Revision of the genus *Myrsiphyllum* Willd.

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**ABSTRACT**

The genus *Myrsiphyllum* Willd. (Liliaceae—Asparageae) is revised. Twelve species are recognized, one of which is new, namely, *M. alopeicum* Oberm. Eight new combinations are made. A key is provided for distinguishing *Myrsiphyllum* from *Protasparagus* Oberm.

**MYRSIPHYLLUM**


*Hecatris* Salisb., Gen. Pl. 66 (1866). Type species: *H. asparagoides* (L.) Salisb.

*Asparagus*, section *Myrsiphyllum* (Willd.) Bak. in J. Linn. Soc. 14: 597 (1875); Fl. Cap. 6: 258 (1896); Jessop in Bothalia 9: 38 (1966); Dyer, Gen. 2: 943 (1976).†

Perennial, innocuous, glabrous climbers or erect, usually chamaephytes. *Rhizome* cylindrical, often not lignified; cataphylls small or vestigial. *Roots* placed radially on the often long, creeping rhizome, usually chamaephytes. *Stems* voluble or erect. *Phylloclades* solitary or 2–3-nate, placed in axils of scale-leaves, the latter not forming spines. (*M. fasciculatum* (Thunb.) Oberm.) Oberm. forms an exception in that the cladodes are many in each fascicle and small spines are developed.) *Flowers* 1–3-nate, bisexual, pendulous on short to long pedicels or stalks (viz. a combination of pedicel and pericladium, separated by a disk). *Tepals* white, usually with a green central band, connivent at base, forming a cup or tube; free lobes recurved above (except in *M. ramosissimum* and *M. scandens* where they remain erect). *Stamens* erect, usually connivent around gynoeicum with filaments flattened, attenuate above, widened below, where they may form two extended spurs; anthers introrse, yellow, orange or red. *Ovary* 3-locular; ovules 6–12 in each locule, biseriate; styles 1 or 3, stigmas 3, papillate. *Berry* globose or ovoid-apiculate, red, yellow or orange; seeds globose, black.

Species 12, recorded from the Winter Rainfall Region, with *M. asparagoides* and *M. ramosissimum* extending along the eastern Escarpment to the Transvaal; the former also spreading northwards to tropical Africa and southern Europe. Recently recorded as a troublesome adventive in Australia.


Scandent with thin stems up to c. 0.4 m tall, or short, erect and compact (in dry areas in Namaqualand). *Rhizome* thin, horizontal, up to 0.5 m long, covered by a cylinder of overlapping small, fusiform, pointed tubers c. 10 × 3 mm, occasionally some continuing below as normal thin roots but scattered long filiform roots are also produced, sometimes one of these producing a tuber distant from rhizome. *Phylloclades* ovate to cordate, c. 15–25 mm long, apiculate, many-veined, margin papillate. *Flowers* 1–3 in axes of membranous scale-leaves; stalk c. 5 mm, curved, articulated below perianth. *Tepals* c. 7 mm, forming a wide tube below, spreading above. *Stamens* as long as tepals, filaments expanded at base, flat. *Ovary* ovoid, with 10–12 ovules in each locale. *Styles* 3, curved outwards; stigmas apical, papillate. *Berry* not seen. Figs. 1.1, 2.1 & 3.1.

Only known from the western Cape in montane vegetation. Flowering July—September. Fig. 4.
KEY TO GENERA PRODASPARAGUS (ASPARAGOPSIS KUNTH) & MYRSiphyllum WILLD.

Perianth with 6 free spreading tepals; stamens free, spreading; flowers erect, fascicled or racemose, rarely solitary; spines present (absent in Protasparagus and P. pendulus), rhizome dorsonervral; cataphylls present .......................................................... 1133 Protasparagus

Perianth with the tepals cohering in lower half, forming a tube, spreading to recurved in upper half; stamens cohering with filaments forming a tube around gynoeceum (exceptions are M. scandens and M. ramossissimam where flowers resemble those of Protasparagus). Flowers pendulous, solitary or rarely 2–3 placed next to one another on a node; spines absent; roots emerging radially from the cylindrical rhizome, rarely dorsonervral ............................................. 1133a Myrsiphyllum

KEY TO SPECIES OF MYRSiphyllum

Phylloclades solitary:

Scandent plants (but cf. M. multilotuberosum which may be erect when stunted):

Phylloclades ovate to cordate, 12–20 mm broad;

Root-tubers attached close to rhizome:

Styles 3: root-tubers cylindrical, c. 10–12 x 3 mm, overlapping on long rhizomes...................................................................................................................................................................................................... 1. M. multilotuberosum

Style 1: root-tubers fusiform, c. 40–60 x 10–15 mm, radiating from rhizome...................................................................................................................................................................................................... 2. M. asparagoides

Root-tubers distant from rhizome .................................................................................................................................................................................................................. 3. M. ovatum

Phylloclades narrowly ovate to broadly linear, c. 4–6 mm broad:

Phylloclades narrow ovate, midrib distinct; root-tubers fusiform, firm................................................................................................................................................................................................... 4. M. kraussianum

Phylloclades narrowly elliptic without a distinct midrib, soft; root-tubers oblong-globose .................................................................................................................................................................................................. 5. M. volubile

Erect plants:

Plants branching freely; phylloclades narrowly ovate-acuminate, strongly ribbed........................................................................... 6. M. undulatum

Plants 'fox-tail-shaped', viz the erect stems bearing numerous contracted branches forming a leafy cylinder around stem; phylloclades narrowly linear:

Phylloclades 1–2 mm broad with smooth or minutely ciliate margins; roots with fusiform tubers some distance away from rhizome.................................................................................................................................................................................................. 7. M. juniperoides

Phylloclades 0.5 mm broad; margin fimbriate; root-tubers densely packed on rhizome .................................................................................................................................................................................................. 8. M. alopecuroides

Phylloclades in fascicles of 3, or very numerous, linear to filiform; scandent, shade-loving;

Phylloclades in fascicles of 3, linear to filiform:

Branches declinate (viz forming recurved loops); branchlets short with overlapping phylloclades; berry ovoid, shortly pointed above and below, many-seeded .................................................................................................................................................................................................. 9. M. declinatus

Branches and branchlets spreading at right angles to stem; berry globose, 1–few-seeded;

Phylloclades spreading in one plane, shallowly S-shaped, 2 mm wide, one opposing two others and one shorter than other two.................................................................................................................................................................................................. 10. M. scadens

Phylloclades laxly spreading, c. 1 mm wide, with a prominent midrib; stems, branchlets and branchlets angled .................................................................................................................................................................................................. 11. M. ramossissum

Phylloclades in dense fascicles (15–30-nate), linear, arcuate, c. 4–8 mm long .................................................................................................................................................................................................. 12. M. fuscificulatum

Vouchers

Marloth 9006; Bayer 3454; Schlechter 8069; Marloth 12776; Rösch & Le Roux 01218 (01211)

It is the only Myrsiphyllum species in which the three styles have not fused into a single column.

2. Myrsiphyllum asparagooides (L.) Willd. in Ges. naturf. Freunde Berl., Mag. 2: 25 (1808); Kunth, Enum. Plant. 5: 105 (1850); Hook. f. in Curtis's bot. Mag., t. 5584 (1866).


Asparagus kusibaensis Dinter in Feddes Repert. 29: 270 (1931). Type: South West Africa/Namibia at the Kuijeb River, Fiezeu in Herb. Dinter 4698 (B, holo.; PRE, photo).

Scandent, much branched perennials with shiny green ovate phylloclades, deciduous or semideciduous. Rhizome cylindrical, bearing numerous fusiform root-tubers c. 40–60 x 10–20 mm, radially arranged, variable in size, close to rhizome. Stems twisting, wiry, smooth or ridged, up to 2 m tall. Branches usually short, with beaded ridges. Phylloclades variable in size and shape, ovate-acuminate, c. 25—40 x 8—20 mm, flat or folded and curved, many-nerved but mostly with 3 more pronounced on each side; margin smooth or minutely denticulate. Flowers on pedicels c. 10 mm long, articulated below perianth. Tepals 6–10 mm long, forming a tube in lower half, reflexed above. Stamens erect, con-
nivent, expanded below into 2 small spreading teeth; anthers red. Ovary pear-shaped, stipitate, narrowed into a style as long as ovary; ovules c. 6 in each locale; stigmas short, spreading, ciliate. Berry globose, c. 10 mm in diam., usually many-seeded. Fig. 1.2, 2.2, 3.2, 5a & 5b.

Widespread and common in southern and eastern Cape forests and coastal valley bushveld; inland in wooded areas and along riverbanks in the eastern parts of Natal and Transvaal. Also recorded from South West Africa/Namibia and further north to tropical Africa. Naturalized locally in southern Europe. An invader in Australia where it has become troublesome. Flowering July—September. Fig. 6.

Vouchers

Goldblatt 2638; Archibald 3610; Rösch & Le Roux 457; Ward 4998; Mersmuller & Giess 32272; Purcell 7.

Introduced in England in 1702 by the Duchess of Beaufort. It was in cultivation in the hortus in Pisa, Italy and illustrated in Tilli’s Catalogue of Plants in 1723, on tab. 12, f. 1. The plant pictured on the right-hand side has narrower, somewhat smaller phylloclades, which led Tilli, Miller and others to regard it as a separate species but the phylloclades vary in size and width. The origin of the plants, figured by Tilli, is unknown.

3. **Myrthesiphylum ovatum** (Salter) Oberm., comb. nov.


Scandent, with twining branches up to 1–1.5 m tall. Rhizome compact scaly, woody with long roots extending in all directions, bearing numerous hard, swollen, fusiform tubers c. 50–100 x 20 mm, far removed from rhizome; much smaller in young plants; tubers may bring forth young plants at their proximal ends. Phylloclades deciduous, ovate, 30 x 15 mm but variable in size, many-nerved, shiny. Flowers 1–3, beside the base of a phylloclade; pedicels c. 10 mm, articulated near base of flower.
Perianth c. 6 mm, tepals reflexed near centre. Stamens with filaments flattened, erect, bearing a small basal spur on each side. Ovary oblong, with c. 8–10 ovules in each locule; style and stigmas just exerted from staminal column. Berry globose, 10 mm in diam., red. Figs 1.3, 1.5, 2.3 & 3.3.

Confined to the Cape Province, usually along the coastal belt from the south-western Cape to the eastern Cape, but also inland. Fig. 7.

Vouchers

Dyer 5338; Mauve & Hugo 243; Mauve 5347; Leach & Bayliss 12647.

4. Myrsiphyllum kraussianum Kunth, Enum. Pl. 5: 107 (1850); (as ‘kraussianum’). Type: Cape, Wynberg, Constantia, Krauss 1333 (B, holo.; in errore Krause).


Asparagus gramineus Kunth, Enum. Plant. 5: 108 (1850). Type: Cape of Good Hope, collector unknown. (B).

Scandent, 1–2 m tall, resembling M. asparagoides but with straight, narrower phylloclades and shorter pedicels. Rhizome bearing a congested cluster of sessile fusiform tubers. Stems and branches laxly curved, angled, ridged. Phylloclades narrowly cordate-acuminate, c. 15–30 × 5 mm, flat, striate,
with a distinct midrib, apiculate. **Flowers** pendulous, axillary; pedicels c. 3–5 mm long, articulated below perianth. **Tepals** c. 5 mm, white with a green midrib. **Stamens** with flattened filaments bearing two basal spurs; anthers orange. **Ovary** with 6 ovules in each locule. **Berry** 6–9 mm in diam., red. Figs 2.4, 3, 4a & 4b.

Southern Cape: recorded from the Cape Peninsula to the south-western and south-eastern Cape, in strandveld and fynbos. Fig. 8.

**Vouchers**

Purcell 68; Taylor 10235; Barker 10227; Strey 521; Van Breda & Joubert 1960; Acocks 17992.

A form of this species, bearing longer, narrower phylloclades c. 35–45 mm long, has been collected around the south-western Cape, viz Ceres, Worcester, Laingsburg and Swellendam.

**Vouchers**

Bayer 3153, 3344; Bond 247; Mauve & Hugo 240.
5. Myrsiphyllum volubile (Thunb.) Oberm., comb. nov.


?Ruscus volubilis Thunb., Prodr. 13 (1794); Kunth, Enum. Pl. 5: 276 (1859). Type as above.*

Asparagus asparagoides sensu Jessop in Bothalia 9: 81 (1966); non Druce.

Scandent with wiry twisted stems and short leafy branches, c. 1 – 1.5 m tall, often with a garlic scent. Rhizome terete, bearing swollen bulbous tubers c. 300 – 500 mm long, closely attached to it. Stems bearing short branches 40 – 80 mm long. Phylloclades broadly linear, abruptly acute above and below, c. 15 – 20 × 3 mm, without a distinct midrib, flat, soft, pale green. Flowers on short pedicels 4 – 5 mm long, articulation below perianth; tepals fused below, spreading above, c. 5 mm long, cream. Stamens with orange anthers, typical. Ovary ovoid; ovules 6 in each locule; style short. Berry not seen. Figs 2.5 & 3.5.

Recorded from the south-eastern to north-eastern Cape, in fynbos, coastal scrub or in forest undergrowth. Fig. 9.

Vouchers

Mauve & Hugo 124, 174, 241, 138; Archibald 4557; Smook 3819; Ecklon & Zeyher 4; Jessop 623; Geldenhuyzen 639, 515; Sim 4082; Thode A2771.
M. volubile can be distinguished from M. kraussianum by its softer phylloclades, which are rounded at the base and do not show a midrib.

'Giving off a garlic odour which scents the air around' (Tyson). Milk becomes tainted when cows feed on this plant.

6. Myrsiphyllum undulatum (L.f.) Kunth, Enum. Pl. 5: 109 (1850). Type: Cape of Good Hope, without precise locality, Thunberg (UPS, 8446; PRE, photo!).


Asparagus klinghardtianus Dinter in Feddes Rep. 29: 270 (1931). Type: South West Africa/Namibia: Klinghardtgebirge, Dinter 3998 (B, holo! PRE!).
REVISION OF THE GENUS *MYRSiphyllum* WILLD.


Erect rigid bushes (chamaephytes) 0.3–0.5 m tall, with long, simple spreading branches bearing regularly placed phylloclades. **Rhizome** compact, scaly, bearing numerous roots, some of these with large fusiform tubers continued below as normal long thin roots; occasionally they may produce a new shoot. **Stem** erect, ridged, with spreading long, usually simple branches. **Phylloclades** ovate-acuminate, up to 25 mm long (smaller on new growth), leathery, striate, often folded above. **Flowers** pendulous, 1–3 at a node; pedicels c. 5–9 mm long, with disk below perianth. **Tepals** broadly linear, c. 6 mm long, purple or green with cream margins, reflexed in upper half. **Stamens** with flat attenuate filaments bearing 2 small basal spurs; **anthers** orange. **Ovary** with 8–10 ovules in each locule. **Berry** globose, c. 5 mm in diam., red. Figs 2.6, 3.6.

Recorded from the Cape Peninsula along the west coast to South West Africa/Namibia, usually in the strandveld with its sandy soil. Flowering in spring. **Fig. 10.**

7. *Myrsiphyllum juniperoides* (Engl.) Oberm., comb. nov. Type: South West Africa/Namibia, Aus, Marloth 1538 (B, holo.).

Fig. 12.—Myrsiphyllum juniperoides, showing a soft branch which developed after the plant was placed in a conservatory at the Botanical Research Institute. J. J. Lavranos 21242, Rosh Pinah, SWA/Namibia.

Erect chamaephytes with stems up to 0.5 m tall, covered by a ‘cylinder’ of much abbreviated densely leafy branches, appearing ‘fox-tail’ shaped. Rhizome creeping, long, densely covered by numerous allantoid, shortly stalked root-tubers, placed in all directions, up to 40 × 10 mm, continued below as normal thin roots, densely covered by a velamen of root hairs. Stems ridged, scale-leaves persisting. Branches c. 30 mm long, ascending, overlapping. Phylloclades narrowly linear, c. 12 × 0.5 mm, glossy, yellow-green, margin densely ciliate, apex mucronate. Flowers solitary on the short branches; pedicels 1 mm long with the disk below perianth. Tepals free, connivent, forming a tube, curved outwards above, linear, obtuse, c. 7 mm long, white with a green midrib, margin of outer tepals densely, shortly ciliate, inner smooth. Stamens with filaments fused to tepals in lower half, outer somewhat shorter. Ovary oblong-ovoid with 4 ovules in each locule; style as long as ovary, stigmas small, curved outwards. Berry several-seeded, c. 7 mm in diam., red? Figs 3.8 & 11.8.

Apparantly endemic to the north-western Cape from Namaqualand to Clanwilliam, in sandy places in Namaqualand Broken Veld. Flowering in winter. Fig. 13.

Vouchers
Van der Wesruizen 272; Marloth 6719, 7794; Schlechter 8028.

Marloth 6719 from Garies-Okiep and Andræa 409 from Klauer show a sudden lengthening of the upper side-branches giving the plants a plumose apex. This has also been observed in other species adopting the cylindric habit.

A psammophyte recorded from southern South West Africa/Namibia and northern Namaqualand, with a few records further inland. Fig. 13.

Vouchers
Dinter 3723; Mersmuller & Giess 3418; Müller 818; Giess 13004; Verdoorn 1835.

8. Myrsiphyllum alopecurum Oberm., sp. nov., M. juniperoidi (Engl.) Oberm. affinis sed rhizomatibus elongatis multituberosis foliis fimbriatis differt.

Type.—Western Cape 2917 (Springbok): 22 km W by S of Springbok (-DB). Acocks 19268 (PRE, holo.).

Chamaephytum. Rhizoma elongata, tuberis multistecta. Tubera allantoidea, ad 40 mm longa. Caules erecti ad 0.5 m alti. Rami brevissimi aggregati. Phyllocladia numerosa anguste linearia, c. 10 mm longa dense ciliata adscendentia. Flores solitarii, breviter pedicellati; tepala anguste oblonga, ad basin tubum breve formantae, lobi recurvati externi ciliolati. Stamina typica. Ovarium ovoidum 4-ovulatum. Bacca plurisperma.

Chamaephyte with erect annual stems c. 0.5 m tall, slender, attenuated above, covered by a feathery ‘cylinder’ of much abbreviated densely leafy branches, appearing ‘fox-tail’ shaped. Rhizome creeping, long, densely covered by numerous allantoid, shortly stalked root-tubers, placed in all directions, up to 40 × 10 mm, continued below as normal thin roots, densely covered by a velamen of root hairs. Stems ridged, scale-leaves persisting. Branches c. 30 mm long, ascending, overlapping. Phylloclades narrowly linear, c. 12 × 0.5 mm, glossy, yellow-green, margin densely ciliate, apex mucronate. Flowers solitary on the short branches; pedicels 1 mm long with the disk below perianth. Tepals free, connivent, forming a tube, curved outwards above, linear, obtuse, c. 7 mm long, white with a green midrib, margin of outer tepals densely, shortly ciliate, inner smooth. Stamens with filaments fused to tepals in lower half, outer somewhat shorter. Ovary oblong-ovoid with 4 ovules in each locule; style as long as ovary, stigmas small, curved outwards. Berry several-seeded, c. 7 mm in diam., red? Figs 3.8 & 11.8.

Fig. 13.—Distribution of , Myrsiphyllum juniperoides; M. alopecurum
Schlechter on some of his collections gave it the name ‘alopecurus’, (as ‘alepocurus’), meaning fox tail.


A. crispus Lam., Encyc. 1: 295 (1783); Roem. & Schult., Syst. Veg. 7: 326 (1820); Kunth, Enum. Pl. 5: 73 (1850); Bak. in J. Linn. Soc., Bot. 14: 607 (1875); Fl. Cap. 6: 259 (1896); Marloth, F. S. Afr., t. 20 (1915); Salter in Fl. Cape Penins. 174 (1950); Jessop in Bothalia 9: 80 (1966). Type: ‘L’Ile de France’ (Mauritius), collector unknown (P, holo.; PRE, photo!).

A. flexuosus Thunb., Prodr. 66 (1794); Kunth, Enum. Pl. 5: 74 (1850). Type: Cape of Good Hope, without precise locality, Thunberg (UPS, 8450, holo.; PRE, photo!).


Soft deciduous copiously branched scramblers up to c. 1 m high. Rhizome creeping, covered by numerous thick fusiform root-tubers up to 50 mm long. Stems annual, angled, thin, green, declinate; branches likewise; branchlets short, bearing overlapping ternate cladodes, or sometimes these more laxly arranged. Cladodes linear-acuminate, c. 5–15 mm long, somewhat arculate. Flowers solitary on pedicels c. 5–11 mm long, articulated below truncate base of flower; tepals broadly linear, reflexed in upper half, c. 5 mm long, white to pale pink. Stamens with filaments bearing 2 basal spurs; anthers orange or red. Ovary oblong-ovoid, tapered into a persistent style, dark green; locules with 2–4 ovules. Berry oblong-ovoid, attenuated below, apiculate, c. 12 mm long, whitish, semi-transparent, 3–9-seeded. Figs 3.9, 11.9 & 14.

Recorded from southern South West Africa/Namibia to Namaqualand, the Cape Peninsula and east as far as Riversdale; in fynbos or coastal scrub, usually on rocky outcrops. Flowering May–September. Fig. 15.

Vouchers
Oliver 3430; Compton 14640; Hall 3640; Bos 168; Taylor 8621; Merxmuller & Giess 32218.

10. Myrsiphyllum scandens (Thunb.) Oberm., comb. nov.

Asparagus scandens Thunb., Prodr. 66 (1784); Roem. & Schult., Syst. Veg. 7: 325 (1820); Smoud. in Ref. bot., t. 21 (1869); Bak. in J. Linn. Soc., Bot. 14: 622 (1875); Fl. Cap. 6: 268 (1896); Salter in Fl. Cape Penins. 174 (1950); Jessop in Bothalia 9: 78 (1966). Syntypes: Cape of Good Hope without precise locality, Thunberg s.n. (UPS, 8461, 8462; BOL! PRE! photos).


Asparagopsis scandens (Thunb.) Kunth, Enum. Pl. 5: 78 (1850).

Perennial herbaceous, scandent, up to 2 m tall, probably evergreen. Rhizome small, covered by fusiform roots 20–40 mm long, tapering towards root-tips. Stems twining, wiry. Phylloclades arranged close together on one plane on both sides of branchlets, the whole resembling the frond of a fern, ternate on alternating sides, one cladode somewhat longer than other 2, shallowly S-shaped, apiculate, 1-nerved, c. 8–17 x 1 mm. Scale-leaves minute, forming fringed white membranous tufts at nodes. Flowers pendulous, 1–3 at a node, on pedicels up to c. 10 mm long, articulated below attenuated pericladium. Tepals spreading, c. 4 mm long, white. Stamens attenuated towards apex; anthers green or yellow. Ovary globose with 3–4 ovules in each locule; style erect short, with 3 spreading stigmas.

Fig. 14.—Myrsiphyllum declinatum. The holotype (L!).

Fig. 15.—Distribution of Myrsiphyllum declinatum.
Berry globose, c. 8 mm in diam., orange or red, 1—2 seeded. Figs 3.10 & 11.10.

A Cape endemic. Recorded from the west coast at St Helena Bay to the Cape Peninsula and eastwards as far as Tsitsikamma. Also inland as far as Worcester; a shade-loving plant, frequent in wooded areas, needing moisture all the year round, apparently evergreen. Flowers August—October. Fig. 16.

Vouchers

Fries, Nordlinth & Weimarck 540; Mauve & Hugo 232; Marloth 4517; Ecklon & Zeyher s.n.; Werdermann & Oberdieck 355.

M. scandens (Thunb.) Oberm. and the next species, M. ramosissimum (Bak.) Oberm. have perianths similar to those of Protasparagus but agree in all other respects with Myrsiphyllum. They are considered more primitive.

11. Myrsiphyllum ramosissimum (Bak.) Oberm., comb. nov.

Asparagus ramosissimum Bak. in Gdnsr's Chron. n.s. 2: 6 (1874); J. Linn. Soc., Bot. 14: 622 (1875); Fl. Cap. 6: 268 (1896). Type: Eastern Cape, Pirie Forest near King Williamstown, Flanagan 2235 (PRE, neof.).

A. scandens Thunb. var. deflexus Bak. in J. Linn. Soc., Bot. 14: 622 (1875); Fl. Cap. 6: 268 (1896). Type: Somerset East, Boschberg, MacOwan 1771 (BOL; SAM).

Scandent, 1—2 m tall, evergreen perennial. Rhizome creeping, woody, scaly, c. 20 mm in diam., producing fusiform root-tubers terminating in long thin roots. Stems green, angled, ridges minutely papillate. Branches and branchlets spreading. Phylloclades usually 3-nate, linear, flat above, keeled below, 8—12 × 0.7 mm, apiculate, margin minutely papillate. Flowers solitary, similar to Protasparagus type; stalk filiform, c. 10 mm, articulated in lower half, pendulous. Tepals spreading, oblong-attenuate, c. 3—4 mm, outer with a small callosity at base, white. Stamens with linear-acuminate filaments, anthers yellow or red, apiculate. Ovary ovoid, attenuated into a short style, stigmas with short spreading ciliate lobes; ovules c. 6 in each locule. Berry red or orange, 1—3 seeded. Figs 3.11 & 11.11.

Recorded from montane areas in the eastern Transvaal, Natal and eastern Cape to the southern Cape; in forests, kloofs and riverbank vegetation, in moist shady places. Flowering in summer. Fig. 17.

Baker described this species from a living plant, collected by Cooper in the eastern Cape and cultivated by Wilson Saunders in his garden at Reigate. It was evidently not preserved. [cf Jessop in Bothalia 9: 80 (1966)].

Vouchers

Kerfoot, Gooyer & Eastman 286; Galpin 14531; Deventer 206; Strey 6292; Compton 28084; Killick 1105; Galpin 10173; Dieterlen 707; Dahlstrand 1851; Compton 30552.

12. Myrsiphyllum fasciculatum (Thunb.) Oberm., comb. nov.


Asparagopsis consanguinea Kunth, Enum. Pl. 5: 76 (1850). Asparagopsis consanguinea (Kunth) Bak. in J. Linn. Soc., Bot. 14: 615 (1875); Fl. Cap. 6: 260 (1896). Type: Cape, without precise locality, Drège s.n. (Kiel, holo.; FKE, photo!; K, PRE, photo!).

Note: On the Kew sheet N. E. Brown gave Drège’s locality as between Krom River and Pietersfontein on the Piqueberg, under 1 000 ft, July. Asparagopsis schlechtendalii Kunth, Enum. Plant 5: 90 (1850). Type: Cape; at the Olifants River, Krebs s.n. (March). B. holo?

Scandent or prostrate, non-spinous (rarely with some small spines on stem below), much branched with deciduous cladodes in feathery fascicles, bearing solitary flowers. Rhizome woody with numerous swollen roots, c. 300—600 mm long and c. 20 mm in diam., smaller in younger plants. Stems spineless, or with some brittle spines below, glabrous, reddish brown. Branches widely spaced, laxly zigzagging, in turn producing numerous short branchlets bearing the cladode-fascicles. Cladodes unequally long, 15—30-nate, c. 5—10 mm long, smooth, apiculate, somewhat curved, greyish green, deciduous. Flowers apical, solitary or rarely 2—3-nate, beside a cladode-fascicle; pedicel c. 5 mm long with disk below perianth. Tepals c. 5 mm, broadly linear, white with a brown central stripe,
FORMING A TUBE, RECURVED ABOVE. STAMENS ERECT, FILAMENTS FLAT, ATTENUATED ABOVE, ABRUPTLY NARROWED BELOW, FORMING BASAL SPURS; ANTHERS ORANGE OR YELLOW. OVARIES OBLONG-OVOID, SHORTLY STIPITATE, WITH 6–8 OVULES IN EACH LOCULE, STYLE LONG, STIGMAS SHORT, SPREADING. BERRIES SEVERAL-SEEDED, C. 10 MM IN DIAM., PINKISH RED. FIGS 1.4, 3.12, 11.12 & 18.

COMMON IN THE WESTERN STRANDVELD UP TO NAMAQUA LAND AND THE SOUTHERN KAROO AS FAR AS LAINGSBURG. NOT RECORDED FROM THE PENINSULA. THE YOUNG CLADODES APPEAR IN MARCH–APRIL; FLOWERS IN MAY–JUNE; FRUITS RIPEN IN SEPTEMBER.

Vouchers
Marloth 9049; Ecklon & Zeyher 1675; Esterhuysen 1805; Thompson & Le Roux 112; Schlechter 7890; Bolus 13882; Werger 414; Leistner 3390.

The fascicles containing numerous cladodes are unusual for this genus, but the pendulous flower, including the true pedicel, are typical of *Myrsiphyllum*. In old plants the root-system develops into a huge mass of long cylindrical roots, each 0.3–0.6 m long and c. 30 mm thick. Marloth (his No. 9049) counted up to 120 'finger thick' roots. Bayer 3287 shows a similar mass (photo). Fig. 19.

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