

## FABACEAE

### A NEW SPECIES OF *RHYNCHOSIA* FROM SOUTH AFRICA

The genus *Rhynchosia* is currently under revision. Herbarium and field studies have led to the discovery of an undescribed species which closely resembles *R. caribaea*.

***Rhynchosia atropurpurea*** *Germish.*, sp. nov. *R. caribaeae* habitu similis sed foliis valde minoribus, stipulis maioribus, vexillo et alis valde brevioribus quam carina, et carina omnino atropurpurea. Figure 19.

TYPE.—North-West, 2527 (Rustenburg): Pilanesberg Game Reserve, near Saulspoort, (–AA), 5-1-1989, *Germishuizen 4977* (PRE, holo.).

A much-branched shrub, scrambling herb or perennial twiner up to 1 m tall; stems densely clothed with thin appressed soft hairs, especially on young parts, sometimes interspersed with patent, bulbous-based glandular hairs

and raised golden glands, becoming glabrous and shiny with age. *Leaflets* pinnately 3-foliolate; upper surface sparsely pubescent, with a few scattered glands, glabrescent; lower surface with prominent nervation, densely pubescent especially on margins and veins, with small raised golden glands scattered in intervenal areas; terminal leaflet 16–25(–33) × 16–22(–36) mm, broadly rhomboid or deltoid, gradually narrowed to an obtuse or subacute apex; lateral leaflets 15–22(–30) × 11–20(–22) mm, with lower margin distinctly gibbous; petiole 15–26 mm long; petiolules 5–12 mm long, canaliculate, stipellate (Figure 20A). *Stipules* up to 3.5 mm long, subulate, appressed, densely pubescent and glandular outside, glabrous inside. *Inflorescences* axillary, lax, unbranched, up to 13-flowered racemes; bracts up to 3 × 2 mm, ovate, reddish brown, pubescent, caducous; ebracteolate. *Flowers* yellow with purple venation, keel deep purple to maroon. *Calyx* finely pubescent, glandular with raised golden glands and bul-



FIGURE 19.—Holotype of *Rhynchosia atropurpurea* Germish.

bous-based hairs; tube 3.5–4.5 mm long; lobes narrowly triangular, carinal lobe up to 7 mm long, longer than other lobes (Figure 20B). *Standard* 15–16 × 9–13 mm, broadly obovate to suborbicular, narrowing into an auriculate claw, sparsely sericeous with raised golden glands especially near apex on outside (Figure 20D). *Wing petals* up to 8 mm long, obovate to slightly cymbiform, slightly pouched (Figure 20C). *Keel petals* 17 mm long; pocket present on outside towards base, up to 1 mm deep; auricles present (Figure 20E). *Stamens* diadelphous; sheath split adaxially; anthers up to 1 mm long, alternately basifixed and dorsifixed (Figure 20F). *Gynoecium* up to 20 mm long; ovary 2-ovulate, densely white pilose; style bent in upper third, pubescent to point of flexure (Figure 20G). *Fruit* 35–44 mm long, oblong-falcate, narrowed towards base, recurving downwards at tip, conspicuously veined, covered with bulbous-based glandular hairs and raised golden glands. *Seeds* unknown.

Although *R. atropurpurea* and *R. caribaea* are superficially similar, *R. atropurpurea* differs from the latter in having much smaller leaves, larger stipules, the standard and wing petals much shorter than the keel petals and the keel dark purple to maroon throughout (in contrast to the yellow keel with maroon tip found in *R. caribaea*).

*Rhynchosia atropurpurea* occurs in the Northern Province, North-West and Mpumalanga (Figure 21), occupying a diverse range of habitats from ravine bush,

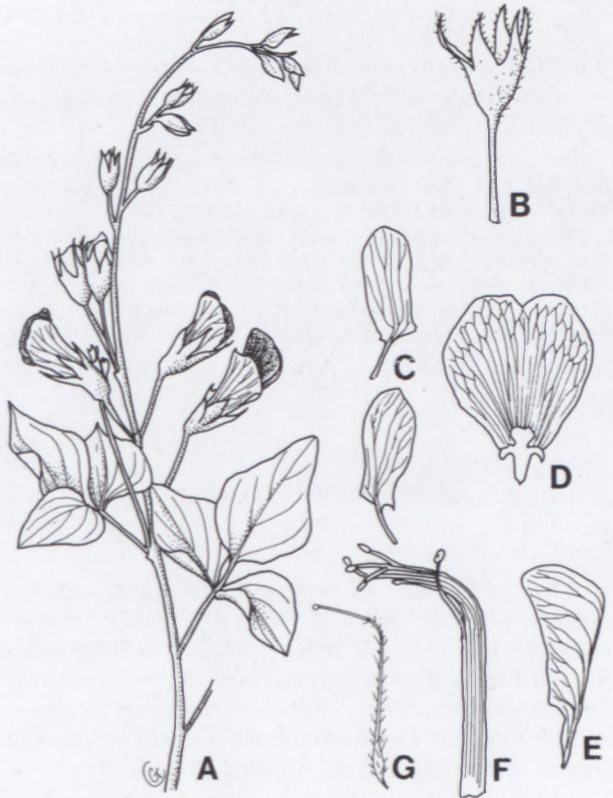


FIGURE 20.—*Rhynchosia atropurpurea*, G. Germishuizen 4977. A, flowering branch, × 1. B–G, × 1.5: B, calyx; C, wing petals; D, standard; E, keel petal; F, stamens; G, style. Drawing by G. Condy.

bushveld, to dense grassland with scattered trees on steep rocky granite hills. In contrast, *R. caribaea* occurs throughout southern Africa, except Lesotho. Flowering takes place from January to March, with fruiting concentrated in March and April.

The specific epithet '*atropurpurea*' refers to the characteristic dark purple keel of this species—in other species the purple marking is restricted to the apex of the keel.

*Specimens examined*

NORTHERN PROVINCE.—2327 (Ellisras): Mogol Nature Reserve, (–DD), *Fourie* 2588 (PRE). 2427 (Thabazimbi): Thabazimbi, western road, 5 km alongside road, (–CB), *Nel* 564 (PRU). 2430 (Pilgrims

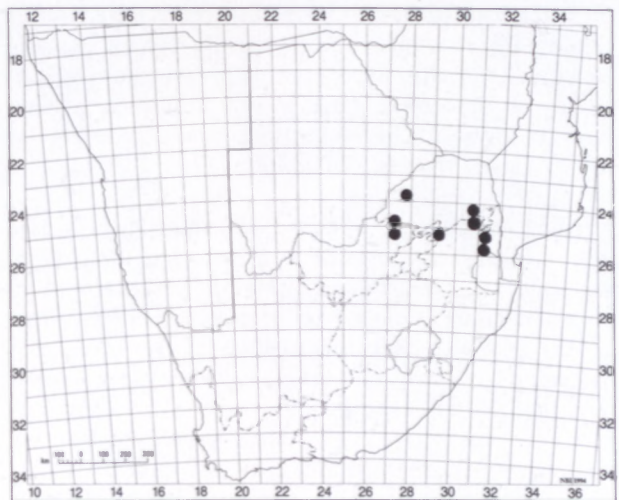


FIGURE 21.—The known distribution of *Rhynchosia atropurpurea* Germish.

Rest): Abel Erasmus Pass, (-BC), *Van Wyk, Dahlgren & Kok 5477* (PRE, PRU); beginning of Abel Erasmus Pass, (-BC), *Strey 3281* (PRE); Hoedspruit Dist., Chester Farm, (-BD), *Burgoyne 4090* (PRE);

NORTH-WEST.—2527 (Rustenburg): Pilanesberg Game Reserve, near Saulspoort, (-AA), *Germishuizen 4977* (PRE).

MPUMALANGA.—2430 (Pilgrims Rest): foot of Kaspers Nek, on Ohrigstad road, (-DA), *Hilliard 4722* (PRE); Mogaba California 228KT, (-DA), *Raal & Raal 1743* (PRE). 2529 (Witbank): 5 km from Groblersdal on road to Marble Hall, (-AB), *Germishuizen 3722* (PRE). 2531 (Komatipoort): Crocodile Valley Farm, 6 km from Nelspruit on Friedenau-Karino road, (-AC), *Coetzer 823* (PRE, PRU); 15 km from Barberton on road to Kaapmuiden, (-CA), *Coetzer 122* (PRE); Claremont Vale, 10 km north of Barberton, (-CA), *De Sousa 229* (PRE).

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