Mountains of the Mist: A first plant checklist for the Bvumba Mountains, Manica Highlands (Zimbabwe-Mozambique)

Jonathan Timberlake¹, Petra Ballings²-³, João de Deus Vidal Jr⁴, Bart Wursten², Mark Hyde², Anthony Mapaura⁴⁵, Susan Childes⁶, Meg Coates Palgrave², Vincent Ralph Clark⁴

¹ Biodiversity Foundation for Africa, 30 Warren Lane, East Dean, E. Sussex, BN20 0EW, UK ² Flora of Zimbabwe & Flora of Mozambique projects, 29 Harry Pichanick Drive, Alexandra Park, Harare, Zimbabwe ³ Meise Botanic Garden, Bouchout Domain, Nieuwelaan 38, 1860, Meise, Belgium ⁴ Afromontane Research Unit & Department of Geography, University of the Free State, Phuthaditjhaba, South Africa ⁵ National Herbarium of Zimbabwe, Box A889, Avondale, Harare, Zimbabwe ⁶ Box BW53 Borrowdale, Harare, Zimbabwe

Corresponding author: Vincent Ralph Clark (vincentralph.clark@gmail.com)

Academic editor: R. Riina  |  Received 10 December 2019  |  Accepted 18 February 2020  |  Published 10 April 2020

Citation: Timberlake J, Ballings P, Vidal Jr JD, Wursten B, Hyde M, Mapaura A, Childes S, Palgrave MC, Clark VR (2020) Mountains of the Mist: A first plant checklist for the Bvumba Mountains, Manica Highlands (Zimbabwe-Mozambique). PhytoKeys 145: 93–129. https://doi.org/10.3897/phytokeys.145.49257

Abstract

The first comprehensive plant checklist for the Bvumba massif, situated in the Manica Highlands along the Zimbabwe-Mozambique border, is presented. Although covering only 276 km², the flora is rich with 1250 taxa (1127 native taxa and 123 naturalised introductions). There is a high proportion of Orchidaceae and Pteridophyta, with both groups showing a higher richness than for adjacent montane areas, which may be due to the massif’s relatively high moisture levels as a result of frequent cloud cover. However, in contrast to other mesic montane regions in southern Africa, there are relatively few near-endemic or range-restricted taxa: there is only one local endemic, Aeranthes africana, an epiphytic forest orchid. This is likely to be an effect of the massif having limited natural grassland compared to forest, the former being the most endemic-rich habitat in southern African mountains outside of the Fynbos Biome. Six other near-endemic taxa with limited distribution in this portion of the Manica Highlands are highlighted. The high number of invasive species is probably a result of diverse human activities in the area. The main species of concern are Acacia melanoxylon, a tree that is invading grassland and previously cultivated land, the forest herb Hedychium gardnerianum which in places is transforming forest understorey with an adverse...
effect on some forest birds, and the woody herb *Vernonanthura polyanthes* which invades cleared forest areas after fire. Future botanical work in the massif should focus on a more detailed exploration of the poorly known Serra Vumba on the Mozambican side and on the drier western slopes. This will allow for a more detailed analysis of patterns of endemism across the Manica Highlands.

**Keywords**
endemics, floristics, invasive species, Manica Highlands, montane, plant diversity

**Introduction**

Southern African mountains continue to fascinate biologists, ecologists and conservationists with their high endemism, high species diversity, and as a haven for taxonomically complex and cryptic evolutionary lineages (White 1978; Taylor et al. 2013; Uys and Cron 2013; Conradie 2014; Mynhardt et al. 2015; Padayachee and Procheş 2016; Phiri and Daniels 2016; Conradie et al. 2018; Branch et al. 2019). From a floristic perspective, there has been a steady output of comprehensive data from the region over the past 25 years, for example the Nyika Plateau (Burrows and Willis 2005) and Mount Mulanje (Strugnell 2006) in Malawi; Mounts Gorongosa, Mabu and Namuli (Müller et al. 2008; Timberlake et al. 2009; Bayliss et al. 2014; Timberlake, in prep.) in Mozambique; Chirinda Forest (Drummond and Mapaure 1994) in Zimbabwe; the Angolan Highlands (Goyder and Gonçalves 2019); the heterogeneous southern African Great Escarpment (Clark et al. 2011, 2014; Roth et al. 2014; Darbyshire et al. 2018; Carbutt 2019). This has greatly improved our regional understanding of montane floristics, patterns of endemism, biogeography and conservation needs. In addition, an account of all the endemic and near-endemic plants from Mozambique has recently been published (Darbyshire et al. 2019b), some of which occur in these border areas. Despite these advances, ongoing biodiversity research in southern African mountains remains a key regional need (Clark et al. 2011, 2019; CEPF 2012), and there remains a substantial lag in the production of fundamental biodiversity and taxonomic data compared to other mountains in Africa.

The Manica Highlands (Clark et al. 2017), which lie on the border between Zimbabwe and Mozambique and are mostly synonymous with Van Wyk and Smith’s (2001) Chimanimani-Nyanga Centre of Floristic Endemism, comprise an area that has been well-botanised over the last 100 years, yet with few publications. Over the past decade, attention has been focused on improving our knowledge of plant diversity and endemism for this ecologically complex 8,000 km$^2$ mountain system. For instance, the first comprehensive floristic treatment of the Nyanga massif was published only recently (Clark et al. 2017), as was the first substantial revision in 50 years of the Chimanimani flora (Wursten et al. 2017).

The central parts of the Manica Highlands (from north to south: Stapleford, Penhalonga, Bvumba, Banti, Himalaya, Tsetserra) are now the outstanding areas that require synthesis of available data and further fieldwork, with the Bvumba being prob-
ably the most thoroughly botanised component of the Manica Highlands. Here we present the first comprehensive plant checklist for the Bvumba massif, with some notes on the massif and its flora.

**The Bvumba area**

**Defining the study area**

Clark et al. (2017) defined the Bvumba as the entire central component of the Manica Highlands, which includes the Bvumba as well as the Penhalonga and Stapleford uplands that occur immediately to the north, i.e. between the Bvumba and Nyanga. However, due to lack of adequate floristic data for Penhalonga and Stapleford, we here restrict ourselves to the Bvumba massif *sensu stricto* and not to the broader Bvumba area as shown in Clark et al. (2017). The checklist area is defined as that part lying primarily above 1200 m altitude with significant vegetation cover, an extent of around 276 km\(^2\), and differs slightly from the more rigid use of the 1200 m contour used by Childes and Mundy (2001).

**Location and topography**

Centred on 19°06’S, 32°47’E, the Bvumba lies 20 km south-east of the border city of Mutare and straddles the Zimbabwe-Mozambique border (Figure 1). The largest extension lies within Mutare District in eastern Zimbabwe, but a significant area of around 30 km\(^2\) lies over the border in Manica District in Mozambique’s Manica Province. This north-eastern extension terminates at the peak of Serra Vumba (1646 m) at 18°58’35”S, 32°53’25”E, just 5 km south of Manica town (previously Vila da Manica) on the main Mutare–Beira highway. The area as a whole is bounded in the north by the Muneni valley (in which the Forbes/Machipanda border post is situated) and in the south by the Burma valley (Nyumataka River), which separates it from the Banti-Himalaya-Tsetserra massif. The Mozambique midlands/lowlands and Chicamba Real dam form the eastern limits, while the Odzi River valley forms the western boundary. Outlying ridges and inselbergs to the west – including Cecil Kop – have been excluded. The lower elevational cut-off of approximately 1000–1200 m used here roughly follows the base of the Bvumba massif where it emerges from the surrounding plains.

Consisting of an upland massif, the highest points in the study area are Castle Beacon (1911 m) and Chinyakwaremba (1714 m), while the main rivers are the Nyamataka in the south, which drains into the Rio Vanduzi via the Chicamba Real dam and then on into the Rio Búzi, the Zonwe River in the centre and the Ndondwe River in the north, both also draining into the Vanduzi. To the west the main river is the Nyachowa, which drains into the Odzi and eventually into the Save River.
Figure 1. Map of the geographic location and selected elevations of the Bvumba massif and vicinities, with main points of interest.

Geology

The principal rocks underlying the Bvumba area are gneissic granites of Proterozoic age, perhaps 2560 million years old, interlaced with intrusions of finer-grained darker dolerite rock perhaps 1800 million years old (Bartholomew 1990; Martin 2000). Millions of years of erosion have left the granite domes exposed, standing above the surrounding younger landscape. Some peri-glacial features date from the Pleistocene period (25,000 years BP). No minerals of economic significance are noted, although gold has been mined for hundreds of years from areas just north of Mutare. The soils are often deep and well-weathered, but are not considered particularly fertile owing to their age and weathering.

Climate

Surprisingly, there does not appear to be a long-term rainfall recording station in the Bvumba area (Agritex 1989), the nearest being at Mutare, which is significantly lower in elevation and with a lower annual rainfall. On isohyet maps, rainfall is indicated as being around 1800 mm/year (Agritex 1989). The warm rainy or growing season extends from November to mid-March, with a colder dry season from June through
to August. Frosts are scarce. A major feature, and one which gives the mountains their name of Mountains of the Mist, are the frequent mists and low moist cloud during the dry season, sometimes called guti (Martin 2000). It is these mists that reduce the physiological stress of the dry season for many plant species and allow forest to thrive.

**History and land use**

The area has been settled, on the Mozambique side in particular, for perhaps 1000 years, with the first written record of people living there dating from Portuguese explorers in the first half of the 17th century (Bannerman 2010; Martin 2000). It was possibly more heavily settled in the past than it is now, as seen from the many grinding stones found inside the forests. When European occupation first started, much of the area was settled by people of the Chirara dynasty (Martin 2000), particularly on the Mozambique side and along the Nzombe valley. The first European settlement on the Zimbabwe side started around 1890, and the first formal concession was granted by the British South African Company for the farm Cloudlands in 1898, now a private nature reserve. A road was cut in 1917 to the Bunga Forest from Mutare (then Umtali), and by 1921 the road continued over and into the Burma Valley (Martin 2000).

Within Zimbabwe, the Bvumba area is now nearly all on privately held land, much of it in small agricultural holdings, plantations or managed for conservation or eco-tourism, including the famous Leopard Rock Hotel and golf course. There is a good road network and the area is well-settled with many properties, a number of which are used as holiday homes with many owners making strong efforts to conserve both the flora and bird life. Commercial farming in the Bvumba area includes dairy, Protea flowers, coffee, and with some wattle and Eucalyptus plantations. The only formal conservation areas are the Bvumba National Park and Botanic Gardens (201 ha) and the now much-expanded Bunga Forest Botanical Reserve (1,560 ha) managed by the Zimbabwe Parks and Wildlife Management Authority. There are no formally conserved areas on the Mozambique side, although from recent Google Earth imagery much of Serra Vumba’s vegetation cover appears to be relatively intact and it may be protected by local traditions.

**Vegetation**

There are four broad vegetation types occurring in the Bvumba area – montane grassland, Afromontane evergreen forest, high-rainfall miombo woodland, and secondary scrub savanna (Martin 2000). The edges of the forests are surrounded by a dense scrub of Pteridium, Smilax, Buddleja, Vangueria and Vernonia (Childes and Mundy 2001). In addition, there are plantations of exotic timber trees and cultivated or fallow agricultural land. It is possible that montane forest originally covered much of the Bvumba, principally owing to dry season precipitation in the form of low wet clouds (guti). But
there is little montane grassland, a vegetation type of great botanical significance in the Nyanga and Chimanimani areas (Timberlake et al. 2016a). It is not clear why this is so, but it might be due to the somewhat lower elevations of the Bvumba compared to Nyanga and/or the greater amount of winter precipitation that allows forest to sustain itself. The high-rainfall woodlands contain many epiphytic ferns and orchids, which also have a high frequency in montane forest. Burrows (1990) suggests that the Bvumba has perhaps the richest fern flora in southern Africa owing to the pervasive mists. Secondary scrub savanna is generally found on infertile or gravelly soils or in degraded forests or reverted agricultural land, and it is here that a number of invasive tree and shrub species are found (S. Childes, pers. obs.).

Previous studies

The Bvumba has seen much botanical activity and many collections over the last 50 years, but almost entirely from the Zimbabwe side. Two notable collectors were Norman Chase, who assembled over 8,000 specimens with meticulous notes, mostly from the Manica Highlands but with a large number from the Bvumba, and John Ball, for whom the Bvumba and Chimanimani provided the inspiration for his book on epiphytic orchids (Ball 1978). Other significant collectors include Hiram Wild, Darrel Plowes, Tom Müller and Hamish Gilliland. Three of the current authors (Mark Hyde, Petra Ballings and Bart Wursten) have collected extensively there over the last 20 years, and another (Susan Childes) runs a small forest and bird conservation area. Although no comprehensive overall checklist was available, detailed lists of the orchids and ferns of the broader area are found on the Vumba Nature website (Ballings and Wursten 2019) and a preliminary Bvumba plant list was compiled by Mark Hyde from a manuscript list by Norman Chase (Chase, no date) and Tree Society and Orchid Society records (Hyde 1999).

The Bvumba Highlands are considered to be an Important Bird Area (IBA ZW004, Childes and Mundy 2001), known for the richness of its montane avifauna. The IBA is taken to be the area above 1200 m elevation, considered to be the lower limit for montane bird species (Harwin et al. 1994). A total of 242 bird species have been recorded, including three of global conservation concern.

The only detailed plant ecological work done so far specifically in the Bvumba area is that by Plowes (2002), who looked at the impacts of the devastating Cyclone Eline on the 40-ha Bunga Forest in February 2000. He noted nearly 200 fallen trees that had created 46 patches totalling 1.57 ha, equivalent to a loss of 13% of forest cover. Gilliland (1938), in his study of the vegetation of Zimbabwe’s Manicaland, surprisingly does not mention areas this far south.

During his major study on Eastern Zimbabwe’s moist forests (Müller 1999, 2006), Tom Müller recorded 37 georeferenced 50 × 50 m forest plots in the Bvumba area. These fell into seven of his 12 described forest types, with most being Type 5 (Syzygium guineense subsp. afromontanum montane forest, 10 plots), Type 7 (Mixed
sub-montane forest, 8 plots) and Type 11 (Medium elevation forest, 8 plots). In addition, there were a few plots each of Type 6 (Regenerating montane forest), Type 8 (*Craibia brevicaudata* forest), Type 9 (*Albizia*-dominated regenerating forest) and Type 10 (*Albizia schimperiana* forest). Hence most of the Bvumba forest plots recorded fell into what Muller calls sub-montane forest, with only a few from the montane or medium elevation forest zones. An interesting finding is that of the 37 plots marked on aerial photographs from the early 1970s, only three have been obviously lost or damaged from what can be seen of their canopy cover using recent Google Earth imagery (most dating from June 2019).

Although not formally documented, it does appear that disturbance over the last 100 years has led to a drying out of some of the forests and an invasion of alien plants (T. Müller, pers. comm. 2017). The impression (S. Childes, pers. obs.) is that the fern flora is moving towards the more generalist species and that some drought-sensitive species of angiosperms such as *Streptocarpus umtaliensis* and *Cryptostephanus vansonii* are reducing.

**Materials and methods**

As the Bvumba is well-documented botanically, with approximately a century of botanical collecting, a checklist approach to documenting plant diversity and endemism was decided upon in order to be comparable to floristic lists recently compiled for Nyanga massif (Clark et al. 2017) and the Chimanimani mountains (Wursten et al. 2017). The two main sources were (i) an extract of the Harare Herbarium (SRGH) database of all records containing the word ‘Vumba’ in the locality field, with any records obviously from below 1200 m elevation removed, and (ii) records from the Bvumba area above 1200 m elevation cited on the Flora of Zimbabwe website (https://www.zimbabweflora.co.zw/, Hyde et al. 2020). In addition to these there were (iii) records from published volumes of Flora Zambesiaca, (iv) orchid and pteridophyte records listed on the Nature Vumba website (Ballings and Wursten 2019), (v) confirmed records from an unpublished Bvumba checklist (Hyde 1999) including those cited as being from Chase’s list (Chase, no date), (vi) any additional records from forest plot studies undertaken by Müller in the 1970s (Müller 2006), and finally (vii) personal records from the authors. A herbarium specimen or record citation (i.e. from the Flora of Zimbabwe website) is given for each taxon, or a confirmed sighting (s.r.) indicated. If there was any uncertainty over an occurrence, the record was omitted.

Families and species are listed alphabetically under pteridophytes, gymnosperms, monocotyledons and dicotyledons. Nomenclature and family arrangement follow those used on the Flora of Zimbabwe website (Hyde et al. 2020, accessed 1 February 2020). Pteridophyte families follow that used in the Pteridophyte Phylogeny Group (2016). Species authorities are abbreviated following Brummitt and Powell (1992). Synonyms are given only for significant recent changes or for taxa that have been known or recorded locally under a different name (e.g. in Mapaura and Timberlake
2004) or where confusion may occur. Where a taxon is believed to be endemic or near-endemic, this is indicated with an E or NE, respectively. Species that are said to be naturalised or introduced on the Flora of Zimbabwe website are indicated with an asterisk (*).

**Results and discussion**

The checklist contains 1250 taxa, comprising 137 pteridophytes, 2 gymnosperms and 1111 flowering plants (Table 1). Of these, 1127 are native species and 123 (9.8%) are naturalised or semi-naturalised introductions, most, unsurprisingly, being cosmopolitan weeds in the Asteraceae (25 species), Poaceae (8 species) and Amaranthaceae (7 species). The largest families represented in the checklist are shown in Table 2.

In terms of species, there are three findings of particular note. First, there is a particularly high number of orchids (125 taxa across 276 km²), higher than might have been expected and significantly more than the number found in the more extensive Nyanga area above 1200 m elevation (92 taxa across 2181 km²; Clark et al. 2017) and in the Chimaninani mountains (97 taxa across 530 km²; Wursten et al. 2017). There are also a large number − 137 taxa − of pteridophytes (particularly ferns), compared to 136 taxa in the Nyanga area and just 105 in the Chimaninani. This is probably due to the greater moisture levels and frequent clouds in the Bvumba; the area is said to be possibly the richest locality for pteridophytes in southern Africa (Burrows 1990).

The third point of interest, again possibly linked to the high precipitation levels, is the lack of the montane conifer *Widdringtonia nodiflora* on the Bvumba, a species

| Table 1. Total number of taxa and introduced taxa in the Bvumba checklist, by group. |
|---------------------------------|------------------|------------------|
| **No. taxa** | **No. introduced** |
| Pteridophytes | 137 | 1 |
| Gymnosperms | 2 | 1 |
| Monocotyledons | 336 | 15 |
| Dicotyledons | 775 | 106 |
| **TOTAL** | **1250** | **123** |

| Table 2. The 10 largest families represented on the Bvumba checklist. |
|-----------------|------------------|
| **Family** | **No. taxa** |
| Orchidaceae | 125 |
| Asteraceae | 119 |
| Fabaceae *sensu lato* | 93 |
| Poaceae | 93 |
| Rubiaceae | 59 |
| Acanthaceae | 33 |
| Lamiaceae | 29 |
| Cyperaceae | 28 |
| Aspleniaceae (Pteridophyta) | 27 |
| Apocynaceae | 22 |
that is locally common both in the Nyanga and Chimanimani areas as well as on Mt Mulanje in southern Malawi (where it also occurs with *W. whytei*) and Mt Gorongosa in Mozambique (Müller et al. 2008). *Widdringtonia* is generally found on the drier rain-shadow side of these large mountains.

**Endemics and taxa of restricted distribution**

There is only one taxon known to be endemic to the Bvumba, the epiphytic orchid *Aeranthes africana*. Noted just twice, it is apparently now not found in its first-recorded location in the forests near Castle Beacon (S. Childes, pers. comm.). This species was recently assessed using IUCN Red List criteria (IUCN 2001) as Critically Endangered (Timberlake 2020, in press) and could be almost extinct, but it is cryptic among the leaves of *Podocarpus milanjianus* and difficult to see except on fallen branches so may have been overlooked.

Six other near-endemic taxa – here defined as taxa found only on nearby montane massifs such as Nyanga, Serra Choa, Stapleford, Banti/Himalaya and Tsetserra, but not including those also found on the Chimanimani or further afield (including Chirinda and Mt Gorongosa) – are found in the Bvumba area (Table 3). Two of them – *Aloe cameronii* var. *bondana* and *Aloe inyangensis* var. *kimberleyana* – are varieties of more widespread species and thus of lesser taxonomic significance; both have recently been assessed as Least Concern using IUCN criteria (Timberlake, in press). Of the remaining four taxa, *Barleria fissimuroides* is restricted to just the Bvumba area and a farm just over the border in Mozambique north of Mutare, but three are more widespread, being found from Serra Choa in Mozambique or over the border in Nyanga south to the Himalaya/Tsetserra area or, in the case of *Anthospermum zimbabwense*, to Mt Pene.

**Table 3.** Taxa of restricted distribution found in the Bvumba area.

| Family/species | Distribution | IUCN Red List assessment |
|----------------|--------------|--------------------------|
| Asphodelaceae | Aloe cameronii *Hemsl.* var. *bondana* *Reynolds* | Troutbeck, Juliasdale, Bvumba | LC |
| | Aloe inyangensis *Christian* var. *kimberleyana* *S.Carter* | Nyanga NP, Juliasdale, Stapleford, Bvumba | LC |
| Orchidaceae | *Aeranthes africana* *J.L.Stewart* | Bvumba [endemic] | CR D |
| Acanthaceae | *Barleria fissimuroides* *I.Darbysh.* | Bvumba, Quinta da Frontiera | EN B2ab |
| Gesneriaceae | *Streptocarpus umtaliensis* *B.L.Burtt* | Serra Choa, Nyanga, Stapleford, Bvumba, Tsetserra | LC |
| Loranthaceae | *Englerina oedostemon* *(Dansen)* *Polhill* & *Wiens* | Serra Choa, Nyanga, Stapleford, Mutare, Bvumba, Tsetserra | – |
| Rubiaceae | *Anthospermum zimbabwense* *Puff* | Nyanga, Stapleford, Bvumba, Himalaya, Mt Pene | NT B1ab+2ab |
in Chimanimani District. Only one of the near-endemic taxa is threatened, *B. fisi- simuroides* (Endangered, Darbyshire et al. 2019a). Also of note is the orchid *Angraecum stella-africae*, believed to be extinct in Zimbabwe (Mapaura and Timberlake 2002), but a small colony has been found on the Bvumba in recent years (Wursten 2007). This species has also been found in Malawi (Viphya, Mt Mulanje) and northern South Africa (Wolkberg Mountains) but is nowhere common.

It is surprising that the Bvumba massif has so few endemic or near-endemic taxa, especially when compared to the Chimanimani Mountains (71 endemic taxa, Wursten et al. 2017) or the Nyanga area (19 endemic taxa, revised from Clark et al. 2017). This is obviously not due to under-collection, but possibly the result of the relatively small size of the Bvumba and the preponderance of forest vegetation compared to montane grassland and scrub habitats. Most Nyanga and Chimanimani endemics, for example, are found in montane grassland or montane scrub (Clark et al. 2017; Wursten et al. 2017), habitats poorly represented in the Bvumba and which are also substantially disturbed there.

**Introduced and invasive species**

There are 123 introduced species present in the Bvumba, a result of the diverse human activities there. Although most of these non-native species are benign, a handful are causing major problems. In contrast to other parts of the Manica Highlands, the Bvumba has a high proportion of introduced species that are garden escapes while the rest of the Manica Highlands is affected more by those from commercial forestry.

Invasive woody invasive species on the Bvumba are typically those also found in other parts of the Manica Highlands, and include the Australian *Acacia mearnsii* (wattle) and *A. melanoxylon* (Australian Blackwood) and *Pinus patula*. Australian Blackwood is a particular problem, taking over tracts of open grassland and areas previously under *Protea* cultivation (S. Childes, pers. obs.). Other woody but non-commercial species that have naturalised and have invasive potential (based on evidence elsewhere in the region) are *Bauhinia variegata* var. *variegata*, *Cinnamomum camphora*, *C. verum*, *Homalanthus populifolius*, *Jacaranda mimosifolia*, *Psidium cattleianum*, *P. guajava*, *Sambucus canadensis* and *Syzygium jambos*. Classic invasive shrubs are *Lantana camara* and *Solanum mauritianum*, for which there are no easy management solutions, while *Cestrum aurantiacum* is clearly a local problem. A more recent challenge is *Vernonanthura polyanthes* – locally called ‘Beebush’ – which has become rampant since it spread into the Bvumba and Chimanimani areas after its introduction from Brazil to Mozambique (Timberlake et al. 2016b). It spreads rapidly into disturbed and burnt areas that were under wattle, blackwood or eucalyptus (S. Childes. pers. obs.). Clark et al. (2019) postulate that Cyclone Idai (March 2019) might have encouraged the spread of this wind-dispersed species even further afield, although it had earlier also been encountered on the Ribáuè mountains in northern Mozambique (I. Darbyshire, pers. comm. 2017). Indigenous montane forests are being invaded by the garden escap-
ees *Tradescantia fluminensis* and *T. zebrina*, while perhaps the worst forest invader is *Hedychium gardnerianum* – a species that can transform the forest understory and has adverse effects on ground-foraging birds such as Orange Thrush (*Geokichla gurneyi*), Buff-spotted Flufftail (*Sarothrura elegans*) and Cinnamon Dove (*Columba larvata*) that need an open understory with leaf litter (S. Childes, pers. obs.).

**Limitations and future work**

Despite the detailed collections, this list is a compilation. As a result, some taxa may have been accidentally omitted whereas others that are found only below 1200 m elevation may have inadvertently been included. In particular, it should be recognised that there are virtually no records from Serra Vumba on the Mozambique side, an area that needs a more detailed collection. Similarly, the drier western slopes of the Bvumba in Zimbabwe have also been undercollected (J. Burrows, pers. comm.). However, with these provisos we estimate that the list is over 90% complete, suggesting a total indigenous flora of around 1250 taxa, of which approximately 1100 would be native flowering plants.

The remaining data gaps for the botanical inventory of the Manica Highlands are centred on the areas immediately to the north and south of the Bvumba, namely Penhalonga-Stapleford and Banti-Himalaya-Tsetserra, respectively. However, some recent survey work has been conducted on Tsetserra and a list of the endemic and range-restricted species has been compiled for that area (J. Osborne, pers. comm.). In contrast to Nyanga, Chimanimani and Bvumba, which had comprehensive available data with which to work, both areas require detailed botanical collecting before reliable lists can be compiled.

**Acknowledgements**

Peter Linder and Nigel Barker are especially thanked for encouragement and support in the establishment of this initiative. Rhodes University, the University of Pretoria, the University of Zürich and the Afromontane Research Unit at the University of the Free State are thanked for logistical support. We are grateful to two reviewers, Iain Darbyshire and John Burrows, for useful comments on a draft.

**References**

Agritex (1989) Agro-Climatological Summaries and Analysis (rainfall and potential evapotranspiration) Volume II, Rainfall. Department of Agricultural Technical and Extension Services/Department of Meteorological Services, Harare.

Ball JS (1978) Southern African Epiphytic Orchids. Conservation Press, Johannesburg, 248 pp.
Ballings P, Wursten B (2019) Vumba Nature. http://www.vumba-nature.com/ [accessed 16 September 2019]

Bannerman JH (2010) The human population: history, culture, land use and traditional structures. In: Ghiurghi A, Dondeyne S, Bannerman JH (Eds) Chimanimani National Reserve: Management Plan. Appendix 1, volume 3. Report prepared by AgriConsulting for Ministry of Tourism, Maputo, Mozambique.

Bartholomew DS (1990) Base metal and industrial mineral deposits of Zimbabwe. Mineral Resources Series No. 22. Zimbabwe Geological Survey, Harare.

Bayliss J, Timberlake JR, Branch W, Bruessow C, Collins S, Congdon C, Curran M, de Sousa C, Dowsett R, Dowsett-Lemaire F, Fishpool L, Harris T, Herrmann E, Georgiadis S, Kopp M, Liggitt B, Monadjem A, Patel H, Ribeiro D, Spottswoode C, Taylor P, Willcock S, Smith P (2014) The discovery, biodiversity and conservation of Mabu forest–The largest medium-altitude rainforest in southern Africa. Oryx 48(2): 177–185. https://doi.org/10.1017/S0030605313000720

Branch WR, Vaz Pinto P, Baptista N, Conradie W (2019) The Reptiles of Angola: History, Diversity, Endemism and Hotspots. In: Huntley B, Russo V, Lages F, Ferrand N (Eds) Biodiversity of Angola. Springer, Switzerland, 283–334. https://doi.org/10.1007/978-3-030-03083-4_13

Brummitt RK, Powell CE (1992) Authors of Plant Names. Royal Botanic Gardens, Kew, 732 pp.

Burrows JE (1990) Southern African Ferns and Fern Allies. Fransden Press, Sandton, 359 pp.

Burrows JE, Willis CK [Eds.] (2005) Plants of the Nyika Plateau. Southern Africa Biodiversity Network Report No. 31. SABONET, Pretoria, 405 pp.

Carbutt C (2019) The Drakensberg Mountain Centre: A necessary revision of southern Africa’s high-elevation centre of plant endemism. South African Journal of Botany 124: 508–529. https://doi.org/10.1016/j.sajb.2019.05.032

Chase ND (no date) Indigenous trees and shrubs found generally in the high altitudes of the Vumba Mountains, forests and savannah. Unpublished manuscript, Mutare.

Childes SL, Mundy PJ (2001) Zimbabwe. In: Fishpool LDC, Evans MI (Eds) Important bird areas in Africa and associated islands. Priority sites for conservation. Pisces/BirdLife International, Newbury/Cambridge, 1025–1042.

Clark VR, Barker NP, Mucina L (2011) Taking the scenic route – the southern Great Escarpment as part of the Cape to Cairo floristic highway. Plant Ecology & Diversity 4(4): 313–328. https://doi.org/10.1080/17550874.2011.619584

Clark VR, Dold AP, McMaster C, McGregor G, Bredenkamp C, Barker NP (2014) Rich Sister, Poor Cousin: Plant Diversity and Endemism in the Great Winterberg-Amatholes (Great Escarpment, Eastern Cape, South Africa). South African Journal of Botany 92: 159–174. https://doi.org/10.1016/j.sajb.2014.01.008

Clark VR, Timberlake JR, Hyde MA, Mapaura A, Coates Palgrave M, Wursten BT, Ballings P, Burrows JE, Linder HP, McGregor GK, Chapano C, Plowes DCH, Childes SL, Dondeyne S, Müller T, Barker NP (2017) A first comprehensive account of floristic diversity and endemism on the Nyanga Massif, Manica Highlands (Zimbabwe-Mozambique). Kirkia 19: 1–53. https://doi.org/10.5167/uzh-131473

Clark VR, Vidal Jr JD, Grundy I, Fakarayi I, Childes S, Barker NP, Linder HP (2019) Bridging the divide between intuitive social-ecological value and sustainability in the Manica
Highlands of southern Africa (Zimbabwe-Mozambique). Ecosystem Services 39: 100999. https://doi.org/10.1016/j.ecoser.2019.100999

Conradie W (2014) The King of the Dwarves: A new cryptic species of Dainty Frog (Anura: Pyxicephalidae: *Cacosternum*) from the eastern Great Escarpment of South Africa. Zootaxa 3785(3): 438–452. https://doi.org/10.11646/zootaxa.3785.3.6

Conradie W, Busschau T, Edwards S (2018) Two new species of *Acontias* (Acontinae, Scincidae) from the Mpumalanga Highveld escarpment of South Africa. Zootaxa 4429(1): 89–106. https://doi.org/10.11646/zootaxa.4429.1.3

Critical Ecosystem Partnership Fund (CEPF) (2012) Ecosystem Profile: Eastern Afromontane Biodiversity Hotspot. Critical Ecosystem Partnership Fund/BirdLife International, Nairobi, 267 pp.

Darbyshire I, Frances LN, Francisco MC, Gonçalves MP (2018) A synopsis of *Rhinacanthus* (Acanthaceae) in Angola and Namibia. Kew Bulletin 73(2): 1–21. https://doi.org/10.1007/s12225-018-9746-5

Darbyshire I, Rokni S, Alves MT, Burrows JE, Chelene I, Datizua C, de Sousa C, Fijamo V, Langa C, Massingue AO, Massunde J, Matimele HA, Muscaleque PA, Osborne J, Si-toe P (2019a) *Barleria fissimurroides*. The IUCN Red List of Threatened Species 2019: e.T120940520A120980033. https://doi.org/10.2305/IUCN.UK.2019-3. RLTS. T120940520A120980033.en [accessed 09 February 2020]

Darbyshire I, Timberlake J, Osborne J, Rokni S, Matimele H, Langa C, Datizua C, de Sousa C, Alves T, Massingue A, Hadj-Hammou J, Dhanda S, Shah T, Wursten W (2019b) The endemic plants of Mozambique: Diversity and conservation status. PhytoKeys 136: 45–96. https://doi.org/10.3897/phytokeys.136.39020

Drummond RB, Mapaura I (1994) List of flowering plants and ferns. In: Timberlake JR, Shaw P (Eds) Chirinda Forest—a Visitors’ Guide. Research and Development Division, Zimbabwe Forestry Commission, Harare, 135–154.

Gilliland HB (1938) The vegetation of Rhodesian Manicaland. Journal of South African Botany 4: 73–100.

Goyder D, Gonçalves FM (2019) The Flora of Angola: Collectors, Richness and Endemism: Science & Conservation: A Modern Synthesis. In: Huntley B, Russo V, Lages F, Ferrand N (Eds) Biodiversity of Angola. Springer, Switzerland, 79–96. https://doi.org/10.1007/978-3-030-03083-4_5

Harwin RM, Manson AJ, Manson C, Mwadziwana P (1994) The birds of the Bvumba highlands. Honeyguide 40(1): 1–51.

Hyde MA (1999) A draft checklist of the plants of the Bvumba (draft no. 3). Compiled for the visit of the Tree Society to the Bvumba, Aug 11th to 15th 1999. Unpublished manuscript.

Hyde MA, Wursten BT, Ballings P, Coates Palgrave M (2020) Flora of Zimbabwe. http://www.zimbabweflora.co.zw/index.php [accessed 01 February 2020]

International Union for Conservation of Nature (IUCN) (2001) IUCN Red List categories and criteria: Version 3.1. IUCN Species Survival Commission, IUCN, Gland, Switzerland and Cambridge, 30 pp.

Mapaura A, Timberlake JR (2004) A checklist of Zimbabwean vascular plants. Southern African Botanical Diversity Network Report No. 33. SABONET, Pretoria, 149 pp.
Mapaura A, Timberlake JR (2002) Zimbabwe. In: Golding JS (Ed.) Southern Africa Plant Red Data Lists. Southern African Botanical Diversity Network Report No. 14. SABONET, Pretoria, 157–182.

Martin D (2000) Bvumba: Magic in the Mist. African Publishing Group, Harare, 57 pp.

Müller T (1999) The distribution, classification and conservation of rainforests in Zimbabwe. In: Timberlake J, Kativu S (Eds) African Plants: Biodiversity, Taxonomy and Uses. Proceedings of the 1997 AETFAT Congress, Harare, Zimbabwe, Royal Botanic Gardens, Kew, 221–235.

Müller T (2006) The distribution and conservation of rainforests in Eastern Zimbabwe. Occasional Publications in Biodiversity No.19. Biodiversity Foundation for Africa, Bulawayo. http://www.biodiversityfoundation.org/documents/BFA%20No.19_Rainforests%20E%20Zimbabwe.pdf [accessed 01 February 2020]

Müller T, Mapaura A, Wursten B, Chapano C, Ballings P, Wild R (2008) Vegetation survey of Mount Gorongosa. Occasional Publications in Biodiversity No. 23. Biodiversity Foundation for Africa, Bulawayo. http://www.biodiversityfoundation.org/documents/BFA%20No.23_Gorongosa%20vegetation%20survey.pdf [accessed 01 February 2020]

Mynhardt S, Maree S, Pelser I, Bennett NC, Bronner GN, Wilson JW, Bloomer P (2015) Phylogeography of a Morphologically Cryptic Golden Mole Assemblage from South-Eastern Africa. PLoS ONE 10(12): e0144995. https://doi.org/10.1371/journal.pone.0144995

Padayachee AL, Prochêş S (2016) Patterns in the diversity and endemism of extant Eocene age lineages across southern Africa. Biological Journal of the Linnean Society. Linnean Society of London 117(3): 482–491. https://doi.org/10.1111/bij.12688

Phiri EE, Daniels SR (2016) Multilocus coalescent species delimitation reveals widespread cryptic differentiation among Drakensberg mountain-living freshwater crabs (Decapoda: Potamonautae). Invertebrate Systematics 30(1): 60–74. https://doi.org/10.1071/IS15035

Plowes RM (2002) Tree damage by Cyclone Eline in the Bunga Forest, Zimbabwe. Kirkia 18: 63–71. https://www.jstor.org/stable/23502378

Pteridophyte Phylogeny Group (2016) A community-derived classification for extant lycophytes and ferns. Journal of Systematics and Evolution 54(6): 563–603. https://doi.org/10.1111/jse.12229

Roth S, Molina J, Predel R (2014) Biodiversity, ecology, and behavior of the recently discovered insect order Mantophasmatodea. Frontiers in Zoology 11(1): 1–70. https://doi.org/10.1186/s12983-014-0070-0

Strugnell AM (2006) A Checklist of the Spermatophytes of Mount Mulanje, Malawi. Scripta Botanica Belgica 34. National Botanic Garden, Meise, 199 pp.

Taylor PJ, Kearney TC, Kerbis Peterhans JC, Baxter RM, Willows-Munro S (2013) Cryptic diversity in forest shrews of the genus Myosorex from southern Africa, with the description of a new species and comments on Myosorex tenuis. Zoological Journal of the Linnean Society 169(4): 881–902. https://doi.org/10.1111/zoj.12083

Timberlake JR (in press) Aeranthes africana, Aloe cameronii var. bondana, Aloe inyangensis var. kimberleyana. The IUCN Red List of Threatened Species.

Timberlake J, Dowsett-Lemaire F, Bayliss J, Alves T, Baena S, Bento C, Cook K, Francisco J, Harris T, Smith P, de Sousa C (2009) Mt. Namuli, Mozambique: biodiversity and conservation. Royal Botanic Gardens, Kew, 115 pp.
Appendix 1

Table A1. Vascular plant checklist for the Bvumba area, E Zimbabwe above 1200 m altitude. Nomenclature follows the Flora of Zimbabwe website (Hyde et al. 2020) with some minor changes. * – introduced species; E – endemic species; NE – near-endemic; FoZ # – Flora of Zimbabwe website record number; s.r. – sight record.

| Name / authority | Voucher |
|------------------|---------|
| PTERIDOPHYTA     |         |
| Anemiaceae       |         |
| Pteris quadratrina Retz subsp. catoptera (Kunze) Schelpe | Chase 7485 |
| Mohria lepigera (Baker) Baker | Chase 3823 |
| Mohria nudiuscula J.P. Roux | Chase 7035 |
| Mohria vestita Baker | Ballings & Wursten 875 |
| Aspleniaceae     |         |
| Asplenium aethiopicum (Burm.f.) Bech. agg. | Chase 7044 |
| Asplenium antisphyllum Kunze | Chase 3471 |
| Asplenium blastophorum Hieron. | Müller 3071 |
| Asplenium boltonii Brause & Hieron. | Müller 3051 |
| Asplenium celi Pic. Serm. | Ballings & Wursten 39 |
| Asplenium dregeanum Kunze | Chase 3457 |
| Asplenium erectum Wild. | Ballings & Wursten 40 |
| Asplenium flexuosum Schrad. | Chase 3252 |
| Asplenium formosum Wild. | Burrows 2151 |
| Asplenium frieirorum C. Chr. | Chase 1018 |
| Asplenium gneggittorum Schrad. | Ballings s.r. |
| Asplenium hypomelas Kuhn | Chase 7145 |
| Asplenium inapulaterale Wild. | Chase 3516 |
| Asplenium laschii Kuhn | Chase 5989 |
| Asplenium lividum Kuhn | Chase 6571 |
| Asplenium lobatum Pappe & Raws. | Chase 3535 |
| Asplenium mannii Hook. | Chase 3526 |
| Name / authority                  | Voucher               |
|----------------------------------|-----------------------|
| Asplenium monanthes L.           | Chase 4665            |
| Asplenium praesit Brause         | Burrows 1667          |
| Asplenium protensum Schrad.      | Chase 3514            |
| Asplenium pulvillus Sw.           | Chase 6990            |
| Asplenium rutifolium (P.J. Bergius) Kunze | Chase 3137 |
| Asplenium sandersonii Hook.      | Chase 3490            |
| Asplenium sinni A.F.Braithw.& Schelpe | Chase 7253 |
| Asplenium stuhlmannii Hieron.    | Chase 3495            |
| Asplenium sulcatum Lam.          | Chase 6558            |
| Asplenium theciferum (Kunth) Mett. | Ballings & Wursten 19 |

**Athyriaceae**

| Name / authority                  | Voucher               |
|----------------------------------|-----------------------|
| Athyrium newtonii Baker          | Ballings & Wursten 860 |
| Athyrium schimperi Feé           | Chase 4407            |
| Deparia borysta (Willd.) M.Kato  | Ballings & Wursten 857 |
| Diplazium nemorale (Baker) Schelpe | Chase 5701     |
| Diplazium zonariaxicum (Baker) C.Chr. | Chase 6092     |

**Blechnaceae**

| Name / authority                  | Voucher               |
|----------------------------------|-----------------------|
| Blechnum attenuatum (Sw.) Mett.  | Chase 3421            |
| Blechnum tabulare (Thunb.) Kuhn  | Chase 3356            |
| Cyathea capensis (L.f.) Sm.       | Eyles 3639            |
| Cyathea dreggi Kunze              | Chase 6047            |
| Cyathea marniana Hook.            | Chase 6696            |
| Cyathea thomsonii Baker           | Chase 6219            |

**Davalliacae**

| Name / authority                  | Voucher               |
|----------------------------------|-----------------------|
| Davallia castrephylloides (Poir.) Steud. | Chase 31810 |

**Dennstaedtiaceae**

| Name / authority                  | Voucher               |
|----------------------------------|-----------------------|
| Blotella glabra (Bory) R.M.Tryon  | Chase 6225            |
| Blotella natalensis (Hook.) R.M.Tryon | Chase 3364 |
| Hystiopteris incisa (Thunb.) J.Sm. | Fisher 1303  |
| Hypolepis sparsisora (Schrad.) Kuhn | Chase 4585  |
| Pieridium aquilinum (L.) Kuhn subsp. capense (Thunb.) C.Chr. | Wursten & Ballings 1194 |

**Didymochlaenaceae**

| Name / authority                  | Voucher               |
|----------------------------------|-----------------------|
| Didymochlaena truncatula (Sw.) J.Sm. | Fisher 1330  |

**Dryopteridaceae**

| Name / authority                  | Voucher               |
|----------------------------------|-----------------------|
| Arachniodes webbianus (A.Braun) Schelpe subsp. foliua (C.Chr.) Gibby | Ballings & Wursten s.r.  |
| Ctenitis cirrhosa (Schumach.) Ching | Ballings & Wursten s.r.  |
| Dryopteris athamanticum (Kunze) Kuntze | Chase 1048 |
| Dryopteris kilenensis (Kuhn) Kuntze | Chase 2034 |
| Dryopteris matritiana (Hook.) C.Chr. | Chase 6572 |
| Dryopteris penhubri (Krasser) C.Chr. | Ballings & Wursten 24 |
| Megalastrom lamnognum (Kaulf.) Holttum | Ballings & Wursten 877  |
| Noisipanema upamitexa (Hook.) Ching | Burrows 1910  |
| Polystichum transvalense N.C.Anthony | Chase 1104  |
| Polystichum zamboiacum Schelpe | Chase 7489  |

**Gleicheniaceae**

| Name / authority                  | Voucher               |
|----------------------------------|-----------------------|
| Dicranopteris linearis (Burm.f.) Underw. | Ballings 7   |

**Hymenophyllaceae**

| Name / authority                  | Voucher               |
|----------------------------------|-----------------------|
| Abrodictyum rigidum (Sw) Ebihara & Dubuisson | Burrows 2383  |
| Crepidomanes inopinatum (Pic.Serm.) J.P.Roux | Ballings & Wursten 853 |
| Crepidomanes melanostichum (Schltdl.) J.P.Roux | Chase 3302 |
| Didymoglossum eroum (Willd.) J.P.Roux | Wild 6443  |
| Hymenophyllum capense Schrad.      | Burrows 2681          |
| Hymenophyllum kuhlrii C.Chr.       | Ballings & Wursten 1623 |
| Polyplegium borbonicum (Bosch.) Ebihara & Dubuisson | Burrows & Wursten 60 |

**Lomariopsidaceae**

| Name / authority                  | Voucher               |
|----------------------------------|-----------------------|
| Elaphoglossum acrostichoides (Hook.& Grev.) Schelpe | Chase 6287  |
| Elaphoglossum aukertii (Desv) T.Moore | Chase 4509 |
| Elaphoglossum kuhlrii Hieron.     | Chase 3413            |
| Elaphoglossum latifolium (Desv.) C.V.Morton | Chase 3308  |
| Elaphoglossum lastii (Baker) C.Chr. | Chase 118            |
| Elaphoglossum macropodium (Féé) T.Moore | Chase 2194  |
| Elaphoglossum spathulatum (Bory) T.Moore var. spathulatum | Burrows 2376  |

**Lycopodiaceae**

| Name / authority                  | Voucher               |
|----------------------------------|-----------------------|
| Huperzia dacyrioides (Baker) Pic.Serm. | Chase 1121  |
| Huperzia opphiaglouoides (Lam.) Rothm. | Chase 1137 |

**Lomariopsidaceae**

| Name / authority                  | Voucher               |
|----------------------------------|-----------------------|
| Elaphoglossum acrostichoides (Hook.& Grev.) Schelpe | Chase 6287  |
| Elaphoglossum aukertii (Desv) T.Moore | Chase 4509 |
| Elaphoglossum kuhlrii Hieron.     | Chase 3413            |
| Elaphoglossum latifolium (Desv.) C.V.Morton | Chase 3308  |
| Elaphoglossum lastii (Baker) C.Chr. | Chase 118            |
| Elaphoglossum macropodium (Féé) T.Moore | Chase 2194  |
| Elaphoglossum spathulatum (Bory) T.Moore var. spathulatum | Burrows 2376  |
| Name / authority | Voucher |
|------------------|---------|
| 
| Huperzia verticillata (L.f.) Trevis. | Chase 3140 |
| Lygodium cerneum (L.) Pic.Serm. | Ballings & Wursten 20 |
| Lygodium clavatum L. | FoZ #4033 |
| Lygodiaceae | |
| Lygodium kerstenii Kuhn | Chase 2024 |
| Marattiaceae | |
| Pitysia fraxinea (Sm.) Murdock var. salicifolia (Schrad.) Murdock | Ballings & Wursten 31 |
| Nephrlepidaeae | |
| Nephrolepis undulata (Sw.) J.Sm. | Chase 3307 |
| Oleandraceae | |
| Oleandra distenta Kunze | Chase 3389 |
| Ophioglossaceae | |
| Ophioglossum gomezianum A.Braun | Burrows & Burrows 5193 |
| Ophioglossum polypliyum A.Braun var. polypliyum | Ballings & Wursten s.r. |
| Ophioglossum reticulatum L. | Ballings & Wursten 131 |
| Osmundaceae | |
| Osmunda regalis L. | Chase 7139 |
| Polypodiaceae | |
| Belvisia spicata (L.f.) Copel. | Burrows 2380 |
| Lepisorus excavatus (Willld.) Ching | Ballings & Wursten 10 |
| Lepisorus schraderi (Mett.) Ching | Ballings & Wursten 14 |
| Loxogramme abysnica (Baker) M.G.Price | Ballings & Wursten 15 |
| Microgramma nautitiana (Willld.) Tardieu | Wild & Chase 78 |
| Microsorium pappei (Kuhn) Tardieu | Chase 7113 |
| Pleopelitis macrocarpa (Willld.) Kaulf. | Ballings & Wursten 18 |
| Pleopelitis polypliydae (L.) E.G.Andrews & Windham subsp. ecklonii (Kunze) J.P.Roux | Ballings & Wursten 80 |
| Pyrrosia rhodesiana (C.Chr.) Schelpe | Chase 1038 |
| Pyrrosia schimperiana (Kuhn) Alston var. schimperiana | Wursten & Ballings 81 |
| Pteridaceae | |
| Actiniopteris dimorpha Pic.Serm. subsp. dimorpha | Chase 7578 |
| Actiniopteris radiata (Sw.) Link | Chase 5576 |
| Adiantum capillus-veneris L. | Ballings & Wursten 1431 |
| Adiantum poiretii Wilkstr. | Chase 4630 |
| *Adiantum raditum C.Presl | Chase 4688 |
| Pityrogramma argentea (Willld.) Domin | Chase 3173 |
| Pteris catoptera Kunze | Ballings & Wursten 114 |
| Pteris cretica L. | Chase 3525 |
| Pteris crenata Forsk. | Fisher 1547 |
| Pteris frictii Hieron. | Ballings & Wursten 78 |
| Pteris vittata L. | Ballings & Wursten 83 |
| Vittaria gurneensis Desv. var. orientalis Hieron. | Chase 6641 |
| Vittaria isentella Bory | Fisher 1549 |
| Vittaria vellusii Hieron. | Ballings & Wursten 144 |
| Selaginellaceae | |
| Selaginella dregei (C.Presl) Hieron. | Chase 1126 |
| Selaginella kraussiana (Kunze) A.Braun | Chase 4035 |
| Selaginella mittenii Baker | Chase 5622 |
| Sinopteridaceae | |
| Cheilanthes bergiana Schldl. | Chase 4591 |
| Cheilanthes buchananii (Baker) Domin | Burrows 2324 |
| Cheilanthes inquilina (Sw.) Schelpe & N.C.Anthony var. obucana (N.C.Anthony) N.C.Anthony | Chase 3469 |
| Cheilanthes leachi (Schelpe) Schelpe | Ballings & Wursten 67 |
| Cheilanthes multifida N.C.Anthony & Schelpe | Chase 3979 |
| Cheilanthes quadratipinnata (Forsk.) Kuhn | Chase 4010 |
| Cheilanthes viridis (Forsk.) Sw. var. glaucia (Sim) Schelpe & N.C.Anthony | Ballings & Wursten 68 |
| Cheilanthes viridis (Forsk.) Sw. var. viridis | Chase 7141a |
| Pellaea calomelanon (Sw.) Link var. calomelanon | Ballings & Wursten 64 |
| Pellaea calomelanon (Sw.) Link var. saynernontonian (Sim) Schelpe | Chase 4413 |
| Pellaea doniana Hook. | Chase 2028 |
| Pellaea dura (Willld.) Hook. var. dura | Chase 5591 |
| Pellaea pectiniformis Baker | Chase 4412 |
| Tectariaceae | |
| Arthropyteris monocrarp (Cordem.) C.Chr. | Chase 3506 |
| Arthropyteris orientalis (J.F.Gmel.) Posth. var. orientalis | Chase 2007 |
| Tectaria gemmifera (Feé) Alston | Chase 3519 |
| Name / authority | Voucher |
|------------------|---------|
| **Thelypteridaceae** |         |
| Amauropelta bergiana (Schldt.) Holltum var. bergiana | Ballings & Wursten 29 |
| Christella dentata (Forssk.) Brownsey & Jermy | Burrows 1636 |
| Christella goeziana (Merr.) Holltum | Chase 3377 |
| Cyclosorus interruptus (Willd.) H.Itô | Ballings & Wursten 82 |
| Pneumatopteris unia (Kunze) Holltum | Ballings & Wursten 21 |
| Pseudocyclosorus pulcher (Willd.) Holltum | Chase 6698 |
| Thelypteris confluenta (Thunb.) Morton | Ballings & Wursten 23 |

| Name / authority | Voucher |
|------------------|---------|
| **Pinaceae** |         |
| *Pinus patula* Schltdl. & Cham. | FoZ #3770 |

| Name / authority | Voucher |
|------------------|---------|
| **Podocarpaceae** |         |
| Podocarpus milanjianus Rendle | Chase 5477 |

| Name / authority | Voucher |
|------------------|---------|
| **Amaryllidaceae** |         |
| *Furneaux foetida* (L.) Haw. | FoZ #40164 |

| Name / authority | Voucher |
|------------------|---------|
| **Monocotyledons** |         |
| **Agavaceae** |         |
| *Furcraea foetida* (L.) Haw. | FoZ #40164 |

| Name / authority | Voucher |
|------------------|---------|
| **Anthericaceae** |         |
| Chlorophyllum andongense Baker | Chase 7321 |
| Chlorophyllum bowiei Baker | FoZ #4051 |
| Chlorophyllum communum (Thunb.) Jacq. | Jacobsen 3051 |
| Chlorophyllum gallabatense Baker | Wild 5570 |
| Chlorophyllum gelpinii (Baker) Karivu | FoZ #32168 |
| Chlorophyllum macrosporum Baker | Chase 1452 |

| Name / authority | Voucher |
|------------------|---------|
| **Araeaceae** |         |
| Zantedeschia albomaculata (Hook.) Baill. subsp. albomaculata | FoZ #34616 |

| Name / authority | Voucher |
|------------------|---------|
| **Araceae** |         |
| Phoenix reclinata Jacq. | FoZ #15154 |

| Name / authority | Voucher |
|------------------|---------|
| **Asparagaceae** |         |
| Asparagus africanus Lam. | Ferrar 4084 |
| Asparagus asparagoides (L.) Wight | FoZ #2885 |
| Asparagus falcatus L. var. falcatus | FoZ #2698 |
| Asparagus laricinus Burch. | FoZ #249 |
| Asparagus setaceus (Kunth) Jessop | Chase 1623 |
| Asparagus virgatus Baker | Müller 3374 |

| Name / authority | Voucher |
|------------------|---------|
| **Asphodelaceae** |         |
| Aloe arborescens Mill. | FoZ #6111 |
| Aloe cameronii Hemsl. var. bondana Reynolds NE | Christian 450 |
| Aloe excelsa A.Berger var. excelsa | FoZ #3451 |
| Aloe inyangenis Christian var. kimberleyana S.Carter NE | Plowes 2021 |
| Aloe pretoriiensis Pole-Evans | Chase 5603 |
| Aloe rhodesiana Rendle | FoZ #3817 |
| Aloe swynertoni Rendle | FoZ #3458 |
| Bulbine latisili (L.f.) Roem. & Schult.f. | FoZ #6231 |
| Kniphofia linearifolia Baker | FoZ #633 |

| Name / authority | Voucher |
|------------------|---------|
| **Behniaceae** |         |
| Behnia reticulata (Thunb.) Didr. | Grosvenor 267 |

| Name / authority | Voucher |
|------------------|---------|
| **Colchicaceae** |         |
| Androcymbium striatum A.Rich. | FoZ #529 |
| Gloriosa superba L. | FoZ #1046 |

| Name / authority | Voucher |
|------------------|---------|
| **Commelinales** |         |
| Annelena aquinocialt (P.Bearv.) Loudon | FoZ #37419 |
| Annelena welwitschii C.B.Clarke | Bamps 684 |
| Commelina africana L. | FoZ #33055 |
| Commelina welwitschii C.B.Clarke | FoZ #33108 |
| Gynostis speciosa (L.f.) Hassk. subsp. speciosa | Chase 609 |
| *Gibasis pellucida* (M.Martens & Galeotti) Hunt | FoZ #18940 |
| Murdannia simplex (Vahl) Brenan | Hopkins 7097 |
| *Tradescantia fluminensis* Vell. | FoZ #36272 |
| Name / authority | Voucher |
|------------------|---------|
| *Tradescantia zebrina* Bosse | FoZ #40886 |
| **Cyperaceae** | |
| Bulbostylis burchelli (Fichalo & Hiern) C.B.Clarke | Jacobsen 3126 |
| Bulbostylis hispida (Vahl) R.W.Haines | Browning 506 |
| Bulbostylis schoenoides (Kunth) C.B.Clarke | FoZ #14528 |
| Carex spicato-paniculata C.B.Clarke | Chase 7425 |
| Coleochloa setifera (Ridl.) Gilly | Bamps 606 |
| Costularia natalensis C.B.Clarke | Fisher 1643 |
| Cyperus albostriatus Schrad. | Chase 8114 |
| Cyperus amabilis Vahl | Browning 576 |
| Cyperus cuspidatus Kunth | Browning 554 |
| Cyperus cyprioides (L.) Kunth | FoZ #15126 |
| Cyperus denudatus L.f. var. denudatus | Browning 281 |
| Cyperus distans L.f. | Jacobsen 3028 |
| Cyperus hemisphaericus (Boeck.) | Chase 5561 |
| Cyperus inuncalatus Rottb. | Jacobsen 3023 |
| Cyperus pseudoeuphorbioides Kük. | Browning 555 |
| Cyperus pseudovestitus (C.B. Clarke) Kük. | Müller 3487 |
| Cyperus rigidifolius Steud. | Browning 574 |
| Cyperus tristis L.f. | Jacobsen 3024 |
| Cyperus tenuispica Boeck. | Jacobsen 3025 |
| Kyllinga stricta var. stricta | Hyde s.n. |
| Kyllinga sp. cf. erecta Schumach.& Thonn. | FoZ #6523 |
| Kyllinga squamulata Vahl | Browning 500 |
| Liposarcina nana (A.Rich.) Cherm. | Jacobsen 3047 |
| Mariscus abouwellii C.B.Clarke | Jacobsen 3027 |
| Mariscus hemisphaericus (Boeck.) C.B.Clarke | Browning 556 |
| Pycreus pelophilus (Ridl.) C.B.Clarke | |
| **Dioscoreaceae** | |
| Dioscorea dumetorum (Kunth) Pax | FoZ #19137 |
| Dioscorea schimperiana Kunth | Müller 3376 |
| Dioscorea sylvatica Eckl. | FoZ #19141 |
| **Dracaenaceae** | |
| Dracaena fragrans (L.) Ker-Gawl. | Chase 1440 |
| Dracaena mannii Baker | Chase 875 |
| Dracaena steudneri Engl. | Müller plot 76 |
| **Eriocaulaceae** | |
| Eriocaulon inyangense Arw. | Wild 5540 |
| **Eriopermachae** | |
| Erioperon macractum (Hook. f.) Baker subsp. macractum | Ferrar s.n. |
| **Hyacinthaceae** | |
| Alliaca kirkii (Baker) Brenan | Ferrar 4040 |
| Bowzia volubilis Hook.f. | Chase 362 |
| Drimia elata Jacq. | FoZ #7512 |
| Eucomis autumnalis (Mill.) Chitt. subsp. autumnalis (=E. zambesiaca Baker) | Plowes 2240 |
| Ledebouria unidentified sp.no.1. | FoZ #41510 |
| Litonlithus purpureus Harv. (=Drimia purpurea J.C.Manning & Goldblatt) | FoZ #69141 |
| Stellarioides tenuifolia (F.Delaroche) Spata subsp. tenuifolia (=Ornithogalum tenuifolium F.Delaroche) | FoZ #8863 |
| **Hydrocharitaceae** | |
| Lagarosiphon major (Ridl.) Moss | Whellans 1561 |
| **Hyposidaceae** | |
| Hypoxis golfinii Baker | FoZ #15385 |
| Hypoxis nyasica Baker | FoZ #53770 |
| Hypoxis rigidula Baker | Zimudzi 57 |
| **Iridaceae** | |
| Anomatheca grandiflora Baker (=Freesia grandiflora (Baker) Klatt) | FoZ #5749 |
| Arista abyssinica Pax | FoZ #791 |
| Arista angolensis Baker | Garley 119 |
| Arista ecklonii Baker | Chase 63 |
| Arista woodii N.E.Br. | Wild 2845 |
| Crocosmia aurea (Hook.) Planch. subsp. aurea | Chase 5488 |
| Crocosmia paniculata (Klatt) Goldblatt | Chase 6315 |
| Dierama formosum Hilliard | Chase 6023 |
| Name / authority | Voucher |
|------------------|---------|
| *Dietes iridioides* (L.) Klatt | Biegel 2422 |
| *Gladiolus caespitosus* Baker | Plowes 2020 |
| *Gladiolus dalenii* Van Geel subsp. *dalenii* | FoZ #796 |
| *Gladiolus flavoviridis* Goldblatt | FoZ #35667 |
| *Hesperantha petitiana* (A.Rich.) Baker | Chase 6036 |
| *Morea spathulata* (L.f.) Klatt | FoZ #2397 |
| **Juncaceae** | |
| *Juncus excparpus* Kunth | FoZ #40749 |
| **Liliaceae** | FoZ #674 |
| *Ensete ventricosum* (Welw.) Cheesman | FoZ #1060 |
| **Orchidaceae** | |
| *Aerangis kotschyana* (Rchb.f.) Schltr. | Chase 7083 |
| *Aerangis mystacida* (Rchb.f.) Schltr. | Chase 5574 |
| *Aeranthus africana* J.L.Stewart E | Ball 1283 |
| *Angaceopus anomalus* Summerrh. | FoZ #1000 |
| *Angaceopus parviflora* (Thouars) Schltr. | FoZ #34512 |
| *Angaceum chamacanthus* Schltr. | FoZ #991 |
| *Angaceum conchiferum* Lindl. | Chase 44 |
| *Angaceum minus* Summerrh. | Chase 5977 |
| *Angaceum saeciferum* Lindl. | Ferr 3979 |
| *Angaceum stella-africana* P.J.Cribb | FoZ #995 |
| *Bolusella iridifolia* (Rolfe) Schltr. subsp. *picea* P.J.Cribb | Wild 2803 |
| *Bonatea steudneri* (Rchb.f.) T.Durand & Schinz | Ball 443 |
| *Brachycorythis laitii* Rolfe | FoZ #4871 |
| *Brachycorythis ovata* Lindl. subsp. *welwitschii* (Rchb.f.) Summerrh. | Chase 4213 |
| *Brachycorythis pleiostephylla* Rchb.f. subsp. *pleiostephylla* | Chase 5548 |
| *Brownlea maculata* P.J.Cribb | Chase 217 |
| *Brownlea parviflora* Lindl. | Chase 6013 |
| *Bulbophyllum ballii* P.J.Cribb | Chase 6170 |
| *Bulbophyllum elintii* Rolfe | Wild 2808 |
| *Bulbophyllum fucum* Lindl. var. *melinostachyum* (Schltr.) J.J.Verm. | Wild 2813 |
| *Bulbophyllum josephii* (Kuntze) Summerrh. | Wild 2804 |
| *Bulbophyllum longiflorum* Thouars | Ball 1378 |
| *Bulbophyllum maximum* (Lindl.) Rehb.f. | Chase 992 |
| *Bulbophyllum sandersonii* (Hook.f.) Rehb.f. subsp. *sandersonii* | Wild 5544 |
| *Bulbophyllum schaberrum* (Rolfe) Bolus | FoZ #1017 |
| *Bulbophyllum usilliatum* De Wild. var. *infracarinatum* (G.Will.) J.J.Verm. | FoZ #1019 |
| *Calanthe sylvatica* (Thouars) Lindl. | Chase 7335 |
| *Cynorkis anacamptoides* Kraenzl. var. *anacamptoides* | FoZ #34629 |
| *Cynorkis debilis* (Hook.f.) Summerh. | Wild 5541 |
| *Cynorkis kassneriana* Kraenzl. | Wild 2798 |
| *Cynorkis kirkii* Rolfe | FoZ #99847 |
| *Cynorkis arcuata* (Lindl.) Schltr. subsp. *arcuata* | Ball 1423 |
| *Cynorkis praetermissa* Summerh. subsp. *praetermissa* | FoZ #33087 |
| *Cynorkis ringens* (Rchb.f.) Sommerh. | FoZ #2478 |
| *Diaphananthe fragrantissima* (Rchb.f.) Schltr. | FoZ #21698 |
| *Diaphananthe rutila* (Rchb.f.) Schltr. | Wild 6446 |
| *Diaphananthe itozii* Schltr. | Ball 1303 |
| *Diaphananthe subsimples* Summerh. | Ball 1406 |
| *Diaphananthe xanthophyllina* (Rchb.f.) Summerh. | Ball 1236 |
| *Disa acontioides* Sond. subsp. *concina* (N.E.Br.) H.P.Linder | Chase 6268 |
| *Disa fragrans* Schltr. subsp. *fragrans* | Chase 4065 |
| *Disperis aubescenii* Rehb.f. | Wild 2816 |
| *Disperis dicerochila* Summerh. | FoZ #2374 |
| *Disperis lindleyana* Rehb.f. | Chase 7030 |
| *Disperis virginalis* Schltr. | Wild 2810 |
| *Eulophia callichroma* Rehb.f. | Symoens et al. 669 |
| *Eulophia cuctullata* (Sw.) Steud. | FoZ #4873 |
| *Eulophia eyletii* Summerh. | Chase 5562 |
| *Eulophia fridericii* (Rchb.f.) A.V.Hall | Ball 440 |
| *Eulophia gonychila* Schltr. | Chase 5572 |
| *Eulophia hians* Spreng. var. *hians* | FoZ #21961 |
| *Eulophia borfallii* (Bateman) Summerh. | Ball 5256 |
| Name / authority | Voucher |
|------------------|---------|
| Eulophia norlindhii Summerh. | Wild s.n. |
| Eulophia nyasae Rendle | Ball 717 |
| Eulophia petersii (Rchb.f.) Rchb.f. | Chase 3075 |
| Eulophia rolfiana Kraenzl. (=E. williamsonii P.J.Cribb) | Chase 51 |
| Eulophia speciosa (Lindl.) Bolus | Chase 121 |
| Eulophia tenella Rchb.f. | Chase 4180 |
| Eulophia venulosa Rchb.f. | FoZ #3623 |
| Habenaria amoena Summerh. | Ballings s.n. |
| Habenaria armatissima Rchb.f. | Ball 442 |
| Habenaria cornuta Lindl. | Ball 522 |
| Habenaria galpinii Bolus | Ball 528 |
| Habenaria macrolepe Summerh. | Chase 6050 |
| Habenaria malacophylla Rchb.f. subsp. nyikana | FoZ #7002 |
| Habenaria praetans Rendle var. praetans | Chase 206 |
| Habenaria rautaneniana Kraenzl. | Chase 6348 |
| Habenaria silvatica Schltr. | Chase 6334 |
| Habenaria subaequalis Summerh. | Wild 2806 |
| Jumellea walleri (Rolfe) la Croix | Wild 3223 |
| Liparis bowkeri Harv. | Grosvenor 784 |
| Liparis multiliana Schltr. | Ball 1267 |
| Liparis nervosa (Thunb.) Lindl. | FoZ #1411 |
| Malaxis weberbaueriana (Kraenzl.) Summerh. (=M. stolzii (Schltr.) Summerh.) | Chase 6363 |
| Microcoelia exilis Lindl. | Ferrar s.n. |
| Microcoelia globulina (Ridl.) L.Jons. | FoZ #5781 |
| Microcoelia stolzii Schltr. | Ball 1392 |
| Mystacidium tennysiens Summerh. (incl. M. pusillum sensu Wild 6442) | FoZ #2455 |
| Nervilia ballii G.Will. | Ball 585 |
| Nervilia crociformis (Zoll. & Moritzi) Seidenf. | Ball 1407 |
| Nervilia kotschy (Rchb.f.) Schltr. var. purpurata (Rchb.f.& Sond.) Börge Pett. | Ball 511 |
| Nervilia pectinata P.J.Cribb | Ball 410 |
| Nervilia shrensis (Rolfe) Schltr. | Chase 6235 |
| Orthochilus eustachyus (Rchb.f.) Bytebier | FoZ #2854 |
| Orthochilus mechwui Rchb.f. | FoZ #102482 |
| Orthochilus milnei (Rchb.f.) Bytebier (=Eulophia milnei Rchb.f.) | Jacobsen 3030 |
| Orthochilus odongioglossus (Rchb.f.) Bytebier | FoZ #37451 |
| Platycoryne perevleri Rchb.f. | FoZ #4075 |
| Polystachya adansoniace Rchb.f. | Chase 5609 |
| Polystachya albuscula Rchb.f. subsp. imbricata (Rolfe) Summerh. | Drummond 5097 |
| Polystachya caespiticosa Engl. subsp. bollandii (Bolus) P.J.Cribb & Podz. | FoZ #36207 |
| Polystachya campyloglossa Rolfe [incl. P. ottoniana sensu Ball 1282, Chase 86] | Ball 1282 |
| Polystachya concreta (Jacq.) Garay & H.R.Sweet (=P. tesellata Lindl.) | Chase 4400 |
| Polystachya cultriformis (Thouars) Spreng. | Grosvener 659 |
| Polystachya fusiformis (Thouars) Lindl. | FoZ #1659 |
| Polystachya golungensis Rchb.f. | Ball 1329 |
| Polystachya modesta Rchb.f. | FoZ #15642 |
| Polystachya simplex Rendle | Ball 1377 |
| Polystachya stuhlmannii Kraenzl. | Philcox et al. 8959 |
| Polystachya subumbellata P.J.Cribb & Podz. | Wild 6445 |
| Polystachya transvaalensis Schltr. | FoZ #1667 |
| Polystachya vaginata Summerh. | Wild 2977 |
| Polystachya zambesiaca Rolfe | Ball 1364 |
| Rangaeris muscicola (Rchb.f.) Summerh. | Plowes 2893 |
| Satyrium asnomadum Schltr. | FoZ #1415 |
| Satyrium chlorocory Rolfe | Chase 6014 |
| Satyrium longicauda Lindl. | Hopkins 7077 |
| Satyrium trinerve Lindl. | FoZ #34622 |
| Solenangi conica (Schltr.) L.Jons. | FoZ #3052 |
| Stenoglottis woodii Schltr. | Woodburn 30b |
| Stenoglottis zambesiaca Rolfe (incl. S. fimbriata sensu Summerh.) | Chase 6018 |
| Stolzia repens (Rolfe) Summerh. var. obtusa G.Will. | Ball 1398 |
| Stolzia repens (Rolfe) Summerh. var. repens | Wild 2811 |
| Taeniophyllum coxii (Summerh.) Summerh. | FoZ #64342 |
| Name / authority                  | Voucher         |
|----------------------------------|----------------|
| Tridactyle anthomaniaca (Rchb.f.) Summerh. | Grosvenor 862 |
| Tridactyle bicaudata (Lindl.) Schltr. | Plowes 2892   |
| Tridactyle inaequidens (De Wild.) Schltr. | Obermeyer 2087|
| Tridactyle inaequilonga (De Wild.) Schltr. | Chase 6101    |
| Tridactyle tricuspis (Bolus) Schltr. | Ball 160      |
| Tridactyle tridentata (Harv.) Schltr. | FoZ #15348    |
| Vanilla polylepis Summerh.        | Plowes 2667    |
| Ypsilopus erectus (P.J.Cribb) P.J.Cribb & J.L.Stewart | Ball 1315 |

**Poaceae**

- Agrostis lachnantha Nees
- Andropogon encomus Nees subsp. encomus
- Andropogon encomus Nees subsp. baillensis (Rendle) Sales
- Andropogon achoris A.Rich.
- Arthraxon lancifolius (Trin.) Hochst.
- Bewsia biflora (Hack.) Gooss.
- Brachypodium flexum Nees
- *Breza maxima* L.
- *Breza minor* L.
- *Bromus catharticus* Vahl
- *Cenchrus clandestinus* (Chiov.) Morrone (=*Pennisteum clandestinum* Chiov.)
- Coelachne africana Pilg.
- Cratopedobachis africana Benth.
- Cymbopogon nardus (L.) Rendle
- Cynodon dactylon (L.) Pers.
- Digitaria eriantha
- Digitaria gazzianesi Rendle
- Digitaria matiangi Stapf & C.E.Hubb.
- Digitaria scutatum (Schwein) Chiov.
- Dieteropogon amplectens (Nees) Clayton var. catangensis (Chiov.) Clayton
- Ehrhartia erecta Lam.
- Eleusine africana Kenn.-O'Byrne
- Elionurus muticus (Spreng.) Kuntze
- Eragrostis acaer De Winter
- Eragrostis capensis (Thunb.) Trin.
- Eragrostis chapeltani (Kunth) Nees
- Eragrostis ciliaris (All.) Janch.
- Eragrostis congesta Oliv.
- Eragrostis hiispidia K.Schum.
- Eragrostis patens Oliv.
- Eragrostis plana Nees
- Eragrostis racemosa (Thunb.) Steud.
- Eragrostis scelantther Nees subsp. villoipes (Jedwabn.) Launert
- Eragrostis teutofolia (A.Rich.) Steud.
- Heteropogon contortus (L.) Roem.& Schult.
- Hyparrhenia anamesa Clayton
- Hyparrhenia cambria (L.) Stapf
- Hyparrhenia filipendula (Hochst.) Stapf
- Hyparrhenia neysonii (Hack.) Stapf var. macra Stapf
- Hyparrhenia neysonii (Hack.) Stapf var. neysonii
- Imperata cylindrica (L.) Raechsch.
- Isachne maeritiana Kunth
- Ichiaenaemum fasciulatum Bronn.
- Koleria capensis (Steud.) Nees
- *Lolium multiflorum* Lam.
- Loudetia flavidula (Stapf) C.E.Hubb.
- Loudetia simplex (Nees) C.E.Hubb.
- Melinis ambiguus Hack. subsp. ambiguus
- Melinis minutiflora P.Beauv.
- Melinis nerviglumis (Franch.) Zizka
- Melinis repens (Wildl.) Zizka subsp. grandiflora (Hochst.) Zizka
- Microchloa caffra Nees
- Monocymbium cerasiforme (Nees) Stapf
- Olyra latifolia L.
| Name / authority | Voucher  |
|------------------|---------|
| Oplismenus burmannii (Retz.) P.Beauv. | Pope 3728 |
| Oplismenus compositus (L.) P.Beauv. | Müller 3047 |
| Oplismenus hirtellus (L.) P.Beauv. | Rattray 1449 |
| Oplismenus undulatifolius (And.) Roem.& Schult. | Runhaar 752a |
| Oxytenanthera abyssinica (A.Rich.) Munro | Chase 2172 |
| Panicum inaequilatum Stapf & C.E.Hubb. | Crook 2020 |
| Panicum latifolium Nees | Müller s.n. |
| Panicum maximum Jacq. | Rattray 1458 |
| Panicum monticola Hook.f. | Runhaar 755 |
| Panicum wiehei | Drummond 5094 |
| *Paspalum dilatatum Poir. | Hyde s.r. |
| *Paspalum scrobiculatum L. | FoZ #15125 |
| *Paspalum urvillei Steud. | FoZ #2054 |
| Perotis patens Gand. | Wild 5 |
| *Poa annua L. | Hyde 103 |
| Pseudochloaena oplismenoides (Hack.) Clayton (=Chloachne oplismenoides (Hack.) Robyns) | Chase 1144 |
| Pogonatheria squarrosa (Roem.& Schult.) Pilg. | Hyde s.r. |
| Pseudochloaena polystachya (Kunth) Stapf | Runhaar 842 |
| Rhytachne rotboellioides Desv. | Hyde s.r. |
| Saccolepis typica (Stapf) Stapf | Chase 7836 |
| Schizachyrium sanguineum (Retz.) Alston | Pope 6607 |
| Setaria homonyma (Staud.) Chiov. | FoZ #33050 |
| Setaria megaphylla (Staud.) T.Durand & Schinz | Müller 3078 |
| Setaria sphacelata (Schumach.) Moss | Wild 1 |
| Setaria verticillata (L.) P.Beauv. | FoZ #2086 |
| Sporobolus acinifolius Stapf | Hyde 94 |
| Sporobolus molleri Hack. | Hyde s.r. |
| Sporobolus pilifera (Trin.) Kunth | Hyde s.r. |
| Sporobolus pyramidalis P.Beauv. | FoZ #15122 |
| Sporobolus sanguineus Rendle | Hyde 135 |
| Sternochloa cameronii (Stapf) Pilg. | Hyde s.r. |
| Streblophaeae longiarista (A.Rich.) Pilg. | Müller 3377 |
| Themeda triandra Forssk. | FoZ #15216 |
| Tragus berteronianus Schult. | Crook 1052 |
| Tricholaena monachne (Trin.) Stapf & C.E.Hubb. | FoZ #15211 |
| Tristachya nodiglumis K.Schum. | Chase 7835 |
| Urochloa oligorriga (Fig.& De Not.) Henrard | Sheppard 43 |
| Potamogetonaceae | |
| Potamogeton nodosus Poir. | FoZ #7454 |
| Potamogeton octandrus Poir. | Chase 5981 |
| Potamogeton pusillus L. | Denny 1315 |
| Smilaceae | |
| Smilax aspera Willd. | Wild 496 |
| Strelitziacae | |
| Strelitzia caudata R.A.Dyer | FoZ #1208 |
| Typhaceae | |
| Typha capensis (Rohrb.) N.E.Br. | FoZ #99860 |
| Velloziaceae | |
| Xerophyta sp. | Hyde s.r. |
| Xyridaceae | |
| Xyris obscura N.E.Br. | Chase 6027 |
| Zingiberaeae | |
| Aframomum alboflorum Lock | FoZ #39633 |
| Aframomum angustifolium (Sonn.) K.Schum. | FoZ #34511 |
| *Hedychium gardnerianum Ker Gawl. | FoZ #294 |
| Siphonochilus aethiopicus (Schweinf.) B.L.Burtt | Eyles 6962 |
| DICOTYLEDONS | |
| Acanthaceae | |
| Anisotes pubinervius (T.Anderson) Heine (=Metatarsia pubinervius (T.Anderson) C.B.Clarke) | Chase 8161 |
| Ayptasia gangetica (L.) T.Anderson subsp. micrantha (Nees) Ensermu | Chase 2154 |
| Barleria aromatica Oberm. | Hopkins 8049 |
| Barleria fuzimiroides I.Darbysh. NE | Chase s.n. |
| Barleria spinulosa Klotzsch subsp. kirkii (T.Anderson) I.Darbysh. | Chase 6495 |
| Barleria ventricosa Nees | FoZ #24678 |
| Brillantassia cicatriciosa Lindau (=B. sulugurica Lindau) | Chase 854 |
| Name / authority | Voucher |
|------------------|---------|
| Dicliptera clinopodia Nees | FoZ #1238 |
| Dicliptera extensa S.Moore | Müller 3042 |
| Dyschoriste nagchana (Nees) Bennet | FoZ #33058 |
| Dyschoriste tricolor (Oliv.) Lindau subsp. verticillaris (C.B.Clarke) Vollesen (=D. verticillaris C.B.Clarke) | Carter 2123 |
| Hypoestes aristata (Vahl) Roem. & Schult. subsp. forstkiolii | Chase 6495 |
| *Hypoestes phyllostachya* Baker | FoZ #36366 |
| Ioglosa gregorii (S.Moore) Lindau | Müller 3404 |
| Ioglosa milanjieris S.Moore (=I. mosambicensis Lindau) | Chase 7104 |
| Justicia betonica L. | Chase 2159 |
| Justicia bracteata (Hochst.) Zarb (=Monochema dehile (Forssk.) Nees) | Chase 4557 |
| Justicia matamennis (Schwein.) Oliv. | Wild 2838 |
| Justicia nyasiana Lindau | Chase 5758 |
| Justicia phyllostachys C.B.Clarke | FoZ #15150 |
| *Mimulopsis subviscosum* C.B.Clarke | FoZ #3602, Chase 4689 |
| Molura lobulata S.Moore | Chase 786 |
| *Phaulopsis imbricata* (Forrsk.) Sweet subsp. imbricata | Chase 1785 |
| Ruellia cordata Thunb. | FoZ #33086 |
| Scrophularia africana Nees | Hopkins 7093 |
| Thunbergia alata Sims | Obermeyer 2141 |
| Thunbergia natalensis Hook. | Biegel 2421 |
| Thunbergia oblongifolia Oliv. (incl. T. lancifolia sensu Mapura & Timberlake) | FoZ #3602, Chase 4689 |
| Thunbergia petersiana Lindau | Grosvenor 783 |
| Thunbergia usambarica Lindau | FoZ #228 |

**Achariaceae**

* Kiggelaria africana L. |
* Rauvolfia serpentina Harv. & Sond. |

**Amaranthaceae**

* Achyranthes aspera L. var. pubescens (Moq.) C.C.Towns. |
* Achyranthes aspera L. var. sicula L. |
* Alternanthera caracasana Kunth |
* Amaranthus hybridus L. |
* Amaranthus lividus L. subsp. polygonoides (Moq.) Probst |
* Centemopsis gracilenta (Hiern) Schinz |
* Chenopodium ambrosioides L. |
* Chenopodium album L. |
* Chenopodium quinoa L. |

**Anacardiaceae**

* Larrea edulis (Sond.) Engel. var. salicif. |

**Aphloiacae**

* Aploia theiformis (Vahl) Benn. |

**Apoaceae**

* Alepidea peduncularis A.Rich. |
* Apium leptophyllum (Pers.) Benth. |
* Centella asiatica (L.) Urb. |
* *Centella virgata* (L.) Drude var. gracilescens Domin |
* Diplolepis buchananii (Oliv.) C.Norman subsp. spynentorii (Baker f.) Cannon |
* Symoens et al. 667 |
| Name / authority | Voucher |
|------------------|---------|
| Heteromorpha arborescens (Spreng.) Cham. & Schltdl. var. abyssinica (A.Rich.) H.Wolff | Chase 4417 |
| Heteromorpha arborescens (Spreng.) Cham. & Schltdl. var. montana P.J.D.Winter | FoZ #35269 |
| Hydrocotyle mannii Hook.f. | Wild 2840 |
| Pimpinella caffra (Eckl. & Zeyh.) D.Dietr. | Chase 6032 |
| Sanicula elata D.Don | FoZ #23850 |
| Stegnosetia araliacea Hochst. var. araliacea | FoZ #31324 |

Apocynaceae

| Name / authority | Voucher |
|------------------|---------|
| Acanthospermum australe (Loefl.) Kuntze | FoZ #433 |
| Adenostemma mauritianum DC. | FoZ #98852 |
| Agnesia adusta (Butia) K.Makra | FoZ #6873 |
| Alchornea insignis (Forssk.) Vahl | FoZ #31947 |
| Anisopappus chinensis (L.) Hook.f. & Arn. var. chinensis var. dentatus (DC.) S.Ortíz, Paiva & Rodr.Oubiña | Chase 5581 |
| Apinax parishii Hook. | Schelpe 378 |
| Aquilaria malaccensis (L.) Aiton | FoZ #28705 |
| Asteraceae | FoZ #3926 |
| *Aster novi-belgii (Lour.) Merr. & Sherff | FoZ #2471 |
| Athrixia rosmarinifolia (Walp.) Oliv. & Hier. var. rosmarinifolia | FoZ #1163 |
| Berbersia setifer DC. | FoZ #3545 |
| *Bidens pilosa L. | FoZ #434 |
| Boscia lineola var. iyangana | FoZ #443 |
| Chrysanthemoides monilifera (L.) Norl. subsp. sepentriomale Norl. | FoZ #3596 |
| Cineraria deltoidea Sond. | FoZ #7635 |
| Cineraria pulchra | FoZ #2471 |
| Coreopsis lanceolata L. | FoZ #489 |
| Name / authority | Voucher |
|------------------|---------|
| Cotula australis (Sieb. & Z. Spreng.) Hook.f. | FoZ #933 |
| Crassocephalum crepidioides (Benth.) S.Moore | Chase 8303 |
| Crassocephalum rubens (Jacq.) S.Moore var. rubens | FoZ #447 |
| Crassocephalum rubens (Jacq.) S.Moore var. sarmatianum (DC.) C.Jeffrey & Beentje | Chase 4576 |
| Crassocephalum × pteridifolium (DC.) S.Moore | Chase 2148 |
| Dicrnochelus integrifolia (L.f.) Kuntze subsp. integrifolia | Chase 7391 |
| Emilia cocinea (Sims) G.Don | FoZ #4114 |
| Emilia discolla (Oliv.) C.Jeffrey | FoZ #7655 |
| *Erigeron karvinskianus DC. | FoZ #3551 |
| Erystheorchis zambesianus Oliv. & Hiern | Wild 469 |
| *Euprypilis chrysanthemoides (DC.) B.Nord. | FoZ #41177 |
| *Galinsoga parviflora Cav. | FoZ #7662 |
| *Galinsoga quadridiadiata Ruiz & Pav. | FoZ #7665 |
| Gerbera piloselloides (L.) Cass. | Chase 8421 |
| Gerbera viridiflora (Oliv.) S.Moore | FoZ #651 |
| *Euryops chrysanthemoides (DC.) B.Nord. | FoZ #41177 |
| *Galinsoga parviflora Cav. | FoZ #7655 |
| *Galinsoga quadriradiata Ruiz & Pav. | FoZ #7665 |
| Gerbera piloselloides (L.) Cass. | Chase 8421 |
| Gerbera viridiflora (Oliv.) S.Moore | FoZ #651 |
| *Euryops chrysanthemoides (DC.) B.Nord. | FoZ #41177 |
| *Galinsoga parviflora Cav. | FoZ #7655 |
| *Galinsoga quadriradiata Ruiz & Pav. | FoZ #7665 |
| Gerbera piloselloides (L.) Cass. | Chase 8421 |
| Gerbera viridiflora (Oliv.) S.Moore | FoZ #651 |
| *Euryops chrysanthemoides (DC.) B.Nord. | FoZ #41177 |
| *Galinsoga parviflora Cav. | FoZ #7655 |
| *Galinsoga quadriradiata Ruiz & Pav. | FoZ #7665 |
| Gerbera piloselloides (L.) Cass. | Chase 8421 |
| Gerbera viridiflora (Oliv.) S.Moore | FoZ #651 |
| *Euryops chrysanthemoides (DC.) B.Nord. | FoZ #41177 |
| *Galinsoga parviflora Cav. | FoZ #7655 |
| *Galinsoga quadriradiata Ruiz & Pav. | FoZ #7665 |
| Gerbera piloselloides (L.) Cass. | Chase 8421 |
| Gerbera viridiflora (Oliv.) S.Moore | FoZ #651 |
| *Euryops chrysanthemoides (DC.) B.Nord. | FoZ #41177 |
| *Galinsoga parviflora Cav. | FoZ #7655 |
| *Galinsoga quadriradiata Ruiz & Pav. | FoZ #7665 |
| Name / authority | Voucher |
|------------------|---------|
| Senecio oxyriifolius DC. | Wild 520 |
| Senecio purpureus L. | Chase 7140 |
| Senecio ruenzioniensis S.Moore | Wild 2822 |
| Senecio springfieldii O.Hoffm. | Hopkins 8046 |
| Senecio tannoides DC. | FoZ #2222 |
| Senecio triactinus S.Moore | FoZ #5793 |
| Sigebeckia orientalis L. | FoZ #84888 |
| Solanecio mannii (Hook.f.) C.Jeffrey | FoZ #469 |
| Sonchus fritzi Boulos var. integer G.V.Pope | FoZ #922 |
| *Sonchus oleraceus L. | FoZ #920 |
| Spilanthes multiradiata (Pers.) DC. | Eyles 7082 |
| Stomatanthes africanus (Oliv.& Hiern) R.M.King & H.Rob. | FoZ #15199 |
| *Tagetes minutus L. | FoZ #35492 |
| Tolpis capensis (L.) Sch.Bip. | FoZ #3753 |
| *Tridax procumbens L. | FoZ #3925 |
| *Vernonia antillana polyanthos (Sprengel) Vega & Dematteis | FoZ #3740 |
| Vernonia acuminatissima S.Moore | Hopkins 8053 |
| Vernonia adomega Sch.Bip. | FoZ #25856 |
| Vernonia bainesii Oliv.& Hiern subsp. bainesii | Whellan 747 |
| Vernonia calvauta (Hook.f.) Hook.f. subsp. meridionalis (Wild) C.Jeffrey | FoZ # 475 |
| Vernonia colorata (Willd.) Drake subsp. colorata | FoZ #2322 |
| Vernonia galpinii Klatt | Chase 3105 |
| Vernonia glaberrima O.Hoffm. | FoZ #4878 |
| Vernonia bolstii O.Hoffm. | Chase 5595 |
| Vernonia karaguensis Oliv.& Hiern | Chase 7138 |
| Vernonia lundienensis (Hutch.) Wild & G.V.Pope | Ferrar 4069 |
| Vernonia melleri Oliv.& Hiern var. melleri | Chase 5582 |
| Vernonia myrianthusa Hook.f. | Plowes 2706 |
| Vernonia natalensis Walp. | Fisher 212 |
| Vernonia wossiahonii S.Moore | Mülher 3060 |
| Vernonia petersii Oliv. | FoZ #43356 |
| Balsaminaceae | |
| Impatiens cecilii N.E.Br. subsp. cecelii | Plowes 2322 |
| Impatiens rubicola Burtt Davy & Greenway | Eyles 5476 |
| Begoniaceae | |
| Begonia sonderiana Irmsch. | Chase 995 |
| Bignoniaceae | |
| *Amphilophium crucigerum (L.) L.G.Lohmann | FoZ #18307 |
| *Dolichandra unguis-cati (L.) L.G.Lohmann | FoZ #3975 |
| *Jacaranda minnowfolia D.Don | FoZ #18352 |
| Podanea brevi (N.E.Br.) Sprague | FoZ #3570 |
| Boraginaceae | |
| Cynoglossum lanceolatum Forssk. | Chase 4390 |
| Cynoglossum willidi E.S.Martins | Williams 215 |
| Brassicaceae | |
| Cardamine africana L. | FoZ #15459 |
| *Cardamine flexuosa With. | FoZ #636 |
| *Coronopus didymus (L.) Sm. | FoZ #19047 |
| *Lepidium bonariense L. | FoZ #41218 |
| Cactaceae | |
| Rhipsalis buccifera (J.Mill.) Stearn | Eyles 6589 |
| Campanulaceae | |
| Lobelia erioides L. | Schelpe 366 |
| Lobelia goetzei Diels | FoZ #867 |
| Lobelia stricklandiae Gilliland | Wild 1592 |
| Wahlenbergia denticulata (Burch.) A.DC. | FoZ #34881 |
| Wahlenbergia madagascariensis A.DC. | FoZ #5012 |
| Wahlenbergia subaphylla (Baker) Thulin subsp. scoparia (Wild) Thulin | Chase 3104 |
| Wahlenbergia undulata (L.) A.DC. | Chase 6125 |
| Wahlenbergia virgata Engl. | FoZ #3750 |
| Capparaceae | |
| Cleome monophylla L. | Hyde s.r. |
| Ritchiea albertis Gilg | Chase 6225 |
| Caprifoliaceae | |
| *Sambucus canadensis L. | FoZ #37446 |
| Name / authority | Voucher |
|------------------|---------|
| Caryophyllaceae  |         |
| *Cerastium glomeratum* Thuill. | Whellan 1560 |
| Drymaria cordata (L.) Roem. & Schult. var. cordata | Chase 6049 |
| *Sagina apetala* Asd. | FoZ #1808 |
| Silene burchelli DC. var. augustifolia Sond. | Chase 7224 |
| Stellaria marnii Hook.f. | Müller plot 68 |
| *Stellaria media* (L.) Vill. | FoZ #79972 |
| Celastraceae      |         |
| Allocasine laxifolia (Harv.) N.Robson | Chase 7199 |
| Catha edulis (Vahl) Endll. | Chase 784 |
| Elaeodendron croceum (Thunb.) DC. | Müller plot 150 |
| Gymnosophora busxofolia (Lyz.) Seyesyl. | Chase 5571 |
| Gymnosophora harveyana Loes. subsp. harveyana | FoZ #15259 |
| Gymnosophora mosambicensis (Klotzsch) Loes. subsp. mosambicensis | Chase 6279 |
| Gymnosophora senegalensis (Lam.) Loes. | FoZ #15183 |
| Hippocratea africana (Wild.) Loes. var. richardiana (Cambess.) N.Robson | Müller 3149 |
| Maytenus acuminata (L.f.) Loes. var. acuminata | Chase 4416 |
| Maytenus chasei N.Robson | Chase 5634 |
| Maytenus undata (Thunb.) Blakelock | Müller 2803 |
| Chrysobalanaceae |         |
| Parinari curatellifolia Benth. | FoZ #2039 |
| Clusiaceae        |         |
| Garcinia buchananii Baker | Chase 5296 |
| Garcinia kingaenias Engl. | Müller plot 74 |
| Harungana madagascariensis Poir. | Chase 1970 |
| Hypericum abieticum Thumb. subsp. sanderi (Bredell) N.Robson | FoZ #15321 |
| Hypericum peplidifolium A.Rich. | FoZ #15310 |
| Hypericum revolutum Vahl | Chase 1181 |
| Hypericum roeperianum A.Rich. | FoZ #15157 |
| Pseudoperiploca feveriana Spach | Whellan 1138 |
| Combretaceae      |         |
| Combretum molle G.Don | FoZ #23920 |
| Combretum pioioides Welw. subsp. pioioides | West 6373 |
| Connaraceae       |         |
| Agelaea pentagyna (Lam.) Baill. | Drummond 5079 |
| Convolvulaceae    |         |
| *Dichondra micrantha* Urb. | FoZ #929 |
| Hewittia malabarica (L.) Suresh | FoZ #18123 |
| *Ipomoea caesia* (L.) Sweet var. caesia | FoZ #1404 |
| Ipomoea involucrata P.Beauv. var. involucrata | Chase 2165 |
| Ipomoea obscura (L.) Ker Gawl. var. obscura | FoZ #4128 |
| Turbina bulbata (Baker) A.Meeuse | Chase 8589 |
| Cornaceae         |         |
| Curtisia dentata (Burm.f.) C.A.Sm. | Chase 4168 |
| Crassulaceae      |         |
| *Bryophyllum pinnaatum* (Lam.) Oken | FoZ #25790 |
| *Bryophyllum tubiflorum* Harv. | FoZ #3407 |
| Crassula alinoides (Hook.f.) Engl. | Mavi 1558 |
| Crassula alitiosa R.Fern. | FoZ #39862 |
| Crassula capitella Thumb. subsp. nodulosa (Schönland) Toelken | FoZ #7384 |
| Crassula expansa Dryand. subsp. expansa | FoZ #79967 |
| Crassula lanceolata (Eckl.& Zeyh) Walp. subsp. transvaalensis (Kuntze) Toelken | FoZ #3494 |
| Crassula sarcochila Eckl.& Zeyh. subsp. sarcochila | Ferrar s.n. |
| Crassula sarmentosa Harv. | FoZ #3499 |
| Crassula setulosa Harv. var. setulosa | Chase 6134 |
| Crassula suazienis Schönland subsp. suazienis var. suazienis | Chase 6149 |
| Kalanchea crenata (Andrews) Haw. | Chase 8445 |
| Kalanchea laceolata (Forssk.) Pers. | FoZ #1620 |
| Kalanchea luciae Raym.-Hamet subsp. luciae | FoZ #4061 |
| Cucurbitaceae     |         |
| Coccinia adoensis (A.Rich.) Cogn. | Chase 7388 |
| Cucumis zeyheri Sond. | Chase 8485 |
| Momordica foetida Schumach. | Wild 14218 |
| Oreocystis africana Hook.f. | Chase 6222 |
| Peponium chirindense (Baker f.) Cogn. | Müller 3486 |
| Name / authority | Voucher |
|------------------|---------|
| Zehneria minutiflora (Cogn.) C.Jeffrey | Ferrar 4020 |
| Zehneria scabra (L.f.) Sond. subsp. scabra | Müller plot 169 |
| Zehneria thwaitesi (Schweinf.) C.Jeffrey | Chase 5550 |
| **Dipsacaceae** | |
| Scabiosa columbaria L. | FoZ #556 |
| **Dipterocarpaceae** | |
| *Monotis engleri* Gilg | FoZ #557 |
| **Droseraceae** | |
| *Drosera burkeana* Planch. | Carly 467 |
| *Drosera dielsiana* Exell & J.R.Laundon | FoZ #644 |
| **Ebenaceae** | |
| *Diospyros abyssinica* (Hiern) F .White subsp. abyssinica | Müller 3043 |
| *Diospyros lycioides* Desf. subsp. sericea (Bernh.) De Winter | Bamps 626 |
| *Diospyros natalensis* (Harv.) Brenan subsp. nummularia (Brenan) Jordaan | Müller 2556 |
| *Diospyros whyteana* (Hiern) F .White | Chase 1495 |
| **Ericaceae** | |
| *Erica hexandra* (S.Moore) E.G.H.Oliv. | van der Berghen 623 |
| *Erica johnstoniana* Britten | Galpin 9267 |
| **Erythroxylaceae** | |
| *Erythroxylum emarginatum* Thonn. | Bamps et al. 648 |
| **Euphorbiaceae** | |
| *Adenoline acuta* (Thunb.) Baill. | Chase 8491 |
| *Croton sylvaticus* C.Krauss | Drummond 5090 |
| *Euphorbia benthamii* Hiern | Chase 5539 |
| *Euphorbia peplu L.* | FoZ #581 |
| *Euphorbia prostrata* Aiton | FoZ #3742 |
| *Euphorbia viridii L.* | Chase 5161 |
| *Homalanthus papalifolius* Graham | FoZ #3728 |
| *Leucaena procumbens* (L.) Prain | Wild 6447 |
| *Macaranga capensis* (BailL) Sim | Chase 5565 |
| *Macaranga mellifera* Prain | Chase 5455 |
| *Neoboutonia macrocalyx* Pax | FoZ #7425 |
| *Ricinus communis* L. var. communis | FoZ #25729 |
| *Shirakiopsis elliptica* (Hochst.) Esser (=Saprium ellipticum) (Krauss) Pax | Chase 7115 |
| *Satureja procera* (Prain) Croizat | Müller 2557 |
| *Tanania suynnotonia* (S.Moore) Prain | Müller plot 172 |
| *Vernicia montana* Tour. | FoZ #3799 |
| **Fabaceae: Caesalpinioideae** | |
| *Bauhinia galpinii* N.E.Br. | FoZ #506 |
| *Bauhinia petersiana* Bolle | FoZ #1030 |
| *Bauhinia variegata* L. var. variegata | FoZ #17371 |
| *Bechystegia speciformis* Benth. | Chase 4153 |
| *Bechystegia utilis* Hutch & Burtt Davy | Chase 4154 |
| *Chamaecrista kirkii* (Oliv.) Standl. var. kirkii | Chase 5489 |
| *Chamaecrista parva* (Steyaert) Lock | Ferrar s.n. |
| *Chamaecrista witteri* (Ghesq.) Lock | Chase 8493 |
| *Jugland nus globifora* (Benth.) Troupin | FoZ #1040 |
| *Senna didymobotrya* (Fresen.) H.S.Irwin & Barneby | Methuen 43 |
| *Senna petersiana* (Bolle) Lock | FoZ #3923 |
| *Senna septemtrionalis* (Viv.) H.S.Irwin & Barneby | Grosvenor 11 |
| **Fabaceae: Mimosoideae** | |
| *Acacia abysinica* Benth. | Chase 7796 |
| *Acacia amythethophylla* A.Rich. | FoZ #15446 |
| *Acacia cornigera* (L.) Willd. (=A. spadicigera) Schltr. & Cham.) | Obermeyer 2061 |
| *Acacia mearnsii* De Wild. | FoZ #3591 |
| *Acacia melanoxylon* R.Br. | Biegel 2431 |
| *Acacia podalyriifolia* G.Don | FoZ #3800 |
| *Acacia sieberiana* DC. var. woodii (Burtt Davy) Keay & Brenan | Biegel 2430 |
| *Albizia adianthifolia* (Schumach.) W.Wight | Müller 3383 |
| *Albizia antunesiana* Harms | FoZ #15145 |
| *Albizia gabebria* (Schumach.& Thonn.) Benth. var. gabebreus (Oliv.) Brenan | Müller 3097 |
| *Albizia gummifer* (J.F.Gmel.) C.A.Sm. | Wild 1596 |
| *Albizia schimperiana* Oliv. var. schimpeiana | Chase 6223 |
| *Distichoclycis cinerea* (L.) Wight & Arn. | FoZ #15202 |
| *Entada abysinica* A.Rich. | Chase 5554 |
| Name / authority | Voucher |
|------------------|---------|
| Newtonia buchananii (Baker f.) | Chase 878 |
| **Fabaceae: Papilionoideae** | |
| Aeschynomene nodulosa (Baker f.) | FoZ #2041 |
| Argyrolobium rapaxtum (E.Mey.) | Bamps et al. s.n. |
| Argyrolobium tomentosum (Andrews) | FoZ #1255 |
| Caesia brevicaudata (Vatke) | Wild 1586 |
| Crotalaria capensis Jacq. | Corby 1582 |
| Crotalaria cephalotes A.Rich. | Chase 8565 |
| Crotalaria dichotoma Baker f. | Corby 1445 |
| Crotalaria gazensis Baker f. | Chase 7449 |
| Crotalaria hyssopifolia Klotzsch | Chase 6930 |
| Crotalaria lanceolata E.Mey. | Muller plot 149 |
| Crotalaria pallida Aiton | Muller 6684 |
| Crotalaria variegata Baker | Whellan 1598 |
| Dalbergia lactea Vatke | Muller 6684 |
| Desmodium adscendens (Sw.) | Staples 183 |
| Desmodium barbatum (L.) | Chase 580 |
| Desmodium repandum (Vahl) DC. | Chase 8557 |
| Dolichos kilimandscharicus | Muller 6684 |
| Eriosema buchananii Baker f. var. | Muller 6684 |
| Eriosema burkei Harv. | Muller 6684 |
| Eriosema ellipticum Baker | Muller 6684 |
| Erythrina lysistemon Hutch. | Muller 6684 |
| Flemingia grahamiana Wight & Arn. | Muller 6684 |
| Indigofera arrecta A.Rich. | Muller 6684 |
| Indigofera cecilii N.E.Br. | Muller 6684 |
| Indigofera hialata Eкл. & Zeyh. | Muller 6684 |
| Indigofera hyllii Baker subsp. | Muller 6684 |
| Indigofera paniculata Pers. subsp. gazensis (Baker f.) | Muller 6684 |
| Indigofera setifera Baker var. | Muller 6684 |
| Kotschya strigosa (Benth.) | Muller 6684 |
| Lotus arabicus L. Bamps et al. | Muller 6684 |
| Lotus discolor E.Mey. subsp. mollis | Muller 6684 |
| Macrotyloma densiflorum (Baker) Verdc. | Muller 6684 |
| Muscuna coriacea Baker subsp. irritans (Burtt Davy) | Muller 6684 |
| Ormosiopsis kirkii S.Moore | Muller 6684 |
| Osboukohium foliosum (Oliv.) | Muller 6684 |
| Philenoptera violacea (Klotzsch) | Muller 6684 |
| Pterocarpus angolensis DC. | Muller 6684 |
| Pterocarpus rotundifolius (Sond.) | Muller 6684 |
| Rhyynchosia clivorum S.Moore subsp. | Muller 6684 |
| Sphenostylis zimbabweensis Mithen | Muller 6684 |
| Stylosanthes fruticosa (Retz.) | Muller 6684 |
| Tephrosia dasyphylla Baker subsp. | Muller 6684 |
| Tephrosia dasyphylla Baker subsp. | Muller 6684 |
| Tephrosia meieri Hutch.& Burtt Davy (= T. glomeruliflora Meisn. subsp. meieri (Hutch.& Burtt Davy) Schrire) | Muller 6684 |
| Tephrosia paniculata Baker subsp. paniculata | Muller 6684 |
| Tephrosia rhodoidea Baker f. var. polystachyoides (Baker f.) | Muller 6684 |
| Tylonota fasoglenii (Schweinf.) | Muller 6684 |
| Name / authority | Voucher |
|------------------|---------|
| Vigna gazensis Baker f. | Chase 6510 |
| Vigna schlechteri Harms | Wild 2844 |
| Vigna vexillata (L.) A.Rich. var. vexillata | FoZ #24719 |
| Zornia mihanu Mohlenbr. | FoZ #41451 |
| Gelseriaceae | |
| Mustea brunonis Dict. var. brunonis | Chase 6745 |
| Gentianaceae | |
| Sebaea leiotysta Gilg | Hopkins 7257 |
| Geraniaceae | |
| Geranium arnicum Forssk. subsp. arnicum | FoZ #25127 |
| Geranium incanum Burm.f. subsp. hyssuense (R.Knuth) J.R.Laundon | Drummond 5093 |
| Pelargonium luridum (Andrews) Sweet | Chase 7921 |
| Pelargonium mossambicense Engl. | Eyles 9276 |
| Gesneriaceae | |
| Zornia milneana Mohlenbr. | FoZ #41451 |
| Gelsemiaceae | |
| Mostuea brunonis Didr. var. brunonis | Chase 6745 |
| Haloragaceae | |
| *Myriophyllum aquaticum (Vell.) Verdc. | Denny 1312 |
| Heteropitys dehniae Suess. | FoZ #3610 |
| Hydrostachyaceae | |
| Hydrostachys polymorpha A.Braun | Chase 6637 |
| Icacinaceae | |
| Apodytes dimidiata Arn. subsp. dimidiata | Chase 366 |
| Iteaceae | |
| Chase 1736 |
| Lamiaceae | |
| Aedanthes buchneriana Brot. | Fisher 1627 |
| Aedanthes serpiculoides Baker | Whellan 749 |
| Clerodendrum cephalanthum Oliv. subsp. swynnertonii (S.Moore) Verdc. | Chase 2164 |
| Haumaniastrum distifolium (Baker) A.J.Paton | FoZ #73536 |
| Haumaniastrum sericeum (Brot.) A.J.Paton | Hopkns s.n. |
| Haumaniastrum villanum (Benth.) A.J.Paton | Chase 6566 |
| Holunda opposita Vahl | FoZ #1752 |
| *Hyptis pectinata (L.) Poit. | FoZ #876 |
| *Hyptis suaveolens (L.) Poit. | FoZ #27586 |
| Leomis oenophila (Burm.f.) Iwarsson var. raineriana (Vis.) Iwarsson | FoZ #34929 |
| Lenca milanjiana Gürke | FoZ #3922 |
| Micromeria micromeria (Forsk.) C.Chr. var. micromeria (=Satureja pontica (Benth.) Brot.) | Chase 7137 |
| Oenanthera obvoluta Benth. subsp. obvolutum var. obvolutum | FoZ #3364 |
| Plectranthus chimonanthesii S.Moore | Chase 6021 |
| Plectranthus euculentus N.E.Br. | FoZ #7536 |
| Plectranthus hadiiensis (Forsk.) Spreng. | FoZ #21128 |
| Plectranthus hereroensis Engl. | Chase 6512 |
| Plectranthus kapatensis (R.E.Fr.) J.K.Morton | Chase 5563 |
| Plectranthus lanuginosus (Benth.) Agnew | FoZ #15345 |
| Plectranthus lasiflorus Benth. | Chase 1999 |
| Plectranthus sanguineus Britten | FoZ #2052 |
| Plectranthus swynnertonii S.Moore | Eyles 7084 |
| Pycnostachys reticulata (E.Mey.) Benth. | Chase 2000 |
| Pycnostachys urticifolia Hook. | FoZ #37502 |
| Rheiaca myrtoides (Hochst.) D.A.S. & Mabb. | FoZ #873 |
| Tetradenia riparia (Hochst.) Codd | FoZ #37444 |
| Vitis doniana Sweet | Carter 2313 |
| Vitex madiensis Oliv. subsp. madiensis (Britten) F.White | Masterson 570 |
| Lauraceae | |
| *Cinnamomum camphora (L.) J.Presl | FoZ #23896 |
| *Cinnamomum verum J.Presl | FoZ #25873 |
| Cryptocarya liebertiana Engl. | Müller 3382 |
| *Pseuda americana Mill. | FoZ #3716 |
| Lentibulariaceae | |
| Genista hispida Stapf | Philcox et al. 8951 |
| Name / authority | Voucher |
|------------------|---------|
| *Utricularia firmula* Oliv. | Philcox et al. 8952 |
| *Utricularia livida* E.Mey. | Chase 6112 |
| *Utricularia sandensii* Benj. | Chase 5539 |
| *Utricularia subulata* L. | Philcox et al. 8950 |
| **Linderniaceae** | |
| *Craterostigma lanceolatum* (Engl.) Skan | FoZ #53083 |
| *Craterostigma sp. no. 1 cf. lanceolatum* | FoZ #28553 |
| *Linderniella pulchella* (Skau) Eb.Fisch., Schäferh. & Kai Müll. (*Lindernia pulchella* (Skau) Philcox) | Philcox 8971 |
| *Linderniella wilmsii* (Engl.) Eb.Fisch., Schäferh. & Kai Müll. (*Lindernia wilmsii* (Engl.) Philcox) | Philcox 8972 |
| **Loganiaceae** | |
| *Strychnos angolensis* Gilg | Müller 3801 |
| *Strychnos luceni* Baker | FoZ #1306 |
| *Strychnos spinosa* Lam. | FoZ #15189 |
| *Strychnos usambarensis* Gilg | FoZ #1308 |
| **Loranthaceae** | |
| *Agelanthus lancifolius* Polhill & Wiens | FoZ #39863 |
| *Agelanthus mulleri* (Engl.) Polhill & Wiens | Polhill & Pope 4746 |
| *Agelanthus nyasicus* (Baker & Sprague) Polhill & Wiens | Chase 578 |
| *Englerina oedostemon* (Danser) Polhill & Wiens | Polhill & Pope 4747 |
| **Malvaceae: Byttnerioideae, Helicteroideae & Sterculioideae** | |
| *Cola greenwayi* Brennan var. *greenwayi* | Drummond 5092 |
| *Dombeya burgessiae* Harv. | Loveridge 1089 |
| *Dombeya rotundifolia* (Hochst.) Planch. | FoZ #1785 |
| *Melhania randii* Baker f. | FoZ #3924 |
| *Waltheria indica* L. | FoZ #37490 |
| **Malvaceae: Grewioideae** | |
| *Grewia occidentalis* L. var. *occidentalis* | FoZ #3190 |
| *Grewia istoleza* Ulbr. | FoZ #7353 |
| *Spermannia rizinocarpa* (Eckl. & Zeyh.) Kuntze | Chase 1678 |
| *Triunfetta avinla* L. | FoZ #7392 |
| *Triunfetta pilosa* Roth var. *pilosa* | FoZ #7393 |
| *Triunfetta rhomboidea* Jacq. | Wild 500 |
| **Malvaceae: Malvoideae** | |
| *Abutilon sonneratianum* (Cav.) Sweet | Wild 472 |
| *Azanza garckeana* (F.Hoffm.) Exell & Hille. | FoZ #98753 |
| *Hibiscus fuscus* Garcke | Chase 8301 |
| *Hibiscus shirensis* Sprague & Hutch. | FoZ #7152 |
| *Hibiscus swatenensis* L. | Chase 8558 |
| *Malvastrum coromandelianum* (L.) Garcke | FoZ #4040 |
| *Pavonia columna* Cav. | Fisher 1601 |
| *Pavonia urra* Cav. | FoZ #1221 |
| **Melastomataceae** | |
| *Antherotoma naudinii* Hook.f. | Schelpe 365 |
| *Diosist princeps* (Kunth) Triana var. *princeps* | Whellan 1980 |
| **Meliaceae** | |
| *Ekebergia benguelensis* C.DC. | FoZ #98848 |
| *Ekebergia capitensis* Sparrm. | Chase 555 |
| *Khaya anthotheca* (Welw.) C.DC. | FoZ #25861 |
| *Trichilia dregeana* Sond. | Chase 3506 |
| **Melianthaceae** | |
| *Bersama abyssinica* Fresen. subsp. *nyasae* (Baker f.) F.White | FoZ #98884 |
| *Bersama suynnertonii* Baker f. | Chase 7020 |
| **Menispermaceae** | |
| *Cissampelos macmornata* A.Rich. | FoZ #37441 |
| *Cissampelos tomlone* Harv. | Chase 1544 |
| *Stephania abyssinica* (Quart.-Dill. & A.Rich.) Wälp. var. *abyssinica* | Wild 495 |
| *Stephania abyssinica* (Quart.-Dill. & A.Rich.) Wälp. var. *tomentella* (Oliv.) Diels | FoZ #27674 |
| *Tiliaeura funifera* (Miers) Oliv. | Grosvenor 265 |
| **Molluginaceae** | |
| *Corrigiola drymarioides* Baker f. | Chase 1183 |
| *Mollugo cerviana* (L.) Ser. var. *cerviana* | Chase s.n. |
| **Monimiaceae** | |
| *Xynalos monospora* (Harv.) Baill. | Chase 6179 |
| **Moraceae** | |
| *Dorstenia buchananii* Engl. var. *buchananii* | Chase 6259 |
| Name / authority | Voucher |
|------------------|---------|
| Ficus chirindensis C.C.Berg | Müller plot 78 |
| Ficus crateromoma Mildbs.& Burret | Plowes 2184 |
| Ficus exasperata Vahl | Masterson 602 |
| Ficus natalensis Hochst. subsp. graniticola J.E.Burrows | Hyde s.n. |
| Ficus rokko Warb.& Schweinf. (=F thonningii Blume in part) | Biegel 2490 |
| Ficus scassellatii Pamp. subsp. scassellatii | FoZ #15572 |
| Ficus sur Forssk. | FoZ #3525 |
| Trilepisium madagascariense DC. | Chase 5625 |
| **Myricaceae** | |
| Morella pilulifera (Rendle) Killick | FoZ #3553 |
| **Myrothamnaceae** | |
| Myrothamnus flabellifolius Welw. | FoZ #2038 |
| **Myrsinaceae** | |
| Embelia schimperi Vatke | Chase 1445 |
| Maesa lanceolata Forssk. | Obermeyer 2053 |
| Myrsine africana L. | Chase 5295 |
| Rapanea melanophloeos (L.) Mez | Chase 6739 |
| **Myrtaceae** | |
| Eugenia malangensis (O.Hoffm.) Nied. | FoZ #1226 |
| Eugenia nataliticia Sond. (incl. E. nyasensis Engl., E. capensis (Eckl.& Zeyh.) Sond. subsp. nyasensis (Engl.) F.White) | Chase 7219 |
| *Psidium cattleyanum Sabine | FoZ #7397 |
| *Psidium guajava L. | FoZ #3529 |
| Syzygium cordatum C.Krauss | Bamps et al. 621 |
| Syzygium guineense (Willd.) DC. subsp. afromontanum F.White (=S. gerrardii (Hook.f.) F.White) | Chase 5626 |
| *Syzygium jambos (L.) Alston | FoZ #25884 |
| **Ochnaceae** | |
| Ochna bolitii Engl. | Wild 1594 |
| **Oleaceae** | |
| Chionanthus battiscumbi (Hutch.) Stearn | Müller 3077 |
| Chionanthus furoelatus (E.Mey.) Stearn subsp. major (L. Verdel.) Stearn | Müller plot 153 |
| Jasminum alyssinicum DC. | FoZ #15266 |
| Jasminum streptopus E.Mey. | Müller plot 149 |
| Olea capensis L. subsp. macrocarpa (C.H.Wright) I. Verdel. | Müller plot 152 |
| Sclerebra alata (Hochst.) Welw. | FoZ #3586 |
| **Opiliaceae** | |
| Opilia amentacea Roxb. | FoZ #6110 |
| **Orobanchaceae** | |
| Alecrna resiliifera (Vahl) Kuntze (incl. var. monticola (Engl.) Melch. & var. senegalensis (Benth.) Hepper | Chase 6035, Philcox 8953 |
| Buchnera speciosa Skan | Chase 4199 |
| Cyniwni adomense Benth. subsp. adomense | Chase 611 |
| Sophora ramosa (Hochst.) Hochst. | Bacon s.n. |
| Sriga biliabata (Thunb.) Kuntze | Wild 2807 |
| Sriga elegans Benth. | FoZ #24937 |
| **Oxalidaceae** | |
| Bisphytum umbrelaculm Welw. | FoZ #2792 |
| *Oxalis corniculata L. | FoZ #7 |
| *Oxalis latifolia Kunth | FoZ #5774 |
| Oxalis semiloba Sond. subsp. semiloba | FoZ #15219 |
| **Passifloraceae** | |
| Adenia digitata (Harv.) Engl. | FoZ #37462 |
| Adenia gummifera (Harv.) Harms var. gummifera | FoZ #98866 |
| Adenia lobata (Jacq.) Engl. subsp. nucifolia (Engl.& Harms) Lye | Müller 3621 |
| Basanancha apetalis (Baker f.) W.J.de Wilde | FoZ #22042 |
| *Passiflora edulis Sims | FoZ #3760 |
| **Penaceae** | |
| Olinia vanguerioides Baker f. | Fisher 1218 |
| **Peraceae** | |
| Clutia abyssinica Jaub.& Spach var. abyssinica | Whellan 1599 |
| Clutia pasii Pax | FoZ #40916 |
| Clutia suynerontii S.Moore | Galpin 9271 |
| **Phyllanthaceae** | |
| Antidema membranaceum Müll.Arg. | Müller 3380 |
| Antidema venosum Tul. | FoZ #15191 |
| Name / authority | Voucher |
|------------------|---------|
| *Antidesma vogelianum* Müll.Arg. | Hyde s.n. |
| Bridelia micrantha (Hochst.) Baill. | FoZ #3580 |
| *Cléistanthus polyacanthus* Planch. subsp. *milleri* (Dunkley) Radcl.-Sm. (*C. apetalus* S.Moore) | Wild 5571 |
| *Margaritaria disoides* (Baill.) Webster var. *nitida* (Pax) Radcl.-Sm. | Chase 5483 |
| Phyllanthus beilii Hutch. | Chase 5590 |
| *Phyllanthus ovatifolius* Forssk. (*P. guineensis* Pax) | Müller plot 79 |
| Uapaca kirkiana Müll.Arg. var. *kirkiana* | FoZ #596 |
| **Phytolaccaceae** | | |
| Phytolacca dodonaea L.'Hér. | Müller 3092 |
| *Phytolacca octandra* L. | FoZ #2561 |
| **Piperaceae** | | |
| *Peperomia banganae* C.DC. (*P. rotundifolia* sensu FZ) | Müller 3067 |
| *Peperomia blanda* (Jacq.) Kunth var. *leptostachya* (Hook.& Arn.) Düll | Chase 851 |
| *Peperomia retusa* (L.f.) A.Dietr. | Wild 2836 |
| *Piper caperatus* L.f. var. *capense* | Plowes 2163 |
| **Pittosporaceae** | | |
| Pittosporum viridiflorum Sims var. *viridiflorum* | Chase 7218 |
| **Plantaginaceae** | | |
| *Linaria vulgaris* Mill. | FoZ #5438 |
| *Plantago major* L. | Ferrar s.n. |
| *Veronica javanica* Blume | Wild 1591 |
| **Polemoniaceae** | | |
| *Cobaea scandens* Cav. | Edwards s.n. |
| **Polygalaceae** | | |
| Polygala gazensis Baker f. | Schelpe 374 |
| Polygala ohlendorfiana Eckl.& Zeyh. | Chase 7873 |
| Polygala virgata Thmb. var. *decona* (Sond.) Harv. | FoZ #25783 |
| Polygala wilmsii Chodat | Obermeyer 2048 |
| Securidaca longepedunculata Fresen. | FoZ #3920 |
| **Polygonaceae** | | |
| Oxygonum dregeanum Meisn. subsp. *canecens* (Sond.) Germish. | Craster s.n. |
| *Persicaria capitata* (D.Don) H.Gross | FoZ #1294 |
| *Rumex acetosella* L. subsp. *angiocarpus* (Murb.) Murb. | FoZ #2778 |
| *Rumex crispus* L. | FoZ #2781 |
| Rumex sagittatus Thunb. | FoZ #2783 |
| **Primulaceae** | | |
| Ardisia wettsteinii R.Wagner | FoZ #2772 |
| **Proteaceae** | | |
| *Faurea rochetiana* (A.Rich.) Pic.Serm. | Fisher 337 |
| *Faurea rubriflora* Marner | Chase 6045 |
| *Faurea saligna* Harv. | Hyde s.n. |
| *Grevillea robusta* R.Br. | FoZ #7595 |
| Protea caffra Mein. subsp. *gazensis* (Beard) Chisumpa & Brummitt | FoZ #7648 |
| Protea greguedi J.F.Gmel. | FoZ #4872 |
| Protea petiolaris (Hiern) Baker subsp. *elegant* Chisumpa & Brummitt | Mitchell s.n. |
| Protea welwitschii Engl. | FoZ #1352 |
| **Putranjivaceae** | | |
| Drypetes gerrardii Hutch. var. *gerrardii* | Hyde s.n. |
| Drypetes natalensis (Harv.) Hutch. var. *natalensis* | FoZ #5654 |
| **Ranunculaceae** | | |
| Clematis brachiata Thunb. | Müller 3403 |
| Clematis sinensis Fresen. | Müller 3087 |
| Ranunculus multifidus Forssk. | FoZ #9877 |
| Thalictrum rhynchocarpum Quatt.-Dill.& A.Rich. | FoZ #2887 |
| **Rhamnaceae** | | |
| Gouania longispicata Engl. | Simon 925 |
| Rhamnus prinoides L.'Hér. | Fisher 1334 |
| Scutia myrtina (Burm.f.) Kurz | Müller 3391 |
| Ziziphus mucronata Willd. | FoZ #5025 |
| **Rhizophoraceae** | | |
| Cassipourea gummiflua Tul. var. *verticillata* (N.E.Br.) J.Lewis | Chase 1802 |
| Cassipourea maloana (Baker) Alston (*C. congensis* sensu auct.) | Chase 5454 |
| **Rosaceae** | | |
| Alchemilla kiwensis Engl. | Chase 1162 |
| Name / authority                     | Voucher         |
|-------------------------------------|-----------------|
| Cliffortia serpyllifolia (Cham.& Schltdl.) | Chase 1182     |
| *Cotoneaster pannosus* Franch.       | FoZ #3811       |
| *Eriobotrya japonica* (Thunb.) Lindl. | FoZ #18306      |
| Prunus africana (Hook.f.) Kalkman    | Chase 6198      |
| *Prunus cerasoides* D.Don            | Bannenmann s.n. |
| *Rubus niveus* Thunb.                | FoZ #2697       |

**Rubiaceae**

Afrocotoneaster ngonii (Bridson) Lantz (=Canthium ngonii) Bridson, C. pseudoreticulatum sensu R.B. Drumm.) Müller 3068
Agathisanthemum bojeri Klotzsch subsp. bojeri FoZ #35444
Aida micrantha (K.Schum.) F .White var. monju (K.Krause) Petit Chase 5552
Anthocarpum ammnasioides S.Moore FoZ #5017
Anthocarpum berbaceum L.f. FoZ #1907
Anthocarpum vallicola S.Moore Chase 6037
Anthocarpum whiteanum Britten Chase 6038
Anthocarpum zimbabwense Puff NE Müller 3068

*Coffea arabica* L. Müller 786
*Coffea mufindiensis* Bridson subsp. australis (Hemsil.) sensu Garcia Drummond 5088
Conostomiun natalense (Hochst.) Bremek. Chase 6039
Coptosperma supra-axillare (Hemsil.) Degref (=Tarenna supra-axillaris (Hemsil.) Bremek. subsp. barbertonensis (Bremek.) Bridson) Müller 3516

Crematophora triflora (Thonn.) K.Schum. subsp. triflora Müller plot 82
Fagacia angustifolia Schweinf. FoZ #3786
Fagacia bombieri De Wild. FoZ #2219
Galium chloroionanthum K.Schum. Müller 342
Galipina circatetiera Thunb. Müller 342
Gardenia imperialis K.Schum. subsp. imperialis Müller 342
Himalaya eriolepis K.Schum. subsp. derrillleides Müller 342
Hymenodictyon floribundum (Hochst. & Steud.) B.L.Rob. Müller 342
Kertea gunetzi (Sond.) Bridson (=Canthium gunetzi Sond.) Müller 342
Kohautia amphiendriosa Eckl. & Zeyh. FoZ #4405
Lectopeta benguelensis (Benth. & Hook.f.) R.D.Good subsp. puhevenus Verdc. FoZ #2042
Musaenda avacata Poir. Wild 552
Oldenlandia affinis (Roem.& Schult.) DC. subsp. fugax (Vatke) Verdc. Chase 2162
Oldenlandia gurantiensis (DC.) Summer. var. gurantiensis FoZ #3530
Oldenlandia berbacea (L.) Roxb. var. berbacea Ballings 1734
Oxiphora inyanga N.E.Bt. subsp. inyanga Müller 786
Oxymutti goezei K.Schum. subsp. goezei Müller 786
Oxymutti speciosus DC. subsp. stemocarpus (K.Schum.) Bridson Müller 786
Pavetta comostyla S.Moore subsp. comostyla var. inyangaensis (Bremek.) Bridson Müller 786
Pavetta umtanensis Bremek. Müller 786
Pentanisia schweinfurthii Hiern Obermeyer 2029
Pentas purpurea Oliv. subsp. purpuurea Müller 2162
Psychotria mahonii C.H.Wright Eyles 7081
Psychotria mutica (Ganders) Schweinf. Chase 6280
Psychotria peduncularis (Salis.) Steyerm. Masterson 559b
Psychotria sphenomorcesusa (Kuntze) E.M.A.Petit Drummond 5098
Psychodoe kraussioides (Hiern) Bridson Müller 25
Psychodoe parviflora (Afzel.) Bridson subsp. chapmanii (Bridson (=Canthium vulgaris (K.Schum.) Bolluck) Müller 3050
Pyrotrica bicracteata (Baker) Cavaco Müller 342
*Richardia brasiliensis* Gomes Müller 342
*Richardia scalra* L. Müller 342
Rothmannia fischeri (K.Schum.) Bullock subsp. moromballae (Birn) Bridson Müller 342
Rothmannia urcelliformis (Hiern) Bullocks Müller 342
Rubia cordfolia L. subsp. conostoma (Gand.) Verdc. Greatrex-SRGH 14938
Rutidoxa fuscosena Hiern subsp. fuscosena Müller 3050
Bygynia macrantha Verdc. (=R. sp. 1 of Drummond) Müller 3050
Serianthe bucligenis (Hiern) Robbr. subsp. engleri (K.Krause) Bridson Müller 3050
Serianthe sp. A of FZ Müller 3050
Spermacoce natalensis Hochst. Hopkins 7096
Tapiphylum velutinum (Hiern) Robyns Müller 3050
Tarenna pavetteoides (Harv.) Sim subsp. affinis (K.Schum.) Bridson FoZ #3806
Ticalyra coriacea (Benth.) Hiern subsp. angustifolia (J.C.Garcia) Robbr. Müller 3050
Tricalyra pallens Hiern Müller 3050
Vangueria apiculata K.Schum. Müller 3050
| Name / authority | Voucher |
|------------------|---------|
| *Vangueria esculenta* S.Moore | Müller 3054 |
| *Vangueria infausta* Burch. subsp. *infausta* | FoZ #15143 |
| **Rutaceae** | |
| *Calodendrum capense* (L.f.) Thunb. | Hyde s.n. |
| *Clausena anisata* (Wildl.) Benth. var. *anisata* | Whellan 761 |
| *Fodaxia asiatica* (L.) Lam. | Bamps et al 625 |
| *Vangueria infausta* (Engl.) Mziray (*Oricia infausta* (Engl.) I.Verd.) | Chase s.n. |
| *Vangueria nobilis* (Delile) Mziray (*Telea nobilis* Delile) | Chase 5297 |
| *Zanthoxylum dasy* (L.Verd.) P.G. Waterman | Müller plot 152 |
| **Salicaceae** | |
| *Casimiroa edulis* La Llave | FoZ #21844 |
| *Citrus limon* (L.) Burm.f. | FoZ #4034 |
| *Clausena anisata* (Willd.) Benth. var. *anisata* | Whellan 761 |
| *Trimeria grandifolia* (Hochst.) Warb. subsp. *grandifolia* | FoZ #15195 |
| **Santalaceae** | |
| *Osyridicarpos schimperianus* (A.Rich.) A.DC. | Müller 3594 |
| *Osyris lanceolata* Hochst.& Steud. | FoZ #955 |
| *Theium usanguense* Engl. | Bamps et al 691 |
| *Viscum shirense* Sprague | Müller 4744 |
| **Sapindaceae** | |
| *Alophyllus abyssinicus* (Hochst.) Radlk. | Chase 6226 |
| *Alophyllus africanus* P.Beauv. | Carter 2130 |
| *Dodonaea viscosa* Jacq. subsp. *angustifolia* (L.f.) J.G.West | Williams 223 |
| *Filicium decipiens* (Wight & Arn.) Thwaites | Chase 1968 |
| *Hechenstretia oatesii* Rolfe subsp. *rhodesiana* Roessler | FoZ #24443 |
| *Jamesbrittenia carvalhoi* (Engl.) Hilliard | Chase 259 |
| *Nemesia zimbabwensis* Rendle | Whellan 1559 |
| *Selago goetzei* subsp. *ambigua* Hilliard | Whellan 1143 |
| **Sapotaceae** | |
| *Chrysophyllum gorungosanum* Engl. | FoZ #1383 |
| *Englerophytum natalense* (Sond.) T.D.Penn. | Müller 3622 |
| *Manilkara discolor* (Sond.) J.H.Hemsl. | Chase 4559 |
| *Mimusops zeberi* Sond. | Chase 1741 |
| **Scrophulariaceae** | |
| *Buddleja pulchella* N.E.Br. | Müller plot 146 |
| *Buddleja salviifolia* (L.) Lam. | Chase 7798 |
| *Diclis ovata* Benth. | Mavi 1785 |
| *Diclis tenella* Hemsl. | Chase 6119 |
| *Freylinia tropica* S.Moore | FoZ #784 |
| *Hechenstretia natalensis* Rolfe | Chase 6124 |
| *Hechenstretia oatesii* Rolfe subsp. *rhodesiana* Roessler | FoZ #24443 |
| *Jamesbrittenia carvalhoi* (Engl.) Hilliard | Chase 259 |
| *Nemesia zimbabwensis* Rendle | Whellan 1559 |
| *Selago goetzei* subsp. *ambigua* Hilliard | Whellan 1143 |
| **Solanaceae** | |
| *Cestrum aurantiacum* Lindl. | FoZ #18295 |
| *Nicandra physaloides* (L.) Gaertn. | FoZ #114 |
| *Physalis peruviana* L. | FoZ #1201 |
| *Solanaeum aculeatisum* Jacq. | Biegel 2429 |
| *Solanaeum angusti* Lam. | Müller 2628 |
| *Solanaeum betacon* Cav. (=*Cyphomandra betacon* (Cav.) Sendtn.) | Masterson 1327 |
| *Solanaeum campylacanthum* A.Rich. (=*S. panduriforme* E.Mey., *S. incanum* auct.) | FoZ #7241 |
| *Solanaeum lycopersicon* L. (=*Lycopersicon esculentum* Mill.) | FoZ #7344 |
| *Solanaeum maturitanum* Scop. | FoZ #9744 |
| *Solanaeum terminale* Forssk. | FoZ #7344 |
| **Sterculiaceae** (see Malvaceae: Byttnerioideae, Helicteroideae & Sterculioideae) | |
| **Stilbaceae** | |
| *Halleria lucida* L. | Plowes 2503 |
| *Nuxia congesta* Fresen. | Simon 921 |
| *Nuxia floribunda* Benth. | Plowes 2183 |
| **Thymelaeaceae** | |
| *Datia cotinifolia* L. | FoZ #4994 |
| *Gnidia kraussiana* Meisn. var. *kraussiana* | Chase 7368 |
| Name / authority | Voucher |
|------------------|---------|
| Peddiea africana Harv. | Chase 1969 |
| Synaptolepis alternifolia Oliv. | Chase 6502 |

### Tillacidae (see Malvaceae: Grewioideae)

#### Turneraceae

Trichoceras longepedunculatum (Mast.) R.Fern. var. longepedunculatum

Bamps et al 643

#### Ulmaceae

Celtis africana Burm.f.

Trema orientalis (L.) Blume

Bamps et al 728

#### Urticaceae

Boehmeria macrophylla Hornem.

Droguetia iners (Forssk.) Schweinf.

Elatostema monticola Hook.f.

Laportea alatipes Hook.f.

Laportea mooreana (Hiern) Chew

Laportea peduncularis (Wedd.) Chew subsp. peduncularis

Myrianthus bolitii Engl.

*Pilea microphylla* (L.) Liebm.

Pilea tetraphylla (Steud.) Blume

Pouzolzia parasitica (Forssk.) Schweinf.

Urera hypselodendron (A.Rich.) Wedd.

Urera trinervis (Hochst.) Friis & Immelman

#### Verbenaceae

*Lantana camara* L.

Lantana suynnertonii Moldenke

Lippia javanica (Burm.f.) Spreng.

*Verbena bonariensis* L.

*Verbena brasiliensis* Vell.

#### Violaceae

Rinorea convallarioides (Baker f.) Eyles subsp. convallarioides

Müller 3495

Rinorea ferruginea Engl.

Viola abyssinica Oliv.

#### Vitaceae

Cayratia gracilis (Guill.& Perr.) Suess.

Cissus petiolata Hook.f.

Cyphostemma buchananii (Planch.) Wild & R.B.Drumm.

Cyphostemma kilimandscharicum (Gilg) Wild & R.B.Drumm.

Cyphostemma montanum Wild & R.B.Drumm.

Rhoicissus rhomboidea (Harv.) Planch.

Rhoicissus tomentosa (Lam.) Wild & R.B.Drumm.

Rhoicissus tridentata (L.f.) Wild & R.B.Drumm.

FoZ #15342