Broad-leaved miombo woodlands

Trees in the broad-leaved miombo woodland are usually 10–20 m tall, whereas stunted growth at higher elevations can result in trees as short as 3 m. The broad-leaved miombo woodlands are dominated by *Brachystegia* species.

Montane grasslands

Unlike lowland African grasslands where grasses often reach more than 3 m in height, the Nyika Plateau grassland supports short, montane varieties that seldom top 1 m (Johnson 1993). In addition to over 90 species of short grass, the montane grassland community includes herbaceous legumes, wild flowers, and shrubs. The four most abundant genera of herbaceous legumes are *Aeschynomene, Dolichos, Eriosema,* and *Rhynchosia*. These are widely distributed over the grassland community (Johnson 1993).

Dambos

Valleys that are partially filled with sediments have poorly drained floors, and grasslands that occur in these marshy headwater valleys are known as “dambos” (Meadows 1985). The dambo is a distinctive feature of the upper reaches of drainage networks in south-central and east Africa. Dambos play an important role in the collection of run-off prior to its concentration in stream flow. A rich, moist-habitat herbaceous flora occupies the dambos and is dominated by species of the sedge family (*Cyperaceae*), of which *Carex* and *Cyperus* species are most common (Meadows 1984a, Meadows 1985, Meadows & Linder 1989). Dambo vegetation usually grows in tussocks (Johnson 1993), and although sedges are the dominant vegetation type, herbaceous plants are also widespread. Plants associated with the dambos include the giant lobelia, *Lobelia mildbraedii,* and numerous orchid species in the genera *Eulophia, Habenaria, Satyrium,* and *Disa.*

Peat formation is the major current process responsible for dambo infill. A high water table, nutrient-poor acidic rocks, relatively high precipitation, and reduced mean annual temperatures at altitude all contribute to retarding decomposition rates (Meadows 1984a; Meadows 1985). According to Meadows (1984a), the basal date for dambo infill in both the Nyika Plateau and Inyanga Mountains is shortly after 12,000 BP, a time that coincides with increased precipitation in the tropics.

Evergreen forests

Dowsett-Lemaire (1985) recognised six different types of evergreen forest within the Nyika National Park:
- Submontane forests of the eastern escarpment (1,900–2,250 m)
- Submontane Juniper forest
- Submontane forests of Nkhonjera Hill
- Submontane forests of the southwestern slopes
- Montane forests of the high plateau (2,250–2,600 m), confined to the heads of dambos and streams, or where rocky outcrops have given some protection from fire
- Riparian forest
Plant diversity

The Nyika Plateau has been classified as one of Africa’s Centres of Plant Diversity (designated Af65), according to WWF & IUCN (1994). In the early 1990s, a total of 1,200 vascular plant species were recorded on the Plateau (Seyani, Chikuni & Kamundi 1991). Patel, Brummitt, and Overton later provided a preliminary checklist of 1,420 species, based on plant specimens collected there between 1958 and 1999, and deposited in the Kew (K) and Zomba (MAL) herbaria (Overton 2000).

In this book, we list a total of 1,817 recorded species. Including the infra-specific taxa and the exotic or naturalised species, the total is 1,891 taxa, grouped in 684 genera and 160 families (Table 1). This figure is a considerable increase on previous estimates of the Nyika Plateau flora. With further collecting on the northern, eastern and southern extremities of the Malawian part of the Plateau, and the confirmation of many of the excluded taxa listed in here, the total figure could reach 2,000.

The top 21 genera—listed in Table 2—are all associated mainly or entirely with the grasslands; we can infer that these genera have achieved their dominance because the Nyika Plateau is such an extensive grassland island. Table 3 illustrates the high diversity of grassland families on the Nyika Plateau. The families Asteraceae, Orchidaceae, Poaceae, Cyperaceae, and Scrophulariaceae are all predominantly grassland families, while the Fabaceae (Leguminosae: Papilionoidae) and the Rubiaceae are strongly represented in the grasslands. An astonishing 44% of the total species in the top ten genera are members of the Orchidaceae. The asclepiad component of the Apocynaceae is particularly large and is also well represented in the grasslands.

Of the top eleven families, only the Rubiaceae and Euphorbiaceae have appreciable representation in the forest and woodland biomes of the Nyika Plateau.

When comparing the dominant plant families of the Nyika Plateau with those of Mt. Mulanje in southern Malawi, the similarity in the dominance and ranking of the main families on the two massifs is striking (Table 3). Although Mt. Mulanje is a rockier mountain, with a far smaller percentage of grassland and a higher proportion of forest, the dominant families remain essentially the same.

Endemism

The Simen (Simien) Mountains, Mt. Mulanje, the Chimanimani Mountains, Mt. Cameroon, and the Nyika Plateau are all mountain blocks with a flora that has evolved in isolation, in much the same way as have the plants on oceanic islands. However, they all have in common the remnants of the Afromontane flora, which once covered a much greater proportion of the African continent, and therefore share many common elements such as similar families and genera. The flora of the Afromontane archipelago grasslands is largely characterised by the families listed in Table 3.

This book lists 33 endemics (Table 4) and 13 near-endemics (Table 5) for the Nyika Plateau (Willis, Burrows, Fish, Phiri, Chikuni & Golding 2001). In this context, “strict endemics” refers to plants restricted to the Nyika Plateau and its foothills. “Near-endemics” include plants that occur on the Nyika Plateau, as well as the Viphya Mountains to the south, the Mafinga Mountains, Makutu Mountains, and the Misuku Hills to the north. The terrestrial orchid flora is also rich (Williamson 1977, 1979, 1980, WWF & IUCN 1994). The remaining forest patches are greatly threatened by dry season fires and agricultural encroachment. The level of endemism in montane grasslands is markedly higher than in montane forests, and is most pronounced for herbs and small shrubby plants. About 25 of the Nyika Plateau endemics are associated with the grasslands, with the remainder associated mainly with the grassland-forest ecotone (Table 4). Ten of the 13 near-endemics are also grassland species. Most striking is the fact that none of the Nyika Plateau endemics are trees. Chapman & White (1970) state that Afromontane forests have low numbers of endemics—endemics are concentrated in grasslands at higher altitudes.

Of the 33 endemics, 28 taxa (>80%) are geophytic or perennial herbs and suffrutes. These life forms are associated with storage organs (rhizomes and tubers), seeding (high volumes and soil-stored seed banks), growth forms (suffrutes), and life strategies (opportunists/pioneers, good competitors, and perennial traits) that are adapted for rapid regeneration after fire disturbances, to which grassland landscapes are especially prone.
The Nyika Plateau, compared to the other areas of the Afromontane archipelago, has only a modest level of endemism. The level of endemism is low (1.7%) compared to Mt. Mulanje (5.3%) and the Chimanimani Mountains (8.1%), as shown in Table 6. Although the level of endemism on the Simen Mountains also seems low (about 2%), it is expected to be much higher in the light of further collecting and taxonomic treatments (Puff & Sileshi Nemomissa 2001).

In our study, some 637 genera (with 1,782 taxa, excluding pteridophytes) were recorded on the Nyika Plateau. By comparison, Mt. Mulanje has a similar number of genera (625), but only 1,317 taxa, whereas the Simen Mountains support 319 genera and only 550 taxa. There are almost three taxa for every genus on the Nyika Plateau, compared to 2.09 for Mt. Mulanje and 1.7 for the Simens. This could be because the flora of the Nyika Plateau has been better studied (that is, more taxonomic work has been done) when compared to the other areas; this is particularly the case with the Simen Mountains. The much greater size of the Nyika Plateau compared to Mt. Mulanje (3,204 km² versus 640 km²) could also account for the higher number of taxa per genus occurring on the Nyika Plateau.

The Nyika Plateau covers the largest area when compared to the other four Afromontane areas listed in Table 6. The Nyika Plateau is relatively species-poor (0.59 taxa/km²) compared to Mt. Mulanje and the Chimanimani Mountains, both of which have a diversity some four times higher (ca 2.0 taxa/km²). In addition, although Mt. Mulanje and the Chimanimani Mountains are both less than half the size of the Nyika Plateau, each has a higher number of endemics than the Nyika Plateau.

One surprising finding during the compilation of this checklist was the low level of monocotyledon endemism—very few endemic monocotyledons were recorded. A single endemic grass species (Setaria grandis) was found. Although the Cyperaceae is well represented on the Nyika Plateau—it is the sixth largest family, represented by 72 taxa—no sedge endemics were recorded. It was expected that the grasslands and dambo areas would have a considerably higher number of monocotyledon endemics. Strugnell (2002) had a similar finding on Mt. Mulanje. She attributed the unexpectedly low number of monocot endemics on Mt. Mulanje to taxonomic studies that generally tend to focus on only certain high-profile taxa, such as orchids. Further taxonomic work on the monocot families Cyperaceae, Poaceae, Xyridaceae, and Eriocaulaceae may reveal more monocotyledon endemics.
This section highlights the most important collectors and collecting expeditions in the history of botanical exploration on the Nyika Plateau. This list is chronological, but an alphabetical index of collectors can be found on page 383. The date that appears before each collector’s name or collecting expedition represents the year(s) when the collector was working on the Nyika Plateau. Bold names in the text indicate that there is a main entry for that person elsewhere in the list. (Full names of herbaria are listed in “Herbarium Acronyms” on page xi.) Maps represent collecting areas of indicated botanists or expeditions.

1896: Alexander Whyte (1834–1908) was the horticulturist in Sir Harry H. Johnston’s administration in British Central Africa (now Malawi), based in Zomba from 1891 to 1897. From May to July 1896, he undertook a collecting expedition in the north of the country, focussing on the Nyika Plateau. He travelled by boat to Florence Bay (now Chitimba Bay), from where he climbed up to the Livingstonia Mission at Kondowe. He collected on Mount Waller to the east of Livingstonia, and the Chidewa Mountains on the eastern flank of the Nyika Plateau. He travelled west towards Fort Hill (Chitipa) and north to the Misuku Hills before returning to Karonga. From there, he sailed south again, returning to Zomba. All his botanical collections are housed at K (G.V. Pope, pers. comm.).

1903: M.M.S. Henderson collected specimens on the Nyika Plateau in November 1903. The plant list is housed in BM.

1903: W. Sanderson collected on the Nyika Plateau, although only a few specimens are known from this collector. Specimens are housed in BM.

1946: Leonard J. Brass (1900–1971) visited the eastern escarpment via Nchena-Nchena from 10–20 August 1946 (Brass 1948, 1953) as part of the Vernay Nyasaland Expedition of 1946. The report on this expedition was published in 1953 in the Memoirs of the New York Botanical Garden. Collected specimens were deposited in NY and K. Plant collections from the upper parts of the escarpment and the plateau of Nyika amounted to 215 numbers (Brass 1953, Brenan & collaborators 1953, 1954). Brass is commemorated in Helichrysum brassii (Asteraceae) and Polystachya brassii (Orchidaceae).

1947, 1956: F.M. Benson collected on the Malawian side of the Nyika Plateau in 1947 and on the Zambian side in 1956. Mrs Benson’s specimens are housed in BM, K, and PRE.

1949: P.O. Wiehe worked as a plant pathologist in Malawi from 1949–1952. He collected grasses on the Nyika Plateau and, in collaboration with George Jackson, collected grasses in Malawi until 1954. In 1958, Wiehe co-authored a checklist on the grasses of Nyasaland (Malawi) with George Jackson (Jackson & Wiehe 1958). His specimens are housed in K and SRGH. Wiehe is commemorated in Panicum wiehe (Poaceae).

1949: Hawksworth collected grasses on the Nyika Plateau in 1949. Specimens are housed in K and SRGH.

1950: Monica Krippner collected on the Nyika Plateau in 1950 with R.B. Smith. Her plant list is housed in BM.
1950s: **Andrew Angus** (b.1926) of Mount Makulu Agricultural Research Station (south of Lusaka), collected with **Norman Robson** on the Nyika Plateau. Angus started collecting in Northern Rhodesia (Zambia) in 1952, and his specimens are housed in BM, BR, FHO, K, LISC, MPR (MRSC), NDO, PRE, SRGH, and UZL.

1950s: **Arthur S. Boughey** (b.1913), former professor at the University of Zimbabwe, collected on the Nyika Plateau in the 1950s. Specimens are housed in CAH, K, PRE, and SRGH.

1950s: **George Jackson** (b.1927), government ecologist in the pre-independence administration of Malawi, collected on the Nyika Plateau in the 1950s (J. Chapman, pers. comm.). He was very influential and one of the main contributors to Kew's collections. He was mainly responsible for the Agriculture Herbarium at Chitedze, which was incorporated into MAL in the 1970s. In 1958, Jackson co-authored a checklist on the grasses of Nyasaland at Chitedze, which was incorporated into MAL in the 1970s. He continued to make extensive plant collections on the Nyika Plateau during the 1950s, when he undertook soil, vegetation, and plant surveys in many parts of Malawi together with George Jackson. He worked with Philip Adlard, Jim Chapman, and Blodwen Binns from the 1960s through to the 1990s. In 1973, he moved with the University of Malawi from Blantyre to Zomba; this is where the Chitedze, Chongoni (Dedza), and University herbaria amalgamated in 1977 to form the National Herbarium of Malawi (MAL) under Jameson Seyani. Between 1970 and 1982, **Dick Brummitt** (K) accompanied Banda on many field excursions in Malawi. Banda made thousands of collections (some in collaboration with other collectors) during his illustrious career as a botanist in Malawi. His specimens are housed in K, MPR (MRSC), PRE, and SRGH.

1950s–1960s: **Raymond M. Lawton** (b.1922), based at the Forest Department (Zambia), collected mainly on the Zambian side of the Nyika Plateau. Collected specimens are housed in FHO, K, MPR (MRSC), and NDO.

1950s–1960s: **Willem (“Bill”) C. Verboom** (b.1909), environmental officer in the Department of Agriculture at Mount Makulu, collected in Zambia in 1959. Specimens are housed in K, MPR (MRSC), PRE, and SRGH.

1950s–1990s: **Elias A.K. Banda** (1936–1994) was probably the first recognised Malawian plant collector and botanist to collect herbarium specimens on the Nyika Plateau. Banda accompanied many botanists to the Nyika Plateau during the 1950s, when he undertook soil, vegetation, and plant surveys in many parts of Malawi together with George Jackson. He worked with Philip Adlard, Jim Chapman, and Blodwen Binns from the 1960s through to the 1990s. In 1973, he moved with the University of Malawi from Blantyre to Zomba; this is where the Chitedze, Chongoni (Dedza), and University herbaria amalgamated in 1977 to form the National Herbarium of Malawi (MAL) under Jameson Seyani. Between 1970 and 1982, Dick Brummitt (K) accompanied Banda on many field excursions in Malawi. Banda made thousands of collections (some in collaboration with other collectors) during his illustrious career as a botanist in Malawi. His specimens are housed in MAL, with duplicates mainly at SRGH, K, MO, EA, and PRE. He co-authored the book Common weeds of Malawi with Brian Morris (Banda & Morris 1986) and is commemorated in Isoglossa eliasbandae (Acanthaceae).


1952–56, 1960, 1963–65 and 1982: **James (Jim) D. Chapman** (b.1918), forest officer in the Forestry Department, was a prolific collector of Malawi's indigenous flora, especially trees. He actively collected specimens over a period of more than three decades (1950s to the 1980s). Chapman was transferred to southern Malawi and continued to make extensive plant collections on Mount Mulanje, hence his professional concern with the Misuku Hills between 1952 and 1956. He also managed to collect to some extent on the Nyika Plateau at the time. The bulk of his collecting expeditions to the Nyika Plateau, however, were made in subsequent visits at different occasions in 1960, 1963, 1964, 1963 (around 126 numbers were collected on the Nyika Plateau from 1960 onwards), and finally after his return to Malawi in 1982. Chapman was in charge of the Zomba Herbarium (MAL) for two or three years in the early 1980s, while Jameson Seyani was studying for his D.Phil. in the U.K. (Seyani 1991). All Chapman's woody collections were sent to FHO; his herbaceous collections were sent by the then government ecologist, **George Jackson**, to BM, while some duplicates went to K, SRGH, and PRE. The strict endemic plant Oxalis chapmaniae (Oxalidaceae) is named after Chapman's wife, Elizabeth (“Betty”) Chapman (b.1928), who collected it on the Nyika Plateau in 1953. Chapman and **Frank White** jointly described the main forest types of the Nyika Plateau in The evergreen forests of Malawi (Chapman & White 1970). Jim Chapman, in collaboration with Frank White and **Françoise Dowsett-Lemaire**, co-authored the Evergreen forest flora of Malawi (White, Dowsett-Lemaire & Chapman 2001). Chapman had been working on the project with White since 1952. The floristic lists used in the publication were based, in part, on his sight records and collected specimens.

1955: **H.M.N. Lees** worked for Zambia's Forest Department and collected in Zambia's Eastern Province, including the Nyika Plateau. Specimens are housed in K.


1958, 1959: **Norman K.B. Robson** (b.1928) made a significant contribution to our knowledge of the Nyika Plateau flora through his collections made in 1958 and 1959 (see Robson 1960). He spent two short periods collecting on the Nyika Plateau in 1958. The first, from 20–29 October, was spent with Andrew Angus. It was with Angus that Robson collected his first 491 numbers. Travelling northward from Lundazi, they reached the Nyika Plateau by road from the Luangwa Valley and stayed at the Northern Rhodesia (now Zambian) Government Rest
House, the only accommodation on the Plateau at the time. In the course of their nine-day stay, they explored examples of most of the vegetation types by vehicle and on foot, but did not reach Nganda Hill, which is the highest point. After visiting Abercorn (now Mbala) and Kitwe, Robson undertook another collecting expedition to the Nyika Plateau from 13–23 November 1958, this time with Dennis Fanshawe, the Northern Rhodesian Forest Department botanist. Subsequent attempts to establish the exact position of the boundary between Northern Rhodesia (Zambia) and Nyasaland (Malawi) on the Plateau proved fruitless; hence the use of his provisional designation of the road to the west of the Rest House as the boundary on his specimen labels. Robson is still actively involved in botanical research; he is based at BM. His field notebooks are housed at K.

1959, 1960, 1961, 1964: Edward A. Robinson, a teacher in Southern Rhodesia (Zimbabwe), collected on the Nyika Plateau in 1959, 1961 and 1964. In January 1959, he joined Mary Richards and Desmond Vesey-Fitzgerald on a collecting expedition to the Nyika Plateau (Condry 1998). In her diary, Mary Richards described Robinson as “very good on sedges” (Condry 1998; see also Bing-ham 2002). Robinson moved back to England in September 1967; Mary Richards described his return as “a great loss to African botany” (Condry 1998). Robinson’s collecting notes are housed in K and his specimens in K, NDO, PRE, SRGH, and UZL.

1959–1960: Philip G. Adlard (b.1926) collected in the northern part of Malawi in 1959. His specimens are housed in FHO, K, and SRGH.

1959, 1961, and 1967: Mary A.E. Richards (1885–1977), based in northern Zambia and southern Tanzania, collected her first numbered specimen in February 1957. She collected on the Nyika Plateau for the first time in January 1959, in the company of Edward Robinson and Desmond Vesey-Fitzgerald (Condry 1998). She accompanied Vesey-Fitzgerald to the Nyika Plateau in February 1961 and visited the Nyika Plateau again in November 1967 (Condry 1998). At the age of 88 and losing her sight, Mary left Africa for the last time in April 1974, having collected 29,172 plant specimens. Her many field notebooks and some of her specimens are housed at K. Other specimens are housed in B, BM, BR, EA, LISC, LMJ, NDO, P, PRE, S, and SRGH. Oddly, all Mary Richards’s specimens were written in her husband’s name, and not her own—they are all intituled H.M. Richards, after her husband, Major Harry Richards. She is commemorated in 29 plants, including one genus and 28 species, amongst others, Richardsiella eruciformis (Poaceae), Aloe richardsiae (Asphodelaceae), Euphorbia richard-siae (Euphorbiaceae), Euophria richard-siae (Orchidaceae), and Habenaria richard-siae (Orchidaceae).

1960s: Dennys B. Fanshawe (1915–1993), Chief Forestry Officer with Zambia’s Forestry Department, collected mainly on the Zambian side of the Nyika National Park during the 1960s; this formed part of a vegetation survey that he conducted in Zambia. Herbarium specimens collected by Fanshawe do not provide precise locality information, stating only that the specimen was collected on the “Nyika”. Specimens are housed in K, NDO, and UZL. He is commemorated in Euphorbia fanshaweae (Euphorbiaceae) and Cissus fanshaweae (Vitaceae).

1960s: Leslie Desmond Edward Foster (“Vesey”) Vesey-Fitzgerald (1910–1974), an entomologist with the International Red Locust
1965–1972: Graham Williamson (b.1932), at the time a private dentist in Lusaka, made extensive collections of orchids on the Nyika Plateau and surrounding woodlands between 1965 and 1972. With the exception of June and July, Graham collected orchids on the Plateau and surrounding woodlands all year round. He later prepared a checklist of the Orchidaceae occurring on the Nyika Plateau (Williamson 1979). Specimens cited in the checklist are mainly from K and SRGH, with a few from MAL and a single orchid specimen from MO. Williamson also collected 60 grass specimens from the Nyika Plateau (Zambia and Malawi), all housed in SRGH. Williamson undertook collecting expeditions with other botanists on the Nyika Plateau, such as W. Kirby in October 1965, Adrian Odgers in March 1966 (specimens in K), and Bryan K. Simon (b.1943) and John S. Ball in February 1968. Collecting localities on the Nyika Plateau included Chowo Rocks, Lake Kaulime, Chelinda Bridge, Kasaramba, Nganda Drive, and Chisanga Falls. Specimens are housed in K, PRE, and SRGH. Williamson is commemorated in Cardiocibos williamsonii and Stolzia williamsonii, both orchid species he collected in 1968 in the Kasaramba Forest on the Nyika Plateau; Euphorbia williamsonii (Euphorbiaceae) is also named after him.

1966: Blodwen Binns, who was appointed professor at the University of Malawi in Limbe in 1966, founded the herbarium there. She collected only a small number of specimens, but was influential in encouraging many others, including Jean Pawek, to contribute specimens to the herbarium. She was instrumental in persuading Kew to send Dick Brummitt to Malawi in 1970, and compiled a checklist of the herbaceous flora of the country (Binns 1968, see also Binns 1972). She left Malawi in the early to mid-1970s for Edinburgh, U.K. (R.K. Brummitt, pers. comm.).

1966–1978: Jean L. Pawek (b.1927) was a teacher at Marymount Secondary School in Mzuzu, Malawi, from 1959 to 1978. She was probably the most prolific individual “plant hunter” on the Nyika Plateau. She collected 14,363 plant specimens in Malawi, many of them on the Nyika Plateau, between 1966 and 1978. Her specimens are housed in several herbaria in Africa, Europe, and the U.S.A., including K, MAL, MO, PRE, SRGH, and UC. Her field collecting books are housed in K. Jean Pawek is commemorated in Isoglossea pawekiae (Acanthaceae) and several other Malawian plant taxa. Dick Brummitt has aptly referred to the collections of Jean Pawek as constituting “one of the biggest personal contributions in the history of African botany” (R.K. Brummitt, pers. comm.)

1962–1972: Audrey W. Moriarty, a botanical artist, visited the Nyika Plateau on several occasions in the 1960s and early 1970s in preparation of her first book, Wild flowers of Malawi (Moriarty 1975). Dick Brummitt persuaded her to make voucher specimens of her illustrations, which he then identified; the voucher specimens are deposited in K. Specimens collected during her visits to the Nyika Plateau are housed mainly in MAL and SCHG, with a few in K.

1969–2003: I. Hassam Patel (b.1942), a parataxonomist attached to Malawi’s National Herbarium and Botanic Gardens, has collected over 2,000 specimens on the Nyika Plateau. He has accompanied many collecting expeditions and visits to the Nyika Plateau, including the Wye College Expedition (1972), several Biosearch Nyika expeditions (1990s–2003), and the SABONET Expedition. Collected specimens are housed mainly in K and MAL.

1970: Anthony J. Hall-Martin collected briefly on the Nyika Plateau in August 1970. His specimens are housed in PRE.

1970, 1972, 1982, 1989, 1990, and 1991: Richard (Dick) K. Brummitt (b.1937) joined the Kew staff in 1963 and worked solely on Flora zambesiaca until 1970. He visited the Nyika Plateau twice in 1970 (May and July), accompanied by his wife, Hilary. He returned to the Nyika Plateau with the Wye College Expedition in 1972 and made subsequent visits in 1982 (with Roger Polhill and Elias Banda), 1989 (spending two weeks at Kayelekera, north of Mpenda Peak), with Jameson Seyani and with the XIIIth AETFAT Congress field excursion to the Nyika Plateau in 1991. Elias Banda and Hassam Patel often accompanied Brummitt during his field excursions. Collected specimens have been deposited in K and MAL, with duplicates housed in SRGH, LISC, PRE, UPS, BR. Brummitt has so far visited Malawi 22 times over a span of more than 30 years. He has also climbed Kayuni Hill, probably the only botanist ever to do so; Kayuni Hill has at least one endemic species related to some of the Nyika Plateau endemics.
1972: Delbert Wiens (b.1932), Professor of Botany at the University of Utah in the U.S.A., collected mistletoes on the Nyika Plateau in March 1972 and visited northern Malawi again in February 1986. His collections are housed in K, MAL, and UT.

1972: The Wye College, University of London Expedition to the Nyika Plateau (16 July–17 September 1972) was led by Sam Kent. The Expedition included experts such as Hugh Synge, Hassam Patel, and Dick Brummitt (plants), and Peter Overton (birds and mammals). Peter Overton subsequently organised the series of Biosearch Nyika Expeditions, which started in March 1997. The aim of the Wye College Expedition was to conduct an ecological survey (fauna, flora, geology, social and economic matters) (Gordon 1993) of the area to the north and east of Nganda Peak, which was considered by the Malawi Government as a possible extension to the Nyika National Park. The report was published in June 1973 and most specimens were deposited in K and MAL. The report was valuable, as the area concerned was hardly known; it was used later for work done on boundary extensions (Gordon 1993). Specimens from the Expedition were labelled either (a) Synge, (b) Brummitt & Synge, or (c) Brummitt, Muthuli & Synge. All the collecting numbers have the prefix WC.

1973–76: Tom A. Mill's Masters thesis, Resource inventory and management plan for the Nyika National Park, Malawi (1979), presents extensive lists of botanical names without any indication of locality or habitat. These lists seem to be based on the large collections of Jean Pawek, who concentrated on the herbaceous vegetation of the Nyika Plateau. Mill was supported by the Canadian University Service Overseas organisation to conduct research in the Nyika National Park from 1973 to 1976; Moses Kumpumula worked with Mill during this period (Gordon 1993). Mill started a systematic programme to monitor vegetation, game, and weather and also worked with satellite imagery (Gordon 1993).

1977: Rosemary Grosvenor and Jany Renz collected 124 specimens during a six-day excursion to the Nyika Plateau in March 1977. Grosvenor (then based at SRGH) and Renz collected in the Chosi Hill area between Thazima Gate and Chelinda Camp, between Chelinda Camp and Nganda Peak, around Chelinda Camp, at Dembo Bridge, approximately 3 km northeast of Chelinda Camp on the road to Dembo Bridge, between Chelinda Camp and Kasaramba in the Juniper Forest, at Chelinda Bridge, and west of the Zambian Rest House. Their specimens are housed in K, PRE, and SRGH.

1977–78: Mike E. Meadows (b.1955) studied past and present environments of the Nyika Plateau as part of a Ph.D. thesis through the University of Cambridge, U.K. (Meadows 1982), incorporating pollen spectra and the analysis of contemporary soil patterns. He collected only a few herbarium specimens when he conducted field research on the Nyika Plateau from July–September 1977 and again from June–November 1978.

1979–83: Françoise Dowsett-Lemaire (b.1952) studied the forest vegetation on both the Malawian and Zambian sides of the Nyika Plateau (Dowsett-Lemaire 1985, 1989a). She spent 90% of her time in the forests on the southwestern slopes, and in particular Zovo-chipolo. Her publications include an extensive list of pteridophyte and spermatophyte taxa, recorded in the forests and secondary growth of the Nyika Plateau. Most specimens were deposited at BR, some at K, and a few duplicates at MAL. Research on these specimens was conducted between 1979 and 1983. Françoise met Frank White for the first time on the Nyika Plateau in 1981, and subsequently worked with him during many visits to Oxford. Françoise was largely responsible for getting the Evergreen forest flora of Malawi (White, Dowsett-Lemaire & Chapman 2001) to press after the death of Frank White in 1994.

1981: Lutgardis van der Linden (b.1949) collected over 200 specimens of vascular plants from various parts of the Nyika National Park during December 1981. During the same period, her husband, Jan Rammeloos (National Botanic Garden, Belgium), made extensive collections of mushrooms in the Nyika National Park. Based on these mushroom collections, three new species of Marasmius (Basidiomycetes, Tricholomataceae) were described: Marasmius lacteoides, Marasmius longistadiatus, and Marasmius nyikae (Antonin 2001). Van der Linden's specimens are held in MAL and BR; a species list is housed in BR.

focussed mainly on orchids (la Croix, la Croix & la Croix 1991). Collected specimens were deposited in K, MAL and MO. Isobyl joined Serena Marner (b.1955) on the Nyika Plateau in 1986 when the latter was researching the genus Faurea (Proteaceae). Serena’s specimens are housed in FHO.

1982, 1986: Roger M. Polhill (b.1937) collected on the Nyika Plateau in February and March 1982 with Dick Brummitt and Elias Banda. He visited the Nyika Plateau again for one day in April 1986 to recollect Englerina cordata (Loranthaceae) at Chisanga Falls; his wife, Diana Polhill, accompanied him. Collections are housed in K, MAL, and SRGH.

1984: John Fehan, geologist and teacher at Kamuzu Academy, collected mistletoes on the Nyika Plateau in July 1984. His collections are widely distributed, including K, MAL, and SRGH.

1985: Ivan Bampton, an entomologist, collected mistletoes on both the Malawian and Zambian sides of the Nyika Plateau in March and November–December 1985. His collections are held at K.

1986: David Philcox (1926–2003), Gerald Pope (b.1941), and Sylvester Chisumpa (1947–1993) collected 97 specimens on the Nyika Plateau from 16–20 April 1986. Most of the specimens were collected on the Zambian side of the Nyika Plateau (in the vicinity of the Zambian Rest House, Chowo Forest, and Chisanga Falls) with some on the main plateau area in Malawi (Chosi Hill, Chelinda River, Chelinda Bridge, and Dam #3).

1987: Mithen collected in the Chisanga Falls area in 1987. Collected specimens are housed in K, MAL, and SRGH.

1989: David J. Goyder (b.1959), Gerald Pope (b.1941), and Alan Radcliffe-Smith (b.1938) spent 20–21 May 1989 on the Nyika Plateau, based at the Zambian Rest House. Their collections are housed in K, MAL, NDO, and PRE.

1991: Paul Joseph Bamps (b.1932) collected 27 plant specimens on the Nyika Plateau from 28–30 March 1991 during a field excursion, before the XIIIth AETFAT Congress held in Zomba, Malawi. He visited the Juniper Forest, Kasaramba, Chelinda Hill, Chelinda River, and the Chowo Forest. The species list and the specimens are housed in BR.

1991: Pauline L. Perry (b.1927) collected Eriospermum kiboense (Eriospermaceae) on the Nyika Plateau on 29 March 1991 during the field excursion before the XIIIth AETFAT Congress. Collected specimens are housed in MAL and NBG.

1991: Sarie M. Perold (b.1928) collected several liverwort species on the Nyika Plateau during a field excursion after the XIIIth AETFAT Congress. Her specimens are housed in PRE.

1991: Ib Friis collected specimens of Urticaceae in the Chowo Forest on the Zambian side of the Nyika Plateau during the field excursion after the XIIIth AETFAT Congress. Friis compiled the Urticaceae treatment for Flora zambesiaca, published in 1991. Specimens are held in C, K, and MAL.

1992: David J. Goyder (b.1959), Alan J. Paton (b.1963), and Ernest John Tawakali (1953–1996), collected on both the Zambian and Malawian sides of the Nyika Plateau from 20–27 January 1992. Over 50 collections were made across the Plateau area, including Nganda Peak and routes to Kasaramba and the Juniper Forest. The group also explored the northern escarpment below
1997–9, 2001, 2003: Peter and Marianne Overton organised and led the Biosearch Nyika Expeditions, which concentrated on the northern Nyika area, north of Nganda Hill (the area also concentrated on by the Wye College Expedition of 1972). Hassam Patel led the plant studies and monitoring. Dick Brummitt vetted the botanical findings. The first Biosearch Nyika Expedition was in March–April 1997. The second Biosearch Nyika expedition was conducted in collaboration with students and staff of the Southampton University Officer Training Corps (SUOTC), U.K., in July–August 1998. Another expedition was undertaken by Biosearch Nyika from 19 July–11 August 1999 and involved staff of the Leeds University Officer Training Corps (LUOTC), U.K. (Overton 2000). In September–October 1999, Biosearch Nyika led an expedition to the southern parts of the Nyika National Park, in partnership with the Scientific Exploration Society. Further Biosearch Nyika expeditions were held in July–August 2001, April 2003 and July–August 2003. All reports emanating from these expeditions are available from the Biosearch Nyika offices at Wayfarer Lodge, Welbourn, Lincolnshire LN5 0QH, England, U.K. Further information on the Biosearch Nyika expeditions can be accessed on their web site www.biosearch.org.uk. Most plant specimens collected during the Biosearch Nyika expeditions were deposited in MAL, with some in K.

2000: The SABONET Nyika Regional Plant Collecting Expedition involved botanists from many southern African botanical institutions—it was the first truly southern African-led botanical expedition to the Nyika Plateau, involving 24 botanists from the southern and eastern African countries of Malawi, Mozambique, South Africa, Tanzania, Zambia, and Zimbabwe. From 22 March–10 April 2000, expedition members collected 3,343 specimens from a large number of localities on the Nyika Plateau, both in Zambia and Malawi (Willis, Phiri, Kamundi & Burrows 1999, Willis, Burrows & Winter 2000, Kurzweil & Willis 2001, Willis et al. 2001). Specimens were deposited in SRGH, PRE, MAL, UZL, and LMA. Emphasis was placed on previously under-collected areas of the Nyika Plateau. Sites where specimens were collected included the Zambian Nyika National Park, Choshi, Mwanda and Nganda Mountains, Chisanga Falls, Fingira Rock, Zovochipolo, Dembo, Kaulime and Wowwe Rivers, Nhakati Peak, Chelinda Bridge area, Mpopoti, Sangule Kopje, Mbuizinandi, Vitinthiza Hill, Jalawe/Domwe area, miombo woodlands in the southwestern part of the Nyika Plateau, as well as the Juniper Forest area. A new bryophyte species, Fossombronia nyikaensis, was collected during the Expedition (Perold 2001). Despite these intensive botanical collecting efforts, vast areas of the Nyika Plateau remain undercollected, especially in the more inaccessible northeastern and eastern areas of the Nyika National Park.

Wall of plant presses showing the results of the two-week SABONET Nyika Expedition on the Nyika Plateau during March/April 2000. A total of 3,343 plant specimens were collected on this expedition, adding new species and many new distribution records for the Nyika Plateau.

Hassam Patel (Malawi) recording plant specimen information on Mwanda Mountain during the SABONET Nyika collecting expedition in March/April 2000.