

## NEW RECORDS OF *CEROPEGIA*

***Ceropegia barbata* R. A. Dyer**, sp. nov., affinis *C. filiformi* (Burch.) Schltr., corolla multo minori, lobis apice libris barbatis differt.

Herba perennis suberecta, radicibus elongatis, fasciculatis, fusiformibus, carnosiss. *Caulis* tenuis, nonnunquam sparse ramosus, glaber. *Folia* linearia, 30–60 mm longa, leviter crassa, marginibus recurvis, glabra. *Pedunculi* extra axillas producti, 1-flori; pedicellus 6–7 mm longus. *Sepala* lineari-lanceolata,  $\pm 5$  mm longa, glabra. *Corolla*  $\pm 25$  mm longa, fere ad medium lobata; tubus  $\pm 13$  mm longus, basi globosus, 5–6 mm diam., ad faucem versus 8–9 mm diam. expansus, glaber, longitudinaliter nervata; lobi alabastro spiritaliter torti, usque 12 mm longi, liberi, suberecti, intra pilis longis cylindricis induti, apicem versus longe pilosi. *Corona* lobis exterioribus 5, profunde divisis, lobulis capitulatis, 1,5 mm longis, hirsutis; lobi interiores lineares, 2 mm longi, glabri. *Folliculi* 1–2, 130–140 mm longi, 4–5 mm diam.

TYPE.—Cape, 3321 (Ladismith): near Calitzdorp (–DA), *Blackburn in BOL 22660/1* (BOL, holo.).

Perennial herb, with rootstock producing a tuft of fusiform roots. *Roots* up to about 0,3 m long, fleshy, with thin laterals. *Stem* unbranched or sparingly branched from near base, slender, up to about 0,45 m long, apparently somewhat fleshy, scrambling with outside support and not twining, glabrous. *Leaves* linear, 30–60 mm long, somewhat fleshy, with the margins recurved, glabrous. *Peduncles* produced laterally at the nodes, 10–20 mm long, 1-flowered, with 1 terminal filamentous bract  $\pm 3$  mm long; pedicel 6–7 mm long. *Sepals* linear-lanceolate,  $\pm 5$  mm long, glabrous. *Corolla*  $\pm 25$  mm long; tube  $\pm 13$  mm long, straight or slightly curved, with a globose-elliptic inflation at base, 5–6 mm diam., narrowed to  $\pm 3$  mm and then gradually expanding to mouth 8–9 mm diam., longitudinally veined; lobes twisted in bud, up to 12 mm long, with terminal knob, becoming free, spread-



ing-erect, narrowly linear from a deltoid base, with long cylindric, dark-tipped hairs from the inner surface and with a mop of long filiform hairs from the somewhat club-shaped apex. *Corona* shortly united at base, produced into 5 pairs of erect lobes  $\pm 1.5$  mm long, with adhering club-shaped heads, with long hairs throughout; inner corona-lobes linear, erect,  $\pm 2$  mm long, glabrous. *Follicles* 1–2, 130–140 mm long, 4–5 mm in diam. (slightly immature).

It is about 40 years since the plant described here was collected by Mrs Blackburn and registered at the Bolus Herbarium. The details of accession are a little confusing. There are three sheets with the following details under *Ceropegia* sp. nov.:

(1) Jan. 1939—coll. Mrs Blackburn, Oudtshoorn Div., Calitzdorp, BOL 22660/II.

(2) May 1939—coll. S. Blackburn, Mossel Bay Div., Little Brak River, BOL 22661.

(3) Dec. 1939—coll. H. Blackburn, Oudtshoorn Div., Calitzdorp. BOL 22660/I.

It is presumed that the sheets were entered in the Bolus Herbarium Register at the same time and that the one dated December was given priority, 22660/I, because of its relative completeness. It is also presumed that specimens 22660/I and 22660/II were from the wild near Calitzdorp and that the other was sent from Mrs Blackburn's place of residence at Little Brak River when it produced follicles.

H. Huber in his revision of the genus in *Mems Soc. broteriana* 12: 139 (1957) (1958) cites a Blackburn specimen from Calitzdorp in December under the name *C. filiformis* (Burch.) Schltr. He did not annotate the Bolus Herb. material and he gives no indication where his Blackburn specimen was housed. It should be compared with typical *C. filiformis* and *C. barbata* to establish its identity. Calitzdorp is fairly remote from the general distribution area of *C. filiformis* and in a different vegetation type.

*Ceropegia barbata*, so named because of the bearded corolla-lobes, differs from *C. filiformis* mainly in the corolla-lobes being free at the tips, their shape which is different on opening, and their distinctive pubescence, which is absent in *C. filiformis*. The coronas of the two species are remarkably similar, which confirms their close affinity.

*Ceropegia connivens* R. A. Dyer, sp. nov. affinis *C. fimbriata* E. Mey., corollae loborum marginibus incurvis, pilis longis clavatis conniventibus, haud pendulis, indutis differt.

Herba perennis radicibus fusiformibus. *Caulis* tenuis, glaber, sparse ramosus, scandens. *Folia* rudimentalia,  $\pm$  lanceolata, caduca. *Pedunculi* extra axillas, 1 (2?)-flori, pedicellis  $\pm 10$  mm longis. *Sepala*  $\pm$  lanceolata, 2–3 mm longa. *Corolla* 30–40 mm longa; tubus basi spherico-inflatus, glaber, superne sensim amplius; lobi  $\pm 5$  mm longi, ad apicem versus connati,  $\pm 10$  mm lati, marginibus incurvis, pilis longis, clavatis, conniventibus induti. *Corona* basi breviter connata, lobis exterioribus semper profunde bilobulatis; lobi interiores incumbenti-erecti.

TYPE.—Cape, 3319 (Worcester): Mowers Siding, 8/9/1959, Stayner in K.G. 59/490 (PRE, holo.).

Perennial herb with rootstock producing a tuft of fusiform roots. *Stems* slender, glabrous, sparingly branched, climbing. *Leaves* rudimentary,  $\pm$  lanceolate. *Peduncle* extra-axillary at the nodes, 1 (2?)-flowered. *Sepals* lanceolate,  $\pm 3$  mm long. *Corolla* 30–40 mm long, glabrous; tube with basal inflation more or less spherical,  $\pm 7$  mm diam., expanding gradually to



FIG. 3.—*Ceropegia connivens*, branch of holotype in PRE, with all the long clavate hairs on the corolla-lobes directed inwards, thus not clearly visible,  $\times 2$ ). Photo: H. King.

mouth and conspicuously veined; lobes united into an incised canopy expanding to 10–12 mm diam., more or less flat-topped, broader than the mouth of the tube. *Corona* shortly campanulate at base, with 5 outer, suberect, usually deeply bilobed lobes; inner corona-lobes linear, incumbent-erect. FIG. 3.

This species appears to be restricted to the grid reference 3319 (Worcester) in the western Cape with a close relative, *C. geniculata* R. A. Dyer, in the area eastwards from Ladismith to the environs of Oudtshoorn.

CAPE.—3319 (Worcester): 1.5 km west of Mowers Siding, Stayner in K.G. 59/490; Tweefontein, 3 km east of De Wet Station, P. A. B. van Breda 1484; Hardy 442; P. V. Bruyns in K.G. 232/76, 48/77, 49/77 (all in NBG).

*C. connivens* has short, broad lobes or struts supporting the canopy, with the margins of the struts incurved and producing from the inner surface a mass of long, clavate, inwardly directed hairs. These hairs compare with the randomly spreading hairs of *C. geniculata* and the pendulous, vibratile ones on the rim of the canopy in *C. fimbriata* which is from the Fish River Valley in the eastern Cape. The canopy of *C. connivens* becomes flattish on maturity whereas that of *C. fimbriata* remains dome-shaped.

*Ceropegia decidua* E. A. Bruce subsp. *pretoriensis* R. A. Dyer, subsp. nov., a typo corollae lobis angustioribus, coronae lobis interioribus incumbenti-



erecto-patentibus acuminatis, foliis persistentibus differt.

TYPE.—Transvaal, 2528 (Pretoria): Meintjies Kop behind Union Buildings, cult., fl. 1956/02/29, L.E. Codd 9565.

This subspecies differs from subspecies *decidua* in the more persistent leaves, in the narrower spathulate corolla-lobes and in the longer incumbent-erect-spreading, acuminate inner corona-lobes.

On hills in the environs of Pretoria.

TRANSVAAL.—2528 (Pretoria): Meintjies Kop, E. A. Bruce 88, 89, 143; D. Hardy 1254; Repton 676; Venter PRE 57396.

***Ceropegia geniculata* R. A. Dyer, sp. nov., affinis *C. zeyheri* Schltr. et *C. conniventi* R. A. Dyer, corollae lobis supra vel infra medium geniculatis et plerumque pilis copiosis longis clavatis quoquoversus patentibus differt.**

Herba perennis radicibus fusiformibus. *Caulis* tenuis, glaber, sparse ramosus, scandens. *Folia* rudimentalia,  $\pm$  lanceolata, caduca. *Pedunculi* extra axillas, 1-flori, pedicellis  $\pm$  10 mm longis. *Sepala* lanceolata, 3–6 mm longa. *Corolla* 40–60 mm longa; tubus basi spherico-inflatus, glaber, superne sensim ampliatus; lobi 15–25 (–30) mm longi, apicem versus spathulati, 3–7 mm lati, connati, marginibus  $\pm$  recurvis, plerumque pilis copiosis longis clavatis quoquoversus patentibus induti. *Corona* basi breviter connata, lobis exterioribus profunde vel medium versus bilobulatis; lobi interiores incumbent-erecti.

TYPE.—3321 (Ladismith): south of Van Wyksdorp at Herbertsdale, 1973, A. J. Joubert in K.G. 46/1973 (NBG, holo.).

Perennial herb with rootstock producing a tuft of fusiform roots. *Stems*, slender, glabrous, sparingly branched, climbing. *Leaves* rudimentary,  $\pm$  lanceolate, deciduous. *Peduncle* extra-axillary, 1-flowered. *Sepals* lanceolate, 3–6 mm long. *Corolla* 40–60 mm long; tube globose-inflated at the base, glabrous, gradually expanded to the mouth; lobes 15–25 (–30) mm long, spathulate towards apex, 3–7 mm broad, “kneed” above or below middle, variably connate at apex, with the margins of the struts  $\pm$  recurved, usually with an abundance of long clavate hairs spreading in all directions. *Corona* shortly connate at the base with 5 deeply or moderately bilobulate outer lobes; inner corona-lobes incumbent-erect. FIG. 4.

This species has been recorded in recent times from several localities of the Little Karoo from Ladismith to Oudtshoorn District. It is not readily detected mingled with low Karoo bushes.

CAPE.—3321 (Ladismith): few km south of Van Wyksdorp (–CD), 4/3/73, A. J. Joubert in K.G. 46/73. 3320 (Montagu): east of Touws River (–AC), Jan. 1976. P. Bruyns in K.G. 2/76. 3321 (Merweville): Prince Albert, Aug. 1921, P. Marchand sub Marloth 10507 in PRE.

In addition to the above records, M. B. Bayer K.G. 389/77 from the Oudtshoorn district near Zwartskraal, is regarded as a form of *C. geniculata*, differing in the shorter, less “kneed” corolla struts. Bayer & Bruyns 1185, from near the type locality near Ladismith, also belongs here despite its longer, narrower struts devoid of long clavate vibratile hairs. The former shows a relationship with *C. connivens* and the latter with *C. zeyheri*. The relationship with *C. zeyheri* becomes more cogent when it is known that both Bruce Bayer and Peter Bruyns have collected specimens identifiable with *C. zeyheri* in the Ladismith division, not far distant from the typical form of *C. geniculata*. I lack field knowledge and am not in a position to speculate on the possible inter-relationships.

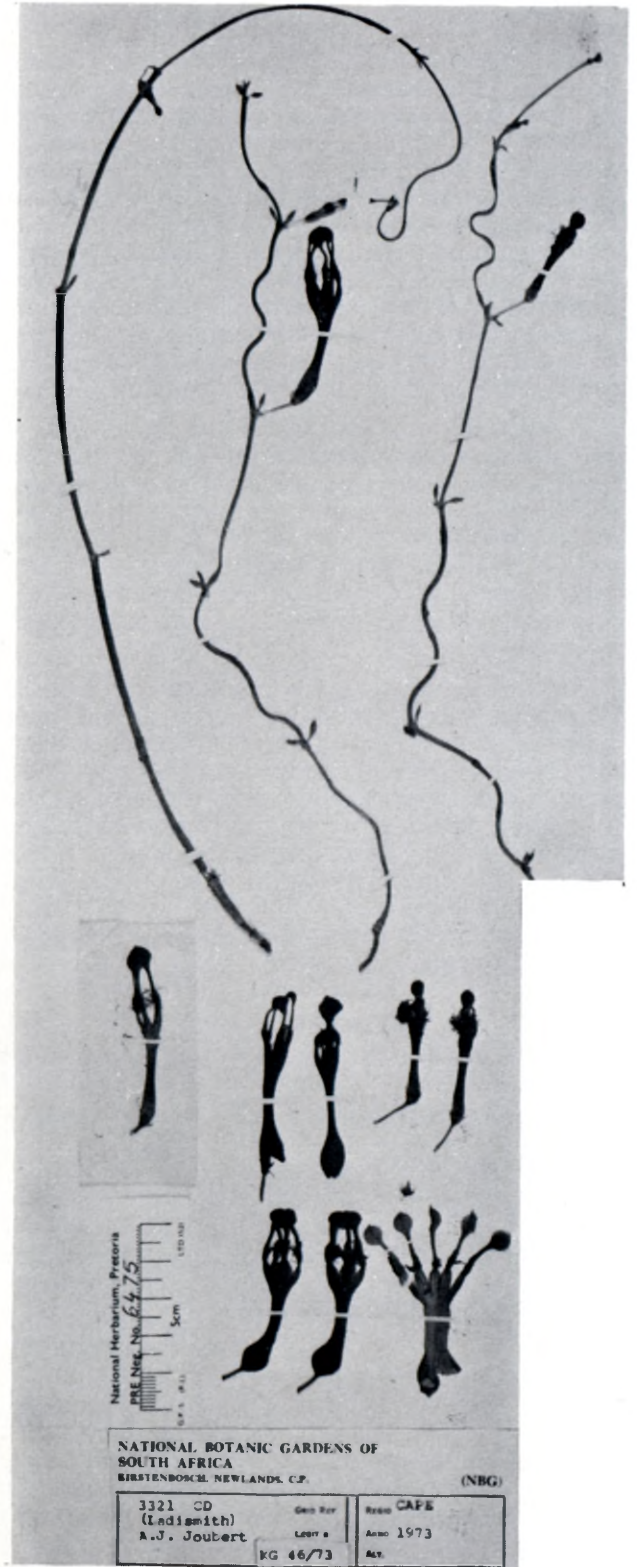


FIG. 4.—*Ceropegia geniculata*, holotype in NBG,  $\times 0.5$ ; corolla-lobes “kneed” at area with long clavate hairs.

The specimen *Marchand sub Marloth* 10507 in PRE, cited above and collected in 1921, long before the others, was originally identified as *C. fimbriata*, which error was to cause many years of confusion in this group with intricate relationships. I had in mind to entitle the present newly described taxon *mixomorpha* but the “kneed” corolla-lobes seemed the unifying character to be emphasized rather than the varying forms and hence the specific epithet *geniculata*.

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