

TWO NEW SPECIES OF *CYANOTIS*

***Cyanotis pachyrrhiza* Oberm.**, sp. nov., species distincta.

Herba colonifera, repens, diffusa. *Caudex* compactus, radicibus numerosis longis, robustis, crassis. *Folia* 5–7, aggregata, linearia, c. 70–150 × 5–8 mm,

supra glabra nitida, subtus violacea, pilis erectis albis. *Spicae* axillares, saepe pedunculatae, multiflorae, compactae. *Spathae* cordatae, saepe elongatae, spicas longe superantes. *Bracteolae* parvae. *Flores* et fructus typici.

TYPE.—Transvaal, 2430 (Pilgrims Rest); Ohrigstad Dam, on rocky hill slopes (—DC), *Mauve & Retief* 5245 (PRE, holo.).

Perennials forming colonies, with a purple colouring and soft white pubescence. *Caudex* compact, small. *Roots* many, long, hard, tapered below, thick, c. 3 mm in diam., white (black when dry). *Leaf-cluster* with 5–7 erect, linear leaves, c. 70–150 × 5–8 mm, glabrous and shiny above, purple below and with erect white hairs. *Spikes* axillary, on erect or semi-decumbent annual stems; flowers many in a compact cluster, often pedunculate, the subtending spathe long and narrow, recurved, not enveloping flowers, or in some short; bracteoles small, ovate. *Calyx* with lobes fused basally, c. 7 mm, setose. *Corolla* just exerted from calyx, maroon; lobes triangular. *Stamens* with white filaments, fusiform below apex where the maroon, beaded, patent hairs are situated; anthers yellow. *Style* fusiform below stigma. *Capsule* subquadrate, sparsely setose above; seeds oblong-globose, c. 1.5 mm, wrinkled. Fig. 3.

So far only recorded from the eastern Transvaal, but with one record from the north-western Transvaal, montane, on rock ledges (quartzite). Flowering December.

TRANSVAAL.—2428 (Nylstroom): Geelhoutkop (—AD), *Breyer* in TRV 17813. 2430 (Pilgrims Rest): Mariepskop (—DB), *Van Dam* in TRV 26303; Lissabon Waterfall (—DD), *De Feyter* 65. 2530 (Lydenburg): top of Steenkampsberg (—AA), *Codd* 8052 (PRE); Dullstroom (—AA), *Galpin* 13126; Mount Anderson (—BA), *Smuts & Gillett* 2434.

Cyanotis robusta Oberm., sp. nov., *C. lapidosa* Phill. affinis, sed planta majora, robustiora, radicibus crassibus lignosis, lobis calycis c. 10 mm longis differt.

Herba colonifera, robusta. *Radices* crassae, longae, lignosae. *Folia* inequalia, 5–7, rosulata, linearia, 100(–300) × 15–20 mm, supra glabra, subtus lanata, pilis albis longissimis tenuis appressis. *Spicae* axillares, multiflorae, compactae. *Calycis lobi* lineari, c. 10 mm longi. *Flores* coerulei vel lilacini, typici.

TYPE.—Natal, 2830 (Dundee): along road between Mooi River and Weenen, c. 10 km past Middelrus (—CC), on rock ledges, under bushes, *Arnold* 1372 (PRE, holo.).

Spreading rhizomatous perennials forming colonies, saxicolous. *Roots* many, long, c. 4 mm thick (outer tissues apparently somewhat spongy). *Rhizome* compact, small, covered by lanate remains of leaf-bases. *Leaves* spreading, unequal in size, linear, 80(–300) × 15–20 mm, smooth and shiny above, lanate below with long thin white appressed hairs. *Flowering stems* annual, basal, spreading, c. 200–300 mm long; cymes axillary, compact, enveloped by long canaliculate spathes, c. 20–50 mm, becoming progressively smaller towards apex. *Flowers* c. 5–10 in each axil, pale sky-blue to mauve. *Calyx* with linear lobes c. 10 mm long, glabrescent to lanate. *Stamens* etc. typical of genus. Fig. 4.



FIG. 3.—*Cyanotis pachyrrhiza*. a whole plant, × 0.5; b, flower with bract and bracteoles, × 1.5; c, stamen, × 3.5; gynoecium, × 3.5. *Mauve & Retief* 5245.



FIG. 4.—*Cyanotis robusta*. Arnold 1372, holotype in PRE.

TRANSVAAL.—2430 (Pilgrims Rest): Wolkberg, NW face of Serala Peak (—AA), Müller & Scheepers 165 (PRE).

NATAL.—2830 (Dundee): Umkhumba Mountain near Weenen (—CC), West 1441 (NH); between Mooi River and Weenen (—CC), Arnold 1372. 2929 (Underberg); Joneskloof near Estcourt (—BB), West 1538 (NH).



FIG. 5.—*Ficinia* × *lucida* C. B. Cl., Bolus 6082 (K, holotype), an interspecific hybrid between *Ficinia cedarbergensis* and *F. ixioides* subsp. *glabra*.

The long thick roots and more robust habit distinguish it from *C. lapidosa*. There appears to be variation in size and degree of pubescence.

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