

## FABACEAE

### *CYCLOPIA SQUAMOSA* (PODALYRIEAE), A NEW SPECIES FROM THE SOUTHWESTERN CAPE PROVINCE

The genus *Cyclopia* Vent. is currently under revision. A study of the morphological variation within the genus indicated the existence of an undescribed species, quite unlike any of the 26 taxa recognized by Kies in her treatment of the genus in 1951.

***Cyclopia squamosa*** A.L. Schutte, sp. nov., *C. sessiliflorae* Eckl. & Zeyh. affinis sed petiolis prominentibus persistentibus, internodiis perbrevis, minus quam 1 mm longis (petioli inconspicui et internodia 3 mm vel longiora in *C. sessiliflora* et speciebus omnibus aliis), foliolis linearibus marginibus valde revolutis (foliolis oblongo-ellipticis marginibus tantum subrevolutis in *C. sessiliflora*), calyce bracteisque maioribus (valde minoribus in *C. sessiliflora*) atque pedicellis longioribus (valde brevioribus in *C. sessiliflora*) differt.

TYPE. —Cape Province, 3319 (Worcester): Paarl District, Wemmershoek Peak, on cliff and at base of cliff, on steep southern slope, (–CC), 25-10-1981, *Esterhuysen* 35695 (BOL, holo.; C, K, S, iso.).

Woody shrubs. *Branches* rigid, internodes short, less than 1 mm long, covered with prominent partially overlapping persistent petioles, appearing scale-like, ± glabrous; young twigs densely leafy, sparsely villous. *Leaves* alternate, trifoliolate, (8–)14–17(–22) mm long, sparsely villous, glabrescent. *Leaflets* linear, (6–)12–15 (–20) mm long, less than 1 mm wide, margins strongly revolute, caducous; apex acute, mucronulate; base distinctly pulvinate. *Petioles* flattened, up to 3 × 2 mm, persistent. *Stipules* less than 1 mm long, fused with petiole. *Inflorescences* axillary, single-flowered. *Bracts* paired, subequal,

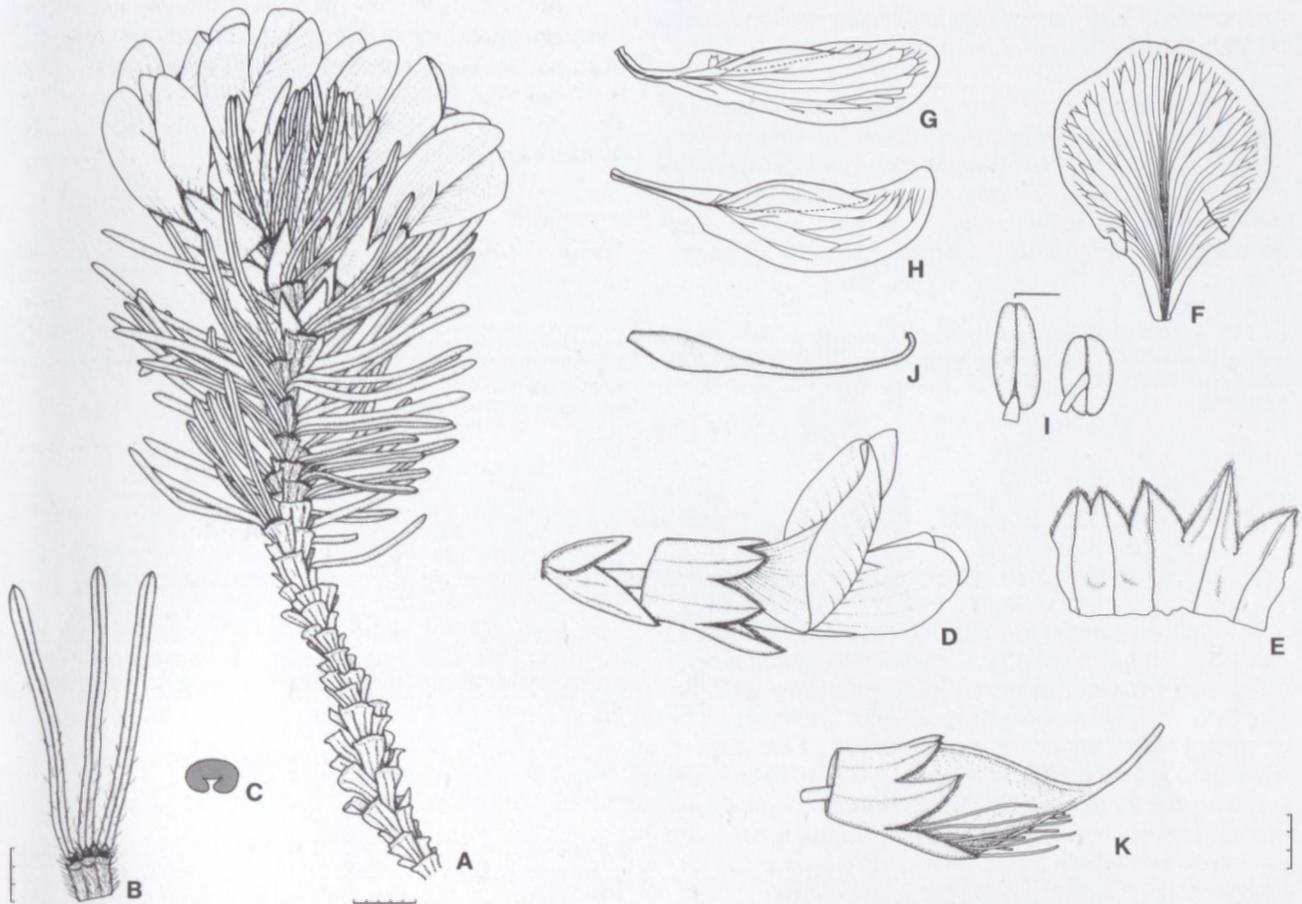


FIGURE 9.—*Cyclopia squamosa*. A, flowering branchlet showing the almost hidden flowers, conspicuous persistent petioles and short internodes; B, mature leaf, abaxial view; C, leaflet in transverse section (enlarged) to show strongly revolute margins; D, flower in lateral view, showing paired bracts; E, calyx opened out with upper lobes to the left; F, standard petal; G, wing petal; H, keel petal; I, anthers; J, pistil; K, young pod in lateral view. Scales in mm.

lanceolate, 6 mm long, keeled, outer surface glabrous, inner surface pubescent, margins thinly silky. *Bracteoles* absent. *Flowers* yellow, 15–17 mm long, almost hidden between leaves, glabrous. *Pedicels* 6–7 mm long, glabrous. *Calyx* intrusive at base, 8–9 mm long, glabrous; upper two lobes fused higher up, carinal lobe longer than the other four, keeled; lobes triangular-acute to lanceolate-acuminate, margins ciliate. *Standard* 15.0–15.5 × 11–12 mm; lamina obovate to suborbicular; apex emarginate; base cuneate; claw ± 3 mm long. *Wing petals* slightly longer than keel, 15.5–17.0 × 4.5–5.0 mm; lamina oblong to narrowly oblong, with distinct pocket ± 6 mm long; claw ± 3.5–4.0 mm long. *Keel petals* 14.5–16.5 × 3.5–4.5 mm, lamina oblong-elliptic, with distinct pocket ± 6 mm long; apex rostrate; claw 3.5–5.0 mm long. *Stamens* 10, filaments free; anthers distinctly dimorphic, 5 × 5, alternately short dorsifixed and long basifixed. *Pistil* sessile, 14–15 mm long; ovules 3–7; ovary glabrous; style slender, curved inwards at the apex, glabrous. *Young pods* 13 × 6 mm, ovate, glabrous. Figure 9.

This species is related to *C. sessiliflora* Eckl. & Zeyh. but differs in the presence of prominent petioles and very short internodes of less than 1 mm long (petioles inconspicuous and internodes 3 mm or longer in *C. sessiliflora* and elsewhere in the genus), the linear leaflets with strongly revolute margins (leaflets oblong-elliptic with margins only slightly revolute in *C. sessiliflora*), the larger

calyx and bracts, and longer pedicels (calyx 5 mm or shorter, bracts up to 2 mm long and pedicels 2–3 mm

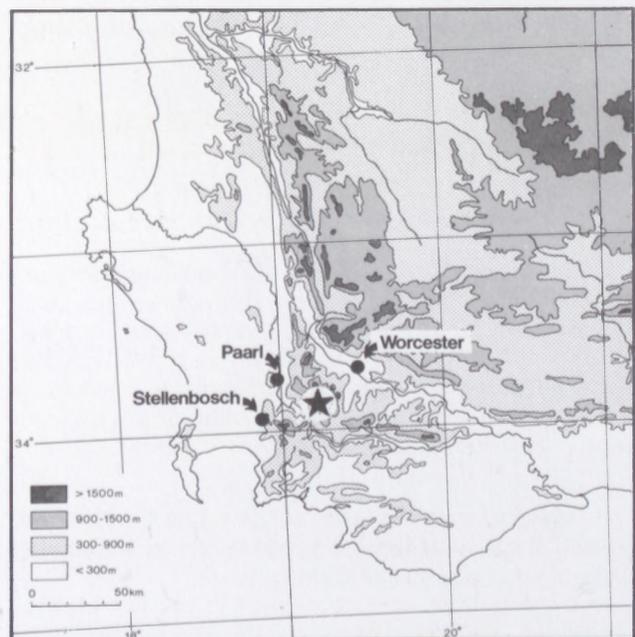


FIGURE 10.—The known geographical distribution of *Cyclopia squamosa*, ★.

long in *C. sessiliflora*). In the latter the standard is orbicular and very shortly clawed, versus obovate to sub-orbicular with a longer claw in *C. squamosa*.

*C. squamosa* is a rare legume known only from the type locality on the Wemmershoek Mountains in the south-western Cape Province (Figure 10). The conspicuous persistent petioles and very short internodes, giving the branches a scaly appearance, are useful diagnostic characters for this species, hence the specific epithet.

CAPE.—3319 (Worcester): Paarl District, Wemmershoek Peak, on cliff and at base of cliff, on steep southern slope, (—CC), 25-10-1981, *Esterhuysen 35695* (BOL, holo.; C, K, S, iso.), 04-04-1982, *Esterhuysen 35764* (BOL, C).

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