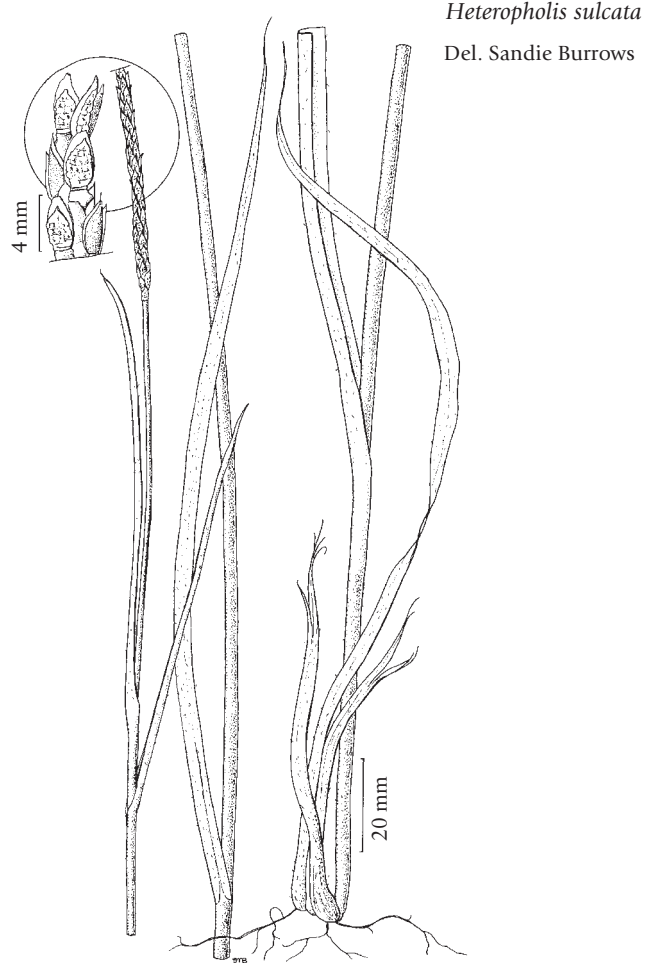


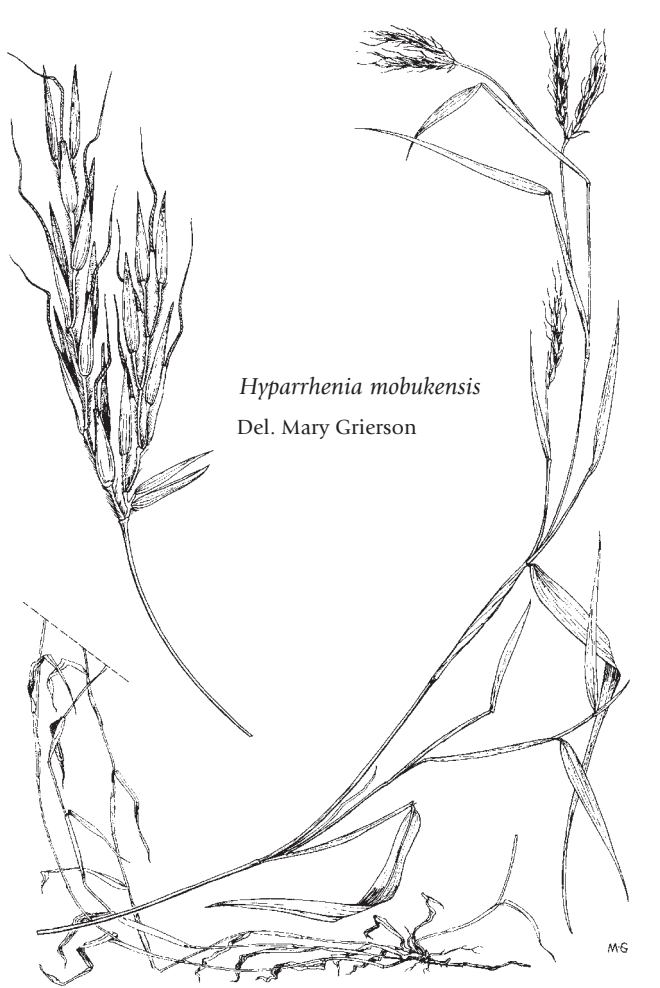
Homozeugos eylesii
Del. Sandie Burrows



Heteropholis sulcata
Del. Sandie Burrows



Heteropogon contortus
Del. Derek Erasmus



Hyparrhenia mobukensis
Del. Mary Grierson

Hyparrhenia dregeana (Nees) Stent ❖

Perennial, robust, up to 2 m high; basal leaf sheaths silky pubescent below; inflorescence of paired, short racemes subtended by narrowly lanceolate spatheole, crowded together in leafy false panicle; raceme-bases subequal; 10–20 awns per raceme pair; awns short; in upland grassland. Southern Africa to E. Africa, Ethiopia, and Sudan.

Malawi. Nyika National Park, without locality or collecting (Mill 1979); Nganda Base Camp, 1997, *Patel & Ludlow 5003* (K); near Domwe, 2000, *Kasakula 250* (MAL); Dembo River bridge, 2000, *Smook 10789* (PRE); Chelinda River bridge, 2000, *Smook 10808* (PRE).

Hyparrhenia filipendula (Hochst.) Stapf var. **filipendula**

fine thatching grass

Perennial, up to 2 m high; inflorescence of paired, short racemes subtended by linear spatheoles; racemes not deflexed, bases unequal; 2–4 awns per racemes pair; sessile spikelet glabrous. Tropical and South Africa, but mainly on the eastern side, Madagascar, eastwards through Sri Lanka to Australia.

Malawi. Nyika National Park, Juniper Forest, 2000, *Smook 10908* (PRE, MAL, UZL, SRGH, LMA).

Hyparrhenia formosa Stapf

Perennial, robust, up to 2 m high, sometimes stilt roots present; inflorescence of paired, short racemes subtended by spatheole crowded together in leafy false panicle; russet or tinged with purple and red lanceolate spatheoles; racemes deflexed, bases subequal; 6–8 awns per raceme pair; similar to *H. cymbaria* and *H. pilgeriana*; in upland grassland and deciduous bush land, on streamsides. Malawi to Ethiopia and D.R.C.; also in Yemen.

Malawi. Nyika National Park, without locality or collecting details (Mill 1979).

Hyparrhenia mobukensis (Chiov.) Chiov. ❖

Perennial, slender, wiry, trailing; inflorescence of paired, short racemes subtended by linear spatheoles in a leafy scanty false panicle; rarely racemes single; racemes not deflexed, bases unequal; 7–15 awns per raceme pair, only species in the genus with glabrous awns; in short grassland. The mountains and highland plateaux of tropical Africa, including Nyika, Ruwenzori, Mt. Elgon, Aberdares, and Mt. Kilimanjaro.

Source. Clayton (1969).

Malawi. Nyika Plateau, eastern side, 1959, *Robinson 3080* (K); Dembo River bridge, 2000, *Smook 10793* (PRE); Chelinda River bridge, 2000, *Smook 10817* (PRE, MAL, UZL, SRGH, LMA).

Zambia. Nyika Plateau, Chire River, 1968, *Williamson 1028* (K).

Hyparrhenia newtonii (Hack.) Stapf var. **macra** Stapf

Perennial, densely tufted, up to 2.1 m high, erect; inflorescence of paired, short racemes subtended by narrowly lanceolate spatheoles crowded together in leafy false panicle; racemes deflexed, bases unequal; 2–4 awns per raceme pair; sessile spikelet pubescent to villous, pedicelled spikelet sometimes villous; in northern part of its range it occurs mainly on lithosols and stony hillsides; to the S. it is found mainly in dappled shade beneath *Brachystegia* woodland. South Africa, Zimbabwe, Malawi, Mozambique, Zambia, Angola, D.R.C., Rwanda, Uganda, and Tanzania.

Source. Clayton (1969).

Malawi. Nyika Plateau, *Jackson 531* (K); Chosi Viewpoint, 2000, *Smook 10730* (PRE, MAL); forest near Sangula Kopje, 2000, *Smook 10860* (PRE, MAL, UZL, SRGH, LMA).

Hyparrhenia newtonii (Hack.) Stapf var. **newtonii**

Perennial, densely tufted, up to 2.1 m high, erect; inflorescence of paired, short racemes subtended by narrowly lanceolate spatheoles crowded together in leafy false panicle; racemes deflexed, bases unequal; 2–4 awns per raceme pair; sessile spikelet glabrous sometimes thinly pilose near apex, pedicelled spikelet glabrous; in northern part of its range it occurs mainly on lithosols and stony hillsides; to the S. it is found mainly in dappled shade beneath *Brachystegia* woodland. Widespread in tropical Africa; also in Madagascar, Thailand, and Indonesia.

Source. Clayton (1969).

Malawi. Nyika National Park, footpath to Chisanga Falls, 2000, *Smook 10764* (PRE, MAL, UZL, SRGH, LMA).

Zambia. Western part of Nyika National Park, 2000, *Phiri 3942* (UZL); Rest House area, 2000, *Phiri 3769* (UZL).

Hyparrhenia nyassae (Rendle) Stapf

Nyassa hood grass

Perennial, up to 2 m high; basal leaf sheaths usually woolly tomentose with white hairs; inflorescence of paired, short racemes subtended by linear, russet spatheoles crowded together in leafy false panicle; tardily and imperfectly deflexed, bases unequal; 8–13 awns per raceme pair; sessile spikelet densely yellow hairy; savanna woodland, particularly moist places and swamp edges; resembles *H. rufa*; may accompany *Loudetia simplex* in swamps. Southern Africa, tropical Africa from Cameroon to Sudan; also in Thailand and Vietnam

Malawi. Nyika National Park, Rumphu Bridge, 1975, *Pawek 9257* (K); Runyina River, 2000, *Phiri 3806* (UZL); Dembo River bridge, 2000, *Smook 10784* (PRE, MAL, UZL, SRGH, LMA).

Hyparrhenia pilgeriana C.E.Hubb

Perennial, laxly tufted, slender and rambling, inflorescence of paired, short racemes subtended by lanceolate spatheoles crowded together in leafy false panicle, panicle usually scanty; not or tardily deflexed, bases subequal to unequal; (4)6–7 awns per raceme pair; a species of seasonal swamps and forest margins; also of grassy hillsides and cultivated land, these perhaps being secondary habitats to which it extends when opportunity offers. South Africa to Ethiopia and Sudan.

Source. Clayton (1969).

Malawi. Nyika Plateau, *Jackson 529* (K); near Chosi Viewpoint, 2000, *Smook 10717* (PRE, MAL, UZL, SRGH); 2000, *Smook 10718* (PRE, MAL, UZL, SRGH, LMA).

Hyparrhenia rufa (Nees) Stapf

nyumbi, cipepati

Perennial, sometimes annual; up to 2.5 m high; inflorescence of paired, short racemes subtended by linear-lanceolate spatheoles crowded together in leafy false panicle; not or rarely deflexed, bases unequal, sometimes more or less connate; (7)9–14 awns per raceme pair; sessile spikelet glabrous to pubescent, but usually scantily covered with rufous hairs; in deciduous bush land and wooded grassland, often preferring moist sites. Tropical and southern Africa and Madagascar; introduced into tropical America and Australia. A variable species with specimens verging towards *H. poecilotricha* and *H. dichroa*.

Malawi. Nyika National Park, without locality or collecting details (Patel 1999).

Hyparrhenia schimperii (A.Rich.) Stapf

Perennial, robust, up to 4 m high; inflorescence of paired short racemes subtended by lanceolate, russet-brown spatheoles crowded together in leafy false panicle; at length deflexed, bases subequal; 6–8 awns per raceme pair; in open, often moist places in savanna grasslands. Southern Africa to Ethiopia; also in Madagascar.

Malawi. Nyika National Park, without locality or collecting details (Mill 1979); Dembo Bridge, 1975, *Pawek 9302* (K).

Hyparrhenia variabilis Stapf

Perennial, with hard cataphylls, up to 3 m high, inflorescence of paired short racemes, subtended by boat-shaped, russet red tinged yellow and green spatheole crowded together in leafy false panicle; racemes deflexed, bases subequal; 5 awns per raceme pair; deciduous bush land and wooded grassland, margins of upland evergreen forests. Southern Africa to E. Africa; also in Madagascar, Comoros, and Java.

Malawi. Nyika National Park, without locality or collecting details (Patel 1999).

Hyparrhenia welwitschii (Rendle) Stapf

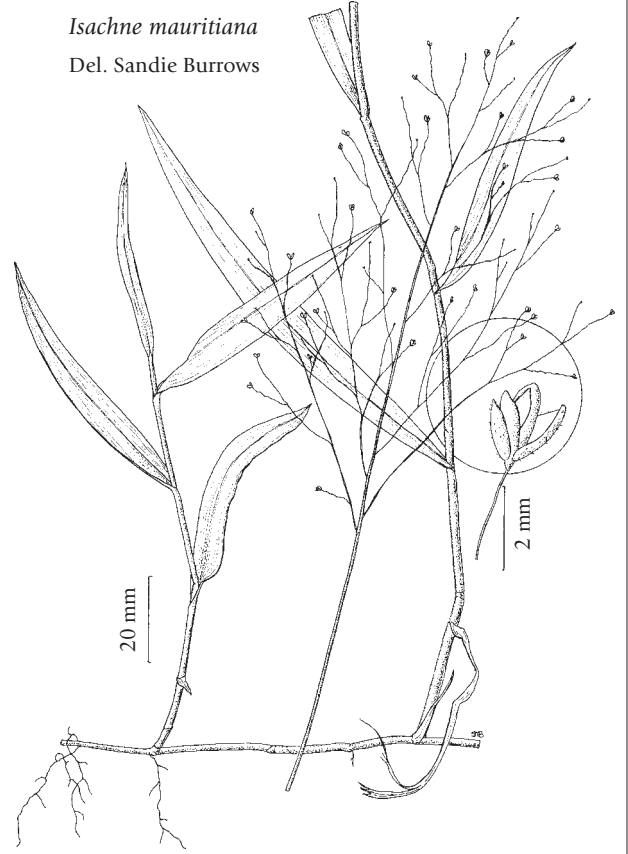
Annual, up to 3 m high, often stilt roots present; inflorescence of paired, short racemes subtended by narrowly lanceolate spatheole crowded together in leafy false panicle; racemes deflexed, bases subequal; sessile spikelet with white hairs; 3 awns per raceme pair; light to deep shade in wooded grassland such as *Brachystegia* wooded grassland in soils with adequate mois-



Hyparrhenia dregeana
Del. Eleanore Catherine



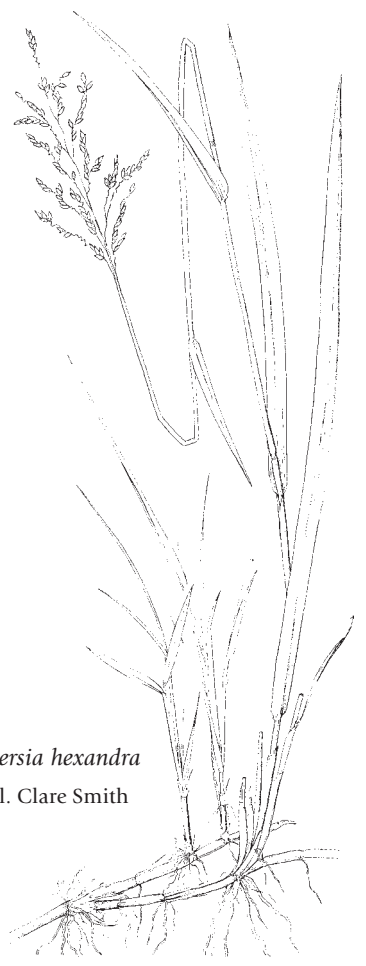
Imperata cylindrica
Del. Clare Smith



Isachne mauritiana
Del. Sandie Burrows



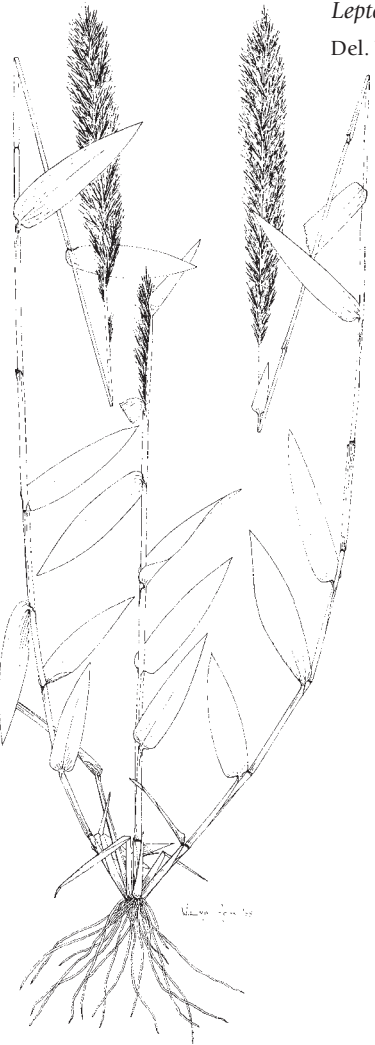
Koeleria capensis
Del. Derek Erasmus



Leersia hexandra
Del. Clare Smith

Leptocarydion vulpiastrum

Del. Wilma Roux



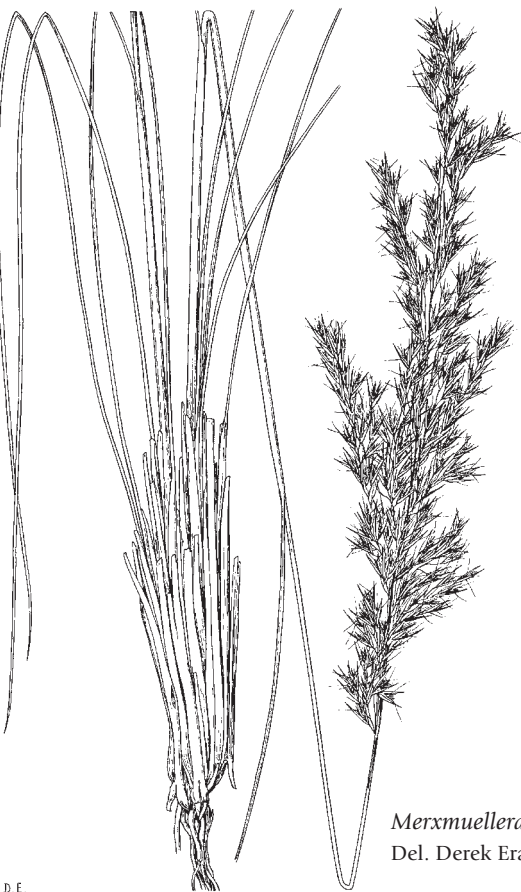
Loudetia simplex

Del. Wilma Roux



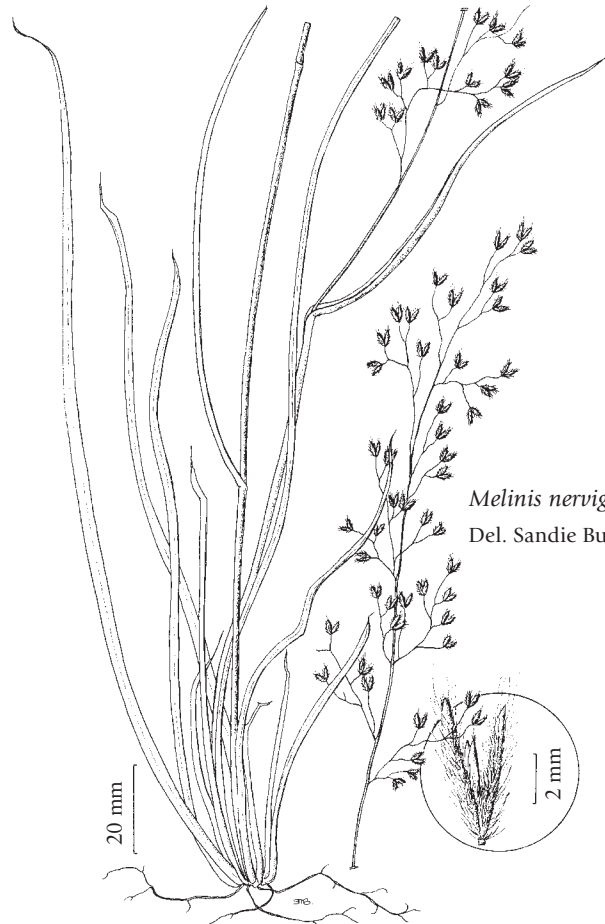
Melinis ambigua
subsp. *ambigua*

Del. Margaret Tebbs



Merxmuellera davyi

Del. Derek Erasmus



Melinis nerviglumis

Del. Sandie Burrows

ture, occasionally in light sandy soils. Malawi, Mozambique, Zambia, and Zimbabwe; W. tropical Africa from Guinea to Angola and northwards to Sudan; also on the Comores.

Malawi. Nyika National Park, without locality or collecting details (Patel 1997).

***Imperata cylindrica* (L.) Raeusch. ❖**

cotton grass, cottonwool grass, silver spike; namsongole
Perennial, rhizomatous, erect, up to 1.2 m high; stiff leaf blades, erect with purple margins and sharp points; inflorescence a silky, white spiciform panicle; spikelet alike, paired; an aggressive weed of disturbed and cultivated places, flowering soon after burning, common at various altitudes. Throughout the Old World tropics, extending to the Mediterranean and Middle East; also in Chile.

Malawi. Nyika Plateau, 6 miles S.W. of Rest House, 1958, *Robson 364* (PRE).

***Isachne angolensis* Rendle**

Chirinda grass

Perennial, rambling, base prostrate; inflorescence a panicle; spikelet 1.5–2 mm long, elliptic, usually 2-flowered, florets bisexual; marshy places in forests; 600–2,300 m. Malawi and Zambia; also western Africa from Angola to Nigeria.

Source. Brummitt (1973).

Malawi. Nyika National Park, Sawi Valley, 1972, *Synge 461* (K, MAL).

***Isachne mauritiana* Kunth ❖**

Isachne aethiopica Stapf & C.E.Hubb.

Perennial, rambling, base prostrate; inflorescence a panicle; spikelet 1.2–1.8 mm long, obovoid; usually 2-flowered, florets bisexual; forest shade; 1,000–2,000 m. Malawi, Mozambique, Zambia, and Zimbabwe, northwards to Kenya and Ghana; also in Mauritius and Madagascar.

Source. *Flora zambesiaca* 10(3): 193 (1989).

Malawi. Nyika Plateau, submontane forest, without locality or collecting details (Dowsett-Lemaire 1985).

Zambia. Nyika Plateau, 1962, *Verboom 713* (K); Manyenjere Forest, 2000, *Phiri 3905* (UZL); Chowo Forest, 2000, *Phiri 4003* (UZL).

***Koeleria capensis* (Steud.) Nees ❖**

Koeleria cristata sensu A.Rich.

June grass

Perennial, very variable, up to 0.9 m high; panicle more or less condensed, spike-like; spikelets 4–7 mm long, 2- to 5-flowered; in open high-altitude grassland, on acid humic soil, often on rocks and steep slopes, or depressions of moist ground, often dominant. Southern Africa to E. Africa, Ethiopia, and Cameroon.

Source. *Flora zambesiaca* 10(1): 71 (1971).

Malawi. Nyika Plateau, 1949, *Hawksworth in GHS 22685* (K, SRGH).

Zambia. Nyika Plateau, 1968, *Williamson 1015* (BM, K).

***Leersia hexandra* Sw. ❖**

rice grass; likakadzi, nakache

Perennial, rhizomatous, erect, but often decumbent; up to 1 m high; panicle open; spikelet 3.2–5.2 mm long; strongly laterally compressed; falling entire from pedicel, 1-flowered, conspicuous cilia, 0.2–0.8 mm on keels; grows in a large variety of moist habitats, in shallow water, often forming extensive mats on floodplains and in swamps. A pantropical grass.

Malawi. Nyika National Park, without locality or collecting details (Patel 1999).

***Leptocarydion vulpiastrum* (De Not) Stapf ❖**

spade grass; kalingamunyu

Annual, up to 1.2 m tall; panicle feathery, pallid or tinged with red or purple; spikelet 5–9 mm long, 5–14-flowered; usually a weed of disturbed and cultivated ground; also in open and wooded grassland, on lake shores, in dambos, and riverine vegetation, growing in sandy soils and red dolerite loams; 45–1,280 m. South Africa, Namibia, Botswana, Zimbabwe, and Mozambique. Known from Malawi, but may be first record for Nyika.

Malawi. Nyika National Park, Chisanga Falls, 2000, *Mwanyambo 486* (MAL).

***Loudetia arundinaceae* (A.Rich.) Steud.**

Perennial, tufted, up to 3 m high; basal leaf sheaths more or less silky pubescent; panicle branches spreading and whorled; spikelet 6–13 mm long, glabrous or tuberculate setose, awned, callus truncate; *Brachystegia* woodland, sometimes on the margins of drainage tracts. Mozambique, Zambia, Angola, northwards to Senegal and Ethiopia. Not recorded for Malawi in *Flora zambesiaca* (1989).

Malawi. Nyika National Park, without locality or collecting details (Patel 1999).

***Loudetia simplex* (Nees) C.E.Hubb. ❖**

common russet grass

Perennial, tufted, up to 1.5 m; basal leaf-sheaths usually becoming fibrous, typically woolly-tomentose sometimes silky pubescent to glabrescent; panicle branches seldom whorled; spikelet 8–14 mm long, glabrous or tuberculate setose; callus 2-toothed; in wooded grassland, on both stony and seasonally waterlogged soils; dominant of montane grasslands; 1,000–2,500 m; grazed by hartebeest, reedbuck, eland, roan antelope, and zebra (Lemon 1964). Southern Africa, Malawi, Mozambique, Zambia, and Zimbabwe; also Madagascar.

Source. *Flora zambesiaca* 10(3): 220 (1989).

Malawi. Nyika National Park, Chisanga Falls, 2000, *Chapama 163* (FRIM); Thazima, 2000, *Izidine 33* (LMA); Thazima Gate towards Chelinda, 2000, *Mwanyambo 515* (MAL); Chosi Viewpoint, 2000, *Smook 10725* (PRE, MAL, UZL, SRGH, LMA); Dembo Bridge, 2000, *Thera 3020* (MAL); near Domwe, 2000, *Kasakula 249* (MAL).

Zambia. Nyika National Park, Chowo Forest, 2000, *Phiri 3516* (UZL).

***Melinis ambigua* Hack. subsp. *ambigua* ❖**

Perennial, up to 1.5 m high; panicle narrowly ovate; spikelet 2–3.4 mm long, laterally compressed, 2-flowered, lower floret male or barren, upper glume awn (0.1)0.8–4.5 mm long; in open *Brachystegia* woodland or grassland at higher elevations; often at anthropogenic sites and streamsides; sandy or stony soils; 1,000–2,500 m. Zimbabwe, Malawi, Mozambique, Zambia, Namibia, Angola, Ethiopia, Tanzania, Burundi, and D.R.C.

Source. *Flora zambesiaca* 10(3): 121 (1989).

Malawi. Nyika National Park, Chosi Viewpoint, 2000, *Smook 10727a* (PRE, MAL, UZL, SRGH); N. Rukuru River Bridge near turnoff to Domwe River, 2000, *Smook 10884* (PRE, MAL, UZL, SRGH, LMA).

***Melinis ambigua* Hack. subsp. *longicauda* (Mez) Zizka**

Rhychelytrum longicaudum (Mez) Chiov.; *Melinis longicauda* (Mez) Stapf & C.E.Hubb

Perennial, up to 1.5 m high; panicle narrowly ovate; spikelet (2.7)3.3–4.4(5.2) mm long; laterally compressed, 2-flowered, lower floret male or barren, upper glume awn (1.8)3.5–8.3 mm long; secondary grassland at higher elevations, rarely *Brachystegia* woodland or anthropogenic sites; 1,000–2,500 m. Zimbabwe, Malawi, Mozambique, Zambia, Angola, D.R.C., Rwanda, and Tanzania.

Malawi. Nyika Plateau, 1969, *Pawek 2098* (K); Chosi Viewpoint, 2000, *Smook 10727b* (PRE, MAL, UZL); path to Chisanga Falls, 2000, *Smook 10769* (PRE, MAL, UZL).

Zambia. Nyika National Park, western part of Park, 2000, *Phiri 3948* (UZL).

***Melinis macrochaeta* Stapf & C.E.Hubb**

Annual or short-lived perennial, tufted, often rooting at nodes, up to 1.5 m; panicle narrowly ovate, pedicels glabrous; spikelet 1.5–2 mm long, 2-flowered, lower floret barren; lower lemma awn 8 mm long; in grassland or *Brachystegia* woodland, often in disturbed places or near streams; 800–1,800 m. South Africa, Zimbabwe, Malawi, Mozambique, Zambia, and throughout tropical Africa.

Source. *Flora zambesiaca* 10(3): 124 (1989).

Malawi. Nyika National Park, without locality or collecting details (Mill 1979).

***Melinis minutiflora* P.Beauv.**

Melinis tenuinervis Stapf

Perennial, tufted, up to 1.5 m high; hairy, strong smell of linseed oil; inflorescence a panicle; pedicels scarious; spikelet (1.5)1.7–2.2(2.4) mm long;

upper glume deeply grooved between prominent nerves; lower lemma awnless or awn up to 14 mm long; grassland or *Brachystegia* woodland at higher elevations, and in montane forest, often at anthropogenic sites; (300) 1,000–2,300 m. Malawi, Mozambique, Zambia, Zimbabwe, and South Africa.

Source. *Flora zambesiaca* 10(3): 123 (1989).

Malawi. Nyika National Park, Chisanga Falls, 2000, *Kasakula 206* (MAL).

Zambia. Nyika Plateau, 1968, *Williamson 930* (SRGH).

Melinis nerviglumis (Franch.) Zizka ❖

Rhynchelytrum nerviglume (Franch.) Chiov.; *Rhynchelytrum setifolium* (Stapf) Hack.

bristle-leaved red top

Perennial, up to 1.5 m high; leaves usually setaceous; panicle narrowly ovate; spikelet 3.2–5(5.7) mm long; usually hairy; in grassland and *Brachystegia* woodland; 1,000–3,000 m. South Africa, Zimbabwe, Malawi, Mozambique, Zambia, northwards to Kenya and Gabon; also in Madagascar, Thailand, and Vietnam.

Source. *Flora zambesiaca* 10(3): 126 (1989).

Malawi. Nyika National Park, path to Chisanga Falls, 2000, *Smook 10758b* (PRE, MAL, UZL, SRGH, LMA).

Melinis repens (Willd.) Zizka var. **nigricans** (Mez) Zizka

Annual, tufted, up to 1.6 m high; spikelet 3–4.5(5) mm long, dark olive-green, rarely green to straw-coloured, hairy to rarely glabrous; lower glumes separated from upper by internode, upper glume and lower lemma not beaked; on anthropogenic sites and embankments. Malawi, Mozambique, Zambia, Zimbabwe; Angola, D.R.C., and Tanzania. Very variable, with four weakly separated subspecies. Typical specimens can easily be identified, but frequent intergradation occurs between the intraspecific groups.

Source. *Flora zambesiaca* 10(3): 126 (1989).

Malawi. Nyika National Park, Juniper Forest, 2000, *Smook 10919* (PRE, MAL, UZL, SRGH, LMA).

Merxmuellera davyi (C.E.Hubb) Conert ❖

Danthonia davyi C.E.Hubb as *Rytidosperma davyi* (C.E.Hubb) Cope in *Flora zambesiaca* 10(2): 7 (1999).

Davy oargrass

Perennial, up to 1.2 m high; panicle loose to somewhat contracted; spikelet 12–16 mm long, 3- to 10-flowered, lemma with 2–3 tufts of hairs near margins and middle of back, central awn geniculate, up to 12.5 mm long; in xeric, rocky, montane grassland. South Africa through Malawi northwards to central Africa.

Source. *Flora zambesiaca* 10(2): 7 (1999).

Malawi. Nyika National Park, without locality or collecting details (Mill 1979).

Microchloa altera (Rendle) Stapf

Rendlia altera (Rendle) Chiov.

Mahem's crest, streamside timothy

Perennial, up to 700 mm; forms compact mats; basal leaf sheaths splitting into fibres; inflorescence single secund raceme, spikelet 4.4–5 mm long, 2(3)-flowered; in montane grassland and seasonally wet dambos, sometimes on termitaria in floodplain grassland; 980–2,260 m. South Africa, Zimbabwe, Malawi, Zambia, Tanzania, and D.R.C.

Source. *Flora zambesiaca* 10(2): 231 (1999).

Malawi. Nyika Plateau, 1949, *Hawksworth in GHS 22678* (K).

Microchloa caffra Nees ❖

pincushion grass

Perennial, dense tufts, up to 700 mm high; inflorescence a single secund raceme, spikelet 3.4–4.1 mm long; 1-flowered; in montane grassland, often in bare areas, in shallow soils over rock or laterite pans, in bare or sparsely covered areas in miombo or mixed deciduous woodlands, and on dambo and pan margins; 580–1,950 m. Southern Africa to Ethiopia and D.R.C.

Source. *Flora zambesiaca* 10(2): 230–231 (1999).

Malawi. Nyika Plateau, 1,690 m, 1977, *Pawek 13303* (K, SRGH); grassland opposite Juniper Forest, 2000, *Smook 10921* (PRE, MAL, UZL, SRGH); without locality, 7,000', 1959, *Robinson 2997* (UZL).

Microchloa indica (L.f.) P.Beauv.

Annual, grows in isolated tufts, rarely forming mats, up to 500 mm high; inflorescence a single secund raceme, spikelet 1.6–2.1(3) mm long; 1-flowered; often in bare or sparsely covered ground in montane grassland and miombo woodlands, on pan edges in mopane woodland, sometimes on termitaria; also roadsides and paths; 610–2,350 m. Throughout the tropics and subtropics.

Source. *Flora zambesiaca* 10(2): 229–230 (1999).

Malawi. Nyika Plateau: 2,300 m, 1975, *Pawek 9267*; Chosi Viewpoint, 2000, *Phiri 3537* (UZL); 2000, *Smook 10733* (PRE, MAL, UZL, SRGH, LMA); Dembo Bridge, 2000, *Kasakula 231* (MAL).

Microchloa kunthii Desv.

Perennial, dense tufts, up to 700 mm high; growing in compact mats; inflorescence a single secund raceme, spikelet 2.3–3.2 mm long; 1-flowered; frequent on shallow soils over rock in montane grassland and rocky outcrops, on stony hillsides, in bare patches in miombo woodland, and on dambo margins; 650–2,300 m. Southern Africa and tropical Africa into Arabia, India, China, and tropical S. America.

Source. *Flora zambesiaca* 10(2): 230 (1999).

Malawi. Nyika Plateau, Chelinda Valley, 2,300 m, 1976, *Phillips 1354* (K, SRGH); Nganda Hill, 2000, *Phiri 3689* (UZL); Chelinda Bridge, 2000, *Mwanyambo 531* (MAL); Chosi Viewpoint, 2000, *Smook 10726* (PRE, MAL, UZL, SRGH, LMA).

Monocymbium cereisiiforme (Nees) Stapf ❖

boat grass

Perennial, of variable habit from straggling to densely tufted; inflorescence of solitary racemes, enclosed in reddish brown, cymbiform spatheole, loosely gathered into false panicle; grassy hillsides; dominant in poorer montane grasslands of the Nyika, along with *Loudetia simplex* (Lemon 1964). Southern Africa northwards to Ethiopia and westwards to W. Africa.

Source. *F.T.E.A. Gramineae* (3): 823–825 (1982)

Malawi. Nyika Plateau, Rumpi Bridge, 1975, *Pawek 9261* (PRE); Chosi Viewpoint, 2000, *Phiri 3531* (UZL); *Mwanyambo 481* (MAL); 2000, *Kasakula 198* (MAL); 2000, *Smook 10731* (PRE, MAL, UZL, SRGH, LMA); Runyina River, 2000, *Phiri 3782* (UZL).

Zambia. Nyika National Park, Chowo Forest, 2000, *Phiri 3514* (UZL); Rest House Area, 2000, *Phiri 3582* (UZL); western part of Nyika National Park, 2000, *Phiri 3953* (UZL).

Oplismenus hirtellus (L.) P.Beauv. ❖

basket grass

Perennial, rambling; inflorescence of elongated racemes along central axis or upper reduced to fascicles, if all fascicled, awns less than 7 mm long; spikelet 2–4 mm long, awn smooth and sticky; in shade of montane forests and evergreen riverine forests; 1,000–1,800 m. Throughout the tropics, except in Asia.

Source. *Flora zambesiaca* 10(3): 8 (1989).

Malawi. Nyika Plateau, 1951, *Jackson 496* (K).

Zambia. Nyika Plateau, 1958, *Robson 415* (K).

Oplismenus undulatifolius (Ard.) Roem. & Schult.

Perennial, trailing; racemes reduced to cuneate fascicles; spikelet 2.5–4 mm long; awns smooth and sticky; forest shade; 800–2,400 m. Malawi, Mozambique, Zambia, Zimbabwe; warm temperate regions of the northern hemisphere, extending southwards to the uplands of Africa and India.

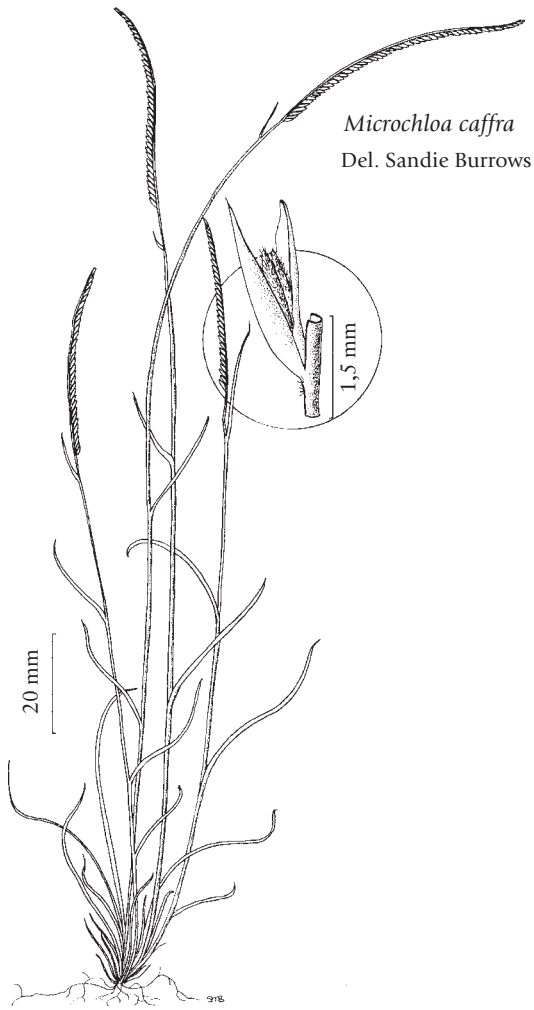
Source. *Flora zambesiaca* 10(3): 8 (1989).

Malawi. Nyika Plateau, 1970, *Brummitt 10886* (K); Juniper Forest, 2000, *Smook 10902* (PRE, MAL, UZL, SRGH, LMA).

Oreobambos buchwaldii K.Schum. ❖

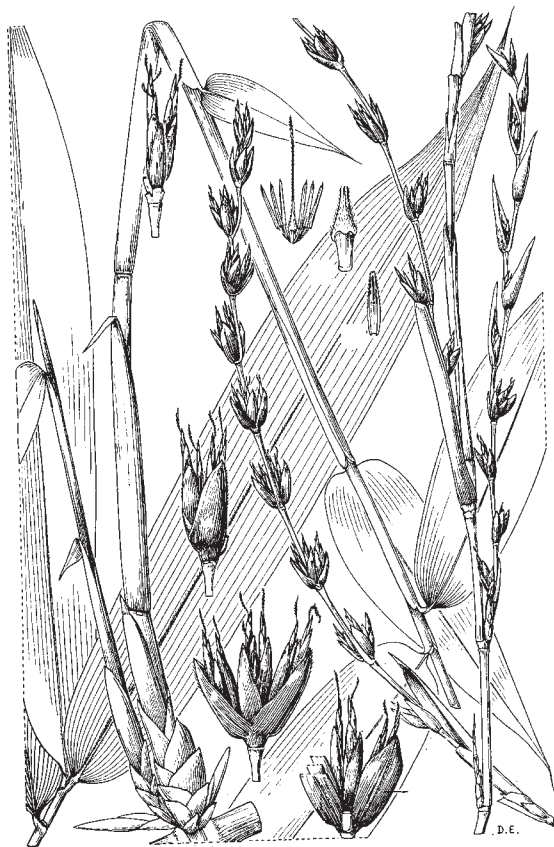
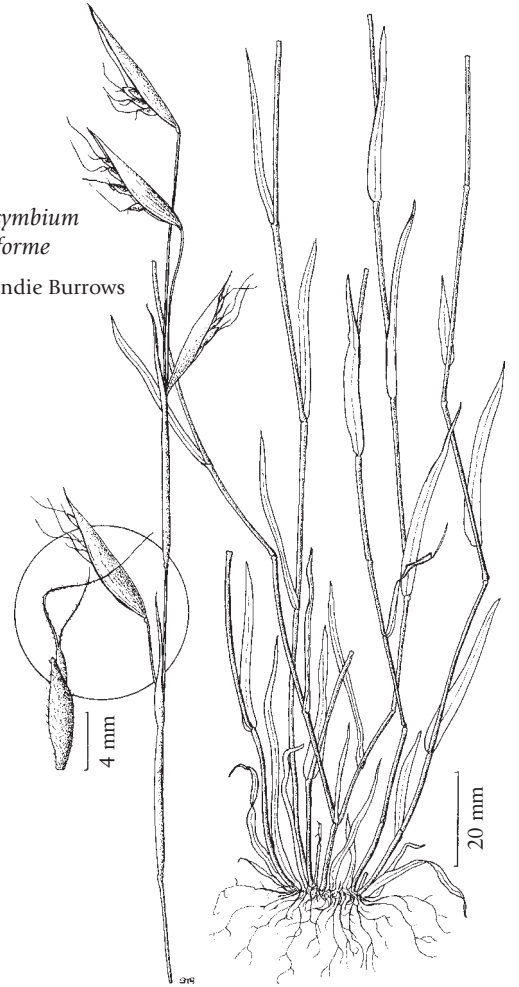
tolanje

Robust tree-like bamboo, growing in small dense patches or solitary clumps, up to 20 m high; leaf laminae obscurely tessellate; culm sheath covered with appressed bristle-like hairs when young, fimbriate at mouth, with short subulate lamina, inflorescence large and loose; in clearings of evergreen rainforests, in swampy forests, and along mountain streams. Zambia and Malawi; also Uganda and Tanzania. Rare on Nyika.



Microchloa caffra
Del. Sandie Burrows

*Monocymbium
ceresiiforme*
Del. Sandie Burrows



Oreobambos buchwaldii
Del. Derek Erasmus

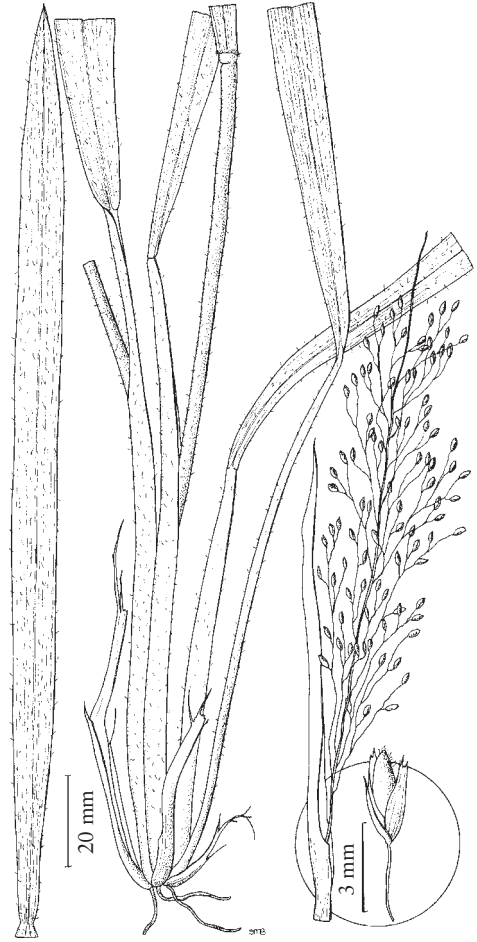


Oplismenus hirtellus
Del. Charmaine Bartman

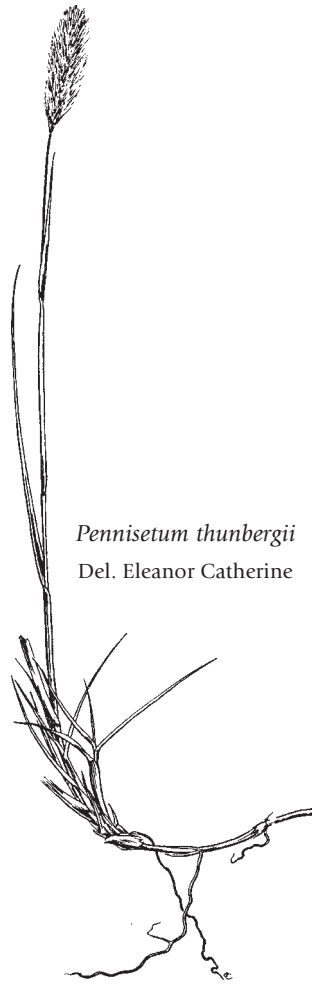
Panicum maximum
Del. Clare Smith



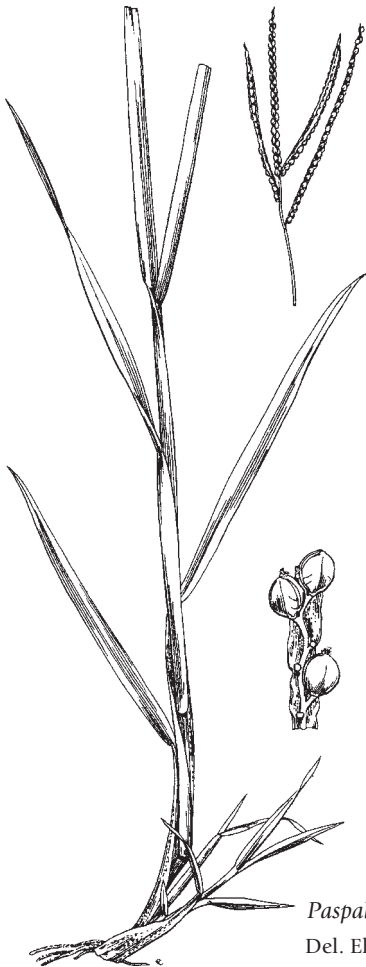
Panicum lukwangulense
Del. Sandie Burrows



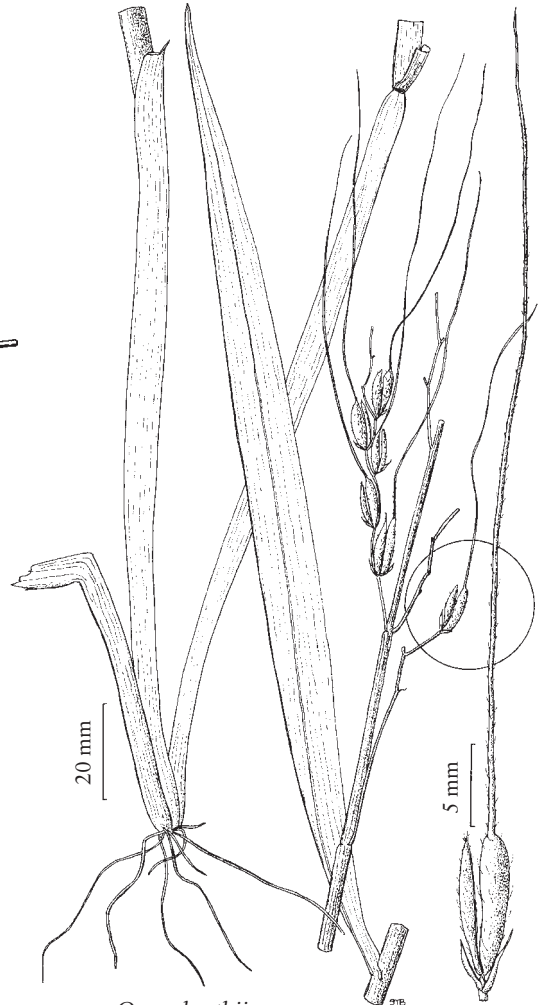
Pennisetum thunbergii
Del. Eleanor Catherine



Paspalum scrobiculatum
Del. Eleanor Catherine



Oryza barthii
Del. Sandie Burrows



Malawi. Nyika National Park, lower N. Rukuru River, 1,600 m (Dowsett-Lemaire 1985).

Oryza barthii A.Chev. ❖

wild rice; mpungaziwe, songasekwe

Annual aquatic grass growing in tufts, up to 1.2 m high, erect or geniculate, produces aerial roots from lower nodes; panicle obdeltoid, dense, many-flowered; spikelet 8–10.5 mm long (excluding awn), keels usually stiffly ciliate, awn (6.5)8–16(19) mm long; in shallow water of ponds, dambos, and marshes; as a weed in rice fields. Not recorded for Malawi in *Flora zambesiaca* (1971). Botswana, Zimbabwe, Zambia to Tanzania; W. Africa from Mauritania to Sudan.

Malawi. Nyika, without locality or collecting details (Patel 1999).

Panicum adenophorum K.Schum.

Annual or short-lived perennial; up to 2.4 m high; leaf cordate or amplexicaul; panicle moderately to much branched, clavate hairy; spikelets 2.5–3(5) mm long; forest margins, grassland or scrub. Malawi, Zambia; Uganda, Tanzania, D.R.C., and Burundi.

Source. *Flora zambesiaca* 10(3): 15 (1989).

Malawi. Nyika Plateau, Chowo Rocks, 2,300 m, 1968, *Simon, Williamson & Ball 1659* (K, SRGH); Sangule Kopje area, 2000, *Smook 10857* (PRE).

Panicum aequinerve Nees

Annual or short-lived perennial with trailing culms; panicle sparsely branched, spreading, pilose or glabrous; spikelet 3–4 mm long; forest margins and mountain grasslands; 1,000–2,700 m. A South African species extending northwards through Malawi to Ethiopia.

Source. *Flora zambesiaca* 10(3): 37 (1989).

Malawi. Nyika National Park, circular drive from Chelinda Camp to Dembo River bridge, 2000, *Smook 10774* (PRE, MAL, UZL, SRGH, LMA); Sanguli Hill, 2000, *Smook 10856* (PRE, MAL, UZL, SRGH, LMA).

Panicum chionachne Mez

stream-side panic grass

Annual or short-lived perennial with decumbent or trailing culms; panicle sparsely to moderately branched, spreading; spikelets 2–3 mm long, acute or acuminate; in forest shade or mountain grassland, in damp places; in stands of *Khaya anthotheca* and *Syzygium* along streams (Lemon 1964); 1,000–2,750 m. Malawi and Zambia, extending northwards to D.R.C. and Sudan.

Malawi. Nyika National Park, without locality or collecting details (Mill 1979).

Panicum claytonii Renvoize

Perennial, up to 750 mm high, erect, pubescent rhizome or knotty base; panicle sparsely branched, densely clavate hairy; spikelet 3.5–5.5 mm long, oblong, pale green often tinged with purple; specimens from Nyika appear not to have any clavate hairs; in woodland or grassland, on red soils. Malawi, Zambia, S. Tanzania, and D.R.C.

Source. *Flora zambesiaca* 10(3): 13 (1989).

Malawi. Nyika Plateau, 1958, *Robson 332* (K, holo.); road to Dembo River bridge, 2000, *Smook 10804* (PRE, MAL, UZL, SRGH).

Panicum delicatulum Fig. & De Not.

Panicum caudiglume Stapf; *Panicum nyassense* Napper

Annual, erect, weak, up to 500 mm high; panicle moderately to much-branched; spikelet 2–2.5 mm long, ovate, pilose, acuminate; in submontane forest; 1,500–2,400 m. Malawi and Zambia northwards to Sudan and Ethiopia.

Source. *Flora zambesiaca* 10(3): 39 (1989).

Malawi. Nyika Plateau, 1969, *Pawek 2110* (K); Chosi Viewpoint, 2000, *Phiri 3527b* (UZL); near Dembo River bridge, 2000, *Smook 10801* (PRE); Jalawe Viewpoint, 2000, *Smook 10878* (PRE, MAL, UZL, SRGH, LMA).

Panicum ecklonii Nees

Panicum pectinatum Rendle

small panicum

Perennial, up to 800 mm high, base usually densely pubescent; panicle

moderately to much-branched, flexuous, glabrous to clavate-hairy; spikelet 2.5–3.5 mm long; apex puberulous, glumes pectinate; in grassland, in rocky places; 1,200–2,700 m. Southern Africa northwards to S. Tanzania and westwards to W. Africa.

Source. *Flora zambesiaca* 10(3): 13 (1989).

Malawi. Nyika Plateau, 1977, *Pawek 13342* (K, SRGH).

Panicum grandiflorum Stapf

Perennial, tufted or shortly rhizomatous, up to 1.5 m high; panicle moderately branched; spikelet 2–2.5 mm long; in grassland on sandy, often damp, soil; 400–1,600 m. Malawi, Mozambique, Zambia, Zimbabwe, and Botswana. Known only from the *Flora zambesiaca* area.

Malawi. Nyika National Park, Domwe, 2000, *Kasakula 254* (MAL).

Panicum hymenochilum Nees

Aquatic annual, up to 1.2 m high; panicle sparsely branched, with tapering and clavate hairs, rarely clavate hairs absent; spikelet 2–2.5 mm long; river margins and swampy places. Southern Africa to Ethiopia, also in Guinea and Madagascar.

Malawi. Nyika National Park, Dam #1 at Chelinda Camp, 2000, *Smook 10740* (PRE, MAL, UZL, SRGH, LMA); Dembo River bridge, 2000, *Smook 10792* (PRE, MAL, UZL); Sangule Kopje, 2000, *Smook 10858* (PRE, MAL, UZL, SRGH).

Panicum inaequilatum Stapf & C.E.Hubb

Perennial, delicate, erect or decumbent from slender rhizome; panicle sparsely branched; spikelet 2–3 mm long, elliptic, sparsely to densely pilose; in submontane grassland, in wet places; 1,600–2,400 m. Malawi, Mozambique, Zimbabwe, and S. Tanzania.

Source. *Flora zambesiaca* 10(3): 38 (1989).

Malawi. Nyika Plateau, Chelinda Camp, 1970, *Brummitt 10904* (K, MAL, SRGH); near Dembo River bridge, 2000, *Smook 10800* (PRE, MAL, UZL, SRGH).

Panicum lukwangulense Pilg. ❖

Perennial, up to 1.5 m high, often densely mixed hispid and glandular hairy; panicle much-branched; spikelet 2.5–3.5 mm long, pilose at apex only; lower glume pectinate or not, upper glume pectinate; in submontane grassland, in damp situations; 2,300–3,000 m. Malawi and S. Tanzania. This species is very closely related to *P. ecklonii* (above).

Source. *Flora zambesiaca* 10(3): 12 (1989).

Malawi. Nyika Plateau, Lake Kaulime, 1968, *Simon, Williamson & Ball 1647* (K, SRGH); Mpopoti, 2000, *Mwanyambo 544* (MAL); en route to Dembo River bridge, 2000, *Smook 10776* (PRE, MAL, UZL).

Panicum maximum Jacq. ❖

Guinea grass; msonge, pokopoko

Perennial, sometimes annual, up to 450 mm high; panicle oblong to pyramidal, spikelet 2.5–5 mm long, oblong, glabrous to pubescent, obtuse or acute; upper lemma conspicuously rugose; in shady or open habitats, on stable or unstable soils in natural or disturbed situations. Throughout southern and tropical Africa; also in Madagascar and introduced widely throughout the tropics.

Malawi. Nyika National Park, without locality or collecting details (Mill 1979); Chelinda Dam, 2000, *Chapama 195* (FRIM).

Panicum monticola Hook.f.

montane panic grass

Perennial, slender, decumbent up to 1 m long; panicle sparsely to moderately branched; spikelet 2.2–3.5 mm long; in submontane and evergreen montane forests (Lemon 1964); 600–2,600 m. South Africa and throughout tropical Africa.

Malawi. Nyika National Park, without locality or collecting details (Mill 1979).

Panicum pectinellum Stapf

Perennial, slender, erect, up to 0.9 m high; base pubescent, knotty; leaves mostly cauline; panicle much-branched, flexuous, glandular hairy; spikelet 1.5–2 mm long, ovate-elliptic; in damp places in rocky grassland or wood-

land; 1,300–2,200 m. Malawi, Zambia, Angola, and D.R.C.

Source. *Flora zambesiaca* 10(3): 12 (1989).

Malawi. Nyika National Park, Chisanga Falls, 1968, *Simon, Williamson & Ball 1798* (K, SRGH); path to Chisanga Falls, 2000, *Smook 10762* (PRE, MAL, UZL, SRGH, LMA).

***Panicum pusillum* Hook.f.**

Annual, delicate, erect or often decumbent, up to 600 mm high; panicle sparsely to moderately branched, spreading to deflexed; spikelet 1.5–2 mm long, narrowly ovate, pilose; in mountain grassland and bush land; 1,350–3,300 m. Malawi northwards to Ethiopia and Sierra Leone.

Source. *Flora zambesiaca* 10(3): 37 (1989).

Malawi. Nyika Plateau, Rumphu Bridge, 1975, *Pawek 9263* (K, MO, SRGH, MAL); Chosi Viewpoint, 2000, *Smook 10734* (PRE, MAL, UZL, SRGH, LMA); on main road to Chisanga Falls from Chelinda Camp, 2000, *Smook 10742* (PRE, MAL, UZL, SRGH, LMA); Chelinda River bridge, 2000, *Smook 10816* (PRE, MAL, UZL, SRGH, LMA).

***Panicum trichocladum* Hack ex K.Schum.**

Perennial, scrambling; panicle densely hairy below lowest branches, pedicels with long cilia at apex covering spikelets; spikelet 2.2–3 mm long, oblong; in shade of bush or forest, on stony or sandy soils. Zimbabwe northwards to D.R.C. and Ethiopia.

Malawi. Nyika, without locality or collecting details (Patel 1999).

***Panicum wiehe* Renvoise**

Annual, scrambling; panicle moderately to much-branched; spikelet 2–2.5 mm long, glabrous to sparsely pilose; in evergreen forests; 900–2,200 m. Zimbabwe and Malawi, extending northwards to Sudan.

Source. *Flora zambesiaca* 10(3): 39 (1989).

Malawi. Nyika National Park, Juniper Forest, 2000, *Smook 10901* (PRE, MAL, UZL, SRGH, LMA).

***Paspalum scrobiculatum* L. ❖**

veld paspalum

Perennial, erect or decumbent at base and rooting at nodes, up to 1.5 m high; racemes 1–20, digitate; spikelet 1.4–3 mm long, broadly elliptic to subrotund, becoming brown; on damp soils and by water; 0–1,900 m. Southern Africa and throughout the Old World tropics. A variable species.

Malawi. Nyika National Park, Dembo River bridge, 2000, *Smook 10779* (PRE, MAL, UZL, SRGH, LMA); between Dam #2 and Chelinda Hill, 2000, *Smook 10842* (PRE, MAL); Juniper Forest parking area, 2000, *Smook 10906* (PRE, MAL, UZL, SRGH).

Zambia. Western part of Nyika National Park, 2000, *Phiri 3943* (UZL).

***Pennisetum clandestinum* Chiov.**

Kikuyu grass

Perennial, mat-forming, rhizomatous; inflorescence reduced and concealed in uppermost sheath; in upland grassland on fertile soils subject to grazing; 1,300–2,500 m. E. African highlands. Probably introduced; widely cultivated for pasture and soil stabilization. Introduced to most tropical and subtropical regions.

Source. *Flora zambesiaca* 10(3): 179 (1989).

Malawi. Nyika Plateau, Chelinda, Old Salt Lick, 1976, *Phillips 1223* (K, MO).

***Pennisetum thunbergii* Kunth ❖**

Thunberg's grass, Thunberg's pennisetum

Perennial, rhizomatous, erect to geniculate, up to 1.5 m high; inflorescence spike-like, bristles fine, glabrous; spikelets 2.5–5 mm long; in upland grassland, particularly on damp soils; may grow with *Hyparrhenia* in lower grassland (Lemon 1964); 1,500–2,500 m. South Africa northwards to Yemen and eastwards to Sri Lanka.

Source. *Flora zambesiaca* 10(3): 185 (1989).

Malawi. Nyika Plateau, 1952, *Jackson 889* (K, SRGH); Dam #2, 2000, *Smook 10826* (PRE, MAL, UZL, SRGH, LMA); between Dam #2 and Chelinda Hill, 2000, *Smook 10833* (PRE, MAL, UZL, SRGH, LMA); Juniper Forest, at bridge, 2000, *Smook 10928* (PRE, MAL, UZL, SRGH).

***Pennisetum unisetum* (Nees) Benth.**

Beckeropsis uniseta (Nees) K.Schum.

Perennial, robust, up to 4 m high; panicles axillary and gathered into a copious false inflorescence; involucre reduced to a single bristle; spikelets 2–3 mm long; in wooded grassland and riverine forests, favouring partial shade; on better soils or fringes of forests (Lemon 1964). South Africa and throughout tropical Africa to Yemen.

Malawi. Nyika National Park, without locality or collecting details (Mill 1979).

Zambia. Western part of Nyika National Park, 2000, *Phiri 3932* (UZL).

***Phacelurus huillensis* (Rendle) Clayton ❖**

Thyrsia huillensis (Rendle) Stapf; *Thyrsia undulatifolia* (Chiov.) Robyns
Perennial, up to 1.8 m high, erect; racemes 3–4, internodes and pedicels clavate; sessile spikelet usually pallid, awnless; in *Brachystegia* wooded grassland. Malawi, Mozambique, Zambia, Tanzania, and D.R.C.

Malawi. Nyika Plateau foothills, 1968, *Simon, Williamson & Ball 1644* (K, PRE); Thazima road, 2000, *Phiri 3609* (UZL); Thazima Gate towards Chelinda, 2000, *Mwanyambo 511* (MAL); Jalawe Viewpoint, 2000, *Smook 10875* (PRE, MAL, UZL, SRGH, LMA).

***Phacelurus schliebenii* (Pilg.) Clayton**

Thyrsia schliebenii Pilg.

Perennial, up to 0.9 m high; basal sheaths flabellate; racemes 2–8, internodes and pedicels clavate; sessile spikelet dark purple, awnless; in marshy places. Zambia, Malawi, Tanzania, and D.R.C.

Malawi. Nyika National Park, Lake Kaulime, 1951, *Jackson 533* (PRE); 1968, *Simon, Williamson & Ball 1644* (PRE); 1970, *Brummitt 11913* (K, PRE); Dembo Bridge, 2000, *Smook 10783* (LMA, MAL, PRE, SRGH, UZL).

***Phragmites mauritianus* Kunth ❖**

common reed; bango, matete

Perennial, up to 5 m high, leaf tips sharp, leaves deciduous at base of sheath; similar in habitats to *P. australis*, though more often recorded growing on sandy banks and not submerged in water; in dense stands along rivers, in swamps, flood plains, marshes, and edges of pools or dams. Southern African region and throughout tropical Africa. In some areas plants may be referred to as *P. karka*.

Source. Brummitt (1973).

Malawi. Nyika National Park, Chipome Valley, 1972, *Synge 275* (K, MAL, SRGH); Sangule Kopje, 2000, *Smook* sight record (material sterile).

***Poa annua* L.**

annual blue grass

Annual, rarely perennial, erect, spreading or decumbent, sometimes rooting at nodes, up to 300 mm high; panicle usually open, stiff; spikelet 3–8 mm long, green, often tinged red; in disturbed areas, in forest clearings, as a weed of cultivation, rarely in montane grassland or open woodlands. A cosmopolitan weed.

Malawi. Nyika National Park, Thazima Gate, 2000, *Phiri 3641* (UZL); Chelinda Camp, 2000, *Smook 10887* (MAL, PRE).

***Poa leptoclada* Hochst. ex A.Rich**

Perennial, variable, erect or geniculate, wiry, up to 750 mm high; lower sheaths often splitting into coarse fibres; panicle almost spike-like, branches erect; spikelets 3–6 mm long pale green, often tinged purple; in montane forests and moorland, in semi-montane open grassland, in kloofs, or along montane watercourses, always in semi-shade and in moist ground. Lesotho and Zimbabwe northwards to Ethiopia, Somalia, and W. tropical Africa.

Source. *Flora zambesiaca* 10(1): 48 (1971).

Malawi. Nyika Plateau, near Lake Kaulime, 2,190 m, 1962, *Tyrer 958* (BM, COI, SRGH).

***Poa schimperiana* Hochst. ex A.Rich ❖**

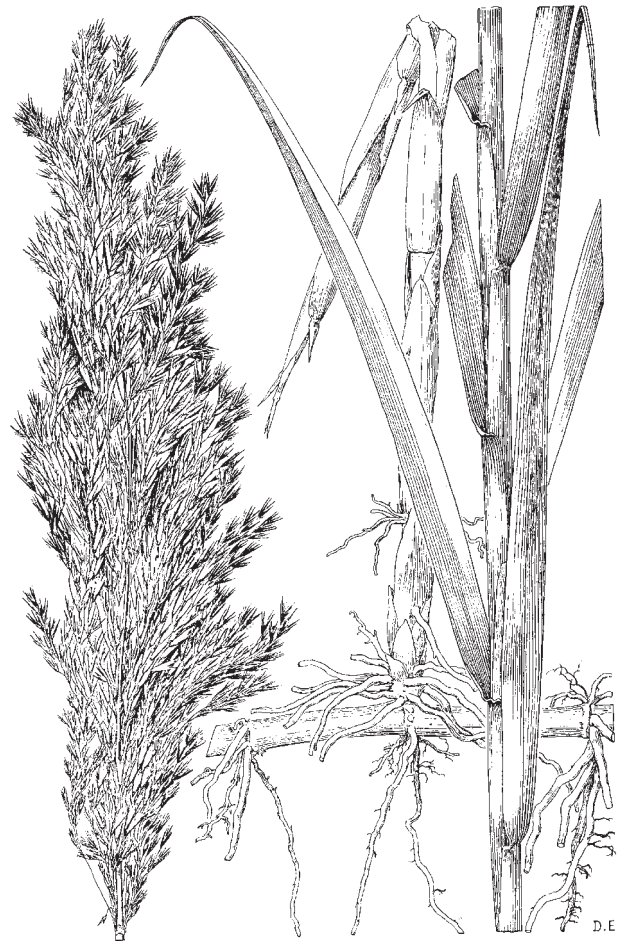
Perennial, slender, weak, erect or geniculate, sometimes straggling; panicle very lax, erect or nodding; spikelets 3–6 mm long; in montane grassland, open woodland, and in forest scrub, usually in moist places. Malawi, Tanzania, Uganda, Kenya, and D.R.C. Very closely allied to *P. leptoclada* (above).



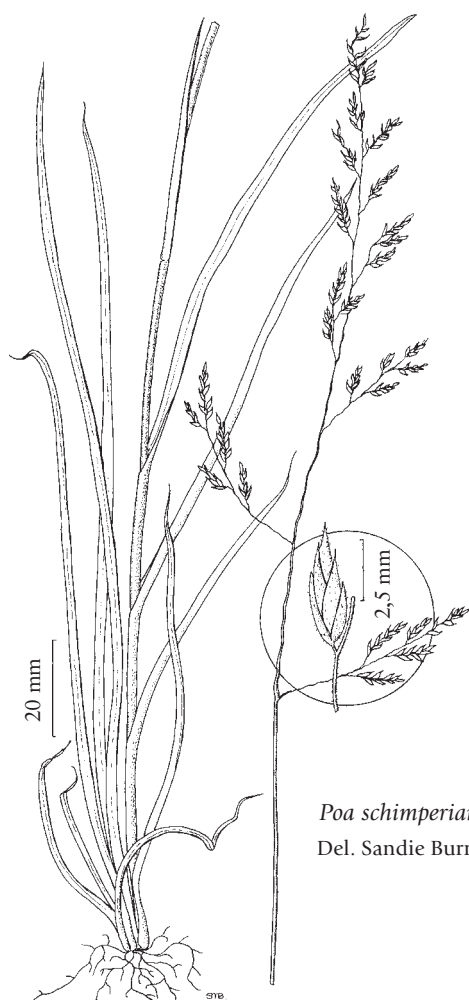
Phacelurus huillensis
Del. Maureen Church

ME

Phragmites mauritianus
Del. Derek Erasmus



D.E

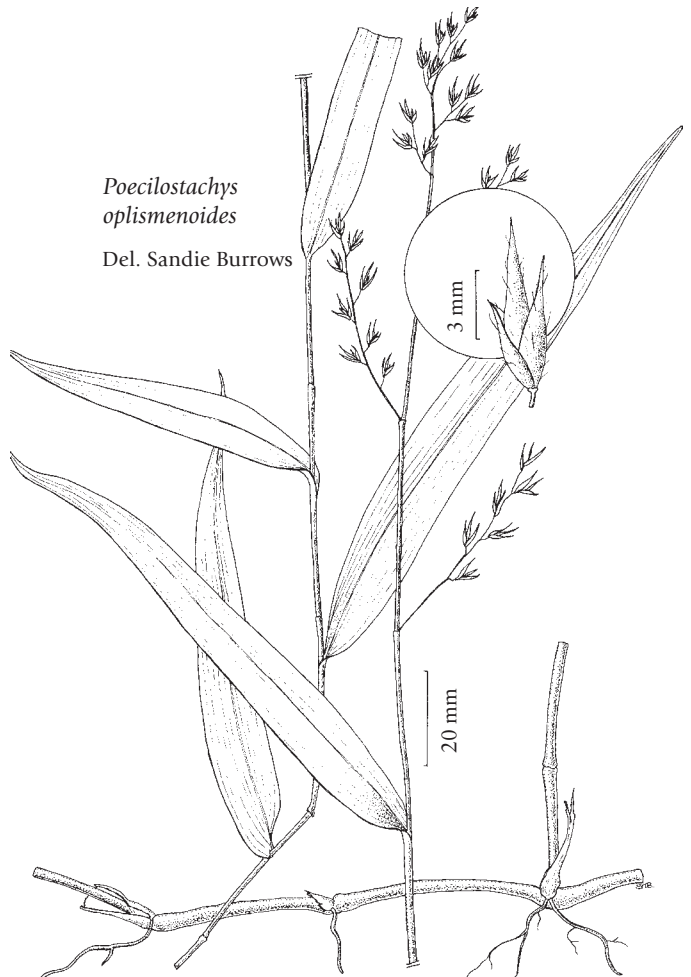


20 mm

2.5 mm

Poa schimperiana
Del. Sandie Burrows

576

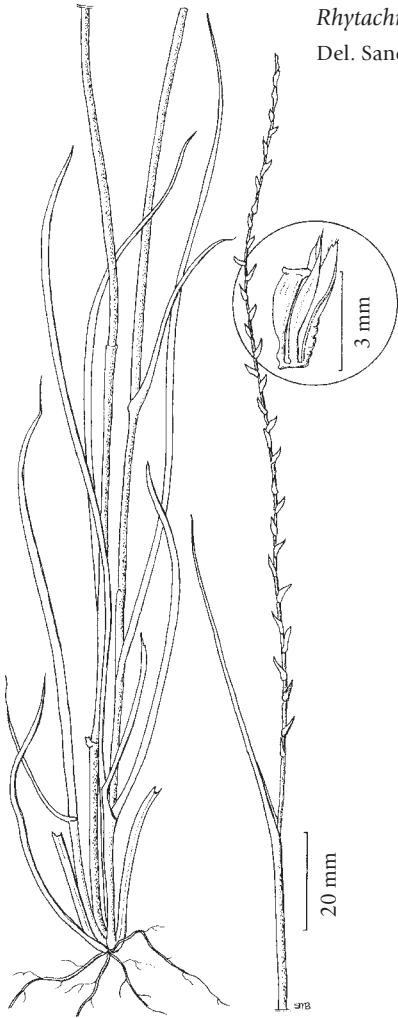


Poecilostachys oplismenoides
Del. Sandie Burrows

3 mm

20 mm

Rhynchne rottboellioides
Del. Sandie Burrows

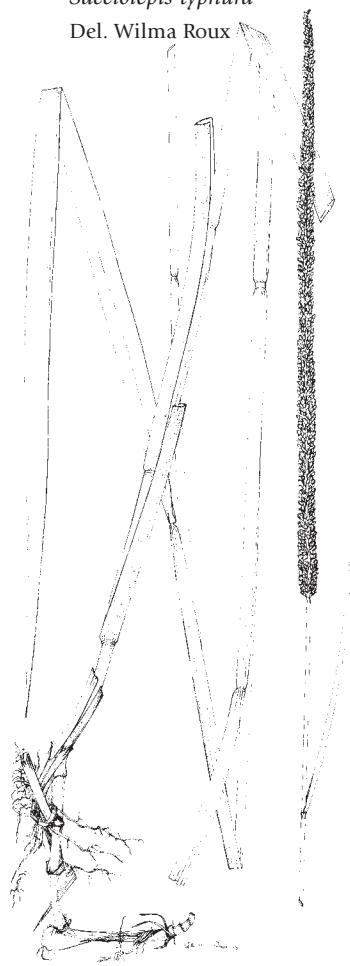


20 mm

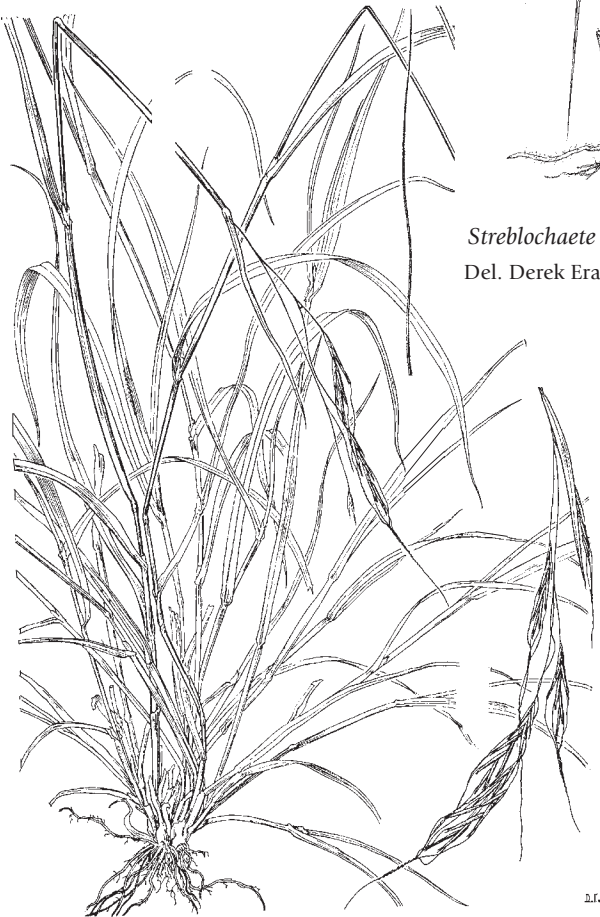
Sporobolus subtilis
Del. Charmaine Bartman



Sacciolepis typhura
Del. Wilma Roux



Streblochaete longiarista
Del. Derek Erasmus



d.f.

Stipa keniensis
Del. Wilma Roux



Source. *Flora zambesiaca* 10(1): 50 (1971).

Malawi. Nyika Plateau, Kasaramba, 1951, *Jackson 504* (SRGH); between Chelinda Hill and Kasaramba Road, 2000, *Smook 10892* (PRE, MAL, UZL, SRGH, LMA).

Poecilostachys oplismenoides (Hack.) Clayton ❖

Choachme oplismenoides (Hack.) Robyns

Perennial, trailing, often with aerial roots at nodes; lax racemes along main axis, spikelets in clumps; spikelets 6–8 mm long, with stiff bristles in yellowish tubercles; in shady places in evergreen forests. Zimbabwe, Malawi, Mozambique, Zambia, northwards to Nigeria and Ethiopia.

Source. *Flora zambesiaca* 10(3): 3 (1989).

Malawi. Nyika Plateau, 1952, *Jackson 887* (K).

Zambia. Nyika Plateau, 1958, *Robson 217* (K).

Rhytachne rottboellioides Desv. ❖

Perennial, slender to robust, up to 1 m high; leaves setaceous; single terminal cylindrical raceme, internodes clavate; sessile spikelet 2–6 mm long, rugose or muricate, glumes awned or awnless; pedicelled spikelet suppressed or nearly so; in swamps and seasonally wet grasslands; 50–2,130 m. Southern and tropical Africa; also in Madagascar, the West Indies, and S. America. A variable species.

Malawi. Nyika National Park, main road at start of footpath to Chisanga Falls, 2000, *Smook 10752* (PRE, MAL, UZL, SRGH, LMA).

Sacciolepis chevalieri Stapf

Sacciolepis brevifolia Stapf

Perennial, rhizomatous, up to 1 m high, culms hard; leaves tightly rolled; panicle cylindrical, often interrupted; spikelets 1.5–2 mm long, mostly pubescent; in swamps and near water; 500–2,000 m. Southern and tropical Africa; also in Madagascar.

Malawi. Nyika National Park, without locality or collecting details (Patel 1999); Dam #2, 2000, *Smook 10825* (PRE, MAL, UZL, SRGH, LMA, K).

Sacciolepis spiciformis (A.Rich.) Stapf

Sacciolepis huillensis (Rendle) Stapf; *Sacciolepis geniculata* Simon

Annual, growing in clumps, up to 800 mm high; panicle cylindrical, spike-like, usually above leaves; spikelets 1–1.5 mm long glabrous or hispidulous; in damp or swampy soils, in pools on rock and ironstone outcrops; 0–2,300 m. South Africa northwards to Cameroon and Ethiopia; also in Madagascar.

Source. *Flora zambesiaca* 10(3): 44 (1989).

Malawi. Nyika Plateau, 1968, *Simon, Williamson & Ball 1650* (K, SRGH).

No country given. Nyika National Park, 1967, *Vesey-Fitzgerald 2977* (UZL).

Sacciolepis transbarbata Stapf

Perennial, with short knotty rhizome, up to 1 m high; panicle cylindrical, spikelets 3–4 mm long, elliptic, silky pilose with a transverse fringe of long hairs on back of lower lemma; in *Brachystegia* woodland; 1,200–1,900 m. Malawi, Zambia, Zimbabwe, and Tanzania.

Malawi. Nyika National Park, Chisanga Falls area, 2000, *Phiri 3576* (UZL); roadside at start of footpath to Chisanga Falls, 2000, *Smook 10775* (PRE, MAL, UZL, SRGH).

Sacciolepis typhura (Stapf) Stapf ❖

Sacciolepis velutina Napper; *Sacciolepis cinereo-vestita* (Pilg.) C.E.Hubb.

Perennial, shortly rhizomatous, up to 1.5 m high; usually spongy at base with cross-nerves on sheaths; leaves flat or folded; panicle cylindrical, dense; spikelet 1.7–2.5 mm long, ovate, mostly glabrous; in swampy and marshy places; 500–2,500 m. South Africa and Namibia, northwards throughout tropical Africa. It is possible that *S. typhura* and *S. chevalieri* are just habit forms of a single species.

Malawi. Nyika National Park, without locality or collecting details (Patel 1999); Chelinda Bridge, 2000, *Smook 10807* (PRE, MAL, UZL, SRGH, LMA, K).

Schizachyrium brevifolium (Sw.) Nees ex Büse ❖

Annual, erect or scrambling and decumbent, delicate, tinged with bright purplish red, up to 400 mm high; racemes filiform, shortly exerted from

the spatheole; sessile spikelet 2.3–3.5 mm long, awn 6–13 mm long; damp waterlogged areas, open sandy ground, river-banks, and road sides, in cultivated ground; 610–1,550 m. Pantropical.

Malawi. Nyika National Park, near Dembo Bridge, 2000, *Smook 10799* (MAL, PRE).

Setaria grandis Stapf ❖●

Willis's timothy

Perennial, robust, up to 3 m high; strongly flabellate basal sheaths; panicle branched, branches stiffly spreading, bristles rigid and pungent; spikelet 3.5–4 mm long; in marshy places bordering lakes and streams; 2,300–2,500 m. Confined to the Nyika Plateau. This species is common and widespread in the Nyika National Park, growing on forest margins, along streams in forest clearings, and in forest margins where the streams leave the forest patches.

Source. *Flora zambesiaca* 10(3): 103 (1989).

Malawi. Nyika Plateau, *Henderson* (BM, holo.); Lake Kaulime, 1970, *Brummitt 10812* (K, SRGH); Mpopoti Hill, 2000, *Salubeni & Mwanyambo 6789* (MAL); Dembo Bridge, 2000, *Thera 3025* (MAL); 2000, *Kasakula 233* (MAL); between Chelinda Camp and Dembo Bridge, 2000, *Smook 10775* (PRE, MAL, UZL, SRGH).

Setaria homonyma (Steud.) Chiov.

Annual, up to 1 m; leaves plicate, light green; panicle branched; spikelet 2–2.5 mm long; in shady places in forests, woodland, and thickets, often as a weed of cultivation; 600–1,500 m. Southern African region, Cameroon, and Ethiopia; also India.

Malawi. Nyika National Park, Thazima Gate, 2000, *Phiri 3636* (UZL); without locality or collecting details (Patel 1999).

Setaria incrassata (Hochst.) Hackel

Setaria phragmitoides Stapf; *Setaria palustris* Stapf

vlei bristle grass

Perennial, with short rhizome, up to 2 m high, nodes pubescent, rarely glabrous; basal sheaths pallid; panicle spike-like; spikelets 2–3 mm long; on black clay plains and marshy stream margins into drier soils; 0–2,000 m. Southern Africa to Ethiopia and Nigeria.

Malawi. Nyika National Park, Dembo River bridge, 2000, *Smook 10785* (MAL, PRE).

Setaria lindenberiana (Nees) Stapf

mountain bristle grass

Perennial, up to 1.2 m high; leaves plicate when young, then flattening out; panicle branched, usually contracted, bristles often inconspicuous; spikelets 2–3 mm long; in open woodland, often on rocky slopes or termite mounds. South Africa, Botswana, Zimbabwe, Zambia, and D.R.C., but not recorded for Malawi in *Flora zambesiaca* (1989). A variable species.

Malawi. Nyika National Park, without locality or collecting details (Mill 1979).

Setaria longiseta P.Beauv.

Setaria paniciformis Rendle

Perennial, geniculate, up to 1.5 m high; panicle branched; spikelets 1.5–2.2 mm long, often tinged purple; in woodland, thicket, and streamsides, often in shady places or on termite mounds; 0–2,000 m. Zimbabwe, Malawi, Mozambique, Zambia, northwards to Sudan and Sierra Leone.

Source. *Flora zambesiaca* 10(3): 103 (1989).

Malawi. Nyika Plateau, 1970, *Hall-Martin 1689* (K, PRE); Sangule Kopje area, 2000, *Smook 10861* (PRE, MAL, UZL, SRGH, LMA); 2000, *Smook 10867* (PRE, MAL, UZL); on road to Chisanga Falls, 2000, *Smook 10745* (PRE, MAL, UZL).

Zambia. Nyika National Park, Manyenjere Forest, 2000, *Phiri 4053* (UZL); Chowo Forest, 2000, *Phiri 3512* (UZL); western part of Park, 2000, *Phiri 3947* (UZL).

Setaria megaphylla (Steud.) T.Durand & Schinz

Setaria plicatilis (Hochst.) Engl.; *Setaria chevalieri* Stapf

broad-leaved bristle grass

Perennial, forming large tufts, up to 3 m high, but showing a considerable

variation in size; leaves plicate; panicle branched; spikelets 2.2–3.5 mm long; in woodland shade, forest glades, and streamsides; 0–1,800 m. Southern and tropical Africa; also in tropical America and a few records in India. Intergrades with a number of related species.

Malawi. Nyika National Park, Chelinda Dam, 2000, *Chapama 190* (FRIM); without locality or collecting details (Patel 1999).

Setaria petiolata Stapf & C.E.Hubb

Setaria interpilosa Stapf & C.E.Hubb.

Annual, weak, up to 1 m, nodes glabrous; panicle spike-like, loose; spikelet 1.5–2 mm long, bristles 5–10 mm long; in wooded grassland and among rocks, in shade; 700–1,500 m. Malawi, Mozambique, Zambia, Zimbabwe; also Kenya and Tanzania.

Source. *Flora zambesiaca* 10(3): 101 (1989).

Malawi. Rumphii (Nyika Plateau?), 1954, *Jackson 1243* (K); without locality or collecting details (Patel 1999).

Setaria pumila (Poir.) Roem. & Schult.

Setaria pallida-fusca (Schumach.) Stapf & C.E.Hubb.; *Setaria ustilata* de Wit

golden bristle grass; katiti

Annual, up to 1.3 m high, nodes glabrous; panicle spike-like; spikelets 1.5–3.5 mm long; bristles green to yellow; a weedy species in disturbed places; 0–1,500 m. Southern Africa region, tropical and warm temperate regions of the Old World; introduced to America.

Source. *Flora zambesiaca* 10(3): 100 (1989).

Malawi. Nyika National Park, Thazima Camp, 2000, *Chapama 179* (FRIM); Chelinda Dam, 2000, *Chapama 187* (FRIM); Dembo River bridge, 2000, *Kasakula 229* (MAL); 2000, *Smook 10795* (PRE, MAL, UZL, SRGH, LMA).

Zambia. Nyika Plateau, 1968, *Williamson 951* (SRGH).

Setaria sphacelata (Schumach.) Moss

Setaria anceps Stapf; *Setaria trinervia* Stapf
ncirawagaru

Perennial, up to 3 m high, nodes glabrous; panicle spike-like; spikelet 1.5–3.5 mm long, pallid to purple; bristles 1.5–12 mm long, yellow; in dambos and other damp habitats, but extends into drier savanna woodland soils; 0–2,000 m. Southern Africa region and tropical Africa. A variable, polymorphic species to which a large number of specific or varietal names have been applied; although morphological variation is customarily partitioned into several varieties; it should be noted that the variation forms a continuum and these varieties are only weakly defined.

Malawi. Nyika National Park, Chosi Viewpoint, 2000, *Mwanyambo 484* (MAL); *Smook 10720* (PRE, MAL, UZL, SRGH); Dembo Bridge, 2000, *Kasakula 223* (MAL); Jalawe Viewpoint, 2000, *Smook 10882* (PRE, MAL, UZL, SRGH, LMA).

Zambia. Nyika National Park, Chowo Forest, 2000, *Phiri 3513* (UZL); Rest House area, 2000, *Phiri 3732* (UZL).

Sporobolus africanus (Poir.) Robyns & Tournay

Sporobolus capensis (P.Beauv.) Kunth
ratstail dropseed

Perennial, erect, up to 1.3 m high; panicle dense, linear to spike-like; spikelet 1.7–2.6 mm long, grey-green to dark green; in floodplain and swampy grassland, in montane grassland, and margins of evergreen forest; 100–2,300 m. South Africa to Cameroon and Ethiopia; also in the Arabian peninsula, Sri Lanka, and Hawaii. This is one of a complex of species, which are often difficult to separate from one other.

Source. *Flora zambesiaca* 10(2): 186 (1999).

Malawi. Nyika Plateau, Dembo Bridge, 2,300 m, 1975, *Pawek 9304* (K); en route to Dembo River Bridge, 2000, *Smook 10796* (PRE, MAL, UZL, SRGH, LMA).

Zambia. Nyika Plateau, Chire River, 1968, *Williamson 1027* (K).

Sporobolus centrifugus (Trin.) Nees

olive dropseed

Perennial, with short oblique rhizome, up to 800 mm high; basal sheaths usually indurated and horny, persistent; leaves usually tightly rolled; pani-

cle branches whorled; spikelet 2.2–5.2 mm long, very dark green; in montane short grassland, sometimes with scattered trees, and in watershed grassland, on sandy or peaty soils in rocky areas and along roadsides, often following fire; 1,210–2,300 m. South Africa, Zimbabwe, Malawi, Zambia, Tanzania, and Kenya, with one record from Sudan.

Source. *Flora zambesiaca* 10(2): 178 (1999).

Malawi. Nyika Plateau, 8 km N.W. of Lake Kaulime, 2,040 m, 1970, *Brummitt 11938* (K, LISC, MAL, PRE, SRGH).

Zambia. Nyika Plateau, 1962, *Verboom 752* (K).

Sporobolus mauritanicus (Steud.) T.Durand & Schinz

Perennial, erect, up to 1 m tall; basal sheaths not indurated or only lightly so; leaves folded; panicle branches whorled, spikelets along the end half of branches; spikelet 2.9–4.8 mm long, brownish to dark olive-green; usually in dambo and swampy grassland; also in montane short grassland and wetter miombo, often after fire; 40–2,290 m. South Africa and throughout tropical Africa; also in Madagascar and Mauritius.

Source. *Flora zambesiaca* 10(2): 179 (1999).

Malawi. Nyika Plateau, turnoff to Kasaramba, ca 10 km from Chelinda, 2,290 m, 1968, *Simon, Williamson & Ball 1709* (SRGH); between Chelinda Hill and Kasaramba road, 2000, *Smook 10888* (PRE, MAL).

Sporobolus micranthus (Steud.) T.Durand & Schinz

Sporobolus psammophilus Stent & J.M.Rattray

Annual, delicate, erect, up to 600 mm high; leaf margins usually with raised glands; panicle branches whorled, with sticky gland patches; spikelet 1–2.1 mm long, reddish; in miombo and *Uapaca* woodlands on sandy soils, Kalahari sand woodland, in sandveld, and on rocky outcrops, less often in dry dambos, on margins of laterite pans, and in submontane grassland, often at roadsides; 600–1,700. Throughout tropical Africa.

Source. *Flora zambesiaca* 10(2): 170 (1999).

Malawi. Nyika Plateau, 10 km N. of M1, 1,650 m, 1978, *Pawek 14055b* (K, SRGH); main road at start of footpath to Chisanga Falls, 2000, *Smook 10747* (PRE, MAL, UZL, SRGH, LMA); between river and fire-break at Juniper Forest, 2000, *Smook 10922* (PRE, MAL, UZL, SRGH, LMA).

Sporobolus mollier Hack.

Annual, erect, up to 600 mm high; panicle linear, spikelets along whole length of branches; spikelet 1.6–2 mm long, yellowish or brownish green, upper glume with subulate awn-like apex; miombo woodland shade and montane grassland, usually on evergreen forest margins; also on escarpments and rocky outcrops, often as a weed of cultivated and waste ground, roadsides, paths, and lawns; 760–1,980 m. Throughout tropical Africa, with a single record from South Africa.

Source. *Flora zambesiaca* 10(2): 180 (1999).

Malawi. Nyika Plateau, Chisanga Falls, 1,980 m, 1968, *Simon, Williamson & Ball 1801* (K); Thazima Gate, 2000, *Phiri 3634* (UZL).

Sporobolus myrianthus Benth.

Sporobolus angustifolius De Wild.

Perennial, up to 1.2 m high; older basal leaf sheaths indurated, sometimes disintegrating into loose glabrous cushion of fibres; panicle diffuse; spikelets evenly distributed; spikelet 1.8–2.6 mm long, dark greyish green to olive-green; often in miombo woodland, but also in mixed deciduous woodland and open grassland, on sandy soils, rocky slopes, and termitaria, and in dambo margins and shallow soil over laterite; 80–1,720 m. Zimbabwe to Angola, Nigeria, and Kenya.

Source. *Flora zambesiaca* 10(2): 191–192 (1999).

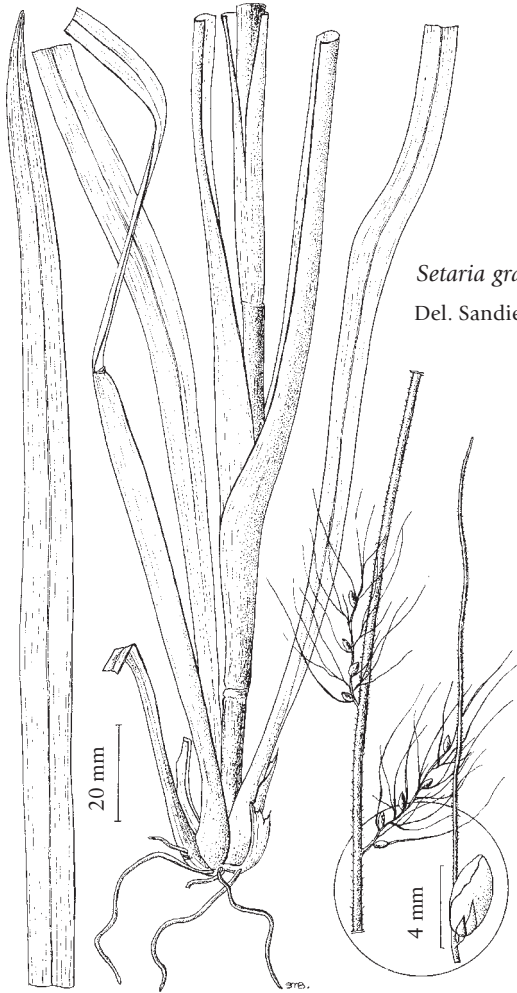
Malawi. Nyika Plateau, 13 km N. of M1, 1977, *Pawek 13309* (K, SRGH).

Sporobolus olivaceus Napper

Perennial, erect, up to 0.9 m high; basal sheaths hard, usually disintegrating into a cushion of persistent fibres; leaves usually folded; panicle spike-like, spikelets densely arranged along whole length; spikelet 2.9–3.4 mm long, dark olive-green to almost black; usually in shallow sandy soils over rock; 1,650–1,700 m. From Malawi and Zambia through E. Africa to Ethiopia. In the same complex as *S. africanus*.

Source. *Flora zambesiaca* 10(2): 187 (1999).

Malawi. Nyika Plateau, 13 km N. of M1, 1977, *Pawek 13312* (K, SRGH).



Setaria grandis
Del. Sandie Burrows

Themeda triandra
Del. Charmaine Bartman

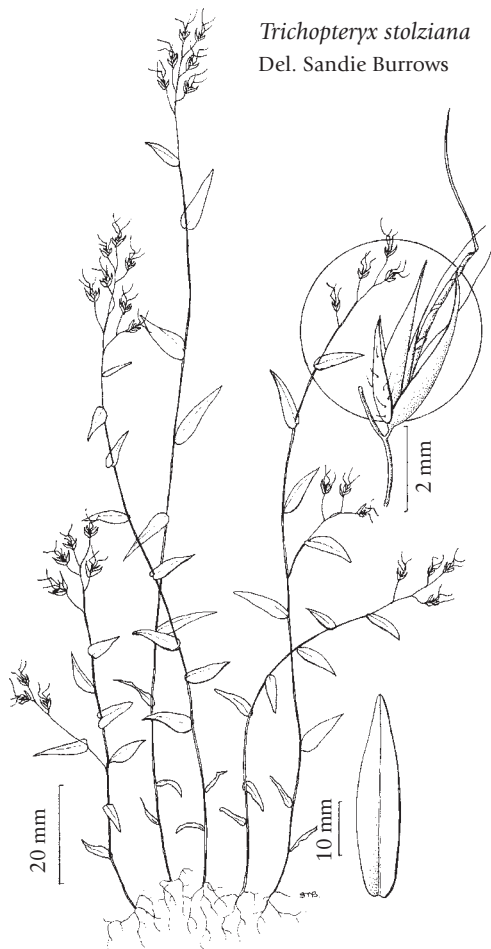


Schizachyrium brevifolium
Del. Eleanor Catherine



Thelopogon elegans
Del. William Trevithick

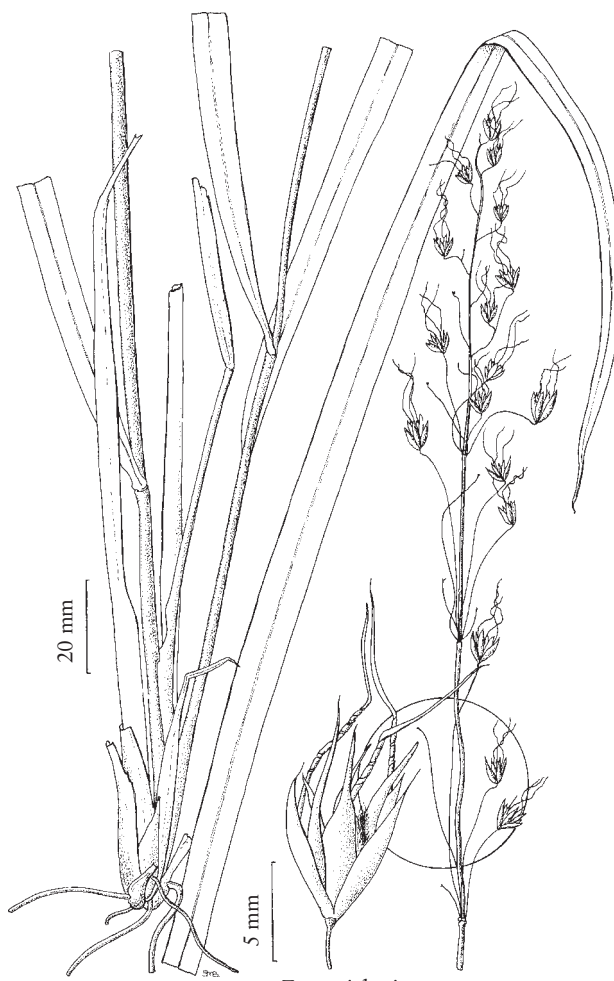
Trichopteryx stolziana
Del. Sandie Burrows



Tristachya leucothrix
Del. Sandie Burrows



Trachypogon spicatus
Del. Rosemary Holcroft



Zonotriche inamoena
Del. Sandie Burrows

Sporobolus piliferus (Trin.) Kunth

Annual, erect, up to 450 mm high; panicle spike-like, branches sometimes whorled, glandular, spikelets along whole length; spikelet 1.5–2.1 mm long, reddish brown; often amongst rocks in montane grassland, on rocky hillsides and granite outcrops in high-rainfall woodland, beside paths, in firebreaks, and margins of laterite pans; 1,100–2,000 m. Throughout the tropics. **Malawi.** Nyika National Park, near Chelinda Camp, 2000, *Smook 10737* (PRE, MAL); near Dembo River bridge, 2000, *Smook 10802* (PRE); Chelinda Bridge, 2000, *Smook 10812* (PRE, MAL, UZL, SRGH, LMA).

Sporobolus pyramidalis P.Beauv.

catstail dropseed; mtsinde

Perennial, erect, up to 2.1 m high; panicle narrowly pyramidal; spikelet 1.7–2.3 mm long, green to greyish or purplish; upper glume obtuse; in dambo and floodplain grassland, on stream banks, less often in open woodland and montane grassland, common where soil fertility is high, a weed of permanent and planted pasture, sometimes invasive in overgrazed marshes; 0–2,290 m. Widely distributed in the southern African region and throughout tropical Africa; also in Madagascar, Mauritius, tropical Arabia, and introduced elsewhere. Belongs in same species complex as *S. africanus*.

Source. *Flora zambesiaca* 10(2): 184 (1999).

Malawi. Nyika Plateau, Chelinda Valley, 2,290 m, 1976, *Phillips 1350* (SRGH).

Sporobolus sanguineus Rendle

Perennial, erect, up to 1.2 m high; panicle branches whorled, spire-shaped; spikelet 2.5–3.5 mm long, reddish; in miombo woodland on sandy soils, often on mountain slopes and rocky outcrops, and on evergreen forest margins; 600–1,830 m. Southern Africa and throughout tropical Africa.

Malawi. Nyika National Park, footpath to Chisanga Falls, 2000, *Smook 10759* (PRE, MAL, UZL, SRGH, LMA).

Sporobolus stapfianus Gand.

fibrous dropseed

Perennial, erect, up to 550 mm high; basal sheaths with curly yellow or brown hairs, disintegrating into persistent fibres; panicle usually diffuse, spikelet 1.4–2.1 mm long, grey-green to dark greenish purple; often in shallow soils over rock; also in miombo or mixed deciduous woodland in bare ground or amongst short grasses, and on margins of sandveld marshes; 100–1,700 m. Southern Africa region and tropical Africa; also in Madagascar and tropical Arabia.

Source. *Flora zambesiaca* 10(2): 191 (1999).

Malawi. Nyika Plateau, 13 km N. of M1, 1977, *Pawek 13302* (K, SRGH).

Sporobolus subtilis Kunth ❖

Perennial, short scaly rhizome, erect, up to 600 mm high; basal leaf sheaths persistent or disintegrating into fibres; panicle very diffuse, branches and pedicels capillary, widely diverging, long white hairs in axils; spikelet 1.3–4 mm long, dark green; in dambo grasslands, sometimes in montane and sandveld grasslands, and on coastal dunes away from the littoral zone; 0–1,800 m. Southern Africa northwards to Tanzania, D.R.C., and W. Africa; also in Madagascar. A variable species. The collections listed below were the first records for Malawi.

Malawi. Nyika National Park, Chelinda River bridge, 2000, *Smook 10810* (PRE, MAL, UZL, SRGH); between Dam #2 and Chelinda River Bridge, 2000, *Smook 10828* (PRE, MAL, UZL, SRGH, LMA).

Stipa keniensis (Pilg.) Freitag ❖

Stipa dregeana Steud var. *elongata* (Nees) Stapf

Perennial, short knotty rhizome, up to 1.5 m high; leaf flat; panicle effuse, branches flexuous, spikelets at end of branches; spikelet 6–7 mm long, awn 10–15 mm long; in shade of montane forests. E. Africa and South Africa.

Malawi. Nyika National Park, without locality or collecting details (Mill 1979).

Streblochaete longiarista (A.Rich.) Pilg. ❖

Perennial, straggling, up to 0.9 m high; panicle contracted; spikelet 15–27 mm long, pale green to silvery green, awns 20–43 mm long; all the awns on the inflorescence intertwine and the florets become detached from the

panicle and thus the seeds are dispersed *en masse*; in montane or submontane evergreen forests or scrub. South Africa (rare), Zimbabwe, Malawi, Nigeria, Cameroon, Ethiopia, and E. Africa; also in Indonesia and Philippines.

Source. Brummitt (1973).

Malawi. Nyika National Park, 4 km W. of Nganda, 1972, *Brummitt & Synges 73* (EA, K, LISC, MAL, SRGH).

Thelopogon elegans Roem. & Schult. ❖

Annual, coarse, erect, stilt roots present, up to 1.5 m high; leaves cordate to amplexicaul at base 2–17 racemes borne terminally; sessile spikelet 5–13 mm long, coarsely rugose, awn 15–25 mm long; very local in weedy patches on black clay soils; 150–1,800 m. Throughout tropical Africa; also extending through India to Indonesia.

Source. *Flora zambesiaca* 10(1): 67 (1971).

Malawi. Nyika Plateau, Mwanembwe, 1903, *McClounie 18* (K); Nyika National Park, without locality or collecting details (Mill 1979).

Themeda triandra Forssk. ❖

red grass, red oat grass; chitungwa

Perennial, erect up to 2 m high; false panicle of wedge-shaped clusters of 2–8 racemes enclosed in russet-coloured spatheoles and spathes; sessile spikelet 6–11 mm long, awn 25–70 mm long; in grassland and grassy areas in bush land or disturbed open woodland, a common dominant of rolling montane grasslands or woodlands; found on lower hills or sometimes in marshes on the Nyika Plateau (Lemon 1964). Probably favoured by fire, but not by close grazing (Lemon 1964). Tropical and subtropical regions of the Old World. This is a widespread polymorphic species and a number of varieties have been described, based on differences in habit and in the hairiness of the spatheoles and spikelets. However, these characters are poorly correlated with chromosome numbers or geographical distribution and are of little significance.

Malawi. Nyika Plateau, Mbuzinande, 1975, *Phillips 770* (K); Nyika Plateau, 6 miles S. of Chelinda Road on Mbuzinandi-Olera Road, 1978, *Pawek 13754* (PRE); Chosi Viewpoint, 2000, *Chapama 142* (FRIM?); Thazima Gate, 2000, *Phiri 3511* (UZL); Thazima-Chelinda Road, 2000, *Mwanyambo 527* (MAL); road above Chisanga Falls, 2000, *Smook 10753* (PRE, MAL, UZL, SRGH, LMA); Jalawe Viewpoint, 2000, *Thera 3114* (MAL).

Zambia. Western part of Nyika National Park, 2000, *Phiri 3941* (UZL); Rest House area, 2000, *Phiri 3765* (UZL).

Trachypogon spicatus (L.f.) Kuntze ❖

giant spear grass

Perennial, erect, up to 2 m high; racemes 1(3); subsessile spikelet barren, awnless; pedicelled spikelet 8–13 mm long, awn 40–100 mm long; in upland grassland, open deciduous bush land, or wooded grassland. Tropical and Southern Africa; also in tropical America. There is considerable variation in vegetative characters, but the spikelets are tolerably constant. Grazed by eland, hartebeest, reedbuck, roan antelope, and zebra, especially after burning (Lemon 1964).

Malawi. Nyika Plateau, 1952, *Jackson 882* (K); Nyika Plateau western valleys, 1959, *Robinson 3082* (PRE); circular drive above Dembo River bridge, 2000, *Smook 10778* (PRE, MAL, UZL, SRGH, LMA).

Zambia. Nyika Plateau, 1959, *Robinson 3010* (K, PRE); western part of Nyika National Park, 2000, *Phiri 3974* (UZL); Rest House area, 2000, *Phiri 3772* (UZL).

Trichopteryx dregeana Nees

Perennial, wiry, trailing, up to 1 m long, nodes exposed; leaves reflexed, panicle narrowly ovate; spikelet 4–5 mm long, upper lemma with lateral tufts 2–3 mm long; central awn 4–6 mm long, lateral awns 1.5–4 mm long; in wet areas and marshy places; 1,100–2,100 m. Malawi, Zambia, Zimbabwe, Angola, South Africa, and D.R.C.; also in Madagascar.

Malawi. Nyika National Park, Sangule Kopje, 2000, *Smook 10868* (PRE, MAL, UZL, SRGH, K).

Trichopteryx elegantula (Hook.f.) Stapf

Trichopteryx delicatissima Phipps

Annual, up to 300 mm high, usually slender and wiry, panicle open or

compact, spikelet 2.5–3.5 mm long, glabrous or tuberculate setose, central awn 7–15 mm long; on damp slopes; 1,200–2,300 m. Malawi, Zambia, D.R.C., and Tanzania, westwards through Uganda to Sierra Leone.

Malawi. Nyika National Park, Jalawe Viewpoint, 2000, *Thera 3100* (MAL).

Trichopteryx fruticulosa Chiov.

Trichopteryx fruticulosa Chiov. var. *whytei* C.E.Hubb.

Perennial, slender, somewhat woody, erect and stiff, up to 800 mm high, nodes usually hidden; leaves more or less reflexed; panicle lanceolate; spikelet 3–6 mm long, usually glabrous, upper lemma with lateral tufts of hair 1–2 mm long; central awn 8–11 mm long, lateral awns 1.5–3 mm long; rocky slopes in *Brachystegia* woodland. Malawi, Zambia, Angola, D.R.C., and Tanzania.

Source. Brummitt (1973).

Malawi. Nyika National Park, Sawi Valley, 1972, *Synge 453* (MAL); Chisanga Falls area, 2000, *Phiri 3563* (UZL); Vithiniza Hill slope, 2000, *Mwanyambo 571* (MAL).

Zambia. Nyika National Park, Kaperekezi Road, 2000, *Phiri 3847* (UZL).

Trichopteryx stolziana Henr. ❖

Trichopteryx elegantula (Hook.f.) Stapf subsp. *stolziana* Phipps

Annual, erect, slender and wiry, up to 300 mm high; panicle compact; spikelet 3.5–5.5 mm long; callus truncate or emarginate; on wet flushes on banks and among rocks, forms patches in overgrazed areas and along paths or roads (Lemon 1964); 1,300–2,500 m. Malawi, Mozambique, Zambia, Zimbabwe, Tanzania, and D.R.C.

Malawi. Nyika National Park, Nganda Hill, 2000, *Phiri 3692* (UZL); footpath to Chisanga Falls, 2000, *Smook 10761* (PRE, MAL, UZL, SRGH, LMA).

Tristachya bequaertii De Wild

Dolichochaete bequaertii (De Wild.) Phipps

Perennial, robust, up to 2 m high, basal sheaths woolly tomentose; panicle open or contracted; spikelet 15–25 mm long; common in poor or steep *Brachystegia* woodlands; 1,300–2,000 m. Malawi, Zambia, Tanzania, and D.R.C.

Malawi. Nyika National Park, without and collecting details (Mill 1979).

Tristachya leucothrix Nees ❖

Tristachya hispida K.Schum.

hairy trident grass

Perennial, up to 1.2 m high; panicle with 1–7 triads of spikelets with connate pedicels; spikelet 20–45 mm long, yellow to yellowish brown, villous with rows of black tubercules; in damp grassland. South Africa, Zimbabwe, Mozambique, Malawi, Zambia, and D.R.C.

Malawi. Nyika National Park, Jalawe Viewpoint, 2000, *Thera 3113* (MAL).

Zonotriche inamoena (K.Schum.) Clayton ❖

Tristachya inamoena K.Schum; *Piptostachya inamoena* (K.Schum.)

Phipps

Perennial, erect, up to 1.5 m high; panicle with triads covered in golden brown hairs; spikelet 10–19 mm long, upper lemma without tufts; in *Brachystegia* woodland; 1,400–1,600 m. Zimbabwe, Mozambique, Zambia, Malawi, Angola, D.R.C., and Tanzania.

Source. *Flora zambesiaca* 10(3): 212 (1989).

Malawi. Rumph District, foothills to Nyika Plateau, 1968, *Simon & Williamson 1770* (SRGH, K).

Excluded species

Acritochaete volkensis Pilg. ?

Oplismenus volkensis (Pilg.) Peter

This genus is not recorded for *Flora zambesiaca* region in *Flora zambesiaca* (1989) or in *Flora of Tropical East Africa* (1982) and, since we have no specimen to confirm its inclusion, it is excluded here.

Malawi. Nyika National Park, without locality or collecting details (Mill 1979).

Aristida hordeacea Kunth

Aristida pseudohordeacea Stent & Rattray

Annual, on sandy, clayey, and black basaltic soils, in open grasslands and woodlands mainly in shallow depressions, on edges of small pans, banks of streams, and mopane veld. It does not seem likely that this is the correct locality for this specimen (see also under McClounie's biographical notes).

Source. *Flora zambesiaca* 10(1): 116 (1971).

Malawi. Nyika Plateau, 1903, *McClounie s.n.* (K).

Eragrostis pseudopoa near **paniciformis**

True identity unknown.

Source. Patel (1999).

Eriochloa macclounii Stapf

Mopane woodland, drainage courses, and flood plains. Lemon (1964) states: 'possibly limited to Nyika Plateau, infrequent or rare'. Said to be a possible endemic to Nyika, but given habitat of mopane woodland it is not likely that the correct locality is given for this specimen. Not recorded for Malawi in *Flora zambesiaca* (1989).

Source. Mill (1979).

Festuca scabra Vahl

Not recorded elsewhere for Malawi; regarded as a South African endemic.

Malawi. Nyika National Park, without locality or collecting details (Mill 1979).

Hyparrhenia simplex (Hochst.) A.Rich.

Cannot find any reference to this name, although the name is old according to authors.

Source. Patel (1999).

Panicum mobukensi

No reference to this species name can be traced.

Source. Patel (1999).

Pennisetum sp.

Source. Brummitt (1972).

Malawi. Nyika National Park, Sawi Valley, 1972, *Synge 460* (K).

Schizachyrium delicatum ? Stapf

Tanzania, Guinea or Nigeria. Not recorded from Malawi and, since there are no details of a confirmed specimen, it is excluded here.

Source. Patel (1999).

Trichopteryx sp.

Too young to identify and does not match any material at K or PRE.

Malawi. Nyika National Park, footpath to Chisanga Falls, 2000, *Smook 10757* (PRE, MAL, K).

PONTEDERIACEAE

Heteranthera callifolia Kunth ❖

Heteranthera kotschyana Fenzl. ex Solms-Laub.; *Heteranthera potamogeton* Solms-Laub.

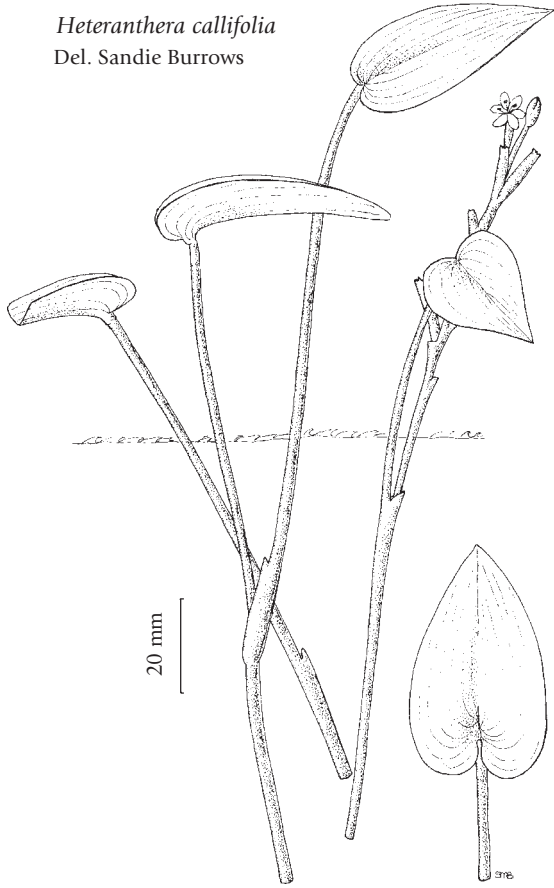
Creeping aquatic herb, rooting at the nodes; leaves sheathing at base, petioles ascending, 60–150 mm long, lamina floating or submerged, 20–75 x 10–50 mm, ovate, base cordate; inflorescence a spike with up to 15 flowers 5–12 mm long, white, blue or purple; capsule trigonous-oblong, many-

seeded; in shallow waters of swamps, marshes, pans or rock pools, 540–2,400 m. Widespread in subtropical and tropical Africa. As with many of McClounie's records, this collection should perhaps be regarded with some suspicion since this species most commonly occurs in warmer, lower-altitude habitats.

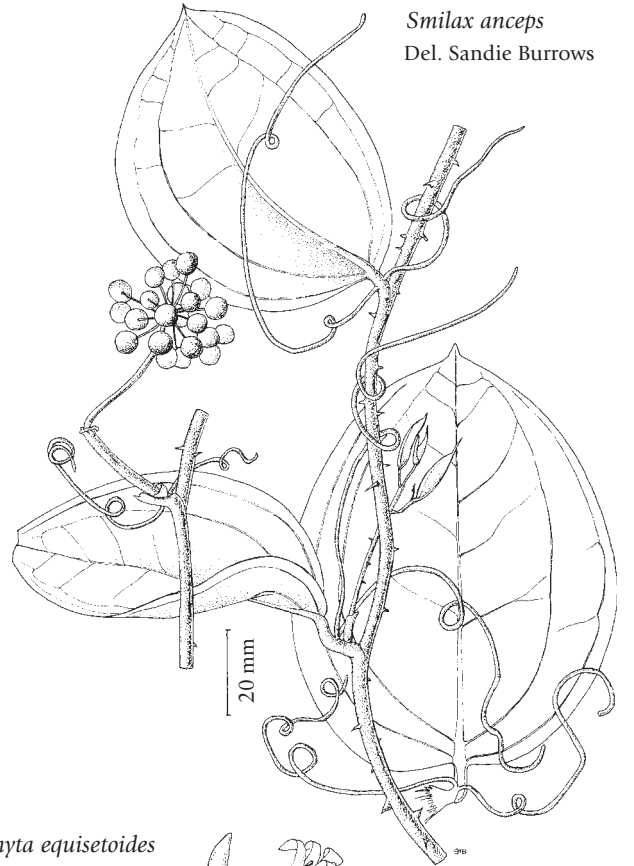
Source. *Kirkia* 16(1): 24 (1996).

Malawi. Nyika Plateau, Mwenembwe, 2,400 m, 1903, *McClounie 97* (K).

Heteranthera callifolia
Del. Sandie Burrows



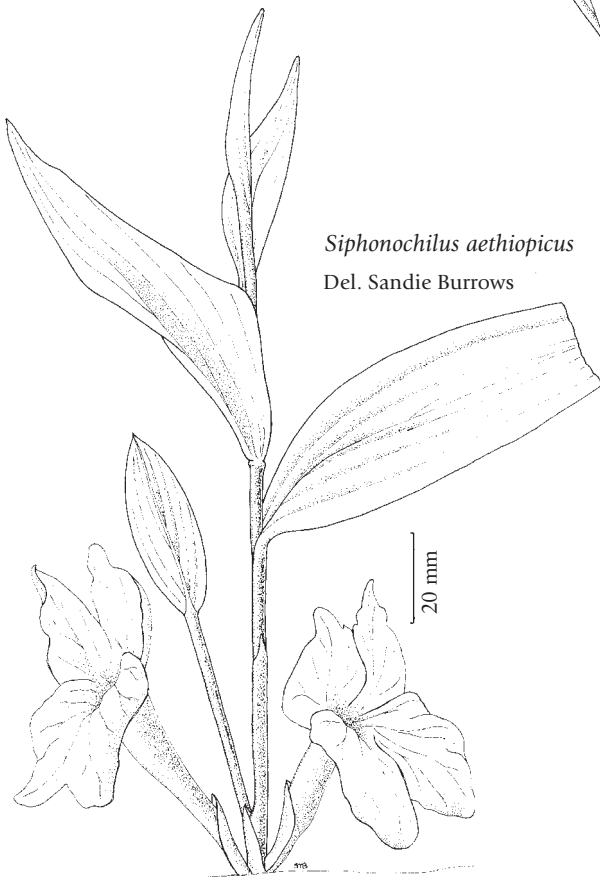
Smilax anceps
Del. Sandie Burrows



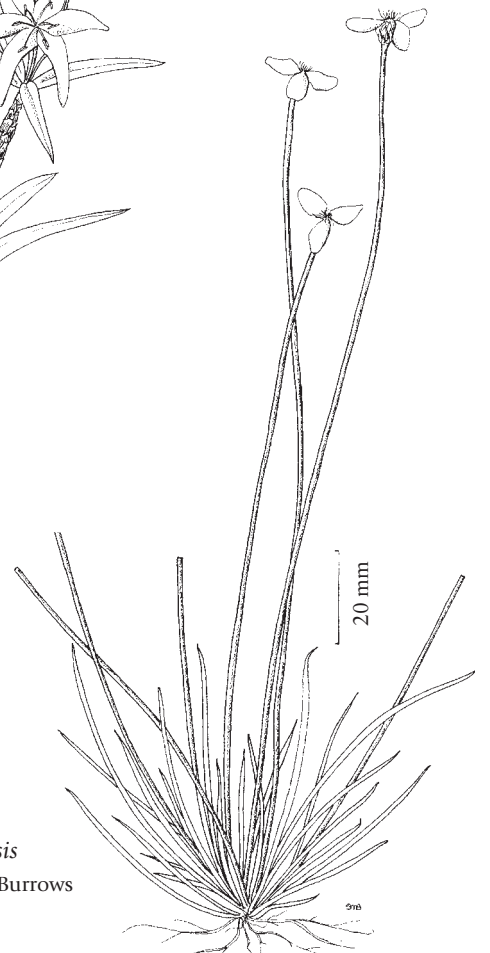
Xerophyta equisetoides
Del. Sandie Burrows



Siphonochilus aethiopicus
Del. Sandie Burrows



Xyris capensis
Del. Sandie Burrows



SMILACACEAE

Smilax anceps Willd. ❖

Smilax mossambicensis Garcke; *Smilax kraussiana* Meissner

Yao: mkwandula; *Sukwa*: mungapa

Climbing shrub, stem woody, ribbed, armed with small sharp prickles; leaves alternate, circular to oblong, rounded or subcordate at the base; flowers stalked, in solitary umbels (clusters), greenish-white to yellowish; in montane scrub or rank grasses in river valleys, in woodland, and lakesides; 0–2,400 m. Throughout the wetter parts of Africa; also in Madagascar and Réunion.

Source. *F.T.E.A.* Smilacaceae: 2 (1989).

Malawi. Nyika National Park, without locality or collecting details (Mill 1979); Kasyaula Forest, without collecting details (Dowsett-Lemaire 1985: 320).

Zambia. Nyika Plateau, Manyanjere and Chowo Forests, without collect-

ing details (Dowsett-Lemaire 1985: 320).

Smilax aspera L.

Smilax goetzeana Engl.

Climbing or creeping shrub, stems 4- to 6-angled, with or without prickles; leaves, alternate, lanceolate to triangular, cordate, hastate or sagittate to the base; flowers sessile, set in umbels (clusters) along an extended rachis; on forest margins, montane scrub, rocky areas, and along streams; 1,450–2,745 m. From Malawi and Zambia northwards through eastern Africa to N. Africa and western Europe; also in the Himalayas and India.

Malawi. Nyika Plateau, Kasyaula Forest, without collecting details (Dowsett-Lemaire 1985: 320).

VELLOZIACEAE

Xerophyta equisetoides Baker var. **pubescens** L.B. Smith & Ayensu ❖

Chichewa: chejo, chewo, misuwachi

Sparsely branched deciduous shrublet with thick fibrous stems and branches, branches long and slender; leaf sheaths 30 mm long, well-exserted, not splitting, leaves softly hairy; flowers showy, bell-shaped with 6 petals, white or al-

most so; in miombo woodland, rocky hillsides, and on granite rocks. Zimbabwe, Malawi, and Tanzania. It is quite possible that one or more of the other varieties of *X. equisetoides* occur along the margins of the Nyika Plateau.

Source. Smith & Ayensu (1974: 195).

Malawi. Rumphu District, near Nyika Plateau Conjunction, *Salubeni 385* (K, ?MAL).

XYRIDACEAE

Xyris aristata N.E.Br.

Xyris laciniata Hutch.; *Xyris leonensis* Hepper; *Xyris subaristata* Malme
Perennial (rarely annual), in dense clumps, base fibrous; spike sub-globose; bracts with pale scarious margins and markedly papillose, acumen long and rigid; in grass swamps, streamsides, and ditches. Malawi, Zambia, and Tanzania.

Source. Mill (1979); Brummitt (1973).

Malawi. Nyika National Park, W. slopes of Nganda, 1972, *Brummitt & Syngé 64* (K, MAL, SRGH, LISC, PRE).

Xyris capensis Thunb. ❖

Annual, sometimes a perennial, forming loose clumps, rhizome inconspicuous; leaves flabellate; inflorescence subspherical, peduncles terete below inflorescence; in marshes, on river-banks, and grassy seepage areas; common and very variable species. Malawi, Zambia, Zimbabwe, Botswana, and widespread through the rest of Africa; also in Madagascar, S. America, India, Sri Lanka, China, and Malaysia.

Malawi. Nyika National Park, Dam #2, 2000, *Smook 10821* (PRE, MAL, UZL, SRGH).

Xyris congensis Büttner

Xyris hildebrandtii Nilsson; *Xyris umbilonis* Nilsson.

Perennial, rhizome hard, covered by persistent shiny reddish brown con-

torted leaf bases, roots thin; leaves clustered, stiff; flowers yellow fading to white; in damp areas, streamsides, often in montane areas, sometimes dominant in swampy places, usually grassy. Malawi, Mozambique, Zambia, Zimbabwe southwards to South Africa; widespread in tropical Africa from E. Africa to Nigeria; also in Madagascar.

Malawi. Nyika National Park, without locality or collecting details (Mill 1979).

Xyris obscura N.E.Br.

Xyris brunnea L.A.Nilsson

Perennial, forming dense tufts, up to 0.5 m tall; leaf-bases persistent; spike 3- to 5-flowered, almost black; in montane grassland, often in rocky places. Malawi, Mozambique, Zambia, Zimbabwe; South Africa, Angola, Tanzania, Burundi, and Cameroon.

Malawi. Nyika National Park, Jalawe Viewpoint, 2000, *Thera 3101* (MAL).

Xyris cf. **straminea** L.A.Nilsson

Annual, small tufts, leaves linear; inflorescence ellipsoid, bracts yellowish brown; shallow soils over rocks, seasonal swamps, among grass tussocks. South Africa, Zimbabwe, Malawi, Zambia, to E. Africa and W. to Sierra Leone.

Malawi. Nyika National Park, near Juniper Forest, 2000, *Smook 10909* (PRE, MAL).

ZINGIBERACEAE

Siphonochilus aethiopicus (Schweinf.) B.L.Burt ♣

Kaempferia aethiopica (Schweinf.) Ridley

Perennial herb from a short ovoid rhizome, roots with tubers; leaves appearing at or after flowering, leaves narrowly elliptic, 170–360 x 20–45 mm, completely hairless; inflorescence arising from the base of the leafy shoot, more or less at ground level, with 4–12 flowers, flowers mauve to purple

with a yellow mark in the throat; fruit almost underground, roundish, ca 15 mm diameter; in deciduous woodland, scrub or wooded grassland; 350–1,830 m. South Africa northwards to Ethiopia and W. Africa. This is a highly prized medicinal plant in South Africa.

Source. *F.T.E.A.* Zingiberaceae: 20 (1985).

Malawi. Nyika National Park, without locality or collecting details (Mill 1979).