A NEW SPECIES OF *ERICINELLA* FROM THE SOUTHERN DRAKENSBERG

**Ericinella hillburttii** *E.G.H. Oliver,* sp. nov., Dracomontibus Capitis *Ericinellae multiflorae* Klotzsch Capite orientali affinis sed lobis corollae viridi-flavae cucullatis, staminibus inclusis, antheris terminalibus ovario insidentibus, filamentis brevibus apice latis aristis decurrentibus, foliis adaxiale praecipue basin versus pubescentibus.

Frutex erectus ad 1,5 m altus caulibus multis. *Rami* breve lanati glabrescentes, saepe sterigmatibus. *Folia* 3-nata appressa imbricata anguste ovata ad anguste elliptica ad oblonga 1–1,8 × 0,4–0,8 mm, abaxiale glabra, adaxiale pubescentia praecipue basin versus, juventute longe ciliata, caespite apicali demum strigulis; petiolo abaxiale puberulo juventute, saepe glabrescenti sed nonnullis pilis persistentibus. *Flores* 1–3(6)-nati extremis brachyblastorum lateralium coarctatorum; pedicello 1,5–1,7 mm longo puberulo viridi; bractea toto recaulescenti; bracteolis deficientibus. *Calyx* 4-lobatus viridis; lobo majore 0,7–0,8 mm longo, anguste triangulari, omnibus glabris ciliatis apice sulcatis. *Corolla* 4-lobata 1,2–1,8 × 1–1,3 mm late obovoidea, viridi–flava; lobis latis rotundatis partim cucullatis interdum emarginatis. *Stamina* 4 libera inclusa; filamentis 0,3–0,6 mm longis linearibus apice expansis glabris; antheris 0,5–1,1 mm longis ellipsoideis ad obovoideis ovario insidentibus glabris muticis ad distincte aristatis, aristis ad 0,2 mm longis partim decurrentibus; poro longitudine ¼–⅓ thecae partes aequanti. *Ovarium* 3-cellulare, 0,5–0,8 mm longum late ellipsoideum ad globosum longitudine porcatum in dimidio superiore, supra lanatum; stylo 0,6–0,9 mm longo glabro; stigmate infundibuliformi 0,4–0,7 mm diam. manifesto ad paulo exserto. *Fructus* capsularis 1,0–1,2 mm longus, sparse lanatus, septis base ⅓–½ capsulae partes aequantibus; seminibus anguste ellipsoideis c. 0,75 × 0,42 mm testa reticulata cellularum elongatarum impressarum marginibus irregulariter undulatis. Fig. 5.

TYPE.—Cape, Elliott District, Baster-voetpad between Saamwerk and Mt Enterprise, 2 130 m, 16 November 1983, *Oliver 8151* (PRE, holo.; BM; BOL; E; GRA; K; MO; NBG; NU; NY; S; STE).

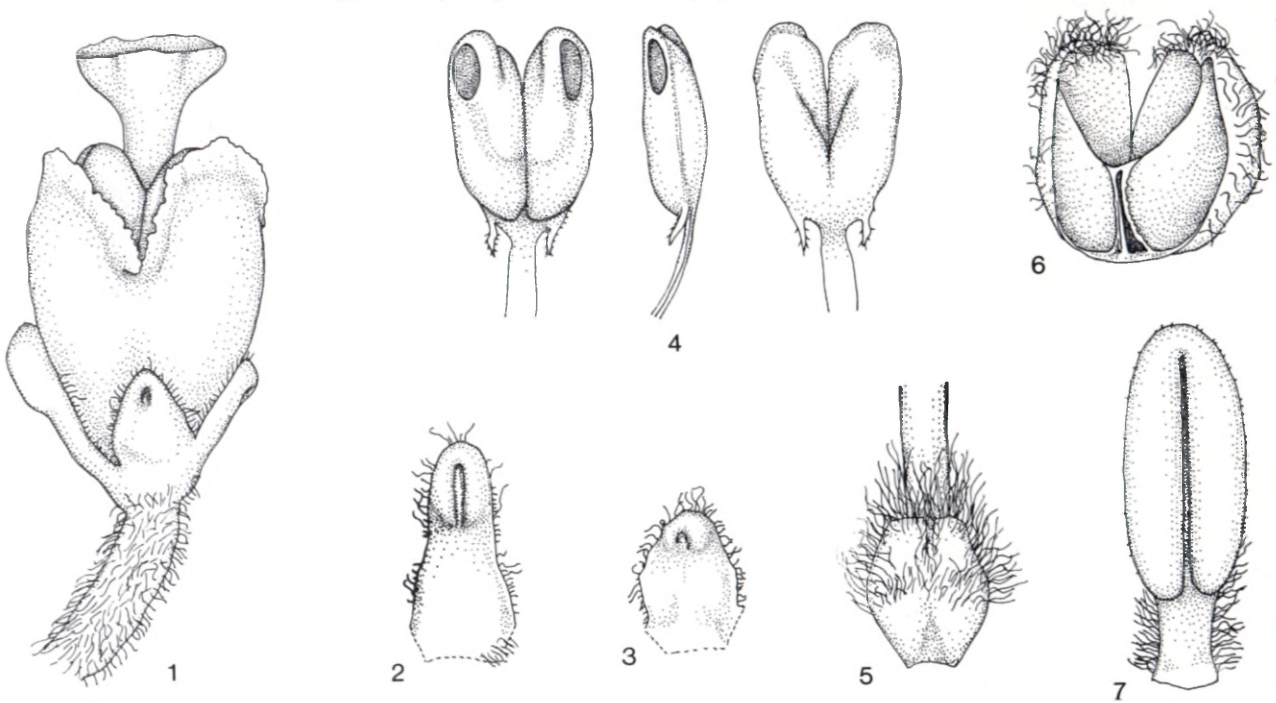


FIG. 5. — *Ericinella hillburttii*. 1, flower; 2, bract (as large lobe of calyx); 3, lateral sepal; 4, anther, front, side and back views; 5, ovary; 6, fruit with one valve removed; 7, leaf; all drawn × 25 from the holotype, *Oliver 8151* (STE).

Erect compact shrubs up to 1,5 m tall, many-stemmed from a woody rootstock. *Branches* shortly lanate soon becoming glabrous, often with distinct internodal sterigmata. *Leaves* 3-nate, appressed imbricate, narrowly ovate to narrowly elliptic to oblong, 1,0–1,8 × 0,4–0,8 mm, glabrous abaxially, pubescent adaxially mainly towards the base, long ciliate and pubescent all over when young and with an apical tuft which remains as strigulae; petiole puberulous abaxially when young, often glabrescent but with some long hairs remaining. *Flowers* 1–3(6)-nate on the ends of short lateral brachyblasts crowded at the ends of the branches; pedicel 1,5–1,7 mm long, puberulous, green; bract fully recaulescent; bracteoles wanting. *Calyx* 4-lobed, green; larger lobe 0,7–0,8 mm long, narrowly triangular to subspathulate from a broadened base; remaining lobes 0,6–0,8 mm long, more or less triangular; all lobes ciliate, the smaller ones pubescent on the inner surface, sulcate at the apex, the larger ones more so. *Corolla* 4-lobed, 1,2–1,8 × 1,0–1,3 mm, broadly obovoid, greenish yellow soon turning pale brown and papery; lobes broad, rounded, partially cucullate sometimes emarginate. *Stamens* 4, free, included; filaments 0,3–0,6 mm long, linear, expanded at the apex, glabrous, ⅓–½ the length of the anther; anthers 0,5–1,1 mm long ellipsoid to obovoid, seated on top of the ovary, glabrous, muticous to distinctly aristate, awns up to 0,2 mm long, partially decurrent; pore ¼–⅓ the length of the thecae. *Ovary* 3-celled, 0,5–0,8 mm long, broadly ellipsoid to globose, ridged longitudinally in the upper half, lanate above and mainly down the ridges; style 0,6–0,9 mm long, glabrous; stigma infundibuliform, 0,4–0,7 mm in diam., manifest to slightly exserted. *Fruit* a dehiscent loculicidal capsule 1,0–1,2 mm long, sparsely lanate with well developed septa at the base ⅓–½ the length of the capsule; seeds narrowly ellipsoid, 0,75 × 0,42 mm with reticulate testa of elongate sunken cells with irregularly undulate margins.

This species was first collected by Prof. Olive Hilliard and Mr Bill Burtt as recently as February 1983 when only fruiting material was available. From this it was nevertheless possible to determine that the material represented a new species. During November 1983, I visited the locality of their collection to collect flowering material and to study the species in the field. En route, material of *Ericinella multiflora* Klotzsch, the only other species in the genus in the eastern Cape, was collected on the Katberg Pass. This made it possible to compare the two species in the fresh state. Fig. 6.

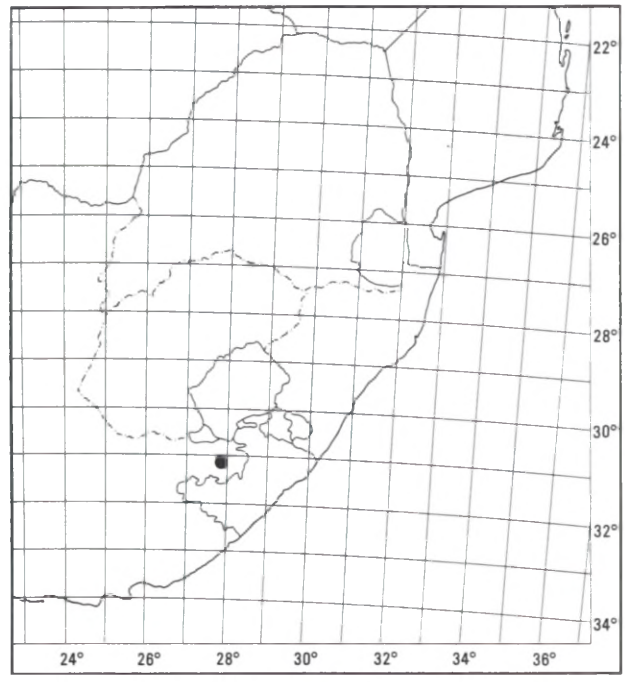


FIG. 6. — Distribution of *Ericinella hillburttii*.

*E. hillburttii* is allied to *E. multiflora*, but differs in a number of characteristics as set out in Table 1.

*E. hillburttii* is known to date only from the type locality, the Baster-voetpad in the mountains north-west of Elliott in the north-eastern Cape. Accessibility in these mountains is very poor, and other populations may well occur farther north towards Naude's Neck.

The plants were among the tallest in the vegetation, but because of the very dull colour and small size of the flowers were not very striking even when in full bloom. The above features, coupled with the larger stigma and lack of nectaries, suggest the wind pollination syndrome.

TABLE 1.—Comparison of characteristics of the allied species, *Ericinella hillburttii* and *E. multiflora*

| *E. hillburttii* | *E. multiflora* |
|---|---|
| Multi-stemmed from woody rootstock | Single-stemmed |
| Distinct internodal sterigmata often present on branches | No distinct sterigmata |
| Leaves adaxially pubescent mainly near the base | Leaves adaxially evenly pubescent |
| Corolla pink, lobes slightly cucullate | Corolla greenish yellow, lobes erect to spreading |
| Filaments 0,3–0,6 mm long, expanded at apex | Filaments c. 1,4 mm long, linear |
| Anthers included, seated on ovary | Anthers exserted, placed well above ovary |
| Anthers terminally attached | Anthers dorsally attached near base |
| Awns partially decurrent | Awns free |
| Ovary lanate | Ovary pubescent |
| Seeds ellipsoid | Seeds broadly ellipsoid to subsphaerical |

One striking feature of *E. hillburttii* is the large number of erect stems which arise from the basal woody rootstock. This is a sure indication that the plants regenerate quickly from the rootstock after a fire. This characteristic contrasts strongly with the single-stemmed habit found in its nearest relative, *E. multiflora,* and has probably evolved in response to the different habitat factors: *E. hillburtii* grows in shorter scrub vegetation on more open grassy slopes whereas *E. multiflora* grows on the edges of forest patches and in more sheltered woody scrub patches, only occasionally on open grassy slopes.

The plants of *E. hillburttii* occurred in a limited area on grassy rocky south-facing slopes with a surface layer of very loamy soil acting as a seep. At the high altitude of 2 100 m the plants have to tolerate very cold conditions during the winter months, often with a good covering of snow.

Specimen examined:

CAPE PROVINCE.— 3127(Lady Frere): Baster-voetpad (–BB), *Hilliard & Burtt 16662* (STE); ibid. *Oliver 8151* (see type).

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