R = rare, I = indeterminate, U = uncertain, nt = not threatened. The letters e and ne in the central code-column of this table represent endemic and non-endemic to southern Africa, respectively. Southern Africa is taken as the area south of and excluding Angola, Zimbabwe and Mozambique.

	Southern Africa	Endemic/ Non-endemic	World
ACANTHACEAE			
Anisotes sessiliflorus C.B. Cl.	R	ne	nt
Barleria albipilosa Hainz	U	ne	U
Barleria ameliae A. Meeuse	U	ne	U
Barleria argillicola Oberm.	R	e	R
Barleria media C.B. Cl.	R	e	R
Barleria megalosiphon Mildbr.	R	ne	R
Barleria oxyphylla Lindau	U	e	U
Blepharis inermis C.B. Cl.	U	e	U
Duvernoia aconitiflora A. Meeuse	U	ne	U
Macrorungia longistrobus C.B. Cl.	U	ne	R
Ruspolia hypocrateriformis (Vahl) M.-Redh. var australis M.-Redh.	U	e	U
Sclerochiton triacanthus A. Meeuse	U	e	U
ADIANTACEAE			
Cheilanthes depauperata Baker	U	e	U
Pellaea namaquensis Baker	U	e	U
Pellaea rufa A.F. Tryon	U	e	U
AMARYLLIDACEAE			
Apodolirion lanceolatum Benth.	R	e	R
Brunsvigia litoralis R.A. Dyer	E	e	E
Brunsvigia undulata Leighton	R	e	R

	Southern Africa	Endemic/ Non-endemic	World
Carpolyza spiralis (L'Hérit.) Salisb.	U	e	U
Clivia caulescens R.A. Dyer	R	e	R
Clivia gardenii Hook.	I	e	I
Clivia miniata Regel	I	e	I
Clivia nobilis Lindl.	R	e	R
Crinum acaule Bak.	R	e	R
Crinum baumii Harms	R	ne	R
Crinum campanulatum Herb.	R	e	R
Crinum carolo-schmidtii Dinter	I	ne	U
Crinum crassicaule Bak.	R	ne	U
Crinum euchrophyllum Verdoorn	R	ne	U
Crinum kirkii Bak.	R	ne	nt
Crinum lineare L.f.	R	e	R
Crinum nerinoides Bak.	U	e	U
Crinum rautanenianum Schinz	R	ne	R
Cyrtanthus attenuatus R.A. Dyer	U	e	U
Cyrtanthus bicolor R.A. Dyer	R	e	R
Cyrtanthus clavatus (L'Herit.) R.A. Dyer	R	e	R
Cyrtanthus epiphyticus J.M. Wood	U	e	U
Cyrtanthus erubescens Killick	R	e	R
Cyrtanthus eucallus R.A. Dyer	R	e	R
Cyrtanthus falcatus R.A. Dyer	R	e	R
Cyrtanthus flavus Barnes	U	e	U
Cyrtanthus guthrieae L. Bol.	V	e	V
Cyrtanthus helictus Lehm.	R	e	R
Cyrtanthus herrei (Leighton) R.A. Dyer	R	e	R
Cyrtanthus huttoni Bak.	R	e	R
Cyrtanthus junodii Beauverd	U	e	U
Cyrtanthus loddigesianus (Herb.) R.A. Dyer	R	e	R
Cyrtanthus nutans R.A. Dyer	R	e	R
Cyrtanthus rectiflorus Bak.	U	e	U
Cyrtanthus smithii Watt ex. Harv.	R	e	R

	Southern Africa	Endemic/ Non-endemic	World
Cyrtanthus spiralis Burch.	V	e	V
Cyrtanthus staadensis Schonl.	V	e	V
Cyrtanthus suaveolens Schonl.	U	e	U
Cyrtanthus thorncroftii C.H. Wright	R	e	R
Gethyllis herrei L. Bol.	U	e	U
Gethyllis multifolia L. Bol.	V	e	V
Gethyllis unilateralis L. Bol.	U	e	U
Haemanthus amarylloides Jacq.	V	e	V
Haemanthus avasmontanus Dinter	U	e	U
Haemanthus canaliculatus Levyns	V	e	V
Haemanthus nortieri Isaac	U	e	U
Hessea chaplinii Barker	V	e	V
Hessea karooica Barker	R	e	R
Hessea leipoldtii L. Bol.	R	e	R
Hessea matthewsii Barker	V	e	V
Hessea unguiculata Barker	U	e	U
Klingia namaquana Schonl.	U	e	U
Nerine bowdenii Watson	U	e	U
Nerine gibsonii Douglas	R	e	R
Nerine gracilis R.A. Dyer	R	e	R
Nerine huttoniae Schonl.	U	e	U
Nerine masonorum L. Bol.	U	e	U
Nerine pancratioides Bak.	U	e	U
Nerine platypetala McNeil	U	e	U
Nerine pudica Hook.	R	e	R
Spiloxene declinata (Nel) Garside	I	e	I
Spiloxene maximiliani Schltr.	U	e	U
Spiloxene umbraticola Schltr.	U	e	U
Strumaria picta Barker	U	e	U
Strumaria salteri Barker	U	e	U
Strumaria watermeyeri L. Bol.	U	e	U
ANACARDIACEAE			
Ozoroa concolor (Presl ex Sond.) De Wint.	U	e	U

	Southern Africa	Endemic/ Non-endemic	World
Ozoroa insignis Del. ssp. latifolia (Engl.) R. Fernandes	U	e	U
Rhus batophylla Codd	U	e	U
Rhus crispa (Engl.) Harv. ex Schonl.	R	e	R
Rhus krebsiana Presl ex Engl.	U	e	U
Rhus rogersii Schonl.	R	e	R
ANNONACEAE			
Friesodielsia obovata (Benth.) Verdc.	U	ne	nt
Uvaria lucida Benth. ssp. virens (N.E. Br.) Verdc.	U	ne	nt
Xylopia odoratissima Welw. ex Oliv.	U	ne	nt
Xylopia parviflora (A. Rich.) Benth.	R	ne	nt
APOCYNACEAE			
Adenium boehmianum Schinz	U	ne	nt
Adenium obesum (Forsk.) Roem. et Schult.	I	ne	nt
Adenium oleifolium Stapf	I	e	I
Adenium swazicum Stapf	I	e	I
Holarrhena pubescens (Buch.-Ham.) Wall	R	ne	nt
Pachypodium namaquanum (Wyley ex Harv.) Welw.	V	e	V
Pachypodium saundersii N.E. Br.	I	e	I
Strophanthus kombe Oliv.	U	ne	nt
Strophanthus luteolus Codd	R	ne	R
APONOGETONACEAE			
Aponogeton ranunculiflorus Jacot-Guill. & Marais	V	e	V
ARACEAE			
Zantedeschia albomaculata (Hook.) Baill. ssp. valida Letty	R	e	R

	Southern Africa	Endemic/ Non-endemic	World
Zantedeschia jucunda Letty	U	e	U
Zantedeschia pentlandii (Watson) Wittm.	R	e	R
ARECACEAE (PALMAE)			
Borassus aethiopicum Mart.	R	ne	nt
Borassus caffra Becc.	R	e	R
Jubaeopsis caffra Becc.	R	e	R
Raphia australis Oberm. & Strey	V	e	V
ASCLEPIADACEAE			
Caralluma acutiloba N.E. Br.	I	e	I
Caralluma aperta N.E. Br.	U	e	U
Caralluma arenicola N.E. Br.	X	e	X
Caralluma bredae R.A. Dyer var. bredae	R	e	R
Caralluma bredae R.A. Dyer var. thomallae R.A. Dyer	I	e	I
Caralluma cincta Luckhoff	V	e	V
Caralluma gracilis Luckhoff	U	e	U
Caralluma intermedia Schltr.	I	e	I
Caralluma inversa N.E. Br.	I	e	I
Caralluma linearis N.E. Br.	R	e	R
Caralluma maughani R.A. Dyer	R	e	R
Caralluma pillansii N.E. Br.	I	e	I
Caralluma pruinosa N.E. Br.	I	e	I
Caralluma ubomboensis Verdoorn	R	e	R
Caralluma villetii Luckhoff	R	e	R
Duvalia maculata N.E. Br.	I	e	I
Duvalia parviflora N.E. Br.	I	e	I
Echidnopsis columnaris R.A. Dyer	V	e	V
Echidnopsis serpentina White & Sloane	U	e	U
Hoodia albispina N.E. Br.	V	e	V
Hoodia barklyi R.A. Dyer	I	e	I

	Southern Africa	Endemic/ Non-endemic	World
Hoodia dregei N.E. Br.	I	e	I
Hoodia lugardii N.E. Br.	U	e	U
Hoodia pillansii N.E. Br.	I	e	I
Huernia distincta N.E. Br.	R	e	R
Huernia humilis Haw.	I	e	I
Huernia insigniflora C.A. Maass	I	e	I
Huernia kennedyana Lavranos	I	e	I
Huernia longii Pillans	I	e	I
Huernia nouhuysii Verdoorn	V	ne	U
Huernia pillansii N.E. Br.	I	e	I
Huernia praestans N.E. Br.	I	e	I
Huernia simplex N.E. Br.	U	e	U
Huernia witzenbergensis Luckhoff	E	e	E
Mondia whitei (Hook. f.) Skeels	U	ne	nt
Orbea longidens (N.E. Br.) Leach	V	e	V
Orbea maculata (N.E. Br.) Leach	V	e	V
Orbea woodii (N.E. Br.) Leach	U	e	U
Orbeanthus conjunctus (White & Sloane) Leach	R	e	R
Orbeanthus hardyi (R.A. Dyer) Leach	U	e	U
Orbeanthus paradoxa (Verdoorn) Leach	R	ne	R
Orbeopsis gerstneri (Letty) Leach spp. elongata (R.A. Dyer) Leach	R	e	R
Orbeopsis gerstneri (Letty) Leach spp. gerstneri	R	e	R
Pectinaria stayneri Bayer	U	e	U
Stapelia barklyi N.E. Br.	I	e	I
Stapelia bijliae Pillans	U	e	U
Stapelia cincta Marloth	R	e	R
Stapelia clavicorona Verdoorn	V	e	V
Stapelia concinna Masson var. concinna	E	e	E
Stapelia concinna Masson var. paniculata N.E. Br.	R	e	R
Stapelia conformis N.E. Br.	R	e	R
Stapelia cylista Luckhoff	R	e	R

	Southern Africa	Endemic/ Non-endemic	World
Stapelia divaricata Mass.	V	e	V
Stapelia dwequensis Luckhoff	E	e	E
Stapelia erectiflora N.E. Br.	R	e	R
Stapelia gariepensis Pillans	U	e	U
Stapelia glanduliflora Mass.	V	e	V
Stapelia immelmaniae Pillans	V	e	V
Stapelia macowanii N.E. Br.	I	e	I
Stapelia neliana White & Sloane	I	e	I
Stapelia nouhuysii Phill.	V	e	V
Stapelia plantii Hook. f.	R	e	R
Stapelia rubiginosa Nel	R	e	R
Stapelia thudichumii Pillans	R	e	R
Stapelia umbonata Pillans	R	e	R
Stapelia vetula Mass. var. simsii N.E. Br.	U	e	U
Stapelia villetae Luckhoff	I	e	I
Stapeliopsis neronis Pillans	E	e	E
Trichocaulon alstoni N.E. Br.	I	e	I
Trichocaulon annulatum N.E. Br.	R	e	R
Trichocaulon cinereum Pillans	R	e	R
Trichocaulon halenbergense Dinter	U	e	U
Trichocaulon keetmanshoopense Dinter	I	e	I
Trichocaulon kubusense Nel	I	e	I
Trichocaulon pictum N.E. Br.	I	e	I
Trichocaulon pillansii N.E. Br.	E	e	E
Trichocaulon rusticum N.E. Br.	U	e	U
Trichocaulon simile N.E. Br.	U	e	U
Trichocaulon truncatum Pillans	R	e	R
Tridentea baylissii (Leach) Leach	I	e	I
Tridentea choanantha (Lavranos & Hall) Leach	I	e	I
Tridentea longii (Luckhoff) Leach	I	e	I
Tridentea parvipuncta (N.E. Br.) Leach	I	e	I
Tridentea umdausensis (Nel) Leach	I	e	I
Tridentea virescens (N.E. Br.) Leach	U	e	U

	Southern Africa	Endemic/ Non-endemic	World
BEGONIACEAE			
Begonia sonderana E. Irmsch.	U	e	U
BORAGINACEAE			
Cordia africana Lam.	R	ne	nt
Cordia grandicalyx Oberm.	U	ne	nt
Cordia pilossima Bak.	U	ne	nt
Lithospermum flexuosum Lehm.	U	e	U
Lobostemon bolusii Levyns	V	e	V
Lobostemon collinus Schltr.	U	e	U
Lobostemon gracilis Levyns	U	e	U
Lobostemon grandiflorus (Andr.) Levyns	U	e	U
Lobostemon horridus Levyns	U	e	U
Lobostemon hottentoticus Levyns	U	e	U
Lobostemon inconspicuus Levyns	U	e	U
Lobostemon lucidus Buek	U	e	U
Lobostemon muirii Levyns	U	e	U
BRUNIACEAE			
Audouinia capitata Brongn.	V	e	V
Berzelia dregeana Colozza	R	e	R
Berzelia ecklonii Pillans	R	e	R
Lonchostoma esterhuyseniae Dahlg. & Strid	I	E	I
Pseudobaeckia stokoei Pillans	R	e	R
Raspalia barnardii Pillans	I	e	I
Raspalia schlechteri Dummer	R	e	R
Staavia dodii Bol.	E	e	E
Staavia phylicoides Pillans	I	e	I
Staavia trichotoma (Thunb.) Pillans	X	e	X
Staavia zeyheri Sond.	E	e	E
Thamnea depressa Oliv.	X	e	X
Thamnea gracilis Oliv.	I	e	I
Thamnea uniflora Soland. ex Brongn.	X	e	X

	Southern Africa	Endemic/ Non-endemic	World
BUDDLEJACEAE			
Nuxia glomerulata (C.A. Sm.) Verdoorn	R	e	R
BURMANNIACEAE			
Burmannia madasgascariensis Mart.	U	ne	nt
BURSERACEAE			
Commiphora discolor Mendes	U	ne	U
Commiphora zanzibarica (Baill.) Engl.	U	ne	nt
CABOMBACEAE			
Brasenia schreberi Gmel.	U	ne	nt
CAMPANULACEAE			
Cyphia comptonii Bond	U	e	U
Cyphia dentariaefolia Presl.	U	e	U
Cyphia longiflora Schltr.	U	e	U
Cyphia longilobata Phill.	U	e	U
Cyphia oligotricha Schltr.	U	e	U
Cyphia ranunculifolia E. Wimm.	U	e	U
Cyphia salteri E. Wimm.	U	e	U
Cyphia stephensii E. Wimm.	U	e	U
Cyphia tortilis N.E. Br.	U	e	U
Laurentia giftbergensis Phill.	V	e	V
Laurentia longituba E. Wimm.	U	e	U
Laurentia mariae E. Wimm.	U	e	U
Lightfootia brachyphylla Adamson	U	e	U
Lightfootia effusa Adamson	U	e	U
Lightfootia microphylla Adamson	U	e	U
Lightfootia multicaulis Adamson	U	e	U

	Southern Africa	Endemic/ Non-endemic	World
Lightfootia multiflora Adamson	U	e	U
Lightfootia pauciflora Adamson	U	e	U
Lightfootia planifolia Adamson	U	e	U
Lightfootia squarrosa Adamson	U	e	U
Lightfootia umbellata Adamson	U	e	U
Lobelia capillipes Schltr.	U	e	U
Lobelia dasyphylla E. Wimm.	U	e	U
Lobelia disperma E. Wimm.	U	e	U
Lobelia hypsibata E. Wimm.	U	e	U
Lobelia laurentioides Schltr.	U	e	U
Lobelia montaguensis E. Wimm.	U	e	U
Lobelia nugax E. Wimm.	U	e	U
Lobelia zwartkopensis E. Wimm.	V	e	V
Monopsis arenaria E. Wimm.	U	e	U
Monopsis flava (Presl) E. Wimm.	U	e	U
Monopsis stricta (Presl) E. Wimm.	U	e	U
Prismatocarpus cordifolius Adamson	R	e	R
Prismatocarpus decurrens Adamson	U	e	U
Prismatocarpus fastigiatus Presl	U	e	U
Prismatocarpus hispidus Adamson	U	e	U
Prismatocarpus implicatus Adamson	U	e	U
Prismatocarpus pauciflorus Adamson	U	e	U
Prismatoctrpus pilosus Adamson	U	e	U
Prismatocarpus spinosus Adamson	U	e	U
Rhigiophyllum squarrosum Hochst.	U	e	U
Roella bryoides Buek	U	e	U
Roella cuspidata Adamson var. hispida Adamson	U	e	U
Roella goodiana Adamson	E	e	E
Roella latiloba DC.	U	e	U
Roella lightfootioides Schltr.	U	e	U
Roella rhodantha Adamson	R	e	R
Wahlenbergia annuliformis V. Brehm.	I	e	I
Wahlenbergia asperifolia V. Brehm.	U	e	U
Wahlenbergia bolusiana Schltr.	U	e	U

	Southern Africa	Endemic/ Non-endemic	World
Wahlenbergia bowkeri Sond.	U	e	U
Wahlenbergia brachycarpa Schltr.	I	e	I
Wahlenbergia buseriana Schltr.	R	e	R
Wahlenbergia ciliolata DC.	U	e	U
Wahlenbergia clavatula V. Brehm.	U	e	U
Wahlenbergia compacta V. Brehm.	U	e	U
Wahlenbergia constricta V. Brehm.	U	e	U
Wahlenbergia debilis Buek	I	e	I
Wahlenbergia distincta V. Brehm.	U	e	U
Wahlenbergia divergens DC.	U	e	U
Wahlenbergia dunantii DC.	U	e	U
Wahlenbergia floribunda Schltr.	U	e	U
Wahlenbergia lasiocarpa Schltr.	U	e	U
Wahlenbergia longisepala V. Brehm.	U	e	U
Wahlenbergia massonii D.C.	U	e	U
Wahlenbergia minuta V. Brehm.	U	e	U
Wahlenbergia mollis V. Brehm.	U	e	U
Wahlenbergia namaquana Sond.	U	e	U
Wahlenbergia oligotricha Schltr.	U	e	U
Wahlenbergia polyclada DC.	U	e	U
Wahlenbergia ramifera V. Brehm.	U	e	U
Wahlenbergia rara Schltr.	U	e	U
Wahlenbergia roelliflora Schltr. & V. Brehm.	U	e	U
Wahlenbergia rotundifolia V. Brehm.	U	e	U
Wahlenbergia saxifragoides V. Brehm.	X	e	X
Wahlenbergia schistacea V. Brehm.	U	e	U
Wahlenbergia serpentina V. Brehm.	U	e	U
Wahlenbergia subpilosa V. Brehm.	U	e	U
Wahlenbergia subtilis V. Brehm.	U	e	U
Wahlenbergia swellendamensis Buek	U	e	U
Wahlenbergia tomentosula V. Brehm.	U	e	U
Wahlenbergia tumida V. Brehm.	U	e	U

	Southern Africa	Endemic/ Non-endemic	World
CANELLACEAE			
Warburgia salutaris (Bertol. f.) Chiov.	V	ne	R
CAPPARACEAE			
Boscia angustifolia A. Rich. var corymbosa (Gilg) De Wolf	U	ne	nt
Boscia foetida Schinz ssp. longi-pedicellata (Gilg) Toelken	R	e	R
Boscia foetida Schinz ssp. minima Toelken	R	e	R
Boscia microphylla Oliv.	R	e	R
Boscia tomentosa Toelken	U	ne	U
Capparis sepiaria L. var. subglabra (Oliv.) De Wolf	R	ne	nt
CELASTRACEAE			
Cassine crocea (Thunb.) Kuntze	I	e	I
Catha transvaalensis Codd	U	e	U
Hippocratea crenata (Klotzsch) K. Schum. & Loes	R	ne	nt
Hipppocratea parvifolia Oliv.	U	ne	nt
Maytenus oxycarpa N.K.B. Robson	U	ne	U
Maytenus pubescens N.K.B. Robson	U	ne	nt
Pseudosalacia streyi Codd	R	e	R
CLUSIACEAE (GUTTIFERAE)			
Hypericum roeperanum Schimp. var. roeperanum	R	ne	nt
COMBRETACEAE			
Combretum collinum Fresen. ssp. taborense (Engl.) Okafor	U	ne	nt

	Southern Africa	Endemic/ Non-endemic	World
Combretum padoides Engl. & Diels	U	ne	nt
Combretum wattii Exell	U	ne	U
Lumnitzera racemosa Willd.	V	ne	nt
COMPOSITAE			
Adenoglossa decurrens (Hutch.) B. Nordenstam	U	e	U
Alciope lanata DC.	U	e	U
Amphiglossa callunoides DC.	U	e	U
Amphiglossa corrudaefolia DC.	U	e	U
Anaxeton angustifolium Lundg.	U	e	U
Anaxeton brevipes Lundg.	R	e	R
Anaxeton ellipticum Lundg.	R	e	R
Anaxeton hirsutum (Thunb.) Less.	R	e	R
Anaxeton virgatum DC.	U	e	U
Arctotheca forbesianum (Harv.) Lewin	I	e	I
Arctotis aenea Jacq.	U	e	U
Arctotis crispata Hutch.	U	e	U
Arctotis diffusa L.	U	e	U
Arctotis dregei Turcz.	U	e	U
Arctotis fosteri N.E. Br.	U	e	U
Arctotis parvifolia Schltr.	U	e	U
Arctotis rosea Jacq.	U	e	U
Arctotis sulcocarpa Lewin	U	e	U
Athanasia crassifolia Schltr.	U	e	U
Athanasia harmeri Phill.	U	e	U
Athanasia mundtii Harv.	U	e	U
Athanasia palmatifida DC.	U	e	U
Athanasia quinquedentata Thunb.	U	e	U
Athanasia rugulosa E. Mey.	V	e	V
Athanasia spathulata Harv.	U	e	U
Athanasia tomentella Hutch.	U	e	U
Berkheya angusta Schltr.	U	e	U
Berkheya dregei Harv.	U	e	U

	Southern Africa	Endemic/ Non-endemic	World
Berkheya francisci Bol.	R	e	R
Brachymeris erubescens Hutch.	U	e	U
Cenia duckittiae L. Bol.	I	e	I
Corymbium fourcadei Hutch.	U	e	U
Corymbium salteri E. Markötter	I	e	I
Corymbium theileri E. Markötter	I	e	I
Cotula loganii Hutch.	U	e	U
Cotula myriophylloides Harv.	I	e	I
Cotula paradoxa Schltr.	U	e	U
Cotula pedunculata Schltr.	U	e	U
Cullumia floccosa E. Mey.	U	e	U
Cullumia micracantha DC.	U	e	U
Cullumia pectinata (Thunb.) Less.	R	e	R
Cullumia selago Roessl.	U	e	U
Disparago rosea Hutch.	U	e	U
Elytropappus hispidus (L.f.) Druce	R	e	R
Eriocephalus tenuipes C.A. Smith	U	e	U
Eroeda muirii (C.A. Smith) Levyns	U	e	U
Euryops brevilobus Compton	R	e	R
Euryops ciliatus B. Nordenstam	I	e	I
Euryops decipiens Schltr.	R	e	R
Euryops dentatus B. Nordenstam	R	e	R
Euryops gracilipes B. Nordenstam	U	e	U
Euryops indecorus B. Nordenstam	R	e	R
Euryops integrifolius B. Nordenstam	R	e	R
Euryops lasiocladus (DC.) B. Nordenstam	I	e	I
Euryops latifolius B. Nordenstam	R	e	R
Euryops marlothii B. Nordenstam	R	e	R
Euryops mirus B. Nordenstam	U	e	U
Euryops muirii C.A. Smith	E	e	E
Euryops pectinatus (L.) Cass. ssp. lobulatus B. Nordenstam	R	e	R
Euryops pleiodontus B. Nordenstam	I	e	I
Euryops polytrichoides (Harv.) B. Nordenstam	I	e	I

	Southern Africa	Endemic/ Non-endemic	World
Euryops rosulatus B. Nordenstam	R	e	R
Euryops subcarnosus DC. ssp. minor B. Nordenstam	R	e	R
Euryops ursinoides B. Nordenstam	I	e	I
Euryops virgatus B. Nordenstam	R	e	R
Euryops zeyheri B. Nordenstam	U	e	U
Felicia annectens (Harv.) Grau	X	e	X
Felicia deserti Schltr.	U	e	U
Felicia diffusa (DC.) Grau ssp. khamiesbergensis Grau	R	e	R
Felicia ebracteata Grau	U	e	U
Felicia elongata (Thunb.) O. Hoffm.	R	e	R
Felicia esterhuyseniae Grau	R	e	R
Felicia fruticosa (L.) Nichols ssp. brevipedunculata (Hutch.) Grau	U	e	U
Felicia nigrescens Grau	U	e	U
Felicia tsitsikamae Grau	R	e	R
Gazania caespitosa Bol.	U	e	U
Gerbera aurantiaca Sch. Bip.	V	e	V
Gerbera parva N.E. Br.	R	e	R
Gerbera wrightii Harv.	R	e	R
Helichrysum archeri Compton	U	e	U
Helichrysum cochleariforme DC.	U	e	U
Helichrysum concinnum N.E. Br.	U	e	U
Helichrysum ernestianum DC.	U	e	U
Helichrysum filagineum DC.	U	e	U
Helichrysum isolepis Bol.	U	e	U
Helichrysum leptorhizum DC.	U	e	U
Helichrysum manopappum O. Hoffm.	U	e	U
Helichrysum pulchellum E. Mey.	U	e	U
Helichrysum ramulosum DC.	U	e	U
Helichrysum recurvatum (L.f.) Thunb.	V	e	V
Helichrysum silicicolum Compton	U	e	U
Helichrysum simii Bol.	U	e	U
Heterolepis mitis (DC.) Cass.	U	e	U
Hippia hirsuta DC.	U	e	U

	Southern Africa	Endemic/ Non-endemic	World
Inula paniculata (Klatt) Burtt Davy	U	ne	U
Mairia decumbens Schltr.	U	e	U
Marasmodes dummeri Bol.	I	e	I
Marasmodes oligocephalus DC.	U	e	U
Marasmodes undulata Compton	X	e	X
Matricaria schlechteri Bol.	U	e	U
Metalasia bodkinii L. Bol.	U	e	U
Metalasia erectifolia Pillans	U	e	U
Metalasia schlechteri L. Bol.	U	e	U
Metalasia tricolor Pillans	U	e	U
Oldenburgia arbuscula DC.	R	e	R
Oldenburgia papionum DC.	R	e	R
Osteospermum aciphyllum DC.	R	e	R
Osteospermum armatum Norl.	U	e	U
Osteospermum elsieae Norl.	R	e	R
Osteospermum hafstroemii Norl.	R	e	R
Osteospermum hirsutum Thunb.	X	e	X
Osteospermum hispidum Harv. var. viride Norl.	I	e	I
Osteospermum pterigoideum Klatt	U	e	U
Osteospermum wallianum Norl.	U	e	U
Othonna abrotanifolia Harv.	U	e	U
Othonna cacalioides L.f.	U	e	U
Othonna cakilefolia DC.	U	e	U
Othonna hallii B. Nordenstam	R	e	R
Othonna lasiocarpa DC.	U	e	U
Othonna lepidocaulis Schltr.	U	e	U
Othonna linearifolia DC.	U	e	U
Othonna membranifolia DC.	I	e	I
Othonna minima DC.	R	e	R
Othonna miser Harv.	U	e	U
Othonna papaveroides Hutch.	U	e	U
Othonna patula Schltr.	U	e	U
Othonna pinnatilobata Sch. Bip.	U	e	U
Othonna pteronioides Harv.	R	e	R

	Southern Africa	Endemic/ Non-endemic	World
Othonna rechingeri B. Nordenstam	U	e	U
Othonna spinescens DC.	U	e	U
Othonna tephrosioides Sond.	U	e	U
Pentzia trifida Schltr. MS.	U	e	U
Phymaspermum schroeteri Compton	R	e	R
Psilothonna speciosa (Pillans) Phill.	V	e	V
Pteronia inflexa Thunb.	U	e	U
Pteronia pillansii Hutch.	U	e	U
Pteronia scabra Harv.	U	e	U
Pteronia tenuifolia DC.	U	e	U
Pterothrix cymbaefolia Harv.	U	e	U
Pterothrix flaccida Schltr.	U	e	U
Pterothrix perotrichoides Harv.	U	e	U
Relhania conferta Hutch.	U	e	U
Relhania decussata (L.) L'Herit.	U	e	U
Relhania garnotii (Less.) Bremer	U	e	U
Relhania multipunctata DC.	U	e	U
Relhania rotundifolia Less.	E	e	E
Relhania steyniae L. Bol.	U	e	U
Relhania tricephala (DC.) Bremer	U	e	U
Rosenia glandulosa Thunb.	U	e	U
Senecio addoensis Compton	U	e	U
Senecio albopunctatus Bol.	U	e	U
Senecio anthemifolius Harv.	U	e	U
Senecio coleophyllus Turcz.	R	e	R
Senecio diodon DC.	U	e	U
Senecio erysimoides DC.	U	e	U
Senecio expansus Harv.	U	e	U
Senecio foeniculoides Harv.	I	e	I
Senecio haworthii DC.	U	e	U
Senecio hirtellus DC.	U	e	U
Senecio microspermus DC.	U	e	U
Senecio muirii L. Bol.	U	e	U

	Southern Africa	Endemic/ Non-endemic	World
Senecio rehmanni Bol.	U	e	U
Senecio serrurioides Turcz.	U	e	U
Senecio succulentus DC.	U	e	U
Senecio thunbergii Harv.	U	e	U
Senecio trachylaenus Harv.	U	e	U
Senecio trachyphyllus Schltr.	U	e	U
Stilpnophytum inopinatum Hutch.	U	e	U
Stilpnophytum oocephalum DC.	U	e	U
Stoebe copholepis Sch. Bip.	U	e	U
Stoebe cyathuloides Schltr.	U	e	U
Stoebe ensori Compton	U	e	U
Stoebe gomphrenoides Berg.	V	e	V
Stoebe humilis Levyns	R	e	R
Stoebe muirii Levyns	R	e	R
Stoebe salteri Levyns	V	e	V
Stoebe schultzii Levyns	U	e	U
Thaminophyllum mundtii Harv.	R	e	R
Thaminophyllum multiflorum Harv.	U	e	U
Ursinia coronopifolia (Less.) N.E. Br.	R	e	R
Ursinia pygmaea DC.	U	e	U
Ursinia subflosculosa (DC.) Prassler	R	e	R
Venidium augustifolium DC.	U	e	U
Venidium bolusii S. Moore	U	e	U
Venidium fugax Harv.	U	e	U
Venidium macrospermum DC.	U	e	U
Vernonia africana (Sond.) Druce	X	e	X
Zoutpansbergia caerulea Hutch.	R	e	R
CONNARACEAE			
Byrsocarpus orientalis (Baill.) Bak.	U	ne	nt

	Southern Africa	Endemic/ Non-endemic	World
CONVOLVULACEAE			
Turbina shirensis (Oliv.) A. Meeuse	R	ne	nt
Turbina stenosiphon (Hall. f.) A. Meeuse	R	ne	nt
CRASSULACEAE			
Adromischus humilis Marloth	U	e	U
Adromischus marianae Marloth	U	e	U
Adromischus phillipsiae Marloth	U	e	U
Cotyledon flanaganii Schonl.	R	e	R
Cotyledon heterophylla Schonl.	R	e	R
Cotyledon ladysmithiensis V. Poelln.	U	e	U
Cotyledon rubrovenosa Dinter	R	e	R
Crassula alcicornis Schonl.	X	e	X
Crassula alpestris Thunb. ssp. massonii (Britten & Bak.f.) Toelken	U	e	U
Crassula arborescens (Mill.) Willd. ssp. undulatifolia Toelken	R	e	R
Crassula barbata Thunb. ssp. broomii (Schonl.) Toelken	R	e	R
Crassula brachystachya Toelken	U	e	U
Crassula decumbens Thunb. var. brachyphylla (Adamson) Toelken	I	e	I
Crassula elsieae Toelken	U	e	U
Crassula fusca Herre	R	e	R
Crassula multiceps Harv.	R	e	R
Crassula multiflora Schonl. & Bak. f. ssp. leucantha (Schonl. & Bak. f.) Toelken	U	e	U
Crassula namaquensis Schonl. & Bak. f. ssp. comptonii (Hutch. & Pillans) Toelken	R	e	R
Crassula namaquensis Schonl. ssp. lutea Schonl.	U	e	U
Crassula obovata Haw. var. dregeana (Harv.) Toelken	U	e	U

	Southern Africa	Endemic/ Non-endemic	World
Crassula pellucida L. ssp. spongiosa Toelken	R	e	R
Crassula planifolia Schonl.	V	e	V
Crassula roggeveldii Schonl.	R	e	R
Crassula rupestris Thunb. ssp. marnierana (Huber & Jacobsen) Toelken	U	e	U
Crassula sericea Schonl. var. velutina (Friedrich) Toelken	U	e	U
Crassula socialis Schonl.	R	e	R
Crassula streyi Toelken	U	e	U
Crassula subulata Hermann var. hispida (Schonl. & Bak. f.) Toelken	X	e	X
Crassula susannae Rauh & Friedrich	I	e	I
Crassula tuberella Toelken	R	e	R
Crassula vestita Thunb.	R	e	R
Kalanchoe alticola Compton	R	e	R
Kalanchoe crundallii Verdoorn	V	e	V
Kalanchoe laciniata (L.) DC.	R	ne	nt
Kalanchoe longiflora Schltr. ex Wood	U	e	U
Tylecodon cacalioides (L.f.) Toelken	V	e	V
Tylecodon fragilis (R.A. Dyer) Toelken	R	e	R
Tylecodon pearsonii (Schonl.) Toelken	R	e	R
Tylecodon schaeferianus (Dinter) Toelken	U	e	U
Tylecodon singularis (R.A. Dyer) Toelken	U	e	U
Tylecodon striatus (Hutch.) Toelken	R	e	R
CRUCIFERAE			
Heliophila cedarbergensis Marais	R	e	R
Heliophila cinerea Marais	R	e	R
Heliophila collina Schulz	R	e	R
Heliophila cuneata Marais	V	e	V
Heliophila eximia Marais	R	e	R
Heliophila filicaulis Marais	R	e	R

	Southern Africa	Endemic/ Non-endemic	World
Heliophila laciniata Marais	R	e	R
Heliophila leptophylla Schltr.	U	e	U
Heliophila patens Oliv.	R	e	R
Heliophila ramosissima Schulz	U	e	U
Heliophila rimicola Marais	R	e	R
Heliophila tabularis W. Dod	R	e	R
Heliophila tricuspidata Schltr.	R	e	R
CUCURBITACEAE			
Gerrardanthus tomentosus Hook. f.	R	e	R
Oreosyce africana Hook. f.	U	ne	nt
CUPRESSACEAE			
Widdringtonia cedarbergensis Marsh	E	e	E
CYPERACEAE			
Tetraria brachyphylla Levyns	U	e	U
DICHAPETALACEAE			
Tapura fischeri Engl.	R	ne	nt
EBENACEAE			
Diospyros rotundifolia Hiern	V	ne	nt
Euclea linearis Zeyh. ex Hiern	R	e	R
ERICACEAE			
Erica acockii Compton	X	e	X
Erica aghillana Guth. and Bol.	V	e	V
Erica alfredii Guth. & Bol.	R	e	R

	Southern Africa	Endemic/ Non-endemic	World
Erica aneimana Dulfer	U	e	U
Erica annectens Guth. & Bol.	R	e	R
Erica aspalathoides Guth. & Bol.	U	e	U
Erica atrovinosa E.G.H. Oliv.	R	e	R
Erica auriculata Guth. & Bol.	U	e	U
Erica bakeri Salter	E	e	E
Erica barrydalensis L. Bol.	U	e	U
Erica beatricis Compton	R	e	R
Erica berzeliodes Guth. & Bol.	U	e	U
Erica blesbergensis H.A. Bak.	U	e	U
Erica bolusiae Salter	X	e	X
Erica casta Guth. & Bol.	V	e	V
Erica cerviciflora Salisb.	U	e	U
Erica chrysocodon Guth. & Bol.	E	e	E
Erica comptonii Salter	R	e	R
Erica cremea Dulfer	R	e	R
Erica crucistigmatica Dulfer	E	e	E
Erica cryptanthera Guth. & Bol.	U	e	U
Erica cyrillaeflora Salisb.	V	e	V
Erica dilatata Wendl.	U	e	U
Erica diotaeflora Salisb.	U	e	U
Erica dulcis L. Bol.	R	e	R
Erica dysantha Benth.	I	e	I
Erica eriophoros Guth. & Bol.	U	e	U
Erica ethelae L. Bol.	U	e	U
Erica fairii Bol.	E	e	E
Erica ferrea Berg.	V	e	V
Erica galgebergensis H.A. Bak.	R	e	R
Erica gallorum L. Bol.	U	e	U
Erica granulatifolia H.A. Bak.	R	e	R
Erica greyii Guth. & Bol.	U	e	U
Erica heleogena Salter	E	e	E
Erica heliophila Guth. & Bol.	U	e	U
Erica hendricksei H.A. Bak.	R	e	R
Erica heterophylla Guth. & Bol.	U	e	U

	Southern Africa	Endemic/ Non-endemic	World
Erica hibbertia Andr.	I	e	I
Erica hippurus Compton	R	e	R
Erica insolitanthera H.A. Bak.	R	e	R
Erica intricata H.A. Bak.	R	e	R
Erica jasminiflora Salisb.	E	e	E
Erica junonia Bol.	E	e	E
Erica keeromsbergensis H.A. Bak.	R	e	R
Erica keetii L. Bol.	U	e	U
Erica kraussiana Klotzsch	U	e	U
Erica lagenaeformis Salisb.	I	e	I
Erica latifolia Andr.	U	e	U
Erica lehmannii Klotzsch ex Benth.	U	e	U
Erica lerouxiae Bol.	R	e	R
Erica leucosiphon L. Bol.	R	e	R
Erica limosa L. Bol.	E	e	E
Erica macilenta Guth. & Bol.	U	e	U
Erica marifolia Soland.	R	e	R
Erica mundii Guth. & Bol.	U	e	U
Erica nematophylla Guth. & Bol.	R	e	R
Erica obconica H.A. Bak.	U	e	U
Erica octonaria L. Bol.	R	e	R
Erica oligantha Guth. & Bol.	I	e	I
Erica oophylla Benth.	R	e	R
Erica ostiaria Compton	U	e	U
Erica oxyandra Guth. & Bol.	U	e	U
Erica paludicola L. Bol.	V	e	V
Erica parvulisepala H.A. Bak.	R	e	R
Erica pauciovulata H.A. Bak.	R	e	R
Erica pearsoniana L. Bol.	U	e	U
Erica pilulifera L.	E	e	E
Erica porteri Compton	V	e	V
Erica praenitens Tausch	U	e	U
Erica purgatoriensis H.A. Bak.	V	e	V
Erica pyramidalis Soland.	X	e	X
Erica pyrantha Bol.	U	e	U

	Southern Africa	Endemic/ Non-endemic	World
Erica quadrisulcata L. Bol.	I	e	I
Erica riparia H.A. Bak.	I	e	I
Erica rufescens Klotzsch	U	e	U
Erica sociorum L. Bol.	E	e	E
Erica sonora Compton	U	e	U
Erica trichophora Benth.	U	e	U
Erica trichophylla Benth.	U	e	U
Erica turbiniflora Salisb.	U	e	U
Erica turgida Salisb.	X	e	X
Erica turrisbabylonica H.A. Bak.	U	e	U
Erica urna-viridis Bol.	V	e	V
Erica uysii H.A. Bak.	R	e	R
Erica vallis-araneorum E.G.H. Oliv.	R	e	R
Erica verticillata Berg.	X	e	X
Erica vestiflua Salisb.	R	e	R
Erica xanthina Guth. & Bol.	U	e	U
Grisebachia incana Klotzsch	U	e	U
Grisebachia niveni N.E. Br.	U	e	U
Grisebachia rigida N.E. Br.	U	e	U
EUPHORBIACEAE			
Alchornea hirtella Benth. var glabrata (Prain) Pax et K. Hoffm.	R	ne	nt
Alchornea laxiflora (Benth.) Pax et K. Hoffm.	R	ne	nt
Bridelia cathartica Bertol f. ssp. cathartica	R	ne	nt
Cavacoa aurea (Cavaco) J. Léon.	V	ne	V
Croton madadensis S. Moore	U	e	U
Drypetes mossambicensis Hutch.	U	ne	U
Euphorbia barnardii White, Dyer & Sloan	E	e	E
Euphorbia clivicola R.A. Dyer	R	e	R
Euphorbia eduardoi Leach	U	ne	U
Euphorbia fasciculata Thunb.	V	e	V

	Southern Africa	Endemic/ Non-endemic	World
Euphorbia grandialata R.A. Dyer	R	e	R
Euphorbia groenewaldii R.A. Dyer	V	e	V
Euphorbia hallii R.A. Dyer	R	e	R
Euphorbia keithii R.A. Dyer	U	e	U
Euphorbia knobelii Letty	E	e	E
Euphorbia marlothiana N.E. Br.	R	e	R
Euphorbia nesemannii R.A. Dyer	V	e	V
Euphorbia perangusta R.A. Dyer	E	e	E
Euphorbia restricta R.A. Dyer	R	e	R
Euphorbia rowlandii R.A. Dyer	U	e	U
Euphorbia sekukuniensis R.A. Dyer	R	e	R
Euphorbia tortirama R.A. Dyer	V	e	V
Euphorbia waterbergensis R.A. Dyer	R	e	R
Euphorbia zoutpansbergensis R.A. Dyer	R	e	R
Jatropha messinica E.A. Bruce	U	ne	R
Phyllanthus cedrelifolius Verdoorn	U	e	U
Phyllanthus kirkianus Muell Arg.	R	ne	nt
Suregada zanzibariensis Baill.	R	ne	U
FLACOURTIACEAE			
Homalium abdessammadii Aschers. & Schweinf.	U	ne	nt
Pseudoscolopia polyantha Gilg	U	e	U
Scolopia oreophila (Sleum.) Killick	R	e	R
Scolopia stolzii Gilg ex Sleum.	R	e	R
GEISSOLOMACEAE			
Geissoloma marginatum (L.) A. Juss.	R	e	R
GESNERIACEAE			
Streptocarpus decipiens Hilliard & Burtt	R	e	R

	Southern Africa	Endemic/ Non-endemic	World
Streptocarpus latens Hilliard & Burtt	U	e	U
Streptocarpus modestus Britten	U	e	U
Streptocarpus pogonites Hilliard & Burtt	R	e	R
Streptocarpus porphyrostachys Hilliard	U	e	U
Streptocarpus wendlandii Spreng.	V	e	V
GRAMINEAE (POACEAE)			
Arundinaria tesselata (Nees) Munro	V	e	V
Eragrostis arenicola C.E. Hubb.	U	e	nt
Helictotrichon barbatum (Nees) Schweick.	U	e	U
Helictotrichon namaquense Schweick.	U	e	U
Helictotrichon quinquesetum (Steud.) Schweick.	U	e	U
Melinus tenuissima Stapf	U	e	nt
Pentameris obtusifolia (Hochst.) Schweick.	U	e	U
Pentaschistis burchellii Stapf	U	e	U
Pentaschistis heterochaeta Stapf	U	e	U
Pentaschistis hirsuta Stapf	U	e	U
Pentaschistis zeyheri Stapf	U	e	U
Prionanthium ecklonii Stapf	U	e	U
Prionanthium pholiuroides Stapf	E	e	E
Prionanthium rigidum Desv.	U	e	U
Schizachrium brevifolium (Sweet) Nees	U	e	nt
Secale africanum L.	I	e	I
GRAMMITIDACEAE			
Grammitis poeppigana (Mett.) Schelpe	R	e	R
GREYIACEAE			
Greyia flanaganii H. Bol.	R	e	R

	Southern Africa	Endemic/ Non-endemic	World
IRIDACEAE			
Aristea lugens (L.f.) Horton	I	e	I
Aristea palustris Schltr.	U	e	U
Aristea recisa Weim.	U	e	U
Aristea simplex Weim.	U	e	U
Aristea singularis Weim.	U	e	U
Babiana auriculata Lewis	R	e	R
Babiana brachystachys (Bak.) Lewis	U	e	U
Babiana cedarbergensis Lewis	R	e	R
Babiana foliosa Lewis	U	e	U
Babiana horizontalis Lewis	U	e	U
Babiana hypogea Burch. var longituba Lewis	U	e	U
Babiana klaverensis Lewis	U	e	U
Babiana leipoldtii Lewis	I	e	I
Babiana lobata Lewis	U	e	U
Babiana obliqua Phill.	U	e	U
Babiana pauciflora Lewis	E	e	E
Babiana pilosa Lewis	U	e	U
Babiana salteri Lewis	R	e	R
Babiana stenomera Schltr.	R	e	R
Babiana striata (Jacq.) Lewis var. planifolia Lewis	R	e	R
Babiana torta Lewis	U	e	U
Bobartia gladiata (L.f.) Ker ssp. major (Lewis) Strid	R	e	R
Bobartia gracilis Baker	U	e	U
Bobartia longicyma J.B. Gillett ssp. longicyma	U	e	U
Bobartia longicyma J.B. Gillett ssp. microflora Strid	U	e	U
Bobartia orientalis J.B. Gillett ssp. occidentalis Strid	R	e	R
Bobartia paniculata Lewis	R	e	R
Bobartia parva J.B. Gillett	E	e	E
Chasmanthe bicolor (Gasp.) N.E. Br.	U	e	U

	Southern Africa	Endemic/ Non-endemic	World
Chasmanthe fucata (Herb.) N.E. Br.	U	e	U
Dierama pulcherrimum (Hook. f.) Bak.	V	e	V
Dietes bicolor Sweet	R	e	R
Dietes butcheriana Gerstn.	R	e	R
Dietes flavida Oberm.	U	e	U
Engysiphon brevitubus Lewis	U	e	U
Ferraria divaricata Sweet ssp. arenosa De Vos	I	e	I
Ferraria foliosa Lewis	U	e	U
Ferraria uncinata (Sweet) Bak.	U	e	U
Freesia armstrongi Watson	R	e	R
Freesia speciosa L. Bol.	R	e	R
Geissorhiza burchellii Foster	U	e	U
Geissorhiza furva Ker ex Bak.	I	e	I
Geissorhiza geminata E. Mey. ex Bak.	U	e	U
Geissorhiza ixioides Schltr.	U	e	U
Geissorhiza leipoldtii Foster	U	e	U
Geissorhiza lewisae Foster	I	e	I
Geissorhiza mathewsii L. Bol.	V	e	V
Geissorhiza mathewsii var. eurystigma Bol.	V	e	V
Geissorhiza ovalifolia Foster	U	e	U
Geissorhiza pappei Bak.	U	e	U
Geissorhiza rogersii N.E. Br.	U	e	U
Geissorhiza rubicunda Foster	U	e	U
Gladiolus acuminatus Bol. f.	U	e	U
Gladiolus alatus L. var. algoensis Herb.	X	e	X
Gladiolus appendiculatus Lewis var appendiculatus	R	e	R
Gladiolus appendiculatus Lewis var longifolius Lewis	R	e	R
Gladiolus aureus Baker	E	e	E
Gladiolus bilineatus Lewis	U	e	U
Gladiolus brachyphyllus Bol. f.	R	ne	R
Gladiolus buckerveldii (L. Bol.) Goldbl.	R	e	R

	Southern Africa	Endemic/ Non-endemic	World
Gladiolus calcaratus Lewis	R	e	R
Gladiolus cardinalis Curtis	R	e	R
Gladiolus carinatus Ait. ssp. parviflorus Lewis	I	e	I
Gladiolus caryophyllaceus (Burm. f.) Poir.	V	e	V
Gladiolus citrinus Klatt	V	e	V
Gladiolus comptonii Lewis	V	e	V
Gladiolus cruentus S. Moore	R	e	R
Gladiolus debilis Ker var. variegatus Lewis	U	e	U
Gladiolus emiliae L. Bol.	E	e	E
Gladiolus engysiphon Lewis	U	e	U
Gladiolus exiguus Lewis	R	e	R
Gladiolus floribundus Jacq. ssp. miniatus (Eckl.) Oberm.	U	e	U
Gladiolus gracilis Jacq. var. latifolius Lewis	I	e	I
Gladiolus gueinzii Kunze	R	e	R
Gladiolus guthriei Bol. f.	V	e	V
Gladiolus hollandii L. Bol.	R	ne	R
Gladiolus jonquilliodorus Eckl. ex H. Bol. & Dod	U	e	U
Gladiolus kamiesbergensis Lewis	U	e	U
Gladiolus lapeirousioides Goldbl.	R	e	R
Gladiolus leptosiphon Bol. f.	U	e	U
Gladiolus lewiseae Oberm.	R	e	R
Gladiolus macneilii Oberm.	R	e	R
Gladiolus maculatus Sweet ssp. hibernus (Ingram) Oberm.	U	e	U
Gladiolus marlothii Lewis	U	e	U
Gladiolus martleyi L. Bol.	U	e	U
Gladiolus microcarpus Lewis	U	e	U
Gladiolus mostertiae L. Bol.	U	e	U
Gladiolus nerineoides Lewis	U	e	U
Gladiolus oppositiflorus Herb. ssp. oppositiflorus	R	e	R

	Southern Africa	Endemic/ Non-endemic	World
Gladiolus oppositiflorus Herb. ssp. salmoneus (Bak.) Oberm.	R	e	R
Gladiolus oreocharis Schltr.	R	e	R
Gladiolus pillansii Lewis var. roseus Lewis	U	e	U
Gladiolus pole-evansii Verdoorn	R	e	R
Gladiolus pretoriensis Kuntze	V	e	V
Gladiolus punctulatus Schrank var. autumnalis Lewis	R	e	R
Gladiolus punctulatus Schrank. var. punctulatus	R	e	R
Gladiolus quadrangulus (Delaroche) Barnard	E	e	E
Gladiolus recurvus L.	U	e	U
Gladiolus robertsoniae Bol. f.	R	e	R
Gladiolus rufomarginatus Lewis	R	e	R
Gladiolus salteri Lewis	R	e	R
Gladiolus stefaniae Oberm.	U	e	U
Gladiolus stokoei Lewis	R	e	R
Gladiolus subcaeruleus Lewis	U	e	U
Gladiolus symonsii Bol. f.	R	e	R
Gladiolus tristis L. var. concolor (Salisb.) Bak.	U	e	U
Gladiolus varius Bol. f. var. micranthus (Bak.) Oberm.	R	e	R
Gladiolus varius Bol. f. var. varius	R	e	R
Gladiolus vernus Oberm.	R	e	R
Gladiolus vigilans Barnard	I	e	I
Gladiolus violaceo-lineatus Lewis	R	e	R
Gladiolus virescens Thunb. var. roseo-venosus Lewis	I	e	I
Gladiolus viridiflorus Lewis	R	e	R
Hesperantha oligantha (Diels) Goldbl.	U	e	U
Homeria lineata Sweet	U	e	U
Homeria meterlekampiae L. Bol.	I	e	I
Homeria spiralis L. Bol.	U	e	U

	Southern Africa	Endemic/ Non-endemic	World
Homoglossum guthriei (L. Bol.) L. Bol.	R	e	R
Homoglossum merianellum (L.) Bak. var. aureum Lewis	I	e	I
Homoglossum merianellum (L.) Bak. var. merianellum	I	e	I
Homoglossum vandermerwei (L. Bol.) L. Bol.	U	e	U
Ixia bellendenii Foster	U	e	U
Ixia brevituba Lewis	V	e	V
Ixia cochlearis Lewis	U	e	U
Ixia conferta Foster var. conferta	U	e	U
Ixia conferta Foster var. ochroleuca (Ker) Lewis	U	e	U
Ixia curta Andr.	V	e	V
Ixia curvata Lewis	U	e	U
Ixia framesii L. Bol.	E	e	E
Ixia gloriosa Lewis	I	e	I
Ixia leipoldtii Lewis	U	e	U
Ixia maculata L. var. fusco-citrina Lewis	U	e	U
Ixia maculata L. var. intermedia Lewis	U	e	U
Ixia maculata L. var. maculata	V	e	V
Ixia patens Ait. var. linearifolia Lewis	I	e	I
Ixia patens Ait. var. patens	I	e	I
Ixia purpureorosea Lewis	R	e	R
Ixia rouxii Lewis	U	e	U
Ixia splendida Lewis	R	e	R
Ixia stolonifera Lewis	I	e	I
Ixia trifolia Lewis	U	e	U
Ixia versicolor Lewis	I	e	I
Ixia viridiflora Lam.	V	e	V
Klattia partita Bak.	R	e	R
Lapeirousia corymbosa (L.) Ker ssp. alta Goldbl.	U	e	U

	Southern Africa	Endemic/ Non-endemic	World
Lapeirousia verecunda Goldbl.	R	e	R
Moraea aristata (Delaroche) Asch & Groeb	E	e	E
Moraea barnardii L. Bol.	R	e	R
Moraea cooperi Bak.	R	e	R
Moraea gigandra L. Bol.	V	e	V
Moraea incurva Lewis	X	e	X
Moraea insolens Goldbl.	E	e	E
Moraea loubseri Goldbl.	X	e	X
Moraea tulbaghensis L. Bol.	E	e	E
Nivenia concinna N.E. Br.	I	e	I
Nivenia dispar N.E. Br.	U	e	U
Nivenia fruticosa (L.f.) Bak.	U	e	U
Nivenia levynsiae Weim.	R	e	R
Nivenia stokoei N.E. Br.	I	e	I
Romulea albomarginata De Vos	R	e	R
Romulea amoena Schltr. ex Beguinot	R	e	R
Romulea aquatica Lewis	V	e	V
Romulea barkerae De Vos	R	e	R
Romulea biflora (Beguinot) De Vos	R	e	R
Romulea cedarbergensis De Vos	U	e	U
Romulea elliptica De Vos	V	e	V
Romulea eximia De Vos	V	e	V
Romulea hallii De Vos	U	e	U
Romulea hantamensis (Diels) Goldbl.	R	e	R
Romulea jugicola De Vos	I	e	I
Romulea kamisensis De Vos	R	e	R
Romulea komsbergensis De Vos	U	e	U
Romulea malaniae De Vos	U	e	U
Romulea membranacea De Vos	U	e	U
Romulea monadelpha (Sweet) Bak.	I	e	I
Romulea multifida De Vos	R	e	R
Romulea multisulcata De Vos	I	e	I
Romulea namaquensis De Vos ssp. bolusii De Vos	U	e	U

	Southern Africa	Endemic/ Non-endemic	World
Romulea namaquensis De Vos ssp. namaquensis	U	e	U
Romulea oliveri De Vos	R	e	R
Romulea papyracea W. Dod	X	e	X
Romulea sanguinalis De Vos	R	e	R
Romulea saldanhensis De Vos	V	e	V
Romulea sinispinosensis De Vos	U	e	U
Romulea sladenii De Vos	R	e	R
Romulea sphaerocarpa De Vos	I	e	I
Romulea sulphurea Beguinot	X	e	X
Romulea syringodeoflora De Vos	R	e	R
Romulea tortilis Bak. var. dissecta De Vos	R	e	R
Romulea tortilis Bak. var. tortilis	R	e	R
Romulea toximontana De Vos	R	e	R
Romulea vinacea De Vos	R	e	R
Romulea viridibracteata De Vos	U	e	U
Sparaxis elegans (Sweet) Goldbl.	I	e	I
Sparaxis pillansii L. Bol.	R	e	R
Sparaxis tricolor (Schneevogt) Ker	E	e	E
Synnotia roxburghii (Bak.) Lewis	I	e	I
Syringodea derustensis De Vos	R	e	R
Syringodea flanagani Bak.	U	e	U
Syringodea pulchella Hook. f.	U	e	U
Syringodea saxatilis De Vos	U	e	U
Thereianthus racemosus (Klatt) Lewis	R	e	R
Tritonia kamisbergensis Klatt	U	e	U
Tritoniopsis elongata (L. Bol.) Lewis	I	e	I
Tritoniopsis flexuosa (L.f.) Lewis	V	e	V
Tritoniopsis latifolia Lewis	R	e	R
Watsonia ardernei J.W. Mathews & L. Bol.	U	e	U
Watsonia caledonica Bak.	U	e	U
Watsonia cooperi L. Bol.	U	e	U
Watsonia dubia Eckl.	U	e	U
Watsonia ecklonii L. Bol.	I	e	I

	Southern Africa	Endemic/ Non-endemic	World
Watsonia emiliae L. Bol.	U	e	U
Watsonia fergusoniae L. Bol.	I	e	I
Watsonia gladioloides Schltr.	U	e	U
Watsonia hysterantha J.W. Mathews & L. Bol.	I	e	I
Watsonia latifolia Oberm.	R	e	R
Watsonia occulta L. Bol.	R	e	R
Watsonia pauciflora L. Bol.	U	e	U
Watsonia rogersii L. Bol.	U	e	U
Watsonia rosea-alba (Jacq.) Ker	I	e	I
Watsonia stanfordiae L. Bol.	I	e	I
Watsonia strictiflora Ker	U	e	U
Watsonia transvaalensis Bak.	R	e	R
Watsonia vittata J.W. Mathews & L. Bol.	U	e	U
Watsonia wilmsii L. Bol.	R	e	R
Watsonia wordsworthiana J.W. Mathews & L. Bol.	U	e	U
Witsenia maura Thunb.	U	e	U
ISOETACEAE			
Isoetes stephansenii A.V. Duthie	I	e	I
Isoetes wormaldii Sim	U	e	U
JUNCACEAE			
Juncus obliquus Adamson	U	e	U
LABIATAE			
Hyptis spicigera Lam.	U	ne	nt
LAURACEAE			
Beilschmiedia natalensis J.H. Ross	U	e	U

	Southern Africa	Endemic/ Non-endemic	World
Cryptocarya wyliei Stapf.	R	e	R
Ocotea kenyensis (Chiov.) Robyns et Wilczek	R	ne	R
LEGUMINOSAE			
Acacia hebeclada DC. ssp. chobiensis (O.B. Miller) A. Schreib.	R	ne	R
Acacia hebeclada DC. ssp. tristis (Welw. ex Oliv.) A. Schreib.	R	e	R
Acacia montis-usti Merxm. et A. Schreib.	R	e	R
Acacia robynsiana Merxm. et A. Schreib.	R	e	U
Acacia welwitschii Oliv. ssp. delagoensis (Harms) J.H. Ross & Brenan	R	ne	nt
Albizia amara (Roxb.) Boiv. ssp. sericocephala (Benth.) Brenan	U	ne	nt
Albizia antunesiana Harms	U	ne	nt
Albizia suluensis Gerstn.	R	e	R
Amblygonocarpus andongensis (Welw. ex Oliv.) Exell & Torre	U	ne	nt
Aspalathus acanthiloba Dahlg.	U	e	U
Aspalathus acanthophylla Peterson & Dahlg.	I	e	I
Aspalathus aciloba Dahlg.	U	e	U
Aspalathus arenaria Dahlg.	U	e	U
Aspalathus barbigera Dahlg.	I	e	I
Aspalathus bidouwensis Garab. ex Dahlg.	I	e	I
Aspalathus borbonifolia Dahlg.	R	e	R
Aspalathus burchelliana Benth.	U	e	U
Aspalathus campestris Dahlg.	U	e	U
Aspalathus candidula Dahlg.	U	e	U
Aspalathus compacta Dahlg.	U	e	U
Aspalathus comptonii Dahlg.	R	e	R
Aspalathus concava Bol.	U	e	U
Aspalathus corniculata Dahlg.	U	e	U

	Southern Africa	Endemic/ Non-endemic	World
Aspalathus decora Dahlg.	U	e	U
Aspalathus desertorum Bol.	R	e	R
Aspalathus digitifolia Dahlg.	U	e	U
Aspalathus erythrodes Eckl. & Zeyh.	U	e	U
Aspalathus esterhuyseniae Dahlg.	R	e	R
Aspalathus excelsa Dahlg.	R	e	R
Aspalathus fasciculata Druce	R	e	R
Aspalathus ferox Harv.	U	e	U
Aspalathus florulenta Dahlg.	U	e	U
Aspalathus fourcadei L. Bol.	U	e	U
Aspalathus glabrata Dahlg.	I	e	I
Aspalathus glossoides Dahlg.	U	e	U
Aspalathus grobleri Dahlg.	U	e	U
Aspalathus hypnoides Dahlg.	U	e	U
Aspalathus incana Dahlg.	U	e	U
Aspalathus karrooensis Dahlg.	U	e	U
Aspalathus lamarckiana Dahlg.	U	e	U
Aspalathus latifolia Bol.	U	e	U
Aspalathus lenticula Bol.	U	e	U
Aspalathus longifolia Benth.	U	e	U
Aspalathus macrantha Harv.	U	e	U
Aspalathus macrocarpa Eckl. & Zeyh.	U	e	U
Aspalathus obliqua Dahlg.	U	e	U
Aspalathus obtusifolia Dahlg.	U	e	U
Aspalathus odontoloba Dahlg.	U	e	U
Aspalathus orbiculata Benth.	U	e	U
Aspalathus pallescens Eckl. & Zeyh.	U	e	U
Aspalathus pilantha Dahlg.	U	e	U
Aspalathus prostrata Eckl. & Zeyh.	U	e	U
Aspalathus quadrata L. Bol.	U	e	U
Aspalathus ramosissima Dahlg.	U	e	U
Aspalathus rectistyla Dahlg.	U	e	U
Aspalathus rostrata Benth.	U	e	U
Aspalathus rycroftii Dahlg.	V	e	V
Aspalathus smithii Dahlg.	V	e	V

	Southern Africa	Endemic/ Non-endemic	World
Aspalathus stokoei L. Bol.	R	e	R
Aspalathus suaveolens Eckl. & Zeyh.	R	e	R
Aspalathus sulphurea Dahlg.	U	e	U
Aspalathus vaccinifolia Dahlg.	U	e	U
Aspalathus variegata Eckl. & Zeyh.	X	e	X
Aspalathus vulpina Garab. ex Dahlg.	U	e	U
Bauhinia bowkeri Harv.	R	e	R
Calpurnia robinioides E. Mey.	R	e	R
Calpurnia woodii Schinz	R	e	R
Cordyla africana Lour.	R	ne	nt
Craibia zimmermannii (Harms) Harms ex Dunn	R	ne	nt
Dialium schlechteri Harms	R	ne	nt
Elephantorrhiza praetermissa J.H. Ross	U	e	U
Elephantorrhiza sp. nova	V	e	V
Entada pursaetha DC.	R	ne	nt
Erythrina decora Harms	R	e	R
Guibourtia conjugata (Bolle) J. Léon.	R	ne	nt
Kotschya thymodora (Bak. f.) Wild var. thymodora	R	ne	nt
Liparia splendens Bos et De Wit	U	e	U
Sophora inhambanensis Klotzsch	R	ne	R
Umtiza listerana Sim	R	e	R
Xeroderris stuhlmannii (Taub.) Mendonça & E.P. Sousa	R	ne	nt
Xylia torreana Brenan	R	ne	nt
LILIACEAE			
Agapanthus coddii Leighton	U	e	U
Agapanthus dyeri Leighton	U	e	U
Agapanthus walshii L. Bol.	R	e	R
Aloe albida (Stapf) Reynolds	V	e	V
Aloe angelica Pole Evans	R	e	R

	Southern Africa	Endemic/ Non-endemic	World
Aloe buhrii Lavranos	R	e	R
Aloe distans Haw.	R	e	R
Aloe erinacea Hardy	V	ne	U
Aloe gerstneri Reynolds	V	e	V
Aloe graciliflora Groenewald	R	e	R
Aloe greenii Bak.	R	e	R
Aloe karasbergensis Pillans	V	e	V
Aloe keithii Reynolds	U	e	U
Aloe minima Bak. var blyderivierensis (Groen.) Reynolds	R	e	R
Aloe monotropa Verdoorn	V	e	V
Aloe peglerae Schonl.	R	e	R
Aloe petrophila Pillans	R	e	R
Aloe polyphylla Schonl.	V	e	V
Aloe prinslooi Verdoorn & Hardy	U	e	U
Aloe pruinosa Reynolds	R	e	R
Aloe reitzii Reynolds	U	e	U
Aloe reitzii Reynolds var. nova	U	e	U
Aloe reynoldsii Letty	V	e	V
Aloe simii Pole Evans	R	ne	U
Aloe soutpansbergensis Verdoorn	R	e	R
Aloe suffulta Reynolds	R	e	R
Aloe thompsoniae Groenewald	U	e	U
Aloe thorncroftii Pole Evans	R	e	R
Aloe vandermerwei Reynolds	R	e	R
Aloe vogtsii Reynolds	R	e	R
Aloe vossii Reynolds	R	e	R
Amphisiphon stylosa Barker	E	e	E
Androcymbium fenestratum Schltr. & Krause	U	e	U
Androcymbium scabromarginatum Phill.	U	e	U
Androsiphon capensis Schltr.	R	e	R
Bulbine brunsvigiaefolia Bak.	U	e	U
Bulbine flexicaulis Bak.	U	e	U
Bulbine minima Bak.	U	e	U
Bulbine urgineoides Bak.	U	e	U

	Southern Africa	Endemic/ Non-endemic	World
Chlorophytum lewisae Oberm.	U	e	U
Chlorophytum monophyllum Oberm.	U	e	U
Daubenya aurea Lindl.	U	e	U
Dracaena usambarensis Engl.	R	ne	nt
Eriospermum cervicorne Marloth	U	e	U
Eriospermum fasciculatum A.V. Duthie	U	e	U
Eriospermum patentiflorum Schltr.	U	e	U
Eriospermum stoloniferum Marloth	U	e	U
Eriospermum villosum Bak.	U	e	U
Eucomis humilis Bak.	R	e	R
Eucomis montana Compton	R	e	R
Eucomis sp. nova (schijfii Reyneke ined.)	U	e	U
Eucomis vandermerwei Verdoorn	R	e	R
Galtonia viridiflora Verdoorn	R	e	R
Gasteria armstrongii Schonl.	U	e	U
Gasteria lilliputana V. Poelln.	U	e	U
Haworthia blackburniae Barker	R	e	R
Haworthia koelmaniorum Oberm. & Hardy	R	e	R
Haworthia marginata (Lam.) Stearn	I	e	I
Haworthia maughanii von Poelln.	I	e	I
Haworthia rubriflora (L. Bol.) C.A.E. Parr	I	e	I
Haworthia springbokvlakensis C.L. Scott	I	e	I
Haworthia truncata Schonl.	I	e	I
Kniphofia acraea Codd	I	e	I
Kniphofia citrina Bak.	I	e	I
Kniphofia coddiana Cuf.	R	e	R
Kniphofia coralligemma E.A. Bruce	R	e	R
Kniphofia crassifolia Bak.	U	e	U
Kniphofia drepanophylla Bak.	V	e	V
Kniphofia ensifolia Bak. ssp. autumnalis Codd	R	e	R
Kniphofia evansii Bak.	R	e	R
Kniphofia fibrosa Bak.	U	e	U

	Southern Africa	Endemic/ Non-endemic	World
Kniphofia flammula Codd	V	e	V
Kniphofia hirsuta Codd	V	e	V
Kniphofia latifolia Codd	V	e	V
Kniphofia litoralis Codd	V	e	V
Kniphofia pauciflora Bak.	E	e	E
Kniphofia praecox Bak. ssp. bruceae Codd	R	e	R
Kniphofia rigidifolia E.A. Bruce	R	e	R
Kniphofia rooperi (S. Moore) Lem.	V	e	V
Kniphofia rufa Bak.	I	e	I
Kniphofia thodei Bak.	R	e	R
Kniphofia triangularis Kunth ssp. obtusiloba (Berger) Codd	R	e	R
Kniphofia tysonii Bak. ssp. lebomboensis Codd	I	e	I
Kniphofia umbrina Codd	V	e	V
Lachenalia campanulata Bak.	I	e	I
Lachenalia convallarioides Bak. var convallarioides	I	e	I
Lachenalia convallarioides var. robusta Bak.	I	e	I
Lachenalia haarlemensis Fourc.	I	e	I
Lachenalia mathewsii Barker	X	e	X
Lachenalia muirii Barker	U	e	U
Lachenalia polyphylla Bak.	V	e	V
Lachenalia purpureo-caerulea Jacq.	E	e	E
Lachenalia rhodantha Bak.	I	e	I
Lachenalia viridiflora Barker	V	e	V
Massonia laeta Mass.	U	e	U
Massonia nervosa Hornem.	I	e	I
Neopatersonia namaquensis Lewis	R	e	R
Neopatersonia uitenhagensis Schonl.	U	e	U
Ornithogalum inclusum Leighton	U	e	U
Ornithogalum secundum Jacq.	I	e	I
Polyxena corymbosa (L.) Jessop	U	e	U
Scilla plumbea Lindl.	U	e	U

	Southern Africa	Endemic/ Non-endemic	World
Trachyandra adamsonii Oberm.	U	e	U
Trachyandra gracilenta Oberm.	U	e	U
Urginea duthiae Adamson	X	e	X
Urginea ecklonii Bak.	X	e	X
Urginea forsteri Bak.	U	e	U
Urginea minor A.V. Duthie	I	e	I
Urginea pedunculata Adamson	U	e	U
Urginea pygmaea A.V. Duthie	I	e	I
Urginea revoluta A.V. Duthie	U	e	U
LINACEAE			
Hugonia orientalis Engl.	R	ne	nt
LYTHRACEAE			
Rhynchocalyx lawsonioides Oliv.	V	e	V
MALPIGHIACEAE			
Triaspis glaucophylla Engl.	R	e	R
MALVACEAE			
Anisodontea alexandri (Bak. f.) Bates	X	e	X
Anisodontea dissecta (Harv.) Bates	U	e	U
Anisodontea gracilis Bates	U	e	U
Anisodontea pseudocapensis Bates	U	e	U
Anisodontea racemosa (Harv.) Bates	U	e	U
Anisodontea theronii Bates	U	e	U
Hibiscus waterbergensis Exell	U	e	U
MARSILEACEAE			
Marsilea schelpeana Launert	V	e	V

	Southern Africa	Endemic/ Non-endemic	World
MELIACEAE			
Entandrophragma spicatum (C.DC.) Sprague	R	ne	U
Pseudobersama mossambicensis (Sim) Verdc.	R	ne	nt
Turraea zambesica Styles & White	U	ne	U
MESEMBRYANTHEMACEAE			
Berrisfordia khamiesbergensis L. Bol.	I	e	I
Caryotophora skiatophytoides Leistner	R	e	R
Chasmatophyllum maninum L. Bol.	U	e	U
Didymaotus lapidiformis (Marloth) N.E. Br.	V	e	V
Dinteranthus vanzylii L. Bol.	R	e	R
Diplosoma leipoldtii L. Bol.	I	e	I
Diplosoma retroversum (Kensit) Schwantes	E	e	E
Dorotheanthus bidouwensis L. Bol.	I	e	I
Dorotheanthus booysenii L. Bol.	I	e	I
Dorotheanthus rourkei L. Bol.	U	e	U
Faucaria candida L. Bol.	I	e	I
Faucaria longidens L. Bol.	U	e	U
Frithia pulchra N.E. Br.	R	e	R
Galenia fruticosa (L.f.) Sond. var. prostrata Adamson	U	e	U
Gibbaeum angulipes (L. Bol.) N.E.Br.	U	e	U
Gibbaeum esterhuyseniae L. Bol.	X	e	X
Gibbaeum pachypodium L. Bol.	U	e	U
Glottiphyllum uniondalense L. Bol.	U	e	U
Herreanthus meyeri Schwant.	I	e	I
Imitaria muirii N.E. Br.	U	e	U
Juttadinteria albata L. Bol.	I	e	I
Juttadinteria tetrasepala L. Bol.	I	e	I
Kensitia pillansii (Kensit) N.E. Br.	U	e	U
Lampranthus algoensis L. Bol.	R	e	R

	Southern Africa	Endemic/ Non-endemic	World
Lampranthus arbuthnotiae L. Bol.	U	e	U
Lampranthus fugitans L. Bol.	R	e	R
Lampranthus rustii N.E.Br.	R	e	R
Lithops comptonii L. Bol.	E	e	E
Lithops divergens L. Bol.	V	e	V
Lithops salicola L. Bol.	V	e	V
Maughaniella luckhoffii (L. Bol.) L. Bol.	I	e	I
Mossia intervallaris (L. Bol.) N.E.Br.	R	e	R
Muiria hortenseae N.E. Br.	E	e	E
Nelia pillansii (N.E. Br.) Schwant.	I	e	I
Nelia schlechteri Schwant.	I	e	I
Neohenricia sibbettii L. Bol.	V	e	V
Oophytum oriforme N.E. Br.	I	e	I
Ophthalmophyllum australe L. Bol.	I	e	I
Ophthalmophyllum haramoepense L. Bol.	I	e	I
Ophthalmophyllum littlewoodii L. Bol.	U	e	U
Ophthalmophyllum longitubum L. Bol.	U	e	U
Ophthalmophyllum noctiflorum L. Bol.	U	e	U
Ophthalmophyllum spathulatum L. Bol.	U	e	U
Ophthalmophyllum vanheerdei L. Bol.	U	e	U
Ophthalmophyllum verrucosum Lavis	I	e	I
Ophthalmophyllum villetii L. Bol.	I	e	I
Pherolobus maughani N.E. Br.	I	e	I
Pleiospilos hilmari L. Bol.	E	e	E
Pleiospilos kingiae L. Bol.	U	e	U
Pleiospilos leipoldtii L. Bol.	I	e	I
Pleiospilos prismaticus Schw.	E	e	E
Rabiea jamesii (L. Bol.) L. Bol.	I	e	I
Rhinephyllum inaequale L. Bol.	I	e	I
Ruschia leipoldtii L. Bol.	E	e	E
Saphesia flaccida (Jacq.) N.E. Br.	E	e	E
Sceletium expansum (L.) L. Bol.	I	e	I
Sceletium ovatum L. Bol.	I	e	I
Schwantesia acutipetala L. Bol.	I	e	I

	Southern Africa	Endemic/ Non-endemic	World
Schwantesia australis L. Bol.	I	e	I
Schwantesia pillansii L. Bol.	I	e	I
Schwantesia speciosa L. Bol.	I	e	I
Schwantesia triebneri L. Bol.	I	e	I
Sphalamanthus arenicolus (L. Bol.) L.Bol.	U	e	U
Stomatium geoffreyi L. Bol.	E	e	E
Stomatium ronaldii L. Bol.	E	e	E
Trichodiadema aurea L. Bol.	I	e	I
Trichodiadema burgeri L. Bol.	R	e	R
Trichodiadema densum (Haw.) Schwant.	R	e	R
Trichodiadema hallii L. Bol.	R	e	R
Trichodiadema obliquum L. Bol.	I	e	I
Trichodiadema peersii L. Bol.	I	e	I
Trichodiadema pygmaeum L. Bol.	I	e	I
Trichodiadema rogersiae L. Bol.	I	e	I
Trichodiadema rupicolum L. Bol.	I	e	I
MORACEAE			
Bosqueia phoberos Baill.	R	ne	nt
Ficus fischeri Warb.	R	ne	nt
Ficus tremula Warb.	U	ne	U
Morus mesozygia Stapf	R	ne	nt
MUSACEAE			
Ensete ventricosum (Welw.) E.E. Cheesm.	I	ne	nt
MYRSINACEAE			
Myrsine pillansii Adamson	R	e	R
Rapanea gilliana (Sond.) Mez	V	e	V

	Southern Africa	Endemic/ Non-endemic	World
MYRTACEAE			
Eugenia erythrophylla Strey	U	e	U
Heteropyxis canescens Oliv.	R	e	R
NYMPHAEACEAE			
Nymphaea lotus L.	R	ne	nt
OCHNACEAE			
Ochna glauca Verdoorn	U	ne	U
OLEACEAE			
Jasminum abyssinicum Hochst. ex DC.	U	ne	nt
Linociera battiscombei Hutch.	R	e	R
Schrebera trichoclada Welw.	U	ne	nt
OPHIOGLOSSACEAE			
Ophioglossum bergianum Schlechtd.	U	e	U
ORCHIDACEAE			
Acrolophia comosa Schltr. & Bol.	U	e	U
Acrolophia micrantha Schltr. & Bol.	R	e	R
Acrolophia ustulata Schltr. & Bol.	X	e	X
Amphigena leptostachya Rolfe	R	e	R
Amphigena tenuis (Lindl.) Rolfe	R	e	R
Angraecum chamaeanthus Schltr.	R	e	R
Anochilus flanagani (Bol.) Rolfe	R	e	R
Ansellia gigantea Reichb. f. and vars.	I	ne	nt
Bonatea densiflora Sond.	U	e	U

	Southern Africa	Endemic/ Non-endemic	World
Bonatea saundersiae (Harv.) Dur. & Schinz	I	e	I
Brachycorythis macowaniana Reichb. f.	U	e	U
Calanthe natalensis (Reichb. f.) Reichb. f.	I	e	I
Corycium bifidum Sond.	I	e	I
Corycium deflexum (Bol.) Rolfe	U	e	U
Corycium tricuspidatum (Schltr.) Bol.	I	e	I
Corycium venosum (Lindl.) Rolfe	U	e	U
Corycium vestitum Sweet	X	e	X
Corymborkis corymbosa Thouars	E	e	E
Cynorkis compacta (Reichb. f.) Rolfe	I	e	I
Disa basutorum Kraenzl. non Schltr.	U	e	U
Disa begleyi L. Bol.	U	e	U
Disa brachyceras Lindl.	U	e	U
Disa breyeri Schltr.	U	e	U
Disa caffra Bol.	U	e	U
Disa extinctoria Reichb. f.	U	e	U
Disa falcata Schltr.	U	e	U
Disa fanniniae Harv. ex Rolfe	U	e	U
Disa frigida Schltr.	R	e	R
Disa galpinii Rolfe	R	e	R
Disa kraussii Rolfe	U	e	U
Disa longifolia Lindl.	R	e	R
Disa micropetala Schltr.	R	e	R
Disa montana Sond.	U	e	U
Disa neglecta Sond.	V	e	V
Disa ovalifolia Sond.	R	e	R
Disa pillansii L. Bol.	R	e	R
Disa rhodantha Schltr.	U	e	U
Disa salteri Lewis	R	e	R
Disa sanguinea Sond.	U	e	U
Disa sankeyi Rolfe	U	e	U
Disa schlechteriana Bol.	R	e	R
Disa scullyi Bol.	U	e	U

	Southern Africa	Endemic/ Non-endemic	World
Disa stokoei L. Bol.	E	e	E
Disa tabularis Sond.	R	e	R
Disa tenuicornis Bol.	R	e	R
Disa thodei Schltr.	U	e	U
Disa tysonii Bol.	R	e	R
Disa woodii Schltr.	U	e	U
Disa zuluensis Rolfe	U	e	U
Disperis allisonii Rolfe	U	e	U
Disperis anomala Schltr.	U	e	U
Disperis bicolor Rolfe	U	e	U
Disperis bodkini Bol.	R	e	R
Disperis buchananii Rolfe	U	e	U
Disperis concinna Schltr.	U	e	U
Disperis ermelensis Rolfe	U	e	U
Disperis flava Rolfe	U	e	U
Disperis gracilis Schltr.	U	e	U
Disperis kermesina Rolfe	U	e	U
Disperis macrocorys Rolfe	U	e	U
Disperis natalensis Rolfe	U	e	U
Disperis stenoglossa Schltr.	I	e	I
Disperis woodii Bol.	I	e	I
Eulophia austrooccidentalis Soelch	I	e	I
Eulophia coddii A.V. Hall	I	e	I
Eulophia cooperi Reichb. f.	R	e	R
Eulophia holubii Rolfe	I	e	I
Eulophia leachii Greatrex ex A.V. Hall	I	e	I
Eulophia leucantha (Kraenzl.) Soelch	I	e	I
Eulophia litoralis Schltr.	I	e	I
Eulophia meleagris Reichb. f.	I	e	I
Eulophia platypetala Lindl.	V	e	V
Eulophia tabularis (L.f.) Bol.	R	e	R
Eulophia zeyheriana Sond.	R	e	R
Habenaria kraenzliniana Schltr.	U	e	U
Habenaria laevigata Lindl. ssp. bicolor (Conrath & Kraenzl.) Schltr.	R	e	R

	Southern Africa	Endemic / Non-endemic	World
Habenaria rehmannii Bol.	I	e	I
Herschelia atropurpurea Rolfe	I	e	I
Herschelia barbata (L.f.) Bol.	E	e	E
Herschelia charpentierana (Reichb.f.) Kraenzl.	U	e	U
Herschelia lugens Bol.	E	e	E
Herschelia multifida Rolfe	U	e	U
Herschelia tripartita (Lindl.) Rolfe	R	e	R
Holothrix confusa Rolfe	I	e	I
Holothrix grandiflora Reichb. f.	U	e	U
Holothrix lithophila Schltr.	U	e	U
Holothirix longicornu Lewis	U	e	U
Holothrix macowaniana Reichb. f.	U	e	U
Holothrix micrantha Schltr.	U	e	U
Holothrix pilosa Reichb. f.	I	e	I
Huttonea woodii Schltr.	U	e	U
Monadenia ecalcarata Lewis	R	e	R
Monadenia leydenbergensis Kraenzl.	U	e	U
Monadenia macrostachya Lindl.	E	e	E
Monadenia physodes Sweet	I	e	I
Monadenia pygmaea Dur. & Schinz	U	e	U
Monadenia sabulosa (Bol.) Kraenzl.	R	e	R
Mystacidium millarii Bol.	R	e	R
Neobolusia tysonii Schltr.	R	e	R
Nervilia kotschyi (Reichb. f.) Schltr.	E	ne	nt
Nervilia natalensis Schelpe	I	e	I
Oberonia disticha (Lam.) Schltr.	U	ne	U
Orthopenthea bodkini (Bol.) Rolfe	R	e	R
Orthopenthea minor Rolfe	R	e	R
Pachites appressa Lindl.	I	e	I
Pachites bodkini Bol.	V	e	V
Polystachya albescens Rioll ssp. imbricata (Rolfe) Summerh.	U	ne	nt
Satyrium foliosum Sweet	V	e	V
Satyrium guthriei Bol.	X	e	X

	Southern Africa	Endemic / Non-endemic	World
Satyrium microrrhynchum Schltr.	U	e	U
Satyrium muticum Lindl.	E	e	E
Satyrium rhodanthum Schltr.	U	e	U
Schizochilus gerrardii (Reichb. f.) Bol.	I	e	I
Schizochilus pulchellus Schltr.	I	e	I
Schizochilus rudatisii Schltr.	I	e	I
Schizodium longipetalum Lindl.	I	e	I
Schizodium obliquum Lindl.	U	e	U
Stenoglottis longifolia Hook. f.	I	e	I
OXALIDACEAE			
Oxalis anomala Salter	U	e	U
Oxalia attaquana Salter	U	e	U
Oxalis blastorrhiza Salter	U	e	U
Oxalis burtoniae Salter	I	e	I
Oxalis callimarginata Weintroub	U	e	U
Oxalis calvinensis R. Knuth.	U	e	U
Oxalis cathara Salter	U	e	U
Oxalis ciliaris Jacq. var. pageae (L. Bol.) Salter	U	e	U
Oxalis comptonii Salter	U	e	U
Oxalis creaseyi Salter	U	e	U
Oxalis crispula Sond. var. crispula	U	e	U
Oxalis crispula Sond. var. glandulosa Salter	U	e	U
Oxalis crocea Salter	U	e	U
Oxalis cuneata Jacq.	U	e	U
Oxalis deserticola Salter	R	e	R
Oxalis dichotoma Salter	U	e	U
Oxalis duriuscula Schltr.	U	e	U
Oxalis extensa Salter	U	e	U
Oxalis fourcadei Salter	U	e	U
Oxalis fragilis Salter var. fragilis	I	e	I
Oxalis fragilis var. pellucida Salter	I	e	I

	Southern Africa	Endemic/ Non-endemic	World
Oxalis heidelbergensis Salter	U	e	U
Oxalis henrici Bol.	U	e	U
Oxalis involuta Salter	R	e	R
Oxalis ioeides Salter & Exell	U	e	U
Oxalis lasiorrhiza Salter	U	e	U
Oxalis levis Salter	V	e	V
Oxalis lichenoides Salter	R	e	R
Oxalis lindaviana Schltr.	I	e	I
Oxalis lineolata Salter	I	e	I
Oxalis luteola Jacq. var. minor Salter	U	e	U
Oxalis marlothii Schltr. ex R. Knuth.	U	e	U
Oxalis massoniana Salter var. massoniana	U	e	U
Oxalis massoniana Salter var. flavescens Salter	U	e	U
Oxalis melanograpta Salter	R	e	R
Oxalis melanosticta Sond. var. latifolia Salter	U	e	U
Oxalis microdonta Salter	I	e	I
Oxalis natans L.f.	E	e	E
Oxalis oligophylla Salter	U	e	U
Oxalis orbicularis Salter	U	e	U
Oxalis oreithala Salter	U	e	U
Oxalis oreophila Salter	U	e	U
Oxalis perineson Salter & Exell	V	e	V
Oxalis porphyriosiphon Salter	U	e	U
Oxalis pulvinata Salter	U	e	U
Oxalis purpurata Jacq.	U	e	U
Oxalis reclinata Jacq. var. gracillima Salter	U	e	U
Oxalis reclinata Jacq. var. quinata Salter	U	e	U
Oxalis reclinata Jacq. var. reclinata	U	e	U
Oxalis rhomboidea Salter	U	e	U
Oxalis rubro-punctata Salter	U	e	U
Oxalis senecta Salter	R	e	R

	Southern Africa	Endemic/ Non-endemic	World
Oxalis simplex Salter	U	e	U
Oxalis stellata Eckl. & Zeyh. var. gracilior Salter	U	e	U
Oxalis stellata Eckl. & Zeyh. var. montaguensis Salter	U	e	U
Oxalis subsessilis L. Bol.	I	e	I
Oxalis tenuis Salter	U	e	U
Oxalis virginea Jacq.	R	e	R
PASSIFLORACEAE			
Adenia fruticosa Burtt Davy ssp. simplicifolia De Wilde.	U	e	U
PEDALIACEAE			
Sesamothamnus benguellensis Welw.	U	ne	U
PENAEACEAE			
Brachysiphon mundii Sond.	R	e	R
Endonema lateriflora (L.f.) Gilg	R	e	R
Endonema retzioides Sond.	R	e	R
Glischrocolla formosa (Thunb.) Dahlg.	V	e	V
Sonderothamnus speciosus (Sond.) Dahlg.	R	e	R
Stylapterus barbatus A. Juss.	I	e	I
Stylapterus dubius (Steph.) Dahlg.	R	e	R
Stylapterus ericifolius (A. Juss.) Dahlg.	R	e	R
Stylapterus ericoides A. Juss. ssp. ericoides	V	e	V
Stylapterus ericoides A. Juss. ssp. pallidus Dahlg.	R	e	R
Stylapterus micranthus Dahlg.	X	e	X

	Southern Africa	Endemic/ Non-endemic	World
PLUMBAGINACEAE			
Limonium acuminatum L. Bol.	V	e	V
Limonium capense (L. Bol.) L. Bol.	I	e	I
POLYGALACEAE			
Muraltia aciphylla Levyns	I	e	I
Muraltia angustiflora Levyns	I	e	I
Muraltia barkerae Levyns	V	e	V
Muraltia calycina Harv.	V	e	V
Muraltia capensis Levyns	U	e	U
Muraltia carnosa E. Mey. ex Harv.	U	e	U
Muraltia chamaepitys Schltr.	R	e	R
Muraltia comptonii Levyns	I	e	I
Muraltia concava Levyns	I	e	I
Muraltia cuspifolia Chod.	I	e	I
Muraltia ferox Levyns	I	e	I
Muraltia gillettiae Levyns	U	e	U
Muraltia guthriei Levyns	R	e	R
Muraltia harveyana Levyns	I	e	I
Muraltia hirsuta Levyns	I	e	I
Muraltia karroica Levyns	I	e	I
Muraltia pappeana Harv.	U	e	U
Muraltia pottebergensis Levyns	U	e	U
Muraltia satureioides DC. var. salteri Levyns	E	e	E
Muraltia serrata Levyns	U	e	U
Muraltia spicata Bol.	U	e	U
Polygala dasyphylla Levyns	I	e	I
Polygala langebergensis Levyns	I	e	I
Polygala lasiosepala Levyns	U	e	U
Polygala pottebergensis Levyns	I	e	I

	Southern Africa	Endemic / Non-endemic	World
PROTEACEAE			
Diastella buekii (Gand.) Rourke	E	e	E
Diastella myrtifolia Knight	R	e	R
Diastella parilis Salisb. ex Knight	R	e	R
Faurea macnaughtonii Phill.	R	e	R
Leucadendron argenteum (L.) R. Br.	V	e	V
Leucadendron bonum I. Williams	E	e	E
Leucadendron brunioides Meisn. var. flumenlupinum I. Williams	R	e	R
Leucadendron burchellii I. Williams	I	e	I
Leucadendron cadens I. Williams	R	e	R
Leucadendron chamelaea (Lam.) I. Williams	E	e	E
Leucadendron cinereum (Soland. ex Ait.) R. Br.	V	e	V
Leucadendron comosum (Thunb.) R. Br. ssp. homoeophyllum (Meisn.) I. Williams	X	e	X
Leucadendron concavum I. Williams	R	e	R
Leucadendron coriaceum Phill. & Hutch.	R	e	R
Leucadendron corymbosum Berg.	V	e	V
Leucadendron cryptocephalum Guth.	E	e	E
Leucadendron diemontianum I. Williams	R	e	R
Leucadendron discolor Phill. & Hutch.	R	e	R
Leucadendron elimense Phill. ssp. elimense	E	e	E
Leucadendron elimense Phill. ssp. salteri I. Williams	V	e	V
Leucadendron elimense Phill. ssp. vyeboomense I. Williams	E	e	E
Leucadendron ericifolium R. Br.	E	e	E
Leucadendron flexuosum I. Williams	E	e	E
Leucadendron floridum R. Br.	E	e	E
Leucadendron galpinii Phill. & Hutch.	R	e	R
Leucadendron globosum (Kennedy ex Andr.) I. Williams	V	e	V

	Southern Africa	Endemic/ Non-endemic	World
Leucadendron levisanus (L.) Berg.	E	e	E
Leucadendron linifolium (Jacq.) R. Br.	I	e	I
Leucadendron macowanii Phill.	E	e	E
Leucadendron modestum I. Williams	V	e	V
Leucadendron nervosum Phill. & Hutch.	R	e	R
Leucadendron orientale I. Williams	I	e	I
Leucadendron platyspermum R. Br.	V	e	V
Leucadendron radiatum Phill. & Hutch.	R	e	R
Leucadendron remotum I. Williams	R	e	R
Leucadendron roodii Phill.	E	e	E
Leucadendron rourkei I. Williams	R	e	R
Leucadendron sericeum (Thunb.) R. Br.	I	e	I
Leucadendron singulare I. Williams	R	e	R
Leucadendron spirale (Salisb. ex Knight) I. Williams	X	e	X
Leucadendron stellare (Sims) Sweet	I	e	I
Leucadendron stelligerum I. Williams	V	e	V
Leucadendron thymifolium (Salisb. ex Knight) I. Williams	E	e	E
Leucadendron tradouwense I. Williams	E	e	E
Leucadendron verticillatum (Thunb.) Meisn.	E	e	E
Leucospermum arenarium Rycroft	R	e	R
Leucospermum bolusii Gand.	R	e	R
Leucospermum cordatum Phill.	R	e	R
Leucospermum formosum (Andr.) Sweet	R	e	R
Leucospermum fulgens Rourke	R	e	R
Leucospermum glabrum Phill.	V	e	V
Leucospermum muirii Phill.	R	e	R
Leucospermum mundii Meisn.	R	e	R
Leucospermum parile (Salisb. ex Knight) Sweet	V	e	V
Leucospermum pedunculatum Klotzsch	R	e	R
Leucospermum pluridens Rourke	R	e	R
Leucospermum praecox Rourke	I	e	I
Leucospermum profugum Rourke	E	e	E

	Southern Africa	Endemic/ Non-endemic	World
RANUNCULACEAE			
Ranunculus capensis Thunb.	U	e	U
RESTIONACEAE			
Cannomois aristata Mast.	R	e	R
Chondropetalum acockii Pillans	E	e	E
Chondropetalum longiflorum Pillans	V	e	V
Chondropetalum rectum (Mast.) Pillans	V	e	V
Elegia altigena Pillans	U	e	U
Elegia bella Pillans	U	e	U
Elegia extensa Pillans	X	e	X
Elegia fastigiata Mast.	X	e	X
Elegia fenestrata Pillans	E	e	E
Elegia prominens Pillans	V	e	V
Elegia stokoei Pillans	V	e	V
Elegia verreauxii Mast.	V	e	V
Hypodiscus alternans Pillans	I	e	I
Hypodiscus paludosus Pillans	E	e	E
Hypodiscus sulcatus Pillans	R	e	R
Hypolaena stokoei Pillans	U	e	U
Lamprocaulos schlechteri Gilg. & Ben.	U	e	U
Leptocarpus impolitus (Kunth) Pillans	V	e	V
Leptocarpus levynsiae Pillans	R	e	R
Leptocarpus monostylis Pillans	I	e	I
Leptocarpus ramosissimus Pillans	X	e	X
Leptocarpus rigoratus Mast. var. simulans Pillans	E	e	E
Restio acockii Pillans	E	e	E
Restio aureolus Pillans	I	e	I
Restio brunneus Pillans	R	e	R
Restio cascadensis Pillans	R	e	R
Restio coactilis Mast.	V	e	V
Restio communis Pillans	V	e	V

	Southern Africa	Endemic/ Non-endemic	World
Restio distans Pillans	R	e	R
Restio dodii Pillans var. dodii	R	e	R
Restio dodii Pillans var. purpureus Pillans	E	e	E
Restio duthieae Pillans	V	e	V
Restio esterhuyseniae Pillans	R	e	R
Restio festucaeformis Nees ex Mast.	V	e	V
Restio filicaulis Pillans	U	e	U
Restio fuscidulus Pillans	R	e	R
Restio fusiformis Pillans	R	e	R
Restio harveyi Mast.	E	e	E
Restio involutus Pillans	R	e	R
Restio micans Nees	R	e	R
Restio papyraceus Pillans	R	e	R
Restio quinquefarius Nees	V	e	V
Restio sabulosus Pillans	E	e	E
Restio scaber Mast.	V	e	V
Restio setiger Kunth	U	e	U
Restio subcompressus Pillans	I	e	I
Restio tuberculatus Pillans	U	e	U
Restio vilis Kunth	R	e	R
Staberoha multispicula Pillans	I	e	I
Staberoha stokoei Pillans	R	e	R
Thamnochortus acuminatus Pillans	R	e	R
Thamnochortus dumosus Mast.	V	e	V
Thamnochortus ellipticus Pillans	I	e	I
Thamnochortus fraternus Pillans	R	e	R
Thamnochortus guthrieae Pillans	R	e	R
Thamnochortus muirii Pillans	V	e	V
Thamnochortus nervosus Pillans	U	e	U
Thamnochortus nutans (Thunb.) Pillans	R	e	R
Thamnochortus pellucidus Pillans	V	e	V
Thamnochortus pluristachyus Mast.	V	e	V
Thamnochortus punctatus Pillans	R	e	R
Willdenowia affinis Pillans	I	e	I

	Southern Africa	Endemic/ Non-endemic	World
Willdenowia fistulosa Pillans	I	e	I
Willdenowia purpurea Pillans	R	e	R
RHAMNACEAE			
Lasiodiscus mildbraedii Engl.	R	ne	nt
Phylica affinis Sond.	U	e	U
Phylica agathosmoides Pillans	U	e	U
Phylica alpina Eckl. & Zeyh.	U	e	U
Phylica altigena Schltr.	U	e	U
Phylica amoena Pillans	U	e	U
Phylica ampliata Pillans	E	e	E
Phylica anomala Pillans	U	e	U
Phylica apiculata Sond.	U	e	U
Phylica barbata Pillans	U	e	U
Phylica brachycephala Sond.	U	e	U
Phylica brevifolia Eckl. & Zeyh.	R	e	R
Phylica burchellii Pillans	U	e	U
Phylica chionocephala Schltr.	U	e	U
Phylica comosa Steud.	U	e	U
Phylica cuspidata Eckl. & Zeyh.	U	e	U
Phylica diosmoides Sond.	U	e	U
Phylica floribunda Pillans	U	e	U
Phylica glabrata Thunb.	U	e	U
Phylica greyii Pillans	I	e	I
Phylica guthriei Pillans	U	e	U
Phylica incurvata Pillans	U	e	U
Phylica laevifolia Pillans	U	e	U
Phylica laevigata Pillans	U	e	U
Phylica laevis Steud.	U	e	U
Phylica lasiantha Pillans	U	e	U
Phylica leipoldtii Pillans	U	e	U
Phylica levynsiae Pillans	U	e	U
Phylica linifolia Pillans	U	e	U
Phylica longimontana Pillans	U	e	U

	Southern Africa	Endemic/ Non-endemic	World
Phylica lucens Pillans	U	e	U
Phylica lucida Pillans	U	e	U
Phylica maximiliani Schltr.	U	e	U
Phylica nigromontana Pillans	U	e	U
Phylica nodosa Pillans	U	e	U
Phylica parvula Pillans	V	e	V
Phylica pauciflora Pillans	U	e	U
Phylica pearsonii Pillans	U	e	U
Phylica recurvifolia Eckl. & Zeyh.	U	e	U
Phylica retrorsa E. Mey. ex Sond.	U	e	U
Phylica reversa Pillans	U	e	U
Phylica salteri Pillans	U	e	U
Phylica schlechteri Pillans	I	e	I
Phylica sericea Pillans	U	e	U
Phylica simii Pillans	I	e	I
Phylica stenopetala Schltr.	I	e	I
Phylica trachyphylla D. Dietr.	U	e	U
Phylica tysoni Pillans var. tysoni	U	e	U
Phylica tysoni var. brevifolia Pillans	U	e	U
Phylica wittebergensis Pillans	U	e	U
RHIZOPHORACEAE			
Cassipourea flanagani (Schinz) Alston	R	e	R
Cassipourea mossambicensis (V. Brehm.) Alston	R	ne	U
Cassipourea swaziensis Compton	R	e	R
Ceriops tagal (Perr.) C.B. Robinson	R	ne	nt
ROSACEAE			
Cliffortia acockii Weim.	V	e	V
Cliffortia aculeata Weim.	U	e	U
Cliffortia acutifolia Weim.	I	e	I

	Southern Africa	Endemic/ Non-endemic	World
Cliffortia carinata Weim.	U	e	U
Cliffortia crenulata Weim.	U	e	U
Cliffortia curvifolia Weim.	U	e	U
Cliffortia cymbifolia Weim.	U	e	U
Cliffortia geniculata Weim.	I	e	I
Cliffortia intermedia Eckl. & Zeyh.	U	e	U
Cliffortia lanata Weim.	U	e	U
Cliffortia longifolia (Eckl. & Zeyh.) Weim.	U	e	U
Cliffortia monophylla Weim.	U	e	U
Cliffortia montana Weim.	U	e	U
Cliffortia multiformis Weim.	U	e	U
Cliffortia reticulata Eckl. & Zeyh.	U	e	U
Cliffortia strigosa Weim.	I	e	I
RUBIACEAE			
Ancylanthus monteiroi Oliv.	R	ne	R
Carpacoce heteromorpha Bol.	I	e	I
Coffea racemosa Lour.	R	ne	nt
Enterospermum rhodesiacum Brem.	R	ne	nt
Galium bredasdorpense Puff	R	e	R
Guettarda speciosa L.	V	ne	nt
Heinsia crinita (Afzel.) G. Tayl.	R	ne	nt
Hymenodictyon parvifolium Oliv.	U	ne	nt
Lagynias dryandum (S. Moore) Robyns	R	ne	R
Neorosea andongensis (Hiern) N. Hallé	R	ne	nt
Oxyanthus latifolius Sond.	R	ne	R
Oxyanthus pyriformis (Hochst.) Skeels	R	e	R
Pavetta barbertonensis Brem.	R	e	R
Pavetta gerstneri Brem.	R	e	R
Pavetta microlancea K. Schum.	R	e	R
Zygoon graveolens Hiern	R	ne	R

	Southern Africa	Endemic / Non-endemic	World
RUTACEAE			
Acmadenia alternifolia Cham. & Schlechtd.	U	e	U
Acmadenia cucullata E. Mey.	U	e	U
Acmadenia densifolia Sond.	U	e	U
Acmadenia niveni Sond.	R	e	R
Adenandra dahlgrenii Strid	R	e	R
Adenandra gracilis Eckl. & Zeyh.	I	e	I
Adenandra odoratissima Strid ssp. odoratissima	I	e	I
Adenandra odoratissima Strid ssp. tenuis Strid	I	e	I
Adenandra schlechteri Dummer	I	e	I
Agathosma abrupta Pillans	I	e	I
Agathosma affinis Sond.	I	e	I
Agathosma alaris Cham.	I	e	I
Agathosma bicolor Dummer	I	e	I
Agathosma capitata Sond.	I	e	I
Agathosma cephalodes E. Mey.	U	e	U
Agathosma conferta Pillans	R	e	R
Agathosma cordifolia Pillans	U	e	U
Agathosma decurrens Pillans	U	e	U
Agathosma dentata Pillans	R	e	R
Agathosma dielsiana	R	e	R
Agathosma distans Pillans	R	e	R
Agathosma elata Sond.	U	e	U
Agathosma florida Sond.	I	e	I
Agathosma foleyana Dummer	R	e	R
Agathosma geniculata Pillans	R	e	R
Agathosma gnidiiflora Dummer	I	e	I
Agathosma involucrata Eckl. & Zeyh.	U	e	U
Agathosma lancifolia Eckl. & Zeyh.	U	e	U
Agathosma leptospermoides Sond.	U	e	U
Agathosma linifolia Licht.	U	e	U
Agathosma longicornu Pillans	R	e	R

	Southern Africa	Endemic/ Non-endemic	World
Agathosma orbicularis Bartl. & Wendl.	I	e	I
Agathosma pallens Pillans	I	e	I
Agathosma pattisonae Dummer	U	e	U
Agathosma phillipsii Dummer	U	e	U
Agathosma planifolia Sond.	U	e	U
Agathosma rehmanniana Dummer	U	e	U
Agathosma sabulosa Sond.	U	e	U
Agathosma salina Eckl. & Zeyh.	U	e	U
Agathosma scaberula Dummer	U	e	U
Agathosma sedifolia Schlechtd.	E	e	E
Agathosma spinosa Sond.	U	e	U
Agathosma stokoei Pillans	R	e	R
Agathosma subteretifolia Pillans	I	e	I
Agathosma thymifolia Schlechtd.	I	e	I
Agathosma umbonata Pillans	U	e	U
Agathosma unicarpellata Pillans	U	e	U
Agathosma zwartbergense Pillans	U	e	U
Citropsis daweana Swingle & Kellerm	R	ne	nt
Coleonema aspalathoides Juss.	U	e	U
Diosma aristata I. Williams	E	e	E
Diosma candida I. Williams	I	e	I
Diosma eckloniana Sond.	U	e	U
Diosma flavescens Oliv.	I	e	I
Diosma passerinoides Steud.	R	e	R
Diosma patentifolia I. Williams	U	e	U
Diosma thyrsophora Eckl. & Zeyh.	U	e	U
Empleurium fragrans P.E. Glover	V	e	V
Euchaetis avisylvana Williams	E	e	E
Euchaetis schlechteri Schinz	E	e	E
Macrostylis cauliflora I. Williams	E	e	E
Zanthoxylum leprieurii Guill. & Perr.	R	ne	nt
SAPINDACEAE			
Allophylus chaunostachys Gilg	U	ne	nt

	Southern Africa	Endemic/ Non-endemic	World
Atalaya capensis R.A. Dyer	R	e	R
Atalaya natalensis R.A. Dyer	U	e	U
Blighia unijugata Bak.	R	ne	nt
Deinbollia xanthocarpa (Klotzsch) Radlk.	R	ne	nt
Erythrophysa transvaalensis Verdoorn	R	e	R
Haplocoelum gallense (Engl.) Radlk.	R	ne	I
Stadmania oppositifolia Poir ssp. rhodesica Exell	R	ne	I
SAPOTACEAE			
Vitellariopsis dispar (N.E. Br.) Aubrév.	R	e	R
SCROPHULARIACEAE			
Charadrophila capensis Marl.	V	e	V
Diascia dielsiana Schltr.	U	e	U
Diascia dissecta Hiern	U	e	U
Diascia heterandra Benth.	I	e	I
Diascia nana Diels	U	e	U
Diascia nutans Diels	U	e	U
Diascia pentheri Schltr.	U	e	U
Diascia ramosa Scott-Elliot	U	e	U
Diascia rudolphi Hiern	U	e	U
Diascia scullyi Hiern	U	e	U
Diascia tysoni Hiern	U	e	U
Diclis stellarioides Hiern	I	e	I
Freylinia decurrens Levyns	I	e	I
Freylinia tropica S. Moore	R	ne	nt
Harveya euryantha Schltr.	U	e	U
Hyobanche barklyi N.E. Br.	U	e	U
Manulea glandulosa Phill.	U	e	U
Nemesia glaucescens Hiern	U	e	U
Nemesia hastata Benth.	U	e	U

	Southern Africa	Endemic / Non-endemic	World
Nemesia micrantha Hiern	I	e	I
Nemesia pallida Hiern	U	e	U
Nemesia picta Schltr.	R	e	R
Nemesia strumosa Benth.	R	e	R
Polycarena capitatum Benth.	I	e	I
Polycarena filiformis Diels	U	e	U
Polycarena gracilipes N.E. Br.	U	e	U
Polycarena minimum Hiern	U	e	U
Polycarena multifolium Hiern	U	e	U
Polycarena parvula Schltr.	U	e	U
Polycarena sordidum Hiern	U	e	U
Sutera atrocaerulea Hiern	U	e	U
Sutera cephalotes O. Kuntze var. cephalotes	U	e	U
Sutera cephalotes var. glabrata Hiern	U	e	U
Sutera divaricata Hiern	U	e	U
Sutera esculenta Bond	V	e	V
Sutera gracilis Hiern	U	e	U
Sutera infundibuliformis Schltr.	U	e	U
Sutera intertexta Hiern	U	e	U
Sutera macrantha Codd	U	e	U
Sutera stenopetala Hiern	U	e	U
Sutera subnuda Hiern	U	e	U
Zaluzianskya nemesioides Diels	U	e	U
Zaluzianskya ramosa Schinz	I	e	I
SELAGINELLACEAE			
Selaginella pygmaea (Kaulf) Alston	U	e	U
SIMAROUBACEAE			
Kirkia dewinteri Merxm. & Heine	R	ne	U

	Southern Africa	Endemic/ Non-endemic	World
SOLANACEAE			
Solanum crassifolium Lam.	I	e	I
STERCULIACEAE			
Dombeya autumnalis Verdoorn	R	e	R
Dombeya kirkii Mast.	R	ne	nt
Dombeya rotundifolia (Hochst.) Planch. var. velutina Verdoorn	R	e	R
Hermannia helicoidea Verdoorn	R	e	R
Hermannia hispidula Reichb. f.	I	e	I
Hermannia repetenda Verdoorn	U	e	U
Sterculia alexandri Harv.	R	e	R
STRELITZIACEAE			
Strelitzia juncea Link	R	e	R
THELYPTERIDACEAE			
Christella altissima Holtt.	X	e	X
THYMELAEACEAE			
Cryptadenia laxa C.H. Wright	U	e	U
Gnidia leipoldtii C.H. Wright	U	e	U
Gnidia parviflora Meisn.	U	e	U
Gnidia scabrida Meisn.	U	e	U
Lachnaea elegans Compton	U	e	U
Lachnaea glomerata Fourc.	I	e	I
Passerina burchellii Thoday	R	e	R
Passerina paludosa Thoday	E	e	E

	Southern Africa	Endemic/ Non-endemic	World
TILIACEAE			
Grewia rogersii Burtt Davy & Greenway	R	e	R
ULMACEAE			
Celtis mildbraedii Engl.	V	ne	nt
URTICACEAE			
Obetia carruthersiana (Hiern) Rendle	U	ne	U
Pilea rivularis Wedd.	R	ne	nt
VELLOZIACEAE			
Xerophyta villosa (Bak.) Smith & Ayensu	U	ne	nt
ZAMIACEAE			
Encephalartos altensteinii Lehm.	R	e	R
Encephalartos arenarius R.A. Dyer	V	e	V
Encephalartos caffer (Thunb.) Lehm.	V	e	V
Encephalartos cupidus R.A. Dyer	E	e	E
Encephalartos cycadifolius (Jacq.) Lehm.	V	e	V
Encephalartos eugene-maraisii Verdoorn	V	e	V
Encephalartos ferox Bertol. f.	V	e	V
Encephalartos friderici-guilielmi Lehm.	R	e	R
Encephalartos ghellinckii Lem.	V	e	V
Encephalartos heenanii R.A. Dyer	V	e	V
Encephalartos horridus (Jacq.) Lehm.	V	e	V
Encephalartos humilis Verdoorn	V	e	V

	Southern Africa	Endemic / Non-endemic	World
Encephalartos inopinus R.A. Dyer	E	e	E
Encephalartos laevifolius Stapf & Burtt Davy	E	e	E
Encephalartos lanatus Stapf & Burtt Davy	V	e	V
Encephalartos latifrons Lehm.	E	e	E
Encephalartos lebomboensis Verdoorn	R	e	R
Encephalartos lehmannii Lehm.	R	e	R
Encephalartos longifolius (Jacq.) Lehm.	V	e	V
Encephalartos natalensis R.A. Dyer & Verdoorn	R	e	R
Encephalartos ngoyanus Verdoorn	V	e	V
Encephalartos paucidentatus Stapf & Burtt Davy	R	e	R
Encephalartos princeps R.A. Dyer	V	e	V
Encephalartos transvenosus Stapf & Burtt Davy	R	e	R
Encephalartos trispinosus (Hook.) R.A. Dyer	V	e	V
Encephalartos umbeluziensis R.A. Dyer	U	e	U
Encephalartos villosus Lem.	R	e	R
Encephalartos woodii Sander	X	e	X
ZINGIBERACEAE			
Kaempferia aethiopica (Schweinf.) Solms-Laub.	R	e	R
Kaempferia natalensis (Wood & Franks) Schltr. & K. Schum.	U	e	U

LISTS OF THREATENED TAXA BY COUNTRY/PROVINCE

In this table e/ne refers to the occurrence of the plant in the political region in question (endemic/not endemic).

S O U T H - W E S T A F R I C A / N A M I B I A

Extinct 0, Endangered 0, Vulnerable 2, Rare 21, Indeterminate 6, Uncertain 27, Endemic 12, Not endemic 44.

Vulnerable

Aloe erinacea	ne	Aloe karasbergensis	ne

Rare

Acacia hebeclada ssp chobiensis	ne	Crinum kirkii	ne
Acacia hebeclada ssp tristis	ne	Crinum rautanenianum	ne
Acacia montis-usti	e	Dombeya rotundifolia var velutina	e
Acacia robynsiana	ne		
Barleria megalosiphon	ne	Entandrophragma spicatum	ne
Boscia microphylla	e	Erythrina decora	e
Citropsis daweana	ne	Ficus fischeri	ne
Cotyledon rubrovenosa	ne	Kalanchoe laciniata	ne
Crinum baumii	ne	Kirkia dewinteri	ne
Crinum crassicaule	ne	Nymphaea lotus	ne
Crinum euchrophyllum	ne	Xeroderris stuhlmannii	ne

Indeterminate

Adenium oleifolium	ne	Eulophia holubii	e
Crinum carolo-schmidtii	ne	Eulophia leucantha	e
Eulophia austrooccidentalis	e	Schwantesia speciosa	ne

Uncertain

Adenium boehmianum	ne	Felicia deserti	ne
Amblygonocarpus andongensis	ne	Friesodielsia obovata	ne
Arctotis aenea	ne	Haemanthus avasmontanus	e
Barleria albipilosa	ne	Hibiscus waterbergensis	ne
Barleria ameliae	ne	Homalium abdessammadii	ne
Boscia angustifolia var corymbosa	ne	Obetia carruthersiana	e
		Ozoroa concolor	ne
Boscia tomentosa	ne	Ozoroa insignis ssp latifolia	e
Byrsocarpus orientalis	ne	Schrebera trichoclada	ne
Combretum wattii	ne	Sesamothamnus benguellensis	ne
Commiphora discolor	ne	Turraea zambesica	ne
Cordia pilosissima	ne	Tylecodon schaeferianus	ne
Crinum nerinoides	e	Tylecodon singularis	e
Euphorbia eduardoi	ne	Xylopia odoratissima	ne

B O T S W A N A

Extinct 0, Endangered 0, Vulnerable 1, Rare 6, Indeterminate 0, Uncertain 8, Endemic 0, Not endemic 15.

Vulnerable

Orbea maculata	ne

Rare

Acacia hebeclada ssp chobiensis	ne	Citropsis daweana	ne
Acacia hebeclada ssp tristis	ne	Crinum crassicaule	ne
Boscia foetida ssp minima	ne	Nymphaea lotus	ne

Uncertain

Albizia amara ssp sericocephalla	ne	Hoodia lugardii	ne
Albizia antunesiana	ne	Hyptis spicigera	ne
Brasenia schreberi	ne	Ruspolia hypocrateriformis var australis	ne
Friesodielsia obovata	ne	Turraea zambesica	ne

T R A N S V A A L

Extinct 0, Endangered 5, Vulnerable 14, Rare 117, Indeterminate 12, Uncertain 68, Endemic 105, Not endemic 112

Endangered

Encephalartos cupidus	e	Euphorbia barnardii	e
Encephalartos inopinus	e	Nervilia kotschyi	ne
Encephalartos laevifolius	e		

Vulnerable

Aloe albida	e	Euphorbia tortirama	e
Aloe monotropa	e	Gladiolus pretoriensis	ne
Encephalartos eugene-maraisii	e	Huernia nouhuysii	ne
Encephalartos heenanii	e	Kalanchoe crundallii	e
Encephalartos humilis	e	Orbea maculata	ne
Encephalartos lanatus	e	Stapelia clavicorona	e
Euphorbia groenewaldii	e	Warburgia salutaris	ne

Rare

Acacia welwitschii ssp delagoensis	ne	Aloe minima var blyderivierensis	e
Alchornea laxiflora	ne	Aloe peglerae	ne
Aloe angelica	e	Aloe petrophila	e
Aloe graciliflora	e	Aloe simii	e

Aloe soutpansbergensis	e
Aloe thorncroftii	e
Aloe vandermerwei	e
Aloe vogtsii	e
Aloe vossii	e
Angraecum chamaeanthus	e
Anisotes sessiliflorus	ne
Borassus aethiopicum	ne
Boscia foetida ssp minima	ne
Bosqueia phoberos	ne
Capparis sepiaria var subglabra	ne
Clivia caulescens	e
Commiphora zanzibarica	ne
Cordia africana	ne
Cordyla africana	ne
Crassula tuberella	ne
Cyrtanthus bicolor	ne
Cyrtanthus eucallus	e
Cyrtanthus huttonii	ne
Cyrtanthus thorncroftii	e
Deinbollia xanthocarpa	ne
Dombeya autumnalis	e
Dombeya kirkii	ne
Encephalartos paucidentatus	e
Encephalartos transvenosus	e
Enterospermum rhodesiacum	ne
Erythrophysa transvaalensis	ne
Euclea linearis	e
Eucomis montana	ne
Eucomis vandermerwei	e
Eulophia cooperi	ne
Euphorbia clivicola	e
Euphorbia grandialata	e
Euphorbia restricta	e
Euphoribia sekukuniensis	e
Euphorbia waterbergensis	e
Euphorbia zoutpansbergensis	e
Faurea macnaughtonii	ne
Freylinia tropica	ne
Frithia pulchra	ne
Gladiolus appendiculatus var longifolius	ne
Gladiolus brachyphyllus	ne
Gladiolus calcaratus	e
Gladiolus exiguus	e
Gladiolus hollandii	ne
Gladiolus macneilii	e
Gladiolus pole-evansii	e
Gladiolus robertsoniae	ne
Gladiolus rufomarginatus	e
Gladiolus varius var micranthus	e
Gladiolus varius var varius	e
Gladiolus vernus	e
Grewia rogersii	e
Guibourtia conjugata	ne
Habenaria laevigata ssp bicolor	e
Haworthia koelmaniorum	e
Heinsia crinita	ne
Heteropyxis canescens	ne
Hippocratea crenata	ne
Holarrhena pubescens	ne
Hugonia orientalis	ne
Hypericum roeperanum var roeperanum	e
Kaempferia aethiopica	e
Kalanchoe alticola	ne
Kniphofia coralligemma	e
Kniphofia rigidifolia	e
Kniphofia triangularis ssp obtusiloba	ne
Kotschya thymodora var thymododora	ne
Lagynias dryandrum	ne
Leucospermum saxosum	ne
Linociera battiscombei	e
Mossia intervallaris	e
Myrsine pillansii	ne
Neobolusia tysonii	ne
Neorosea andongensis	ne
Nerine gracilis	e
Nuxia glomerulata	ne
Nymphaea lotus	ne
Ocotea kenyensis	ne
Orbeanthus conjunctus	e
Orbeanthus paradoxa	ne
Orbeopsis gerstneri ssp elongata	e
Pavetta barbertonensis	ne
Pavetta microlancea	e
Phyllanthus kirkianus	ne
Pilea rivularis	e
Protea comptonii	e
Protea roupelliae var hamiltonii	e
Protea rubropilosa	e
Protea transvaalensis	e
Rhus rogersii	e
Stadmania oppositifolia ssp rhodesica	ne
Streptocarpus decipiens	e
Streptocarpus pogonites	e
Strophanthus luteolus	ne
Triaspis glaucophylla	e
Turbina shirensis	ne
Turbina stenosiphon	ne

Watsonia latifolia	ne	Xylopia parviflora	ne
Watsonia occulta	ne	Zantedeschia pentlandii	e
Watsonia transvaalensis	e	Zanthoxylum leprieurii	ne
Watsonia wilmsii	e	Zoutpansbergia caerulea	e
Xeroderris stuhlmannii	ne	Zygoon graveolens	ne
Xylia torreana	ne		

Indeterminate

Adenium obesum	ne	Ensete ventricosum	ne
Adenium oleifolium	ne	Eulophia coddii	e
Adenium swazicum	ne	Eulophia leachii	ne
Ansellia gigantea et vars	ne	Nervilia natalensis	ne
Clivia gardenii	ne	Pachypodium saundersii	ne
Clivia miniata	ne	Schizochilus gerrardii	ne

Uncertain

Adenia fruticosa ssp simplicifolia	e	Gladiolus microcarpus	ne
Agapanthus coddii	e	Habenaria kraenzliniana	e
Agapanthus dyeri	e	Hibiscus waterbergensis	ne
Albizia amara ssp sericocephala	ne	Hippocratea parvifolia	ne
Allophyllus chaunostachys	ne	Holothrix micrantha	e
Aloe reitzii	e	Hoodia lugardii	ne
Aloe thompsoniae	e	Hymenodictyon parvifolium	ne
Babiana hypogea var longituba	e	Hyptis spicigera	ne
Barleria oxyphylla	e	Inula paniculata	ne
Begonia sonderana	e	Jasminum abyssinicum	ne
Boscia angustifolia var corymbosa	ne	Jatropha messinica	ne
Brasenia schreberi	ne	Kniphofia crassifolia	e
Catha transvaalensis	e	Macrorungia longistrobus	ne
Combretum collinum ssp taborense	ne	Maytenus oxycarpa	ne
Combretum padoides	ne	Maytenus pubescens	ne
Cordia grandicalyx	ne	Melinus tenuissima	e
Croton madadensis	ne	Monadenia leydenbergensis	e
Cyrtanthus junodii	e	Mondia whitei	ne
Dietes flavida	ne	Oberonia disticha	ne
Disa breyeri	e	Ochna glauca	ne
Disa extinctoria	ne	Orbea woodii	ne
Disa rhodantha	ne	Orbeanthus hardyi	e
Disperis concinna	ne	Oreosyce africana	ne
Disperis ermelensis	e	Polystachya albescens ssp imbricata	ne
Disperis gracilis	e	Protea curvata	e
Disperis natalensis	ne	Protea laetans	e
Drypetes mossambicensis	ne	Rhus batophylla	e
Duvernoia aconitiflora	ne	Ruspolia hypocrateriformis var australis	ne
Elephantorrhiza praetermissa	e	Schizachrium brevifolius	e
Eragrostis arenicola	e	Sclerochiton triacanthus	e
Euphorbia rowlandii	e	Streptocarpus latens	e
Felicia fruticosa ssp brevipedunculata	e	Strophanthus kombe	ne
		Sutera macrantha	ne
		Xerophyta villosa	ne
		Xylopia odoratissima	ne
		Zantedeschia jucunda	e

B O P H U T H A T S W A N A

Extinct 0, Endangered 2, Vulnerable 2, Rare 7, Indeterminate 0, Uncertain 1, Endemic 3, Not endemic 9.

Endangered

Euphorbia knobelii	e	Euphorbia perangusta	e

Vulnerable

Caralluma maculata	ne	Gladiolus pretoriensis	ne

Rare

Aloe peglerae	ne	Frithia pulchra	ne
Barleria media	e	Myrsine pillansii	ne
Boscia foetida ssp minima	ne	Nuxia glomerulata	ne
Erythrophysa transvaalensis	ne		

Uncertain

Burmannia madagascariensis	ne

S W A Z I L A N D

Extinct 0, Endangered 0, Vulnerable 1, Rare 10, Indeterminate 6, Uncertain 6, Endemic 5, Not endemic 18.

Vulnerable

Kniphofia umbrina	e

Rare

Caralluma ubomboensis	ne	Gladiolus appendiculatus var longifolius	ne
Cyrtanthus bicolor	ne	Gladiolus hollandii	ne
Encephalartos lebomboensis	ne	Heteropyxis canescens	ne
Encephalartos villosus	ne	Kalanchoe alticola	ne
Eucomis montana	ne	Pavetta barbertonensis	ne

Indeterminate

Adenium swazicum	ne	Kniphofia tysonii ssp lebomboensis	ne
Ansellia gigantea et vars	ne	Pachypodium saundersii	ne
Clivia gardenii	ne		
Habenaria rehmannii	e		

Uncertain

Aloe keithii	e	Croton madadensis	ne

Dietes flavida	ne	Encephalartos umbeluziensis	e
Duvernoia aconitiflora	ne	Euphorbia keithii	e

O R A N G E F R E E S T A T E

Extinct 0, Endangered 0, Vulnerable 4, Rare 9, Indeterminate 1, Uncertain 9, Endemic 4, Not endemic 19.

Vulnerable

Aloe polyphylla	ne	Encephalartos ghellinckii	ne
Arundinaria tesselata	ne	Neohenricia sibbettii	e

Rare

Crassula tuberella	ne	Galtonia viridiflora	ne
Disa frigida	e	Gladiolus cruentus	ne
Eucomis humilis	ne	Gladiolus robertsoniae	ne
Eucomis montana	ne	Kniphofia thodei	ne
Eulophia cooperi	ne		

Indeterminate

Corycium tricuspidatum	ne

Uncertain

Cyrtanthus attenuatus	e	Helichrysum ernestianum	ne
Disa basutorum	ne	Nerine bowdeni	ne
Disa thodei	e	Nerine platypetala	ne
Eucomis sp nov (schijfii)	ne	Satyrium microrrhynchum	ne
Gladiolus microcarpus	ne		

N A T A L

Extinct 3, Endangered 1, Vulnerable 21, Rare 84, Indeterminate 18, Uncertain 41, Endemic 73, Not endemic 95.

Extinct

Christella altissima	e	Vernonia africana	e
Encephalartos woodii	e		

Endangered

Kniphofia pauciflora	e

Vulnerable

Aloe gerstneri	e	Aponogeton ranunculiflorus	e

Arundinaria tesselata	ne	Kniphofia latifolia	e
Cavacoa aurea	ne	Kniphofia litoralis	e
Celtis mildbraedii	e	Kniphofia rooperi	ne
Diospyros rotundifolia	ne	Lumnitzera racemosa	ne
Encephalartos ferox	e	Orbea longidens	e
Encephalartos ghellinckii	ne	Raphia australis	e
Encephalartos ngoyanus	e	Rhynchocalyx lawsonioides	e
Gerbera aurantiaca	e	Streptocarpus wendlandii	e
Guettarda speciosa	ne	Warburgia salutaris	ne
Kniphofia flammula	e		

Rare

Albizia suluensis	e	Eucomis montana	ne
Alchornea hirtella var glabrata	e	Eulophia cooperi	ne
Aloe greenii	e	Eulophia zeyheriana	ne
Aloe pruinosa	e	Faurea macnaughtonii	ne
Aloe suffulta	e	Galtonia viridiflora	ne
Ancylanthus monteiroi	ne	Gerbera parva	e
Anochilus flanaganii	ne	Gerrardanthus tomentosus	e
Barleria argillicola	e	Gladiolus appendiculatus var appendiculatus	e
Blighia unijugata	ne	Gladiolus cruentus	ne
Boscia foetida ssp longipedicellata	e	Gladiolus gueinzii	ne
Bosqueia phoberos	ne	Gladiolus oppositiflorus ssp oppositiflorus	ne
Bridelia cathartica ssp cathartica	ne	Gladiolus symonsii	e
Brunsvigia undulata	e	Haplocoelum gallense	ne
Calpurnia woodii	e	Jubaeopsis caffra	ne
Caralluma ubomboensis	ne	Kniphofia coddiana	ne
Cassipourea mossambicensis	ne	Kniphofia ensifolia ssp autumnalis	e
Cassipourea swaziensis	e	Kniphofia evansii	e
Ceriops tagal	ne	Kniphofia thodei	ne
Clivia nobilis	ne	Kniphofia triangularis ssp obtusiloba	ne
Coffea racemosa	ne	Lampranthus fugitans	ne
Commiphora zanzibarica	ne	Lasiodiscus mildbraedii	e
Cordyla africana	ne	Morus mesozygia	ne
Craibia zimmermannii	ne	Myrsine pillansii	ne
Crassula tuberella	ne	Mystacidium millarii	e
Crinum acaule	e	Neobolusia tysonii	ne
Cryptocarya wyliei	ne	Nymphaea lotus	ne
Cyrtanthus bicolor	ne	Ocotea kenyensis	ne
Cyrtanthus erubescens	e	Orbeanthus paradoxa	ne
Cyrtanthus falcatus	e	Orbeopsis gerstneri ssp gerstneri	e
Cyrtanthus nutans	e	Oxyanthus latifolius	ne
Dialium schlechteri	ne	Oxyanthus pyriformis	e
Dietes butcheriana	e	Pavetta barbertonensis	ne
Dracaena usambarensis	ne	Pavetta gerstneri	e
Encephalartos lebomboensis	ne	Pseudobersama mossambicensis	ne
Encephalartos natalensis	ne	Pseudosalacia streyii	ne
Encephalartos villosus	ne	Scolopia oreophila	e
Entada pursaetha	ne		
Eucomis humilis	ne		

Scolopia stolzii	e	Watsonia latifolia	ne
Sophora inhambanensis	ne	Watsonia occulta	ne
Strophanthus luteolus	ne	Zantedeschia albomaculata ssp valida	e
Suregada zanzibariensis	ne	Zanthoxylum leprieurii	ne
Tapura fischeri	ne		
Vitellariopsis dispar	e		

Indeterminate

Adenium obesum	ne	Eulophia leachii	ne
Ansellia gigantea et vars	ne	Kniphofia rufa	e
Bonatea saundersiae	e	Kniphofia tysonii ssp lebomboensis	ne
Calanthe natalensis	ne	Nervilia natalensis	ne
Cassine crocea	ne	Pachypodium saundersii	ne
Clivia gardenii	ne	Schizochilus gerrardii	ne
Clivia miniata	ne	Schizochilus rudatisii	e
Cynorkis compacta	e	Stenoglottis longifolia	e
Disperis stenoglossa	e		
Disperis woodii	ne		

Uncertain

Aloe prinslooi	e	Disperis concinna	ne
Aloe reitzii var nova	e	Disperis flava	e
Atalaya natalensis	e	Disperis kermesina	e
Beilschmiedia natalensis	ne	Disperis natalensis	ne
Burmannia madagascariensis	ne	Eucomis sp nov (schijfii)	ne
Crassula obovata var dregeana	ne	Eugenia erythrophylla	ne
Cyrtanthus epiphyticus	ne	Ficus tremula	ne
Dietes flavida	ne	Gladiolus microcarpus	ne
Disa basutorum	ne	Huttonaea woodii	e
Disa extinctoria	ne	Kaempferia natalensis	e
Disa fanniniae	e	Kalanchoe longiflora	e
Disa kraussii	e	Kniphofia fibrosa	ne
Disa rhodantha	ne	Nerine pancratioides	e
Disa sankeyi	e	Nerine platypetala	ne
Disa woodii	e	Orbea woodii	ne
Disa zuluensis	e	Pseudoscolopia polyantha	ne
Disperis allisonii	e	Rhus krebsiana	ne
Disperis anomala	e	Satyrium microrrhynchum	ne
Disperis bicolor	e	Satyrium rhodanthum	e
Disperis buchananii	e	Sutera macrantha	ne
		Uvaria lucida ssp virens	e

L E S O T H O

Extinct 0, Endangered 0, Vulnerable 2, Rare 3, Indeterminate 0, Uncertain 2, Endemic 1, Not endemic 6.

Vulnerable

Aloe polyphylla	ne	Kniphofia hirsuta	e

Rare

Calpurnia robinioides	ne	Kniphofia thodei	ne
Galtonia viridiflora	ne		

Uncertain

Disa basutorum	ne	Eucomis sp nov (schijfii)	ne

T R A N S K E I

Extinct 0, Endangered 1, Vulnerable 12, Rare 30, Indeterminate 8, Uncertain 23, Endemic 21, Not endemic 53.

Endangered

Corymborkis corymbosa	e

Vulnerable

Aloe reynoldsii	e	Encephalartos ghellinckii	ne
Arundinaria tesselata	ne	Encephalartos longifolius	ne
Crassula planifolia	e	Encephalartos princeps	ne
Dierama pulcherrimum	ne	Eulophia platypetala	ne
Elephantorrhiza sp nov	e	Kniphofia drepanophylla	e
Encephalartos caffer	ne	Kniphofia rooperi	ne

Rare

Acrolophia micrantha	ne	Eucomis humilis	ne
Bauhinia bowkeri	e	Eulophia zeyheriana	ne
Borassus caffra	e	Faurea macnaughtonii	ne
Calpurnia robinioides	ne	Galtonia viridiflora	ne
Cassipourea flanaganii	ne	Gladiolus gueinzii	ne
Clivia nobilis	ne	Gladiolus oppositiflorus ssp oppositiflorus	ne
Cotyledon flanaganii	ne		
Cryptocarya wyliei	ne	Gladiolus oppositiflorus ssp salmoneus	ne
Cyrtanthus helictus	ne		
Dietes bicolor	ne	Jubaeopsis caffra	ne
Disa galpinii	e	Kniphofia coddiana	ne
Disa tysonii	ne	Lampranthus fugitans	ne
Encephalartos altensteinii	ne	Nerine gibsonii	e
Encephalartos friderici-guilielmi	ne	Pseudosalacia streyii	ne
		Rhus crispa	ne
Encephalartos natalensis	ne	Umtiza listerana	ne
Encephalartos villosus	ne		

Indeterminate

Cassine crocea	ne	Eulophia meleagris	ne
Clivia gardenii	ne	Lachenalia convallarioides	e
Clivia miniata	ne	Schizochilus gerrardii	ne
Disperis woodii	ne	Schizochilus pulchellus	e

Uncertain

Beilschmiedia natalensis	ne	Kniphofia fibrosa	ne
Bobartia gracilis	ne	Nerine bowdeni	ne
Crassula obovata var dregeana	ne	Nerine masonorum	e
Crassula streyi	e	Phylica tysoni	e
Cyrtanthus epiphyticus	ne	Phylica tysoni var brevifolia	e
Cyrtanthus rectiflorus	ne	Phyllanthus cedrelifolius	e
Disa caffra	e	Pseudoscolopia polyantha	ne
Disa montana	e	Satyrium microrrhynchum	ne
Disa rhodantha	ne	Streptocarpus modestus	e
Disa scullyi	e	Streptocarpus porphyrostachys	e
Eucomis sp nov (schijfii)	ne	Syringodea flanaganii	ne
Eugenia erythrophylla	ne		

C A P E P R O V I N C E

Extinct 37, Endangered 95, Vulnerable 125, Rare 336, Indeterminate 238, Uncertain 694, Endemic 1480, Not endemic 45.

Extinct

Acrolophia ustulata	e	Leucadendron comosum ssp homeophyllum	e
Anisodontea alexandri	e	Leucadendron spirale	e
Aspalathus variegata	e	Marasmodes undulata	e
Caralluma arenicola	e	Mimetes stokoei	e
Corycium vestitum	e	Moraea incurva	e
Crassula alcicornis	e	Moraea loubseri	e
Crassula subulata var hispida	e	Osteospermum hirsutum	e
Elegia extensa	e	Romulea papyracea	e
Elegia fastigiata	e	Romulea sulphurea	e
Erica acockii	e	Satyrium guthriei	e
Erica bolusiae	e	Staavia trichotoma	e
Erica pyramidalis	e	Stylapterus micranthus	e
Erica turgida	e	Thamnea depressa	e
Erica verticillata	e	Thamnea uniflora	e
Felicia annectens	e	Urginea duthiae	e
Gibraeum esterhuyseniae	e	Urginea eckloni	e
Gladiolus alatus var algoensis	e	Wahlenbergia saxifragoides	e
Lachenalia mathewsii	e		
Leptocarpus ramosissimus	e		

Endangered

Agathosma sedifolia	e	Diosma aristata	e
Amphisiphon stylosa	e	Diplosoma retroversum	e
Babiana pauciflora	e	Disa stokoei	e
Bobartia parva	e	Elegia fenestrata	e
Brunsvigia litoralis	e	Encephalartos latifrons	e
Chondropetalum acockii	e	Erica bakeri	e
Diastella buekii	e	Erica chrysocodon	e

Erica crucistigmatica	e	Moraea insolens	e
Erica fairii	e	Moraea tulbaghensis	e
Erica heleogena	e	Muiria hortenseae	e
Erica jasminiflora	e	Muraltia satureioides var	
Erica junonia	e	salteri	e
Erica limosa	e	Orothamnus zeyheri	e
Erica pilulifera	e	Oxalis natans	e
Erica sociorum	e	Passerina paludosa	e
Euchaetis avisylvana	e	Phylica ampliata	e
Euchaetis schlechteri	e	Pleiospilos hilmari	e
Euryops muirii	e	Pleiospilos prismaticus	e
Gladiolus aureus	e	Prionanthium pholiuroides	e
Gladiolus emiliae	e	Protea holosericea	e
Gladiolus quadrangulus	e	Protea mucronifolia	e
Herschelia barbata	e	Protea odorata	e
Herschelia lugens	e	Relhania rotundifolia	e
Huernia witzenbergensis	e	Restio acockii	e
Hypodiscus paludosus	e	Restio dodii var purpureus	e
Ixia framesii	e	Restio harveyi	e
Lachenalia purpureo-caerulea	e	Restio sabulosus	e
Leptocarpus rigoratus var		Roella goodiana	e
simulans	e	Ruschia leipoldtii	e
Leucadendron bonum	e	Saphesia flaccida	e
Leucadendron chamelaea	e	Satyrium muticum	e
Leucadendron cryptocephalum	e	Serruria ciliata	e
Leucadendron elimense spp		Serruria florida	e
vyeboomense	e	Serruria furcellata	e
Leucadendron elimense ssp		Serruria roxburghii	e
elimense	e	Serruria trilopha	e
Leucadendron ericifolium	e	Sorocephalus imbricatus	e
Leucadendron flexuosum	e	Sorocephalus palustris	e
Leucadendron floridum	e	Sorocephalus tenuifolius	e
Leucadendron levisanus	e	Sparaxis tricolor	e
Laucadendron macowanii	e	Staavia dodii	e
Leucadendron roodii	e	Staavia zeyheri	e
Leucadendron thymifolium	e	Stapelia concinna var	
Leucadendron tradouwense	e	concinna	e
Leucadendron verticillatum	e	Stapelia dwequensis	e
Leucospermum profugum	e	Stapeliopsis neronis	e
Lithops comptonii	e	Stomatium geoffreyi	e
Macrostylis cauliflora	e	Stomatium ronaldii	e
Mimetes hottentoticus	e	Trichocaulon pillansii	e
Monadenia macrostachya	e	Widdringtonia cedarbergensis	e
Moraea aristata	e		

Vulnerable

Aloe karasbergensis	ne	Charadrophila capensis	e
Arundinaria tesselata	ne	Chondropetalum longiflorum	e
Aspalathus rycroftii	e	Chondropetalum rectum	e
Aspalathus smithii	e	Cliffortia acockii	e
Athanasia rugulosa	e	Cyrtanthus guthrieae	e
Audouinia capitata	e	Cyrtanthus spiralis	e
Caralluma cincta	e	Cyrtanthus staadensis	e

Didymaotus lapidiformis	e
Dierama pulcherrimum	ne
Disa neglecta	e
Echidnopsis columnaris	e
Elegia prominens	e
Elegia stokoei	e
Elegia verreauxii	e
Empleurum fragrans	e
Encephalartos arenarius	e
Encephalartos caffer	ne
Encephalartos cycadifolius	e
Encephalartos horridus	e
Encephalartos longifolius	ne
Encephalartos princeps	ne
Encephalartos trispinosus	e
Erica aghillana	e
Erica casta	e
Erica cyrillaeflora	e
Erica ferrea	e
Erica paludicola	e
Erica porteri	e
Erica purgatoriensis	e
Erica urna-viridis	e
Eulophia platypetala	ne
Euphorbia fasciculata	e
Euphorbia nesemannii	e
Geissorhiza matthewsii	e
Geissorhiza matthewsii var eurystigma	e
Gethyllis multifolia	e
Gladiolus caryophyllaceus	e
Gladiolus citrinus	e
Gladiolus comptonii	e
Gladiolus guthriei	e
Glischrocolla formosa	e
Haemanthus amarylloides	e
Haemanthus canaliculatus	e
Helichrysum recurvatum	e
Heliophila cuneata	e
Hessea chaplinii	e
Hessea mathewsii	e
Hoodia albispina	e
Ixia brevituba	e
Ixia curta	e
Ixia maculata var maculata	e
Ixia viridiflora	e
Kniphofia rooperi	ne
Lachenalia polyphylla	e
Lachenalia viridiflora	e
Laurentia giftbergensis	e
Leptocarpus impolitus	e
Leucadendron argenteum	e
Leucadendron cinereum	e
Leucadendron corymbosum	e
Leucadendron elimense ssp salteri	e
Leucadendron globosum	e
Leucadendron modestum	e
Leucadendron platyspermum	e
Leucadendron stelligerum	e
Leucospermum glabrum	e
Leucospermum parile	e
Limonium acuminatum	e
Lithops divergens	e
Lithops salicola	e
Lobelia zwartkopensis	e
Lobostemon bolusii	e
Marsilea schelpeana	e
Moraea gigandra	e
Muraltia barkerae	e
Muraltia calycina	e
Oxalis levis	e
Oxalis perineson	e
Pachites bodkini	e
Pachypodium namaquanum	e
Paranomus longicaulis	e
Phylica parvula	e
Protea angustata	e
Protea lanceolata	e
Protea minor	e
Protea pruinosa	e
Psilothonna speciosa	e
Rapanea gilliana	e
Restio coactilis	e
Restio communis	e
Restio duthieae	e
Restio festucaeformis	e
Restio quinquefarius	e
Restio scaber	e
Romulea aquatica	e
Romulea elliptica	e
Romulea eximia	e
Romulea saldanhensis	e
Satyrium foliosum	e
Serruria candicans	e
Sorocephalus crassifolius	e
Sorocephalus scabridus	e
Spatalla ericoides	e
Spatalla tulbaghensis	e
Stapelia divaricata	e
Stapelia glanduliflora	e
Stapelia immelmaniae	e
Stapelia nouhuysii	e
Stoebe gomphrenoides	e
Stoebe salteri	e
Stylapterus ericoides ssp ericoides	e
Sutera esculenta	e

Thamnochortus dumosus	e	Thamnochortus pluristachyus	e
Thamnochortus muirii	e	Tritoniopsis flexuosa	e
Thamnochortus pellucidus	e	Tylecodon cacalioides	e

Rare

Acmadenia niveni	e	Caralluma maughanii	e
Acrolophia micrantha	ne	Caralluma villetii	e
Adenandra dahlgrenii	e	Caryotophora skiatophytoides	e
Agapanthus walshii	e	Cassipourea flanaganii	ne
Agathosma conferta	e	Clivia nobilis	ne
Agathosma dentata	e	Cotyledon flanaganii	ne
Agathosma dielsiana	e	Cotyledon heterophylla	e
Agathosma distans	e	Cotyledon rubrovenosa	ne
Agathosma foleyana	e	Crassula arborescens ssp	
Agathosma geniculata	e	undulatifolia	e
Agathosma longicornu	e	Crassula barbata ssp	
Agathosma stokoei	e	broomii	e
Aloe buhrii	e	Crassula fusca	e
Aloe distans	e	Crassula multiceps	e
Amphigena leptostachya	e	Crassula namaquensis ssp	
Amphigena tenuis	e	comptonii	e
Anaxeton brevipes	e	Crassula pellucida ssp	
Anaxeton ellipticum	e	spongiosa	e
Anaxeton hirsutum	e	Crassula roggeveldii	e
Androsiphon capensis	e	Crassula socialis	e
Anochilus flanaganii	ne	Crassula vestita	e
Apodolirion lanceolatum	e	Crinum campanulatum	e
Aspalathus borbonifolia	e	Crinum lineare	e
Aspalathus comptonii	e	Cullumia pectinata	e
Aspalathus desertorum	e	Cyrtanthus clavatus	e
Aspalathus esterhuyseniae	e	Cyrtanthus helictus	ne
Aspalathus excelsa	e	Cyrtanthus herrei	e
Aspalathus fasciculata	e	Cyrtanthus huttonii	ne
Aspalathus stokoei	e	Cyrtanthus loddigesianus	e
Aspalathus suaveolens	e	Cyrtanthus smithii	e
Atalaya capensis	e	Diastella myrtifolia	e
Babiana auriculata	e	Diastella parilis	e
Babiana cedarbergensis	e	Dietes bicolor	ne
Babiana salteri	e	Dinteranthus vanzylii	e
Babiana stenomera	e	Diosma passerinoides	e
Babiana striata var planifolia	e	Disa longifolia	e
Berkheya francisci	e	Disa micropetala	e
Berzelia dregeana	e	Disa ovalifolia	e
Berzelia ecklonii	e	Disa pillansii	e
Bobartia gladiata ssp		Disa salteri	e
major	e	Disa schlechteriana	e
Bobartia orientalis ssp		Disa tabularis	e
occidentalis	e	Disa tenuicornis	e
Bobartia paniculata	e	Disa tysonii	ne
Brachysiphon mundii	e	Disperis bodkini	e
Cannomois aristata	e	Echidnopsis serpentina	e
Caralluma bredae var bredae	e	Elytropappus hispidus	e
Caralluma linearis	e	Encephalartos altensteinii	ne

Encephalartos friderici-guilielmi	ne
Encephalartos lehmannii	e
Encephalartos villosus	ne
Endonema lateriflora	e
Endonema retzioides	e
Erica alfredii	e
Erica annectens	e
Erica atrovinosa	e
Erica beatricis	e
Erica comptonii	e
Erica cremea	e
Erica dulcis	e
Erica galgebergensis	e
Erica granulatifolia	e
Erica hendricksei	e
Erica hippurus	e
Erica insolitanthera	e
Erica intricata	e
Erica keeromsbergensis	e
Erica lerouxiae	e
Erica leucosiphon	e
Erica marifolia	e
Erica nematophylla	e
Erica octonaria	e
Erica oophylla	e
Erica parvulisepala	e
Erica pauciovulata	e
Erica uysii	e
Erica vallis-araneorum	e
Erica vestiflua	e
Eulophia tabularis	e
Euphorbia hallii	e
Euphorbia marlothiana	e
Euryops brevilobus	e
Euryops decipiens	e
Euryops dentatus	e
Euryops indecorus	e
Euryops integrifolius	e
Euryops latifolius	e
Euryops marlothii	e
Euryops pectinatus	e
Euryops rosulatus	e
Euryops subcarnosus ssp minor	e
Euryops virgatus	e
Faurea macnaughtonii	ne
Felicia diffusa ssp khamiesbergensis	e
Felicia elongata	e
Felicia esterhuyseniae	e
Felicia tsitsikamae	e
Freesia armstrongii	e
Freesia speciosa	e
Galium bredasdorpense	e
Geissoloma marginatum	e
Gerbera wrightii	e
Gladiolus buckerveldii	e
Gladiolus cardinalis	e
Gladiolus gueinzii	ne
Gladiolus lapeirousioides	e
Gladiolus lewisiae	e
Gladiolus oppositiflorus ssp oppositiflorus	ne
Gladiolus oreocharis	e
Gladiolus punctulatus var autumnalis	e
Gladiolus punctulatus var punctulatus	e
Gladiolus salteri	e
Gladiolus stokoei	e
Gladiolus violaceo-lineatus	e
Gladiolus viridiflorus	e
Grammitis poeppigana	ne
Greyia flanaganii	e
Haworthia blackburniae	e
Heliophila cedarbergensis	e
Heliophila cinerea	e
Heliophila collina	e
Heliophila eximia	e
Heliophila filicaulis	e
Heliophila laciniata	e
Heliophila patens	e
Heliophila rimicola	e
Heliophila tabularis	e
Heliophila tricuspidata	e
Hermannia helicoidea	e
Herschelia tripartita	e
Hessea karooica	e
Hessea leipoldtii	e
Homoglossum guthriei	e
Huernia distincta	e
Hypodiscus sulcatus	e
Ixia purpureorosea	e
Ixia splendida	e
Klattia partita	e
Kniphofia praecox ssp bruceae	e
Lampranthus algoensis	e
Lampranthus rustii	e
Lapeirousia verecunda	e
Leptocarpus levynsiae	e
Leucadendron brunioides var flumenlupinum	e
Leucadendron cadens	e
Leucadendron concavum	e
Leucadendron coriaceum	e
Leucadendron diemontianum	e
Leucadendron discolor	e
Leucadendron galpinii	e
Leucadendron nervosum	e

Leucadendron radiatum	e	Protea pityphylla	e
Leucadendron remotum	e	Pseudobaeckea stokoei	e
Leucadendron rourkei	e	Raspalia schlechteri	e
Leucadendron singulare	e	Restio brunneus	e
Leucospermum arenarium	e	Restio cascadensis	e
Leucospermum bolusii	e	Restio distans	e
Leucospermum cordatum	e	Restio dodii var dodii	e
Leucospermum formosum	e	Restio esterhuyseniae	e
Leucospermum fulgens	e	Restio fuscidulus	e
Leucospermum muirii	e	Restio fusiformis	e
Leucospermum mundii	e	Restio involutus	e
Leucospermum pedunculatum	e	Restio micans	e
Leucospermum pluridens	e	Restio papyraceus	e
Leucospermum secundifolium	e	Restio vilis	e
Leucospermum tomentosum	e	Rhus crispa	ne
Mimetes capitulatus	e	Roella rhodantha	e
Mimetes palustris	e	Romulea albomarginata	e
Mimetes splendidus	e	Romulea amoena	e
Monadenia ecalcarata	e	Romulea barkerae	e
Monadenia sabulosa	e	Romulea biflora	e
Moraea barnardii	e	Romulea hantamensis	e
Moraea cooperi	e	Romulea kamisensis	e
Muraltia chamaepitys	e	Romulea multifida	e
Muraltia guthriei	e	Romulea oliveri	e
Nemesia picta	e	Romulea sanguinalis	e
Nemesia strumosa	e	Romulea sladenii	e
Neopatersonia namaquensis	e	Romulea syringodeoflora	e
Nerine pudica	e	Romulea tortlis var dissecta	e
Nivenia levynsiae	e	Romulea tortilis var tortilis	e
Oldenburgia arbuscula	e	Romulea toximontana	e
Oldenburgia papionum	e	Romulea vinacea	e
Orthopenthea bodkini	e	Senecio coleophyllus	e
Orthopenthea minor	e	Serruria brownii	e
Osteospermum aciphyllum	e	Serruria cyanoides	e
Osteospermum elsieae	e	Serruria flava	e
Osteospermum hafstroemii	e	Serruria hirsuta	e
Othonna hallii	e	Serruria kraussii	e
Othonna minima	e	Serruria leipoldtii	e
Othonna pteronioides	e	Serruria lenearis	e
Oxalis deserticola	e	Serruria meisneriana	e
Oxalis involuta	e	Serruria triternata	e
Oxalis lichenoides	e	Serruria zeyheri	e
Oxalis melanograpta	e	Sonderothamnus speciosus	e
Oxalis senecta	e	Sorocephalus alopecurus	e
Oxalis virginea	e	Sorocephalus pinifolius	e
Paranomus adiantifolius	e	Sorocephalus teretifolius	e
Paranomus capitatus	e	Sparaxis pillansii	e
Paranomus diversifolius	e	Spatalla nubicola	e
Passerina burchellii	e	Spatalla salsoloides	e
Phylica brevifolia	e	Staberoha stokoei	e
Phymaspermum schroeteri	e	Stapelia cincta	e
Prismatocarpus cordifolius	e	Stapelia concinna var	
Protea convexa	e	paniculata	e
Protea oleracea	e	Stapelia conformis	e

Stapelia cylista	e	Thamnochortus nutans	e
Stapelia erectiflora	e	Thamnochortus punctatus	e
Stapelia plantii	e	Thereianthus racemosus	e
Stapelia rubiginosa	e	Trichocaulon annulatum	e
Stapelia thudichumii	e	Trichocaulon cinereum	e
Stapelia umbonata	e	Trichocaulon truncatum	e
Sterculia alexandri	e	Trichodiadema burgeri	e
Stoebe humilis	e	Trichodiadema densum	e
Stoebe muirii	e	Trichodiadema hallii	e
Strelitzia juncea	e	Tritoniopsis latifolia	e
Stylapterus dubius	e	Tylecodon fragilis	e
Stylapterus ericifolius	e	Tylecodon pearsonii	e
Stylapterus ericoides ssp pallidus	e	Tylecodon striatus	e
		Umtiza listerana	ne
Syringodea derustensis	e	Ursinia coronopifolia	e
Thaminophyllum mundtii	e	Ursinia subflosculosa	e
Thamnochortus acuminatus	e	Wahlenbergia buseriana	e
Thamnochortus fraternus	e	Willdenowia purpurea	e
Thamnochortus guthrieae	e		

Indeterminate

Adenandra gracilis	e	Caralluma pillansii	e
Adenandra odoratissima	e	Caralluma pruinosa	e
Adenandra odoratissima ssp tenuis	e	Carpacoce heteromorpha	e
		Cassine crocea	ne
Adenandra schlechteri	e	Cenia duckittiae	e
Adenium oleifolium	ne	Cliffortia acutifolia	e
Agathosma abrupta	e	Cliffortia geniculata	e
Agathosma affinis	e	Cliffortia strigosa	e
Agathosma alaris	e	Clivia gardenii	ne
Agathosma bicolor	e	Corycium bifidum	e
Agathosma capitata	e	Corycium tricuspidatum	ne
Agathosma florida	e	Corymbium salteri	e
Agathosma gnidiiflora	e	Corymbium theileri	e
Agathosma orbicularis	e	Cotula myriophylloides	e
Agathosma pallens	e	Crassula decumbens var brachyphylla	e
Agathosma subtereitifolia	e		
Agathosma thymifolia	e	Crassula susannae	e
Arctotheca forbesiana	e	Diascia heterandra	e
Aristea lugens	e	Diclis stellaroiodes	e
Aspalathus acanthophylla	e	Diosma candida	e
Aspalathus barbigera	e	Diosma flavescens	e
Aspalathus bidouwensis	e	Diplosoma leipoldtii	e
Aspalathus glabrata	e	Disperis wooddii	ne
Babiana leipoldtii	e	Dorotheanthus bidouwensis	e
Berrisfordia khamiesbergensis	e	Dorotheanthus booysenii	e
Calanthe natalensis	ne	Duvalia maculata	e
Caralluma acutiloba	e	Duvalia parviflora	e
Caralluma bredae var thomallae	e	Erica dysantha	e
		Erica hibbertia	e
Caralluma intermedia	e	Erica lagenaeformis	e
Caralluma inversa	e	Erica oligantha	e

Erica quadrisulcata	e
Erica riparia	e
Eulophia litoralis	e
Eulophia meleagris	ne
Euryops ciliatus	e
Euryops lasiocladus	e
Euryops pleiodontus	e
Euryops polytrichoides	e
Euryops ursinoides	e
Faucaria candida	e
Ferraria divaricata ssp arenosa	e
Freylinia decurrens	e
Geissorhiza furva	e
Geissorhiza lewisae	e
Gladiolus carinatus ssp parviflorus	e
Gladiolus gracilis var latifolius	e
Gladiolus vigilans	e
Gladiolus virescens var roseo-venosus	e
Grisebachia incana	e
Haworthia marginata	e
Haworthia maughanii	e
Haworthia rubriflora	e
Haworthia springbokvlakensis	e
Haworthia truncata	e
Hermannia hispidula	e
Herreanthus meyeri	e
Herschelia atropurpurea	e
Holothrix confusa	e
Holothrix pilosa	e
Homeria meterlekampiae	e
Homoglossum merianellum var aureum	e
Homoglossum merianellum var merianellum	e
Hoodia barklyi	e
Hoodia dregei	e
Hoodia pillansii	e
Huernia humilis	e
Huernia insigniflora	e
Huernia kennedyana	e
Huernia longii	e
Huernia pillansii	e
Huernia praestans	e
Hypodiscus alternans	e
Isoetes stephansenii	e
Ixia gloriosa	e
Ixia patens var linearifolia	e
Ixia patens var patens	e
Ixia stolonifera	e
Ixia versicolor	e
Juttadinteria albata	e
Juttadinteria tetrasepala	e
Kniphofia acraea	e
Kniphofia citrina	e
Lachenalia campanulata	e
Lachenalia convallarioides var robusta	e
Lachenalia haarlemensis	e
Lachenalia rhodantha	e
Lachnaea glomerata	e
Leptocarpus monostylis	e
Leucadendron burchellii	e
Leucadendron linifolium	e
Leucandendron orientale	e
Leucadendron sericeum	e
Leucadendron stellare	e
Leucospermum praecox	e
Limonium capense	e
Lonchostoma esterhuyseniae	e
Marasmodes dummeri	e
Massonia nervosa	e
Maughaniella luckhoffii	e
Monadenia physodes	e
Muraltia aciphylla	e
Muraltia angustiflora	e
Muraltia comptonii	e
Muraltia concava	e
Muraltia cuspifolia	e
Muraltia ferox	e
Muraltia harveyana	e
Muraltia hirsuta	e
Muraltia karroica	e
Nelia pillansii	e
Nelia schlechteri	e
Nemesia micrantha	e
Nivenia concinna	e
Nivenia stokoei	e
Oophytum oviforme	e
Ophthalmophyllum australe	e
Ophthalmophyllum haramoepense	e
Ophthalmophyllum verrucosum	e
Ophthalmophyllum villetii	e
Ornithogalum secundum	e
Osteospermum hispidum var viride	e
Othonna membranifolia	e
Oxalis burtoniae	e
Oxalis fragilis	e
Oxalis fragilis var pellucida	e
Oxalis lindaviana	e
Oxalis lineolata	e
Oxalis microdonta	e
Oxalis subsessilis	e

Pachites appressa	e	Staavia phylicoides	e
Paranomus centaureoides	e	Staberoha multispicula	e
Paranomus esterhuysenae	e	Stapelia barklyi	e
Pherolobus maughani	e	Stapelia macowanii	e
Phylica greyii	e	Stapelia neliana	e
Phylica schlechteri	e	Stapelia villetae	e
Phylica simii	e	Stylapterus barbatus	e
Phylica stenopetala	e	Synnotia roxburghii	e
Pleiospilos leipoldtii	e	Thamnea gracilis	e
Polycarena capitatum	e	Thamnochortus ellipticus	e
Polygala dasyphylla	e	Trichocaulon alstoni	e
Polygala langebergensis	e	Trichocaulon keetmanshoopense	e
Polygala pottebergensis	e	Trichocaulon kubusense	e
Protea denticulata	e	Trichocaulon pictum	e
Protea vogtsiae	e	Trichodiadema aurea	e
Rabiea jamesii	e	Trichodiadema obliquum	e
Raspalia barnardii	e	Trichodiadema peersii	e
Restio aureolus	e	Trichodiadema pygmaeum	e
Restio subcompressus	e	Trichodiadema rogersiae	e
Rhinephyllum inaequale	e	Trichodiadema rupicolum	e
Romulea jugicola	e	Tridentea baylissii	e
Romulea monadelpha	e	Tridentea choanantha	e
Romulea multisulcata	e	Tridentea longii	e
Romulea sphaerocarpa	e	Tridentea parvipuncta	e
Sceletium expansum	e	Tridentea umdausensis	e
Sceletium ovatum	e	Tritoniopsis elongata	e
Schizodium longipetalum	e	Urginea minor	e
Schwantesia acutipetala	e	Urginea pygmaea	e
Schwantesia australis	e	Wahlenbergia annuliformis	e
Schwantesia pillansii	e	Wahlenbergia brachycarpa	e
Schwantesiaz speciosa	ne	Wahlenbergia debilis	e
Schwantesia triebneri	e	Watsonia ecklonii	e
Secale africanum	e	Watsonia fergusoniae	e
Senecio foeniculoides	e	Watsonia hysterantha	e
Serruria incrassata	e	Watsonia rosea-alba	e
Serruria millefolia	e	Watsonia stanfordiae	e
Solanum crassifolium	e	Willdenowia affinis	e
Sparaxis elegans	e	Willdenowia fistulosa	e
Spatalla propinqua	e	Zaluzianskya ramosa	e
Spiloxene declinata	e		

Uncertain

Acmadenia alternifolia	e	Agathosma elata	e
Acmadenia cucullata	e	Agathosma involucrata	e
Acmadenia densifolia	e	Agathosma lancifolia	e
Acrolophia comosa	e	Agathosma leptospermoides	e
Adenoglossa decurrens	e	Agathosma linifolia	e
Adromischus humilis	e	Agathosma pattisonae	e
Adromischus marianae	e	Agathosma phillipsii	e
Adromischus phillipsiae	e	Agathosma planifolia	e
Agathosma cephalodes	e	Agathosma rehmanniana	e
Agathosma cordifolia	e	Agathosma sabulosa	e
Agathosma decurrens	e	Agathosma salina	e

Agathosma scaberula	e	Aspalathus macrocarpa	e
Agathosma spinosa	e	Aspalathus obliqua	e
Agathosma umbonata	e	Aspalathus obtusifolia	e
Agathosma unicarpellata	e	Aspalathus odontoloba	e
Agathosma zwartbergense	e	Aspalathus orbiculata	e
Alciope lanata	e	Aspalathus pallescens	e
Amphiglossa callunoides	e	Aspalathus pilantha	e
Amphiglossa corrudaefolia	e	Aspalathus prostrata	e
Anaxeton angustifolium	e	Aspalathus quadrata	e
Anaexeton virgatum	e	Aspalathus ramosissima	e
Androcymbium fenestratum	e	Aspalathus rectistyla	e
Androcymbium scabromarginatum	e	Aspalathus rostrata	e
Anisodontea dissecta	e	Aspalathus sulphurea	e
Anisodontea gracilis	e	Aspalathus vaccinifolia	e
Anisodontea pseudocapensis	e	Aspalathus vulpina	e
Anisodontea racemosa	e	Athanasia crassifolia	e
Anisodontea theronii	e	Athanasia harmeri	e
Arctotis aenea	ne	Athanasia mundtii	e
Arctotis crispata	e	Athanasia palmatifida	e
Arctotis diffusa	e	Athanasia quinquedentata	e
Arctotis dregei	e	Athanasia spathulata	e
Arctotis fosteri	e	Athanasia tomentella	e
Arctotis parvifolia	e	Babiana brachystachys	e
Arctotis rosea	e	Babiana foliosa	e
Arctotis sulcocarpa	e	Babiana horizontalis	e
Aristea palustris	e	Babiana klaverensis	e
Aristea recisa	e	Babiana lobata	e
Aristea simplex	e	Babiana obliqua	e
Aristea singularis	e	Babiana pilosa	e
Aspalathus acanthiloba	e	Babiana torta	e
Aspalathus aciloba	e	Berkheya angusta	e
Aspalathus arenaria	e	Berkheya dregei	e
Aspalathus burchelliana	e	Blepharis inermis	e
Aspalathus campestris	e	Bobartia gracilis	ne
Aspalathus candidula	e	Bobartia longicyma ssp	
Aspalathus compacta	e	longicyma	e
Aspalathus concava	e	Bobartia longicyma ssp	
Aspalathus corniculata	e	microflora	e
Aspalathus decora	e	Bonatea densiflora	e
Aspalathus digitifolia	e	Brachycorythis macowaniana	e
Aspalathus erythrodes	e	Brachymeris erubescens	e
Aspalathus ferox	e	Bulbine brunsvigiaefolia	e
Aspalathus florulenta	e	Bulbine flexicaulis	e
Aspalathus fourcadei	e	Bulbine minima	e
Aspalathus glossoides	e	Bulbine urgineoides	e
Aspalathus grobleri	e	Caralluma aperta	e
Aspalathus hypnoides	e	Caralluma gracilis	e
Aspalathus incana	e	Carpolyza spiralis	e
Aspalathus karrooensis	e	Chasmanthe bicolor	e
Aspalathus lamarckiana	e	Chasmanthe fucata	e
Aspalathus latifolia	e	Chasmatophyllum maninum	e
Aspalathus lenticula	e	Cheilanthes depauperata	e
Aspalathus longifolia	e	Chlorophytum lewisae	e
Aspalathus macrantha	e	Chlorophytum monophyllum	e

Cliffortia aculeata	e	Diascia rudolphi	e
Cliffortia carinata	e	Diascia scullyi	e
Cliffortia crenulata	e	Diascia tysoni	e
Cliffortia curvifolia	e	Diosma eckloniana	e
Cliffortia cymbifolia	e	Diosma patentifolia	e
Cliffortia intermedia	e	Diosma thyrsophora	e
Cliffortia lanata	e	Disa begleyi	e
Cliffortia longifolia	e	Disa brachyceras	e
Cliffortia monophylla	e	Disa falcata	e
Cliffortia montana	e	Disa sanguinea	e
Cliffortia multiformis	e	Disparago rosea	e
Cliffortia reticulata	e	Disperis macrocorys	e
Coleonema aspalathoides	e	Dorotheanthus rourkei	e
Corycium deflexum	e	Elegia altigena	e
Corycium venosum	e	Elegia bella	e
Corymbium fourcadei	e	Engysiphon brevitubus	e
Cotula loganii	e	Erica aneimana	e
Cotula paradoxa	e	Erica aspalathoides	e
Cotula pedunculata	e	Erica auriculata	e
Cotyledon ladismithiensis	e	Erica barrydalensis	e
Crassula alpestris ssp		Erica berzeloides	e
massoni	e	Erica blesbergensis	e
Crassula brachystachya	e	Erica cerviciflora	e
Crassula elsieae	e	Erica cryptanthera	e
Crassula multiflora ssp		Erica dilatata	e
leucantha	e	Erica diotaeflora	e
Crassula namaquensis ssp		Erica eriophoros	e
lutea	e	Erica ethelae	e
Crassula rupestris var		Erica gallorum	e
marnierana	e	Erica greyii	e
Crassula sericea var velutina	e	Erica heleophila	e
Cryptadenia laxa	e	Erica heterophylla	e
Cullumia floccosa	e	Erica keetii	e
Cullumia micracantha	e	Erica kraussiana	e
Cullumia selago	e	Erica latifolia	e
Cyphia comptonii	e	Erica lehmanii	e
Cyphia dentariaefolia	e	Erica macilenta	e
Cyphia longiflora	e	Erica mundii	e
Cyphia longilobata	e	Erica obconica	e
Cyphia oligotricha	e	Erica ostiaria	e
Cyphia ranunculifolia	e	Erica oxyandra	e
Cyphia salteri	e	Erica pearsoniana	e
Cyphia stephensii	e	Erica praenitens	e
Cyphia tortilis	e	Erica pyrantha	e
Cyrtanthus flavus	e	Erica rufescens	e
Cyrtanthus rectiflorus	ne	Erica sonora	e
Cyrtanthus suaveolens	e	Erica trichophora	e
Daubenya aurea	e	Erica trichophylla	e
Diascia dielsiana	e	Erica turbiniflora	e
Diascia dissecta	e	Erica turrisbabylonica	e
Diascia nana	e	Erica xanthina	e
Diascia nutans	e	Eriocephalus tenuipes	e
Diascia pentheri	e	Eriospermum cervicorne	e
Diascia ramosa	e	Eriospermum fasciculatum	e

Eriospermum patentiflorum	e	Gnidia parviflora	e
Eriospermum stoloniferum	e	Gnidia scabrida	e
Eriospermum villosum	e	Grisebachia niveni	e
Eroeda muirii	e	Grisebachia rigida	e
Euryops gracilipes	e	Haemanthus nortieri	e
Euryops mirus	e	Harveya euryantha	e
Euryops zeyheri	e	Helichrysum archeri	e
Faucaria longidens	e	Helichrysum cochleariforme	e
Felicia deserti	ne	Helichrysum concinnum	e
Felicia ebracteata	e	Helichrysum ernestianum	ne
Felicia nigrescens	e	Helichrysum filagineum	e
Ferraria foliosa	e	Helichrysum isolepis	e
Ferraria uncinata	e	Helichrysum leptorhizum	e
Galenia fruticosa		Helichrysum manopappum	e
var prostrata	e	Helichrysum pulchellum	e
Gasteria armstrongii	e	Helichrysum ramulosum	e
Gasteria lilliputana	e	Helichrysum silicicolum	e
Gazania caespitosa	e	Helichrysum simii	e
Geissorhiza burchellii	e	Helictotrichon barbatum	e
Geissorhiza geminata	e	Helictotrichon namaquense	e
Geissorhiza ixioides	e	Helictotrichon quinquisetum	e
Geissorhiza leipoldtii	e	Heliophila leptophylla	e
Geissorhiza ovalifolia	e	Heliophila ramosissima	e
Geissorhiza pappei	e	Hermannia repetenda	e
Geissorhiza rogersii	e	Herschelia charpentierana	e
Geissorhiza rubicunda	e	Herschelia multifida	e
Gethyllis herrei	e	Hesperantha oligantha	e
Gethyllis unilateralis	e	Hessea unguiculata	e
Gibbaeum angulipes	e	Heterolepis mitis	e
Gibbaeum pachypodium	e	Hippia hirsuta	e
Gladiolus acuminatus	e	Holothrix grandiflora	e
Gladiolus bilineatus	e	Holothrix lithophila	e
Gladiolus debilis var		Holothrix longicornu	e
variegatus	e	Holothrix macowaniana	e
Gladiolus engysiphon	e	Homeria lineata	e
Gladiolus floribundus ssp		Homeria spiralis	e
miniatus	e	Homoglossum vandermerwei	e
Gladiolus jonquilliodorus	e	Huernia simplex	e
Gladiolus kamiesbergensis	e	Hyobanche barklyi	e
Gladiolus leptosiphon	e	Hypolaena stokoei	e
Gladiolus maculatus ssp		Imitaria muirii	e
hiburnus	e	Isoetes wormaldii	e
Gladiolus marlothii	e	Ixia bellendenii	e
Gladiolus martleyi	e	Ixia cochlearis	e
Gladiolus mostertiae	e	Ixia conferta var conferta	e
Gladiolus nerineoides	e	Ixia conferta var ochroleuca	e
Gladiolus pillansii var roseus	e	Ixia curvata	e
Gladiolus recurvus	e	Ixia leipoldtii	e
Gladiolus stephaniae	e	Ixia maculata var	
Gladiolus subcaeruleus	e	fusco-citrina	e
Gladiolus tristis var		Ixia maculata var	
concolor	e	intermedia	e
Glottiphyllum uniondalense	e	Ixia rouxii	e
Gnidia leipoldtii	e	Ixia trifolia	e

Juncus obliquus	e	Muraltia pappeana	e
Kensitia pillansii	e	Muraltia pottebergensis	e
Klingia namaquana	e	Muraltia serrata	e
Kniphofia fibrosa	ne	Muraltia spicata	e
Lachenalia muirii	e	Nemesia glaucescens	e
Lachnaea elegans	e	Nemesia hastata	e
Lampranthus arbuthnotiae	e	Nemesia pallida	e
Lamprocaulos schlechteri	e	Neopatersonia uitenhagensis	e
Lapeirousia corymbosa ssp		Nerine bowdeni	ne
alta	e	Nerine huttoniae	e
Laurentia longituba	e	Nivenia dispar	e
Laurentia mariae	e	Nivenia fruticosa	e
Lightfootia brachyphylla	e	Ophioglossum bergianum	e
Lightfootia effusa	e	Ophthalmophyllum littlewoodii	e
Lightfootia microphylla	e	Ophthalmophyllum longitubum	e
Lightfootia multicaulis	e	Ophthalmophyllum noctiflorum	e
Lightfootia multiflora	e	Ophthalmophyllum spathulatum	e
Lightfootia pauciflora	e	Ophthalmophyllum vanheerdei	e
Lightfootia planifolia	e	Ornithogalum inclusum	e
Lightfootia squarrosa	e	Osteospermum armatum	e
Lightfootia umbellata	e	Osteospermum pterigoideum	e
Liparia splendens	e	Osteospermum wallianum	e
Lithospermum flexuosum	e	Othonna abrotanifolia	e
Lobelia capillipes	e	Othonna cacalioides	e
Lobelia dasyphylla	e	Othonna cakilefolia	e
Lobelia disperma	e	Othonna lasiocarpa	e
Lobelia hypsibata	e	Othonna lepidocaulis	e
Lobelia laurentioides	e	Othonna linearifolia	e
Lobelia montaguensis	e	Othonna miser	e
Lobelia nugax	e	Othonna papaveroides	e
Lobostemon collinus	e	Othonna patula	e
Lobostemon gracilis	e	Othonna pinnatilobata	e
Lobostemon grandiflorus	e	Othonna rechingeri	e
Lobostemon horridus	e	Othonna spinescens	e
Lobostemon hottentoticus	e	Othonna tephrosioides	e
Lobostemon inconspicuus	e	Oxalis anomala	e
Lobostemon lucidus	e	Oxalis attaquana	e
Lobostemon muirii	e	Oxalis blastorrhiza	e
Mairia decumbens	e	Oxalis callimarginata	e
Manulea glandulosa	e	Oxalis calvinensis	e
Marasmodes oligocephalus	e	Oxalis cathara	e
Massonia laeta	e	Oxalis ciliaris var pageae	e
Matricaria schlechteri	e	Oxalis comptonii	e
Metalasia bodkinii	e	Oxalis creaseyi	e
Metalasia erectifolia	e	Oxalis crispula	e
Metalasia schlechteri	e	Oxalis crispula var	
Metalasia tricolor	e	glandulosa	e
Monadenia pygmaea	e	Oxalis crocea	e
Monopsis arenaria	e	Oxalis cuneata	e
Monopsis flava	e	Oxalis dichotoma	e
Monopsis stricta	e	Oxalis duriuscula	e
Muraltia capensis	e	Oxalis extensa	e
Muraltia carnosa	e	Oxalis fourcadei	e
Muraltia gillettiae	e	Oxalis heidelbergensis	e

Oxalis henrici	e	Phylica floribunda	e
Oxalis ioeides	e	Phylica glabrata	e
Oxalis lasiorrhiza	e	Phylica guthriei	e
Oxalis luteola var minor	e	Phylica incurvata	e
Oxalis marlothii	e	Phylica laevifolia	e
Oxalis massoniana	e	Phylica laevigata	e
Oxalis massoniana var		Phylica laevis	e
flavescens	e	Phylica lasiantha	e
Oxalis melanosticta var		Phylica leipoldtii	e
latifolius	e	Phylica levynsiae	e
Oxalis oligophylla	e	Phylica linifolia	e
Oxalis orbicularis	e	Phylica longimontana	e
Oxalis oreithala	e	Phylica lucens	e
Oxalis oreophila	e	Phylica lucida	e
Oxalis porphyriosiphon	e	Phylica maximiliani	e
Oxalis pulvinata	e	Phylica nigromontana	e
Oxalis purpurata	e	Phylica nodosa	e
Oxalis reclinata	e	Phylica pauciflora	e
Oxalis reclinata var		Phylica pearsonii	e
gracillima	e	Phylica recurvifolia	e
Oxalis reclinata var		Phylica retrorsa	e
quinata	e	Phylica reversa	e
Oxalis rhomboidea	e	Phylica salteri	e
Oxalis rubro-punctata	e	Phylica sericea	e
Oxalis simplex	e	Phylica trachyphylla	e
Oxalis stellata var		Phylica wittebergensis	e
montaguensis	e	Pleiospilos kingiae	e
Oxalis stellata var		Polycarena filiformis	e
gracilior	e	Polycarena gracilipes	e
Oxalis tenuis	e	Polycarena minimum	e
Ozoroa concolor	ne	Polycarena multifolium	e
Pectinaria stayneri	e	Polycarena parvula	e
Pellaea namaquensis	e	Polycarena sordidum	e
Pellaea rufa	e	Polygala lasiosepala	e
Pentameris obtusifolia	e	Polyxena corymbosa	e
Pentaschistis burchellii	e	Prionanthium ecklonii	e
Pentaschistis heterochaeta	e	Prionanthium rigidum	e
Pentaschistis hirsuta	e	Prismatocarpus decurrens	e
Pentaschistis zeyheri	e	Prismatocarpus fastigiatus	e
Pentzia trifida	e	Prismatocarpus hispidus	e
Phylica affinis	e	Prismatocarpus implicatus	e
Phylica agathosmoides	e	Prismatocarpus pauciflorus	e
Phylica alpina	e	Prismatocarpus pilosus	e
Phylica altigena	e	Prismatocarpus spinosus	e
Phylica amoena	e	Pteronia inflexa	e
Phylica anomala	e	Pteronia pillansii	e
Phylica apiculata	e	Pteronia scabra	e
Phylica barbata	e	Pteronia tenuifolia	e
Phylica brachycephala	e	Pterothrix cymbaefolia	e
Phylica burchellii	e	Pterothrix flaccida	e
Phylica chionocephala	e	Pterothrix perotrichoides	e
Phylica comosa	e	Ranunculus capensis	e
Phylica cuspidata	e	Relhania conferta	e
Phylica diosmoides	e	Relhania decussata	e

Relhania garnotii	e	Stoebe cyathuloides	e
Relhania multipunctata	e	Stoebe ensori	e
Relhania steyniae	e	Stoebe schultzii	e
Relhania tricephala	e	Strumaria picta	e
Restio filicaulis	e	Strumaria salteri	e
Restio setiger	e	Strumaria watermeyeri	e
Restio tuberculatus	e	Sutera atrocaerulea	e
Rhigiophyllum squarrosum	e	Sutera cephalotes	e
Rhus krebsiana	ne	Sutera cephalotes var	
Roella bryoides	e	glabrata	e
Roella cuspidata var		Sutera divaricata	e
hispida	e	Sutera gracilis	e
Roella latiloba	e	Sutera infundibuliformis	e
Roella lightfootioides	e	Sutera intertexta	e
Romulea cedarbergensis	e	Sutera stenopetala	e
Romulea hallii	e	Sutera subnuda	e
Romulea komsbergensis	e	Syringodea flanaganii	ne
Romulea malaniae	e	Syringodea pulchella	e
Romulea membranacea	e	Syringodea saxatilis	e
Romulea namaquensis ssp		Tetraria brachypylla	e
bolusii	e	Thaminophyllum multiflorum	e
Romulea namaquensis ssp		Thamnochortus nervosus	e
namaquensis	e	Trachyandra adamsonii	e
Romulea sinispinosensis	e	Trachyandra gracilenta	e
Romulea viridibracteata	e	Trichocaulon halenbergense	e
Rosenia glandulosa	e	Trichocaulon rusticum	e
Schizodium obliquum	e	Trichocaulon simile	e
Scilla plumbea	e	Tridentea virescens	e
Selaginella pygmaea	e	Tritonia kamisbergensis	e
Senecio addoensis	e	Tylecodon schaeferianus	ne
Senecio albopunctatus	e	Urginea forsteri	e
Senecio anthemifolius	e	Urginea pedunculata	e
Senecio diodon	e	Urginea revoluta	e
Senecio erysimoides	e	Ursinia pygmaea	e
Senecio expansus	e	Venidium angustifolium	e
Senecio haworthii	e	Venidium bolusii	e
Senecio hirtellus	e	Venidium fugax	e
Senecio microspermus	e	Venidium macrospermum	e
Senecio muirii	e	Wahlenbergia asperifolia	e
Senecio rehmanni	e	Wahlenbergia bolusiana	e
Senecio serrurioides	e	Wahlenbergia bowkeri	e
Senecio succulentus	e	Wahlenbergia ciliolata	e
Senecio thunbergii	e	Wahlenbergia clavatula	e
Senecio trachylaenus	e	Wahlenbergia compacta	e
Senecio trachyphyllus	e	Wahlenbergia constricta	e
Sphalmanthus arenicolus	e	Wahlenbergia distincta	e
Spiloxene maximiliani	e	Wahlenbergia divergens	e
Spiloxene umbraticola	e	Wahlenbergia dunantii	e
Stapelia bijliae	e	Wahlenbergia floribunda	e
Stapelia gariepensis	e	Wahlenbergia lasiocarpa	e
Stapelia vetula var simsii	e	Wahlenbergia longisepala	e
Stilpnophytum inopinatum	e	Wahlenbergia massonii	e
Stilpnophytum oocephalum	e	Wahlenbergia minuta	e
Stoebe copholepis	e	Wahlenbergia mollis	e

Wahlenbergia namaquana	e	Watsonia ardernei	e
Wahlenbergia oligotricha	e	Watsonia caledonica	e
Wahlenbergia polyclada	e	Watsonia cooperi	e
Wahlenbergia ramifera	e	Watsonia dubia	e
Wahlenbergia rara	e	Watsonia emiliae	e
Wahlenbergia roelliflora	e	Watsonia gladioloides	e
Wahlenbergia rotundifolia	e	Watsonia pauciflora	e
Wahlenbergia schistacea	e	Watsonia rogersii	e
Wahlenbergia serpentina	e	Watsonia strictiflora	e
Wahlenbergia subpilosa	e	Watsonia vittata	e
Wahlenbergia subtilis	e	Watsonia wordsworthiana	e
Wahlenbergia swellendamensis	e	Witsenia maura	e
Wahlenbergia tomentosula	e	Zaluzianskya nemesioides	e
Wahlenbergia tumida	e		

LISTS OF THREATENED TAXA IN DEGREE AREAS WITHIN EACH COUNTRY/PROVINCE

S O U T H - W E S T A F R I C A / N A M I B I A

Area name: Porto Velho
Boundaries: 17-18S, 12-13E
Number of taxa listed: 9

Rare

Acacia hebeclada ssp tristis	ne
Acacia robynsiana	ne
Boscia microphylla	ne

Uncertain

Adenium boehmianum	ne
Boscia tomentosa	ne
Combretum wattii	ne
Commiphora discolor	ne
Hibiscus waterbergensis	ne
Sesamothamnus benguellensis	ne

Area name: Ondangua
Boundaries: 17-18S, 15-16E
Number of taxa listed: 2

Rare

Acacia hebeclada ssp tristis	ne
Crinum rautanenianum	ne

Area name: Enana
Boundaries: 17-18S, 16-17E
Number of taxa listed: 2

Rare

Crinum rautanenianum	ne
Entandrophragma spicatum	ne

Area name: Swartbooisdrif
Boundaries: 17-18S, 13-14E
Number of taxa listed: 1

Rare

Boscia microphylla	ne

Area name: Kuring-Kuru
Boundaries: 17-18S, 18-19E
Number of taxa listed 1

Rare

Acacia hebeclada ssp tristis	ne

Area name: Ruacana Falls
Boundaries: 17-18S, 14-15E
Number of taxa listed: 3

Rare

Crinum rautanenianum	ne
Entandrophragma spicatum	ne

Indeterminate

Eulophia holobii	ne

Area name: Runtu
Boundaries: 17-18S, 19-20E
Number of taxa listed: 4

Rare

Acacia hebeclada ssp chobiensis	ne
Crinum baumii	ne
Nymphaea lotus	ne

Indeterminate

Crinum carolo-schmidtii	ne

Area name: Sambio
Boundaries: 17-18S, 20-21E
Number of taxa listed: 1

Indeterminate

Crinum carolo-schmidtii	ne

Area name: Singalamwe
Boundaries: 17-18S, 23-24E
Number of taxa listed: 3

Rare

Crinum baumii	ne
Ficus fischeri	ne

Uncertain

Homalium abdessammadii	ne

Area name: Katima Mulilo
Boundaries: 17-18S, 24-25E
Number of taxa listed: 14

Rare

Acacia hebeclada ssp chobiensis	ne
Citropsis daweana	ne
Crinum crassicaule	ne
Crinum euchrophyllum	ne
Ficus fischeri	ne
Xeroderris stuhlmannii	ne

Indeterminate

Crinum carolo-schmidtii	ne
Eulophia holubii	ne

Uncertain

Amblygonocarpus andongensis	ne
Friesodielsia obovata	ne
Homalium abdessammadii	ne
Schrebera trichoclada	ne
Turraea zambesica	ne
Xylopia odoratissima	ne

Area name: Livingstone
Boundaries: 17-18S, 25-26E
Number of taxa listed: 9

Rare

Barleria megalosiphon	ne
Crinum kirkii	ne

Indeterminate

Eulophia holubii	ne

Uncertain

Barleria ameliae	ne
Boscia angustifolia var corymbosa	ne
Byrsocarpus orientalis	ne
Cordia pilosissima	ne
Friesodielsia obovata	ne
Schrebera trichoclada	ne

Area name: Sanitatas
Boundaries: 18-19S, 12-13E
Number of taxa listed: 3

Rare

Acacia montis-usti	ne
Boscia microphylla	ne

Uncertain

Euphorbia eduardoi	ne

Area name: Ohopoho
Boundaries: 18-19S, 13-14E
Number of taxa listed: 2

Rare

Acacia hebeclada ssp tristis	ne
Kalanchoe laciniata	ne

Area name: Okahakana
Boundaries: 18-19S, 15-16E
Number of taxa listed: 1

Indeterminate

Eulophia leucantha e

Area name: Namutoni
Boundaries: 18-19S, 16-17E
Number of taxa listed: 1

Uncertain

Barleria albipilosa ne

Area name: Sesfontein
Boundaries: 19-20S, 13-14E
Number of taxa listed: 2

Rare

Acacia montis-usti ne
Kirkia dewinteri ne

Area name: Kamanjab
Boundaries: 19-20S, 14-15E
Number of taxa listed: 1

Uncertain

Adenium boehmianum ne

Area name: Okaukuejo
Boundaries: 19-20S, 15-16E
Number of taxa listed: 1

Uncertain

Adenium boehmianum ne

Area name: Gobaub
Boundaries: 19-20S, 16-17E
Number of taxa listed: 1

Indeterminate

Eulophia austrooccidentalis e

Area name: Tsumeb
Boundaries: 19-20S, 17-18E
Number of taxa listed: 2

Uncertain

Adenium boehmianum ne
Crinum nerinoides ne

Area name: Grootfontein
Boundaries: 19-20S, 18-19E
Number of taxa listed: 1

Rare

Erythrina decora ne

Area name: Tsunkwe
Boundaries: 19-20S, 20-21E
Number of taxa listed: 1

Indeterminate

Crinum carolo-schmidtii ne

Area name: Otjihorongo
Boundaries: 20-21S, 15-16E
Number of taxa listed: 1

Rare

Boscia microphylla ne

Area name: Otjiwarongo
Boundaries: 20-21S, 16-17E
Number of taxa listed: 5

Rare

Acacia robynsiana ne
Boscia microphylla ne

Uncertain

Adenium boehmianum ne
Combretum wattii ne
Obetia carruthersiana ne

Area name: Uis
Boundaries: 21-22S, 14-15E
Number of taxa listed: 3

Rare

Acacia montis-usti	ne
Acacia robynsiana	ne
Boscia microphylla	ne

Area name: Karibib
Boundaries: 21-22S, 15-16E
Number of taxa listed: 1

Rare

Dombeya rotundifolia var velutina	ne

Area name: Steinhausen
Boundaries: 21-22S, 18-19E
Number of taxa listed: 1

Indeterminate

Crinum carolo-schmidtii	ne

Area name: Swakopmund
Boundaries: 22-23S, 14-15E
Number of taxa listed: 2

Rare

Erythrina decora	ne

Uncertain

Obetia carruthersiana	ne

Area name: Trekkopje
Boundaries: 22-23S, 15-16E
Number of taxa listed: 1

Uncertain

Ozoroa insignis ssp latifolia	e

Area name: Otjimbingwe
Boundaries: 22-23S, 16-17E
Number of taxa listed: 1

Uncertain

Adenium boehmianum	ne

Area name: Windhoek
Boundaries: 22-23S, 17-18E
Number of taxa listed: 3

Rare

Erythrina decora	ne

Uncertain

Adenium boehmianum	ne
Haemanthus avasmontanus	e

Area name: Gobabis
Boundaries: 22-23S, 18-19E
Number of taxa listed: 1

Uncertain

Crinum nerinoides	ne

Area name: Nauchas
Boundaries: 23-24S, 16-17E
Number of taxa listed: 3

Rare

Dombeya rotundifolia var velutina	ne
Erythrina decora	ne

Uncertain

Arctotis aenea	ne

Area name: Maltahohe
Boundaries: 24-25S, 16-17E
Number of taxa listed: 2

Vulnerable

Aloe karasbergensis ne

Rare

Dombeya rotundifolia var velutina ne

Area name: Luderitz
Boundaries: 26-27S, 15-16E
Number of taxa listed: 1

Uncertain

Tylecodon schaeferianus ne

Area name: Aus
Boundaries: 26-27S, 16-17E
Number of taxa listed: 1

Vulnerable

Aloe karasbergensis ne

Area name: Bogenfels
Boundaries: 27-28S, 15-16E
Number of taxa listed: 2

Vulnerable

Aloe erinacea

Uncertain

Tylecodon schaeferianus ne

Area name: Witputz
Boundaries: 27-28S, 16-17E
Number of taxa listed: 2

Uncertain

Ozoroa concolor ne
Tylecodon singularis e

Area name: Chamaites
Boundaries: 27-28S, 17-18E
Number of taxa listed: 1

Uncertain

Ozoroa concolor ne

Area name: Grunau
Boundaries: 27-28S, 18-19E
Number of taxa listed: 1

Vulnerable

Aloe karasbergensis ne

Area name: Warmbad
Boundaries: 28-29S, 18-19E
Number of taxa listed: 5

Vulnerable

Aloe karasbergensis ne

Rare

Cotyledon rubrovenosa ne

Indeterminate

Adenium oleifolium ne
Schwantesia speciosa ne

Uncertain

Felicia deserti ne

Area name: Ariamsvlei
Boundaries: 28-29S, 19-20E
Number of taxa listed: 1

Rare

Cotyledon rubrovenosa ne

B O T S W A N A

Area name: Andara
Boundaries: 18-19S, 21-22E
Number of taxa listed: 7

Rare

Acacia hebeclada ssp chobiensis	ne
Acacia hebeclada ssp tristis	ne
Citropsis daweana	ne
Crinum crassicaule	ne
Nymphaea lotus	ne

Uncertain

Albizia antunesiana	ne
Friesodielsia obovata	ne

Area name: Kangara
Boundaries: 18-19S, 22-23E
Number of taxa listed: 2

Rare

Nymphaea lotus	ne

Uncertain

Hyptis spicigera	ne

Area name: Kachikau
Boundaries: 18-19S, 24-25E
Number of taxa listed: 2

Rare

Citropsis daweana	ne

Uncertain

Turraea zambesica	ne

Area name: Maun
Boundaries: 19-20S, 23-24E
Number of taxa listed: 3

Rare

Nymphaea lotus	ne

Uncertain

Brasenia schreberi	ne
Ruspolia hypocrateriformis var australis	ne

Area name: Kwebe Hills
Boundaries: 20-21S, 23-24E
Number of taxa listed: 1

Uncertain

Brasenia schreberi	ne

Area name: Plumtree
Boundaries 20-21S, 27-28E
Number of taxa listed: 1

Uncertain

Albizia amara ssp sericocephala	ne

Area name: Rakops
Boundaries: 21-22S, 24-25E
Number of taxa listed: 1

Uncertain

Hoodia lugardii	ne

Area name: Francistown
Boundaries: 21-22S, 27-28E
Number of taxa listed: 1

Uncertain

Albizia amara ssp sericocephala	ne

Area name: Gaborone
Boundaries: 24-25S, 25-26E
Number of taxa listed: 1

Vulnerable

Orbea maculata	ne

Area name: Mafeking
Boundaries: 25-26S, 25-26E
Number of taxa listed: 1

Rare

Boscia foetida ssp minima	ne

T R A N S V A A L

Area name: Maasstroom
Boundaries: 22-23S, 28-29E
Number of taxa listed: 1

Uncertain

Ochna glauca	ne

Area name: Waterpoort
Boundaries: 22-23S, 29-30E
Number of taxa listed: 26

Vulnerable

Huernia nouhuysii	ne
Orbea maculata	ne
Stapelia clavicorona	e

Rare

Aloe angelica	ne
Aloe petrophila	ne
Anisotes sessiliflorus	ne
Capparis sepiaria var subglabra	ne
Encephalartos transvenosus	ne
Enterospermum rhodesiacum	ne
Euphorbia zoutpansbergensis	e
Linociera battiscombei	ne
Neorosea andongensis	ne
Orbeanthus conjunctus	ne
Strophanthus luteolus	ne
Turbina stenosiphon	ne
Xeroderris stuhlmannii	ne

Indeterminate

Adenium oleifolium	ne
Pachypodium saundersii	ne

Uncertain

Adenia fruticosa ssp simplicifolia	e
Hibiscus waterbergensis	ne
Hoodia lugardii	ne
Jatropha messinica	ne
Ochna glauca	ne
Orbea woodii	ne
Orbeanthus hardyi	ne
Ruspolia hypocrateriformis var australis	ne

Area name: Messina
Boundaries: 22-23S, 30-31E
Number of taxa listed: 19

Rare

Alchornea laxiflora	ne
Aloe vogtsii	ne
Anisotes sessiliflorus	ne
Bosqueia phoberos	ne
Encephalartos transvenosus	ne
Enterospermum rhodesiacum	ne
Holarrhena pubescens	ne
Lagynias dryandrum	ne
Neorosea andongensis	ne
Phyllanthus kirkianus	ne
Pilea rivularis	ne
Protea transvaalensis	ne
Xylopia parviflora	ne
Zanthoxylum leprieurii	ne

Indeterminate

Adenium obesum	ne
Ensete ventricosum	ne

Uncertain

Hoodia lugardii	ne
Jatropha messinica	ne
Xylopia odoratissima	ne

Area name: Pafuri
Boundaries: 22-23S, 31-32E
Number of taxa listed: 30

Rare

Alchornea laxiflora	ne
Aloe angelica	ne
Anisotes sessiliflorus	ne
Capparis sepiaria var subglabra	ne
Deinbollia xanthocarpa	ne
Dombeya kirkii	ne
Guibourtia conjugata	ne
Heinsia crinita	ne
Hippocratea crenata	ne
Holarrhena pubescens	ne
Hugonia orientalis	ne
Lagynias dryandrum	ne
Phyllanthus kirkianus	ne
Turbina shirensis	ne
Xeroderris stuhlmannii	ne
Xylia torreana	ne
Zanthoxylum leprieurii	ne
Zygoon graveolens	ne

Indeterminate

Adenium obesum	ne

Uncertain

Albizia amara ssp sericocephala	ne
Boscia angustifolia var corymbosa	ne
Cordia grandicalyx	ne
Drypetes mossambicensis	ne
Euphorbia rowlandii	e
Hippocratea parvifolia	ne
Maytenus oxycarpa	ne
Maytenus pubescens	ne
Ruspolia hypocrateriformis var australis	ne
Strophanthus kombe	ne
Xylopia odoratissima	ne

Area name: Ellisras
Boundaries: 23-24S, 27-28E
Number of taxa listed: 2

Rare

Euphorbia waterbergensis	e

Uncertain

Hibiscus waterbergensis	ne

Area name: Baltimore
Boundaries: 23-24S, 28-29E
Number of taxa listed: 3

Vulnerable

Euphorbia tortirama	ne

Uncertain

Disa breyeri	e
Jasminum abyssinicum	ne

Area name: Pietersburg
Boundaries: 23-24S, 29-30E
Number of taxa listed: 32

Vulnerable

Encephalartos eugene-maraisii	ne
Euphorbia groenewaldii	e
Euphorbia tortirama	ne
Kalanchoe crundallii	e
Warburgia salutaris	ne

Rare

Aloe angelica	ne
Aloe soutpansbergensis	e
Aloe vogtsii	ne
Aloe vossii	e
Encephalartos transvenosus	ne
Enterospermum rhodesiacum	ne
Euclea linearis	ne
Kaempferia aethiopica	ne
Kniphofia coralligemma	ne
Linociera battiscombei	ne
Neorosea andongensis	ne

Ocotea kenyensis	ne
Orbeanthus conjunctus	ne
Pilea rivularis	ne
Protea transvaalensis	ne
Turbina stenosiphon	ne
Watsonia transvaalensis	ne
Watsonia wilmsii	ne
Zoutpansbergia caerulea	e
Indeterminate	
Nervilia natalensis	ne
Uncertain	
Agapanthus dyeri	e
Babiana hypogea var longituba	e
Disperis gracilis	ne
Felicia fruticosa ssp brevipedunculata	ne
Kniphofia crassifolia	e
Oreosyce africana	ne
Xerophyta villosa	ne

Area name: Tzaneen
Boundaries: 23-24S, 30-31E
Number of taxa listed: 31

Vulnerable	
Aloe monotropa	e
Encephalartos eugene-maraisii	ne
Warburgia salutaris	ne
Rare	
Aloe vandermerwei	ne
Borassus aethiopicum	ne
Clivia caulescens	ne
Cordia africana	ne
Encephalartos transvenosus	ne
Gladiolus varius var micranthus	ne
Gladiolus vernus	ne
Kaempferia aethiopica	ne
Kniphofia coralligemma	ne
Linociera battiscombei	ne
Neobolusia tysonii	ne
Ocotea kenyensis	ne
Protea rubropilosa	ne
Watsonia transvaalensis	ne
Xylopia parviflora	ne
Indeterminate	
Adenium obesum	ne
Ensete ventricosum	ne
Uncertain	
Aloe thompsoniae	ne
Eragrostis arenicola	e
Inula paniculata	ne
Melinus tenuissima	e
Mondia whitei	ne
Oberonia disticha	ne
Polystachya albescens ssp imbricata	ne
Ruspolia hypocrateriformis var australis	ne
Schizachrium brevifolius	e
Xerophyta villosa	ne
Xylopia odoratissima	ne

Area name: Phalaborwa
Boundaries: 23-24S, 31-32E
Number of taxa listed: 8

Rare	
Aloe vandermerwei	ne
Gladiolus brachyphyllus	ne
Stadmania oppositifolia ssp rhodesica	ne
Indeterminate	
Adenium obesum	ne
Pachypodium saundersii	ne
Uncertain	
Albizia amara ssp sericocephala	ne
Hymenodictyon parvifolium	ne
Jatropha messinica	ne

Area name: Thabazimbi
Boundaries: 24-25S, 27-28E
Number of taxa listed: 6

Rare	
Boscia foetida ssp minima	ne

Erythrophysa transvaalensis	ne
Freylinia tropica	ne
Kniphofia coralligemma	ne
Uncertain	
Agapanthus coddii	e
Hibiscus waterbergensis	ne

Area name: Nylstroom
Boundaries: 24-25S, 28-29E
Number of taxa listed: 7

Vulnerable	
Encephalartos eugene-maraisii	ne
Euphorbia tortirama	ne
Rare	
Aloe petrophila	ne
Euclea linearis	ne
Freylinia tropica	ne
Grewia rogersii	e
Ocotea kenyensis	ne

Area name: Zebediela
Boundaries: 24-25S, 29-30E
Number of taxa listed: 10

Vulnerable	
Euphorbia tortirama	ne
Rare	
Euphorbia clivicola	e
Euphorbia sekukuniensis	ne
Triaspis glaucophylla	ne
Indeterminate	
Eulophia leachii	ne
Uncertain	
Elephantorrhiza praetermissa	ne
Felicia fruticosa ssp brevipedunculata	ne
Gladiolus microcarpus	ne
Orbeanthus hardyi	ne
Xerophyta villosa	ne

Area name: Pilgrims Rest
Boundaries: 24-25S, 30-31E
Number of taxa listed: 59

Endangered	
Encephalartos cupidus	e
Encephalartos inopinus	e
Euphorbia barnardii	e
Vulnerable	
Encephalartos eugene-maraisii	ne
Encephalartos lanatus	ne
Warburgia salutaris	ne
Rare	
Aloe minima var blyderivierensis	ne
Clivia caulescens	ne
Cyrtanthus bicolor	ne
Cyrtanthus huttonii	ne
Cyrtanthus throncroftii	ne
Dombeya autumnalis	ne
Encephalartos paucidentatus	ne
Encephalartos transvenosus	ne
Euclea linearis	ne
Euphorbia grandialata	e
Euphorbia restricta	e
Euphorbia sekukuniensis	ne
Faurea macnaughtonii	ne
Gladiolus exiguus	ne
Gladiolus macneilii	e
Gladiolus rufomarginatus	ne
Gladiolus varius var micranthus	ne
Gladiolus varius var varius	ne
Gladiolus vernus	ne
Hypericum roeperanum var roeperanum	e
Kaempferia aethiopica	ne
Kniphofia coralligemma	ne
Kniphofia rigidifolia	ne
Kniphofia triangularis ssp obtusiloba	ne
Kotschya thymodora var thymodora	ne
Leucospermum saxosum	ne
Orbeopsis gerstneri ssp elongata	e
Protea rubropilosa	ne
Streptocarpus decipiens	e
Triaspis glaucophylla	ne
Watsonia occulta	ne

Watsonia transvaalensis	ne
Watsonia wilmsii	ne
Indeterminate	
Adenium obesum	ne
Eulophia leachii	ne
Nervilia natalensis	ne
Pachypodium saundersii	ne
Uncertain	
Aloe thompsoniae	ne
Catha transvaalensis	e
Cyrtanthus junodii	e
Disa extinctoria	ne
Duvernoia aconitiflora	ne
Elephantorrhiza praetermissa	ne
Hyptis spicigera	ne
Jasminum abyssinicum	ne
Macrorungia longistrobus	ne
Orbeanthus hardyi	ne
Oreosyce africana	ne
Protea laetans	e
Rhus batophylla	e
Ruspolia hypocrateriformis var australis	ne
Sutera macrantha	ne
Zantedeschia jucunda	e

Area name: Acornhoek
Boundaries: 24-25S, 31-32E
Number of taxa listed: 11

Rare	
Acacia welwitschii ssp delagoensis	ne
Aloe vandermerwei	ne
Commiphora zanzibarica	ne
Gladiolus brachyphyllus	ne
Orbeanthus paradoxa	ne
Indeterminate	
Adenium obesum	ne
Ansellia gigantea et vars	ne
Pachypodium saundersii	ne
Uncertain	
Barleria oxyphylla	ne
Combretum collinum ssp taborense	ne
Hymenodictyon parvifolium	ne

Area name: Pretoria
Boundaries: 25-26S, 28-29E
Number of Taxa listed: 10

Endangered	
Nervilia kotschyi	ne
Vulnerable	
Gladiolus pretoriensis	ne
Rare	
Aloe peglerae	ne
Boscia foetida ssp minima	ne
Frithia pulchra	ne
Gladiolus pole-evansii	ne
Nuxia glomerulata	ne
Nymphaea lotus	ne
Indeterminate	
Pachypodium saundersii	ne
Uncertain	
Habenaria kraenzliniana	e

Area name: Witbank
Boundaries: 25-26S, 29-30E
Number of taxa listed: 17

Vulnerable	
Encephalartos eugene-maraisii	ne
Encephalartos lanatus	ne
Rare	
Euclea linearis	ne
Eucomis vandermerwei	ne
Eulophia cooperi	ne
Frithia pulchra	ne
Gladiolus pole-evansii	ne
Gladiolus vernus	ne
Haworthia koelmaniorum	e
Myrsine pillansii	ne
Neobolusia tysonii	ne
Nymphaea lotus	ne
Triaspis glaucophylla	ne
Uncertain	
Brasenia schreberi	ne

Disa extinctoria	ne
Disa rhodantha	ne
Inula paniculata	ne

Area name: Lydenburg
Boundaries: 25-26S, 30-31E
Number of taxa listed: 47

Endangered

Encephalartos laevifolius	ne

Vulnerable

Encephalartos humilis	e

Rare

Aloe graciliflora	e
Aloe minima var blyderivierensis	ne
Aloe simii	ne
Aloe thorncroftii	ne
Angraecum chamaeanthus	e
Clivia caulescens	ne
Cyrtanthus bicolor	ne
Dombeya autumnalis	ne
Eucomis montana	ne
Eucomis vandermerwei	ne
Faurea macnaughtonii	ne
Gladiolus calcaratus	e
Gladiolus exiguus	ne
Gladiolus hollandii	ne
Gladiolus rufomarginatus	ne
Gladiolus varius var micranthus	ne
Gladiolus varius var varius	ne
Heteropyxis canescens	ne
Kniphofia rigidifolia	ne
Kniphofia triangularis ssp obtusiloba	
Kotschya thymodora var thymodora	ne
Neobolusia tysonii	ne
Ocotea kenyensis	ne
Protea comptonii	ne
Protea roupelliae var hamiltonii	e
Protea rubropilosa	ne
Rhus rogersii	ne
Watsonia latifolia	ne
Watsonia occulta	ne
Watsonia transvaalensis	ne
Watsonia wilmsii	ne
Zantedeschia pentlandii	e

Indeterminate

Ansellia gigantea et vars	ne
Pachypodium saundersii	ne
Schizochilus gerrardii	ne

Uncertain

Aloe reitzii	e
Begonia sonderana	e
Combretum collinum ssp taborense	ne
Disa extinctoria	ne
Disperis concinna	ne
Disperis gracilis	ne
Disperis natalensis	ne
Monadenia leydenbergensis	e
Sclerochiton triacanthus	ne
Streptocarpus latens	e

Area name: Komatipoort
Boundaries: 25-26S, 31-32E
Number of taxa listed: 44

Endangered

Encephalartos laevifolius	ne
Nervilia kotschyi	ne

Vulnerable

Aloe albida	e
Encephalartos heenanii	e

Rare

Aloe simii	ne
Aloe thorncroftii	ne
Aloe vandermerwei	ne
Clivia caulescens	ne
Cordyla africana	ne
Cyrtanthus bicolor	ne
Cyrtanthus eucallus	e
Cyrtanthus throncroftii	ne
Encephalartos paucidentatus	ne
Gladiolus appendiculatus var longifolius	ne
Gladiolus brachyphyllus	ne
Gladiolus hollandii	ne

Gladiolus varius var micranthus	ne
Gladiolus varius var varius	ne
Heteropyxis canescens	ne
Kaempferia aethiopica	ne
Kalanchoe alticola	ne
Ocotea kenyensis	ne
Orbeanthus paradoxa	ne
Pavetta barbertonensis	ne
Pavetta microlancea	e
Protea comptonii	ne
Rhus rogersii	ne
Streptocarpus pogonites	e

Indeterminate

Adenium obesum	ne
Adenium swazicum	ne
Ansellia gigantea et vars	ne
Clivia gardenii	ne
Clivia miniata	ne
Pachypodium saundersii	ne

Uncertain

Allophyllus chaunostachys	ne
Barleria oxyphylla	ne
Combretum padoides	ne
Croton madadensis	ne
Disa extinctoria	ne
Duvernoia aconitiflora	ne
Macrorungia longistrobus	ne
Protea curvata	e
Ruspolia hypocrateriformis var australis	ne
Sclerochiton triacanthus	ne

Area name: Potchefstroom
Boundaries: 26-27S, 27-28E
Number of taxa listed: 2

Vulnerable

Gladiolus pretoriensis	ne

Rare

Nuxia glomerulata	ne

Area name: Johannesburg
Boundaries: 26-27S, 28-29E
Number of taxa listed: 7

Rare

Eulophia cooperi	ne
Gladiolus robertsoniae	ne
Habenaria laevigata ssp bicolor	e
Mossia intervallaris	e
Nerine gracilis	ne

Indeterminate

Eulophia coddii	e

Uncertain

Holothrix micrantha	e

Area name: Bethal
Boundaries: 26-27S, 29-30E
Number of taxa listed: 5

Rare

Cyrtanthus bicolor	ne
Eucomis montana	ne
Gladiolus robertsoniae	ne
Nerine gracilis	ne

Uncertain

Disperis ermelensis	e

Area name: Carolina
Boundaries: 26-27S, 30-31E
Number of taxa listed: 8

Rare

Aloe minima var blyderivierensis	ne
Crassula tuberella	ne
Eucomis montana	ne
Eucomis vandermerwei	ne
Eulophia cooperi	ne
Nerine gracilis	ne
Watsonia latifolia	ne

Uncertain

Dietes flavida	ne

B O P H U T H A T S W A N A

Area name: Zeerust
Boundaries: 25-26S, 26-27E
Number of taxa listed: 4

Endangered

Euphorbia knobelii	e
Euphorbia perangusta	e

Vulnerable

Gladiolus pretoriensis	ne

Rare

Nuxia glomerulata	ne

Area name: Rustenburg
Boundaries: 25-26S, 27-28E
Number of taxa listed: 8

Vulnerable

Gladiolus pretoriensis	ne
Orbea maculata	ne

Rare

Aloe peglerae	ne
Erythrophysa transvaalensis	ne
Frithia pulchra	ne
Myrsine pillansii	ne
Nuxia glomerulata	ne

Uncertain

Burmannia madagascariensis	ne

Area name: Vryburg
Boundaries: 26-27S, 24-25E
Number of taxa listed: 1

Rare

Barleria media	ne

Area name: Delareyville
Boundaries: 26-27S, 25-26E
Number of taxa listed: 1

Rare

Boscia foetida ssp minima	ne

Area name: Kuruman
Boundaries: 27-28S, 23-24E
Number of taxa listed: 1

Rare

Barleria media	ne

S W A Z I L A N D

Area name: Mbabane
Boundaries: 26-27S, 31-32E
Number of Taxa listed: 23

Vulnerable

Kniphofia umbrina	e

Rare

Caralluma ubomboensis	ne
Cyrtanthus bicolor	ne
Encephalartos lebomboensis	ne
Encephalartos villosus	ne
Eucomis montana	ne
Gladiolus appendiculatus var longifolius	ne
Gladiolus hollandii	ne
Heteropyxis canescens	ne
Kalanchoe alticola	ne
Pavetta barbertonensis	ne

Indeterminate	
Adenium swazicum	ne
Ansellia gigantea et vars	ne
Clivia gardenii	ne
Habenaria rehmannii	e
Kniphofia tysonii ssp lebomboensis	ne
Pachypodium saundersii	ne

Uncertain	
Aloe keithii	e
Croton madadensis	ne
Dietes flavida	ne
Duvernoia aconitiflora	ne
Encephalartos umbeluziensis	e
Euphorbia keithii	e

O R A N G E F R E E S T A T E

Area name: Frankfort
Boundaries: 27-28S, 28-29E
Number of taxa listed: 1

Rare

Gladiolus robertsoniae	ne

Area name: Volksrust
Boundaries: 27-28S, 29-30E
Number of taxa listed: 3

Rare

Eucomis montana	ne

Indeterminate

Corycium tricuspidatum	ne

Uncertain

Nerine platypetala	ne

Area name: Senekal
Boundaries: 28-29S, 27-28E
Number of taxa listed: 1

Uncertain

Cyrtanthus attenuatus	ne

Area name: Bethlehem
Boundaries: 28-29S, 28-29E
Number of taxa listed: 18

Vulnerable

Aloe polyphylla	ne
Arundinaria tesselata	ne
Encephalartos ghellinckii	ne

Rare

Crassula tuberella	ne
Disa frigida	e
Eucomis humilis	ne
Eulophia cooperi	ne
Galtonia viridiflora	ne
Gladiolus cruentus	ne
Kniphofia thodei	ne

Indeterminate

Corycium tricuspidatum	ne

Uncertain

Cyrtanthus attenuatus	ne
Disa basutorum	ne
Eucomis sp nov (schijfii)	ne
Gladiolus microcarpus	ne
Helichrysum ernestianum	ne
Nerine bowdeni	ne
Satyrium microrrhynchum	ne

Area name: Jagersfontein
Boundaries: 29-30S, 25-26E
Number of taxa listed: 1

Vulnerable

Neohenricia sibbettii	e

Area name: Bloemfontein
Boundaries: 29-30S, 26-27E
Number of taxa listed: 1

Uncertain

Disa thodei e

N A T A L

Area name: Bela Vista
Boundaries: 26-27S, 32-33E
Number of taxa listed: 32

Vulnerable

Diospyros rotundifolia ne
Encephalartos ferox ne
Lumnitzera racemosa ne
Orbea longidens ne
Raphia australis e

Rare

Ancylanthus monteiroi ne
Bridelia cathartica ssp cathartica ne
Cassipourea mossambicensis ne
Ceriops tagal ne
Coffea racemosa ne
Commiphora zanzibarica ne
Cordyla africana ne
Craibia zimmermannii ne
Crinum acaule ne
Dialium schlechteri ne
Dracaena usambarensis ne
Haplocoelum gallense ne
Morus mesozygia ne
Nymphaea lotus ne
Orbeanthus paradoxa ne
Oxyanthus latifolius ne
Pavetta gerstneri ne
Pseudobersama mossambicensis ne
Scolopia stolzii ne
Sophora inhambanensis ne
Strophanthus luteolus ne
Suregada zanzibariensis ne
Tapura fischeri ne
Zanthoxylum leprieurii ne

Indeterminate

Pachypodium saundersii ne

Uncertain

Ficus tremula ne
Sutera macrantha ne

Area name: Vryheid
Boundaries: 27-28S, 30-31E
Number of taxa listed: 18

Vulnerable

Encephalartos ngoyanus ne

Rare

Crassula tuberella ne
Encephalartos lebomboensis ne
Encephalartos natalensis ne
Encephalartos villosus ne
Eucomis montana ne
Eulophia cooperi ne
Gladiolus appendiculatus var appendiculatus e
Neobolusia tysonii ne
Pavetta barbertonensis ne
Scolopia oreophila e
Watsonia latifolia ne
Watsonia occulta ne

Uncertain

Aloe reitzii var nova e
Cyrtanthus epiphyticus ne
Disperis concinna ne
Disperis natalensis ne
Nerine platypetala ne

Area name: Louwsburg
Boundaries: 27-28S, 31-32E
Number of taxa listed: 27

Vulnerable	
Encephalartos ngoyanus	ne
Warburgia salutaris	ne
Rare	
Ancylanthus monteiroi	ne
Cassipourea swaziensis	e
Cordyla africana	ne
Craibia zimmermannii	ne
Cyrtanthus bicolor	ne
Dietes butcheriana	ne
Encephalartos lebomboensis	ne
Encephalartos natalensis	ne
Haplocoelum gallense	ne
Kniphofia triangularis ssp obtusiloba	ne
Ocotea kenyensis	ne
Orbeanthus paradoxa	ne
Orbeopsis gerstneri ssp gerstneri	e
Pavetta barbertonensis	ne
Sophora inhambanensis	ne
Watsonia latifolia	ne
Indeterminate	
Adenium obesum	ne
Clivia gardenii	ne
Kniphofia tysonii ssp lebomboensis	ne
Nervilia natalensis	ne
Schizochilus gerrardii	ne
Uncertain	
Atalaya natalensis	e
Dietes flavida	ne
Gladiolus microcarpus	ne
Uvaria lucida ssp virens	ne

Area name: Ubombo
Boundaries: 27-28S, 32-33E
Number of taxa listed: 44

Vulnerable	
Cavacoa aurea	ne
Celtis mildbraedii	ne
Diospyros rotundifolia	ne
Encephalartos ferox	ne
Encephalartos ngoyanus	ne
Guettarda speciosa	ne
Orbea longidens	ne
Warburgia salutaris	ne
Rare	
Aloe greenii	ne
Aloe suffulta	ne
Ancylanthus monteiroi	ne
Blighia unijugata	ne
Boscia foetida ssp longipedicellata	ne
Bridelia cathartica ssp cathartica	ne
Caralluma ubomboensis	ne
Cassipourea mossambicensis	ne
Coffea racemosa	ne
Commiphora zanzibarica	ne
Cordyla africana	ne
Craibia zimmermannii	ne
Crinum acaule	ne
Dialium schlechteri	ne
Dracaena usambarensis	ne
Encephalartos lebomboensis	ne
Haplocoelum gallense	ne
Lasiodiscus mildbraedii	ne
Morus mesozygia	ne
Nymphaea lotus	ne
Oxyanthus latifolius	ne
Oxyanthus pyriformis	ne
Pavetta gerstneri	ne
Scolopia stolzii	ne
Sophora inhambanensis	ne
Strophanthus luteolus	ne
Suregada zanzibariensis	ne
Tapura fischeri	ne
Zanthoxylum leprieurii	ne
Indeterminate	
Adenium obesum	ne
Ansellia gigantea et vars	ne
Eulophia leachii	ne
Pachypodium saundersii	ne
Uncertain	
Dietes flavida	ne
Ficus tremula	ne
Uvaria lucida ssp virens	ne

Area name: Harrismith
Boundaries: 28-29S, 29-30E
Number of taxa listed: 25

Vulnerable

Arundinaria tesselata	ne

Rare

Brunsvigia undulata	ne
Cyrtanthus erubescens	e
Eucomis humilis	ne
Eulophia cooperi	ne
Eulophia zeyheriana	ne
Galtonia viridiflora	ne
Kniphofia ensifolia ssp autumnalis	e
Kniphofia evansii	ne
Myrsine pillansii	ne
Vitellariopsis dispar	ne
Zantedeschia albomaculata ssp valida	ne

Indeterminate

Kniphofia rufa	ne

Uncertain

Aloe prinslooi	e
Disa basutorum	ne
Disa rhodantha	ne
Disa sankeyi	e
Disperis allisonii	e
Disperis bicolor	e
Disperis flava	e
Disperis kermesina	e
Disperis natalensis	ne
Eucomis sp nov (schijfii)	ne
Gladiolus microcarpus	ne
Satyrium rhodanthum	ne

Area name: Dundee
Boundaries: 28-29S, 30-31E
Number of taxa listed: 14

Vulnerable

Aloe gerstneri	e
Kniphofia flammula	e

Rare

Barleria argillicola	e
Boscia foetida ssp longipedicellata	ne
Calpurnia woodii	ne
Cyrtanthus nutans	e
Encephalartos natalensis	ne
Eucomis humilis	ne
Faurea macnaughtonii	ne
Vitellariopsis dispar	ne

Indeterminate

Ansellia gigantea et vars	ne

Uncertain

Kalanchoe longiflora	e
Nerine pancratioides	ne
Orbea woodii	ne

Area name: Nkandla
Boundaries: 28-29S, 31-32E
Number of taxa listed: 30

Extinct

Encephalartos woodii	e

Vulnerable

Cavacoa aurea	ne
Encephalartos ghellinckii	ne
Encephalartos ngoyanus	ne
Gerbera aurantiaca	ne
Kniphofia latifolia	ne
Kniphofia litoralis	ne
Streptocarpus wendlandii	e

Rare

Albizia suluensis	ne
Alchornea hirtella var glabrata	e
Aloe greenii	ne
Bridelia cathartica ssp cathartica	ne
Cryptocarya wyliei	ne
Dietes butcheriana	ne
Encephalartos villosus	ne

Entada pursaetha	ne
Faurea macnaughtonii	ne
Lasiodiscus mildbraedii	ne
Nymphaea lotus	ne
Scolopia stolzii	ne
Tapura fischeri	ne
Indeterminate	
Calanthe natalensis	ne
Cassine crocea	ne
Clivia miniata	ne
Cynorkis compacta	ne
Kniphofia tysonii ssp lebomboensis	ne
Stenoglottis longifolia	e
Uncertain	
Beilschmiedia natalensis	ne
Disa zuluensis	e
Kaempferia natalensis	e

Area name: Mtubatuba
Boundaries: 28-29S, 32-33E
Number of taxa listed: 17

Endangered	
Kniphofia pauciflora	ne
Vulnerable	
Cavacoa aurea	ne
Kniphofia litoralis	ne
Rare	
Albizia suluensis	ne
Aloe suffulta	ne
Bosqueia phoberos	ne
Bridelia cathartica ssp cathartica	ne
Craibia zimmermannii	ne
Crinum acaule	ne
Dialium schlechteri	ne
Sophora inhambanensis	ne
Tapura fischeri	ne
Zanthoxylum leprieurii	ne
Indeterminate	
Clivia miniata	ne
Kniphofia tysonii ssp lebomboensis	ne
Uncertain	
Burmannia madagascariensis	ne
Uvaria lucida ssp virens	ne

Area name: Underberg
Boundaries: 29-30S, 29-30E
Number of taxa listed: 27

Vulnerable	
Aponogeton ranunculiflorus	e
Arundinaria tesselata	ne
Encephalartos ghellinckii	ne
Rare	
Anochilus flanaganii	ne
Brunsvigia undulata	ne
Calpurnia woodii	ne
Cyrtanthus falcatus	e
Eucomis humilis	ne
Eulophia zeyheriana	ne
Galtonia viridiflora	ne
Gerbera parva	e
Gladiolus cruentus	ne
Gladiolus oppositiflorus ssp oppositiflorus	ne
Gladiolus symonsii	e
Kniphofia evansii	ne
Kniphofia thodei	ne
Vitellariopsis dispar	ne
Zantedeschia albomaculata ssp valida	ne
Indeterminate	
Kniphofia rufa	ne
Uncertain	
Disa basutorum	ne
Disperis concinna	ne
Gladiolus microcarpus	ne
Kniphofia fibrosa	ne
Nerine pancratioides	ne
Orbea woodii	ne
Rhus krebsiana	ne
Satyrium microrrhynchum	ne

Area name: Pietermaritzburg
Boundaries: 29-30S, 30-31E
Number of taxa listed: 29

Endangered	
Kniphofia pauciflora	ne
Vulnerable	
Gerbera aurantiaca	ne
Kniphofia latifolia	ne
Rare	
Aloe greenii	ne
Aloe pruinosa	e
Brunsvigia undulata	ne
Dietes butcheriana	ne
Encephalartos natalensis	ne
Encephalartos villosus	ne
Eulophia zeyheriana	ne
Faurea macnaughtonii	ne
Gerrardanthus tomentosus	ne
Gladiolus oppositiflorus ssp salmoneus	ne
Indeterminate	
Cassine crocea	ne
Clivia gardenii	ne
Clivia miniata	ne
Cynorkis compacta	ne
Disperis woodii	ne
Kniphofia rufa	ne
Uncertain	
Disa extinctoria	ne
Disa fanniniae	e
Disa kraussii	e
Disa rhodantha	ne
Disa woodii	ne
Disperis anomala	e
Disperis buchananii	e
Disperis natalensis	ne
Huttonaea woodii	e
Nerine pancratioides	ne

Area name: Stanger
Boundaries: 29-30S, 31-32E
Number of taxa listed: 15

Extinct	
Christella altissima	e
Vernonia africana	e
Vulnerable	
Cavacoa aurea	ne
Celtis mildbraedii	ne
Kniphofia litoralis	ne
Rare	
Aloe greenii	ne
Encephalartos natalensis	ne
Gerrardanthus tomentosus	ne
Gladiolus gueinzii	ne
Mystacidium millarii	e
Oxyanthus pyriformis	ne
Indeterminate	
Bonatea saundersiae	e
Clivia gardenii	ne
Disperis stenoglossa	e
Disperis woodii	ne

Area name: Port Shepstone
Boundaries: 30-31S, 30-31E
Number of taxa listed: 25

Vulnerable	
Celtis mildbraedii	ne
Encephalartos ghellinckii	ne
Kniphofia litoralis	ne
Kniphofia rooperi	ne
Rhynchocalyx lawsonioides	e
Rare	
Aloe greenii	ne
Clivia nobilis	ne
Cryptocarya wyliei	ne
Encephalartos natalensis	ne
Entada pursaetha	ne
Faurea macnaughtonii	ne
Gladiolus gueinzii	ne
Jubaeopsis caffra	ne
Kniphofia coddiana	ne
Lampranthus fugitans	ne
Pseudosalacia streyii	ne

Indeterminate	
Cynorkis compacta	ne
Disperis woodii	ne
Schizochilus rudatisii	e
Uncertain	
Beilschmiedia natalensis	ne
Crassula obovata var dregeana	ne
Disa woodii	ne
Eugenia erythrophylla	ne
Pseudoscolopia polyantha	ne
Satyrium rhodanthum	ne

L E S O T H O

Area name: Maseru
Boundaries: 29-30S, 27-28E
Number of taxa listed: 3

Vulnerable	
Aloe polyphylla	ne
Rare	
Calpurnia robinioides	ne
Uncertain	
Eucomis sp nov (Schijfii)	ne

Area name: Marakabei
Boundaries: 29-30S, 28-29E
Number of taxa listed: 4

Vulnerable	
Kniphofia hirsuta	e
Rare	
Galtonia viridiflora	ne
Kniphofia thodei	ne
Uncertain	
Disa basutorum	ne

T R A N S K E I

Area name: Lady Grey
Boundaries: 30-31S, 27-28E
Number of taxa listed: 3

Vulnerable	
Arundinaria tesselata	ne
Rare	
Calpurnia robinioides	ne
Uncertain	
Eucomis sp nov (schijfii)	ne

Area name: Matatiele
Boundaries: 30-31S, 28-29E
Number of taxa listed: 3

Vulnerable	
Arundinaria tesselata	ne
Rare	
Gladiolus oppositiflorus ssp salmoneus	ne
Uncertain	
Disa montana	e

Area name: Kokstad
Boundaries: 30-31S, 29-30E
Number of taxa listed: 15

Vulnerable	
Encephalartos ghellinckii	ne
Kniphofia drepanophylla	ne
Kniphofia rooperi	ne
Rare	
Disa tysonii	ne
Encephalartos natalensis	ne
Eucomis humilis	ne
Eulophia zeyheriana	ne
Gladiolus oppositiflorus ssp salmoneus	ne
Nerine gibsonii	ne
Indeterminate	
Eulophia meleagris	ne
Schizochilus gerrardii	ne
Schizochilus pulchellus	e
Uncertain	
Cyrtanthus epiphyticus	ne
Disa rhodantha	ne
Phylica tysoni	e

Area name: Lady Frere
Boundaries: 31-32S, 27-28E
Number of taxa listed: 10

Rare	
Galtonia viridiflora	ne
Nerine gibsonii	ne
Indeterminate	
Cassine crocea	ne
Uncertain	
Cyrtanthus epiphyticus	ne
Cyrtanthus rectiflorus	ne
Disa scullyi	e
Nerine bowdeni	ne
Phylica tysoni var brevifolia	e
Satyrium microrrhynchum	ne
Syringodea flanaganii	ne

Area name: Umtata
Boundaries: 31-32S, 28-29E
Number of taxa listed: 9

Vulnerable	
Crassula planifolia	ne
Elephantorrhiza sp nov	e
Rare	
Clivia nobilis	ne
Disa galpinii	e
Encephalartos altensteinii	ne
Encephalartos friderici-guilielmi	ne
Gladiolus oppositiflorus ssp salmoneus	ne
Nerine gibsonii	ne
Uncertain	
Nerine masonorum	e

Area name: Port St Johns
Boundaries: 31-32S, 29-30E
Number of taxa listed: 23

Endangered	
Corymborkis corymbosa	e
Vulnerable	
Eulophia platypetala	ne
Kniphofia drepanophylla	ne
Kniphofia rooperi	ne
Rare	
Bauhinia bowkeri	ne
Borassus caffra	e
Cassipourea flanaganii	ne
Clivia nobilis	ne
Cryptocarya wyliei	ne
Encephalartos altensteinii	ne
Encephalartos villosus	ne
Faurea macnaughtonii	ne
Gladiolus oppositiflorus ssp oppositiflorus	ne
Jubaeopsis caffra	ne
Kniphofia coddiana	ne

Indeterminate

Clivia gardenii	ne
Clivia miniata	ne

Uncertain

Disa caffra	e
Eugenia erythrophylla	ne
Kniphofia fibrosa	ne
Phyllanthus cedrelifolius	e
Pseudoscolopia polyantha	ne
Streptocarpus modestus	e

Area name: Port Edward
Boundaries: 31-32S, 30-31E
Number of taxa listed: 11

Rare

Cryptocarya wyliei	ne
Jubaeopsis caffra	ne
Kniphofia coddiana	ne
Lampranthus fugitans	ne
Pseudosalacia streyii	ne

Uncertain

Beilschmiedia natalensis	ne
Crassula obovata var dregeana	ne
Crassula streyi	e
Eugenia erythrophylla	ne
Pseudoscolopia polyantha	ne
Streptocarpus porphyrostachys	e

Area name: Butterworth
Boundaries: 32-33S, 28-29E
Number of taxa listed: 22

Vulnerable

Aloe reynoldsii	e
Crassula planifolia	ne
Dierama pulcherrimum	ne
Encephalartos caffer	ne
Encephalartos longifolius	ne
Encephalartos princeps	ne
Kniphofia rooperi	ne

Rare

Acrolophia micrantha	ne
Bauhinia bowkeri	ne
Cassipourea flanaganii	ne
Cotyledon flanaganii	ne
Cyrtanthus helictus	ne
Dietes bicolor	ne
Encephalartos villosus	ne
Gladiolus gueinzii	ne
Gladiolus oppositiflorus ssp oppositiflorus	ne
Rhus crispa	ne
Umtiza listerana	ne

Indeterminate

Clivia miniata	ne
Disperis woodii	ne
Lachenalia convallarioides	e

Uncertain

Bobartia gracilis	ne

C A P E P R O V I N C E

Area name: Mata-Mata
Boundaries: 25-26S, 20-21E
Number of taxa listed: 1

Indeterminate

Adenium oleifolium	ne

Area name: Oranjemund
Boundaries: 28-29S, 16-17E
Number of taxa listed: 21

Endangered

Stapeliopsis neronis	ne

Vulnerable

Aloe karasbergensis	ne
Echidnopsis columnaris	e

Rare

Crassula fusca	ne
Heliophila eximia	e

Stapelia rubiginosa	ne
Stapelia umbonata	ne
Trichocaulon cinereum	ne
Tylecodon pearsonii	e
Indeterminate	
Juttadinteria albata	e
Juttadinteria tetrasepala	e
Nelia pillansii	ne
Stapelia neliana	ne
Trichocaulon alstoni	ne
Trichocaulon kubusense	e
Uncertain	
Crassula sericea var velutina	e
Klingia namaquana	ne
Ozoroa concolor	ne
Stapelia gariepensis	e
Trichocaulon halenbergense	e
Tylecodon schaeferianus	ne

Area name: Vioolsdrif
Boundaries: 28-29S, 17-18E
Number of taxa listed: 14

Vulnerable	
Pachypodium namaquanum	ne
Rare	
Cotyledon rubrovenosa	ne
Stapelia rubiginosa	ne
Stapelia umbonata	ne
Trichocaulon cinereum	ne
Indeterminate	
Caralluma pruinosa	ne
Nelia pillansii	ne
Schwantesia acutipetala	e
Stapelia neliana	ne
Uncertain	
Babiana lobata	ne
Caralluma aperta	ne
Klingia namaquana	ne
Ophthalmophyllum noctiflorum	e
Osteospermum armatum	ne

Area name: Kakamas
Boundaries: 28-29S, 20-21E
Number of taxa listed: 4

Indeterminate	
Trichocaulon keetmanshoopense	e
Uncertain	
Felicia deserti	ne
Oxalis extensa	ne
Trichocaulon simile	ne

Area name: Upington
Boundaries: 28-29S, 21-22E
Number of taxa listed: 3

Vulnerable	
Cyrtanthus staadensis	ne
Indeterminate	
Adenium oleifolium	ne
Stapelia macowanii	ne

Area name: Griekwastad
Boundaries: 28-29S, 23-24E
Number of taxa listed: 1

Indeterminate	
Adenium oleifolium	ne

Area name: Port Nolloth
Boundaries: 29-30S, 16-17E
Number of taxa listed: 4

Indeterminate	
Caralluma pruinosa	ne
Uncertain	
Adenoglossa decurrens	ne
Caralluma aperta	ne
Hyobanche barklyi	e

Area name: Springbok
Boundaries: 29-30S, 17-18E
Number of taxa listed: 44

Endangered

Stapeliopsis neronis	ne

Rare

Cyrtanthus herrei	e
Babiana striata var planifolia	e
Crassula fusca	ne
Gladiolus viridiflorus	ne
Heliophila laciniata	ne
Lapeirousia verecunda	e
Trichocaulon cinereum	ne
Trichocaulon truncatum	e

Indeterminate

Caralluma acutiloba	e
Caralluma pruinosa	ne
Euryops pleiodontus	e
Herreanthus meyeri	e
Nelia schlechteri	e
Oophytum oviforme	ne
Schizodium longipetalum	ne
Schwantesia speciosa	ne
Stapelia barklyi	e
Trichocaulon alstoni	ne
Trichocaulon pictum	ne
Tridentea umdausensis	e

Uncertain

Adenoglossa decurrens	ne
Athanasia tomentella	ne
Babiana horizontalis	e
Caralluma aperta	ne
Eriospermum cervicorne	ne
Eriospermum villosum	ne
Helichrysum concinnum	ne
Helichrysum filagineum	ne
Klingia namaquana	ne
Ophthalmophyllum littlewoodii	e
Ophthalmophyllum longitubum	e
Osteospermum armatum	ne
Othonna abrotanifolia	ne
Othonna lasiocarpa	ne
Oxalis crocea	e
Phylica pearsonii	e
Senecio albopunctatus	e
Senecio trachylaenus	e
Trichocaulon simile	ne
Tritonia kamisbergensis	e
Wahlenbergia floribunda	e
Wahlenbergia oligotricha	e
Wahlenbergia roelliflora	e

Area name: Gamoep
Boundaries: 29-30S, 18-19E
Number of taxa listed: 7

Vulnerable

Pachypodium namaquanum	ne

Rare

Gladiolus salteri	e

Indeterminate

Ophthalmophyllum haramoepense	e
Ophthalmophyllum verrucosum	ne
Schwantesia australis	ne

Uncertain

Ophthalmophyllum spathulatum	e
Osteospermum armatum	ne

Area name: Pofadder
Boundaries: 29-30S, 19-20E
Number of taxa listed: 11

Endangered

Stapelia dwequensis	ne

Vulnerable

Lithops divergens	ne
Pachypodium namaquanum	ne

Rare

Dinteranthus vanzylii	e

Indeterminate

Schwantesia australis	ne
Schwantesia pillansii	e

Schwantesia triebneri	e
Trichocaulon alstoni	ne
Trichocaulon pictum	ne
Uncertain	
Ophthalmophyllum vanheerdei	e
Osteospermum armatum	ne

Area name: Boomrivier
Boundaries: 29-30S, 20-21E
Number of taxa listed: 3

Indeterminate	
Ophthalmophyllum villetii	e
Uncertain	
Osteospermum armatum	ne
Oxalis extensa	ne

Area name: Kenhardt
Boundaries: 29-30S, 21-22E
Number of taxa listed : 2

Vulnerable	
Aloe karasbergensis	ne
Uncertain	
Trichocaulon rusticum	e

Area name : Prieska
Boundaries : 29-30S, 22-23E
Number of taxa listed: 6

Extinct	
Caralluma arenicola	ne
Vulnerable	
Aloe karasbergensis	ne
Indeterminate	
Adenium oleifolium	ne
Duvalia maculata	ne
Uncertain	
Trichocaulon simile	ne
Tridentea virescens	ne

Area name: Hopetown
Boundaries: 29-30S, 24-25E
Number of taxa listed: 3

Vulnerable	
Lithops salicola	e
Indeterminate	
Duvalia maculata	ne
Uncertain	
Tridentea virescens	ne

Area name: Hondeklipbaai
Boundaries: 30-31S, 17-18E
Number of taxa listed: 23

Rare	
Neopatersonia namaquensis	e
Oxalis virginea	e
Restio vilis	ne
Romulea kamisensis	ne
Indeterminate	
Caralluma pruinosa	ne
Crassula susannae	e
Uncertain	
Amphiglossa corrudaefolia	e
Arctotis crispata	e
Babiana brachystachys	ne
Babiana lobata	ne
Bulbine brunsvigiaefolia	ne
Bulbine urgineoides	ne
Caralluma aperta	ne
Helichrysum filagineum	ne
Matricaria schlechteri	ne
Oxalis cathara	ne
Oxalis reclinata var gracillima	ne
Polygala lasiosepala	ne

Pteronia pillansii	ne
Romulea namaquensis ssp bolusii	e
Romulea namaquensis ssp namaquensis	e
Sphalmanthus arenicolus	e
Wahlenbergia lasiocarpa	e

Area name: Kamiesberg
Boundaries: 30-31S, 18-19E
Number of taxa listed: 45

Endangered

Monadenia macrostachya	e

Vulnerable

Lithops divergens	ne

Rare

Crassula multiceps	ne
Euryops subcarnosus ssp minor	e
Felicia diffusa ssp khamiesbergensis	e
Oxalis lichenoides	ne
Oxalis senecta	ne
Restio vilis	ne
Romulea kamisensis	ne
Romulea oliveri	e
Romulea tortilis var dissecta	ne
Wahlenbergia buseriana	e

Indeterminate

Berrisfordia khamiesbergensis	e
Monadenia physodes	ne
Ophthalmophyllum australe	e

Uncertain

Androcymbium scabromarginatum	e
Babiana lobata	ne
Babiana torta	e
Bulbine brunsvigiaefolia	ne
Chasmanthe fucata	e
Dorotheanthus rourkei	ne
Erica dilatata	e
Eriospermum cervicorne	ne
Felicia deserti	ne
Gladiolus kamiesbergensis	e
Helichrysum leptorhizum	e
Helictotrichon barbatum	e
Helictotrichon namaquense	ne
Hesperantha oligantha	ne
Massonia laeta	e
Nemesia glaucescens	e
Oxalis cathara	ne
Oxalis craeseyi	e
Oxalis cuneata	e
Oxalis reclinata var gracillima	ne
Phylica retrorsa	e
Polycarena minimum	ne
Polygala lasiosepala	ne
Prismatocarpus fastigiatus	ne
Pterothrix flaccida	ne
Relhania conferta	e
Roella bryoides	ne
Ursinia pygmaea	ne
Wahlenbergia namaquana	e
Wahlenbergia rara	e

Area name: Loeriesfontein
Boundaries: 30-31S, 19-20E
Number of taxa listed: 3

Vulnerable

Haemanthus amarylloides	ne

Rare

Gladiolus lapeirousioides	e
Stapelia cincta	ne

Area name: Brandvlei
Boundaries: 30-31S, 20-21E
Number of taxa listed: 1

Uncertain

Polycarena gracilipes	e

Area name: Vanwyksvlei
Boundaries: 30-31S, 21-22E
Number of taxa listed: 1

Uncertain

Othonna lepidocaulis	ne

Area name: Carnarvon
Boundaries: 30-31S, 22-23E
Number of taxa listed: 3

Endangered

Trichocaulon pillansii ne

Vulnerable

Hoodia albispina e

Indeterminate

Hoodia dregei ne

Area name: Britstown
Boundaries: 30-31S, 23-24E
Number of taxa listed: 1

Uncertain

Tridentea virescens ne

Area name: De Aar
Boundaries: 30-31S, 24-25E
Number of taxa listed: 1

Indeterminate

Huernia humilis ne

Area name: Aliwal North
Boundaries: 30-31S, 26-27E
Number of taxa listed: 2

Uncertain

Brachymeris erubescens ne
Venidium bolusii ne

Area name: Vanrhynsdorp
Boundaries: 31-32S, 18-19E
Number of taxa listed: 100

Endangered

Leucadendron roodii e
Pleiospilos prismaticus ne

Vulnerable

Caralluma cincta ne
Euphorbia fasciculata e
Gladiolus caryophyllaceus ne
Gladiolus comptonii e
Laurentia giftbergensis e
Leptocarpus impolitus ne
Lithops divergens ne
Stapelia glanduliflora ne

Rare

Babiana salteri e
Bibiana stenomera e
Caralluma villetii e
Crassula multiceps ne
Crassula socialis ne
Echidnopsis serpentina ne
Elytropappus hispidus e
Gladiolus violaceo-lineatus ne
Heliophila collina ne
Heliophila laciniata ne
Heliophila patens ne
Hessea leipoldtii ne
Othonna hallii e
Othonna minima e
Oxalis deserticola e
Oxalis lichenoides ne
Oxalis melanographa e
Oxalis senecta ne
Romulea biflora ne
Romulea sladenii e
Romulea toximontana ne
Stapelia cylista e
Tylecodon fragilis e
Ursinia subflosculosa ne

Indeterminate

Caralluma inversa ne
Diascia rudolphi ne
Holothrix confusa ne
Maughaniella luckhoffii e
Oophytum oviforme ne
Ophthalmophyllum verrucosum ne
Serruria millefolia e
Wahlenbergia annuliformis ne
Wahlenbergia brachycarpa ne

Uncertain

Agathosma elata ne
Arctotis aenea ne
Athanasia tomentella ne
Babiana klaverensis e
Babiana pilosa e

Bulbine minima	ne
Caralluma gracilis	ne
Carpolyza spiralis	e
Crassula alpestris ssp massoni	ne
Cyphia longiflora	e
Cyphia oligotricha	e
Cyphia salteri	e
Diascia scullyi	e
Diascia tysoni	ne
Dorotheanthus rourkei	ne
Erica sonora	e
Gethyllis herrei	e
Haemanthus nortieri	e
Helichrysum filagineum	ne
Helichrysum pulchellum	ne
Heliphila leptophylla	e
Hermannia repetenda	ne
Holothrix grandiflora	ne
Homeria lineata	e
Ixia maculata var intermedia	ne
Juncus obliquus	ne
Manulea glandulosa	e
Othonna abrotanifolia	ne
Othonna cakilefolia	e
Othonna lepidocaulis	ne
Othonna papaveroides	e
Oxalis blastorrhiza	e
Oxalis comptonii	e
Oxalis crispula	e
Oxalis crispula var glandulosa	e
Oxalis oligophylla	e
Oxalis oreithala	e
Oxalis reclinata	e
Oxalis reclinata var quinata	e
Oxalis rhomboidea	e
Oxalis simplex	ne
Oxalis tenuis	e
Pellaea namaquensis	ne
Polygala lasiosepala	ne
Prismatocarpus fastigiatus	ne
Pteronia inflexa	ne
Pteronia pillansii	ne
Pterothrix cymbaefolia	e
Romulea sinispinosensis	e
Strumaria salteri	ne
Trachyandra adamsonii	e
Trichocaulon simile	ne
Ursinia pygmaea	ne
Wahlenbergia asperifolia	e
Wahlenbergia divergens	e
Wahlenbergia longisepala	e
Wahlenbergia polyclada	e

Area name: Calvinia
Boundaries: 31-32S, 19-20E
Number of taxa listed: 98

Endangered

Amphisiphon stylosa	e
Babiana pauciflora	e
Sparaxis tricolor	e

Vulnerable

Gladiolus caryophyllaceus	ne
Haemanthus amarylloides	ne
Stapelia nouhuysii	ne
Sutera esculenta	ne

Rare

Aloe buhrii	e
Androsiphon capensis	e
Caralluma maughanii	e
Crassula namaquensis ssp comptonii	ne
Crassula pellucida ssp spongiosa	e
Crassula vestita	ne
Cullumia pectinata	e
Echidnopsis serpentina	ne
Euphorbia hallii	e
Euryops marlothii	ne
Euryops rosulatus	e
Euryops virgatus	e
Gladiolus viridiflorus	ne
Heliophila collina	ne
Leucadendron remotum	e
Romulea amoena	e
Romulea hantamensis	e
Romulea sanguinalis	e
Romulea toximontana	ne
Sparaxis pillansii	e
Stapelia cincta	ne
Stapelia concinna var paniculata	e
Stapelia erectiflora	ne
Stapelia thudichumii	ne
Tylecodon striatus	e

Indeterminate

Cliffortia acutifolia	e
Holothrix confusa	ne
Ixia patens var patens	ne
Oxalis lineolata	ne
Pherolobus maughani	e
Romulea monadelpha	e

Romulea multisulcata	e
Sparaxis elegans	e
Staavia phylicoides	e
Stapelia villetae	e
Tridentea longii	ne

Uncertain

Agathosma phillipsii	ne
Anisodontea racemosa	ne
Arctotis diffusa	ne
Arctotis sulcocarpa	ne
Aspalathus florulenta	ne
Aspalathus obliqua	e
Caralluma gracilis	ne
Chlorophytum lewisae	e
Cotula loganii	e
Crassula alpestris ssp massoni	ne
Diascia dissecta	e
Diascia nana	ne
Diascia nutans	e
Diascia ramosa	ne
Disperis macrocorys	ne
Euryops mirus	e
Ferraria uncinata	ne
Gladiolus mostertiae	e
Gnidia leipoldtii	e
Helictotrichon namaquense	ne
Hesperantha oligantha	ne
Hessea unguiculata	e
Homeria spiralis	e
Ixia curvata	e
Ixia maculata var fusco-citrina	ne
Lobostemon hottentoticus	ne
Ornithogalum inclusum	e
Othonna cacalioides	e
Othonna rechingeri	e
Oxalis calvinensis	e
Oxalis lasiorrhiza	e
Oxalis massoniana	e
Oxalis massoniana var flavescens	e
Oxalis melanosticta var latifolius	e
Oxalis pulvinata	e
Oxalis purpurata	e
Oxalis rubro-punctata	e
Pellaea namaquensis	ne
Pentaschistis heterochaeta	e
Phylica affinis	e
Phylica agathosmoides	e
Polycarena filiformis	e
Polycarena minimum	ne
Prionanthium rigidum	e
Prismatocarpus pauciflorus	ne
Romulea viridibracteata	ne
Strumaria picta	e
Strumaria salteri	ne
Strumaria watermeyeri	e
Sutera divaricata	e
Sutera gracilis	e
Sutera stenopetala	e
Trachyandra gracilenta	e
Wahlenbergia minuta	e
Zaluzianskya nemesioides	e

Area name: Williston
Boundaries: 31-32S, 20-21E
Number of taxa listed: 5

Vulnerable

Sutera esculenta	ne

Rare

Stapelia cincta	ne

Uncertain

Diascia nana	ne
Romulea membranacea	e
Venidium fugax	e

Area name: Loxton
Boundaries: 31-32S, 22-23E
Number of taxa listed: 1

Rare

Crassula barbata ssp broomii	ne

Area name: Victoria West
Boundaries: 31-32S, 23-24E
Number of taxa listed: 5

Rare

Crassula barbata ssp broomii	ne
Euryops dentatus	ne

Uncertain

Arctotis diffusa	ne
Huernia simplex	e
Othonna spinescens	ne

Area name: Hanover
Boundaries: 31-32S, 24-25E
Number of taxa listed: 4

Uncertain

Chasmatophyllum maninum	ne
Helichrysum simii	ne
Nemesia hastata	e
Syringodea pulchella	ne

Area name: Steynsburg
Boundaries: 31-32S, 25-26E
Number of taxa listed: 1

Vulnerable

Arundinaria tesselata	ne

Area name: Queenstown
Boundaries: 31-32S, 26-27E
Number of taxa listed: 10

Vulnerable

Arundinaria tesselata	ne
Encephalartos princeps	ne

Rare

Anochilus flanaganii	ne
Cyrtanthus helictus	ne
Encephalartos friderici-guilielmi	ne
Greyia flanaganii	ne

Indeterminate

Lachenalia rhodantha	ne

Uncertain

Nerine bowdeni	ne
Othonna patula	e
Watsonia gladioloides	e

Area name: Vredenburg
Boundaries: 32-33S, 17-18E
Number of taxa listed: 13

Extinct

Lachenalia mathewsii	e

Vulnerable

Hessea chaplinii	ne
Hessea mathewsii	ne
Lachenalia viridiflora	e
Limonium acuminatum	ne
Romulea elliptica	e

Rare

Romulea barkerae	e

Indeterminate

Geissorhiza lewisae	ne
Gladiolus gracilis var latifolius	ne
Massonia nervosa	ne
Oxalis burtoniae	ne

Uncertain

Babiana obliqua	ne
Polyxena corymbosa	ne

Area name: Clanwilliam
Boundaries: 32-33S, 18-19E
Number of taxa listed: 101

Extinct

Corycium vestitum	e

Endangered

Diplosoma retroversum	e
Leucospermum profugum	e
Sorocephalus imbricatus	ne
Trichocaulon pillansii	ne

Vulnerable

Gladiolus caryophyllaceus	ne
Hessea mathewsii	ne
Marsilea schelpeana	ne
Moraea gigandra	e
Romulea aquatica	ne

Romulea saldanhensis	ne
Stapelia glanduliflora	ne
Stapelia immelmaniae	e
Stapelia nouhuysii	ne

Rare

Agathosma longicornu	ne
Aloe distans	ne
Babiana auriculata	ne
Bobartia orientalis ssp occidentalis	e
Disa longifolia	ne
Erica leucosiphon	ne
Euryops pectinatus	e
Gladiolus violaceo-lineatus	ne
Heliophila patens	ne
Hermannia helicoidea	e
Hessea leipoldtii	ne
Ixia splendida	e
Leucadendron brunioides var flumenlupinum	e
Leucadendron discolor	e
Leucospermum arenarium	e
Osteospermum aciphyllum	ne
Romulea tortilis var dissecta	ne
Romulea tortilis var tortilis	ne
Romulea vinacea	ne
Stapelia erectiflora	ne
Thereianthus racemosus	ne

Indeterminate

Agathosma bicolor	ne
Agathosma capitata	e
Arctotheca forbesiana	ne
Caralluma intermedia	e
Caralluma inversa	ne
Corymbium theileri	e
Diplosoma leipoldtii	e
Geissorhiza lewisae	ne
Gladiolus gracilis var latifolius	ne
Hermannia hispidula	e
Leucadendron stellare	ne
Oxalis lindaviana	ne
Polycarena capitatum	ne
Schizodium longipetalum	ne
Synnotia roxburghii	e
Wahlenbergia brachycarpa	ne

Uncertain

Adromischus marianae	e
Agathosma cephalodes	e
Agathosma elata	ne
Agathosma involucrata	e
Agathosma lancifolia	ne
Agathosma salina	ne
Androcymbium fenestratum	e
Anisodontea gracilis	ne
Anisodontea racemosa	ne
Arctotis aenea	ne
Arctotis fosteri	e
Aspalathus decora	ne
Aspalathus glossoides	e
Aspalathus latifolia	e
Aspalathus rectistyla	e
Babiana brachystachys	ne
Babiana obliqua	ne
Cotula pedunculata	e
Cullumia floccosa	e
Cullumia micracantha	e
Cyphia dentariaefolia	ne
Diascia rudolphi	ne
Engysiphon brevitubus	e
Erica aspalathoides	ne
Eriospermum patentiflorum	ne
Eriospermum villosum	ne
Ferraria foliosa	e
Gnidia parviflora	ne
Hermannia repetenda	ne
Herschelia multifida	ne
Ixia maculata var intermedia	ne
Kensitia pillansii	e
Lightfootia umbellata	e
Lobostemon hottentoticus	ne
Matricaria schlechteri	ne
Othonna tephrosioides	ne
Oxalis luteola var minor	e
Pellaea namaquensis	ne
Pentaschistis hirsuta	e
Phylica cuspidata	e
Polycarena parvula	ne
Prionanthium ecklonii	ne
Roella latiloba	ne
Senecio diodon	ne
Spiloxene maximiliani	e
Wahlenbergia constricta	e
Wahlenbergia distincta	e
Wahlenbergia massonii	ne
Wahlenbergia subtilis	e
Wahlenbergia tomentosula	ne

Area name: Wuppertal
Boundaries: 32-33S, 19-20E
Number of taxa listed: 110

Extinct

Crassula alcicornis	e
Romulea sulphurea	e

Endangered

Leucadendron bonum	e
Lithops comptonii	ne
Widdringtonia cedarbergensis	e

Vulnerable

Didymaotus lapidiformis	ne
Ixia brevituba	ne
Restio quinquefarius	ne
Sorocephalus scabridus	ne

Rare

Agathosma conferta	e
Agathosma dentata	e
Agathosma distans	e
Agathosma longicornu	ne
Aspalathus comptonii	e
Aspalathus desertorum	ne
Babiana auriculata	ne
Babiana cedarbergensis	e
Cannomois aristata	e
Crassula namaquensis ssp comptonii	ne
Disa ovalifolia	ne
Erica leucosiphon	ne
Euryops brevilobus	ne
Gladiolus buckerveldii	e
Gladiolus oreocharis	ne
Gladiolus violaceo-lineatus	ne
Heliophila cedarbergensis	e
Leptocarpus levynsiae	e
Leucadendron concavum	e
Leucadendron diemontianum	ne
Restio brunneus	e
Romulea albomarginata	e
Romulea biflora	ne
Romulea tortilis var tortilis	ne
Romulea vinacea	ne
Serruria flava	e
Serruria leipoldtii	e
Stapelia erectiflora	ne
Stapelia thudichumii	ne
Thereianthus racemosus	ne
Tritoniopsis latifolia	e
Ursinia subflosculosa	ne

Indeterminate

Agathosma bicolor	ne
Aspalathus bidouwensis	e
Dorotheanthus bidouwensis	e
Geissorhiza lewisae	ne
Holothrix confusa	ne
Leucadendron sericeum	e
Oxalis lineolata	ne
Tridentea parvipuncta	ne
Wahlenbergia brachycarpa	ne

Uncertain

Agathosma cordifolia	ne
Agathosma pattisonae	e
Agathosma salina	ne
Anisodontea racemosa	ne
Aristea singularis	e
Aspalathus decora	ne
Aspalathus florulenta	ne
Athanasia tomentella	ne
Berkheya dregei	e
Bulbine urgineoides	ne
Caralluma gracilis	ne
Cheilanthes depauperata	ne
Corycium deflexum	ne
Crassula elsieae	e
Crassula namaquensis ssp lutea	ne
Cyphia comptonii	e
Cyphia dentariaefolia	ne
Cyphia ranunculifolia	e
Cyphia stephensii	e
Diascia tysoni	ne
Disperis macrocorys	ne
Erica aspalathoides	ne
Erica greyii	e
Eriospermum patentiflorum	ne
Euryops zeyheri	e
Geissorhiza geminata	ne
Geissorhiza ixioides	e
Geissorhiza leipoldtii	ne
Geissorhiza rubicunda	ne
Hermannia repetenda	ne
Herschelia multifida	ne
Ixia conferta var conferta	ne
Ixia rouxii	ne
Juncus obliquus	ne
Lightfootia brachyphylla	ne
Lightfootia multicaulis	e
Ophioglossum bergianum	ne
Oxalis oreophila	e

Oxalis porphyriosiphon	e
Oxalis simplex	ne
Phylica alpina	e
Phylica altigena	e
Phylica barbata	e
Phylica chionocephala	ne
Phylica leipoldtii	e
Phylica levynsiae	ne
Phylica maximiliani	e
Phylica pauciflora	ne
Phylica salteri	e
Prismatocarpus decurrens	e
Prismatocarpus pauciflorus	ne
Prismatocarpus pilosus	e
Relhania multipunctata	e
Restio setiger	e
Restio tuberculatus	e
Romulea cedarbergensis	e
Romulea viridibracteata	ne
Spiloxene umbraticola	e
Strumaria salteri	ne
Watsonia cooperi	ne

Area name: Sutherland
Boundaries: 32-33S, 20-21E
Number of taxa listed: 26

Vulnerable

Ixia brevituba	ne

Rare

Crassula roggeveldii	e
Crassula vestita	ne
Euryops marlothii	ne
Romulea multifida	e
Romulea syringodeoflora	e
Stapelia cincta	ne
Stapelia thudichumii	ne

Indeterminate

Dorotheanthus booysenii	e
Secale africanum	e
Tridentea longii	ne

Uncertain

Adromischus phillipsiae	e
Agathosma sabulosa	e
Arctotis diffusa	ne
Arctotis sulcocarpa	ne
Corycium deflexum	ne
Daubenya aurea	e
Gladiolus marlothii	e
Ixia trifolia	ne
Lithospermum flexuosum	e
Oxalis marlothii	e
Pellaea namaquensis	ne
Romulea hallii	e
Romulea komsbergensis	e
Rosenia glandulosa	e
Senecio erysimoides	ne

Area name: Merweville
Boundaries: 32-33S, 21-22E
Number of taxa listed: 1

Uncertain

Pteronia inflexa	ne

Area name: Beaufort West
Boundaries: 32-33S, 22-23E
Number of taxa listed: 10

Extinct

Caralluma arenicola	ne

Endangered

Muiria hortenseae	e

Rare

Stapelia cincta	ne

Indeterminate

Hoodia dregei	ne
Huernia humilis	ne

Uncertain

Adromischus humilis	e
Gibbaeum angulipes	ne
Nemesia pallida	e
Othonna miser	ne
Pellaea rufa	ne

Area name: Rietbron
Boundaries: 32-33S, 23-24E
Number of taxa listed: 5

Rare

Caralluma bredae var bredae	e
Trichocaulon annulatum	ne

Indeterminate

Trichodiadema obliquum	e

Uncertain

Senecio haworthii	ne
Venidium bolusii	ne

Area name: Graaff-Reinet
Boundaries: 32-33S, 24-25E
Number of taxa listed: 15

Vulnerable

Encephalartos longifolius	ne

Rare

Diosma passerinoides	ne
Encephalartos lehmannii	ne
Euryops dentatus	ne
Trichocaulon annulatum	ne

Indeterminate

Duvalia maculata	ne
Huernia insigniflora	e
Lachenalia rhodantha	ne
Rhinephyllum inaequale	e
Stapelia macowanii	ne

Uncertain

Chasmatophyllum maninum	ne
Cliffortia montana	ne
Faucaria longidens	e
Gazania caespitosa	ne
Helichrysum ernestianum	ne

Area name: Somerset East
Boundaries: 32-33S, 25-26E
Number of taxa listed: 22

Endangered

Stomatium geoffreyi	e
Stomatium ronaldii	e

Vulnerable

Encephalartos cycadifolius	ne
Stapelia divaricata	ne

Rare

Encephalartos lehmannii	ne

Indeterminate

Caralluma bredae var thomallae	e
Corycium tricuspidatum	ne
Eulophia meleagris	ne
Faucaria candida	e
Huernia kennedyana	e
Kniphofia acraea	e
Lachenalia campanulata	ne
Rabiea jamesii	e
Trichodiadema rogersiae	e

Uncertain

Brachymeris erubescens	ne
Helichrysum ernestianum	ne
Nerine huttoniae	ne
Rhus krebsiana	ne
Senecio diodon	ne
Syringodea pulchella	ne
Venidium bolusii	ne
Wahlenbergia bowkeri	e

Area name: Fort Beaufort
Boundaries: 32-33S, 26-27E
Number of taxa listed: 14

Vulnerable

Arundinaria tesselata	ne
Encephalartos cycadifolius	ne

Rare

Crassula socialis	ne
Cyrtanthus helictus	ne
Cyrtanthus huttonii	ne
Rhus crispa	ne

Indeterminate

Cassine crocea	ne
Euryops ciliatus	e

Uncertain

Bonatea densiflora	e
Cyrtanthus rectiflorus	ne
Disa sanguinea	ne
Helichrysum isolepis	e
Holothrix macowaniana	ne
Rhus krebsiana	ne

Area name: Stutterheim
Boundaries: 32-33S, 27-28E
Number of taxa listed: 27

Vulnerable

Dierama pulcherrimum	ne
Encephalartos caffer	ne
Encephalartos princeps	ne
Kniphofia rooperi	ne

Rare

Cassipourea flanaganii	ne
Cotyledon flanaganii	ne
Crinum campanulatum	ne
Cyrtanthus helictus	ne
Cyrtanthus huttonii	ne
Disa tysonii	ne
Encephalartos altensteinii	ne
Encephalartos friderici-guilielmi	ne
Gladiolus oppositiflorus ssp oppositiflorus	ne
Greyia flanaganii	ne
Kniphofia praecox ssp bruceae	e
Rhus crispa	ne
Umtiza listerana	ne

Indeterminate

Calanthe natalanesis	ne
Cassine crocea	ne
Kniphofia citrina	ne
Lachenalia campanulata	ne
Phylica simii	e

Uncertain

Cyrtanthus rectiflorus	ne
Cyrtanthus suaveolens	e
Disa sanguinea	ne
Kniphofia fibrosa	ne
Syringodea flanaganii	ne

Area name: Saldanha
Boundaries: 33-34S, 17-18E
Number of taxa listed: 10

Vulnerable

Limonium acuminatum	ne

Rare

Aloe distans	ne
Felicia elongata	ne
Ixia purpureorosea	ne

Indeterminate

Agathosma thymifolia	ne
Gladiolus gracilis var latifolius	ne
Limonium capense	ne
Oxalis subsessilis	ne
Phylica greyii	e
Watsonia hysterantha	ne

Area name: Cape Town
Boundaries: 33-34S, 18-19E
Number of taxa listed: 196

Extinct

Aspalathus variegata	e
Erica acockii	e

Erica bolusiae	e
Erica pyramidalis	ne
Erica turgida	ne
Erica verticillata	e
Felicia annectens	ne
Marasmodes undulata	e
Moraea loubseri	e
Osteospermum hirsutum	e
Romulea papyracea	e
Urginea duthiae	e
Urginea eckloni	e

Endangered

Chondropetalum acockii	e
Disa stokoei	ne
Erica crucistigmatica	ne
Erica pilulifera	e
Gladiolus quadrangulus	ne
Herschelia barbata	ne
Herschelia lugens	ne
Hypodiscus paludosus	ne
Ixia framesii	e
Lachenalia purpureo-caerulea	e
Leptocarpus rigoratus var simulans	ne
Leucadendron levisanus	ne
Leucadendron thymifolium	e
Leucadendron verticillatum	e
Moraea aristata	e
Oxalis natans	ne
Passerina paludosa	ne
Prionanthium pholiuroides	e
Protea odorata	e
Relhania rotundifolia	e
Restio acockii	e
Restio harveyi	ne
Restio sabulosus	ne
Saphesia flaccida	e
Serruria ciliata	ne
Serruria furcellata	e
Serruria roxburghii	ne
Serruria trilopha	ne

Vulnerable

Aspalathus rycroftii	e
Athanasia rugulosa	e
Charadrophila capensis	ne
Chondropetalum rectum	ne
Cliffortia acockii	e
Disa neglecta	ne
Elegia prominens	ne
Elegia verreauxii	ne
Erica ferrea	ne
Geissorhiza matthewsii	e
Geissorhiza matthewsii var eurystigma	e
Gladiolus citrinus	e
Haemanthus amarylloides	ne
Heliophila cuneata	e
Hessea chaplinii	ne
Ixia curta	e
Ixia maculata var maculata	e
Leptocarpus impolitus	ne
Leucadendron argenteum	e
Leucadendron cinereum	e
Leucadendron corymbosum	ne
Leucospermum parile	e
Limonium acuminatum	ne
Oxalis levis	e
Oxalis perineson	e
Psilothonna speciosa	e
Restio duthieae	ne
Restio quinquefarius	ne
Romulea aquatica	ne
Romulea eximia	e
Romulea saldanhensis	ne
Satyrium foliosum	ne
Serruria candicans	ne
Stapelia divaricata	ne
Stoebe gomphrenoides	ne

Rare

Aspalathus borbonifolia	e
Disa micropetala	ne
Disa ovalifolia	ne
Disa tabularis	ne
Disa tenuicornis	ne
Disperis bodkini	e
Erica hippurus	e
Erica marifolia	ne
Euphorbia marlothiana	ne
Felicia elongata	ne
Gerbera wrightii	ne
Heliophila tabularis	ne
Ixia purpureorosea	ne
Leucospermum tomentosum	e
Monadenia sabulosa	ne
Moraea cooperi	ne
Nemesia strumosa	e
Orthopenthea bodkini	ne
Oxalis involuta	ne
Restio micans	e
Serruria brownii	e
Serruria cyanoides	ne
Serruria kraussii	ne
Serruria linearis	e
Thamnochortus nutans	ne
Thamnochortus punctatus	ne

Indeterminate		Uncertain	
Agathosma thymifolia	ne	Agathosma cordifolia	ne
Arctotheca forbesiana	ne	Aspalathus obtusifolia	ne
Aristea lugens	e	Babiana obliqua	ne
Aspalathus acanthophylla	e	Disa begleyi	ne
Aspalathus glabrata	e	Eriospermum fasciculatum	ne
Babiana leipoldtii	e	Eriospermum stoloniferum	ne
Cenia duckittiae	e	Ferraria uncinata	ne
Cotula myriophylloides	ne	Galenia fruticosa var prostrata	e
Crassula decumbens var brachyphylla	ne	Geissorhiza geminata	ne
Eulophia litoralis	ne	Geissorhiza rogersii	ne
Ferraria divaricata ssp arenosa	e	Geissorhiza rubicunda	ne
Geissorhiza furva	ne	Gladiolus jonquilliodorus	ne
Geissorhiza lewisae	ne	Gladiolus martleyi	ne
Gladiolus carinatus ssp parviflorus	ne	Gladiolus nerineoides	e
Gladiolus gracilis var latifolius	ne	Gladiolus recurvus	ne
Grisebachia incana	ne	Helictotrichon quinquisetum	e
Homeria meterlekampiae	e	Ixia cochlearis	ne
Isoetes stephansenii	e	Ixia conferta var conferta	ne
Ixia versicolor	ne	Ixia conferta var ochroleuca	ne
Leucadendron stellare	ne	Ixia rouxii	ne
Limonium capense	ne	Marasmodes oligocephalus	ne
Marasmodes dummeri	e	Ophioglossum bergianum	ne
Massonia nervosa	ne	Othonna tephrosioides	ne
Monadenia physodes	ne	Pellaea namaquensis	ne
Muraltia aciphylla	e	Pentashistis zeyheri	ne
Muraltia harveyana	e	Polycarena sordidum	e
Ornithogalum secundum	ne	Polyxena corymbosa	ne
Osteospermum hispidum var viride	e	Pterothrix perotrichoides	ne
Oxalis burtoniae	ne	Ranunculus capensis	ne
Oxalis fragilis	e	Roella bryoides	ne
Oxalis fragilis var pellucida	e	Senecio expansus	ne
Oxalis subsessilis	ne	Senecio thunbergii	e
Phylica schlechteri	e	Tetraria brachyphylla	ne
Polycarena capitatum	ne	Urginea forsteri	ne
Schizodium longipetalum	ne	Urginea revoluta	ne
Senecio foeniculoides	ne	Wahlenbergia ciliolata	ne
Serruria incrassata	e	Wahlenbergia clavatula	e
Tritoniopsis elongata	ne	Wahlenbergia compacta	e
Urginea minor	e	Wahlenbergia dunantii	e
Urginea pygmaea	e	Wahlenbergia massonii	ne
Wahlenbergia annuliformis	ne	Wahlenbergia ramifera	e
Wahlenbergia debilis	e	Wahlenbergia rotundifolia	e
Watsonia hysterantha	ne	Wahlenbergia serpentina	ne
Watsonia rosea-alba	ne	Wahlenbergia subpilosa	e
Watsonia stanfordiae	ne	Watsonia dubia	ne
Willdenowia affinis	e	Watsonia strictiflora	ne
		Watsonia vittata	e
		Watsonia wordsworthiana	ne

Area name: Worcester
Boundaries: 33-34S, 19-20E
Number of taxa listed: 253

Extinct

Elegia extensa	e
Elegia fastigiata	e
Leucadendron comosum ssp homeophyllum	e
Leucadendron spirale	e
Moraea incurva	e
Thamnea depressa	ne
Thamnea uniflora	ne

Endangered

Diastella buekii	e
Erica bakeri	e
Erica chrysocodon	e
Erica junonia	e
Huernia witzenbergensis	e
Hypodiscus paludosus	ne
Leucadendron chamelaea	e
Leucadendron flexuosum	e
Lithops comptonii	ne
Moraea tulbaghensis	e
Oxalis natans	ne
Phylica ampliata	e
Pleiospilos prismaticus	ne
Protea holosericea	e
Protea mucronifolia	e
Ruschia leipoldtii	ne
Serruria florida	ne
Serruria roxburghii	ne
Sorocephalus imbricatus	ne
Stapelia concinna var concinna	e

Vulnerable

Caralluma cincta	ne
Charadrophila capensis	ne
Chondropetalum longiflorum	e
Didymaotus lapidiformis	ne
Disa neglecta	en
Elegia stokoei	e
Erica purgatoriensis	ne
Euphorbia nesemannii	e
Gethyllis multifolia	e
Glischrocolla formosa	ne
Ixia viridiflora	e
Lachenalia polyphylla	e
Leucadendron corymbosum	ne
Pachites bodkini	ne
Protea angustata	ne
Restio coactilis	e
Serruria candicans	ne
Sorocephalus scabridus	ne
Spatalla tulbaghensis	e
Stapelia glanduliflora	ne
Stylapterus ericoides ssp ericoides	e

Rare

Agathosma foleyana	e
Amphigena leptostachya	ne
Anaxeton ellipticum	ne
Aspalathus desertorum	ne
Aspalathus esterhuyseniae	e
Aspalathus fasciculata	e
Aspalathus suaveolens	e
Diastella myrtifolia	e
Diastella parilis	e
Disa longifolia	ne
Disa micropetala	ne
Disa ovalifolia	ne
Disa tabularis	ne
Erica atrovinosa	e
Erica cremea	e
Erica intricata	e
Erica keeromsbergensis	e
Erica lerouxiae	e
Erica leucosiphon	ne
Erica parvulisepala	ne
Euryops brevilobus	ne
Euryops decipiens	ne
Gladiolus cardinalis	e
Gladiolus oreocharis	ne
Heliophila filicaulis	e
Heliophila tricuspidata	ne
Hypodiscus sulcatus	ne
Leucadendron diemontianum	ne
Leucadendron nervosum	e
Leucospermum formosum	ne
Moraea cooperi	ne
Nemesia picta	e
Nerine pudica	ne
Oldenburgia papionum	e
Orthopenthea minor	ne
Osteospermum aciphyllum	ne
Oxalis involuta	ne
Paranomus adiantifolius	ne
Paranomus capitatus	e
Paranomus diversifolius	ne
Passerina burchellii	e
Protea oleracea	ne
Protea pityphylla	e
Restio esterhuyseniae	e

Restio fuscidulus	e
Romulea tortilis var tortilis	ne
Senecio coleophyllus	ne
Serruria triternata	e
Serruria zeyheri	e
Sorocephalus alopecurus	ne
Sorocephalus teretifolius	e
Spatalla salsoloides	e
Stylapterus ericoides ssp pallidus	e
Thamnochortus acuminatus	e
Thereianthus racemosus	ne
Ursinia coronopifolia	e
Willdenowia purpurea	ne

Indeterminate

Caralluma pillansii	ne
Carpacoce heteromorpha	ne
Cliffortia strigosa	e
Diclis stellarioides	e
Diosma flavescens	e
Erica hibbertia	ne
Geissorhiza furva	ne
Gladiolus virescens var roseo-venosus	e
Grisebachia incana	ne
Haworthia rubriflora	ne
Herschelia atropurpurea	e
Holothrix confusa	ne
Ixia patens var linearifolia	e
Ixia stolonifera	e
Leucadendron burchellii	e
Muraltia angustiflora	e
Muraltia ferox	e
Oxalis lindaviana	ne
Phylica stenopetala	e
Restio aureolus	e
Restio subcompressus	ne
Romulea sphaerocarpa	e
Schizodium longipetalum	ne
Senecio foeniculoides	ne
Spatalla propinqua	ne
Tritoniopsis elongata	ne
Watsonia rosea-alba	ne
Watsonia stanfordiae	ne

Uncertain

Agathosma cordifolia	ne
Agathosma decurrens	e
Agathosma lancifolia	ne
Agathosma leptospermoides	ne
Agathosma phillipsii	ne
Alciope lanata	e
Anaxeton angustifolium	e
Anisodontea dissecta	ne
Anisodontea gracilis	ne
Arctotis aenea	ne
Arctotis parvifolia	e
Aristea recisa	ne
Aspalathus burchelliana	ne
Aspalathus compacta	e
Aspalathus corniculata	e
Aspalathus erythrodes	e
Aspalathus ferox	e
Aspalathus lenticula	e
Aspalathus macrocarpa	ne
Aspalathus orbiculata	e
Aspalathus pilantha	e
Aspalathus rostrata	e
Aspalathus sulphurea	e
Athanasia crassifolia	e
Athanasia harmeri	ne
Athanasia palmatifida	e
Athanasia spathulata	ne
Bulbine minima	ne
Chasmanthe bicolor	ne
Chlorophytum monophyllum	e
Cliffortia cymbifolia	ne
Cliffortia lanata	e
Cliffortia multiformis	ne
Cliffortia reticulata	ne
Corycium deflexum	ne
Corycium venosum	ne
Crassula namaquensis ssp lutea	ne
Diascia nana	ne
Diosma thyrsophora	ne
Disa brachyceras	ne
Erica auriculata	e
Erica cryptanthera	ne
Erica eriophoros	e
Erica latifolia	ne
Erica rufescens	ne
Erica trichophora	ne
Geissorhiza geminata	ne
Geissorhiza leipoldtii	ne
Geissorhiza ovalifolia	e
Geissorhiza pappei	ne
Geissorhiza rogersii	ne
Geissorhiza rubicunda	ne
Gethyllis unilateralis	ne
Gladiolus recurvus	ne
Gnidia parviflora	ne
Grisebachia rigida	e
Helichrysum pulchellum	ne
Herschelia charpentierana	ne
Hippia hirsuta	ne

Ixia bellendenii	ne
Ixia cochlearis	ne
Ixia conferta var ochroleuca	ne
Ixia maculata var fusco-citrina	ne
Ixia rouxii	ne
Lachnaea elegans	e
Lampranthus arbuthnotiae	ne
Lapeirousia corymbosa ssp alta	ne
Laurentia mariae	e
Lightfootia brachyphylla	ne
Lightfootia effusa	e
Lobelia nugax	e
Lobostemon gracilis	ne
Mairia decumbens	ne
Marasmodes oligocephalus	ne
Matalasia schlechteri	e
Monopsis arenaria	e
Monopsis flava	e
Muraltia serrata	e
Othonna miser	ne
Oxalis callimarginata	e
Oxalis henrici	e
Phylica chionocephala	ne
Phylica comosa	e
Phylica guthriei	e
Phylica levynsiae	ne
Phylica lucens	e
Phylica nodosa	e
Phylica pauciflora	ne
Phylica reversa	e
Phylica trachyphylla	e
Polycarena minimum	ne
Polycarena parvula	ne
Prionanthium ecklonii	ne
Prismatocarpus implicatus	e
Pterothrix flaccida	ne
Pterothrix perotrichoides	ne
Relhania tricephala	ne
Restio filicaulis	e
Roella bryoides	ne
Romulea malaniae	e
Scilla plumbea	e
Senecio diodon	ne
Senecio expansus	ne
Senecio rehmanni	ne
Senecio succulentus	e
Stapelia vetula var simsii	e
Stilpnophytum oocephalum	ne
Sutera cephalotes	ne
Urginea forsteri	ne
Venidium angustifolium	ne
Venidium macrospermum	e
Wahlenbergia mollis	e
Wahlenbergia schistacea	e
Wahlenbergia swellendamensis	e
Wahlenbergia tomentosula	ne
Watsonia ardernei	e
Watsonia cooperi	ne
Watsonia dubia	ne
Watsonia strictiflora	ne
Watsonia wordsworthiana	ne

Area name: Montagu
Boundaries: 33-34S, 20-21E
Number of taxa listed: 119

Extinct

Caralluma arenicola	ne
Crassula subulata var hispida	e

Endangered

Bobartia parva	e
Euchaetis avisylvana	e
Gladiolus emiliae	ne
Leucadendron ericifolium	ne
Leucadendron tradouwense	e
Pleiospilos hilmari	ne
Pleiospilos prismaticus	ne
Ruschia leipoldtii	ne
Stapelia ,dwequensis	ne
Trichocaulon pillansii	ne

Vulnerable

Empleurum fragrans	e
Satyrium foliosum	ne

Rare

Adenandra dahlgrenii	e
Caralluma linearis	e
Cotyledon heterophylla	ne
Crassula socialis	ne
Diosma passerinoides	ne
Erica oophylla	e
Freesia speciosa	e
Geissoloma marginatum	ne
Gladiolus punctulatus var autumnalis	ne
Gladiolus punctulatus var punctulatus	e
Hessea karooica	e
Huernia distincta	e
Hypodiscus sulcatus	ne

Leucadendron cadens	e
Leucadendron radiatum	ne
Leucospermum mundii	ne
Mimetes splendidus	ne
Othonna pteronioides	e
Phymaspermum schroeteri	e
Protea convexa	e
Spatalla nubicola	e
Stylapterus dubius	ne
Stylapterus ericifolius	ne
Trichodiadema densum	ne
Indeterminate	
Agathosma florida	e
Agathosma subteretifolia	e
Caralluma pillansii	ne
Duvalia parviflora	ne
Haworthia rubriflora	ne
Hoodia pillansii	ne
Huernia pillansii	ne
Huernia praestans	ne
Ixia gloriosa	e
Leptocarpus monostylis	ne
Muraltia karroica	ne
Oxalis microdonta	e
Pachites appressa	e
Polycarena capitatum	ne
Raspalia barnardii	e
Sceletium ovatum	e
Thamnea gracilis	e
Tridentea parvipuncta	ne
Willdenowia fistulosa	ne
Uncertain	
Agathosma linifolia	ne
Agathosma umbonata	e
Anisodontea dissecta	ne
Anisodontea pseudocapensis	ne
Arctotis rosea	e
Aspalathus burchelliana	ne
Aspalathus campestris	ne
Aspalathus hypnoides	ne
Aspalathus lamarckiana	ne
Aspalathus macrocarpa	ne
Aspalathus vulpina	ne
Brachymeris erubescens	ne
Cheilanthes depauperata	ne
Coleonema aspalathoides	e
Crassula alpestris ssp massoni	ne
Crassula brachystachya	ne
Crassula rupestris var marnierana	ne
Diosma patentifolia	e
Erica barrydalensis	e
Erica heleophila	ne
Erica heterophylla	e
Erica latifolia	ne
Erica macilenta	ne
Erica mundii	e
Erica oxyandra	e
Geissorhiza burchellii	ne
Gladiolus bilineatus	ne
Gladiolus engysiphon	ne
Gladiolus martleyi	ne
Gladiolus stephaniae	e
Gladiolus tristis var concolor	ne
Helichrysum archeri	e
Helichrysum concinnum	ne
Helichrysum silicicolum	e
Imitaria muirii	ne
Ixia leipoldtii	ne
Ixia trifolia	ne
Lobelia dasyphylla	e
Lobelia hypsibata	e
Lobostemon horridus	e
Lobostemon muirii	ne
Nivenia fruticosa	ne
Othonna lasiocarpa	ne
Othonna linearifolia	e
Othonna pinnatilobata	e
Othonna spinescens	ne
Othonna tephrosioides	ne
Oxalis anomala	ne
Oxalis ciliaris var pageae	e
Oxalis orbicularis	e
Oxalis stellata var montaguensis	e
Pellaea rufa	ne
Phylica brachycephala	e
Phylica recurvifolia	e
Phylica wittebergensis	e
Pterothrix perotrichoides	ne
Relhania tricephala	ne
Senecio erysimoides	ne
Senecio haworthii	ne
Stilpnophytum inopinatum	e
Wahlenbergia tumida	ne
Watsonia caledonica	ne

Area name: Ladismith
Boundaries: 33-34S, 21-22E
Number of taxa listed: 86

Endangered	
Leucadendron ericifolium	ne
Pleiospilos hilmari	ne
Vulnerable	
Paranomus longicaulis	e
Protea pruinosa	e
Tylecodon cacalioides	ne
Rare	
Acmadenia niveni	e
Cotyledon heterophylla	ne
Cyrtanthus clavatus	ne
Disa schlectheriana	e
Erica granulatifolia	e
Erica nematophylla	e
Euryops decipiens	ne
Geissoloma marginatum	ne
Gladiolus lewisiae	e
Gladiolus punctulatus var autumnalis	ne
Haworthia blackburniae	e
Heliophila rimicola	e
Leucadendron radiatum	ne
Leucospermum formosum	ne
Leucospermum mundii	ne
Leucospermum pluridens	ne
Leucospermum secundifolium	e
Mimetes splendidus	ne
Osteospermum aciphyllum	ne
Paranomus diversifolius	ne
Raspalia schlechteri	e
Restio papyraceus	e
Stylapterus dubius	ne
Trichodiadema hallii	e
Indeterminate	
Caralluma pillansii	ne
Duvalia parviflora	ne
Erica dysantha	e
Erica lagenaeformis	e
Freylinia decurrens	e
Haworthia maughanii	e
Holothrix pilosa	ne
Hoodia barklyi	e
Huernia praestans	ne
Leptocarpus monostylis	ne
Muraltia karroica	ne
Paranomus centaureoides	e
Polygala langebergensis	e
Thamnochortus ellipticus	e
Tridentea choananthus	e
Willdenowia fistulosa	ne

Uncertain	
Anisodontea pseudocapensis	ne
Anisodontea theronii	e
Aspalathus incana	e
Aspalathus karrooensis	e
Aspalathus lamarckiana	ne
Aspalathus longifolia	e
Aspalathus ramosissima	ne
Aspalathus vulpina	ne
Blepharis inermis	e
Crassula brachystachya	ne
Crassula rupestris var marnierana	ne
Diascia ramosa	ne
Diosma thyrsophora	ne
Erica macilenta	ne
Erica obconica	e
Erica ostiaria	ne
Gazania caespitosa	ne
Gibbaeum angulipes	ne
Gibbaeum pachypodium	e
Gladiolus bilineatus	ne
Gladiolus engysiphon	ne
Gladiolus leptosiphon	ne
Gnidia scabrida	e
Helichrysum cochleariforme	ne
Hippia hirsuta	ne
Holothrix grandiflora	ne
Imitaria muirii	ne
Laurentia longituba	e
Lightfootia pauciflora	e
Lightfootia planifolia	ne
Lobostemon muirii	ne
Nivenia fruticosa	ne
Oxalis anomala	ne
Oxalis dichotoma	e
Phylica longimontana	e
Phylica nigromontana	ne
Phylica sericea	e
Prismatocarpus hispidus	ne
Sutera subnuda	e
Syringodea saxatilis	e
Watsonia emiliae	e

Area name: Oudtshoorn
Boundaries: 33-34S, 22-23E
Number of taxa listed: 64

Extinct	
Acrolophia ustulata	ne
Anisodontea alexandri	e
Caralluma arenicola	ne

Vulnerable

Leucospermum glabrum	ne
Thamnochortus muirii	ne
Tylecodon cacalioides	ne

Rare

Agathosma dielsiana	ne
Berkheya francisci	e
Bobartia paniculata	e
Diosma passerinoides	ne
Eulophia tabularis	ne
Felicia esterhuyseniae	e
Leucadendron rourkei	ne
Leucadendron singulare	e
Leucospermum formosum	ne
Leucospermum pluridens	ne
Staberoha stokoei	e
Syringodea derustensis	e
Thamnochortus nutans	ne
Trichodiadema burgeri	e

Indeterminate

Agathosma affinis	e
Cassine crocea	ne
Haworthia truncata	e
Hoodia dregei	ne
Hoodia pillansii	ne
Huernia pillansii	ne
Romulea jugicola	e
Wahlenbergia brachycarpa	ne

Uncertain

Agathosma planifolia	ne
Agathosma rehmanniana	e
Agathosma zwartbergense	e
Aristea simplex	ne
Aspalathus digitifolia	e
Aspalathus ramosissima	ne
Athanasia quinquedentata	e
Cliffortia aculeata	e
Cliffortia cymbifolia	ne
Cliffortia montana	ne
Crassula brachystachya	ne
Cyphia longilobata	e
Diascia pentheri	e
Elegia altigena	e
Erica aneimana	e
Erica blesbergensis	e
Erica heleophila	ne
Erica lehmanii	e
Erica ostiaria	ne
Gethyllis unilateralis	ne
Gladiolus leptosiphon	ne
Gnidia parviflora	ne
Ixia leipoldtii	ne
Lobelia montaguensis	e
Metalasia tricolor	e
Muraltia carnosa	e
Osteospermum pterigoideum	ne
Oxalis attaquana	e
Oxalis fourcadei	ne
Oxalis ioeides	e
Oxalis stellata var gracilior	e
Pellaea rufa	ne
Phylica nigromontana	ne
Polycarena multifolium	ne
Prismatocarpus hispidus	ne
Stilpnophytum oocephalum	ne

Area name: Willowmore
Boundaries: 33-34S, 23-24E
Number of taxa listed: 47

Extinct

Caralluma arenicola	ne

Vulnerable

Encephalartos longifolius	ne
Leucospermum glabrum	ne

Rare

Encephalartos lehmannii	ne
Erica beatricis	e
Euryops integrifolius	e
Faurea macnaughtonii	ne
Felicia tsitsikamae	e
Freesia armstrongii	ne
Herschelia tripartita	e
Leucadendron rourkei	ne
Mimetes palustris	ne
Trichocaulon annulatum	ne
Trichodiadema densum	ne

Indeterminate

Calanthe natalensis	ne
Caralluma pillansii	ne
Holothrix pilosa	ne
Lachenalia haarlemensis	e
Monadenia physodes	ne

Paranomus esterhuysenae	ne
Pleiospilos leipoldtii	e
Protea vogtsiae	ne
Sceletium expansum	e
Trichodiadema aurea	e
Trichodiadema peersii	e
Watsonia ecklonii	e

Uncertain

Agathosma planifolia	ne
Agathosma spinosa	e
Aspalthus fourcadei	ne
Brachycorythis macowaniana	ne
Corymbium fourcadei	e
Cotyledon ladismithiensis	e
Disparago rosea	e
Elegia bella	e
Erica keetii	ne
Eriocephalus tenuipes	ne
Glottiphyllum uniondalense	e
Helichrysum ramulosum	e
Lobostemon lucidus	ne
Monopsis stricta	e
Oxalis duriuscula	ne
Oxalis fourcadei	ne
Oxalis heidelbergensis	ne
Pleiospilos kingiae	e
Relhania decussata	e
Senecio diodon	ne
Stoebe ensori	ne

Area name: Steytlerville
Boundaries: 33-34S, 24-25E
Number of taxa listed: 17

Vulnerable

Encephalartos longifolius	ne

Rare

Atalaya capensis	ne
Encephalartos lehmannii	ne
Freesia armstrongii	ne
Strelitzia juncea	ne

Indeterminate

Cassine crocea	ne
Haworthia springbokvlakensis	e
Paranomus esterhuysenae	ne
Protea vogtsiae	ne
Tridentea baylissii	e

Uncertain

Agathosma unicarpellata	ne
Aspalathus fourcadei	ne
Chasmatophyllum maninum	ne
Eriocephalus tenuipes	ne
Gasteria armstrongii	e
Stoebe ensori	ne
Sutera atrocaerulea	e

Area name: Port Elizabeth
Boundaries: 33-34S, 25-26E
Number of taxa listed: 53

Extinct

Gladiolus alatus var algoensis	e

Endangered

Brunsvigia litoralis	e
Herschelia lugens	ne

Vulnerable

Cyrtanthus spiralis	ne
Cyrtanthus staadensis	ne
Encephalartos horridus	e
Encephalartos longifolius	ne
Eulophia platypetala	ne
Helichrysum recurvatum	ne
Lobelia zwartkopensis	e
Marsilea schelpeana	ne
Rapanea gilliana	ne

Rare

Atalaya capensis	ne
Crassula arborescens ssp undulatifolia	e
Crassula socialis	ne
Crinum lineare	ne
Cyrtanthus clavatus	ne
Cyrtanthus helictus	ne
Cyrtanthus loddigesianus	ne
Encephalartos lehmannii	ne
Euryops latifolius	e
Lampranthus algoensis	e
Oldenburgia arbuscula	ne
Stapelia conformis	ne
Stapelia plantii	ne
Sterculia alexandri	e
Strelitzia juncea	ne

Indeterminate	
Euryops ursinoides	e
Holothrix pilosa	ne
Huernia longii	e
Kniphofia citrina	ne
Lachnaea glomerata	e
Leucadendron orientale	e
Othonna membranifolia	ne
Trichodiadema rupicolum	e
Tridentea longii	ne
Uncertain	
Amphiglossa callunoides	e
Athanasia mundtii	ne
Bulbine flexicaulis	e
Erica ethelae	e
Heliophila ramosissima	ne
Heterolepis mitis	e
Holothrix longicornu	e
Neopatersonia uitenhagensis	e
Nerine huttoniae	ne
Pentaschistis zeyheri	ne
Senecio addoensis	e
Senecio hirtellus	ne
Senecio microspermus	ne
Senecio serrurioides	e
Sutera influndibuliformis	ne
Sutera intertexta	e
Syringodea flanaganii	ne
Crinum lineare	ne
Cyrtanthus clavatus	ne
Cyrtanthus helictus	ne
Cyrtanthus loddigesianus	ne
Cyrtanthus smithii	e
Dietes bicolor	ne
Encephalartos altensteinii	ne
Gladiolus gueinzii	ne
Oldenburgia arbuscula	ne
Stapelia conformis	ne
Stapelia plantii	ne
Indeterminate	
Cassine crocea	ne
Euryops polytrichoides	e
Kniphofia citrina	ne
Lachenalia convallarioides var robusta	e
Stapelia macowanii	ne
Uncertain	
Brachycorythis macowaniana	ne
Cyrtanthus flavus	e
Euryops gracilipes	e
Gasteria lilliputana	e
Holothrix macowaniana	ne
Isoetes wormaldii	ne
Nerine huttoniae	ne
Senecio hirtellus	ne

Area name: Grahamstown
Boundaries: 33-34S, 26-27E
Number of taxa listed: 34

Endangered	
Encephalartos latifrons	e
Vulnerable	
Encephalartos arenarius	e
Encephalartos caffer	ne
Encephalartos longifolius	ne
Encephalartos trispinosus	ne
Helichrysum recurvatum	ne
Rapanea gilliana	ne
Rare	
Clivia nobilis	ne
Crassula socialis	ne
Crinum campanulatum	ne

Area name: Peddie
Boundaries: 33-34S, 27-28E
Number of taxa listed: 19

Vulnerable	
Arundinaria tesselata	ne
Encephalartos caffer	ne
Encephalartos trispinosus	ne
Kniphofia rooperi	ne
Rare	
Cassipourea flanaganii	ne
Crinum lineare	ne
Cyrtanthus loddigesianus	ne
Dietes bicolor	ne
Encephalartos altensteinii	ne
Encephalartos friderici-guilielmi	ne
Encephalartos villosus	ne
Gladiolus gueinzii	ne
Umtiza listerana	ne

Indeterminate	
Cassine crocea	ne
Clivia gardenii	ne
Disperis woodii	ne
Uncertain	
Bobartia gracilis	ne
Isoetes wormaldii	ne
Venidium bolusii	ne

Area name: Simonstown
Boundaries: 34-35S, 18-19E
Number of taxa listed: 178

Extinct	
Acrolophia ustulata	ne
Erica pyramidalis	ne
Leptocarpus ramosissimus	e
Satyrium guthriei	e
Thamnea uniflora	ne
Wahlenbergia saxifragoides	e
Endangered	
Disa stokoei	ne
Elegia fenestrata	ne
Erica crucistigmatica	ne
Erica fairii	e
Erica heleogena	e
Erica limosa	e
Erica sociorum	e
Gladiolus aureus	e
Gladiolus quadrangulus	ne
Herschelia barbata	ne
Herschelia lugens	ne
Hypodiscus paludosus	ne
Leptocarpus rigoratus var simulans	ne
Leucadendron floridum	e
Leucadendron levisanus	ne
Leucadendron macowanii	e
Mimetes hottentoticus	e
Muraltia satureioides var salteri	e
Orothamnus zeyheri	e
Oxalis natans	ne
Passerina paludosa	ne
Restio harveyi	ne
Roella goodiana	e
Serruria ciliata	ne
Serruria florida	ne
Serruria trilopha	ne
Sorocephalus palustris	e
Sorocephalus tenuifolius	ne
Staavia dodii	e
Vulnerable	
Audouinia capitata	e
Charadrophila capensis	ne
Chondropetalum rectum	ne
Disa neglecta	ne
Elegia prominens	ne
Elegia verreauxii	ne
Erica cyrillaeflora	e
Erica ferrea	ne
Erica paludicola	e
Erica porteri	e
Erica urna-viridis	e
Glischrocolla formosa	ne
Haemanthus canaliculatus	e
Lobostemon bolusii	ne
Pachites bodkini	ne
Protea angustata	ne
Restio communis	e
Restio duthieae	ne
Restio festucaeformis	ne
Restio quinquefarius	ne
Satyrium foliosum	ne
Stoebe gomphrenoides	ne
Thamnochortus pellucidus	ne
Rare	
Acrolophia micrantha	ne
Agapanthus walshii	e
Agathosma stokoei	ne
Amphigena leptostachya	ne
Amphigena tenuis	e
Anaxeton ellipticum	ne
Aspalathus stokoei	ne
Berzelia dregeana	ne
Berzelia ecklonii	ne
Bobartia gladiata ssp major	e
Disa micropetala	ne
Disa pillansii	ne
Disa salteri	e
Disa tenuicornis	ne
Erica annectens	e
Erica comptonii	ne
Erica dulcis	ne
Erica marifolia	ne
Erica vallis-araneorum	e
Erica vestiflua	e

Eulophia tabularis	ne
Euphorbia marlothiana	ne
Euryops indecorus	e
Gerbera wrightii	ne
Heliophila cinerea	e
Heliophila tabularis	ne
Heliophila tricuspidata	ne
Klattia partita	ne
Leucospermum bolusii	e
Leucospermum cordatum	e
Mimetes capitulatus	ne
Monadenia ecalcarata	e
Monadenia sabulosa	ne
Muraltia guthriei	e
Nivenia levynsiae	ne
Prismatocarpus cordifolius	ne
Protea oleracea	ne
Restio cascadensis	e
Restio distans	e
Restio dodii var dodii	e
Restio fusiformis	e
Restio involutus	e
Senecio coleophyllus	ne
Serruria cyanoides	ne
Serruria hirsuta	e
Serruria kraussii	ne
Stoebe humilis	ne
Thamnochortus fraternus	e
Thamnochortus nutans	ne
Thamnochortus punctatus	ne

Indeterminate

Agathosma orbicularis	ne
Arctotheca forbesiana	ne
Carpacoce heteromorpha	ne
Corycium bifidum	ne
Corymbium salteri	e
Cotula myriophylloides	ne
Crassula decumbens var brachyphylla	ne
Diascia heterandra	e
Erica quadrisulcata	e
Gladiolus carinatus ssp parviflorus	ne
Gladiolus vigilans	e
Homoglossum merianellum var aureum	e
Homoglossum merianellum var merianellum	e
Hypodiscus alternans	ne
Ixia versicolor	ne
Monadenia physodes	ne
Muraltia comptonii	e
Nemesia micrantha	e
Nivenia stokoei	ne
Polycarena capitatum	ne
Restio subcompressus	ne
Senecio foeniculoides	ne
Solanum crassifolium	e
Stylapterus barbatus	e
Watsonia rosea-alba	ne
Willdenowia fistulosa	ne
Zaluzianskya ramosa	e

Uncertain

Acmadenia alternifolia	ne
Aspalathus acanthiloba	e
Aspalathus macrantha	ne
Aspalathus vaccinifolia	e
Athanasia spathulata	ne
Cliffortia carinata	ne
Cliffortia cymbifolia	ne
Cliffortia intermedia	ne
Cliffortia longifolia	ne
Cliffortia reticulata	ne
Corycium venosum	ne
Cotula paradoxa	e
Cyphia dentariaefolia	ne
Disa begleyi	ne
Disa brachyceras	ne
Erica cerviciflora	e
Erica trichophora	ne
Erica turbiniflora	e
Geissorhiza pappei	ne
Gladiolus jonquilliodorus	ne
Gladiolus martleyi	ne
Gladiolus pillansii var roseus	ne
Gladiolus recurvus	ne
Grisebachia niveni	ne
Holothrix lithophila	ne
Hypolaena stokoei	e
Lampranthus arbuthnotiae	ne
Lapeirousia corymbosa ssp alta	ne
Lobostemon hottentoticus	ne
Monadenia pygmaea	ne
Ophioglossum bergianum	ne
Osteospermum wallianum	e
Pentaschistis zeyheri	ne
Phylica glabrata	e
Ranunculus capensis	ne
Schizodium obliquum	e
Selaginella pygmaea	ne
Tetraria brachyphylla	ne
Urginea pedunculata	e
Urginea revoluta	ne
Watsonia rogersii	e
Watsonia strictiflora	ne
Witsenia maura	ne

Area name: Caledon
Boundaries: 34-35S, 19-20E
Number of taxa listed: 257

Extinct

Erica turgida	ne
Felicia annectens	ne
Gibbaeum esterhuyseniae	ne
Mimetes stokoei	e
Staavia trichotoma	e
Stylapterus micranthus	e
Thamnea depressa	ne

Endangered

Agathosma sedifolia	ne
Elegia fenestrata	ne
Erica jasminiflora	e
Euchaetis schlechteri	ne
Gladiolus emiliae	ne
Hypodiscus paludosus	ne
Leptocarpus rigoratus var simulans	ne
Leucadendron cryptocephalum	ne
Leucadendron elimense ssp vyeboomense	e
Leucadendron elimense ssp elimense	e
Macrostylis cauliflora	e
Moraea insolens	e
Restio dodii var purpureus	ne
Restio harveyi	ne
Restio sabulosus	ne
Sorocephalus tenuifolius	ne
Staavia zeyheri	e

Vulnerable

Aspalathus smithii	ne
Chondropetalum rectum	ne
Elegia prominens	ne
Elegia verreauxii	ne
Erica aghillana	ne
Erica casta	ne
Erica purgatoriensis	ne
Gladiolus guthriei	ne
Glischrocolla formosa	ne
Leucadendron elimense ssp salteri	e
Leucadendron globosum	e
Leucadendron modestum	e
Leucadendron platyspermum	e
Leucadendron stelligerum	e
Lobostemon bolusii	ne
Pachites bodkini	ne
Phylica parvula	ne
Protea lanceolata	ne
Protea minor	e
Restio festucaeformis	ne
Restio scaber	e
Sorocephalus crassifolius	e
Spatalla enicoides	e
Stoebe salteri	ne
Thamnochortus dumosus	e
Thamnochortus pellucidus	ne
Thamnochortus pluristachyus	ne
Tritoniopsis flexuosa	e

Rare

Agathosma geniculata	ne
Agathosma stokoei	ne
Aloe distans	ne
Amphigena leptostachya	ne
Anaxeton brevipes	e
Anaxeton hirsutum	e
Aspalathus excelsa	e
Aspalathus stokoei	ne
Berzelia dregeana	ne
Berzelia ecklonii	ne
Disa longifolia	ne
Disa micropetala	ne
Disa pillansii	ne
Disa tenuicornis	ne
Endonema lateriflora	e
Endonema retzioides	e
Erica alfredii	e
Erica comptonii	ne
Erica dulcis	ne
Erica galgebergensis	e
Erica hendricksei	e
Erica insolitanthera	e
Erica octonaria	e
Erica parvulisepala	ne
Erica pauciovulata	e
Eulophia tabularis	ne
Gladiolus stokoei	e
Grammitis poeppigana	ne
Heliophila tricuspidata	ne
Homoglossum guthriei	e
Leucospermum pedunculatum	e
Mimetes capitulatus	ne
Mimetes palustris	ne
Moraea barnardii	e
Moraea cooperi	ne
Muraaltia chamaepitys	e
Nerine pudica	ne
Nivenia levynsiae	ne
Orthopenthea bodkini	ne

Orthopenthea minor	ne
Osteospermum aciphyllum	ne
Paranomus adiantifolius	ne
Phylica brevifolia	ne
Prismatocarpus cordifolius	ne
Protea oleracea	ne
Pseudobaeckea stokoei	e
Senecio coleophyllus	ne
Serruria meisneriana	e
Sonderothamnus speciosus	e
Sorocephalus alopecurus	ne
Sorocephalus pinifolius	e
Stoebe humilis	ne
Thaminophyllum mundtii	e
Thamnochortus guthrieae	e
Willdenowia purpurea	ne

Indeterminate

Adenandra gracilis	e
Adenandra odoratissima	e
Adenandra schlechteri	e
Agathosma abrupta	e
Agathosma orbicularis	ne
Arctotheca forbesiana	ne
Carpacoce heteromorpha	ne
Cliffortia geniculata	e
Corycium bifidum	ne
Diosma candida	e
Erica hibbertia	ne
Erica oligantha	e
Erica riparia	e
Eulophia litoralis	ne
Euryops lasiocladus	e
Grisebachia incana	ne
Hypodiscus alternans	ne
Ixia patens var patens	ne
Leucadendron linifolium	ne
Lonchostoma esterhuyseniae	e
Muraltia concava	e
Muraltia cuspifolia	e
Muraltia hirsuta	e
Nivenia concinna	e
Nivenia stokoei	ne
Ornithogalum secundum	ne
Oxalis burtoniae	ne
Polygala dasyphylla	e
Spatalla propinqua	ne
Spiloxene declinata	e
Staberoha multispicula	e
Tritoniopsis elongata	ne
Watsonia fergusoniae	ne

Uncertain

Acrolophia comosa	e
Agathosma leptospermoides	ne
Anaxeton virgatum	ne
Arctotis dregei	e
Aristea palustris	e
Aristea recisa	ne
Aspalathus aciloba	ne
Aspalathus burchelliana	ne
Aspalathus concava	e
Aspalathus macrantha	ne
Aspalathus prostrata	ne
Athanasia harmeri	ne
Athanasia mundtii	ne
Babiana foliosa	e
Berkheya angusta	e
Bobartia longicyma ssp longicyma	e
Chasmanthe bicolor	ne
Cliffortia carinata	ne
Cliffortia crenulata	e
Cliffortia curvifolia	e
Cliffortia intermedia	ne
Cliffortia monophylla	e
Cliffortia multiformis	ne
Corycium venosum	ne
Crassula multiflora ssp leucantha	e
Cryptadenia laxa	e
Cullumia selago	e
Diosma thyrsophora	ne
Disa begleyi	ne
Disa brachyceras	ne
Erica berzeloides	e
Erica cryptanthera	ne
Erica diotaeflora	e
Erica gallorum	e
Erica kraussiana	e
Erica praenitens	e
Erica pyrantha	e
Erica rufescens	ne
Erica trichophora	ne
Erica trichophylla	e
Erica turrisbabylonica	e
Erica xanthina	e
Eriospermum fasciculatum	ne
Eriospermum stoloniferum	ne
Felicia nigrescens	e
Geissorhiza geminata	ne
Geissorhiza pappei	ne
Gladiolus acuminatus	e

Gladiolus debilis var variegatus	e
Gladiolus floribundus ssp miniatus	ne
Gladiolus pillansii var roseus	ne
Gladiolus subcaeruleus	e
Gladiolus tristis var concolor	ne
Grisebachia niveni	ne
Harveya euryantha	e
Helichrysum manopappum	e
Helichrysum simii	ne
Heliophila ramosissima	ne
Herschelia charpentierana	ne
Hippia hirsuta	ne
Holothrix lithophila	ne
Homoglossum vandermerwei	ne
Ixia bellendenii	ne
Lampranthus arbuthnotiae	ne
Liparia splendens	ne
Lobelia capillipes	e
Lobelia disperma	e
Lobelia laurentioides	e
Lobostemon collinus	ne
Lobostemon grandiflorus	ne
Lobostemon inconspicuus	e
Lobostemon lucidus	ne
Mairia decumbens	ne
Marasmodes oligocephalus	ne
Metalasia bodkinii	e
Monadenia pygmaea	ne
Muraltia capensis	e
Muraltia gillettiae	e
Muraltia pottebergensis	ne
Muraltia spicata	e
Nivenia dispar	e
Oxalis duriuscula	ne
Pentameris obtusifolia	e
Pentzia trifida	ne
Phylica amoena	e
Phylica anomala	e
Phylica apiculata	e
Phylica burchellii	e
Phylica diosmoides	e
Phylica floribunda	ne
Phylica incurvata	e
Phylica laevifolia	e
Phylica laevis	e
Phylica linifolia	e
Phylica lucida	ne
Pteronia scabra	e
Pteronia tenuifolia	e
Rhigiophyllum squarrosum	e
Roella bryoides	ne
Roella cuspidata var hispida	ne
Roella lightfootioides	e
Selaginella pygmaea	ne
Senecio anthemifolius	ne
Senecio trachyphyllus	e
Stoebe copholepis	e
Stoebe cyathuloides	ne
Stoebe schultzii	e
Sutera cephalotes	ne
Sutera cephalotes var glabrata	e
Thaminophyllum multiflorum	e
Thamnochortus nervosus	e
Venidium angustifolium	ne
Wahlenbergia bolusiana	e
Wahlenbergia serpentina	ne
Watsonia caledonica	ne
Watsonia pauciflora	e
Witsenia maura	ne

Area name: Bredasdorp
Boundaries: 34-35S, 20-21E
Number of taxa listed: 96

Extinct

Gibbaeum esterhuyseniae	ne

Endangered

Agathosma sedifolia	ne
Euchaetis schlechteri	ne
Leucadendron cryptocephalum	ne
Leucadendron ericifolium	ne
Restio dodii var purpureus	ne

Vulnerable

Aspalathus smithii	ne
Cyrtanthus guthrieae	e
Erica aghillana	ne
Erica casta	ne
Gladiolus guthriei	ne
Muraltia calycina	e
Phylica parvula	ne
Stapelia divaricata	ne
Thamnochortus muirii	ne
Thamnochortus pluristachyus	ne

Rare

Agathosma dielsiana	ne
Agathosma geniculata	ne

Apodolirion lanceolatum	ne
Brachysiphon mundii	e
Caryotophora skiatophytoides	e
Diosma passerinoides	ne
Erica uysii	e
Galium bredasdorpense	e
Geissoloma marginatum	ne
Klattia partita	ne
Leucadendron coriaceum	ne
Leucospermum fulgens	e
Osteospermum elsieae	e
Osteospermum hafstroemii	e
Phylica brevifolia	ne
Roella rhodantha	e
Stoebe muirii	ne
Stylapterus ericifolius	ne

Indeterminate

Aspalathus barbigera	e
Crassula decumbens var brachyphylla	ne
Haworthia rubriflora	ne
Holothrix pilosa	ne
Leucadendron linifolium	ne
Polygala pottebergensis	e
Protea denticulata	e
Trichodiadema pygmaeum	e
Watsonia fergusoniae	ne

Uncertain

Acmadenia cucullata	e
Acmadenia densifolia	ne
Agathosma linifolia	ne
Anaxeton virgatum	ne
Anisodontea dissecta	ne
Aristea simplex	ne
Aspalathus aciloba	ne
Aspalathus burchelliana	ne
Aspalathus grobleri	e
Aspalathus hypnoides	ne
Aspalathus obtusifolia	ne
Aspalathus pallescens	e
Aspalathus prostrata	ne
Athanasia mundtii	ne
Bobartia longicyma ssp microflora	e
Cliffortia longifolia	ne
Diosma eckloniana	e
Felicia ebracteata	e
Gladiolus bilineatus	ne
Gladiolus engysiphon	ne
Gladiolus floribundus ssp miniatus	ne
Gladiolus maculatus ssp hiburnus	ne
Gladiolus tristis var concolor	ne
Grisebachia niveni	ne
Homoglossum vandermerwei	ne
Lachenalia muirii	ne
Lampranthus arbuthnotiae	ne
Lightfootia microphylla	e
Lightfootia squarrosa	ne
Lobostemon collinus	ne
Lobostemon gracilis	ne
Lobostemon grandiflorus	ne
Muraltia pappeana	ne
Muraltia pottebergensis	ne
Oxalis duriuscula	ne
Oxalis heidelbergensis	ne
Pectinaria stayneri	e
Pentzia trifida	ne
Phylica floribunda	ne
Phylica laevigata	ne
Phylica lasiantha	e
Phylica lucida	ne
Polycarena multifolium	ne
Prismatocarpus spinosus	e
Relhania garnotii	ne
Roella cuspidata var hispida	ne
Senecio anthemifolius	ne
Senecio rehmanni	ne
Stilpnophytum oocephalum	ne
Stoebe cyathuloides	ne
Sutera cephalotes	ne
Sutera infundibuliformis	ne
Watsonia caledonica	ne

Area name: Riversdale
Boundaries: 34-35S, 21-22E
Number of taxa listed: 62

Endangered

Disa stokoei	ne
Euryops muirii	e
Gladiolus emiliae	ne
Satyrium muticum	ne

Vulnerable

Erica casta	ne
Muraltia barkerae	e
Protea lanceolata	ne
Stoebe salteri	ne
Thamnochortus muirii	ne
Tylecodon cacalioides	ne

Rare

Agathosma dielsiana	ne
Apodolirion lanceolatum	ne
Diosma passerinoides	ne
Lampranthus rustii	e
Leucadendron coriaceum	ne
Leucadendron galpinii	e
Leucospermum muirii	e
Paranomus diversifolius	ne
Stoebe muirii	ne

Indeterminate

Adenandra odoratissima ssp tenuis	e
Agathosma gnidiiflora	e
Agathosma pallens	e
Haworthia marginata	e
Holothrix pilosa	ne
Heurnia praestans	ne
Leucadendron linifolium	ne
Leucospermum praecox	e
Watsonia fergusoniae	ne

Uncertain

Acmadenia densifolia	ne
Agathosma scaberula	e
Aspalathus aciloba	ne
Aspalathus arenaria	e
Aspalathus campestris	ne
Aspalathus candidula	e
Aspalathus obtusifolia	ne
Aspalathus odontoloba	e
Aspalathus quadrata	e
Aspalathus vulpina	ne
Bulbine minima	ne
Cyphia dentariaefolia	ne
Diascia dielsiana	e
Disa falcata	e
Erica pearsoniana	ne
Eroeda muirii	e
Gibbaeum angulipes	ne
Gladiolus maculatus ssp hiburnus	ne
Helichrysum cochleariforme	ne
Lachenalia muirii	ne
Lightfootia multiflora	e
Lightfootia planifolia	ne
Lightfootia squarrosa	ne
Metalasia erectifolia	e
Muraltia pappeana	ne
Phylica laevigata	ne
Ranunculus capensis	ne
Relhania garnotii	ne
Relhania steyniae	e
Roella latiloba	ne
Selaginella pygmaea	ne
Senecio microspermus	ne
Senecio muirii	e
Wahlenbergia tumida	ne

Area name: Mossel Bay
Boundaries: 34-35S, 22-23E
Number of taxa listed: 14

Endangered

Diosma aristata	e
Satyrium muticum	ne

Vulnerable

Thamnochortus muirii	ne

Rare

Agathosma dielsiana	ne
Gladiolus gueinzii	ne

Uncertain

Aspalathus obtusifolia	ne
Cyphia tortilis	e
Erica pearsoniana	ne
Geissorhiza burchellii	ne
Herschelia multifida	ne
Liparia splendens	ne
Pentaschistis burchellii	e
Stapelia bijliae	e
Wahlenbergia ciliolata	ne

Area name: Knysna
Boundaries: 34-35S, 23-24E
Number of taxa listed: 4

Endangered

Satyrium muticum	ne

Indeterminate

Agathosma alaris	e

Uncertain

Acmadenia alternifolia	ne
Erica keetii	ne

Area name: Humansdorp
Boundaries: 34-35S, 24-25E
Number of taxa listed: 14

Vulnerable

Dierama pulcherrimum	ne
Encephalartos caffer	ne
Encephalartos longifolius	ne
Rapanea gilliana	ne

Rare

Cyrtanthus loddigesianus	ne
Gladiolus gueinzii	ne

Indeterminate

Kniphofia citrina	ne
Othonna membranifolia	ne

Uncertain

Acmadenia densifolia	ne
Agathosma unicarpellata	ne
Brachycorythis macowaniana	ne
Gazania caespitosa	ne
Lamprocaulos schlechteri	e
Osteospermum pterigoideum	ne

Area name: Skoenmakerskop
Boundaries: 34-35S, 25-26E
Number of taxa listed: 1

Vulnerable

Cyrtanthus spiralis	ne

DISCUSSION OF FINDINGS

The statistical findings in this report should be seen as currently likely approximations, due to the preliminary nature of the survey over most of the area of southern Africa, the large number of indeterminate and uncertain cases still to be studied in the field, unresolved taxonomic problems, and the rapidly worsening status of some species. An important problem is that collecting and field-study intensities have been low for numbers of taxonomic groups and areas, for some time. It is hoped that the threatened plant surveys being mounted in several parts of southern Africa will remedy this.

Table 3 indicates that the Cape Province has by far the greatest number of plants in hazard of any region of southern Africa. Map 1 shows this in greater detail. The highest concentrations occur in the extreme south-west, while in the immediate interior the numbers fall off sharply to near-zero levels. Other concentrations exist in Namaqualand in the north-western Cape Province, in parts of the eastern Cape and Natal, and along the easterly escarpments and mountains of the Transvaal. In general, most of these concentrations coincide with areas of increased local endemism. Local endemics with small ranges of distribution are especially sensitive to damage from the widespread impacts of humanity. This sensitivity may be more acute when the plants need a specialised habitat such as a wetland, that may itself be unusually prone to drastic alteration.

By far the worst area for threatened and rare plants is the small region of the Cape Floristic Kingdom. This is less than one percent of the area of southern Africa, yet it carries 65 percent of southern Africa's threatened and rare plants. As a crisis zone for threatened plants, it probably has the highest concentration of any temperate area in the world, rivalling Hawaii in the tropics which has 1 113 endangered, threatened and recently extinct taxa (Ayensu and DeFilipps 1978).

Studies are in hand to show the chief patterns of threat factors for species in various areas. Table 4 gives some initial results, for a small sample of 70 taxa from the south-western Cape Province. Direct human impacts, agriculture, development of urban and industrial facilities and plant collecting account for 49 percent of the threats. Invasive alien plants account for another 33 percent: notable here is the especially destructive role apparently played by the thicket-forming Australian Acacias. Natural pressures make up a remaining 18 percent: nearly six percent of the sample of seventy species appear to have been made extinct from such causes.

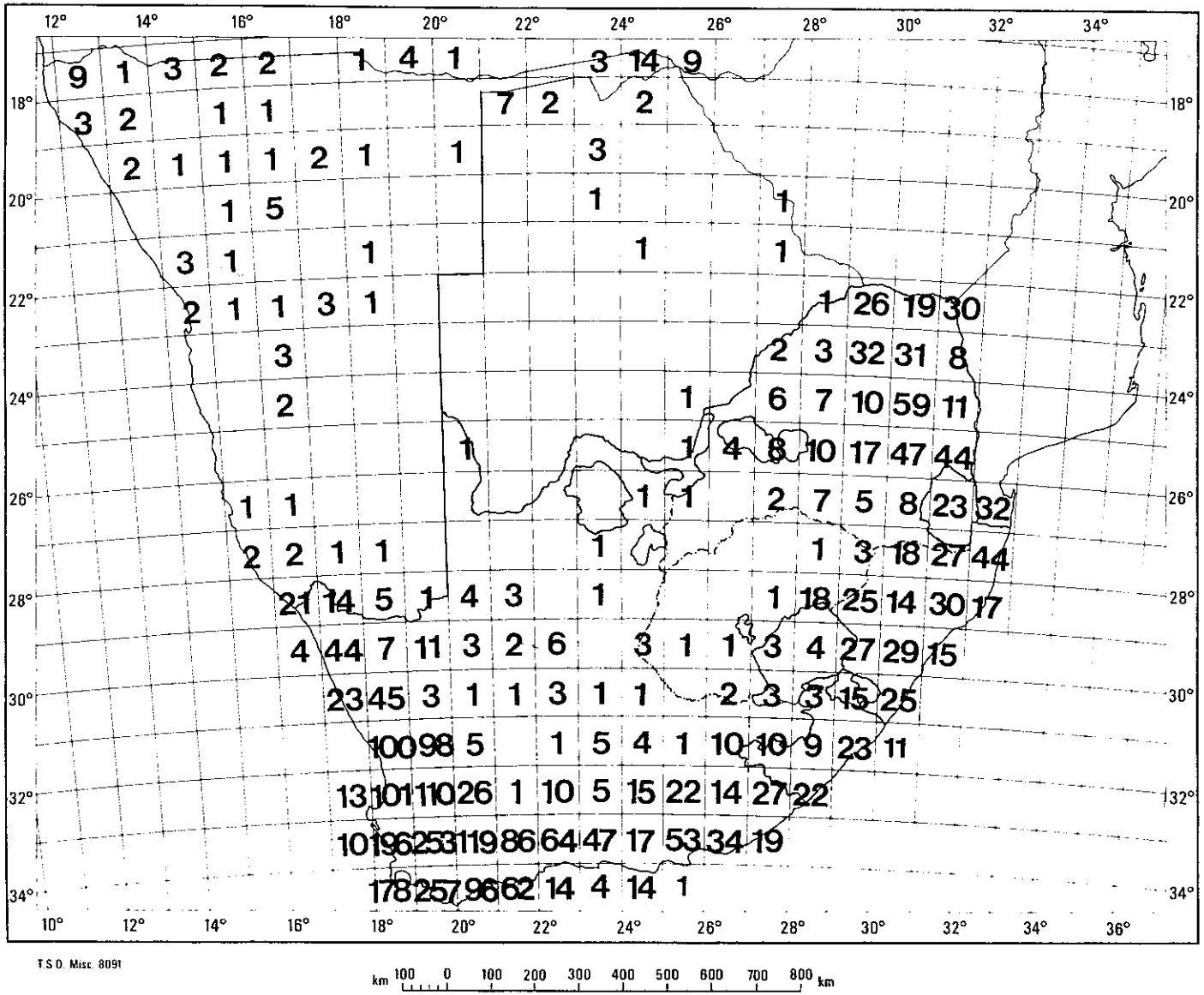
Table 5 shows a taxonomic analysis of the more threatened families in southern Africa. Perhaps most significant are the three endemic families, each with high proportions of taxa in hazard: Penaeaceae (43 percent), Bruniaceae (18 percent) and Geissolomaceae (100 percent: only one rare species). Many other important families, especially in the Cape Floristic Kingdom, have a fifth or more of their southern African species under threat, notably the Proteaceae (33 percent), the Restionaceae (31 percent) and the Iridaceae (22 percent). Perhaps the

most serious case of all is the threat to the Cycads (Encephalartos spp: Zamiaceae) of which all 28 of the southern African species are listed as rare, extinct or threatened.

Finally, it is important to know whether there have been any changes in the rate of plant extinction, in the same way as recorded for the United States of America by Opler (1977). An indirect guide to this is given by the dates on which recently extinct plants were last recorded as vouchers in herbarium collections. These dates are known for 34 of the 39 extinctions of plants in southern Africa, and they are given as a frequency histogram for 20-year periods in Figure 1. The weakness of this method is that it has probably been strongly affected by varying collecting intensities over the years. Nevertheless, there is a marked resemblance to Opler's histogram and surveys currently in hand will doubtless greatly strengthen knowledge on this important topic. In particular it is likely to raise substantially the columns in the histogram in the period from 1940 to the present. Any conclusions from the shape of the histogram in Figure 1 must be regarded as speculative.

Table 3. Summary of the geographical distribution of recently extinct, threatened and rare vascular plants in southern Africa. The boundaries of regional areas are defined approximately by 1x1-degree units of latitude and longitude. Codes are as defined on page 9 : X = extinct, E = endangered, V = vulnerable, R = rare, I = indeterminate, U = uncertain if safe or not.

Region, with its % of area of southern Africa	Numbers of taxa in hazard							% in region
	X	E	V	R	I	U	Total	
Southern Africa (100%)	39	105	166	537	261	807	1 915	100
Cape Province (25%)	36	96	125	336	237	672	1 502	78
Cape Floristic Kingdom (< 1%)	35	90	110	280	185	544	1 244	65
Transvaal (10%)		5	14	117	12	68	216	11
Natal (3%)	3	1	21	84	18	41	168	9
Transkei (1%)		1	12	30	8	23	74	4
South West Africa (31%)			2	21	6	27	56	3
Orange Free State (5%)			4	9	1	9	23	1
Swaziland (< 1%)			1	10	6	6	23	1
Botswana (22%)			1	6		8	15	1
Bophuthatswana (2%)		2	2	7		1	12	1
Lesotho (1%)			2	3		2	7	1



Map 1. Geographical distribution of recently extinct, threatened and critically rare taxa in Southern Africa : numbers of taxa in 1 x 1 - degree areas of latitude and longitude.

Table 4. Pressures causing extinction or threatening the surival of species: summary of threat statistics for a sample of 70 taxa from the south-western Cape Province.

Threat	Number of cases of threats				%
	Extinct	Endangered	Vulnerable	Total	
Agriculture: ploughing, grazing, burning	1	13	10	24	18
Industry, roads, urban development, mining	8	11	10	29	22
Plant collecting, wild flower picking	1	8	3	12	9
Invasive alien plants					
Pinus spp	1	8	2	11	8
Acacia spp	0	18	12	30	23
Hakea spp	0	1	2	3	2
Natural fires, pathogens, genetic factors etc	5	16	3	24	18

Table 5. Vascular plant families with high proportions of threatened and rare species in southern Africa.

Family	Threatened and rare species in southern Africa, given as:		
	Total in southern Africa	Percentage of family's species in: Southern Africa	World
Geissolomaceae	1	100	100
Zamiaceae	28	100	35
Penaeaceae	10	43	43
Rhamnaceae	49	35	5
Amaryllidaceae	66	32	6
Proteaceae	116	33	12
Restionaceae	62	31	19
Oxalidaceae	50	25	6
Orchidaceae	116	24	< 1
Rutaceae	62	23	7
Iridaceae	188	22	11
Campanulaceae	82	22	1
Bruniaceae	14	18	18
Liliaceae	103	12	3
Ericaceae	92	12	3
Asclepiadaceae	81	12	4
Compositae	184	9	< 1

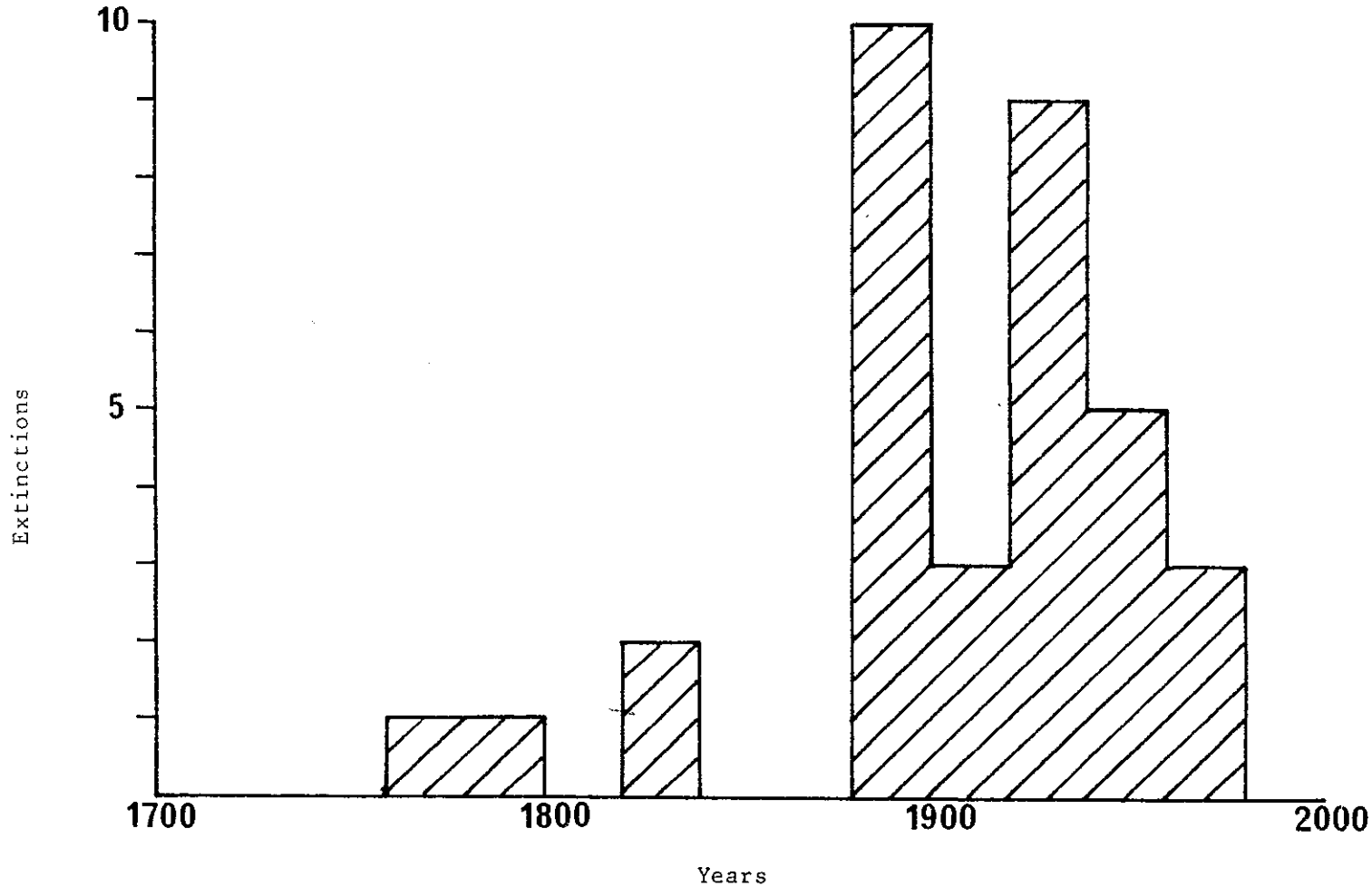


Figure 1. Vascular plant extinctions in Southern Africa : the distribution of years in which recently extinct plants were last recorded in herbarium collections, for 34 of the 39 known extinctions in the region.

Table 6. Taxonomic distritubion of recently extinct, threatened and critically rare taxa in southern Africa

	Number of taxa
Pteridophyta	
Selaginellaceae	1
Isoetaceae	2
Ophioglossaceae	1
Marsileaceae	1
Adiantaceae	3
Grammitidaceae	1
Thelypteridaceae	1
Total for Pteridophyta:	10
Gymnospermae	
Zamiaceae	28
Cupressaceae	1
Total for Gymnospermae:	29
Angiospermae: Monocotyledonae	
Aponogetonaceae	1
Gramineae	16
Cyperaceae	1
Arecaceae (Palmae)	4
Araceae	3
Restionaceae	64
Juncaceae	1
Liliaceae	111
Amaryllidaceae	66
Velloziaceae	1
Iridaceae	227
Musaceae	1
Strelitziaceae	1
Zingiberaceae	2
Burmanniaceae	1
Orchidaceae	118
Total for Monocotyledonae:	618
Angiospermae: Dicotyledonae	
Ulmaceae	1
Moraceae	4
Urticaceae	2
Proteaceae	122
Mesembryanthemaceae	74

Cabombaceae	1
Nymphaeaceae	1
Ranunculaceae	1
Annonaceae	4
Lauraceae	3
Cruciferae	13
Capparaceae	6
Crassulaceae	41
Bruniaceae	14
Rosaceae	16
Connaraceae	1
Leguminosae	81
Oxalidaceae	58
Linaceae	1
Rutaceae	62
Simaroubaceae	1
Burseraceae	2
Meliaceae	3
Malpighiaceae	1
Polygalaceae	25
Dichapetalaceae	1
Euphorbiaceae	28
Anacardiaceae	6
Celastraceae	7
Sapindaceae	8
Greyiaceae	1
Rhamnaceae	50
Tiliaceae	1
Malvaceae	7
Sterculiaceae	7
Ochnaceae	1
Clusiaceae (Guttiferae)	1
Canellaceae	1
Flacourtiaceae	4
Passifloraceae	1
Begoniaceae	1
Geissolomaceae	1
Penaeaceae	11
Thymelaeaceae	8
Lythraceae	1
Rhizophoraceae	4
Combretaceae	4
Myrtaceae	2
Ericaceae	92
Myrsinaceae	2
Plumbaginaceae	2
Sapotaceae	1
Ebenaceae	2
Oleaceae	3
Buddlejaceae	1
Apocynaceae	9
Asclepiadaceae	85
Convolvulaceae	2
Boraginaceae	13
Labiatae	1
Solanaceae	1

Scrophulariaceae	43
Pedaliaceae	1
Gesneriaceae	6
Acanthaceae	12
Rubiaceae	16
Cucurbitaceae	2
Campanulaceae	82
Compositae	188
Total for Dicotyledonae:	1 258
Total for Angiospermae:	1 876
Total for all groups:	1 915

CONSERVATION PERSPECTIVES

WHY CONSERVE?

The International Convention on International Trade in Endangered Species of Wild Animals and Plants, which is administered by the IUCN and which has been signed by some 38 countries, states that 'wild fauna and flora, in their many beautiful and varied forms, are an irreplaceable part of the natural systems of the earth which must be protected for this and the generations to come'. The Convention states further (Anon 1973, Lucas 1976) that the contracting states are 'conscious of the ever-growing value of wild fauna and flora from aesthetic, scientific, cultural, recreational and economic points of view'. How do the Convention's guiding principles apply in southern Africa?

Natural extinction in the past

Natural extinction forms a major part of the processes that have combined to produce the world's present fauna and flora. Indeed, with the living species totalling perhaps much less than one percent of all those that have ever existed, natural extinction has been a most conspicuous phenomenon when all past ages are taken together (Mayr 1963). The present wave of extinction caused by humanity was preceded by high rates of species loss in the climatic stresses of the Pleistocene period. About 1,6 million years ago, the world's climate entered a long-enduring colder phase, with 'spikes' of warmth, lasting a few millenia, appearing in cycles of about ninety thousand years (Haq et al 1977). In the north temperate latitudes of the world this had disastrous effects on plant and animal life. Over large areas, many plants and animals experienced intense cold and expanding ice sheets. Many species perished, while others endured the dual problems of coldness and alternating periods of warmth, maybe with drought. The present warm phase has lasted about eleven thousand years and the north temperate floras still seem to be in a state of recovery (Good 1964). It is not known how long the present warm phase may last (Gribbin, 1978).

For southern Africa, the world's cooler temperatures in the Pleistocene are thought to have brought northward a rain-bearing wind belt known by mariners today as the 'roaring forties' and to have given frequent depressions with a cooler and wetter climate over much of southern Africa (Van Zinderen Bakker 1976). Large areas of the present grassland, desert and semi-desert may have been covered by sclerophyllous woodland and patches of savanna (Axelrod and Raven 1978). The rich fynbos flora of the Cape Floristic Kingdom would have been somewhat limited in its present area by an expansion of the temperate rainforests, which today stand as remnants in mountain kloofs and as large patches in the Knysna summer and winter rainfall area. Relicts of fynbos on mountains above 900 - 1 200 m in Namaqualand and the Karoo suggest that this flora may have largely survived the moist Pleistocene periods by spreading northwards (Levyns 1964, Axelrod and Raven 1978). At the onset of a moist period, the dry-area floras in places like the Karoo would have been invaded on a vast scale.

Competitive pressures may well have brought many species to extinction. The opposite would have happened in a dry spell, with the moist-area species either surviving in relict patches, or migrating to wetter places such as along the coast, or becoming extinct.

Past renewals of natural diversity

Evolutionary forces could have brought renewals of natural diversity after the crisis of each climatic change. Relict populations of plants, protected by local patches of congenial climate in mountains or escarpments, could have persisted and developed reproductive isolation from their parent species. On the return of amenable conditions, they could radiate independently into new forms. The relict survivors would have to be numerous enough to avoid extinction due to chance pressures, and rich enough in the necessary genetic variation for the action of natural selection. It has been suggested that a fluctuating climate can regenerate diversity like a 'species-pump' (Valentine 1967, Stebbins 1974) and conditions in some parts of southern Africa would have been most suitable for it.

Humanity: More extinction, less renewal of diversity?

It is in the present warmer period after the Pleistocene that human impact has appeared on a large scale. In a brief moment of biological time, humanity has reduced the habitats of wild species to scattered fragments in most landscapes. The rate of extinction has increased, and the futures of hosts of surviving plants now stand in question. The suddenness of this has left no time for evolutionary renewal of diversity. The net effect has been floristic and faunistic impoverishment.

Conditions in southern Africa today often oppose the long-term survival of natural diversity. The region has in some parts seen a major amount of floristic simplification and there is every sign that this will spread in certain key areas. A large share of the simplification is due to invasions by weeds, brought from other countries, which have taken hold over vast areas (Stirton 1978). Some of the invaders are capable of massive suppressions of wild plants. For example, it has been estimated that without proper control of the invasive Australian Acacia, Hakea, Leptospermum and other weeds in the south-western Cape, the species-rich fynbos flora of that area would vanish in most places within a hundred years (Hall and Boucher 1977). Similarly monocultures of farm and timber crops, important to human survival and development, have reduced the areas left for natural diversity, extensively in some of the moister areas but hardly at all in the drier areas. About 60 percent of the area for the fynbos of the Cape Floristic Kingdom has been lost to farming, forestry and other land uses. This flora survives in patches on the flats and along mountain chains in which one may expect an increased rate of extinction among species and critical populations, as indeed is shown by this report. The area probably has the highest concentration of threatened species of any temperate region in the world (P H Raven pers comm).

Future plant evolution

Most plants, whether rare or not, have the potential for increasing their numbers when conditions are favourable. For rare plants, these conditions may not exist at present. When in future they do, some could flourish and perhaps perform some important rôles in the ecosystem. To allow rare plants to become extinct is to threaten this flexibility. For each plant species that becomes extinct there may be on average a ten to thirty-fold loss of other dependant organisms, including insects closely adapted to particular food and habitat preferences to one or a few plant species (Raven 1976). A consequence of such simplification could be future waves of invasion by organisms that would go unchallenged by the biological controls that could develop from the great reservoirs of diversity of more intact past ecosystems.

Value to humanity

We know too little of the biology of rare plants to be able to evaluate their actual or possible rôles and value in ecosystems. Some of today's rare species might become common and important in future ecosystems. Intricate relationships may give rare species an important controlling rôle, perhaps as hosts to pathogens of potential invaders. Mature ecosystems have these relationships well developed, giving healthy plant covers that can resist disruptions such as soil erosion.

The possibilities of some rare plants having unrecognised values to humanity as future sources of food, medicines or other materials are often cited as a reason for their conservation (Smithsonian Institution 1975, Ayensu and DeFilipps 1978). Thompson (1975a) has called for caution on this, pointing out that the chances of finding really useful plants among the rarities are too slim for this to be a powerful argument. However, in southern Africa, the potential value of the natural flora has scarcely been investigated at all. In a recent five-year period a survey indicated that about 60 percent of the southern African species of eleven plant families could show anti-cancer activities (Edwards 1976) and local medicinal uses of southern African plants have shown promising leads for new curatives among a vast array of species (Watt and Breyer-Brandwijk 1962).

Rare plants attract a surprising interest among visitors and tourists. Many people go to great lengths in the pursuit of the unique. Apart from satisfying natural curiosity, this helps to lend personal distinctiveness in the daily uniformity of urban living. Such interests can give at least a few rare plants a special value to the community. Smith (1976) has noted that the extinction of a plant or animal may mean the virtual loss of a cultural entity. This over-states the case for little-known species. However, it accurately describes the long-standing sense of loss when a vanished plant or animal had been known for its special beauty or other prized aesthetic qualities.

For tourists, southern Africa's plants, the rarities included, rank as a major source of interest. Ferrario (1978) found that in a sample of 5 053 tourists leaving for home after a visit to southern Africa, the highest three categories of attraction had been scenery, wild animals and natural vegetation. A properly conserved flora appears to be a valuable earner of foreign exchange.

In horticulture, the blushing bride, Serruria florida (Proteaceae), is one of a number of plants threatened in the wild but now cultivated for cut flowers and as a garden ornamental. It is reduced in the wild to a number of scattered groups of plants with a dozen or so individuals in each (F J Kruger pers comm). In cultivation, it has helped establish, with other wild species, a cut-flower export trade that has grown to earnings of over R3 000 000 per annum. For most species, 80 percent of the flowers are cut from wild plants, chiefly from the area of the Cape Floristic Kingdom (Edwards 1976). Other causes have depleted this vegetation which is already under pressure from the present dry period after the Pleistocene. The extra pressure of the cut flower industry could soon put its target species into decline. The recent cutting of large amounts of the wood-coned leucadendron, Leucadendron platyspermum (Proteaceae), now known to be a vulnerable species, is an example. Plants depleted by horticulture include the cycads, succulents, bulbous and cormous plants.

Plants provide a wide array of other materials besides foods, medicines and ornamentals. These include fibres, fuels, timbers, gums and perfumes. They may have special functions such as the nitrogen-fixing ground covers for soil improvement, or the well-adapted succulents for emergency grazing in times of drought. The rich flora of the south-western Cape thrives on apparently nutrient-poor soils, suggesting a potential use on infertile land elsewhere. Conserving the rarities listed in this report will hold open the widest range of options for finding plants adapted for these tasks in the future.

Conserving rare plants ensures as broad a base as possible for future scientific study. Examples of concern in this are the families Bruniaceae and Penaeaceae which are found mostly in the Cape Floristic Kingdom and nowhere else in the world. About a fifth of the species of Bruniaceae and a half of the Penaeaceae have had to be listed among the threatened and rare plants in this report. The extinction of such plants would mean an irreplaceable loss of important scientific evidence. Scientists in southern Africa have a duty towards their colleagues elsewhere not to let this happen.

CONSERVATION STRATEGIES

It might seem at first sight that one could conserve most threatened species by planting them out in protected sanctuaries. However, threatened plants pose special problems that are not well understood (Simmons et al 1976). These problems must be solved if southern Africa's threatened plants are to be given better chances of survival on at least a thousand-year time-scale.

Conservation of habitats

It is often stressed that the first priority in conserving a threatened plant is to give it a secure natural habitat (Smithsonian Institution 1975, Budowski 1976, Raven 1976). The habitat should have all the essential amenities and pressures that the plant had known in the wild state over many previous generations. These amenities and pressures may be difficult to define and, if necessary, reproduce. The factors are more complex than the regimes of soil, water, light and temperature that are given to plants in cultivation. Although some plants seem to 'survive' well away from their natural home, the substitution of quite new selection pressures for the old should eventually cause them to change. How many generations would be needed for the rare plant to become no longer the same species, genetically if not morphologically?

For example, certain animals may be essential for the future survival of a threatened species. Pollinators, seed-dispersers and predators on the pests that attack the plant, may all perform essential tasks that allow it to grow, reproduce, and survive in sufficiently large numbers (Gilbert and Raven 1975). Reducing the action of any one of these agents may cause the threatened plant to slide inexorably towards extinction. It follows that the populations of the associates should be vigorous enough for their long-term survival with the threatened plant. To maintain this vigour it may be necessary to conserve them in areas rather larger than that of the threatened plant, especially where local or distant migrations are a required part of their life-history. This hypothesis requires painstaking, case-by-case research to find out which animal associates play an essential role. Until this has been done, the policy should be to conserve substantial areas around the threatened plant as a safety measure.

Conservation of genetic diversity

Another priority is to conserve enough genetic variability to enable the plant to survive natural hazards in the future. This variability is held among the populations of a species which more or less share, through sexual reproduction, a common collection of the units of variation known as a gene pool. If the gene pool becomes depleted there is a greater risk of the expression of deleterious genes in the descendants. Even short-term surival may be genetically at risk, or even unlikely, if a population drops below some threshold number of individuals (Mayr 1963). The practical problem is to know what the safe numbers should be, for each species. There is still very little information on this (Mayr 1963, Thompson 1975b, Frankel 1976). The requirements of each species may differ, and there are certainly some exceptional cases where vast populations are known to have come from only one or two individuals. Notable here is the world population of laboratory hamsters that originated from a single pair. Population-genetic studies are needed to show what numbers consitute a critical safe minimum, and how this is likely to vary from one species to another. Until this is done, conservation will be groping in the dark on the fundamental problem of the minimum sizes of nature reserves. For the present, the hypothesis must remain in favour of conserving as many individuals and populations of threatened and rare plants as possible.

Conserving separate natural populations of a plant should usually give a higher chance of survival than either acting on one alone, or merging them together. A single population may be prone to extinction from a local intense pressure sweeping continuously through it, destroying all its members. An example is a set of fires, following too rapidly on one another to give the plant a chance of renewing its seed-store in the soil, which by successive waves of germination may become completely used up. Because of the distinct genetic histories and environments of separated populations, they will probably carry differing gene pools. This diversity gives natural selection a broader base on which to act. The base is extended if variation in each population is enriched by an occasional flow of new gene combinations from the others. Selection in this way is likely to increase the vigour of the threatened species, helping to prepare it for surviving future hazards. Diamond (1975) and Hummel (1978) have taken the layout of populations further, and have proposed idealised geometries for the boundaries of sanctuaries. Such work supports the now widely held concern for conserving mosaics of genetic diversity (Frankel 1970, Simmons et al 1976, J C Greig pers comm).

Saving critically threatened species

The principle of keeping populations largely isolated may not hold where only depleted fragments remain. Like the populations at the margins of a species' area, these fragments may have a limited chance of survival (Soulé 1973). If the remnants are likely to be below a minimum safe size for genetic viability, there may be good justification for reducing the isolation between them or even merging them completely. Judging whether to do this or not will rest on other factors as well, notably the kind of impacts to be expected in the resulting population's habitat.

Because of the present uncertainty about how the minimum genetically viable population-size may vary from one species to another, it seems important not to be dissuaded from trying to rescue a severely depleted population. One such case is the beautiful blue and violet-flowered Loubser's Moraea, Moraea loubseri (Iridaceae), discovered in 1973 at the edge of a quarry near Saldanha. The quarrying could not be halted and the habitat was destroyed, making the plant extinct in the wild. Seed was collected from the population shortly after its dicovery and the plant was found to grow well in cultivation. It will be interesting to see if the gene-pool in the cultivated plants will be large enough for the species to be established successfully in a wild sanctuary near its former home.

Considerations of gene-pool sizes also affect the storage of seed of critically threatened plants. Such seed can be stored as an insurance against the total loss of the plant in the wild (Thompson 1975b). In a minimal procedure, the seeds are collected, cleaned, dried over anhydrous silica gel for four weeks at 5°C and then placed in the seed-bank at -25°C. For a temporary seed-bank at the University of Cape Town, 300 to 600 seeds are being kept in this way for each of a number of species. The seeds are collected from the wild using as far as possible the sampling patterns suggested by Hawkes (1976). Where there is no risk to reducing the regeneration of the threatened plant,

the higher numbers of seeds are preferred. They not only give a better sampling of genetic variation but can withstand losses due to deterioration in storage. It is eventually hoped to expand this operation with proper seed-testing facilities.

Planning a sanctuary for threatened plants

What do these hypotheses suggest as the ideal sanctuaries for threatened plants? The survival habitat should be chiefly in the plant's former home, with outlying populations close enough to permit occasional gene exchange. Both the main and the supplementary habitats should be large enough to carry populations of the plant that are well above a minimum critical size for viability. They must include any extra areas needed to support vigorous populations of required associates. Research and management should be aimed at restoring former elements of the habitat and excluding those that are artificial. A census of the plant should be taken regularly, to show the rates of recruitment and recovery, and patterns of mortality. In many cases, buffer-zones around the habitat may be needed to fend off the worst effects of impacts such as invasions by weeds, insecticide-drifts that may kill pollinators, or salinization of ground-water by fertilizers. The buffer-zones could carry cleared belts to allow the maintenance of a desirable burning regime, independently of the surrounding countryside. These conditions may be unobtainable in areas where relicts are extensively threatened by other land-uses.

As a last resort, the populations may have to be re-established at a new site elsewhere. This may be a challenging task for species that are less easy to cultivate than the Loubser's Moraea noted above. Referring chiefly to animals, Botkin (1977) notes that translocations of wild species to new habitats usually fail. Botanical gardens can assist by holding a temporary survival-population while establishment trials are in progress at new wild sites (Hall and Rycroft 1979). Great care is needed to see that regeneration by seed is not attended by major alien selective pressures or by hybridization in the botanical garden. These could weaken the species' future chances of survival in the wild. However good the precautions against these hazards may be the species should be allowed as few generations as possible in the botanical garden before being returned to the wild. It is wrong to believe that a botanical garden is a safe, permanent sanctuary for threatened plants.

CONCLUSIONS

1. Partly preliminary findings indicate that southern Africa (south of Angola, Rhodesia and Mozambique) has 1 915 or 11 percent of its vascular plant taxa in the following categories:

39	recently extinct
105	endangered
166	vulnerable and declining
537	critically rare
261	indeterminate, but in some category above
807	uncertain if safe or not

2. The geographical distribution of the threatened taxa co-incides with some of the areas of greatest endemism in southern Africa. There is a very high concentration in the area of the Cape Floristic Kingdom which is rich in local endemics and is so distinct as to merit a rank as one of the world's six major geo-taxonomic units of plant life. The Cape Floristic Kingdom covers about 0,67 percent of the area of southern Africa and carries 65 percent of the entire region's plants in hazard.

3. The taxonomic distribution of threatened plants shows a predominance of Cape Floristic Kingdom families, including a third of southern Africa's Proteaceae and Restionaceae and a fifth of the species of groups such as Iridaceae and Rutaceae. The Cape endemic families Penaeaceae, Bruniaceae and Geissolomaceae all have high proportions of threatened taxa. Outside the Cape Floristic Kingdom, the most important case is the Cycad family, Zamiaceae, of which all southern African species are variously in hazard.

4. An initial study suggests that in the south-western Cape about half of the pressures causing decline are due to direct human impacts (agriculture, industrial and urban development, plant collecting); a third due to habitat change by introduced invasive plants, chiefly the Australian Acacias; and the remainder due to natural factors.

5. A prior condition for the present situation may have been a bio-climatic compression of moister floras in the comparatively short and drier period of the last ten thousand years. This may have increased the amount of local endemism, which in turn has made so many species susceptible to endangerment from human impacts. With rapid expected increases in the human population of the region (recently 60 000 persons a month in South Africa), these impacts will strengthen and probably bring many further plant species into a threatened state.

6. In view of the important values attached to southern Africa's plant life it is recommended that the threatened plant and threatened habitat problems be studied in greater depth. In particular, the nature and the consequences of plant extinctions are neglected fields of study.

7. Much more attention than in the past needs to be given to the establishment of habitat sanctuaries for threatened plants. To be effective on the thousand-year time scales of biological development, the management of the sanctuaries needs to be based on sound autecological and population-genetic studies, which are widely lacking at present.

8. The role of botanic gardens, low-temperature seed-banks and other emergency measures for critically threatened taxa should be developed as an important supplement to habitat conservation.

9. Plant conservation measures in the Cape Floristic Kingdom area should be greatly strengthened as a national priority. At present this is, on a world scale, a major crisis zone for the loss of genetic diversity.

REFERENCES

Anonymous 1973. Convention on international trade in endangered species of wild fauna and flora. Special Supplement, IUCN Bulletin 4, 1-12.

Axelrod D I and P H Raven 1978. Late Cretaceous and Tertiary vegetation history of Africa. In: Biogeography and Ecology of Southern Africa. M J A Werger (ed). Junk, The Hague. pp 79-130.

Ayensu E S and R A De Filipps 1978. Endangered and threatened plants of the United States. Smithsonian Institution and World Wildlife Fund, U S Section, Washington. 301 pp.

Botkin D B 1977. Strategies for the reintroduction of species into damaged ecosystems. In: Recovery and restoration of damaged ecosystems. J Cairns et al (eds). University Press of Virginia, Charlottesville. pp 241-260.

Budowski G 1976. The global problems of conservation and the potential role of living collections. In: Conservation of threatened plants. J B Simmons et al (eds). Plenum Press, New York. pp 9-13.

Diamond J M 1975. The island dilemma: lessons of modern biogeographic studies for the design of natural reserves. Biological Conservation 7, 129-145.

Eckholm E 1978. Disappearing species: the social challenge. Worldwatch Paper 22, 1-38.

Edwards D 1976. Floral resources of Southern Africa. In: Resources of Southern Africa today and tomorrow. G Baker (ed). The Associated Technical and Scientific Societies of Southern Africa, Johannesburg. pp 154-160.

Edwards D and O A Leistner 1971. A degree reference system for citing biological records in Southern Africa. Mitteilungen der Botanischen Staatssammlung München 10, 501-509.

Ferrario F F 1978. An evaluation of the tourist resources of South Africa. Publications of the Geography Department at the University of Cape Town 1, 1-319.

Frankel O H 1970. Variation - the essence of life. Sir William Macleay Memorial Lecture, 1970. Proceedings of the Linnean Society of New South Wales 95, 158-169.

Frankel O H 1976. The time scale of concern. In: Conservation of threatened plants. J B Simmons et al (eds). Plenum Press, New York. pp 245-248.

Gilbert L E and P H Raven 1975. Coevolution of animals and plants. University of Texas Press, Austin. 246 pp.

Goldblatt P 1978. An analysis of the flora of Southern Africa: its characteristics, relationships and origins. Annals of the Missouri Botanical Garden 65, 369-436.

Good R 1964. The geography of the flowering plants. Longmans, London. 518 pp.

Gribbin J 1978. Climatic change. Cambridge University Press. 280 pp.

Hall A V 1972. The use of a data-banking system for taxonomic collections. Contributions from the Bolus Herbarium 5, 1-78.

Hall A V 1978. Endangered species in a rising tide of human population growth. Transactions of the Royal Society of South Africa 43, 37-49.

Hall A V In press. Information handling for South Africa's rare and endangered species survey. In: Proceedings of the Conference on Geographical Data Organization for Rare Plant Conservation, New York, 14-18 November 1977. L E Morse and M S Henifin (eds). New York Botanical Garden.

Hall A V and C H Boucher 1977. The threat posed by alien weeds to the Cape Flora. In: Proceedings of the Second National Weeds Conference of South Africa. Anon. Balkema, Cape Town. pp 35-45.

Hall A V and H B Rycroft 1979. South Africa : the conservation policy of the National Botanic Gardens and its Regional Gardens. In: Survival or Extinction. H Synge and H Townsend (eds). Bentham-Moxon Trust, Kew. pp 125-134.

Haq B U, W A Berggren and J A van Couvering 1977. Corrected aged of the Pliocene/Pleistocene boundary. Nature, London 269, 483-488.

Hawkes J G 1976. Sampling gene pools. In: Conservation of threatened plants. J B Simmons et al (eds). Plenum Press, New York. pp 145-154.

Henifin M S, L E Morse, J L Reveal, B MacBryde and J I Lawyer In press. Guidelines for the preparation of status reports on rare or endangered plant species. In: Proceedings of the Conference on Geographical Data Organization for Rare Plant Conservation, New York, 14-18 November 1977. L E Morse and M S Henifin (eds). New York Botanical Garden.

Hummel M 1978. Trees: saving the gene pool. Ontario Naturalist 18, 18-23.

Levyns, M R 1964. Migrations and origin of the Cape Flora. Transactions of the Royal Society of South Africa 37, 85-107.

Lucas G Ll 1976. Conservation: recent developments in international co-operation and legislation. In: Conservation of threatened plants. J B Simmons et al (eds). Plenum Press, New York. pp 271-303.

Mayr E 1963. Animal species and evolution. The Belknap Press of Harvard University Press, Cambridge, Massachusetts. 797 pp.

Myers N 1976. An expanded approach to the problem of disappearing species. Science 193, 198-202.

Opler P A 1977. The parade of passing species: a survey of extinctions in the U S. The Science Teacher 44(1), 5 pp.

Population Reference Bureau 1976. World population growth and response 1965-1975. Population Reference Bureau, Washington. 40 pp.

Prance G T and T S Elias 1977. Extinction is forever. The New York Botanical Garden. 437 pp.

Raven P H 1976. Ethics and attitudes. In: Conservation of threatened plants. J B Simmons et al (eds). Plenum Press, New York. pp 155-179.

Simmons J B et al (eds) 1976. Conservation of threatened plants. Plenum Press, New York. 336 pp.

Smith R L 1976. Ecological genesis of endangered species: the philosophy of preservation. Annual Review of Ecology and Systematics 7, 33-55.

Smithsonian Institution 1975. Report on endangered and threatened plant species of the United States. U S Government Printing Office, Washington, D C. 200 pp.

Sommer A 1976. Attempt at a global appraisal of the tropical moist forests. Proceedings of the Committee on Forest Development in the Tropics, Rome, 15-20 November 1976, F A O FO:FDT/76/4.

Soulé M E 1973. The epistasis cycle: a theory of marginal populations. Annual Review of Ecology and Systematics 4, 165-187.

Stebbins G L 1974. Flowering plants. Evolution above the species level. Edward Arnold, London. 399 pp.

Stirton C H (ed) 1978. Plant invaders, beautiful but dangerous. Cape Town: The Department of Nature and Environmental Conservation of the Cape Provincial Administration. 175 pp.

Talbot A M (ed) 1978. Proceedings of a Conference on the effects of population growth in South Africa. Transactions of the Royal Society of South Africa 43, 1-94.

Thompson P A 1975a. Should botanic gardens save rare plants? New Scientist 68, 636-638.

Thompson P A 1975b. The collection, maintenance and environmental importance of the genetic resources of wild plants. Environmental Conservation 2, 223-228.

Valentine J W 1967. The influence of climatic fluctuations on species diversity within the tethyan provincial system. In: Aspects of Tethyan Biogeography, Systematics Assoc Publ 7. C G Adams and D V Ager (eds). pp 37-56.

Van Zinderen Bakker, E M 1976. Late Quaternary environmental changes in Southern Africa. Annals of the South African Museum 71, 141-152.

Watt J M and M G Breyer-Brandwijk 1962. The medicinal and poisonous plants of Southern and Eastern Africa. Livingstone, Edinburgh. 1457 pp.

INDEX

TITLES IN THIS SERIES

1. *A description of the Savanna Ecosystem Project, Nylsvley, South Africa. December 1975. 24 pp.

2. *Sensitivity analysis of a simple linear model of a savanna ecosystem at Nylsvley. W M Getz and A M Starfield. December 1975. 18 pp.

3. *Savanna Ecosystem Project - Progress report 1974/1975. S M Hirst. December 1975. 27 pp.

4. Solid wastes research in South Africa. R G Noble. June 1976. 13 pp.

5. *Bibliography on marine pollution in South Africa. D A Darracott and C E Cloete. June 1976. 131 pp.

6. *Recycling and disposal of plastics waste in South Africa. R H Nurse, N C Symington, G R de V Brooks and L J Heyl. June 1976. 35 pp.

7. South African Red Data Book - Aves. W R Siegfried, P G H Frost, J Cooper and A C Kemp. June 1976. 108 pp.

8. South African marine pollution survey report 1974-1975. C E Cloete and W D Oliff (editors). September 1976. 60 pp.

9. Modelling of the flow of stable air over a complex region. M T Scholtz and C J Brouckaert. September 1976. 42 pp.

10. Methods and machinery for pulverising solid wastes. M J Simpkins. October 1976. 29 pp.

11. *South African Red Data Book - Small mammals. J A J Meester. November 1976. 59 pp.

12. Savanna Ecosystem Project - Progress report 1975/1976. B J Huntley. March 1977. 41 pp.

13. Disposal and recovery of waste paper in South Africa. G R de V Brooks. April 1977. 35 pp.

14. South African Red Data Book - Fishes. P H Skelton. July 1977. 39 pp.

15. *A checklist of the birds of the Nylsvley Nature Reserve. W R Tarboton. September 1977. 14 pp.

16. *Grondsoorte van die Nylsvley-natuurreservaat. H J von M Harmse. September 1977. 64 pp.

17. Description and manual for the use of DRIVER - an interactive modelling aid. P R Furniss. September 1977. 23 pp.

18. South African Red Data Book - Large mammals. J D Skinner, N Fairall and J du P Bothma. November 1977. 29 pp.

19. Introducing you to satellite operated Data Collection Platforms (DCP's). C C Stavropoulos. September 1977. 9 pp.

20. A phytosociological classification of the Nylsvley Nature Reserve. B J Coetzee, F van der Meulen, S Zwanziger, P Gonsalves and P J Weisser. December 1977. 31 pp.

21. An annotated checklist of the amphibians, reptiles and mammals of the Nylsvley Nature Reserve. N H G Jacobsen. December 1977. 65 pp.

22. Cooperative National Oceanographic Programme. SANCOR. January 1978. 19 pp.

23. South African Red Data Book - Reptiles and amphibians. G R McLachlan. February 1978. 53 pp.

24. Guidelines for the disposal of dangerous and toxic wastes so as to minimize or prevent environmental and water pollution. R T Rudd. January 1978. 12 pp.

25. Richards Bay mesometeorological data. Vertical profiles of air temperature and wind velocity and surface wind statistics. M T Scholtz, E T Woodburn, C J Brouckaert and M Mulholland. March 1978. 104 pp.

26. *Studies of mineralization in South African rivers. G C Hall and A H M Görgens (editors). March 1978. 24 pp.

27. Nylsvley - A South African Savanna Ecosystem Project: objectives, organization and research programme. March 1978. 37 pp.

28. A description of the Fynbos Biome Project. June 1978. 25 pp.

29. Savanna Ecosystem Project - Phase I summary and Phase II progress. B J Huntley and J W Morris. July 1978. 52 pp.

30. Review of Coastal Currents in Southern African Waters. T F W Harris. August 1978. 106 pp.

31. Report of the Task Group on Fermentation Technology. R J Andrews, J A de Villiers, P M Lategan, F G Neytzell-de Wilde, J P van der Walt and Professor D R Woods. September 1978. 16 pp.

32. South African programme for the SCOPE mid-term project on the ecological effects of fire. September 1978. 36 pp.

33. Fire in South African ecosystems: an annotated bibliography. G U Schirge and A H Penderis. October 1978. 114 pp.

34. Inland water ecosystems in South Africa : a review of research needs. R G Noble and J Hemens. November 1978. 150 pp.

35. South African Antarctic Research Programme, 1978-1982. SASCAR. December 1978. 39 pp.

36. Aboveground biomass subdivisions in woody species of the Savanna Ecosystem Project Study Area, Nylsvley. M C Rutherford. January 1979. 33 pp.

37. Marine Line Fish Research Programme. SANCOR. April 1979. 17 pp.

38. The Southern Ocean - South African Cooperative Research Programme. SANCOR. May 1979. 26 pp.

39. The Transfer of Pollutants in Two Southern Hemispheric Oceanic Systems. Proceedings of a workshop held at Plettenberg Bay, South Africa, 23-26 April 1979. 188 pp.

40. Fynbos ecology : a preliminary synthesis. J Day, W R Siegfried, G N Louw and M L Jarman. December 1979. 166 pp.

41. Bibliography of Marine Biology in South Africa. D A Darracott and A C Brown. 250 pp.

42. Advances in understanding phosphorus cycling in inland waters - their significance for South African limnology. A J Twinch and C M Breen. March 1980. 22 pp.

43. Terrestrial ecology in South Africa - project abstracts for 1978. February 1980. 92 pp.

44. A manual of methods for use in the South African Marine Pollution Monitoring Programme. R J Watling. April 1980. 82 pp.

45. Threatened plants of Southern Africa. A V Hall, M de Winter, B de Winter and S A M van Oosterhout. May 1980. 244 pp.

*Out of print.