

LABIATAE

NEW SPECIES OF *PLECTRANTHUS*

Plectranthus xerophilus Codd, sp. nov.; species insignis, *P. tomentosus* Benth. primo aspectu maxime simile sed calyce subaequaliter 5-dentato differt.

Suffrutex perennis radicibus tuberosis. *Caulis* erectus parce ramosus, 1–1,7 m altus, teres vel obscure quadrangularis, cano-tomentosus. *Folia* breviter petiolata vel sessilia; petiolus 2–5 mm longus; lamina ovata vel elliptica, 3,5–9 cm longa, 2,5–7 cm lata, supra strigosa, subtus dense cano-tomentosa glanduloso-punctata, valde reticulata, apice rotundato vel obtuso, basi cuneata vel obtusa, margine profundo crenato. *Inflorescentia* gracilis erecta subspicata vel paniculata, 25–60 cm longa; bractae lanceolatae vel lineari-lanceolatae acuminatae deciduae, 1,5–3 mm longae, dense tomentulosae. *Verticillastri* 0,3–2,5 cm distantes, 12–20-floribus; pedicelli 2–4 mm longi glanduloso-tomentulosi. *Calyx* 2 mm longus subaequaliter 5-dentatus, dense glanduloso-tomentulosus; dentes lanceolati, \pm 1,5 mm longi. *Corolla* violacea, glanduloso-tomentulosa; tubus 4 mm longus, basi 1 mm late, fauce 4 mm late; labium posticum cucullatum, 3 mm longum obscure 4-lobatum cymbiforme, 4–6 mm longum. *Stamina* 4, 7–8 mm longa, basi breviter connatis. *Stylus* 9–10 mm fauce exsertus. *Nuculae* brunneae, laeves, angulares.

TYPE.—Transvaal, 2430 (Pilgrims Rest): near Marone (–CD), Codd & Dyer 7729 (PRE, holo.).

Perennial, slender shrub with thick, horizontal, tuberous roots; stems erect, semi-woody, terete to obscurely 4-angled, sparingly branched, 1–1,7 m tall (including inflorescence), finely grey-tomentose. *Leaves* opposite, subsessile to shortly petiolate, subcoriaceous, ovate to elliptic, 3,5–9 cm long, 2,5–7 cm broad, upper surface dark grey-green, strigose, lower surface reticulate, densely grey-tomentose, tomentum of crisped multicellular hairs, short, gland-tipped hairs and numerous sessile gland-dots; margin coarsely crenate; apex obtuse to rounded; base cuneate to truncate; petiole 2–5 mm long. *Inflorescence* subspicate or paniculate with 1–3 pairs of basal branches, carried on slender peduncles up to 30 cm long; racemes up to 35 cm long; bracts early deciduous, lanceolate to linear-lanceolate, acuminate, 1,5–3 mm long, densely crisped tomentulose. *Flowers* densely clustered in 12–20-flowered verticillasters, verticillasters 0,3–2,5 cm apart; pedicels 2–4 mm long, densely crisped tomentulose. *Calyx* 2 mm long at flowering stage, enlarging to 4 mm long in fruit, subequally 5-toothed, densely crisped tomentulose and gland-dotted; teeth lanceolate, up to 1,5 mm long, the uppermost slightly broader than the rest. *Corolla* violet to mauve-purple, crisped tomentulose and gland-dotted without, glabrous within, bilabiate; tube 1 mm wide for 2 mm and then curved upwards, expanding into the upper lip, 4 mm wide at the throat; upper lip hooded, 3 mm long, obscurely 4-lobed; lower lip boat-shaped, 4–6 mm long. *Stamens* shortly connate at the base, 7–8 mm long, curved upwards in the lower corolla lip. *Style* curved upwards, exserted from the throat by 9–10 mm. *Nutlets* brown, smooth, angled. FIG. 3 and 4.

Found on dry, rocky slopes in the eastern and northern Transvaal and shows a marked ability to survive under hot, arid conditions. Its flowering season is from March to May.

TRANSVAAL.—2229 (Waterpoort): 6 km N. of Mara (–DC), Meeuse 10199. 2331 (Phalaborwa): Kruger National Park, Makadzi area (–CC), Van der Schijff 3853. 2429 (Zebediela): 24 km E. of Malipsdrift (–BB), 31/5/35, Obermeyer & Verdoorn 23; between Chuniespoort and Malipsdrift (–BC), Pole

Evans 4370; near Chuniespoort Police Station (–BD), Meeuse 10351. 2430 (Pilgrims Rest): 3 km S. of Mica (–BB), Leach 11637; 3 km S.E. of Steelpoort (–CA) Codd & Dyer 7712; 50 km N. of Burgersfort (–CA), Leach & Jones 13249; 30 km N. of Steelpoort Bridge on road to Penge Mine (–CB), Codd 10489; near Marone (–CD), Codd & Dyer 7729; Codd 8504; 16 km N. of Orighstad (–DA), Codd 10020; Echo Caves Motel, 30 km S. of Erasmus Pass tunnel (–DA), De Winter 7725; Blyde River Gorge near Mariepskop (–DB), Marsh s.n.; 48 km N. of Lydenburg (–DC), Dyer 3959.

P. xerophilus was first collected near Malipsdrift in 1935 (Obermeyer & Verdoorn 23) and has been cultivated in our Botanic Garden for more than 20 years.

The delay in describing it is largely because of uncertainty regarding its correct generic position. In certain respects its characteristics would place it in the genus *Coleus*, for example, the densely-glomerate verticils, the bracts being very early deciduous and the stamens being shortly connate at the base. On the other hand, the calyx shape, which is subequally 5-toothed, is not found in *Coleus*, but is reminiscent of *Burnatastrum*, a genus usually included in *Plectranthus*.

The modern tendency to take a broad view of *Plectranthus*, and to include *Coleus* within it, removes some of these difficulties. However, *P. xerophilus* possesses characteristics which are unusual even in this broader concept of *Plectranthus*, for example the thick, horizontal roots, the slender, woody stems which are subterete, not 4-angled, and the peculiar hooded upper lip of the corolla. Consideration was given to according it separate generic status, but there appear to be insufficient grounds for such a view.

The dense tomentum on the underside of the leaves of *P. xerophilus*, and the fact that the bracts are shed at a very early stage, gives this species a superficial resemblance to *Plectranthus* Sect. *Coleoides* Benth., including species such as *P. zatarhendi* Forsk. and *P. tomentosus* Benth., but these species have the conventional *Plectranthus* corolla and 1 + 4 calyx shape (i.e. the upper calyx tooth much larger than the other four).

Plectranthus hilliardiae Codd, sp. nov., a *P. ambiguus* (Bol.) Codd corolla tubo basi expanso 3–4 mm diametro differt.

Herba erecta perennis 30–40 cm alta; caulis semi-succulentus 4-angulatus parce ramosus, brevis antrosi-pilosus glandulosus, nodis hispidis. *Folia* petiolata; petiolus 1,5–3,5 cm longus; lamina late elliptica vel obovato-elliptica, 5,5–9 cm longa, 4–6 cm lata, submembranacea, utrinque parce strigosa, glanduloso-punctata, apice acuta vel obtusa, basi cuneata attenuata, margine non profundo crenato-dentata ciliata. *Inflorescentia* erecta raro ramosa; racemi 8–15 cm longi, rhachis glanduloso-tomentulosa; bractae lineari-lanceolatae acuminatae persistentes, 3 mm longae, glanduloso-pubescentes. *Verticillastri* 1,5–2,5 cm distantes \pm 6-floribus; pedicelli 4–5 mm longi glanduloso-hispiduli. *Calyx* 4–5 mm longus glanduloso-hispidulus; lobus posticus ovatus erectus, 2,5 mm longus; lobi laterales deltoideo-acuminati; antici lineari-deltoidei. *Corolla* lilacina, minute glanduloso-puberula; tubus 2,3–2,7 cm longus prope basin expansus, cylindrica, 3–4 mm diam.; labium posticum erectum, 5–6 mm longum, 5 mm latum obscure 4-lobatum; labium anticum cymbiforme, 4 mm longum. *Stamina* 4, filamentis liberis, superna 6 mm longa, inferna 8 mm longa. *Stylus* 8–10 mm fauce exsertus.

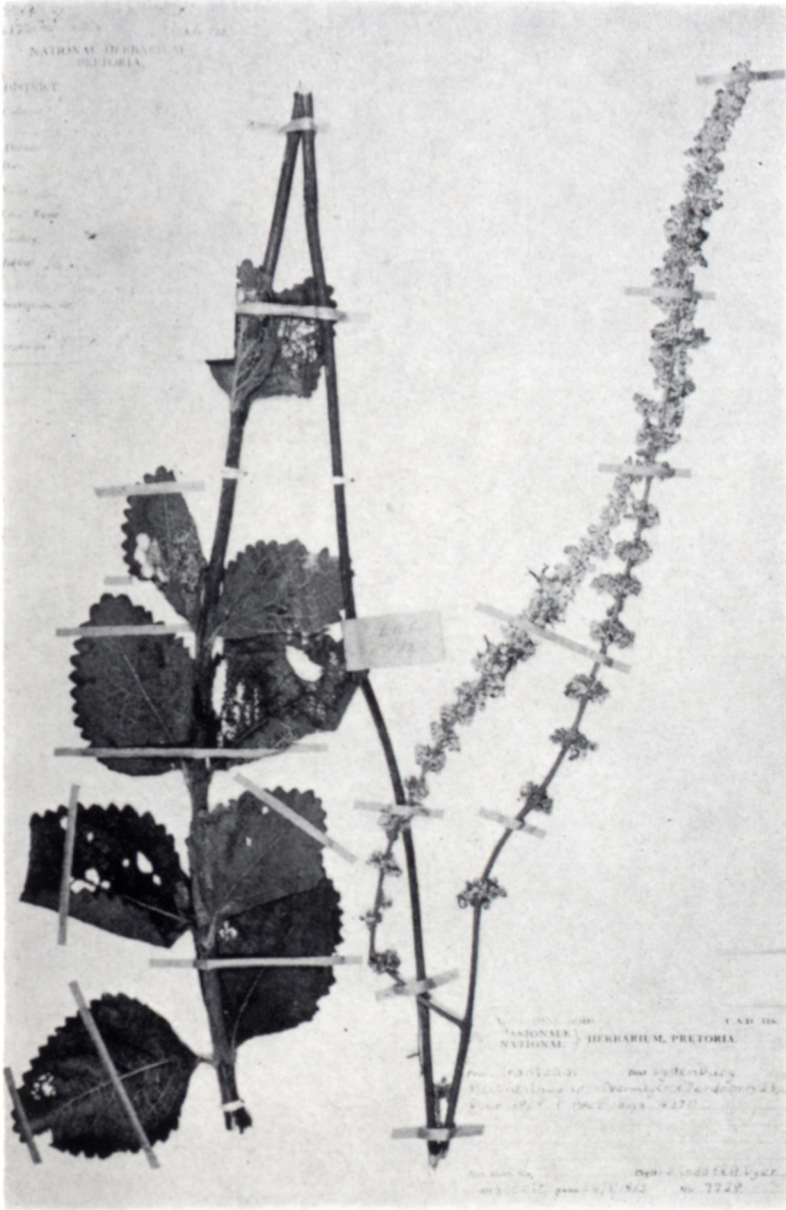


FIG. 3.—*Plectranthus xerophilus* Codd (Codd & Dyer 7729, holotype, in (PRE).



FIG. 4.—*Plectranthus xerophilus* Codd, showing the horizontal, tuberous roots (Hardy 2259).



FIG. 5.—*Plectranthus hilliardiae* Codd (Hilliard & Burt 6767, holotype, in PRE).

TYPE: Natal, 3130 (Port Edward): Umtamvuna River (-AA), Hilliard & Burt 6767 (PRE, holo.; NU).

Erect, perennial herb 30–40 cm tall, aromatic; stems semi-succulent, 4-angled, sparingly branched, shortly antrorse pilose and gland-dotted, with occasional long, multicellular hairs and tufts of long, stiff, multicellular purple-tinted hairs at the nodes. *Leaves*: petiole 1.5–3.5 cm long, densely appressed glandular pilose, similar to the stems; blade broadly elliptical to obovate elliptical, 5.5–9 cm long, 4–6 cm broad, semi-fleshy when fresh, drying membranaceous, dark green and sparingly strigose above, under-surface paler, reticulate-veined, sparingly strigose on the nerves and freely dotted with small, transparent, sessile glands; apex acute to obtuse; base cuneate, attenuate into the petiole; margin ciliate, shallowly crenate-dentate above the middle. *Inflorescence* erect, simple or sparingly branched, with a pair of branches near the base; raceme 8–15 cm long; rhachis glandular tomentulose with multicellular and short gland-tipped hairs; bracts linear-lanceolate, acuminate, 3 mm long, persisting to the fruiting stage, with gland-dots and long multicellular hairs. *Flowers* in sessile, usually 3-flowered cymes forming \pm 6-flowered verticillasters, verticillasters 1.5–2.5 cm apart; pedicels 4–5 mm long, finely glandular-hispidulous. *Calyx* 4–5 mm long at flowering stage, enlarging in fruit, glandular-hispi-

dulous near the base, subglabrous above; upper lip ovate, erect, not decurrent on the tube, 2.5 mm long; lower lip 4-toothed, the lower pair longer than the median; teeth linear- to deltoid-subulate. *Corolla* pale bluish, purple-flecked on the lobes, minutely glandular-puberulous; tube 2.3–2.7 cm long, slightly deflexed and expanding abruptly near the calyx to 4 mm wide and parallel-sided or narrowing to 3 mm wide at the throat; upper lip erect, 5–6 mm long and equally broad, bilobed at the apex and with two lateral ear-like lobes; lower lip shallowly boat-shaped, 4 mm long, horizontal or deflexed. *Stamens* free, the lower pair the longer, up to 8 mm long, horizontal to recurved. *Style* horizontal to ascending, exerted by 8–10 mm. FIG. 5.

A softly semi-succulent herb which grows among rocks near and in the margins of scrub forest and so far collected only on high ground above the Umtamvuna River a few miles inland from Port Edward. The flowering time is February–March.

NATAL.—3130 (Port Edward): Umtamvuna River (-AA) 26/2/71, Hilliard & Burt 6767; heights overlooking Umtamvuna River, 27/2/71, Nicholson s.n.

The species is named in honour of Dr Olive M. Hilliard of Natal University, who, together with Mr B. L. Burt of the Royal Botanic Gardens, Edinburgh, has made such valuable contributions to our knowledge of the South African flora.

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