

Floristic composition of the southern Cape forests with an annotated check-list

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An annotated list of species recorded in the forests of the southern Cape is provided. The flora comprises 470 species which belong to 280 genera and 106 families (50 monogeneric families, 32 monospecific families and 193 monospecific genera). The species : family ratios of 3.1 for woody plants and 4.5 for herbaceous plants are very low when compared to other forests in Africa and to the surrounding fynbos shrublands. Bisexuality predominates all growth forms and unisexuality (dioecy and monoecy) is almost confined to trees, woody shrubs and vines. Sixty-nine percent of the woody plants have fleshy propagules, predominantly of small size, whereas 85% of the herbaceous plants have dry propagules of which 41% are wind-dispersed (mainly ferns and orchids). Several species other than geophytes and ferns have conspicuous spines/prickles, water and/or food storage organs, or display deciduousness. These are presumed adaptations to browsing pressure, or to periodic drought. Very few taxa are entirely confined (endemic) to the area. Statistics suggest that due to pressures of fire frequency and aridity, speciation apparently occurred outside the forest towards shrubby and herbaceous growth forms. Families shared with surrounding shrublands and thickets have few but widespread species inside forests and many species with limited distribution ranges in the surrounding vegetation types.

'n Ge-annoteerde spesielys is saamgestel om 'n opname te maak van die taksa wat in die woude van die suid-Kaap versamel is. Die flora bestaan uit 470 spesies wat tot 280 genera en 106 families behoort (50 monogeneriese families, 32 monospesifieke families en 193 monospesifieke genera. Die spesies : familie-verhouding van 3.1 vir houtagtige en 4.5 vir kruidagtige plante is baie laag in vergelyking met ander woude in Afrika en met die omringende fynbos. Tweeslagtigheid oorheers al die groeivorme en twee- en eenhuisigheid is feitlik beperk tot bome, houtagtige struik en kruidagtige rankers. Nege-en-sestig persent van die houtagtige plante het vlesige vrug/saadtypes, hoofsaaklik klein, en 85% van die kruidagtige plante het droë vrug/saadtypes waarvan 41% windverspreid is (hoofsaaklik varings en orgidieë). Verskeie spesies, uitgesonderd geofiete en varings, het opvallende aanpassings teen beweiding, soos dorings en stekels, en teen periodieke droogtes, soos bladwisselendheid en water- en/of voedselstoororgane. Baie min soorte is totaal beperk (endemies) tot die studiegebied. Statistieke dui daarop dat spesiasie moontlik onder druk van vuurfrekwensie en droogte buite die woud in die rigting van struikagtige en kruidagtige groeivorms plaasgevind het. Families wat met omringende fynbos en struikbos gedeel word, het min maar wydverspreide spesies binne die woude, en baie spesies met beperkte verspreiding in die omringende plantegroeitipes.

Keywords: Breeding systems, check-list, dispersal, flora, growth forms, phytogeography.

Introduction

The southern Cape forests have several features inviting a study of their flora. It is not only the largest forest complex in southern Africa, but is also the most southerly forest complex of significant size in Africa (Anonymous 1987). They cover a wide altitudinal range over a very short distance, i.e. from the Indian Ocean coastline to near the top of the mountain ranges 10 – 37 km inland [1220 m above mean sea-level (a.s.l.)] (Geldenhuys 1991). These forests occur relatively isolated from the larger forests to the east (Alexandria) and west (Grootvadersbosch), and the very small patches of forest in the inland mountains to the north (Anonymous 1987; Geldenhuys 1989a, in press a).

Several authors have dealt with the forest flora of the southern Cape. Phillips (1931) listed the species of 'the principal stages of the four seres — hydrosere, halosere, psammose and lithosere — in order of the plant succession', as well as the species of scrub forest and high forest. Fourcade (1941) compiled a check-list of all flowering plants of the forest, fynbos and Little Karoo (dry shrub-

lands) between George, Uniondale and Humansdorp. Von Breitenbach (1974) provided a general account of the forest flora and listed the more common woody and herbaceous plants. Goldblatt (1978) and Bond and Goldblatt (1984) included the southern Cape forests in their discussions of the flora of the Cape Floristic Region, one of the world's six Floral Kingdoms of the world. In recent years the floristics of several other forests in southern Africa have been studied in some detail (Geldenhuys 1989b, in press a). Recent collections in the southern Cape forests have produced some new species and have extended the distribution ranges of several known ones.

The objectives of this study are to enumerate the species which have been collected in the forests of the southern Cape, to analyse the flora in terms of floristic and structural plant groups, and to determine the composition of its breeding, dispersal and possible survival systems. These analyses would allow comparison with floras of other forests and vegetation types which could improve the understanding of the ecological significance of the southern Cape forest flora.

Knowledge of the flora was used in biogeographical analyses of the forest floras of the southern Cape and southern Africa (Geldenhuys 1989a, in press a). Finally, it is declared policy of the Department of Water Affairs and Forestry (Forestry Branch) to maintain the species diversity of vegetation types under its jurisdiction. Hence, this study provides baseline information for the southern Cape forests.

Study area

The study covers the area between the Gouritz River to the west, Kromme River to the east, Indian Ocean coastline to the south and crests of the east-west trending coastal Cape Folded Mountains to the north (Figure 1; Geldenhuys 1991). The mountains, up to 1600 m a.s.l., separate the moist coastal region from the arid inland Little Karoo. To the south, undulating foothills separate the mountains from the level coastal platform (at 180 – 240 m a.s.l.). The platform ends in a steep coastal scarp. Many rivers run south from the mountains and form deep, narrow incisions through the coastal foreland. In several places, east-west tributaries form wider valleys along softer geological substrates. Rocks of the Cape Supergroup (mainly of supermature quartzitic sandstones, with subordinate shales) underlie most of the area. Pre-Cape and Cretaceous rocks (granite, quartzites, shales and schists), and unconsolidated deposits of recent age, occupy smaller areas (Toerien 1979). The soils are generally acid, leached, low in nutrients (with phosphate and manganese deficiencies in places), have a poor buffering capacity and internal drainage, and the effective depth is almost invariably shallow (G.N. Schafer, pers. commun. 1988).

Geldenhuys (1991) discussed the general climatic features. The forests occur in areas where the mean annual rainfall, mainly orographic, ranges from 500 to about 1200 mm. Rain falls all year with maxima in early and late summer. The mean daily maximum temperature ranges between 23.8°C for February and 18.2°C for August, and the mean daily minimum between 19.7°C and 8.9°C. Frost is infrequent to absent. Bergwinds during winter and cold fronts during spring and autumn further contribute to a very equable climate.

Acocks (1953) recognized several vegetation types in the area. Knysna Forest (Veld Type 4), also described by Phillips (1931) and the subject of this study, comprises both high and scrub forest and covers a total area of 60 561 ha (Geldenhuys 1991). It is surrounded by several types of

shrubland: a large area of False Macchia or Mountain Fynbos (Veld Type 70) along the mountains and coastal foreland; and relatively small areas of Coastal Macchia (Veld Type 47), Coastal Renosterbos (Veld Type 46) and Valley Bushveld (Veld Type 23) towards the western and eastern extremes of the area. Taylor (1955), McKenzie (1978) and Cowling (1983, 1984, 1986) studied forest and other vegetation to the west and east of the study area.

Methods

I compiled a species list for high and scrub forest, forest gaps and forest edges of the study area (Appendix 1). Recurring fynbos-related forest edge species are included in the list, but were excluded from most analyses. Most of the specimens are housed in the Saasveld Herbarium, George. I screened various check-lists (Phillips 1931; Fourcade 1941; Stewart *et al.* 1982; Bond & Goldblatt 1984; Schelpe & Anthony 1986; Von Breitenbach 1986), and checked the Fourcade (1941) collection in the Bolus Herbarium and other collections at the Bolus (Pteridophyta) and Compton herbaria in Cape Town and the National Herbarium in Pretoria for additional taxa. I became familiar with most of the included species in the field during sampling for forest classification. Where field or herbarium checking of unfamiliar species was not possible, a reference indicates the information source. It is possible that some species have been omitted from the list and additions will continue in future.

The definition of the different variables and categories and the source references are given in Appendix 1. Information on growth form, breeding and dispersal system, deciduousness and spinescence is based on the literature, but also on personal observations in the study area. Information on moisture requirements, forest type, geographic spread in the study area and abundance is based on my extensive observation of species in the study area. The geographic range in southern Africa of each species is based on herbarium information, distribution maps, and flora accounts.

Results

Size and composition of the flora

Composition of the flora is summarized by taxonomic groups in Table 1, and by growth forms in Table 2. Appendix 1 includes four families and 12 genera of the fynbos-related forest edge species which are characteristic of fynbos. The families are Bruniaceae, Ericaceae, Penaeaceae

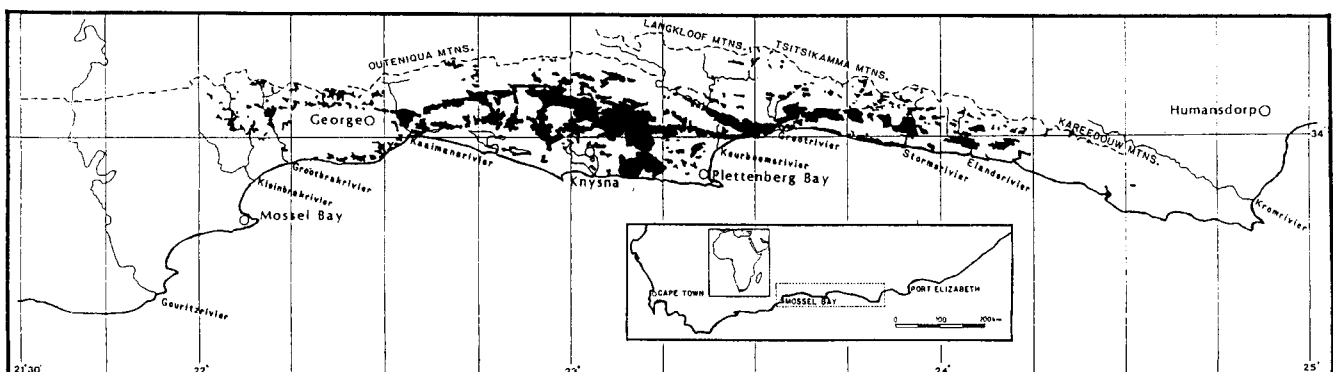


Figure 1 Distribution of indigenous forests in the southern Cape.

Table 1 Composition of the southern Cape forest flora by main taxonomic groups

	Forest species	Fynbos-related edge species
Families	106	15
Genera	280	22
Species	470	40
Pteridophytes	67	—
Gymnosperms	3	—
Monocotyledons	83	5
Dicotyledons	317	35

and Gentianaceae, which represent five genera and 13 species. The genera, *Protea*, *Leucadendron*, *Phyllica*, *Empleurum*, *Agathosma*, *Struthiola*, *Euryops*, *Peyrousea*, *Anapalina*, *Ixia*, *Brownleea* and *Schizodium*, belong to seven forest-shared families and represent 17 species. The remaining nine entirely fynbos species belong to five forest-shared genera (and families), i.e. *Myrica*, *Silene*, *Crassula*, *Lobelia* and *Holothrix*. The fynbos species represent four growth forms: woody shrubs (24 species); soft shrubs (1 species); geophytes (5 species) and forbs (10 species). The rest of the analyses cover forest-related species only.

Number of species and genera per family

The frequency distribution of families or genera with specific numbers of genera or species follows the typical

negative exponential curve, i.e. with relatively few families or genera with many representatives and the majority with few members only (Table 3). The flora contains 50 monogeneric families, 32 monospecific families and 193 monospecific genera. Large families (genera/species in parentheses) are Asteraceae (12/22), Orchidaceae (13/18), Poaceae (11/18), Celastraceae (5/17), Liliaceae (10/16), Fabaceae (12/15), Cyperaceae (8/15), Euphorbiaceae (10/14), Asclepiadaceae (8/14), Acanthaceae (6/14), Aspleniaceae (2/14), Rubiaceae (7/13), Adiantaceae (3/11), Crassulaceae (2/11), Anacardiaceae (3/10) and Lamiaceae (3/10). Of these, only the Celastraceae and Rubiaceae are prominent in the high forest. The larger genera by number of species are *Asplenium* (13), *Crassula* (10), *Rhus* (8), *Cassine* (7), *Senecio* (7), *Cheilanthes* (6), *Isoglossa* (6), *Maytenus* (6), and *Thelypteris* (6).

The genera : family (g:f) and species : family (s:f) ratios vary between the growth forms and forest types (Table 2). The s:f ratio is 3.1 for woody plants and 4.5 for herbaceous plants. Amongst woody plants, subcanopy trees and shrubs have the highest s:f ratios. Amongst herbaceous plants, graminoids have the highest s:f ratio followed by geophytes, ferns with erect rhizomes and forbs. Plants of the high forest, scrub forest and forest gap have very similar s:f ratios, higher than the 1.6 for the forest edge. The s:f ratio is relatively high for subcanopy trees in high and scrub forest, for soft shrubs in disturbed forest, for ferns and epiphytes in high forest, for geophytes in scrub forest, and for graminoids in high forest and forest gaps.

Table 2 Number of families, genera and species in each growth form, and the species : family ratio by growth form and forest type^a, excluding fynbos-related edge species

Growth form	Number of		Number of species and species : family ratio				
	Families	Genera	Total	Hf ^a	Sf ^a	Df ^a	
Canopy trees	27	40	Number	47	34	11	2
			Ratio	1.74	1.4	1.2	2.0
Subcanopy trees	17	27	Number	40	22	12	6
			Ratio	2.35	2.4	2.4	1.0
Woody shrubs	25	40	Number	55	14	14	27
			Ratio	2.20	1.3	1.8	1.9
Soft shrubs	15	22	Number	29	3	8	18
			Ratio	1.93	1.0	1.3	1.8
Lianes	11	12	Number	15	8	6	1
			Ratio	1.36	1.3	1.0	1.0
Vines	17	30	Number	47	16	20	11
			Ratio	2.76	1.4	1.8	1.2
Ferns: erect ^b	10	13	Number	34	29	4	1
			Ratio	3.40	3.2	1.3	1.0
Ferns: creeping ^b	7	6	Number	18	15	—	3
			Ratio	2.57	2.5	—	1.0
Epiphytes	9	15	Number	25	24	1	—
			Ratio	2.78	2.7	1.0	—
Geophytes	6	25	Number	28	10	13	5
			Ratio	4.67	1.7	4.3	1.3
Graminoids	3	20	Number	35	16	2	17
			Ratio	11.67	5.0	2.0	8.0
Forbs	30	58	Number	97	31	36	30
			Ratio	3.23	1.7	2.4	2.2

^a Hf, high forest; Sf, scrub forest; Df, disturbed forest (gaps and margin).

^b Referring to rhizomes.

Table 3 Frequency distribution of families or genera with a specific number of genera or species for the southern Cape forest flora

Number of genera per family, or species per genus or family	Frequency distribution for		
	Genera/family	Species/family	Species/genus
1	50	32	193
2	21	25	51
3	15	10	14
4	6	7	7
5	3	9	6
6	2	2	5
7	—	2	2
8	3	1	1
9	—	1	—
10	2	3	1
11	1	2	—
12	2	—	—
13	1	1	1
14	—	4	—
15	—	2	—
16	—	1	—
17	—	1	—
18	—	2	—
22	—	1	—

Breeding systems

The importance of different breeding systems varies amongst the growth forms (Table 4). Bisexuality predominates all growth forms except woody shrubs. Dioecy and monoecy are almost confined to trees, woody shrubs and vines, and spores are confined to ferns. Dioecy runs in specific families or genera, namely the Anacardiaceae (*Laurophyllous*, *Loxostylis* and *Rhus*), Asteraceae (tree genera *Brachylaena* and *Tarchoanthus*), Cucurbitaceae (*Kedrostis* and *Lagenaria*), Dioscoreaceae (*Dioscorea*), Ebenaceae (*Diospyros* and *Euclea*), Euphorbiaceae (*Adenocline*, *Excoecaria* and *Lachnostylis*), Flacourtiaceae (*Dovyalis*, *Kiggelaria*, *Scolopia* and *Trimeria*), Myricaceae (*Myrica*), Menispermaceae (*Cissampelos*), Meliaceae (*Ekebergia*) and Podocarpaceae (*Podocarpus*). Dioecious genera of larger families are *Dodonea* (Sapindaceae), *Myrsine* (Myrsinaceae), *Pyrenacantha* (Icacinaeae) and *Vepris* (Rutaceae). The monoecious families are Achariaceae (*Ceratisicyos*), Aquifoliaceae (*Ilex*), Cupressaceae (*Widdringtonia*), Euphorbiaceae (*Acalypha*, *Andrachne*, *Ctenomaria*, *Euphorbia*, *Leidesia* and *Tragia*), Haloragaceae (*Laurembergia*), Hamamelidaceae (*Trichocladus*), Loranthaceae (*Tapinanthus*), Moraceae (*Ficus*), Phytolaccaceae (*Phytolacca*), Salvadoraceae (*Azima*), Ulmaceae (*Celtis*), Urticaceae (*Australina*, *Droquetia* and *Laportea*) and Viscaceae (*Viscum*). The monoecious genera of larger families are *Ocotea* (Lauraceae), *Rapanea* (Myrsinaceae), *Zanthoxylum* (Rutaceae) and *Zehneria* (Cucurbitaceae). *Maytenus* (Celastraceae) is indicated as having bisexual to unisexual flowers.

Propagule types and dispersal

Propagule types differ in importance in different growth forms (Table 5). They represent the following dispersal systems: 8.0% fleshy fruits with large seeds dispersed by larger frugivores; 23.9% small seeds either from fleshy

Table 4 Relationship between growth form and breeding system in the southern Cape forest flora. The figures represent the number of species

Growth form	Breeding system			
	Dioecy	Monoecy	Bisexual	Spores
Trees				
Canopy	12	6	29	—
Subcanopy	11	2	27	—
Shrubs				
Woody	20	7	28	—
Herbaceous	1	3	25	—
Lianes	—	—	15	—
Vines	9	4	34	—
Ferns	—	—	—	52
Epiphytes	—	—	10	15
Geophytes	—	1	27	—
Graminoids	—	4	31	—
Forbs	—	8	89	—
Total	53	35	315	67

Table 5 Relationship between growth form and propagule type in the southern Cape forest flora. The figures represent number of species

Growth form	Propagule type						
	Fleshy fruit/seed		Dry fruit/seed		Seed/fruit with		Dust-like seeds or spores
	Large	Small	Large	Small	Burs/wool	Pappus	
Trees							
Canopy	15	20	7	3	—	2	—
Subcanopy	8	26	4	2	—	—	—
Shrubs							
Woody	9	23	9	12	—	2	—
Soft	—	9	1	16	2	1	—
Lianes	1	9	—	—	—	5	—
Vines	1	15	—	15	—	16	—
Ferns	—	—	—	—	—	—	52
Epiphytes	—	2	—	—	—	—	23
Geophytes	4	—	—	14	—	—	10
Graminoids	—	—	—	23	12	—	—
Forbs	—	7	—	75	4	11	—
Total	38	111	21	160	18	37	85

fruits or with fleshy aril from drier fruits, dispersed by frugivores; 4.3% larger dry seed from capsules, cones or nuts dispersed by mechanical means; 34.2% small dry seed dispersed by gravity (possibly assisted by wind) or ballistic mechanisms; 3.4% seed with attachment to cling to animal fur; 7.9% small seed with pappus or wool dispersed by wind; and 18.3% spores and dust-like seeds dispersed by wind. Fleshy propagules, especially of small size, predominate in the tree species. Large, fleshy propagules are more important in canopy than in subcanopy trees. Large, dry propagules are more important than small, dry propagules in both canopy and subcanopy trees. Only *Tarchoanthus camphoratus* and *Brachylaena glabra* have true wind-dispersed seeds. However, *Buddleja saligna*, *Cunonia capensis* and *Nuxia floribunda* have very small seeds which

can drift in the wind over short distances. Small propagules predominate in the woody shrubs with 59% fleshy and 41% dry propagules overall. However, of the soft shrubs only 32% have fleshy propagules and 68% have dry propagules. Almost all climbers have small propagules. Lianes have only fleshy (64%) or wind-dispersed (36%) propagules. Of the vines, 64% have dry propagules of which 53% are wind-dispersed. Small dry propagules predominate in the geophytes, graminoids and forbs. The ferns and Orchidaceae have spores or dustlike seeds which are dispersed by the wind.

Spinescence, deciduousness and storage organs

Several species other than geophytes and ferns have conspicuous adaptations to adverse conditions or pressures. Spines or prickles are presumed adaptations to browsing pressure. They are present on the branches and boles or stems of 16 species of high forest, seven species of scrub forest, and four species of disturbed forest. These are the canopy tree *Scolopia zeyheri*, the subcanopy trees *Canthium spinosum*, *Dovyalis lucida*, *D. rotundifolia*, *Maytenus heterophylla*, *M. nemorosa* and *Zantoxylum capense*, the woody shrubs *Azima tetracantha*, *Canthium ciliatum*, *Carissa bispinosa*, *Cassinopsis ilicifolia*, *Dovyalis rhamnoides*, *Putterlickia pyracantha* and *Rhus longispina*, the soft shrubs *Hibiscus diversifolius*, *Protasparagus macowanii* and *Solanum giganteum*, the scramblers *Capparis sepiaria* var. *citrifolia*, *Rubus pinnatus* and *Scutia myrtina*, and the vine *Protasparagus aethiopicus*. Five species lose spinescence beyond the juvenile stage, i.e. the canopy trees *Erythrina caffra*, *Scolopia mundii* and *Zanthoxylum davyi* (develops knobs), and the subcanopy trees *Canthium inerme* and *C. pauciflorum*. The majority of these species occur in the dry high or scrub forest. Leaf spines occur in the subcanopy tree *Cassine papillosa*, in the juvenile stage only, in *Aloe arborescens* and *A. ferox* in scrub forest, and in three *Solanum* species. Two *Laportea* species have irritating leaf hairs. The soft shrub *Sparrmannia africana* of wet mountain forest has dry capsules with spiny bristles.

Deciduous species are the canopy trees *Calodendrum capense*, *Celtis africana*, *Ekebergia capensis* (facultative), *Erythrina caffra*, *Ficus sur*, *Kiggelaria africana*, *Rhus chirindensis*, *Schotia afra*, *S. latifolia* and *Vepris lanceolata*, the subcanopy trees *Allophylus decipiens*, *Hippobromus pauciflorus*, *Canthium inerme*, *C. mundianum*, *C. spinosum* and *Trimeria grandifolia*, the woody shrubs *Calpurnia aurea*, *Canthium ciliatum*, *Gardenia thunbergia* and *Rhus rehmannia*, the soft shrub *Heteromorpha trifoliata*, the lianes *Clematis brachiata*, *Ficus burtt-davyi*, *Grewia occidentalis* and *Rhoicissus tomentosa*, two species each of the vines *Dioscorea* and *Myrsiphyllum*, and the geophytes *Chasmanthe aethiopica*, *Haemanthus albiflos*, *Melaspheerula ramosa* and *Scadoxus puniceus*.

Water and/or food storage organs are conspicuous in certain families. Succulent leaves occur in the Crassulaceae, and in *Aloe arborescens* and *A. ferox*. Swollen root organs are typical of the geophytes. Root tubers occur in the Cucurbitaceae, Dioscoreaceae, the *Cyphia* species, and in *Ceropegia africana* and *Rumex sagittatus*. The *Oxalis* species have corms, and the species of *Myrsiphyllum* and *Protasparagus* have swollen roots. All these plants are more

conspicuous in the dry scrub forest, although several occur widespread in moist high forest.

Forest endemics

The distribution of several forbs, graminoids and geophytes listed in Appendix 1 as occurring in the southern Cape only, is not well known. The better known endemics are listed in Table 6. Very few endemics are entirely confined to the study area.

Discussion

The southern Cape forest flora is relatively large when compared to other forest complexes in southern Africa (Geldenhuys, in press a). It has the third largest total flora, the largest herbaceous flora and the fifth largest woody flora. The size of the flora is surprising in view of its southern location on the tip of the African continent, and in view of the southward attenuation of particularly tree and shrub species along the eastern side of southern Africa (Phillips 1931; Scheepers 1978; McKenzie 1978; Tinley 1985; Cawe 1986; Geldenhuys 1989a,b, in press a). Furthermore, the forest map shows that this forest complex is relatively isolated from the forests to the east and west (Anonymous 1987). The coastal Alexandria forest and the dry inland Suurberg forest are the nearest large forests to the east and 200 km away. Foothill and mountain forests of Grootvadersbosch are the nearest large forests to the west and 120 km away. However, in the study area the mountains are very close to the coast. Coastal and mountain forests are connected in several areas and the floral elements of both the coastal and mountain areas of further east occur together in

Table 6 Forest endemics of southern Cape region which are common in the study area

	Distribution range
Trees and shrubs	
<i>Gnidia denudata</i>	Swellendam – Humansdorp
<i>Lachnostylis hirta</i>	Riversdal – Port Elizabeth
<i>Laurophyllum capensis</i>	Somerset West – Port Elizabeth
<i>Sparrmannia africana</i>	Caledon – Uitenhage
<i>Strelitzia alba</i>	Knysna – Bloukrans River
<i>Virgilia divaricata</i>	Mossel Bay – Willowmore – Uitenhage
<i>Virgilia oroboides</i> subsp. <i>ferruginea</i>	Mossel Bay – George
Climbers	
<i>Myrsiphyllum scandens</i>	Southern and south-western Cape
<i>Myrsiphyllum volubile</i>	Hermanus – Port Elizabeth
Ferns	
<i>Hymenophyllum marlothii</i>	Southern and south-western Cape
<i>Thelypteris knysnaensis</i>	George – Keurbooms River
Epiphytes	
<i>Angraecum pusillum</i> (<i>burchellii</i>)	Southern Cape
Geophytes	
<i>Cyrtanthus purpureus</i>	Mossel Bay – Uitenhage
<i>Gladiolus sempervirens</i>	George – Humansdorp
<i>Liparis capensis</i>	Southern and south-eastern Cape
Sedges	
<i>Schoenoxiphium altum</i>	Mossel Bay – Kromme River

the same stands in this area. This largest forest complex in southern Africa covers a range of sites which may trap species which are dispersed along the coast or provide a refuge for species of different climatic periods (Geldenhuis 1989a). Furthermore, the size of the flora may reflect the intensity of plant collection. The appended species list includes species housed in different herbaria, in addition to individual collections and published flora accounts of forests in the area. Most of the published species lists include only species collected during the particular studies (e.g. Scheepers 1978; Philipson 1987).

The appended species list includes many species which are widely distributed in southern Africa. White (1983) listed several of the southern Cape forest species for various parts of Africa, including high forest, scrub forest, thicket and bushland of Guineo-Congolian, Zambebian, Sudanian, Somalia-Masai, Karoo-Namib and Cape regional centres of endemism, and some regional transition zones and mosaics. However, most of the listed species occur in the Afro-montane regional centre of endemism (White 1978) and the Tongoland-Pondoland regional mosaic (Moll & White 1978). For example, this flora shares 68% of the 50 families, 27% of the 141 genera and 13% of the 196 species of the evergreen and semi-evergreen trees of Malawi (Chapman & White 1970). Many forest species are also important constituents of the subtropical transitional thicket in the eastern Cape. Cowling (1984) listed 67 Kaffrarian thicket species in the south-eastern Cape of which 85% occur in the southern Cape forests (96% of the 24 diagnostic species). Everard (1987) listed 278 species for eastern Cape succulent and Kaffrarian thicket. Of the 97 differential species of, and common species to, xeric and succulent thicket, only 9% occur in the southern Cape forests, and of these only *Sideroxylon inerme* is a prominent tree. Sixty percent of the differential xeric Kaffrarian thicket species and 62% of the 90 species which occur in two or more of the suborders of thicket, occur in the southern Cape forests. Many of these species cover the moist to dry gradient in the southern Cape, including *Halleria lucida* which I have considered to be a moist species.

The breeding and dispersal systems are typical of the closed, mixed tropical-subtropical forest (Hall & Swaine 1981; Bullock 1985). Dioecy and monoecy are confined to trees, woody shrubs and vines, and to particular families and genera (Table 4) and show no relationship with geographic origin, geographic range or abundance of the species (Geldenhuis, in press b). Pollination systems are relatively unknown for most species, although insect pollination probably dominates in the woody plants (Phillips 1931). Propagule type varies significantly with growth form. Fleshy propagules are important in woody plants, whereas dry propagules predominate in herbaceous plants. Fleshy propagules are almost absent in the fynbos shrubs (Siegfried 1983).

The legumes (Fabaceae), one of the larger families, are absent from moist to dry high forest and nowhere prominent in the scrub forest. However, pure stands of the pioneer *Virgilia* tree species (Phillips 1926) and of *Psoralea* spp. develop on the forest edge after fire. Australian blackwood (*Acacia melanoxylon*) has established widely in forest gaps and edges since its planting in gaps early this century, but cannot tolerate the closed forest (Geldenhuis 1986a). The

two *Schotia* species are locally common only in dry scrub forest near Plettenberg Bay, but are more prominent in eastern Cape subtropical transitional thicket (Everard 1987). Moist coastal evergreen rain forest of west Africa (e.g. Cameroun and Gabon) is rich in legumes (Caesalpinioideae) which often form pure stands, dominated by one or two species, in which abundant regeneration and a range of size-classes are well represented (White 1983). Many legume species occur in the fynbos of the Cape Floristic Region (Bond & Goldblatt 1984) and in the woodlands of Africa (White 1983), i.e. vegetation types which are frequently disturbed by fire.

Speciation as expressed in the species : family ratio (Table 2) is very low when compared to other forest floras and to floras of surrounding vegetation. Tropical rain forest of Ghana has a species : family ratio of 16.3, excluding ferns (Hall & Swaine 1981). The larger families of mostly woody plants, which are shared with the southern Cape forest flora (number of Ghana species in parentheses), are Rubiaceae (218), Fabaceae (163), Euphorbiaceae (97), Apocynaceae (63) and Celastraceae (49). Similarly, families which are shared between the forest and fynbos have considerably more species in the fynbos, such as the Asteraceae, Fabaceae, Iridaceae, Orchidaceae, Proteaceae, Rutaceae and Schrophulariaceae (fynbos numbers based on Stewart *et al.* 1982; Vogts 1982; Bond & Goldblatt 1984). Similarly, endemism is very low and very few species are confined to the forests of the study area. By contrast, endemism is very high in the fynbos (Bond & Goldblatt 1984).

Growth forms which are almost dependent on the closed forest environment, such as subcanopy trees, ferns and epiphytes, have a higher species : family ratio than the other typical forest growth forms. This suggests that species which are confined to the more equable microclimate of the understorey of closed forest are probably differentiated on the basis of resource partitioning. Moll (1978) indicated for Natal coastal forests that shrubs and understorey species were less dependent on the external environment than canopy species. Most of the trees and shrubs of high and scrub forests occur either in the canopy or in forest gaps and forest margins, and can cope with disturbed habitats. Canopy trees should have wider tolerance limits because of the varied conditions which they experience from the forest floor to the exposed canopy. In disturbed forest, differentiation is greatest in the shrubby and herbaceous growth forms.

Several statistics suggest that pressures of greater aridity and low soil fertility, and disturbance by fire, have caused forest families to speciate outside the forest in shrubby and herbaceous growth forms. This is shown by the low species : family ratio in the forest compared to the high ratio in fynbos, the wide distribution of many forest species (Appendix 1; Geldenhuis, in press a), the radiation and limited distribution of species in the fynbos of families and genera of those widespread forest species, the low endemism in forest compared to the high endemism in fynbos, and the preference of forest endemics for forest margins and gaps. Deacon (1983) suggested that the fynbos species radiated as a result of increasing aridity and fire frequency since the Plio-Pleistocene.

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Appendix 1

Annotated list of fern and seed plant species of the southern Cape forests (Veld Type 4)

The Pteridophytes follow the arrangement of Schelpe & Anthony (1986). The arrangement and genus numbers of the Gymnosperms, Monocotyledons and Dicotyledons follow Gibbs Russell *et al.* (1985, 1987). The nomenclature for the different groups follow the three mentioned sources. The National Tree List numbers are provided for the trees and some shrubs (Von Breitenbach 1986). The numbers precede the respective genera or species. Information on breeding system, fruit type and dispersal mode is based on Levyns (1966), Palmer & Pitman (1972), Dyer (1975, 1976), Palgrave (1977) and personal observation.

Each species name is followed by notes on growth form, breeding system, fruit type, dispersal mode, deciduousness, spinescence, habitat, forest type, geographic range in the southern Cape, abundance and distribution in southern Africa. Information on reproductive and other characteristics is supplied only when it deviates from the dominant character. The following definitions apply:

- **Growth form** represents the typical form of the plant in most of the communities and follows the definitions of Geldenhuys *et al.* (1988).

A **tree** is a woody plant with diameter at breast height (DBH) >10 mm and >3 m tall if single-stemmed or >5 m tall if multi-stemmed.

A **canopy tree** has a dominant or codominant position in the canopy of mature vegetation.

A **subcanopy tree** has an intermediate or overtopped position between the canopy and the shrub or ground layer.

A **shrub** is a woody plant <3 m tall if single-stemmed or <5 m tall if multi-stemmed.

A **woody shrub** has a woody stem and a **soft shrub** a herbaceous stem with woody base.

A **liane** is a not self-supporting woody, winding, scrambling or climbing plant with DBH >10 mm. A **vine** has a similar habit but with herbaceous stem <10 mm DBH.

A **terrestrial fern** is recorded in one of two categories: with **erect rhizome**, i.e. fronds originate from a central growing point (stem); or with **creeping rhizome**, i.e. fronds originate on various points along the rhizome.

An **epiphyte** is aerially supported on both trees and rocks and includes both ferns and flowering plants. Tree-borne parasites are included in this category.

A **geophyte** is a herbaceous non-graminoid monocotyledon with strap-like leaves and with underground storage organs such as bulbs, corms, or rhizomes.

A **graminoid** is a herbaceous plant with grasslike or wiry leaves and belong to the families Poaceae, Cyperaceae and Juncaceae.

A forb is a herbaceous angiosperm, excluding vines and epiphytes, which does not fit any of the former categories.

- Breeding system represents four basic modes of reproduction: asexual by spores for ferns; bisexual for most plants, i.e. with male and female parts in the same flower; monoecious with separate male and female flowers on the same plant; or dioecious with male and female flowers on separate plants.
- Fruit type is mentioned in an ecological context as observed at maturity. A pod or capsule is a mostly dry (but can be fleshy) dehiscent fruit which open at one or more sides to release the seed. Some seeds have an aril or fleshy covering. Indehiscent fruits enclose the seed and are taken from the plant with the seed during dispersal. A drupe is a fleshy, semi-fleshy or leathery fruit with a one- to many-seeded stone. A berry is a fleshy fruit with one to many seeds. A nut is a one-seeded, dry fruit with a hard pericarp. Seed size relates to the possible dispersal by small birds versus larger frugivores. A small seed has its largest diameter ≤ 5 mm and a large seed a diameter > 5 mm.
- Deciduousness refers to the relative period during which plants are without leaves. Most plants are evergreen. Deciduous plants shed all their leaves simultaneously or their total above-ground biomass and stay as such for longer or shorter periods. Semi-deciduous plants produce new foliage immediately prior to or after shedding the old leaves, especially during periods of drought.
- Spinescence refers to the spines or hooks attached to the stem, branchlets, or leaves, and either in the juvenile stage only or until maturity, presumably for protection. Most plants are unarmed.
- Habitat is indicated as dry, moist or wet, and Forest type as high forest, scrub forest, forest gap or margin. Special localities are noted. In general, mountain forests are wet, foothill and platform forests are moist to medium-moist (designated as moist), and dry forest, scrub forest of coastal and riverine escarpment, and dunes, are dry.
- Geographical range refers to the relevant habitat in the southern Cape. A widespread species occurs in most parts of its range. A sporadic species occurs at various discrete points of its range. An occasional species occurs at very few points of its range. A disjunct species occurs at few widely separated points of its range. In the latter two cases special localities are noted.
- Abundance relates to the geographical range, habitat and forest type. An abundant species occurs in large numbers throughout its range. A common species occurs in relatively smaller numbers but is seen throughout its range. A scattered or rare species occurs with increasingly smaller numbers which make it more difficult to locate, unless it occurs in scattered or rare clumps or groups.
- Phytogeography refers to the distribution of the species in southern Africa. It is based on published and unpublished accounts of floras and taxa (Taylor 1955; Chippindall 1959; Van der Schijff & Schoonraad 1971; Venter 1972; Campbell & Moll 1977; McKenzie *et al.* 1977; Van der Walt 1977; McKenzie 1978; Moll 1978, 1980a, 1980b, 1981; Scheepers 1978; Weisser & Drews 1980; Nicholson 1982; Stewart *et al.* 1982; Vogts 1982; Abbott 1985; Burns 1986; Cawe 1986; Schelpe & Anthony 1986; Von Breitenbach 1986; Phillipson 1987; Lubke & Strong 1988; Taylor & Masson in prep.; Geldenhuys unpublished data; and this paper.

PTERIDOPHYTES

LYCOPODIACEAE

Lycopodium L.

- cernuum L. Fern with creeping rhizome, moist forest margin, common in wet spots, sporadic, western Cape to Natal coast and midlands and Transvaal. Taylor 1247 PRE
- clavatum L. Fern with creeping rhizome, moist forest, sporadic, scattered clumps, western Cape to Natal midlands and Transvaal. Keet 930 PRE
- gnidioides L.f. Epiphyte, also lithophytic, wet mountain to dry forest, sporadic, rare, western Cape to Natal midlands and Transvaal. Geldenhuys 509 BOL

SELAGINELLACEAE

Selaginella Beauv.

- kraussiana (Kunze) A.Br. ex Kuhn Fern with creeping rhizome, sometimes epiphytic, moist forest, sporadic, common in clumps in forest gaps, disjunct in western Cape, southern Cape to Natal midlands and Transvaal. Geldenhuys 437 STE

MARATTIACEAE

Marattia Swartz

- fraxinea J.E.Sm. ex J.F.Gmel.
var. salicifolia (Schrad.) C.Chr. Fern with erect rhizome, moist forest near streams, sporadic, rare, Mossel Bay to Natal midlands and Transvaal. Geldenhuys 507 BOL

OSMUNDACEAE

Osmunda L.

- regalis L. Fern with erect rhizome, open stream banks in shade, sporadic, eastern Tsitsikamma, western Cape to Natal midlands and Transvaal. Schelpe & Anthony 1986

Todea Willd. ex Bernh.

- barbara (L.) T. Moore Fern with erect rhizome, stream banks and moist sites, sporadic in plateau forests, widespread in mountain forests, locally common, western Cape to Natal midlands and Transvaal. Donald s.n. SAAS

GLEICHENIACEAE

Gleichenia J.E.Sm.

- polypodioides (L.) J.E.Sm. Fern with creeping rhizome, mountain and moist forest gaps and margin, widespread, common clumps, western Cape to Natal midlands and Transvaal. Theron 1771 PRE

SCHIZAEACEAE

Mohria Swartz

- cafferum (L.) Desv. Fern with erect rhizome, dry forest margin and coastal scrub forest, widespread, scattered clumps, western Cape to Natal and Transvaal. Geldenhuys 555 BOL

CYATHEACEAE

Cyathea J.E. Sm.

- 2 capensis (L.f.) J.E. Sm. Fern with erect rhizome, wet mountain and moist forest, widespread, common to scattered, western Cape to Natal midlands and Transvaal. Geldenhuys 391 BOL

HYMENOPHYLLACEAE

Trichomanes L.pyxidiferum L.

- var. melanotrichum (Schlecht.) Schelpe Epiphyte (low-level) and lithophyte, creeping rhizome, moist forest, widespread, common, Swellendam to Natal and Transvaal. Geldenhuys 965 BOL

Hymenophyllum J.E.Sm.

- capense Schrad. Epiphyte, creeping rhizome, moist to dry forest, western Cape to Natal midlands and Transvaal. Schelpe & Anthony 1986
- marlothii Brause Epiphyte and lithophyte, creeping rhizome, on decaying tree trunks in wet mountain to moist forest, western Cape to Knysna. Schelpe & Anthony 1986
- pellatum (Poir.) Desv. Epiphyte, creeping rhizome, wet mountain to moist forest, sporadic, rare, western Cape to Natal mountains. Geldenhuys 590 BOL
- unbridgense (L.) J.E. Sm. Epiphyte, creeping rhizome, moist to dry forest, widespread, scattered clumps, western Cape to Natal midlands and Transvaal. Geldenhuys 97 PRE

DENNSTAETIACEAE

Blotiella Tryon

- glabra (Bory) Tryon Fern with creeping rhizome, wet mountain to moist forest, widespread, scattered, Mossel Bay to Natal midlands and Transvaal. Von Gadow 12 SAAS
- natalensis (Hook.) Tryon Fern with erect rhizome, moist forest in damp localities, sporadic, Mossel Bay to Natal midlands. Schelpe & Anthony 1986

Histiopteris (Agardh) J. Sm.

- incisa (Thunb.) J. Sm. Fern with creeping rhizome, wet mountain to moist forest, widespread, scattered, western Cape to Natal midlands and Transvaal. Geldenhuys 477 BOL

Pteridium Gled. ex Scop.aquilinum (L.) Kuhn

- subsp. aquilinum Fern with creeping rhizome, forest margin, widespread, scattered clumps, western Cape to Natal and Transvaal. Morze 2061 SAAS

Hypolepis Bernh.

- sparsisora (Schrad.) Kuhn Fern with creeping rhizome, moist forest gaps, widespread, scattered to common, western Cape to Natal midlands and Transvaal. Geldenhuys 390 BOL

VITTARIACEAE

Vittaria J.E. Sm.

- isotifolia Bory Epiphyte, rhizome erect to shortly creeping, moist to dry forest, often on stumps of Ocotea bullata, sporadic, scattered, western Cape to Natal and Transvaal. Geldenhuys 417 PRE

ADIANTACEAE

Adiantum L.

- aethiopicum L. Fern with creeping rhizome, moist forest along stream banks, sporadic, scattered clumps, western to eastern Cape. Geldenhuys 389 BOL
- capillus-veneris L. Fern with creeping rhizome, moist forest, sporadic, scattered clumps, western Cape to Natal and Transvaal. Geldenhuys 862 BOL

Pteris L.

- buchananii Bak. ex Sim Fern with creeping rhizome, moist forest, widespread, scattered clumps, Swellendam to Natal midlands and Transvaal. Schelpe 4302 PRE
- cretica L. Fern with creeping rhizome, moist forest, sporadic, scattered clumps, Swellendam to Natal midlands and Transvaal. Morze 2038 SAAS
- dentata Forssk. Fern with erect rhizome, moist forest, widespread, scattered clumps, western Cape to Natal midlands and Transvaal. Geldenhuys 1321 PRE

Cheilanthes Swartz

- bergiana Schlecht. Fern with erect rhizome, moist to dry forest, widespread, common to scattered clumps, Mossel Bay to Natal and Transvaal. Geldenhuys 399 BOL
- capensis (Thunb.) Swartz Fern with erect rhizome, rhizome shortly creeping, coastal scrub forest, sporadic, scattered clumps, western Cape to Natal mountains. Geldenhuys 295 BOL
- concolor (Langsd. & Fisch) R. & A. Tryon Fern with erect rhizome, dry forest, disjunct at Mossel Bay, rare, eastern Cape to Natal and Transvaal. Schelpe & Anthony 1986
- hirta Swartz Fern with erect rhizome, rhizome shortly creeping, dry forest and scrub forest, widespread, scattered clumps, Mossel Bay to Natal and Transvaal. Geldenhuys 529 BOL
- viridis (Forssk.) Swartz
var. viridis Fern with creeping rhizome, dry forest to scrub forest and forest margin, widespread, scattered, western Cape to Natal and Transvaal. Schelpe & Anthony 1986
- var. macrophylla (Kunze) Schelpe & N.C. Anthony Fern with creeping rhizome, dry forest to scrub forest, sporadic, scattered, Mossel Bay to Natal and Transvaal. Schelpe & Anthony 1986

POLYPODIACEAE

x Pleuropodium Schelpe & N.C. Anthony

- simianum Schelpe & N.C. Anthony Epiphyte, creeping rhizome, moist to dry forest, sporadic, scattered, Knysna to Natal midlands and Transvaal. Schelpe & Anthony 1986

Pleopeltis H.B.K. ex Willd.

- macrocarpa (Bory ex Willd.) Kaulf. Epiphyte and lithophyte, creeping rhizome, moist to dry forest and scrub forest, widespread, scattered, western Cape to Natal and Transvaal. Geldenhuys 403 BOL

schraderi (Mett.) Tardieu-Blot Epiphyte, creeping rhizome, moist forest, sporadic, scattered, Swellendam to Natal midlands and Transvaal. *Geldenhuys 402 BOL*

Microsorium Link

ensiforme (Thunb.) Schelpe Epiphyte (high level) and lithophyte, creeping rhizome, moist to dry forest and scrub forest, sporadic, scattered, western to southern Cape and disjunct locality in Transkei. *Geldenhuys 422 BOL*

ASPLENIACEAE

Asplenium L.

adiantum-nigrum L.

var. *solidum* (Kunze) J.P. Roux Fern with creeping rhizome, moist forest, sporadic, rare, Swellendam to eastern Cape coast. *Acocks 21314 PRE*

aethiopicum (Burm.f.) Becherer Fern with creeping rhizome, often epiphytic or lithophytic, moist to dry forest, sporadic, rare, western Cape to Natal midlands and Transvaal. *Geldenhuys 405 BOL*

erectum Bory ex Willd.

var. *erectum* Fern with erect rhizome, sometimes epiphytic, wet mountain to moist forest, widespread, scattered to rare, western Cape to Natal midlands and Transvaal. *Geldenhuys 536 BOL*

x *flexuosum* Schrad. Fern with erect rhizome, moist situations even in dry forest, associated with *A. rutifolium* and *A. gemmiferum*, sporadic, rare, western Cape to southern Natal and Transvaal. *Compton 14343 PRE*

gemmiferum Schrad. Fern with erect rhizome, also on humus-covered boulders or as low-level epiphyte, moist forest, sporadic, scattered clumps, western Cape to Natal midlands and Transvaal. *Geldenhuys 425 BOL*

lobatum Pappe & Raws. Fern with erect rhizome, also low-level epiphyte, moist forest, sporadic, rare, Nature's Valley to Natal midlands and Transvaal. *Schelpe & Anthony 1986*

lunulatum Swartz Fern with erect rhizome, wet mountain to dry forest, widespread, scattered, George to Natal midlands and Transvaal. *Acocks 21173 PRE*

monanthes L. Fern with erect rhizome, moist to dry forest, sporadic, rare, western Cape to Natal midlands and Transvaal. *Geldenhuys 613 BOL*

platyneuron (L.) Oakes Fern with erect rhizome, moist to dry forest, sporadic, scattered clumps, Swellendam to Natal mountains and southern Transvaal. *Geldenhuys 584 BOL*

protensum Schrad. Fern with erect rhizome, often lithophytic, wet mountain forest, sporadic, scattered, Mossel Bay to Natal midlands and Transvaal. *Geldenhuys 474 BOL*

rutifolium (Berg.) Kunze Fern with erect rhizome, sometimes epiphytic or lithophytic, dry forest and scrub forest, widespread, scattered to common, Swellendam to Natal and Transvaal. *Geldenhuys 418 BOL*

simii Braithwaite & Schelpe Epiphyte, often on old decaying stumps, rhizome erect, moist to dry forest, sporadic, scattered, disjunct from George to Natal and Transvaal. *Geldenhuys 1328 PRE*

theciferum (H.B.K.) Mett.

var. *concinnum* (Schrad.) Schelpe Epiphyte, low to mid-level epiphyte or lithophyte, rhizome erect, moist to dry forest, sporadic, rare, Mossel Bay to Natal midlands and Transvaal. *Schelpe & Anthony 1986*

Ceterach DC.

cordatum (Thunb.) Desv. Fern with erect rhizome, dry forest to scrub forest, including coastal forest, sporadic, rare, western Cape to Natal midlands and Transvaal drier areas. *Geldenhuys 294 BOL*

THELYPTERIDACEAE

Thelypteris Schmid.

bergiana (Schlecht.) Ching Fern with erect rhizome, moist forest, widespread, scattered, western Cape to Natal midlands and Transvaal. *Geldenhuys 611 PRE*

confuens (Thunb.) Morton Fern with creeping rhizome, stream banks, moist forest, occasional, rare, western Cape to Natal midlands and Transvaal. *Van der Merwe 2389 PRE*

queinziana (Mett.) Schelpe Fern with erect rhizome, moist forest, disjunct (Diepwalle forest), rare, Knysna to Natal midlands and Transvaal. *Schelpe Bol 32221 PRE*

interrupta (Willd.) K. Iwats. Fern with creeping rhizome, disjunct along stream banks in dry forest (Bitou River and eastern Tsitsikamma), scattered clumps, disjunct in western and southern Cape, widespread from Transkei to Natal coast and Transvaal. *Geldenhuys 1314 PRE*

knysnaensis N.C. Anthony & Schelpe Fern with erect rhizome, new species collected from moist forest localities in Groenkop forest and Keurboomsrivier Nature Reserve. *Geldenhuys 609 BOL*

pozzii (Lagasca) Morton Fern with erect rhizome, moist forest along stream banks, sporadic, rare, western Cape to Natal midlands and Transvaal. *Geldenhuys 617 PRE*

LOMARIOPSIDACEAE

Elaphoglossum Schott ex J. Sm.

acrostichoides (Hook & Grev.) Schelpe Epiphyte, creeping rhizome, wet to dry forest, sporadic, scattered clumps, western Cape to Natal midlands and Transvaal. *Geldenhuys 404 BOL*

angustatum (Schrad.) Hieron. Epiphyte, creeping rhizome, wet mountain to moist forest, widespread, common, western to southern Cape and disjunct distribution in southern Natal. *Geldenhuys 401 BOL*

ASPIDACEAE

Dryopteris Adans.

inaequalis (Schlecht.) Kuntze Fern with creeping rhizome, moist forest, widespread, rare, Cape Peninsula to Natal midlands and Transvaal. *Geldenhuys 615 PRE*

Polystichum Roth

pungens (Kaulf.) Presl Fern with creeping rhizome, wet mountain to dry forest, widespread, scattered to dense clumps, western Cape to Natal midlands and Transvaal. *Jacobsen 2292 PRE*

Rumohra Raddi

adiantiformis (G.Forst.) Ching Fern with creeping rhizome, moist mountain to dry forest and scrub forest, widespread, scattered to dense clumps, western Cape to southern Natal and Transvaal. *Geldenhuys 388 BOL*

Ctenitis (C.Chr.) C.Chr. ex Tardieu-Blot

lanuginosa (Willd. ex Kaulf.) Copel. Fern with erect rhizome, moist forest, sporadic, scattered, George to Natal midlands and Transvaal. *Geldenhuys 538 BOL*

BLECHNACEAE

Blechnum L.

australe L.

var. *australe* Fern with erect rhizome, moist to dry forest, widespread, scattered to rare, western Cape to Natal mountains and Transvaal. *Giffen 1055 PRE*

capense Burm.f. Fern with erect rhizome, moist to wet forest, widespread, scattered to common clumps, western Cape to Natal mountains and Transvaal. *Acocks 21193 PRE*

giganteum (Kaulf.) Schlecht. Fern with erect rhizome, wet mountain to dry forest, widespread, scattered to common clumps, western Cape to Natal midlands and Transvaal. *Geldenhuys 397 BOL*

punctulatum Swartz

var. *punctulatum* Fern with erect rhizome, wet mountain to dry forest, widespread, scattered to common clumps, western Cape to Natal and southern Transvaal. *Geldenhuys 396 BOL*

tabulare (Thunb.) Kuhn Fern with erect rhizome, wet mountain forest including margin, widespread, scattered to common clumps, western Cape to Natal midlands and Transvaal. *Geldenhuys 94 SAAS*

SPERMATOPHYTES

GYMNOSPERMS

PODOCARPACEAE

13 Podocarpus L'Herit.

16 *falcatus* (Thunb.) R.Br. ex Mirb. Canopy tree, dioecious, drupe with large seed, emergent in moist to dry forest and scrub forest, widespread, scattered, Swellendam to Natal and Transvaal. *Bird 1002 PRE*

18 *latifolius* (Thunb.) R.Br. ex Mirb. Canopy tree, dioecious, large nut on fleshy receptacle, wet mountain to dry forest and scrub forest, widespread, common, western Cape to Natal and Transvaal. *Keet 519 PRE*

CUPRESSACEAE

38 Widdringtonia Endl.

20 *nodiflora* (L.) Powrie Subcanopy tree, serotinous cone with large dry winged seed, mountain forest margin, widespread, scattered, western Cape to Natal midlands and Transvaal. *Keet 1041 PRE*

MONOCOTYLEDONS

POACEAE

55 Microstegium Nees

nudum (Trin.) A.Camus Graminoid, grain with bristles, moist forest gaps, paths and roadside, widespread, scattered groups, Mossel Bay to Natal midlands and Transvaal. *Geldenhuys 490 PRE*

104 Brachiaria Griseb

chusqueoides (Hack.) Clayton Graminoid, grain, coastal scrub forest, sporadic in Goukamma Nature Reserve, rare, eastwards to Natal coast. *Curator Pretoria 168 PRE*

108 Stenotaphrum Trin.

secundatum (Walt.) Kuntze Graminoid, grain, forest margin, river banks and moist gaps, widespread, scattered clumps, western Cape to Natal coast. *Liebenberg 7777 PRE*

115 Oplismenus Beauv.

hirtellus (L.) Beauv. Graminoid, grain with bristles, moist to dry forest and scrub forest, widespread, common to rare, Swellendam to Natal and Transvaal. *Botha 3135 PRE*

undulatifolius (Ard.) Roem. & Schult. Graminoid, grain with bristles, moist to dry forest, sporadic, rare, southern Cape to Natal and Transvaal. *Geldenhuys 374 PRE*

116 Panicum L.

deustum Thunb. Graminoid, grain with bristles, dry forest, widespread, scattered but common in gaps, Swellendam to Natal and Transvaal. *Geldenhuys 373 PRE*

subalbicum Kunth Graminoid, grain with bristles, disturbed forest margin, sporadic, rare, southern Cape to Natal and Transvaal. *Baker 26 PRE*

160 Ehrharta Thunb.

calycina J.E.Sm. Graminoid, grain, moist forest, sporadic, scattered, western Cape to Natal coast. *Van der Merwe 1200 PRE*

erecta Lam. (two varieties often are intermediate) var. *erecta* Graminoid, grain, wet mountain to dry forest, widespread, common to scattered clumps, western Cape to Natal midlands and Transvaal. *Geldenhuys 375 PRE*

var. *natalensis* Stapf Graminoid, grain, dry coastal forest, scattered, Knysna (Lilylei) to Natal coast. *Geldenhuys 424 PRE*

rehmannii Stapf var. *rehmannii* Graminoid, grain, wet mountain to moist forest, widespread, scattered clumps, western Cape to Tsitsikamma. *Geldenhuys 286 PRE*

subsp. *subspicata* (Stapf) Gibbs Russell Graminoid, grain, forest margin, sporadic, scattered, western to eastern Cape. *Ellis 4679 PRE*

243 Agrostis L.

lachnantha Nees Graminoid, grain, forest gaps and roadside, Lily Vlei forest, sporadic, rare, western Cape to Natal and Transvaal. *Geldenhuys 423 PRE*

263 Stipa L.

dregeana Steud. var. *dregeana* Graminoid, grain with bristles, dune forest, sporadic, rare, western to eastern Cape. *Geldenhuys 872 PRE*

var. *elongata* (Nees) Stapf Graminoid, grain with bristles, dry forest gaps, widespread, scattered, western Cape to Natal and Transvaal. *Geldenhuys 377 PRE*

- 283 *Sporobolus* R.Br.
fourcadii Stent Graminoid, grain, forest margin and roads, widespread, scattered, George to southern Natal. *Chippendall 310 PRE*
- 417 *Festuca* L.
africana (Hack.) Clayton Graminoid, grain, moist mountain forest, sporadic in Kop-se-bos, Buffelsnek, rare. *Geldenhuys 1331 PRE*
- 432 *Brachypodium* Beauv.
flexum Nees Graminoid, grain, moist to dry forest, widespread, scattered to common, western Cape to Natal midlands and Transvaal. *Geldenhuys 376 PRE*
- CYPERACEAE
- 456 *Cyperus* Banks & Soland.
glomerata Nees Graminoid, grain, wet riverine scrub, moist forest gaps and slippaths, widespread, scattered clumps, western Cape to southern Natal. *Dahlstrand 510 PRE*
- 459 *Cyperus* L.
tenellus L.f. Graminoid, grain, wet spots along paths in moist forest, widespread, scattered clumps, western to eastern Cape. It has a flattened spikelet, see also *Isolepis ludwigii* and *Juncus capensis*. *Acocqs 21506 PRE*
- 465 *Ficinia* Schrad.
fascicularis Nees Graminoid, grain with bristles, forest margin and disturbed forest understorey, sporadic, rare clumps, George to eastern Cape. *Geldenhuys 679 PRE*
leiocarpa Nees/*sylvatica* Kunth complex Graminoid, grain with bristles, forest gaps and margin and dry scrub forest, sporadic, scattered clumps, Swellendam to eastern Cape. *Geldenhuys 598, 1060, 1213, 1219 PRE*
sp. Graminoid, grain with bristles, dry forest on slope and along river, Soutriwibos, De Vasselot Nature Reserve, locally common. *Geldenhuys 1064, 1070 PRE*
- 468.2 *Isolepis* R.Br.
costata (Boeck.) A.Rich. Graminoid, grain, wet mountain to moist forest and forest margin, widespread, scattered, Mossel Bay to eastern Cape. *Geldenhuys 288 PRE*
ludwigii Kunth Graminoid, grain, wet sites along paths in moist forest, widespread, scattered clumps, western Cape to Natal and Transvaal. It has a rounded spikelet, see also *Cyperus tenellus* and *Juncus capensis*. *Thompson 2716 PRE*
prolifer R.Br. Graminoid, grain, moist forest and forest margin, widespread, scattered, western Cape to Natal and Transvaal. *Van der Merwe 2387 PRE*
- 477.1 *Epischoenus* C.B. Cl.
adnatus Levyns Graminoid, grain with bristles, dry forest margin, widespread, scattered clumps, western Cape to Tsitsikamma. *Geldenhuys 1074 PRE*
gracilis Levyns Graminoid, grain with bristles, moist forest margin, sporadic, scattered clumps, western Cape to Tsitsikamma. *Geldenhuys 959 PRE*
- 515 *Scleria* Berg.
natalensis C.B. Cl. Graminoid, grain, moist forest in gaps and along slip paths, widespread, scattered dense clumps, Nature's Valley to Natal midlands and Transvaal. *Geldenhuys 846 PRE*
- 521 *Schoenoxiphium* Nees
altum Kukkonen Graminoid, grain, monoecious, forest gaps and margin, widespread, scattered to common, new species described from southern Cape. *Geldenhuys 1218 PRE*
lanceum (Thunb.) Kuekenh. Graminoid, grain, monoecious, wet mountain and moist forest, widespread, scattered to common, western Cape to Natal midlands and Transvaal. *Geldenhuys 78 PRE*
lehmannii (Nees) Steud. Graminoid, grain, monoecious, wet mountain to dry forest and scrub forest, widespread, scattered to common, western Cape to southern Natal and Transvaal. *Geldenhuys 420 PRE*
- 525 *Carex* L.
aethiopica Schkuhr Graminoid, grain, monoecious, moist to dry forest, widespread, scattered, western Cape to Natal midlands and Transvaal. *Geldenhuys 962 PRE*
- ARACEAE
- 748 *Zantedeschia* Spreng.
aethiopica (L.) Spreng. Geophyte, monoecious, berry with large seed, moist sites or on tree trunks, widespread, rare, western Cape to Natal and Transvaal. *Bond & Goldblatt 1984*
- COMMELINACEAE
- 896 *Commelina* L.
africana L. Forb, capsule, small seed, dry coastal forest, sporadic, rare, western Cape to Natal and Transvaal. *Geldenhuys 837 STE*
- JUNCACEAE
- 936 *Juncus* L.
capensis Thunb. Graminoid, grain, wet sites along paths in moist forest, widespread, scattered clumps, western Cape to southern Natal. It has a larger, open inflorescence and broader leaves, see also *Cyperus tenellus* and *Isolepis ludwigii*. *Geldenhuys 429 BOL*
lomatophyllus Spreng. Graminoid, grain, marshy sites in moist forest and along streams, widespread, scattered groups, western Cape to Natal and Transvaal. *Geldenhuys 749 PRE*
- LILIACEAE
- 985 *Bulbine* Willd.
latifolia (L.f.) Roem. & Schult. Geophyte, capsule, small seed, dry scrub forest, widespread, rare groups, Swellendam to southern Natal. *Geldenhuys 1073 PRE*
- 985.1 *Trachyantha* Kunth
ciliata (L.f.) Kunth Geophyte, capsule, small seed, coastal dune forest, occasional (in Goukamma Nature Reserve), rare, western to eastern Cape. *Geldenhuys 871 PRE*
- 990 *Chlorophytum* Ker-Gawler
comosum (Thunb.) Jacq. Geophyte, capsule, small seed, dry forest and scrub forest, widespread, scattered groups, western Cape to Natal and Transvaal. *Liebenberg 7954 PRE*
- 1026 *Aloe* L.
arborescens Mill. Soft multi-stemmed shrub, capsule, small seed, spinescent leaves, dry scrub forest, widespread, rare, western Cape to Natal midlands and Transvaal.
ferox Mill. Soft single-stemmed shrub, capsule, small seed, spinescent leaves, dry coastal scrub forest, sporadic at Nature's Valley, Robberg, and Victoria Bay to Mossel Bay, rare, abundant Riviersonderend to Mossel Bay and Humansdorp to southern Natal.
- 1027 *Gasteria* Duval
acinacifolia (Jacq.) Haw Geophyte, capsule, small seed, coastal scrub forest, occasional groups, Knysna to southern Natal. *Geldenhuys 1209 NBG*
- 1046 *Agapanthus* L'Herit
praecox Willd.
subsp. *minimus* (Lindl.) Leighton Geophyte, capsule, small seed, dry forest and scrub forest, along river valleys and on coast, occasional clumps, southern Cape to southern Natal. *Leighton 35/54 NBG*
- 1047 *Tulbaghia* L.
violacea Harv. Geophyte, capsule, small seed, coastal scrub forest, sporadic, scattered groups, Knysna to Port Elizabeth. *Geldenhuys 1204 PRE*
- 1089 *Ornithogalum* L.
dubium Houtt. Geophyte, capsule, small seed, dry scrub forest margin, sporadic, rare groups, western Cape to southern Natal. *Keet 1003 PRE*
longibracteatum Jacq. Geophyte, capsule, small seed, dry forest and scrub forest, along river valleys and on coast, widespread, scattered groups, Swellendam to East London. *Jacobs 7 PRE*
- 1113.1 *Protasparagus* Oberm.
aethiopicus (L.) Oberm. Vine, berry, small seed, spiny stem, dry forest and scrub forest, widespread, scattered, western to eastern Cape. *Geldenhuys 304 PRE*
macowanii (Bak.) Oberm. Soft shrub, berry, small seed, spiny stem, dry scrub forest, widespread, scattered, Swellendam to Natal coast and Transvaal. *Geldenhuys 537 PRE*
setaceus (Kunth) Oberm. Vine, berry, small seed, moist to dry forest and scrub forest, widespread, scattered, Swellendam to Natal and Transvaal. *Jantjies 20 PRE*
- 1113.2 *Myrsiphyllum* Willd.
asparagoides (L.) Willd. Vine, berry, small seed, deciduous to semi-deciduous, dry forest and scrub forest, widespread, scattered, western Cape to Natal and Transvaal. *Geldenhuys 638 PRE*
scandens (Thunb.) Oberm. Vine, berry, small seed, wet mountain to dry forest, widespread, scattered, western Cape to eastern Tsitsikamma. *Van der Merwe 6 PRE*
volubile (Thunb.) Oberm. Vine, berry, small seed, deciduous, known only from coastal scrub forest at Nature's Valley, Wilderness and Klein Brak River, Hermanus to Port Alfred along coast. *Geldenhuys 515 PRE*
- AMARYLLIDACEAE
- 1167 *Haemanthus* L.
albiflos Jacq. Geophyte, berry, large seed, deciduous, moist mountain forest to dry scrub forest, widespread, rare, Mossel Bay to Natal coast. *Van Daalen 167 PRE*
- 1167.1 *Scadoxus* Raf.
punicus (L.) Friis & Nordal Geophyte, berry, large seed, deciduous, moist to dry forest, sporadic, rare, George to Natal and Transvaal. *Bond & Goldblatt 1984*
- 1191 *Cyrtanthus* L.f.
purpureus (Ait.) Traub Geophyte, capsule, small winged seed, moist forest margin, sporadic, scattered, Mossel Bay to Uitenhage. *Bond & Goldblatt 1984*
- HYPOXIDACEAE
- 1230 *Hypoxis* L.
sp. Geophyte, capsule, small seed, moist forest, sporadic, rare. *Geldenhuys 575 SAAS*
- DIOSCOREACEAE
- 1252 *Dioscorea* L.
mundii Bak. Vine, dioecious, capsule, small winged seed, tuberous rootstock, deciduous, moist to dry forest and scrub forest, widespread, scattered, Mossel Bay to eastern Cape. *Geldenhuys 292 PRE*
sylvatica (Kunth) Eckl. Vine, dioecious, capsule, small winged seed, tuberous rootstock, deciduous, sporadic, rare, Keurbooms river to Natal and Transvaal. *Heineken K69 PRE*
- IRIDACEAE
- 1265.1 *Dietsa* Salisb. ex Klatt
iridoides (L.) Sweet ex Klatt Geophyte, capsule, small seed, moist to dry forest and scrub forest, widespread, common to scattered, Swellendam to Natal and Transvaal. *Morze 2033 SAAS*
- 1295 *Aristea* Ait.
ensifolia Muir Geophyte, capsule, small seed, wet mountain forest and moist sites and gaps in moist to dry forest and scrub forest, widespread, scattered, sometimes clumps, Swellendam to eastern Cape. *Horn 2381 PRE*
- 1302 *Ixia* L.
polystachya L. Geophyte, capsule, small seed, deciduous, dry forest margin, fynbos component, sporadic, rare, western to southern Cape.
- 1305 *Melaspheerula* Ker-Gawl.
ramosa (L.) N.E.Br. Geophyte, capsule, small seed, deciduous, coastal forest and scrub forest, sporadic, scattered, western Cape to Tsitsikamma. *Fourcade 1550 PRE*

- 1306.3 *Chasmanthe* N.E.Br.
aethiopica (L.) N.E.Br. Geophyte, capsule, small seed, deciduous, forest and scrub forest margin on sandy soils, sporadic, common in clumps, western to eastern Cape. *Geldenhuys 296 SAAS*
- 1311 *Gladiolus* L.
sempervirens G.J.Lewis Geophyte, capsule, small seed, wet mountain forest margin, occasional, rare, George to Humansdorp (Lewis *et al.* 1972). *Morze 2064 SAAS*
- 1312.2 *Anapalina* N.E. Br.
caffra G. Lewis Geophyte, capsule, small seed, forest margin after fire, fynbos component, widespread, rare, Swellendam to Port Elizabeth. *Geldenhuys 223 BOL*
- STRELITZIACEAE
1319 *Strelitzia* Ait.
32 *alba* (L.f.) Skeels Subcanopy tree, capsule, large seed, moist forest and forest margin, locally common, scattered clumps (Geldenhuys 1986), Knysna to Bloukrans River. *Dyer 5329 PRE*
- ORCHIDACEAE
1408 *Holothrix* L.C.Rich. ex Hook.
parviflora Lindl. Geophyte, capsule, dustlike seed, dry coastal scrub forest, sporadic, scattered, Swellendam to southern Natal. *Acocks 21206 PRE*
villosa Lindl.
var. *villosa* Geophyte, capsule, dustlike seed, moist to dry forest margin, fynbos component, western to southern Cape. *Schlechter 5855 PRE*
- 1422 *Habenaria* Willd.
arenaria Lindl. Geophyte, capsule, dustlike seed, dry forest to scrub forest on dunes, sporadic, scattered, Swellendam to Natal midlands and Transvaal. *Geldenhuys 524 BOL*
- 1422.2 *Bonatea* Willd.
speciosa (L.f.) Willd.
var. *speciosa* Geophyte, capsule, dustlike seed, dry forest to scrub forest, sporadic, scattered, western Cape to Natal and Transvaal. *Van Niekerk 194 PRE*
- 1430 *Satyrion* Swartz
ligulatum Lindl. Geophyte, capsule, dustlike seed, dry forest to scrub forest margin, sporadic, rare, western Cape to southern Natal. *Long 1119 PRE*
- 1432 *Schizodium* Lindl.
inflexum Lindl. Geophyte, capsule, dustlike seed, forest margin, fynbos component, western to southern Cape. *Werdermann 986 PRE*
- 1433 *Erownleea* Harv. ex Lindl.
recurvata Sond. Geophyte, capsule, dustlike seed, forest margin, fynbos component, southern Cape to southern Natal. *Bond & Goldblatt 1984*
- 1436 *Monadenia* Lindl.
bracteata (Swartz) Dur. & Schinz Geophyte, capsule, dustlike seed, forest margin, sporadic, rare, western to southern Cape. *Schlechter 5965 PRE*
- 1437 *Disperis* Swartz
lindleyana Reichb.f. Geophyte, capsule, dustlike seed, moist to dry forest, widespread, scattered, Mossel Bay to Natal midlands and Transvaal. *Theron 955 PRE*
thorncroftii Schltr. Geophyte, capsule, dustlike seed, moist forest, occasional, rare, Knysna (Diepwalle forest) to Natal and Transvaal. *Bos 909 PRE*
- 1556 *Liparis* L.C.Rich.
capensis Lindl. Geophyte, capsule, dustlike seed, in sandy soil in forest, sporadic, rare, southern and southeastern Cape endemic.
remota J. Stewart & Schelpe Geophyte, capsule, dustlike seed, dry forest to scrub forest, sporadic, scattered groups, George to Natal coast and Swaziland. *Geldenhuys 543 BOL*
- 1565 *Polystachya* Hook.
ottoniana Reichb.f. Epiphyte, capsule, dustlike seed, wet mountain to dry forest mostly on *Ocotea bullata* and *Podocarpus falcatus*, sporadic, scattered to rare, Swellendam to Natal and Transvaal. *Geldenhuys 588 BOL*
- 1631 *Calanthe* R.Br.
sylvatica (Thouars) Lindl. Geophyte, capsule, dustlike seed, moist to dry forest including margin, sporadic, rare, George to Natal and Transvaal. *Grant 3257 PRE*
- 1828 *Angraecum* Bory
conchiferum Lindl. Epiphyte, capsule, dustlike seed, dry forest and scrub forest, sporadic, scattered, George to Natal midlands and Transvaal. *Geldenhuys 583 BOL*
pusillum Lindl. (*A. burchellii* Reichb.f. in Rolfe 1913) Epiphyte, capsule, dustlike seed, moist to dry forest, widespread, common, southern Cape.
pusillum Lindl. (*A. pusillum* Lindl. in Rolfe 1913) Epiphyte, capsule, dustlike seed, moist to dry forest, sporadic, scattered groups, Swellendam to Natal midlands and Transvaal. *Geldenhuys 1214 PRE*
sacchiferum Lindl. Epiphyte, capsule, dustlike seed, moist to dry forest and scrub forest, widespread, scattered, Swellendam to Natal midlands and Transvaal. *Geldenhuys 1327 PRE*
- 1828.1 *Tridactyle* Schltr.
bicaudata (Lindl.) Schltr. Epiphyte, capsule, dustlike seed, moist to dry forest and scrub forest, widespread, common, Mossel Bay to Natal coast and Transvaal. *Geldenhuys 284 BOL*
- 1835 *Cyrtorchis* Schltr.
arcuata (Lindl.) Schltr. Epiphyte, capsule, dustlike seed, moist to dry forest, widespread, common, Mossel Bay to Natal and Transvaal. *Linder 1919 PRE*
- 1837 *Mystacidium* Lindl.
capense (L.f.) Schltr. Epiphyte, capsule, dustlike seed, moist to dry forest, widespread, common, Mossel Bay to Natal and Transvaal. *Geldenhuys 440 BOL*
- DICOTYLEDONS
PIPERACEAE
1862 *Piper* L.
capense L.f. Soft shrub, drupe, small seed, wet mountain to moist forest, sporadic, scattered groups, Swellendam to Natal midlands and Transvaal. *Taylor 749 SAAS*
- 1866 *Peperomia* Ruiz & Pav.
retusa (L.f.) A. Dietr. Epiphyte, also lithophytic and terrestrial, minute nuts on fleshy receptacle, moist to dry forest, sporadic, scattered clumps, western Cape to Natal midlands and Transvaal. *Geldenhuys 1097 PRE*
tetraphylla (G. Forst.) Hook. & Arn. Epiphyte, minute nuts on fleshy receptacle, wet to dry forest, widespread, common, Swellendam to Natal midlands and Transvaal. *Geldenhuys 1095 PRE*
- MYRICACEAE
1874 *Myrica* L.
cordifolia L. Woody shrub, dioecious, drupe, small seed, coastal scrub forest margin, fynbos component, widespread, scattered, western to eastern Cape. *Geldenhuys 301 PRE*
humilis Cham. & Schlecht. Woody shrub, dioecious, drupe, small seed, mountain forest margin, fynbos component, widespread, scattered, western to eastern Cape. *Van Breda 1134 PRE*
quercifolia L. Woody shrub, dioecious, drupe, small seed, coastal scrub forest margin, marshy areas, sporadic, rare, western Cape to southern Natal. *Retief 428 PRE*
- 38 *serrata* Lam. Woody shrub, dioecious, drupe, small seed, forest margin, widespread, scattered, western Cape to Natal and Transvaal. *Geldenhuys 303 PRE*
- ULMACEAE
1898 *Celtis* L.
39 *africana* Burm.f. Canopy tree, monoecious, berry, small seed, deciduous, dry forest to scrub forest, sporadic, scattered but common in dune forest near Sedgefield, western Cape to Natal and Transvaal. *Geldenhuys 351 PRE*
- MORACEAE
1961 *Ficus* L.
49 *burt-davyi* Hutch. Woody shrub, often epiphytic on emergent trees or lithophytic, monoecious, fleshy fig with small nuts, moist to dry forest and scrub forest, sporadic, scattered to rare, Mossel Bay (Gouritz River) to Natal coast. *Martloth 7432 PRE*
- 50 *sax* Forssk. Canopy tree, monoecious, fleshy fig with small nuts, deciduous, moist to dry forest often along shale bands, sporadic, scattered to rare, George to Natal and Transvaal. *Rodin 1313 PRE*
- URTICACEAE
1980 *Laportea* Gaudich
grossa (Wedd.) Chew Forb, monoecious, small nut, stinging hairs on leaves cause irritation, moist to dry forest, sporadic, scattered groups, George to southern Natal and Transvaal. *Bond & Goldblatt 1984*
peduncularis (Wedd.) Chew
subsp. *peduncularis* Forb, monoecious, small nut, stinging hairs on leaves cause irritation, moist to dry forest, sporadic, scattered groups, Mossel Bay to Natal and Transvaal. *Botha 531 PRE*
- 2013 *Droquelia* Gaudich
iners (Forssk.) Schweine
subsp. *burchellii* (N.E. Br.) Friis & Wilmot-Dear Forb, monoecious, small nut, moist sites in dry forest, widespread, rare groups, Swellendam to eastern Cape. *Geldenhuys 745 PRE*
- 2014 *Didymodoxa* Wedd.
capensis (L.f.) Friis & Wilmot-Dear Forb, monoecious, small nut, coastal forest, scattered, western Cape to Tsitsikamma. *Bond & Goldblatt 1984*
- PROTEACEAE
2034 *Faurea* Harv.
74 *macnaughtonii* Phil. Canopy tree, large nut with hairs, moist to dry parts of Lily Vlei forest, disjunct, locally common (Phillips 1927), Knysna to Natal and Transvaal. *Keet 56626 PRE*
- 2035 *Protea* L.
93 *mundii* Klotzsch Woody shrub, collective fruit with large achenes, moist to dry forest margin, fynbos component, widespread, scattered, southwestern Cape and George to Port Elizabeth. *Gillet 1278 PRE*
- 2037 *Leucadendron* R.Br.
78.1 *conicum* (Lam.) I. Williams Woody shrub, dioecious, collective fruit with samara, mountain forest margin, fynbos component, widespread, scattered groups, Riversdal to Port Elizabeth. *Dahlstrand 1286 PRE*
- 81 *eucalyptifolium* Buek ex Meisn. Woody shrub, dioecious, collective fruit with samara, forest margin, fynbos component, widespread, scattered groups, Montagu to Grahamstown. *Hugo 1308 PRE*
- LORANTHACEAE
2074 *Tapinanthus* Blume
sp. Parasitic woody shrub on branches, monoecious, small berry, moist forest on *Maytenus peduncularis*, Groenkop forest near George. *Geldenhuys 371 SAAS*
- VISCACEAE
2093 *Viscum* L.
obscurum Thunb. Parasitic woody shrub on branches, monoecious, small berry, common in *Virgilia* stands and forest margin, widespread, scattered, Swellendam to Natal midlands and Transvaal. *Geldenhuys 371 PRE*
rotundifolium L.f. Parasitic woody shrub on branches, monoecious, small berry, dry scrub forest, sporadic, rare, western Cape to Natal and Transvaal. *Geldenhuys 517 PRE*

SANTALACEAE

- 2104 *Colpocon* Berg.
99 *compressum* Berg. Woody shrub, parasitic on roots, drupe, large seed, dry forest and scrub forest margin, widespread, scattered, western Cape to Natal and Transvaal. *Botha 3081 PRE*

POLYGONACEAE

- 2195 *Rumex* L.
sagittatus Thunb. Vine, small winged nut, tuberous rootstock, dry forest and scrub forest margin, widespread, scattered, western Cape to Natal midlands and Transvaal. *Von Gadow 17 SAAS*
- 2201 *Polygonum* L.
salicifolium Brouss ex Willd. Forb, small winged nut, moist sites in forest, widespread, scattered clumps, western Cape to Natal coast. *Geldenhuys 746 PRE*

AMARANTHACEAE

- 2299 *Amaranthus* L.
thunbergii Moq. Forb, small membranous utricle with bristles, coastal scrub forest, occasional, rare, western Cape to Natal and Transvaal. *Mogg 11862 PRE*
- 2309.2 *Nelsia* Schinz.
quadrangula (Engl.) Schinz Forb, small membranous utricle with bristles, dry forest, single record from farm Rozenhof, eastern Tsitsikamma to eastern Cape. *Geldenhuys 1094 PRE*

2314 *Pupalia* Juss.

- atropurpurea* Moq. Forb, small membranous utricle with bristles, dry scrub forest, sporadic, scattered, southern Cape to Natal coast. *Taylor 4437 PRE*

PHYTOLACCACEAE

- 2330 *Phytolacca* L.
americana L. Soft shrub, monoecious, berry, small seed, forest margin and gaps, widespread, rare groups, western Cape to southern Natal. *Morze 2283 PRE*
- oclandra* L. Soft shrub, monoecious, berry, small seed, forest margin and gaps, sporadic, rare groups, western Cape to Natal midlands and Transvaal. *Botha 3545 PRE*

AIZOACEAE

- 2389 *Pharnaceum* L.
thunbergii Adamson Forb, capsule, small seeds, coastal dune forest, sporadic, scattered, southern Cape to Natal coast. *Geldenhuys 864 PRE*
- 2403 *Tetragonia* L.
glauca Fenzl Vine, small winged nut, coastal dune forest, sporadic, scattered, western to southern Cape. *Geldenhuys 873 PRE*

MESEMBRYANTHEMACEAE

- 2405.9 *Aptenia* N.E. Br.
cordifolia (L.f.) Schwant.
var. *cordifolia* Forb, fleshy capsule, small seeds, dry scrub forest along Keurbooms river, sporadic, scattered groups, Plettenberg Bay to Natal and Transvaal. *Geldenhuys 1324 PRE*

CARYOPHYLLACEAE

- 2452 *Drymaria* Willd. ex Roem. & Schult.
cordata (L.) Willd.
subsp. *diantra* (Blume) J. Duke Forb, capsule, small seeds, moist forest, sporadic, scattered groups, George to southern Natal. *Geldenhuys 1319 PRE*
- 2490 *Silene* L.
belligoides Sond. Forb, capsule, small seeds, coastal scrub forest, sporadic, rare, western Cape to Natal and Transvaal. *Heineken 245 PRE*
- crassifolia* L. Forb, capsule, small seeds, dune forest margin, fynbos component, sporadic, scattered, western to southern Cape. *Taylor 4442 PRE*
- primuliflora* Eckl. & Zeyh. Forb, capsule, small seeds, dune forest margin, fynbos component, sporadic, scattered, southern Cape to southern Natal. *Von Niekerk 230 PRE*
- undulata* Ait. Forb, capsule, small seeds, coastal scrub forest margin, sporadic, scattered, western Cape to Natal. *Theron 2099 PRE*

RANUNCULACEAE

- 2541.1 *Knowltonia* Salisb. (see Rasmussen 1979)
cordata H. Rasm. Forb, small berry, dry coastal scrub forest margin, sporadic, scattered to rare, southern to eastern Cape. *Schlechter 2388 BOL*
- filia* (L.f.) Dur. & Schinz
subsp. *scaposa* H. Rasm. Forb, small berry, dry forest margin, widespread, rare, southern Cape. *Bos 842 STE*
- vesicatoria* (L.f.) Sims
subsp. *humilis* H. Rasm. Forb, small berry, coastal scrub forest, western to eastern Cape. *Acocks 21210 PRE*
- subsp. *grossa* H. Rasm. Forb, small berry, moist to dry forest, widespread, scattered, southern Cape. *Marsh 1308 PRE*
- 2542 *Clematis* L.
brachiata Thunb. Liane, small achene, wet mountain to dry forest, widespread, scattered to common, western Cape to Natal and Transvaal. *Marloth 12714 PRE*

2546 *Ranunculus* L.

- multifidus* Forssk. Forb, small achene with bristles, moist to dry forest in moist places, widespread, scattered, western Cape to Natal and Transvaal. *Geldenhuys 574 STE*

MENISPERMACEAE

- 2574 *Cissampelos* L.
capensis L.f. Vine, dioecious, small drupe, coastal dry forest to scrub forest, widespread, common, western Cape to Bitou river valley, Plettenberg Bay. *Geldenhuys 316 PRE*
- torulosa* E.Mey. ex Harv. Vine, dioecious, small fleshy drupe, moist to dry forest, widespread, scattered, Mossel Bay to Natal and Transvaal. *Geldenhuys 472 PRE*

LAURACEAE

- 2788 *Ocotea* Aubl.
118 *bullata* (Burch.) Baill. Canopy tree, monoecious, semi-fleshy drupe, large seed, common in wet mountain forest, scattered in moist to dry forest, widespread, western Cape to Natal midlands and Transvaal. *Bird 1601 SAAS*
- 2825 *Cassytha* L.
ciligata Nees Parasitic vine on branches, small fruit in fleshy receptacle, forest margin often on *Virgilia*, sporadic, western Cape to Natal midlands and Transvaal. *Laughton s.n. SAAS*

BRASSICACEAE

- 2883 *Lepidium* L.
ecklonii Schrad. Forb, capsule, small seed, coastal forest margin, Ratelsbos (Fourcade 1941), western to eastern Cape.
- 2966 *Cardamine* L.
africana L. Forb, capsule, small seed, dry forest and scrub forest, widespread, scattered, often small groups, western Cape to Natal midlands and Transvaal. *Geldenhuys 684 PRE*

CAPPARACEAE

- 3101 *Capparis* L.
sepiaria L.
130 var. *citrifolia* (Lam.) Toelken Scrambling liane, berry, large seed, spines at leave base on stem, moist to dry forest and scrub forest, widespread, scattered, Swellendam to Natal coast. *Geldenhuys 269 PRE*

3112 *Maerua* Forssk.

- 134 *racemulosa* (DC.) Gilg & Ben. Woody shrub, berry, large seed, dry forest and scrub forest, widespread, rare, George to Natal coast. *Geldenhuys 262 PRE*

CRASSULACEAE

- 3164 *Cotyledon* L.
orbiculata L. Soft shrub, capsule, small seed, dry scrub forest margin, widespread, scattered, western Cape to southern Natal. *Acocks 21541 PRE*
- 3168 *Crassula* L.
cordata Thunb. Forb, capsule, small seed, dry scrub forest, sporadic, scattered, George to Natal. *Van Zinderen Bakker 316 PRE*
- ericoides* Harv. Forb, capsule, small seed, coastal scrub forest margin, fynbos component, sporadic, scattered groups, western Cape to Natal. *Breyer 23299 PRE*
- lactea* Soland. Forb, capsule, small seed, dry scrub forest along Keurbooms river, scattered groups, Riversdal to eastern Cape. *Heineken K112 PRE*
- orbicularis* L. Forb, capsule, small seed, dry scrub forest, widespread, scattered groups, western Cape to Natal. *Geldenhuys 542 BOL*
- pellucida* L.
subsp. *alsinoides* (Hook.f.) Toelken Forb, capsule, small seed, common in moist sites in moist forest, sporadic, western Cape to southern Natal. *Geldenhuys 436 STE*
- subsp. *marginalis* (Dryand. in Ait.) Toelken Forb, capsule, small seed, dry scrub forest, sporadic, scattered, southern to eastern Cape. *Hugo 2016 PRE*
- perforata* Thunb. Forb, capsule, small seed, dry scrub forest, sporadic, scattered, western Cape to southern Natal.
- rubricaulis* Eckl. & Zeyh. Forb, capsule, small seed, dry scrub forest, widespread, scattered in rocky sites, Swellendam to eastern Cape. *Geldenhuys 528 BOL*
- sarmentosa* Harv. Forb, capsule, small seed, moist sites along forest margin, scattered groups, George to southern Natal. *Bayliss 1450 PRE*
- spatulata* Thunb. Forb, capsule, small seed, understorey in moist forest on shale, sporadic, scattered groups, Mossel Bay to eastern Cape. *Geldenhuys 1087 PRE*
- subulata* L.
var. *subulata* Forb, capsule, small seed, dry coastal dune scrub forest, sporadic, scattered, western to eastern Cape. *Acocks 21502 PRE*

PITTOSPORACEAE

- 3252 *Pittosporum* Banks ex Soland.
139 *viridiflorum* Sims Canopy tree, capsule, small sticky orange seed, dry forest to scrub forest, widespread, scattered, Swellendam to Natal and Transvaal. *Linger 60 PRE*

CUNONIACEAE

- 3269 *Platylophus* D. Don
141 *trifolius* (L.f.) D. Don Canopy tree, small bladdered capsule, wet mountain to moist forest, widespread, common, western Cape to eastern Tsitsikamma. *Bos 886 PRE*
- 3275 *Cunonia* L.
140 *capensis* L. Canopy tree, capsule, small seed, widespread, abundant in wet mountain forest, rare in moist sites in moist forest, western Cape to northern Natal. *Keet 506 PRE*

BRUNIACEAE

- 3294 *Berzella* Brongn.
intermedia (Dietr.) Schlecht. Woody shrub, collective fruit with small nuts, moist forest margin, fynbos component, widespread, scattered, western to eastern Cape. *Codd 3594 PRE*

HAMAMELIDACEAE

- 3311 *Trichocladus* Pers.
142 *crinitus* (Thunb.) Pers. Woody shrub, monoecious, ballistic capsule, large seed, abundant in medium-moist to dry forest, scattered in moist forest and dry scrub forest, widespread, Swellendam to Natal coast. *Geldenhuys 289 PRE*
- 143 *ellipticus* Eckl. & Zeyh. ex Walp. Woody shrub, monoecious, ballistic capsule, large seed, sporadic small, dense patches in Gouna and Goudveld forests, scattered, Knysna to Natal midlands and Transvaal. *Geldenhuys 1334 PRE*

ROSACEAE

- 3353 *Rubus* L.
pinnatus Willd. Scrambler, drupe, small seed, spinescent, moist forest gaps and margin, widespread, scattered, western Cape to Natal midlands and Transvaal. *Mogg 11783 PRE*

- 3375 *Alchemilla* L.
capensis Thunb. Forb, achenecetum with receptacle, small seed, moist to dry forest margin, widespread, scattered clumps, western to eastern Cape. *Geldenhuis 432 BOL*
- 3396 *Prunus* L.
147 *africana* (Hook.f.) Kalkm. Canopy tree, drupe, large seed, scattered in Bloukrans river gorge (Geldenhuis 1981), western Tsitsikamma to Natal midlands and Transvaal. *Geldenhuis 282 PRE*
- FABACEAE
3506 *Schotia* Jacq.
afra (L.) Thunb.
201 var. *afra* Canopy tree, pod, large arillate seed, coastal scrub forest, disjunct in Keurbooms River, Klein Brak River and thicket near Gouritz River, scattered, Riversdale coast to eastern Cape including Little Karoo and Valley Bushveld. *Geldenhuis 1315 PRE*
204 *latifolia* Jacq. Canopy tree, pod, large arillate seed, dry scrub forest in Plettenberg Bay area, scattered, southern Cape to southern Natal and northern Transvaal. *Geldenhuis 1326 PRE*
- 3607 *Caipurnia* E. Mey.
aurea (Ait.) Benth.
220 subsp. *sylvatica* (Burch.) Brummitt Woody shrub, pod, small seed, dry forest, Bitou River valley, scattered, southern to eastern Cape. *Geldenhuis 1317 PRE*
- 3608 *Virgilia* Poir. (Van Wyk 1986)
221.1 *divaricata* Adamson Canopy tree, pod, large seed, common in pure stands in forest margin, widespread, endemic George to Grahamstown. *Van Wyk 929 FFS*
221 *orooides* (Berg.) Salter subsp. *ferruginea* B.-E. Van Wyk Canopy tree, pod, large seed, common in pure stands in forest margin, endemic Mossel Bay to George. *Van Wyk 416 FFS*
- 3669 *Crotalaria* L.
224.1 *capensis* Jacq. Woody shrub, pod, large seed, dry forest and coastal forest margin, sporadic, scattered, western Cape to Natal and Transvaal. *Kapp 14 PRE*
- 3673 *Argyrobolium* Eckl. & Zeyh.
tomentosum (Andr.) Druce Woody shrub, pod, small seed, dry forest and scrub forest, sporadic, scattered, Knysna to Natal midlands and Transvaal. *Geldenhuis 430 PRE*
- 3703 *Psoralea* L.
affinis Eckl. & Zeyh. Woody shrub, pod, large seed, forest margin, fynbos component, widespread, scattered, western to eastern Cape. *Liebenberg 6363 PRE*
cordata Thunb. Woody shrub, pod, large seed, forest margin, sporadic, scattered, western to eastern Cape. *Bos 797 PRE*
225.8 *pinnata* L. Woody shrub, pod, large seed, forest margin in moist sites, widespread, scattered, western Cape to Natal and Transvaal. *Hugo 1306 PRE*
- 3703.4 *Othobium* C.H. Stirton
fruticans (L.) Druce Woody shrub, pod, large seed, dry forest margin, sporadic, scattered, western to eastern Cape. *Goldblatt 7441 PRE*
- 3807 *Cesmodium* Desv.
repandum (Vahl) DC. Woody shrub, pod, small seed, moist to dry forest and scrub forest, sporadic, rare, George to Natal and Transvaal. *Botha 3118 PRE*
- 3861 *Cumasia* DC.
villosa DC.
var. *villosa* Vine, pod, small seed, moist forest, sporadic, rare, Knysna to Natal and Transvaal. *Geldenhuis 491 PRE*
- 3870 *Erythrina* L.
242 *caftra* Thunb. Canopy tree, pod, large red seed, dry coastal forest and moist forest on coastal platform, occasional (Driefontein, Blueliliesbush and possibly Nature's Valley), rare, eastern Tsitsikamma to Natal coast. *Geldenhuis 1202 PRE*
- 3897 *Rhynchosia* Lour.
caribaea (Jacq.) DC. Vine, pod, small seed, coastal scrub forest, sporadic, rare, George to Natal coast and Transvaal. *Geldenhuis 552 PRE*
- 3909.1 *Dipogon* Liebm.
lignosus (L.) Verdc. Vine, pod, small seed, dry forest margin and gaps, widespread, scattered clumps, western Cape to Natal and Transvaal. *Thompson 854 PRE*
- GERANIACEAE
3928 *Felargonium* L'Herit.
cordifolium (Cav.) Curtis Soft shrub, mericarp, small bristled achene, moist forest margin, widespread, scattered, Bredasdorp to King Williams Town. *Story 3112 PRE*
papilionaceum (L.) L'Herit. Soft shrub, mericarp, small bristled achene, moist forest margin, sporadic, rare, western to eastern Cape. *Thode A757 PRE*
zonale (L.) L'Herit. Soft shrub, mericarp, small achene, dry forest and scrub forest margin (moist sites), widespread, scattered groups, western Cape to southern Natal. *Linger 44 PRE*
- OXALIDACEAE
3936 *Oxalis* L.
incarnata L. Forb with bulb, small capsule, moist to dry forest, widespread, scattered, western to eastern Cape. *Geldenhuis 431 PRE*
stellata Eckl. & Zeyh.
var. *gracillor* Salter Forb with bulb, small capsule, dry coastal scrub forest along paths in De Vasselot Nature Reserve, western to eastern Cape. *Geldenhuis 548 BOL*
- ZYGOPHYLLACEAE
3965 *Zygophyllum* L.
morgsana L. Soft shrub, often a scrambler, large winged capsule, coastal scrub forest, widespread, locally common, western Cape to Alexandria. *Wright 89 SAAS*
- RUTACEAE
3991 *Zanthoxylum* L.
253 *capense* (Thunb.) Harv. Subcanopy tree, monoecious, capsule, small seed, spines on stem and branches, dry scrub forest, sporadic, scattered, Riversdale coast to Natal coast and Transvaal. *Geldenhuis 232 PRE*
254 *davyi* (Verdoorn) Waterm. Canopy tree, monoecious, capsule, small seed, corky knobs on stem, moist to dry forest, widespread, rare, Knysna to Transvaal, rarely Natal coast. *Geldenhuis 497 PRE*
- 4035 *Calodendrum* Thunb.
256 *capense* (L.f.) Thunb. Canopy tree, capsule, large seed, deciduous, dry forest, widespread, rare, Swellendam to Natal coast and Transvaal. *Kapp 105 PRE*
- 4037 *Agathosma* Willd.
qvata (Thunb.) Pillans Woody shrub, ballistic capsule, small seed with elaiosome, forest margin, fynbos component, widespread, scattered, western Cape to southern Natal. *Keet 1065 PRE*
- 4046 *Empleurum* Ait.
unicapsulare (L.f.) Skeels Woody shrub, ballistic capsule, small seed with elaiosome, forest margin in moist sites, fynbos component, widespread, scattered, western to eastern Cape. *Keet 1064 PRE*
- 4076 *Vepres* Comm. ex A.Juss.
261 *lanceolata* (Lam.) G. Don Canopy tree, dioecious, fleshy drupe or capsule, small seed, semi-deciduous, dry forest, widespread, rare, Swellendam to Natal coast and Transvaal. *Williams 3532 PRE*
- 4091 *Clausena* Burm.f.
265 *anisata* (Willd.) Hook.f. ex Benth. Subcanopy tree, fleshy drupe, large seed, dry scrub forest, widespread, rare, Riversdale coast to Natal coast and Transvaal. *Geldenhuis 313 PRE*
- MELIACEAE
4193 *Ekebergia* Sparrm.
298 *capensis* Sparrm. Canopy tree, dioecious, berry, large seed, semi-deciduous, moist to dry forest, widespread, rare, western Cape to Natal coast and Transvaal. *Taylor 2913 PRE*
- POLYGALACEAE
4273 *Polygala* L.
fruticosa Berg. Woody shrub, membranous capsule, small seed, moist to dry forest margin and gaps, sporadic, scattered, western Cape to Natal coast. *Van Daalen 4 SAAS*
myrtifolia L. Woody shrub, membranous capsule, small seed, moist to dry forest margin and gaps, widespread, scattered, western Cape to southern Natal. *Du Plessis s.n. SAAS*
- EUPHORBIACEAE
4286 *Andrachne* L.
305 *ovalis* (Sond.) Muell. Arg. Woody shrub, monoecious, capsule, small seed, moist to dry forest and scrub forest in gaps, paths and margin, widespread, scattered to locally common, George to Natal midlands and Transvaal. *Bos 853 PRE*
- 4291 *Lachnostylis* Turcz.
307 *hirta* (L.f.) Muell. Arg. Subcanopy tree, dioecious, capsule, large seed, dry forest and scrub forest, widespread, scattered groups, Swellendam to southern Natal. *Geldenhuis 66 SAAS*
- 4370 *Adenocline* Turcz.
acuta (Thunb.) Baill. Vine, dioecious, capsule, small seed, dry forest and scrub forest, widespread, rare, western Cape to Natal midlands and Transvaal. *Geldenhuis 861 PRE*
- 4372 *Leidesia* Muell.-Arg.
procumbens (L.) Prain Forb, monoecious, capsule, small seed, moist sites in dry forest, sporadic, scattered groups, western Cape to Natal midlands and Transvaal. *Geldenhuis 669 PRE*
- 4407 *Acalypha* L.
capensis (L.f.) Prain & Hutch. Forb, monoecious, capsule, small seed, dry forest to scrub forest margin, widespread, scattered clumps, western to eastern Cape. *Geldenhuis 290 PRE*
ecklonii Baill. Forb, monoecious, capsule, small seed, moist to dry forest, collected from elephant faeces in forest, southern Cape to Natal coast. *Schlechter 2350 PRE*
- 4416 *Tragia* L.
sp. Vine, monoecious, capsule, small seed, dry forest margin, Groenkop forest, rare. *Jacobs 13 PRE*
- 4416.1 *Ctenomeria* Harv.
capensis (Thunb.) Harv. ex Sond. Vine, monoecious, capsule, small seed, moist to dry forest, sporadic, rare, Mossel Bay to Natal and Transvaal. *Keet 701 PRE*
- 4448 *Clusia* L.
affinis Sond. Woody shrub, dioecious, capsule, small seed with elaiosome, forest margin, gaps and understorey, widespread, scattered, western Cape to Natal midlands and Transvaal. *Keet 717 PRE*
alaternoides L. Soft shrub, dioecious, capsule, small seed with elaiosome, forest margin, sporadic, scattered, western Cape to Natal. *Phillips 55 PRE*
laxa Eckl. ex Sonder Soft shrub, dioecious, capsule, small seed with elaiosome, mountain forest margins, sporadic, rare, Riversdal to Natal midlands and Transvaal. *Van Wyk 218 PRE*

- pulchella* L. Woody shrub, dioecious, capsule, small seed with elaiosome, wet mountain to dry forest and scrub forest understorey, gaps and margin, widespread, scattered to common, western Cape to Natal midlands and Transvaal. *Botha 2267 PRE*
- 4478 *Excoecaria* L.
simii (Kuntze) Pax Woody shrub, dioecious, capsule, large seed, dry forest and scrub forest, widespread, scattered to locally common, George to Natal coast. *Geldenhuys 262 PRE*
- 4498 *Euphorbia* L.
kraussiana Bernh.
var. *kraussiana* Soft shrub, monoecious, capsule, small seed, dry forest to scrub forest, sporadic, rare, Mossel Bay to Natal and Transvaal. *Geldenhuys 493 PRE*
- ANACARDIACEAE
4586 *Loxostylis* Spreng. f. ex Reichb.
365 *alata* A. Sprengel ex Reichb. Canopy tree, dioecious, small drupe, dry scrub forest, rare, eastern Tsitsikamma (Kromme river) to southern Natal. Not collected, but identification based on *Geldenhuys 275 PRE* from Baviaanskloof.
- 4587 *Laurophyllus* Thunb.
366 *capensis* Thunb. Woody shrub, dioecious, large samara, moist forest margin, sometimes in forest gaps, widespread, scattered, Grabouw to Uitenhage. *Wright 83 SAAS*
- 4594 *Rhus* L.
380 *chirindensis* Bak.f. Canopy tree, dioecious, small semi-fleshy drupe, deciduous, dry forest and scrub forest, widespread, rare groups, Swellendam (Grootvadersbosch) to Natal coast and Transvaal. *Von Breitenbach 1128 SAAS*
380.1 *crenata* Thunb. Woody shrub, dioecious, small semi-fleshy drupe, coastal forest margin and scrub forest, widespread, common, western to eastern Cape. *Geldenhuys 227 PRE*
383.2 *glauca* Thunb. Woody shrub, dioecious, small semi-fleshy drupe, coastal scrub forest, sporadic, scattered, western to eastern Cape. *Geldenhuys 521 PRE*
388 *longispina* Eckl. & Zeyh. Woody shrub, scandent, dioecious, small semi-fleshy drupe, dry scrub forest, sporadic, rare, Mossel Bay to eastern Cape. *Geldenhuys 547 PRE*
388.1 *lucida* L. Subcanopy tree, dioecious, small semi-fleshy drupe, dry forest and scrub forest, including gaps and margin, widespread, scattered, western Cape to Natal midlands and Transvaal. *Geldenhuys 541 PRE*
refracta Eckl. & Zeyh. Woody shrub, dioecious, small semi-fleshy drupe, dry scrub forest, Bietou river valley, rare, Plettenberg Bay to eastern Cape. *Geldenhuys 1311 PRE*
393.1 *rehmanniana* Engl. Woody shrub, dioecious, small semi-fleshy drupe, dry forest and scrub forest margin, Bietou river valley, rare, Swellendam to Natal coast and Transvaal. *Geldenhuys 1312 PRE*
395 *undulata* Jacq. Woody shrub, dioecious, small semi-fleshy drupe, dry forest and scrub forest margin near coast, sporadic, scattered, mostly drier parts of southern Africa. *Geldenhuys 315 PRE*
- AQUIFOLIACEAE
4614 *Ilex* L.
397 *mitis* (L.) Radlk. Canopy tree, monoecious, berry, small seed, rare in wet mountain forest, scattered in moist forest, often along streams, widespread, western Cape to Natal and Transvaal. *Bird 1447 SAAS*
- CELASTRACEAE
4626 *Maytenus* Molina
acuminata (L.f.) Loes.
398 var. *acuminata* Subcanopy tree, monoecious to bisexual, capsule, small arillate seed, dry forest and scrub forest, often margin, widespread, scattered, western Cape to Natal and Transvaal. *Keet 713 PRE*
399 *heterophylla* (Eckl. & Zeyh.) N.K.B. Robson Subcanopy tree, monoecious to bisexual, capsule, small arillate seed, spinescent, moist to dry forest and scrub forest, widespread, scattered, western Cape to Natal and Transvaal. *Geldenhuys 602 STE*
399.3 *nemorosa* (Eckl. & Zeyh.) Marais Subcanopy tree, monoecious to bisexual, capsule, small arillate seed, spinescent, moist to dry forest, widespread, scattered to common, Mossel Bay to Natal coast. *Geldenhuys 963 PRE*
401 *peduncularis* (Sond.) Loes. Canopy tree, monoecious to bisexual, capsule, large arillate seed, moist to dry forest and scrub forest, widespread, scattered to rare, George to Natal and Transvaal. *Taylor 7724 PRE*
401.1 *procumbens* (L.f.) Loes. Woody shrub, monoecious to bisexual, capsule, small arillate seed, dry scrub forest on dunes, sporadic, scattered, Riversdal to Natal coast. *Geldenhuys 305 PRE*
403 *undata* (Thunb.) Blakelock Subcanopy tree, monoecious to bisexual, capsule, small arillate seed, rare - one dubious record for Nature's Valley, eastwards to Natal and Transvaal. *Bower 315 PRE*
- 4628 *Putterlickia* Endl.
403.1 *pyracantha* (L.) Szyszyl. Woody shrub, capsule, small arillate seed, spinescent, dry scrub forest, widespread, scattered to rare, Cape Peninsula to Natal and Transvaal. *Geldenhuys 1206 PRE*
- 4630 *Pterocelastrus* Meisn.
408 *rostratus* Walp. Subcanopy tree, fleshy capsule, small arillate seed, wet mountain forest, widespread west of George, scattered to common, western Cape to George, eastern Cape to Natal mountains. *Geldenhuys 631 PRE*
409 *tricuspidatus* (Lam.) Sond. Canopy tree, fleshy capsule, small arillate seed, moist to dry forest and scrub forest, widespread, rare to common, western Cape to Natal coast. *Morze 2147 SAAS*
- 4641 *Cassine* L.
410 *aethiopica* Thunb. Canopy tree, drupe, small seed, dry forest and scrub forest, widespread, scattered, western Cape to Natal and Transvaal. *Geldenhuys 306 PRE*
413 *eucleiformis* (Eckl. & Zeyh.) Kuntze Subcanopy tree, drupe, small seed, moist to dry forest and scrub forest, widespread, scattered, western Cape to Natal midlands and Transvaal. *Geldenhuys 266 PRE*
- maritima* (H.Bol.) L.Bol. Woody shrub, drupe, small seed, coastal scrub forest margin, sporadic, scattered, Cape Peninsula to eastern Cape coast. *Geldenhuys 379 BOL*
- 414 *peragua* L. Canopy tree, drupe, large seed, dry forest and scrub forest, widespread, scattered to common, western Cape to drier Natal coast and midlands. *Botha 2295 PRE*
- 415 *papillosa* (Hochst.) Kuntze Subcanopy tree, semi-fleshy drupe, moist to dry forest and scrub forest, widespread, scattered to rare, Swellendam to Natal and Transvaal. *Geldenhuys 264 PRE*
- 415.1 *parvifolia* Sond. Woody shrub, drupe, small seed, forest margin, widespread, rare, disjunct between western Cape and southern Cape (to eastern Tsitsikamma). *Fourcade 2412 PRE*
- 411.1 *tetragona* (L.f.) Loes. Scrambling liane, drupe, small seed, dry forest to scrub forest, widespread, scattered to common, western Cape to Natal and Transvaal. *Marais 700 PRE*
- 4645 *Hartogiella* Codd
±18 *schinoides* (Spreng.) Codd Subcanopy tree, drupe, small seed, forest margin, sporadic, scattered but more common in Tsitsikamma, western and southern Cape, and rare in eastern Cape. *Geldenhuys 281 PRE*
- ICACINACEAE
4671 *Cassinopsis* Sond.
420 *ilicifolia* (Hochst.) Kuntze Woody shrub, drupe, large seed, spinescent, moist to dry forest, widespread, rare, western Cape (Stanford) to Natal mountains and Transvaal. *Geldenhuys 267 PRE*
- 4686 *Apodytes* E.Mey. ex Arn.
dimidiata E.Mey. ex Arn.
422 subsp. *dimidiata* Canopy tree, drupe, small seed, moist to dry forest, widespread, scattered to common, western Cape to Natal and Transvaal. *Linger 84 PRE*
- 4709 *Pyrenacantha* Wight
scandens Planch. ex Harv. Vine, dioecious to monoecious, drupe, large seed, moist to dry forest, widespread, scattered to common, Swellendam to Natal coast. *Von Breitenbach 1277 SAAS*
- SAPINDACEAE
4734 *Allophylus* L.
423 *decipiens* (Sond.) Radlk. Subcanopy tree, carpel, small seed, deciduous, dry scrub forest, widespread, scattered, Mossel Bay (Herbertsdale) to Natal and Transvaal. *Geldenhuys 181 PRE*
- 4831 *Dodonaea* Mill.
437.1 *angustifolia* L.f. Woody shrub, dioecious, large membranous capsule, dry forest and scrub forest margin, sporadic, scattered, drier areas from western Cape to Transvaal. *Kapp 99 PRE*
- 4836 *Hippobromus* Eckl. & Zeyh.
438 *pauciflorus* (L.f.) Radlk. Subcanopy tree, drupe, small seed, common in dry scrub forest in Nature's Valley, rare in eastern parts of area (Geldenhuys 1986b), Tsitsikamma to Natal coast and Transvaal. *Geldenhuys 1071 PRE*
- BALSAMINACEAE
4856 *Impatiens* L.
hochstetteri Warb.
subsp. *hochstetteri* Forb. fleshy capsule, small seed, moist sites in moist forest, sporadic, locally common, Grabouw to Natal midlands and Transvaal. *Geldenhuys 573 SAAS*
- RHAMNACEAE
4874 *Scutia* Comm. ex Brongn.
451 *myrtina* (Burm.f.) Kurz Scrambling liane, drupe, small seed, spinescent, dry forest to scrub forest, widespread, scattered to common, western Cape to Natal and Transvaal. *Geldenhuys 300 PRE*
- 4875 *Rhamnus* L.
452 *prinoideis* L'Herit. Subcanopy tree, berry, small seed, forest and scrub forest gaps and margin, widespread, scattered, Swellendam to Natal mountains and Transvaal. *Rodin 1161 PRE*
- 4886 *Phylla* L.
axillaris Lam. Woody shrub, ballistic capsule, small seed with elaiosome, forest margin, fynbos component, widespread, scattered, western to eastern Cape. *Geldenhuys 337 PRE*
pinga Thunb. Woody shrub, ballistic capsule, small seed with elaiosome, forest margin, fynbos component, sporadic, scattered, western to southern Cape. *Acocks 21751 PRE*
purpurea Sond. Woody shrub, ballistic capsule, small seed with elaiosome, forest margin, fynbos component, sporadic, scattered, western to southern Cape. *Dahlstrand 502 PRE*
- VITACEAE
4917 *Rhoicissus* Planch.
456.2 *digitata* (L.f.) Gilg & Brandt Liane, berry, small seed, dry forest and scrub forest, widespread, scattered to common, western Cape (Betty's bay) to Natal coast. *Morze 2235 PRE*
- 456.5 *tomentosa* (Lam.) Wild & Drum. Liane, berry, small seed, moist to dry forest and scrub forest, often covering canopy trees, widespread, scattered to common, western Cape to Natal and Transvaal. *Kapp 34 PRE*
- 456.6 *tridentata* (L.f.) Wild & Drum. Liane, berry, small seed, dry forest, sporadic, rare, Swellendam to Natal and Transvaal. *Codd 3569 PRE*
- 4918.1 *Cyphostemma* Alston
sp. of *C. hypoleucum* (Harv.) Desc. ex Wild & Drum. Vine, berry, small seed, dune forest, occasional, rare, eastern Tsitsikamma (Driefontein) to southern Natal. *Geldenhuys 1099 PRE*
- TILIACEAE
4957 *Sparmannia* L.f.
457 *africana* L.f. Woody shrub, prickly capsule, small seed, wet mountain forest including margin, widespread, scattered to locally common, Swellendam to Uitenhage. *Thompson 868 PRE*

- 4966 *Grewia* L.
463 *occidentalis* L. Scrambling liane, drupe, small seed, dry forest and scrub forest, widespread, scattered, western Cape to Natal and Transvaal. *Marsh 612 PRE*
- MALVACEAE
4983 *Abutilon* Mill.
sonneratianum (Cav.) Sweet Forb, carpel, small seed, dry scrub forest gaps and margin, sporadic, rare, Mossel Bay to Natal and Transvaal. *Geldenhuys 553 PRE*
- 4998 *Sida* L.
dregei Burt Davy Forb, carpel, small seed, dry scrub forest margin at Wilderness, rare, George to Natal midlands and Transvaal. *Mogg s.n. PRE*
ternata L.f. Forb, carpel, small seed, dry forest margin, sporadic, rare, Mossel Bay to Natal midlands and Transvaal. *Taylor 7977 PRE*
- 5007 *Pavonia* Cav.
columella Cav. Forb, carpel, small seed, dry forest margin, sporadic, rare, George to Natal midlands and Transvaal. *Morze 2078 SAAS*
- 5013 *Hibiscus* L.
diversifolius Jacq.
subsp. *diversifolius* Soft shrub, spinescent stem, capsule, small seed, forest margin, sporadic, rare, Knysna, Bitou river valley and Nature's Valley to Natal coast. *Theron 1003 PRE*
ludwigii Eckl. & Zeyh. Forb, capsule, small seed, coastal forest margin in De Vasselot Nature Reserve, sporadic, rare, southern Cape to Natal. *Geldenhuys 501 PRE*
pedunculatus L.f. Soft shrub, capsule, small seed, dry forest and scrub forest, widespread, scattered to rare, George to Natal midlands and Transvaal. *Geldenhuys 1318 PRE*
- OCHNACEAE
5112 *Ochna* L.
arborea Burch. ex DC.
479 var. *arborea* Subcanopy tree, drupe, large seed, moist to dry forest and scrub forest, widespread, scattered, George to Natal and Transvaal. *Geldenhuys 263 PRE*
479.1 *serrulata* (Hochst.) Walp. Woody shrub, drupe, large seed, dry forest, locally common to scattered, Knysna to Natal and Transvaal. *Geldenhuys 336 PRE*
- FLACOURTIACEAE
5296 *Kiggelaria* L.
494 *africana* L. Canopy tree, dioecious, capsule, small arillate seed, semi-deciduous, moist to dry forest, widespread, rare, western Cape to Natal midlands and Transvaal. *Taylor 990 PRE*
- 5304 *Scolopia* Schreb.
496 *mundii* (Eckl. & Zeyh.) Warb. Canopy tree, berry, small seed, juvenile plants spinescent, dry forest and scrub forest, widespread, scattered, Cape Peninsula to Natal midlands and Transvaal. *Bird 1373 SAAS*
498 *zeyheri* (Nees) Harv. Canopy tree, berry, small seed, spinescent branchlets on bole, dry forest and scrub forest, widespread, rare, Mossel Bay (Herbertsdale) to Natal and Transvaal. *Geldenhuys 309 PRE*
- 5315 *Trimeria* Harv.
503 *grandifolia* (Hochst.) Warb. Subcanopy tree, dioecious, capsule, small arillate seed, deciduous, moist to dry forest, widespread, scattered, George to Natal and Transvaal. *Taylor 697 PRE*
- 5328 *Dcnyalis* E.Mey. ex Arn.
508 *lucida* Sim Subcanopy tree, dioecious, berry, small seed, spinescent, occasional, rare, eastern Tsitsikamma (Koomansbos) to Natal and Transvaal. *Geldenhuys 1207 PRE*
509 *rhamnoides* (Burch. ex DC.) Harv. Woody shrub, dioecious, berry, small seed, spinescent, dry forest and scrub forest, widespread, scattered to common, George to Natal coast, disjunct in Transvaal. *Taylor 7998 PRE*
510 *rotundifolia* (Thunb.) Thunb. & Harv. Subcanopy tree, dioecious, berry, small seed, spinescent, dry scrub forest, occasional, rare, eastern Tsitsikamma (Driefontein) to eastern Cape. *Geldenhuys 1201 PRE*
- ACHARIACEAE
5374 *Ceratisicyos* Nees
laevis (Thunb.) A.Meeuse Vine, monoecious, capsule, small seed, moist places in dry forest and scrub forest, widespread, scattered to rare, Mossel Bay to Natal and Transvaal. *Taylor 7808 PRE*
- PENAEACEAE
5425 *Panaea* L.
aneorum Meerb.
subsp. *gigantea* R. Dahlg. Woody shrub, capsule, small seed, forest margin, fynbos component, widespread, rare, western to eastern Cape. *Taylor 2943 PRE*
- OLINIACEAE
5428 *Olinia* Thunb.
513 *ventosa* (L.) Cufod. Canopy tree, drupe, large seed, moist to dry forest on drier sites, widespread, scattered, often small groups, western Cape to southern Natal. *Taylor 1254 PRE*
- THYMELAEACEAE
5435 *Gnidia* L.
denudata Lindl. Woody shrub, dry fruit, small seed, moist to dry forest gaps, widespread, scattered groups, Swellendam to Humansdorp. *Bird 1008 PRE*
- 5436 *Struthiola* L.
argentea Lehm Woody shrub, dry fruit, small seed, coastal forest margin, fynbos component, sporadic, scattered, western to eastern Cape. *Acoccks 21215 PRE*
eckloniana Meisn. Woody shrub, dry fruit, small seed, forest margin, fynbos component, sporadic, scattered, western to southern Cape. *Taylor 4466 PRE*
hirsuta Wikstr. Woody shrub, dry fruit, small seed, forest margin, fynbos component, sporadic, scattered, Riversdal to Humansdorp. *Taylor 9983 PRE*
- 5461 *Passerina* L.
520 *falcifolia* C.H.Wr. Woody shrub, fleshy pericarp, small seed, moist to dry forest margin, widespread, scattered to locally common, Mossel Bay to Port Elizabeth. *Van Daalen 117 STE*
- MYRTACEAE
5583 *Syzygium* Gaertn.
555 *cordatum* Hochst. Canopy tree, berry, large seed, two large trees in scrub forest at Nature's Valley, eastwards to Natal coast and Transvaal. *Geldenhuys 1307 PRE*
- ONAGRACEAE
5795 *Epilobium* L.
hirsutum L. Forb, capsule, small seed with hairs, moist forest paths, Diepwalle forest, locally common, western Cape to Transvaal. *Martin 4438 PRE*
- HALORAGACEAE
5833 *Laurembergia* Baill. or Berg.
repens Berg.
subsp. *brachypoda* (Hiern) Oberm. Forb, monoecious, small fleshy nut, moist sites in forest, widespread, scattered groups, western Cape to Natal and Transvaal. *Geldenhuys 434 STE*
- ARALIACEAE
5852 *Schefflera* J.R. & G.Frost
566 *umbellifera* (Sond.) Baill. Canopy tree, berry, small seed, locally common in Elands river valley in eastern Tsitsikamma from the mountains to the coast, disjunct until Natal coast and Transvaal. *Anon. TM37883 PRE*
- 5872 *Cussonia* Thunb.
spicata Thunb.
564 var. *spicata* Subcanopy tree, berry, small seed, dry scrub forest, disjunct in small forest patches (along Kromme river in eastern Tsitsikamma, Gouritz River in west, northern slopes of Outeniqua mountains), scattered, western Cape to Natal and Transvaal. *Marloth 6864 PRE*
565 *thysiflora* Thunb. Scrambling liane, berry, small seed, dry scrub forest, widespread, scattered, western Cape to southern Natal. *Strey 10356 PRE*
- APIACEAE
5894 *Centella* L.
eriantha (Rich.) Drude
var. *eriantha* Forb, mericarp, small seed, damp places in moist to dry forest and forest margin, widespread, scattered to common, western Cape to Natal. *Geldenhuys 559 PRE*
- 5918 *Sanicula* L.
elata Buch.-Ham. Forb, mericarp, small seed, moist to dry forest, widespread, scattered (see also *Ranunculus multifidus*), western Cape to Natal midlands and Transvaal. *Bos 905 PRE*
- 5992 *Heteromorpha* Cham. & Schlecht.
568 *trifoliata* (Wendl.) Eckl. & Zeyh. Woody shrub, mericarp, small seed, dry scrub forest and margin, sporadic, rare, western Cape to Natal and Transvaal. *Fourcade 219 PRE*
- 5996 *Rhyticarpus* Sond.
difformis Benth. & Hook. Soft shrub, mericarp, small seed, dry scrub forest, sporadic (Nature's Valley), rare, western to eastern Cape. *Geldenhuys 550 SAAS*
- 6116 *Peucedanum* L.
capense (Thunb.) Sond. Soft shrub, mericarp, small seed, dry scrub forest margin, sporadic, scattered, Swellendam to Natal and Transvaal. *Van Daalen 13 SAAS*
- CORNACEAE
6156 *Curtisia* Ait.
570 *dentata* (Burm.f.) C.A.Sm. Canopy tree, fleshy drupe, small seed, moist to dry forest, widespread, scattered, western Cape to Natal midlands and Transvaal. *Bird 1412 SAAS*
- ERICACEAE
6237 *Erica* L.
ganaliculata Andr. Woody shrub, capsule, minute seed, forest margin, fynbos component, widespread, locally common, southern Cape. *Linger 45 PRE*
copiosa Wendl. Woody shrub, capsule, minute seed, forest margin, fynbos component, sporadic, scattered, western Cape to southern Natal. *Bond 1368 PRE*
curviflora L. Woody shrub, capsule, minute seed, forest margin, fynbos component, sporadic, scattered, western to eastern Cape. *Keet 483 PRE*
densifolia Willd. Woody shrub, capsule, minute seed, forest margin, fynbos component, sporadic, scattered, southern Cape. *Geldenhuys 219 PRE*
gibbosa Klotzsch ex Benth. Woody shrub, capsule, minute seed, forest margin, fynbos component, sporadic, rare, southern Cape. *Germishuizen 4289 PRE*
seriphifolia Salisb. Woody shrub, capsule, minute seed, forest margin, fynbos component, sporadic, scattered, southern Cape. *Taylor 2017 PRE*
sparsa Lodd. Woody shrub, capsule, minute seed, forest margin, fynbos component, sporadic, scattered, Swellendam to Port Elizabeth. *Morze 2001 PRE*
- 6244 *Simocheilus* Klotzsch
multiflorus Klotzsch Woody shrub, capsule, minute seed, dry forest margin, fynbos component, sporadic, scattered, southern Cape. *Geldenhuys 95 PRE*
- MYRSINACEAE
6313 *Myrsine* L.
africana L. Woody shrub, dioecious, small berry, moist to dry forest margin, widespread, scattered, western Cape to Natal midlands and Transvaal. *Cameron 19 SAAS*
- 6314 *Rapanea* Aubl.
578 *melanophloeos* (L.) Mez Canopy tree, monoecious, berry, small seed, moist

to dry forest and scrub forest, often in margin, widespread, scattered to common, western Cape to Natal and Transvaal. *Bird 1443 SAAS*

PLUMBAGINACEAE

5343 *Plumbago* L.

auriculata Lam. Woody shrub, capsule, small seed, scrub forest to dry forest gaps and understorey, occasional (Bietou River Valley and western tributaries of Keurbooms river), rare, Plettenberg Bay to Natal midlands and Transvaal. *Geldenhuys 1316 PRE*

5351 *Limonium* Adans. or Mill.

scabrum (Thunb.) Kuntze

var. *scabrum* Forb, capsule, small seed, margin of dry scrub forest near coast, sporadic, scattered to common, western Cape to eastern Cape coast. *Codd 9913 PRE*

SAPOTACEAE

5368 *Sideroxylon* L.

579

inermis L. Canopy tree, berry, large seed, dry forest and scrub forest, common near coast or above water line of lakes, widespread, western Cape to Natal coast and Transvaal. *Geldenhuys 233 SAAS*

EBENACEAE

5404 *Euclea* Murray

crispa (Thunb.) Guerie

594

subsp. *crispa* Subcanopy tree, dioecious, small berry, dry scrub forest, sporadic, rare, Bredasdorp to Natal midlands and Transvaal. *White 1075? PRE natalensis A.DC.*

subsp. *natalensis* Subcanopy tree, dioecious, berry, forest margin, western Cape to Natal and Transvaal. *Geldenhuys 354 PRE*
polyandra (L.f.) E.Mey. ex Hiern Subcanopy tree, dioecious, large nut, dry scrub forest margin, sporadic, scattered, western Cape to Natal and Transvaal. *Geldenhuys 154 PRE*

599

racemosa Murray Subcanopy tree, dioecious, berry, small seed, dry scrub forest, sporadic, scattered, western to eastern Cape. *Geldenhuys 511 PRE*
schimperi (A.DC.) Dandy

600

var. *schimperi* Subcanopy tree, dioecious, berry, large seed, dry forest and scrub forest, widespread, scattered to rare, western Cape to Natal coast, disjunct in Transvaal. *Geldenhuys 439 PRE*

undulata Thunb.

601

var. *undulata* Subcanopy tree, dioecious, berry, small seed, dry scrub forest, sporadic, rare, western Cape to Natal and Transvaal drier areas. *Geldenhuys 518 PRE*

5406 *Diospyros* L.

603

dichrophylla (Gand.) De Winter Subcanopy tree, dioecious, berry, large seed, dry forest and scrub forest including margin, widespread, scattered to common, Bredasdorp to Natal coast. *Vari 1084 PRE*

603.1

glabra (L.) De Winter Woody shrub, dioecious, berry, large seed, moist to dry forest margin, widespread, scattered, western Cape to eastern Tsitsikamma. *Bredenkamp 127 PRE*

pallens (Thunb.) F.White Woody shrub, dioecious, berry, large seed, coastal scrub forest, sporadic, scattered, George to southern Natal. *Taylor 1144 PRE*

611

whytiana (Hiern) F.White Subcanopy tree, dioecious, berry, large seed, moist to dry forest and scrub forest, widespread, scattered to common, western Cape to Natal midlands (occasionally Mafucaland coast) and Transvaal. *Bos 902 PRE*

OLEACEAE

5428 *Chionanthus* L.

foveolata (E. Mey.) Stearn

615

subsp. *foveolata* Subcanopy tree, drupe, large seed, medium-moist to dry forest and scrub forest, widespread, scattered to rare, western Cape to Natal and Transvaal. *Geldenhuys 234 PRE*

615.1

subsp. *tomentellus* (Verdoorn) Stearn Subcanopy tree, drupe, large seed, coastal scrub forest, sporadic, rare, Cape Peninsula to southern Natal. *Keet 913 PRE*

616

peglerae (C.H. Wr.) Stearn Canopy tree, drupe, large seed, medium-moist to dry forest, occasional (Koomansbos and Witelsbos), rare, eastern Tsitsikamma to Natal, disjunct in Transvaal. *Geldenhuys 1210 PRE*

5434 *Olea* L.

europaea L.

617

subsp. *africana* (Mill.) P.S.Green Canopy tree, drupe, small seed, dry scrub forest, widespread, scattered to rare, western Cape to Natal and Transvaal drier areas. *Bocquet 17967 PRE*

capensis L.

618

subsp. *capensis* Subcanopy tree, drupe, small seed, wet mountain, moist to dry forest and scrub forest, widespread, scattered to common, western Cape to southern Natal, scattered further north. *Geldenhuys 637 PRE*

618.2

subsp. *macrocarpa* (C.H.Wr.) Verdoorn Canopy tree, drupe, large seed, common in moist to dry forest, scattered to rare in scrub forest, widespread, western Cape to Natal and Transvaal. *Bird 1539 SAAS*

619

exasperata Jacq. Subcanopy tree, drupe, small seed, coastal scrub forest, sporadic, scattered, western to eastern Cape. *Morze 2125 SAAS*

5440 *Jasminum* L.

angulare Vahl Vine, berry, small seed, dry scrub forest, sporadic in Bitou river valley and Keurboomsrivier Nature Reserve, rare, Plettenberg Bay to Natal. *Geldenhuys 1347 PRE*

SALVADORACEAE

5444 *Azima* Lam.

622.1

tetracantha Lam. Woody shrub, monoecious, small berry, spinescent, dry scrub forest margin, widespread, scattered, Cape Infanta to Natal and Transvaal. *Thompson 584 PRE*

LOGANIACEAE

5460 *Strychnos* L.

624

decussata (Pappe) Gilg Canopy tree, berry, large seed, medium-moist to dry forest, disjunct (single plants in Bievlei and Brackenhill forests, extensive population in Nature's Valley, *Geldenhuys 1986b*), southern Cape to Natal coast and Transvaal lowveld. *Geldenhuys 530 PRE*

5469 *Nuxia* Lam.

634

floribunda Benth. Canopy tree, capsule, minute seed, moist to dry forest, widespread, scattered, Swellendam to Natal midlands and Transvaal. *Botha 3054*

5473 *Buddleia* L.

636

saligna Willd. Canopy tree, capsule, minute seed, dry scrub forest including dry forest margin, widespread, scattered to common, western Cape to Natal and Transvaal. *Van Daalen 29 SAAS*

637

salviifolia (L.) Lam. Woody shrub, capsule, minute seed, dry forest to scrub forest margin, sporadic, scattered, western Cape to Natal midlands and Transvaal. *Geldenhuys 1090 PRE*

GENTIANACEAE

5503 *Chironia* L.

baccifera L. Forb, fleshy capsule, small seed, coastal forest margin, fynbos component, sporadic, scattered, western Cape to Natal coast. *Botha 80 PRE*
decumbens Levyns Forb, fleshy capsule, small seed, coastal forest margin, fynbos component, sporadic, scattered, western to eastern Cape. *Martin 4403*
melampyroides Lam. Forb, fleshy capsule, small seed, forest margin, fynbos component, widespread, rare, western to eastern Cape. *Marloth 1882 PRE*

APOCYNACEAE

5558 *Acokanthera* G.Don

638

oblongifolia (Hochst.) Codd Woody shrub, berry, large seed, dry scrub forest on dunes, occasional, rare, Mossel Bay and Knysna to Natal coast. *Kapp 50142 PRE*

639

oppositifolia (Lam.) Codd Woody shrub, berry, large seed, dry forest to scrub forest, widespread, scattered to rare, western Cape to Natal coast and Transvaal. *Kapp 29 PRE*

5559 *Carissa* L.

bispinosa (L.) Desf. ex Brenan

640.1

var. *acuminata* (E.Mey.) Codd Woody shrub, berry, small seed, spinescent, moist to dry forest and scrub forest, widespread, scattered to common, disjunct between western Cape, Natal coast and mountains and Transvaal. *Geldenhuys 298 PRE*

5581 *Gonioma* E.Mey.

641

kamassji E.Mey. Subcanopy tree, mericarp, large winged seeds, wet mountain to dry forest and scrub forest, widespread, scattered to common, Mossel Bay to Natal coast and southern Transvaal. *Taylor 7985 PRE*

ASCLEPIADACEAE

5758 *Astephanus* R.Br.

marginatus Decne. Vine, follicle, small seed with hairs, coastal scrub forest, sporadic, rare, George to eastern Cape. *Retief 425 PRE*
trilobus (L.f.) Schultes Vine, follicle, small seed with hairs, scrub forest, sporadic in De Vassilot Nature Reserve, scattered, western to southern Cape. *Geldenhuys 1349 PRE*

5791 *Asclepias* L.

fruticosa L. Forb, follicle, small seed with hairs, forest margin and gaps, sporadic, rare groups, western Cape to Transvaal. *Balfour-Browne 19 PRE*

5834 *Cynanchum* L.

ellipticum (Harv.) R.A.Dyer Vine, follicle, small seed with hairs, dry forest margin and scrub forest, widespread, scattered, southern Cape to Natal coast and Transvaal. *Geldenhuys 310 PRE*

gerrardii (Harv.) Liede Vine, follicle, small seed with hairs, moist forest, sporadic, rare, southern and eastern Cape. *Geldenhuys 498 PRE*

natalium Schltr. Vine, follicle, small seed with hairs, coastal scrub forest margin, sporadic, rare, Sedgfield to Natal coast. *Codd 3601 PRE*

obtusifolium L.f.

var. *obtusifolium* Vine, follicle, small seed with hairs, dry forest margin and scrub forest, widespread, scattered, western Cape to Natal coast. *Geldenhuys 311 SAAS*

var. *pilosum* Schltr. Vine, follicle, small seed with hairs, coastal forest margin, sporadic, scattered, Sedgfield to eastern Cape. *Phillips 4 PRE*

tetrapterum (Turcz.) R.A.Dyer Vine, almost leafless green stem, follicle, small seed with hairs, dry scrub forest, rare, Nature's Valley to Natal and Transvaal. *Geldenhuys 498 PRE*

5842 *Oncinema* Arn.

lineare (L.f.) Bullock Vine, follicle, small seed with hairs, wet mountain to dry forest, widespread, rare, western to eastern Cape. *Esterhuysen 10856 PRE*

5849 *Sarcostemma* R.Br.

viminale (L.) R.Br. Vine, almost leafless green stem, follicle, small seed with hairs, dry scrub forest, sporadic, scattered, Riversdale to Natal and Transvaal. *Taylor 8331 PRE*

5860 *Secamone* R.Br.

alpinii Schultes Liane, follicle, small seed with hairs, wet mountain to dry forest and scrub forest, widespread, scattered, western Cape to Natal and Transvaal. *Geldenhuys 441 SAAS*

5874 *Ceropegia* L.

africana R. Br. Forb, capsule, small seed, tuberous, scrambling on forest floor and lower stems of trees, dry forest to scrub forest, sporadic, scattered, Mossel Bay to Natal.

5899 *Tylophora* R.Br.

cordata (Thunb.) Druce Vine, follicle, small seed with hairs, dry forest and scrub forest, widespread, scattered to rare, Mossel Bay to southern Natal. *Moffett 688 PRE*

CONVOLVULACEAE

5968 *Cuscuta* L.

africana Willd. Parasitic vine on branches, fleshy capsule, small seed, common in *Virgilia* stands on forest margin, widespread, Swellendam to Port Elizabeth. *Geldenhuys 285 PRE*

- 6971 *Dichondra* Forst.
repens J.R. & G. Forst. Forb, membranous capsule, small seed, damp sites in coastal forest, sporadic in De Vasselot Nature Reserve, scattered, western Cape to Transvaal. *Strey 4551 PRE*
- 6972 *Falkia* L.f.
repens L. Forb, membranous utricle, small seed, damp sites in coastal forest, sporadic in De Vasselot Nature Reserve, scattered, western Cape to Natal. *Geldenhuys 556 BOL*
- 6993 *Convolvulus* L.
capensis Burm. f.
var. *bowianus* (Rundle) A. Meeuse Vine, capsule, small seed, coastal scrub forest, sporadic, rare, western to eastern Cape.
farinosus L. Vine, capsule, small seed, mountain forest margin, sporadic, rare, western Cape to Transvaal. *Geldenhuys 564 PRE*
- BORAG NACEAE
7064 *Cynoglossum* L.
lanceolatum Forssk. Forb, aggregation of nutlets, dry scrub forest margin, sporadic, scattered, southern Cape to Transvaal. *Mogg 11645 PRE*
- VERBENACEAE
7191 *Clerodendron* L.
glabrum E. Mey
var. *glabrum* Subcanopy tree, capsule, small seed, dry coastal dune forest, occasional, scattered, eastern Tsitsikamma (Driefontein) to Natal and Transvaal. *Geldenhuys 1203 PRE*
- LAMIACEAE
7264 *Leonotis* R.Br.
leonurus (L.) R.Br. Soft shrub, aggregation of nutlets, forest margin, sporadic, rare, western Cape to Natal and Transvaal. *Batten 53 PRE*
- 7281 *Stachys* L.
aethiopica L. Forb, aggregation of nutlets, dry forest and scrub forest margin and gaps, widespread, scattered, western Cape to Natal and Transvaal. *Heinecken K9 PRE*
gracilliflora Presl Forb, aggregation of nutlets, moist forest and coastal scrub forest margins, occasional, rare, George to southern Natal. *Liebenberg 7765 PRE*
scabrada Skan Forb, aggregation of nutlets, coastal scrub forest margin, Knysna to southern Natal. *Thode 981 PRE*
thunbergii Benth. Forb, aggregation of nutlets, moist to dry forest gaps and margin, widespread, scattered groups, western Cape to Humansdorp. *Acocks 14063 PRE*
- 7350 *Plectranthus* L'Herit
ciliatus E. Meyer ex Benth. Forb, aggregation of nutlets, forest margins, sporadic, rare, George to Natal and eastern Transvaal. *Germishuizen 4270 PRE*
fruticosus L'Herit Soft shrub, aggregation of nutlets, moist forest, sporadic, scattered to common, western Cape to Natal and Transvaal. *Geldenhuys 567 PRE*
laxiflorus Benth. Forb, aggregation of nutlets, forest margin, occasional, rare groups, eastern Tsitsikamma (Rozenhof & Witelsbos) to Transvaal. *Fourcade 1217 PRE*
madagascariensis (Pers.) Benth.
var. *madagascariensis* Forb, aggregation of nutlets, dry forest, occasional along Keurbooms river, rare groups, Plettenberg Bay to Transvaal. *Geldenhuys 1325 PRE*
verticillatus (L.f.) Druce Forb, aggregation of nutlets, moist places in dry scrub forest, sporadic, scattered clumps, Mossel Bay to Natal and Transvaal. *Geldenhuys 595 PRE*
- SOLANACEAE
7407 *Solanum* L.
aculeastrum Dunal Soft shrub, berry, small seed, spiny leaves, forest margin, sporadic, scattered, western Cape to Transvaal. *Van Breda 1159 PRE*
aculeatissimum Jacq. Forb, berry, small seed, spiny leaves, forest gaps, sporadic, scattered, southern Cape to Transvaal. *Geldenhuys 668 PRE*
geniculatum E. Mey. Liane, berry, small seed, coastal scrub forest, sporadic, scattered, southern Cape to Transvaal. *Schoitz 59 PRE*
- 669.4
giganteum Jacq. Soft shrub, berry, small seed, spiny stem, moist forest and gaps, sporadic, scattered groups, western Cape to Transvaal. *Mogg s.n. PRE*
hermannii Dun. Soft shrub, berry, small seed, spinescent leaves, berry, moist to dry forest and scrub forest gaps, widespread, rare, western Cape to Transvaal.
- SCROPHULARIACEAE
7476 *Nemesia* Vent.
melissifolia Benth. Forb, capsule, small seed, moist forest margin, occasional, rare, Knysna to southern Natal. *Bond & Goldblatt 1984*
- 7477 *Diclis* Benth.
reptans Benth. Forb, capsule, small seed, moist forest and scrub forest, sporadic, rare, George to Natal and Transvaal. *Liebenberg 7763 PRE*
- 7493 *Halleria* L.
670
lucida L. Subcanopy tree, berry, small seed, wet mountain to moist forest, widespread, scattered, western Cape to Natal and Transvaal. *Fourcade 1413 PRE*
- 7494 *Tegdia* Rudolphi
lucida Rudolphi Soft shrub, berry, small seed, dry forest margin, sporadic, scattered groups, western Cape to Natal. *Geldenhuys 143 BOL*
- 7519 *Sutherlandia* Roth
aethiopica (L.) Kuntze Soft shrub, capsule, small seed, coastal scrub forest margin, widespread, scattered, western Cape to Nature's Valley. *Geldenhuys 519 BOL*
- cordata* (Thunb.) Kuntze
var. *cordata* Forb, capsule, small seed, moist sites in dry forest and scrub forest, sporadic, scattered, George to eastern Cape. *Geldenhuys 525 PRE*
sp. cf var. *hirsutior* Hiern Forb, capsule, small seed, coastal scrub forest, Goukamma Nature Reserve, rare, southern Cape.
- 7627 *Harveya* Hook.
capensis Hook. Forb parasitic on roots, white flower, capsule, small seed, wet forest margins, sporadic, scattered, western to eastern Cape. *Esterhuysen 6800 PRE*
stenosiphon Hiern Forb parasitic on roots, red flower, capsule, small seed, wet forest margin, sporadic, scattered, Swellendam to Humansdorp. *Lavrans 16183 PRE*
- GESNERIACEAE
7823 *Streptocarpus* Lindl.
rexii (Hook.) Lindl. Forb, sometimes epiphytic or lithophytic, capsule, small seed, damp microsites in dry scrub forest, sporadic, scattered, George to southern Natal. *Van Breda 1145 PRE*
- ACANTHACEAE
7914 *Thunbergia* Retz.
gregaria Nees Vine, capsule, small seed, moist to dry forest, sporadic, scattered. Beervlei forest (near George) to Natal coast.
- 8031 *Dicliptera* Juss.
zeylanica Nees Forb, capsule, small seed, moist to dry forest, sporadic, scattered groups, Mossel Bay to Transvaal. *Geldenhuys 1088 PRE*
- 8032 *Hypoestes* Soland. ex R.Br.
aristata R. Br.
var. *aristata* Forb, capsule, small seed, coastal scrub forest, sporadic, scattered groups, Bredasdorp to Natal and Transvaal. *Geldenhuys 1305 PRE*
forskaolei (Vahl) R.Br. Forb, capsule, small seed, moist to dry forest, sporadic, scattered groups, George to Natal and Transvaal. *Geldenhuys 540 PRE*
- 8049 *Siphonoglossa* Oerst.
leptantha (Nees) Immelman
subsp. *late-ovata* (C.B.Cl.) Immelman Forb, capsule, small seed, coastal dry forest and scrub forest, rare, Knysna (Harkerville) to southern Natal. *Geldenhuys 1217 PRE*
subsp. *leptantha* Forb, capsule, small seed, coastal scrub forest, sporadic, scattered groups, George to southern Natal. *Geldenhuys 1309 SAAS*
- 8079 *Isoglossa* Oerst.
ciliata (Nees) Lindau Forb, capsule, small seed, moist to dry forest, sporadic, scattered groups, George to southern Natal. *Geldenhuys 372 PRE*
eckloniana (Nees) Lindau Forb, capsule, small seed, dry forest and scrub forest, sporadic, scattered, Nature's Valley to Natal and Transvaal. *Fourcade 3685 PRE*
grantii C.B. Cl. Forb, capsule, small seed, dry coastal forests, sporadic, scattered, George to Natal coast and Transvaal. *Geldenhuys 1304 PRE*
hypoestiflora Lindau Forb, capsule, small seed, coastal forest, sporadic, rare, Storms river to Natal and Transvaal. *Venter 8682 PRE*
prolixa (Nees) Lindau Forb, capsule, small seed, riverine forest, sporadic, rare, from Keurbooms river eastwards. *Geldenhuys 693 PRE*
svyatica Burchell ex C.B. Clarke Forb, capsule, small seed, forest, southern Cape. *Bond & Goldblatt 1984*
- 8094 *Justicia* L.
anselliana (Nees) T. Anders. Forb, capsule, small seed, coastal forest and scrub forest, sporadic, rare, from Knysna eastwards and Namibia. *Taylor 1355 PRE*
sp. cf *J. protracta* (Nees) T. Anders. Forb, capsule, small seed, coastal scrub forest, occasional, rare, eastern Tsitsikamma (Witelsbos) to Natal and Transvaal. *Geldenhuys 1205 PRE*
- RUBIACEAE
8281 *Burchellia* R.Br.
688
bubalina (L.f.) Sims Subcanopy tree, berry, small seed, moist to dry forest, widespread, scattered, Swellendam to Natal and Transvaal. *Acocks 1427 PRE*
- 8285 *Gardenia* Ellis
692
thunbergia L.f. Woody shrub, woody berry, small seed, moist forest to coastal scrub forest, occasional, rare, eastern Tsitsikamma (Kromrivier State Forest) to Natal coast. *Geldenhuys 1085 PRE*
- 8285.1 *Rothmannia* Thunb.
693
capensis Thunb. Subcanopy tree, berry, small seed, moist to dry forest, widespread, scattered to rare, Swellendam to Natal midlands and Transvaal. *Bird 1486 SAAS*
- 695
globosa (Hochst) Keay Subcanopy tree, berry, small seed, moist forest, disjunct small group of trees in Diepwalle forest, Knysna to Natal coast and Transvaal. *Geldenhuys 1339 PRE*
- 8352 *Canthium* Lam.
705.1
ciliatum (Klotzsch) Kuntze Woody shrub, drupe, small seed, spinescent, dry forest and scrub forest, occasional, rare, Tsitsikamma (Lottering forest) to Natal and Transvaal. *Galpin 4098 PRE*
- 708
inermis (L.f.) Kuntze Subcanopy tree, drupe, large seed, spinescent in juvenile stage, dry forest and scrub forest, widespread, scattered, western Cape to Natal and Transvaal. *Keet 469 PRE*
- 710
mundianum Cham. & Schlecht. Subcanopy tree, drupe, small seed, deciduous, moist to dry forest and scrub forest, widespread, scattered, often groups, western Cape to Natal midlands and Transvaal. *Geldenhuys 172 SAAS*
- 708.1
pauciflorum (Klotzsch) Kuntze Subcanopy tree, drupe, small seed, spinescent in juvenile stage, rare, single records from George (Witfontein) and Knysna, eastwards to Natal and Transvaal. *Geldenhuys 1208 PRE*
- 707
spinosum (Klotzsch) Kuntze Subcanopy tree, drupe, small seed, spinescent, dry forest, occasional, scattered, eastern Tsitsikamma (farm Rozenhof) to Natal coast. *Geldenhuys 1093 PRE*

- 8352.3 *Psydraz* Gaertn.
obovata (Eckl. & Zeyh.) Bridson
 711 subsp. *obovata* Canopy tree, drupe, small seed, moist to dry forest, widespread, scattered, Swellendam to Natal and Transvaal. *Bayliss 126 PRE*
- 8399 *Psychotria* L.
 723 *capensis* (Eckl.) Vatke Woody shrub, berry, small seed, confined to a small area of Lily Vlei Nature Reserve, locally common, Knysna to Natal and Transvaal. *Geldenhuys 412 PRE*
- 8435 *Galopina* Thunb.
circaeoides Thunb. Forb, mericarp, small seed, moist to dry forest, widespread, scattered to common, Swellendam to Natal and Transvaal. *Goldblatt 6781 PRE*
- 8489 *Rubia* L.
petiolaris DC. Forb, mericarp, small seed, coastal dune forest, occasional, scattered, Swellendam (De Hoop) to Transvaal. *Geldenhuys 1098 PRE*
- CUCURBITACEAE
 8564 *Zehneria* Endl.
scabra (L.f.) Sond.
 subsp. *scabra* Vine, monoecious, berry, small seed, tuberous rootstock, moist to dry forest and scrub forest, widespread, scattered to rare, western Cape to Transvaal. *Geldenhuys 293 PRE*
- 8568 *Kedrostis* Medik.
loetidissima (Jacq.) Cogn.
 subsp. *obtusiloba* (Sond.) A. Meeuse Vine, dioecious, berry, small seed, tuberous rootstock, dry forest margin and coastal scrub forest, sporadic, scattered, Nature's Valley to Natal coast. *Donald s.n. SAAS*
nana (Lam.) Cogn.
 var. *nana* Vine, dioecious, berry, small seed, tuberous rootstock, coastal forest to scrub forest, widespread, scattered, western Cape to southern Natal. *Geldenhuys 546 PRE*
- 8610 *Lagenaria* Ser.
sphaerica (Sond.) Naud. Vine, dioecious, berry, small seed, coastal dune forest near Knysna, scattered, southern Cape to southern Natal. *Taylor 9993 PRE*
- LOBELIACEAE
 8681 *Cyphia* Berg.
digitata (Thunb.) Willd. Vine, capsule, small seed, tuberous rootstock, dry forest margin, sporadic, rare, western Cape to Sedgfield. *Geldenhuys 170 SAAS*
heterophylla Presl Vine, capsule, small seed, tuberous rootstock, dry scrub forest gap, above Wilderness, scattered, southern Cape. *Geldenhuys 1216 SAAS*
- 8694 *Lobelia* L.
anceps L.f. Forb, capsule, small seed, moist forest gaps and roadside, sporadic, scattered clumps, western to eastern Cape. *Geldenhuys 1329 PRE*
coronopifolia L. Forb, capsule, small seed, dry scrub forest margin, fynbos component, sporadic, rare, western Cape to Natal. *Van Niekerk 179 PRE*
cuneifolia Link & Otto Forb, capsule, small seed, moist forest to dry scrub forest in damp sites, sporadic, scattered clumps, southern Cape. *Geldenhuys 427 BOL*
neglecta Roem. & Schult. Forb, capsule, small seed, forest margin, fynbos component, widespread, scattered, southern to eastern Cape. *Van Niekerk 27 PRE*
patula L.f.
 var. *patula* Forb, capsule, small seed, moist to dry forest, sporadic, scattered, George to southern Natal. *Fourcade 1592 PRE*
pubescens Ait. Forb, capsule, small seed, forest margin, fynbos component, sporadic, scattered, western to southern Cape. *Fourcade 2799 PRE*
- ASTERACEAE
 8751 *Vernonia* Schreb.
anisochaetoides Sond. Liane, composite fruit with pappus, dry forest and scrub forest including margin, sporadic, scattered, Nature's Valley to Natal coast. *Geldenhuys 860 PRE*
mespilifolia Less. Liane, composite fruit with pappus, dry forest and scrub forest including margin, widespread, scattered, George to Transvaal. *Geldenhuys 1306 PRE*
- 8818 *Mikania* Willd.
natalensis DC. Liane, composite fruit with pappus, dry scrub forest, sporadic, rare, Knysna to Natal and Transvaal. *Bond & Goldblatt 1984*
- 8919 *Felicia* Cass.
aculeata Grau Forb, capitulum with pappus, forest gaps and margin, sporadic, scattered, western to southern Cape.
westae (Fourc.) Grau Forb, capitulum with pappus, moist forest margin, sporadic, scattered, southern Cape. *Fourcade 50 PRE*
- 8936 *Brachylaena* R.Br.
 726 *glabra* (L.f.) Druce Canopy tree, dioecious, composite fruit with pappus, moist forest, sporadic from Lottering forest eastwards, scattered, disjunct between Hermanus, southern Cape and northern Natal. *Fourcade 537 PRE*
 729 *neriifolia* (L.) R.Br. Woody shrub, dioecious, composite fruit with pappus, along streams through forest, common, western Cape to Humansdorp (Loerie forest). *Botha 3148 PRE*
- 8937 *Tarconanthus* L.
 733 *camphoratus* L. Canopy tree, dioecious, composite fruit with woolly seed, dry forest and scrub forest, widespread, scattered, Cape Peninsula to Natal and Transvaal. *Kepp 111 PRE*
- 9006 *Helichrysum* Mill.
cymosum (L.) D. Don
 subsp. *cymosum* Forb, composite fruit with pappus, forest margin, widespread, scattered, western Cape to Natal coast and Transvaal. *Fourcade 1158 PRE*
petiolare Hilliard & Burt Forb, composite fruit with pappus, moist to dry forest gaps and margin, widespread, scattered clumps, southern to eastern Cape. *Keet 24 PRE*
- 9098 *Osmitopsis* Cass.
osmitoides (Less.) Bremer Soft shrub, composite fruit with pappus, wet sites in forest margin, widespread, scattered clumps, Caledon to southern Cape. *Accocks 21322 PRE*
- 9357 *Hippia* L.
rutescens L. Forb, capitulum with pappus, forest gaps and margin, widespread, scattered clumps, western to southern Cape. *Story 2583 PRE*
- 9365 *Payrousea* DC.
umbellata (L.f.) Fourc. Forb, composite fruit with pappus, forest margin, fynbos component, sporadic, scattered clumps, Riviersonderend to southern Cape. *Denman 318 PRE*
- 9406 *Cineraria* L.
lobata L'Herit. Vine, composite fruit with pappus, scrub forest margin, Herolds Bay, rare, southern Cape to southern Natal. *Geldenhuys 875 PRE*
- 9411 *Senecio* L.
amabilis DC. Forb, capitulum with pappus, forest margin, sporadic, scattered, western to southern Cape. *Laughton s.n. SAAS*
angulatus L.f. Vine, capitulum with pappus, dry forest and coastal scrub forest margin, widespread, scattered, southern and eastern Cape. *Botha 3108 PRE*
crenatus Thunb. Forb, capitulum with pappus, moist to dry forest margin, sporadic, rare, Swellendam to eastern Cape. *Keet 25 PRE*
deltoides Less. Vine, capitulum with pappus, forest gaps and margin, widespread, scattered, Swellendam (De Hoop) to Natal and Transvaal. *Van Wyk 183 PRE*
ilicifolius L. Forb, capitulum with pappus, forest margin, sporadic, scattered, Riversdal to eastern Cape. *Geldenhuys 162 SAAS*
mikanicoides Otto ex Harv. Vine, capitulum with pappus, coastal forest, widespread, scattered, Swellendam to Natal and Transvaal. *Bond & Goldblatt 1984*
quinquelobus (Thunb.) DC. Vine, capitulum with pappus, moist forest to dry scrub forest, widespread, scattered, Swellendam to Transvaal. *Geldenhuys 1059 PRE*
- 9417 *Euryops* Cass.
virginicus (L.f.) DC. Soft shrub, capitulum with pappus, forest margin, fynbos component, widespread, scattered, western to eastern Cape. *Morze 2008 PRE*
- 9427.2 *Chrysanthemoides* Tourn. ex Medik.
 736.1 *monilifera* (L.) T. Norl. Soft shrub, composite fruit with pappus and berries, forest gaps and margin, widespread, scattered to common, western Cape to Transvaal. *Bayliss 146 PRE*
- 9528 *Gerbera* L.
cordata (Thunb.) Less. Forb, capitulum with pappus, medium-moist to dry forest, widespread, scattered to common, southern to eastern Cape. *Geldenhuys 64 SAAS*