

shape, being 2–2.5 times as long as broad at the base in *C. glomerata* and 3–4 times as long as broad at the base in *C. schlechteri*. The style bases in these two taxa are respectively glabrous or minutely scabrid.

In *C. capitellata* and *C. bracteosa* the anther crests are pyramidal to globular in shape with the crest length equal to or shorter than the width at the crest base. The style base in both species is distinctly more scabrid than in either *C. glomerata* or *C. schlechteri*. In *C. filifolia* the size and shape of the anther crests and scabrid nature of the style base are the same as described for *C. capitellata* and *C. bracteosa*. This suggests a much closer relationship with these two taxa than with *C. glomerata* or *C. schlechteri*. This affinity is further indicated by the amount of reduction undergone by the inflorescence coupled with the reduction in the number of culm nodes.

Despite its close affinity with these two taxa and especially with *C. capitellata*, *C. filifolia* has a number of characteristics that clearly set it apart from other southern African species: these include the tufted growth habit, filiformous leaves and single-noded culms which have already been discussed. Other distinctive features include the large achenes, these being 1.6–2 times longer than those of other taxa, in which the achenes are all similar in size, ranging between 2.3–2.6 mm in length. Associated with the large achene is a long style base which varies between 0.9–1.4 mm, compared with 0.4–0.7 mm in other taxa. Another unusual feature found only in this species, although not well-developed in all the specimens examined, is the occurrence of plumose bristles.

Apart from the southern African species, the only other *Carpha* species found in Africa is *C. eminii* (K. Schum.) C.B. Cl. A detailed comparison between *C. filifolia* and this species has not been carried out, nevertheless it is clear from existing descriptions that these two taxa are not conspecific. Two characteristics of *C. eminii* that distinguish it from *C. filifolia* are its broad, flattened leaves, and small achenes which are only  $\frac{1}{3}$  the length of the glumes.

#### Key to the southern African species

Plants rhizomatous; leaves dorsiventrally flattened, keeled, 2–28 mm wide; inflorescence axis many-noded (2–6 fertile, 1–2 sterile); achene length 2.3–2.6 mm:

Plants of large stature, 0.8 to 3 m tall; fertile inflorescence nodes 4–6; anther crests linear-acuminate:

Leaves 15–28 mm wide, margins scabrid; spikelets 6–7 mm long ..... *C. glomerata*

Leaves 5–8 mm wide, margins entire; spikelets c. 3 mm long ..... *C. schlechteri*

Plants of small stature, less than 0.6 m tall; fertile inflorescence nodes 2–4; anther crests pyramidal to globular:

Inflorescence bracts narrowly lanceolate, chartaceous; achene epidermal cells isodiametric, outer periclinal walls crateriform ..... *C. capitellata*

Inflorescence bracts broadly ovate, papyraceous; achene epidermal cells longitudinally elongated, outer periclinal walls  $\pm$  planar ..... *C. bracteosa*

Plants tufted; leaves filiform, 0.5–0.75 mm diam.; inflorescence axis single-noded or nodeless; achene length 4–5 mm ..... *C. filifolia*

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## LAMIACEAE

### A NEW SPECIES OF *PLECTRANTHUS*

***Plectranthus dolomiticus* Codd, sp. nov.**, forma corollae *P. petiolaris* E. Mey. ex Benth. simile, sed caulibus tenuioribus decumbentibus, foliis et floribus parvioribus differt.

Herba perennis, semisucculenta, ramosa; caules decumbentes cinereo-tomentulosi, 100–150 mm longi. *Folia* petiolata; lamina semisucculenta, ovata vel late ovata, 20–30  $\times$  18–30 mm, subglabra, apice rotundato, basi truncata, margine manifeste crenato; petiolus 15–30 mm longus. *Inflorescentia* terminalis, simplex vel interdum ramosa, 70–130 mm longa; rhachis minute puberula; bractae ellipticae, 1.5 mm longae, persistentes. *Verticillastri* 10–25 mm distantes, 2–6-flori; pedicelli 4–5 mm longi, minute puberuli. *Calyx* campanulatus, demum 5–6 mm longus, subglaber; lobus posticus ovatus, erectus, 2 mm longus; lobus anticus subaequaliter 4-dentatus; dentes deltoideo-lanceolati, 1.5–2 mm longi. *Corolla* violacea, glabra, 9–10 mm longa; tubus aliquantum sigmoideus, basi 0.75 mm diam., ad fauce 2 mm diam.; labium posticum erectum, 2 mm longum, obscure 4-lobatum; labium anticum concavum, 2 mm longum. *Stamina* 4; filamenta 2 mm longa, libera. *Stylus* 2 mm fauce exsertus.

TYPE.—Transvaal, Farm Ostend, 7 km north-west of Penge Mine, 10 December 1982, Van Jaarsveld 7052 (PRE, holotype).

Perennial, semi-succulent, branched herb, about 100 mm tall and 300 mm across; stems decumbent, slender, greyish-tomentulose, 100–150 mm long. *Leaves* petiolate; blade semi-succulent, ovate to broadly ovate, 20–30  $\times$  18–30 mm, subglabrous, apex rounded, base truncate, margin distinctly crenate; petiole 15–30 mm long. *Inflorescence* terminal, simple or sometimes branched, 70–130 mm long; rhachis minutely puberulous; bracts elliptical, 1.5 mm long, persistent. *Verticils* 2–6-flowered, 10–25 mm apart; flowers in 1–3-flowered sessile cymes; pedicels 4–5 mm long, minutely puberulous. *Calyx* campanulate, eventually 5–6 mm long, subglabrous; upper lip ovate, erect, 2 mm long; lower lip subequally 4-toothed; teeth lanceolate-deltoid, 1.5–2 mm long. *Corolla* violet-purple, glabrous, 9–10 mm long; tube somewhat sigmoid, 0.75 mm deep at the base, increasing about the middle to 2 mm deep at the throat; upper lip erect, 2 mm long, obscurely 4-lobed; lower lip concave, 2 mm long. *Stamens* 4; filaments 2 mm



FIG. 5.—*Plectranthus dolomiticus* (Van Jaarsveld 7052, PRE, holotype).

long, free to the base. Style exerted by 2 mm, shortly bifid. Nutlets broadly ovoid, 1.5 mm long, pale brown. Figs 5 & 6.

TRANSVAAL.—2430 (Pilgrims Rest): 7 km NW of Penge Mine (—AD); Van Jaarsveld 7052.

This species was discovered independently in 1982 by Mr E. J. van Jaarsveld of the Kirstenbosch National Botanic Garden and Mr S. Venter of the Transvaal Nature Conservation Department on the dolomite formation which crops up in and near the Olifants River and Blyde River valleys in the eastern Transvaal. Here it grows in shallow, humus-filled rock crevices in arid woodland, usually in open



FIG. 6.—*Plectranthus dolomiticus* (Van Jaarsveld 7052, PRE, holotype), approximately natural size.

sunny places, forming small, semi-succulent plants about 100 mm tall and 300 mm across with slender, greyish-tomentulose, decumbent stems.

In growth habit the plants superficially resemble *Aeollanthus parvifolius*, but the calyx places it in *Plectranthus*. The shape and colour of the corolla are reminiscent of *P. petiolaris*, in which the tube is also somewhat sigmoid in shape, i.e. narrow at the base and at first ascending, then deflexed about the middle and expanding to the throat, but here the resemblance ends. *P. dolomiticus* is a smaller plant with semi-succulent, greyish stems and smaller leaves and corolla 9–10 mm long, whereas *P. petiolaris* is a robust herb, 0.5–1 m tall of forest margins with fairly thick, 4-angled, strigose stems, large, thin-textured leaves 40–140 × 35–110 mm, and corolla 12–15 mm long.

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## MELIANTHACEAE

### TWO NEW COMBINATIONS IN MELIANTHUS

*Melanthus pectinatus* Harv. in Fl. Cap. 1, Add. sub praef 21 (1860); Coulston & Bailey in Bailey, Cycl. Hort. 4: 2024 (1916); Phillips & Hofmeyer in Bothalia 2: 353 (1927); Bean in Chittenden, R. Hort. Soc. Dict. 3: 1281 (1951). Type: Cape, Namaqualand, Wyley s.n. (TCD, holo.).

*Melanthus trimenianus* Hook. f. in Trimen Jl. Bot. N.S. 2: 353 (1873); Hook. f. in Curtis's bot. Mag. 37: t.6557 (1881). Type: Cape, Namaqualand, Barkley s.n. (?K, holo.).

Shrub. Leaves up to 140 mm long; stipules paired, acuminate, 8 mm long, 1 mm wide; rachis unwinged to wings as broad as terminal leaflet; leaflets 7–27, narrowly linear to lanceolate, sinuate to dentate, dorsal surface stellately hairy over sunken veins, sometimes sparsely pilose over blade, ventral surface with a dense mat of short stellate hairs with large emergent stellate hairs. Inflorescence a sub-terminal raceme, erect to pendulous, elongating