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MS. received: 1995-08-30.

APIACEAE

A NEW SPECIES OF *CENTELLA*

The genus *Centella* is currently under revision. Field work and a study of morphological and genetic variation in the genus, (Schubert & Van Wyk in prep.) led to the discovery of an up to now undescribed species, closely related to *C. macrocarpa*.

***Centella glauca* Schubert & B.-E. van Wyk sp. nov.**, a *Centella macrocarpa* habitu multo robustiore, foliis glaucis foliisque juvenilibus laminaribus non acicularibus differt.

TYPE.—Western Cape, 3219 (Wuppertal): between Matjies River and Dwars River on road between Ceres and Algeria, *Hugo 730* (STE holo.; PRE). See *Hugo 729* (PRE, STE) which are from functionally male plants collected at the same locality as the bisexual holotype of this andromonoecious species.

Resprouting, densely virgate, robust, mostly dioecious perennial (Figure 6), up to 700 mm tall. *Leaves* acicular, somewhat succulent, (50–)80–90(–130) × 1–2 mm; distinctly glaucous, concolorous; glabrous; acicular; lamina indistinguishable from petiole; main vein slightly sunken; margin entire; apex acute (Figure 7D, E); coppice leaves petiolate; petiole (30–)40–50(–100) mm long; lamina cuneate or narrowly elliptic, (7–)15–25 × 2–3 mm (Figure 7A–C); base cuneate; margins sometimes inrolled, with 1–3 acute teeth on upper third of lamina; apex acute. *Inflorescence* mostly sparse, borne along the shoots; functionally male inflorescence with 3–6 umbellules; rays (5–)10–15(–25) mm long; bracts 2, acute at apex, glabrous; male flowers 3 on each umbellule, petals cream-coloured, glabrous; functionally bisexual inflorescence with single umbellule; ray (2–)15–20(–35) mm long; bracts 2, acute at apex, 2–3 × 1 mm, shorter than fruit (Figure 7I–L). *Fruit* very large, (4–)5(–7) × (3–)4(–5) mm; widely elliptic in commissural view, with 2 prominent, purple ribs visible on either side of both carpels (Figure 7I, J).

Judged by morphological similarities, the closest relative of *C. glauca* is *C. macrocarpa*, even though specimens have mostly been identified as *C. linifolia* or *C. virgata* in the past. *Centella glauca* is similar to *C. macrocarpa* but differs in the much larger habit, the glaucous leaves (hence the specific epithet) and the laminate, often toothed, coppice leaves. The mature leaves of *C. glauca* are acicular. Another distinct feature of *C. glauca* is that the rays of the functionally male and female umbellules

may often be extremely long. The ribbed fruits are very similar in shape and surface sculpturing (Figure 7I, J, N) to those of *C. macrocarpa*, but are usually much larger.

Centella glauca is furthermore geographically isolated from *C. macrocarpa* and is restricted to the extreme northern area of the Western Cape (Figure 8). It occurs on the Witzenberg, northwards along the Grootwinterhoek Mountains and also further north in the Cederberg near Citrusdal and Clanwilliam.

This new species forms an interesting morphological link between *C. linifolia* and the *C. macrocarpa/virgata*

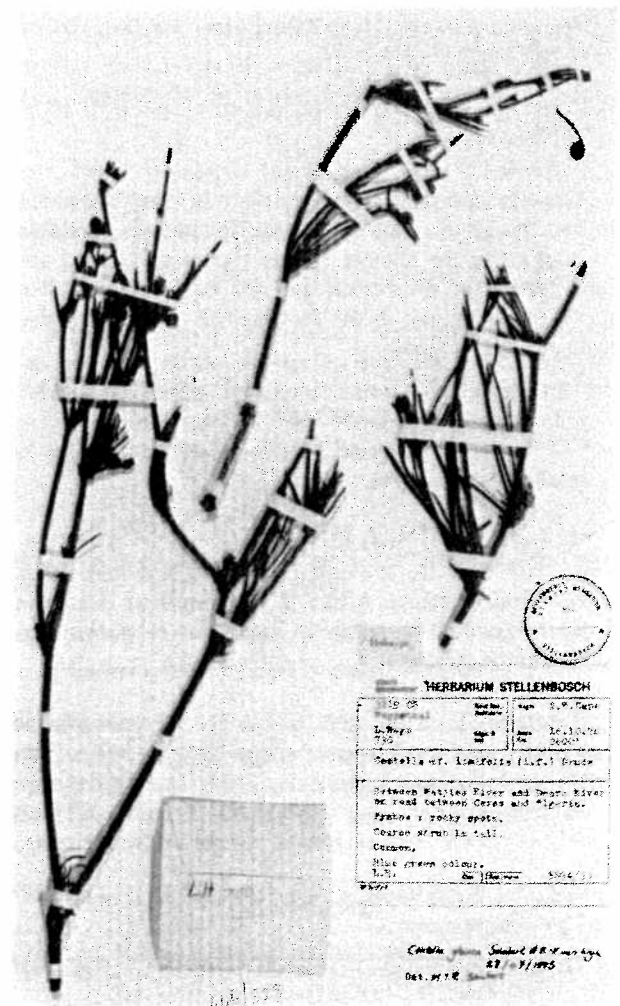


FIGURE 6.—Holotype of *Centella glauca*, *Hugo 730*.

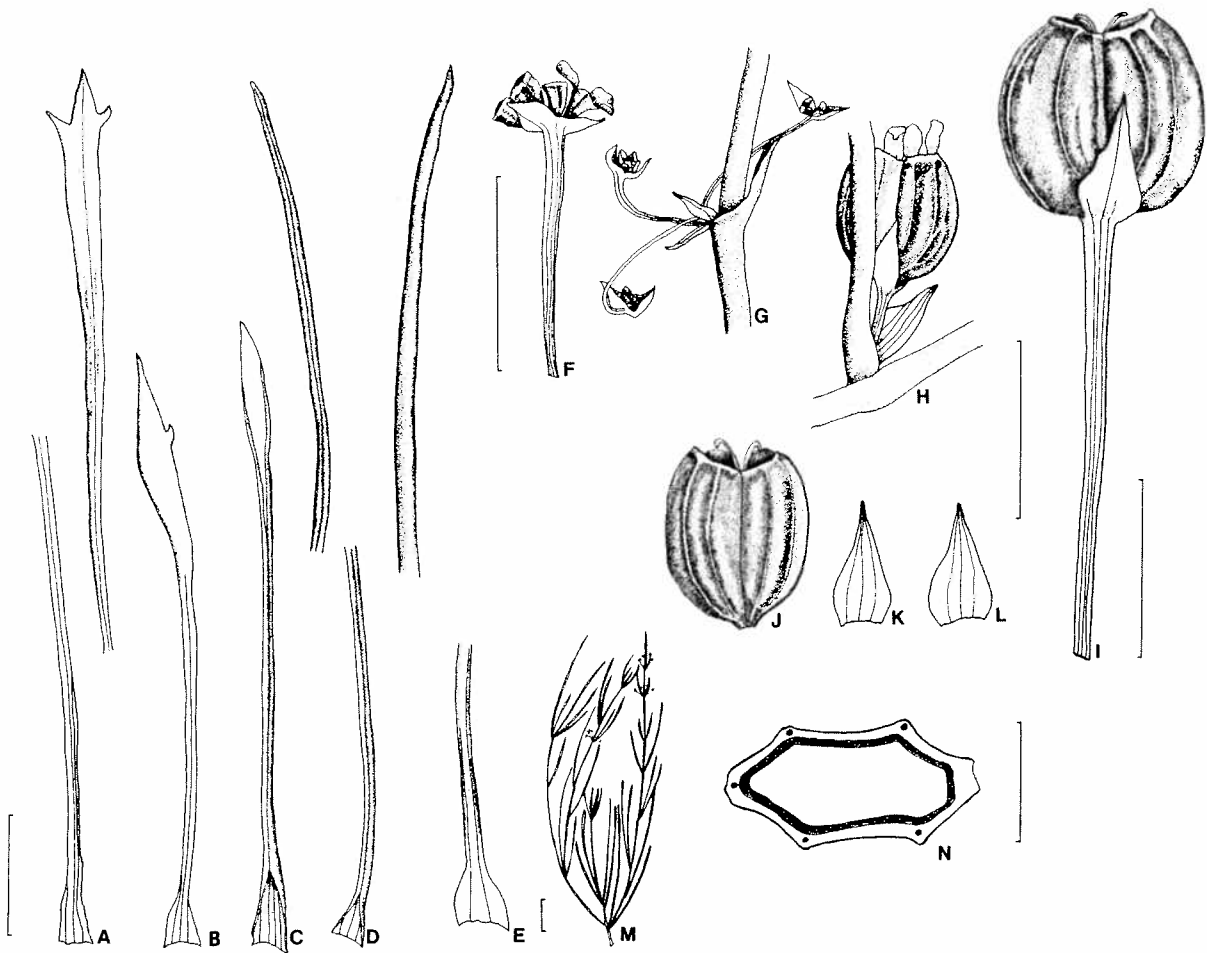


FIGURE 7.—*Centella glauca*. A, adaxial view of tridentate coppice leaf; B, abaxial view of coppice leaf with one/two teeth; C, adaxial view of coppice leaf with in-rolled margins; D, adaxial view of acicular mature leaf; E, abaxial view of acicular mature leaf; F, functionally male umbellule with 3 flowers; G, male inflorescence with 3 umbellules; H, female inflorescence (infructescence) reduced to a single fruit; I, mature fruit with bracts; J, fruit with bracts removed; K, abaxial view of bract; L, adaxial view of bract; M, habit; N, cross section of fruit. Scale bars: A–E, G, H, J & L, M, 5 mm; F & I, 10 mm; N, 2 mm.

complex. The apparent isolation of *C. linifolia* from the series *Virgatae* Adamson (1951) is therefore reduced. The new species combines the glaucous leaf surface and distinct lamina of *C. linifolia* (at least in coppice shoots) with the acicular leaves and virgate habit of *C. macrocarpa*. The new species appears to be invariably resprouting, whereas *C. virgata* and some populations of *C. macrocarpa* are obligate reseeder. Further studies are in pro-

gress to examine relationships amongst these and related species.

Material examined

WESTERN CAPE.—3219 (Wuppertal): Heuning Vlei, (–AA), Esterhuysen 7464 (BOL); Sneeuwkop, (–AC); Eselbank, (–AC), Taylor

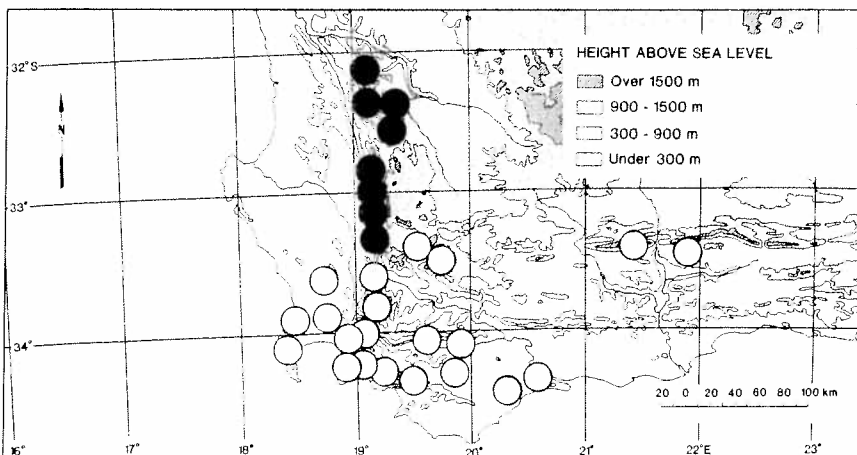


FIGURE 8.—The known geographic distribution of *Centella glauca*, ●, and *Centella macrocarpa*, ○.

11357 (NBG); Cederberg, Matjies River, (-AD), *Wagner 261* (NBG); Wolfberg, (-AD), *Esterhuysen 18099* (BOL); Truitjieskraal, (-AD), *Stirton & Zantovska 11496* (NBG); Zoo Ridge, (-AD), *Taylor 6117* (STE); between Matjies River and Dwars River, (-CB), *Hugo 729, 730* (PRE, STE); Kromme River, (-CB), *Leighton 21610* (BOL); Dasklip Pass, (-CC), *Schubert & Van Wyk 101* (E, GRA, JRAU, KMG, MO, NBG, PRE, S, WIND); mountains above Porterville, (-CC), *Barker 249* (BOL); *Edwards 16149* (BOL); *Esterhuysen 16116* (BOL, NBG, PRE); *Thompson 1459* (PRE, STE), *1460* (STE); *Zeyher 727* (SAM), 3319 (Worcester); De Tronk, (-AA), *Low 899* (STE); Visgat, (-AA), *Stokoe s.n.* (SAM); Groothoek Peak, (-AA), *Campbell 10362* (PRE, STE); Groot Winterhoek, (-AA), *Phillips 1751* (SAM); Winterhoek, (-AA), *Bolus 5057* (BOL); Witzenberg, (-AC), *Andreae 187* (STE). Without precise locality: *Marloth s.n.* (PRE); *Zeyher 727* (GRA, SAM), 742 (GRA).

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MS. received: 1995-09-20.