

ERICACEAE

A NEW SPECIES OF *PHILIPPIA*, FROM THE DRAKENSBERG

Philippia drakensbergensis E. G. H. Oliver, sp. nov. *Philippiae evansii* speciei alterae habitanti in dracomontibus natalensis affinis, sed ab ea antheris subbasalibus (haud basalibus), stigmatibus infundibuliformi (haud peltato), indumentoque praesertim eglanduloso pilis longioribus glandulosis ad ramos ramulosque limitatis satis differt.

Frutex vel arbor ad 2,5 m altus. Rami adscendentes pubescentes indumento brevi inconspicuo admixto pilis crassioribus longioribus glandulosis. Folia 3-nata, 1,5–4,6 mm longa linearia usque anguste elliptica appressa vel erecta usque patentia et reflexa, pubescentia pilis brevibus crassis, demum sparse pubescentia, marginibus glandulis magnis sessilibus et subtus glandulis paucis breviter pedicellatis vestita; petiolo 0,6–0,8 mm longo sparse puberulo ciliato glandulis. Flores (2)3–6(8) nati in extremis ramulorum brevium lateralium, aggregatorum sub extremis ramorum; pedicello ad 1 mm longo glabro usque sparse pubescenti cum vel sine glandulis paucis; bractea totaliter recaulescenti; bracteolis deficientibus. Calyx 4-lobatus, lobis fere aequalibus usque maxime inaequalibus; lobo maximo abaxiali ad 1,7 mm longo late ovato usque elliptico, parte superiore $\frac{2}{3}$ foliiformi, fere libero; lobis lateralibus asymmetris, lobo adaxiali symmetrico, omnibus tribus 0,6–0,8 mm longis ovatis; omnibus lobis breviter pubescentibus usque sparse pubescentibus, marginibus glandulis sessilibus vestitis. Corolla 4-lobata, 1,2–1,6 mm longa cyathiformis glabra; lobis longitudine $\frac{1}{2}$ corollae partes aequantibus. Stamina 8; filamentis liberis vel ad basin parum conjunctis 0,5 mm longis linearibus glabris; antheris inclusis subbasaliter affixis 0,7–0,8 mm longis muticis scabris, lateribus glabris exceptis; poro parvo longitudine $\frac{1}{4}$ thecae partes aequanti. Ovarium 4-loculare ovulis multis in quoque loculo, late ovoideum 0,7 × 0,8 mm longistrorsum porcatum, pubescens pilis crassis appressis interdum glandulosis; stylo brevi 0,2–0,3 mm longo glabro vel raro sparse pubescenti; stigmatibus 0,3–0,4 mm lato infundibuliformi infra pubescenti, interdum solum paucis pilis. Fructus capsularis loculicidus; seminibus multis in quoque loculo laevigatis.

TYPE. — Natal Drakensberg, MnWeni Pinnacles, 7–8000 ft, July 1953, Esterhuysen 21651 (BOL, holo.; K; LD; MO; PRE).

Shrub or single-stemmed tree up to 2,5 m tall. Branches ascending, hairy, with short inconspicuous indumentum intermingled with stouter longer gland-tipped hairs. Leaves 3-nate, 1,5–4,6 mm long, linear to narrowly elliptic, appressed or erect to spreading and recurved with an appressed petiole, pubescent with short stout hairs all over when young becoming sparsely so, with large sessile glands on the margins and a few short-stalked glands on the abaxial surface; petiole 0,6–0,8 mm long, sparsely puberulous, glandular ciliate. Flowers (2)3–6(8)-nate at the ends of short lateral branchlets crowded towards the ends of the branches; pedicel up to 1 mm long, glabrous to sparsely pubescent, with or without a few gland-tipped hairs; bract fully recaulescent as the abaxial

lobe of the calyx; bracteoles wanting. Calyx 4-lobed, almost equal to highly unequal; the largest lobe abaxial up to 1,7 mm long, broadly ovate to elliptic with the upper $\frac{2}{3}$ leaf-like, reaching from half the length of the corolla tube to above the corolla interstices, almost separate; lateral lobes asymmetrical and adaxial lobe symmetrical, all three 0,6–0,8 mm long, ovate; all lobes shortly hairy to sparsely so and edged with sessile glands. Corolla 4-lobed, 1,2–1,6 mm long, cyathiform, glabrous; lobes $\frac{1}{2}$ the length of the corolla. Stamens 8; filaments free or slightly joined at the base, 0,5 mm long, linear, glabrous; anthers included, sub-basally attached, 0,7–0,8 mm long, muticous, adhering but not properly joined, rough with smooth sides; pore small, $\frac{1}{4}$ the length of the cell. Ovary 4-locular with numerous ovules per locule, broadly ovoid, 0,7 × 0,8 mm, longitudinally ridged, pubescent with short thick appressed hairs occasionally gland-tipped around the apex; style short, 0,2–0,3 mm long, glabrous or rarely

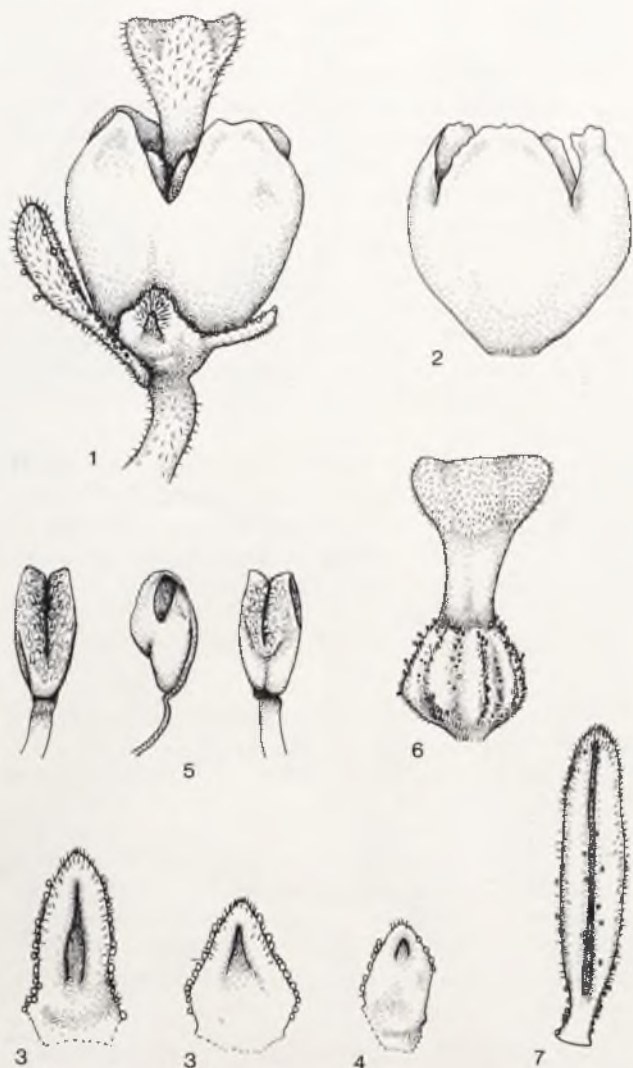


FIG. 2. — *Philippia drakensbergensis*. 1; flower; 2, corolla; 3, variation in the recaulescent bract (abaxial segment of the calyx); 4, lateral sepal; 5, anther, back, side and front views; 6, gynoecium; all × 20; 7, leaf, × 10. All drawn from the holotype, Esterhuysen 21651 (BOL).

sparingly hairy; stigma large, 0.3–0.4 mm broad, deeply funnel-shaped, hairy on the undersurface sometimes reduced to only a few distinct hairs. Fruit a loculicidal capsule; seeds numerous per locule, smooth. Fig. 2.

This species has remained undescribed since it was first collected by Dr Amy Jacot Guillarmod in Lesotho in 1947. Since then a number of collections have been made in the Natal Drakensberg by Miss Elsie Esterhuysen. It was recognized as being similar to *P. evansii* N. E. Br., the only known species of *Philippia* in the Drakensberg.

P. drakensbergensis can easily be distinguished from *P. evansii* by the short pubescence on the leaves, sepals, ovary and stigma and also on the branches and branchlets which have in addition, stouter longer gland-tipped hairs. *P. evansii*, by contrast, has an abundance of gland-tipped hairs also on its leaves. The anthers of *P. drakensbergensis* are subbasally rather than basally attached and the pore is relatively smaller. The shape of the stigma in the new species is quite different, being funnel-shaped, whereas in *P. evansii* it is peltate. The flowers tend to be more densely clustered near the ends of the branches than they are in *P. evansii*. The most noticeable difference in the living state would be the stickiness of *P. evansii* plants.

P. drakensbergensis has a different distribution range and perhaps also ecological preference to *P. evansii*. Although the two species grow in the same general area in the northern Drakensberg of Natal, *P. drakensbergensis* appears to favour the higher reaches of the mountains at altitudes between 2 100 and 2 500 metres. It also occurs in the drier climate of central Lesotho. Esterhuysen notes in the type collection 'where cooler conditions prevail this is commoner than *Erica ebracteata* or *Philippia evansii*'. *P. evansii* is confined to the eastern side of the escarpment where it grows, sometimes abundantly, at altitudes between 1 500 and 2 000 metres. The recent discovery of *P. drakensbergensis* on the Witteberg in the Cape Province extends the distribution range considerably further southward. Fig. 3.

Dr Jacot Guillarmod notes that the species occurs along streambanks, especially the north side, in Lesotho. I have only seen the species on the Witteberg in the north-eastern Cape Province, where it was common on south- and west-facing slopes alongside the streams or on open dry rocky grassy slopes. In sheltered places it formed a veritable forest of single-

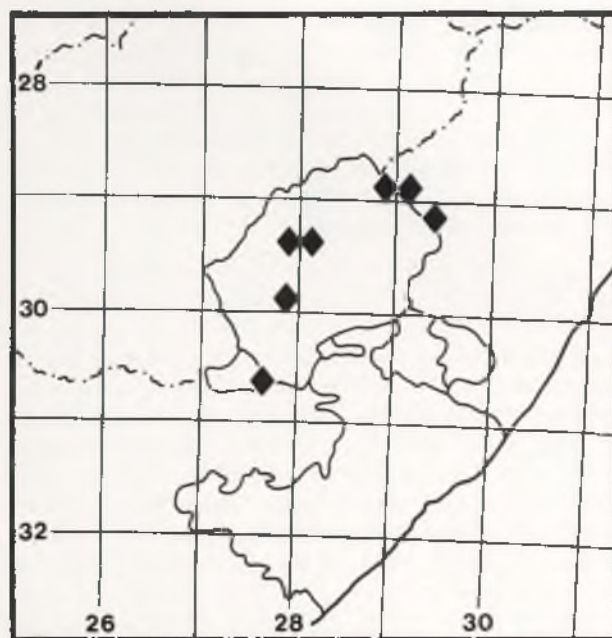


FIG. 3. — Distribution of *Philippia drakensbergensis*.

stemmed trees 2–2.5 m tall, reminiscent of the philippias in photographs of the East African ericoid belt on the high mountains. At an altitude of 2 100–2 500 metres the plants must be subjected to a substantial covering of snow during winter.

NATAL. — 2828 (Bethlehem): Mont aux Sources area, Linyati (–DD), Esterhuysen 21681 (BOL). 2829 (Harrismith): MnWeni Pinnacles (–CC), Esterhuysen 21646 (BOL; K; LD; PRE; S; STE; UPS); ibid. Esterhuysen 27837 (BOL; PRE); M'bundini (–CC), Esterhuysen 27809 (BOL; E; MO; NH; NU; NY; P; S; STE). 2929 (Underberg): Cathkin Peak (–AB), Esterhuysen 17361 (BOL; NBG; NU; PRE; STE); ibid. Esterhuysen 20236 (BOL; K; PRE; STE).

LESOTHO. — 2927 (Maseru): Makhaleng Valley near Quilloane Falls (–BD), Hilliard & Burnt 12043 (NU; STE); God Help Me Pass (–BD), Killick 4226 (BM; NBG; NH; PRE). 2928 (Marakabies): Little Bokong Valley (–AC), Jacot Guillarmod 309 (PRE); Mamalapi (–AC), Compton 21372 (BOL; NBG); ibid. Jacot Guillarmod 1217 (PRE); Putsua Mountains, Pass from Malealea to Simonkeng (–DD), Esterhuysen 13176 (BOL); Ribaneng Stream (–DD), Esterhuysen 13203 (BOL).

CAPE. — 3027 (Lady Grey): Beddelert in the Witteberg, Barkly East distr. (–DA), Hilliard & Burnt 13166 (NU; STE); ibid. Oliver 8394 (BM; GRA; MO; PRE; STE).

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