

472. *Cynoglossum alticola* Hilliard & Burt, *species nova* *C. alpino* (Brand) B. L. Burt, *speciei ethiopicae*, affinis, sed corollis minoribus, lobis vix patentibus, glochidiis fructus robustioribus conicis distinguenda.

Herba perennis, albo-pubescent; caulis ad 60cm altus inflorescentia inclusa, 3.5mm diam., simplex, foliatus. *Folia* radicalia tempore florencia marcescentia; lamina ad 200×13mm, parte inferiore petiolari c.80mm longa, anguste elliptica, utrinque attenuata; caulina 35–100×6–8mm sursum in bracteas gradatim decrescentia, basi amplexante, apice plus minusve acuto. *Inflorescentia* paniculata parce ramosa; pedicelli c.5mm longi, ebracteati. *Calyx* fere ad basin 5-lobatus; lobi c.4×2.5mm, sub fructu ad 7×4.5mm ampliati et valde reflexi, elliptico-oblongi, obtusi, extra dense intus tenuiter pilosi. *Corollae* tubus ad fornicum bases 2.5mm longus, intus basi gibbis 10 parvis praeditus; lobi 4×3mm, oblongi, apice rotundato, caerulei, glabri pilis albis externe sub apice loborum exceptis; fornice c.0.75×1.5mm, crassi, leviter bilobi, acute papilloso, orem tubi fere occultantes, caerulei. *Stamina* 5, inclusa; filamenta in triente superiore tubi orientia, 0.3mm longa; antherae 1.25mm longae, sub medio dorsifixae. *Stylus* fructus 7mm longus; nuculae 9×7mm, ovatae, valde compressae, immarginatae, glochidiis validis conicis approximatis, cicatrice deltoidea 5×3.5mm, fascia styli cum nucula separata. **Fig. 1.** Type: E Cape, Barkly East distr., 3027 DB, Ben McDhui, 8600ft, 5 ii 1983, *Hilliard & Burt* 16468, cult. at RBG Edinb. under 831306 (E holo.). LESOTHO. Mokhotlong, 'Boheme' [Sesuto], nuisance in wool, 28 ii 1947, *Guillarmod* 997 (PRE); ibidem, 7500ft, i 1953, *Liebenberg* 5789 (PRE).

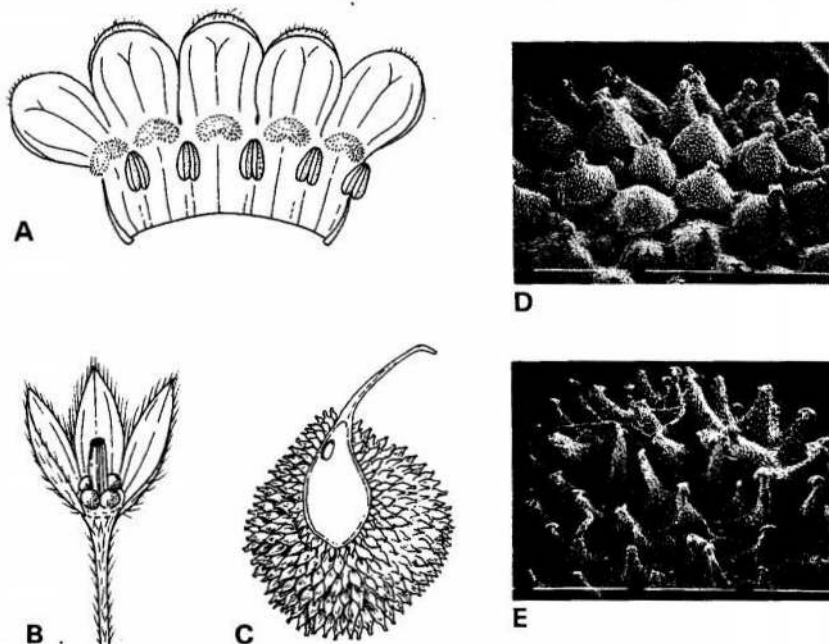


FIG. 1. *Cynoglossum alticola*: A, corolla, spread open, ×4; B, calyx and ovary (one sepal removed), ×4; C, nutlet showing scar of attachment and strip of styler tissue, ×3; D, surface of nutlet, ×12: all from cult. plant of *H & B* 16468. *Cynoglossum alpinum*: E, surface of nutlet, ×12: from *Schimper* 227.

Cynoglossum alticola has much larger nutlets than any other species in southern Africa and it has no close ally amongst them. It is related to a plant from the highlands of Ethiopia which was placed by Brand as *C. montanum* var. *alpinum* but is here raised to specific rank as *C. alpinum* (see above).

At first it was thought that *C. alticola*, found on sheep-grazed mountains, might be an introduction from Eurasia, but all the north temperate species that are in any way similar have the fornicies longer than broad, whereas in *C. alticola* they are broader than long. In this, however, it does agree with *C. alpinum* and there seems no doubt that it represents another example of the phytogeographical link between the mountains of southern Africa and the Ethiopian highlands.

Cynoglossum alticola grows on damp slopes and near streams at c.2600m on Ben McDhui on the Cape-Lesotho border. In February only old fruiting stems and new tufts of radical leaves were present. A plant raised from seed at Edinburgh flowered in May 1985 and also set fruit. Two other specimens from Mokhotlong had been misdetermined (Guillarmod, *Fl. Lesotho* 234, 1971) as '*C. basuticum* Weim.' (i.e. *C. spelaeum* Hilliard & Burt, a quite different white-flowered species).

473. *Cynoglossum austroafricanum* Hilliard & Burt, species nova *C. caeruleo* A. DC. affinis et magis comparanda sed differre videtur nuculis immarginatis (nec leviter marginatis) et glochidiis columnaribus basi vix incrassatis (nec conicis basi distincte expansis).

Syn.: [*Cynoglossum austroafricanum* Weim., Jacot Guillarmod, *Fl. Lesotho* 233 (1971); Gibbs Russell *et al.* in *Mem. Bot. Surv. S. Afr.* 48:109 (1984)—nomen nudum.]

Herba hispida, perennis vel biennis(?), radice palmari valido usque ad 1cm diam.; caulis ad 1m altus inflorescentia inclusa, ad c.5mm diam., simplex vel e basi ramosus, foliatus. *Folia* radicalia tempore florendi emarcida; lamina ad 170×25mm, elliptica, utrinque attenuata, parte petiolari ad 25mm longa; folia caulina plerumque 50–100×8–20mm in bracteis gradatim minores in inflorescentia transeuntia, lanceolata, apice acuta, basi angustata. *Inflorescentia* paniculata, bene ramosa. *Flores* numerosa. *Calyx* fere ad basin 5-lobus; lobi c.2–3×1.75–2.5mm sub fructu, anthesi paulo minores, late elliptici, obtusi, intus glabri, extra hispidi. *Corolla* 2.75–4.25mm longa; tubus lobis aequalis, extra glaber, intus zona papillarum basali 0.5mm lata; lobi 1.5–2.5×1.5–2.5mm suborbiculares, vivide caerulea, glabra, fornicibus 0.5–0.75×0.75–1.25mm plus minusve oblongis paulo bilobis extra papillosis orem tubi vix occultantibus caeruleis. *Stamina* 5, inclusa; filamenta e triente tubi superiore orientia, c.0.25–0.3mm longa; antherae 0.75–1mm longae. *Stylus* fructus 1.5–2mm longus. *Nuculae* 3–3.5×2.5–3mm, ambitu ovatae, leviter dorsoventraliter compressae, immarginatae, glochidiis columnaribus dense armatae, cicatrice deltoidea c.0.5×1.25mm, cum fascia styli caducae.

Type: Natal, Underberg distr., 2929 CB, Cobham Forest Reserve, Sipongweni, c.6500ft, 21 ii 1981, Hilliard & Burt 14072 (E holo., NU iso.).