

## Notes on African plants

VARIOUS AUTHORS

### APOCYNACEAE

#### CATHARANTHUS AND VINCA IN SOUTHERN AFRICA

A good deal of confusion regarding the correct name of *Catharanthus roseus* (L.) G. Don has existed in the past. This pantropical weed has been commonly, but incorrectly, referred to as *Vinca rosea* L. But, as Lawrence (1959), Farnsworth (1961) and Stearn (1973, 1975) have convincingly established that *Vinca* and *Catharanthus* are distinct genera, differing in 34 morphological characters, cytology, chemistry and geographical distribution, there should be no further confusion. *Vinca*, with six species, is native to Europe, western and central Asia and has become naturalized in North America, whereas *Catharanthus*, with eight species, occurs in Madagascar, with one of the species in India. One of its members *C. roseus* has become a pantropical weed. The genus *Vinca* was established by Linnaeus in 1753 when he described two species *V. minor* and *V. major*. In 1759 he added *V. rosea* (now the accepted lectotype of *Catharanthus*). This species was separated by Reichenbach (1828) as the genus *Lochnera*. This name remained a *nomen nudum* until Endlicher provided a description in his *Genera Plantarum* 583 no. 3406 (1838). The name is illegitimate, however, as it is a later homonym of *Lochneria* Scop. (1777) and a synonym of *Catharanthus* G. Don (1837). The correct citation for the Madagascan periwinkle is therefore as follows:

*Catharanthus roseus* (L.) G. Don, Gen. Syst. 4: 95 (1837)  
*Vinca rosea* L., Syst. Nat. ed. 10,2: 944 (1759)  
*Lochnera rosea* (L.) Spach., Hist. Nat. Veg. Phan. 8: 526 (1839)

*Vinca gulielmi waldemarii* Klotzsch in Klotzsch & Garcke, Bot. Reise Prinzen Ergebn. Waldem. 89, t. 70 (1862)

*Ammocallis roseus* (L.) Small, Fl. S.E.U.S. 935 (1903)

*Vinca minor* and *V. major* have also become naturalized weeds in South Africa. They can be separated from *Catharanthus roseus* as follows:

Corolla funnel-shaped (infundibular) with a gradually expanded tube, anthers with apical appendages; seeds 6-8, 6-10 mm long, brown; foliage persistent, evergreen:  
 Calyx 3-5 mm long, glabrous ..... *Vinca minor*  
 Calyx 7-18 mm long, ciliate ..... *Vinca major*  
 Corolla salver-shaped (salverform) with an almost cylindrical tube, anthers without apical appendages; seeds 15-30, 1-3 mm long, black; foliage deciduous, not persisting ..... *Catharanthus roseus*

#### REFERENCES

- FARNSWORTH, N. R., 1961. The pharmacognosy of the periwinkle: *Vinca* and *Catharanthus*. *Lloydia* 14: 105-138 (good list of references).  
 PICHON, M., 1948. Classification des Apocynacées IX. *Mem. Mus. Hist. Nat.* 32, fasc. 6: 153-252.  
 LAWRENCE, G. H. M., 1959. *Vinca* and *Catharanthus*. *Baileya* 7: 113-119.  
 STEARN, W. T., 1973. A synopsis of the genus *Vinca* including its taxonomic and nomenclatural history. In W. T. Taylor and N. Farnsworth (eds), *The Vinca alkaloids*. New York: Marcel Dekker.  
 STEARN, W. T., 1975. A synopsis of the genus *Catharanthus* (*Apocynaceae*). In W. T. Taylor and N. Farnsworth (eds), *The Catharanthus alkaloids*. New York: Marcel Dekker.

C. H. STIRTON

### FABACEAE

#### A NEW SPECIES OF INDIGOFERA FROM THE SOUTH-WEST CAPE

*Indigofera superba* C. H. Stirton, sp. nov. subsectione *Psiloceratiae* Gillettii proxima.

Frutex erectus molliter lignosus ad 2 m altus; ramis in partibus superioribus ramificantibus, cano-albis, junioribus appressis strigulosis glabrescentibus. *Stipulae* liberae, subulato-setaceae. *Folia* regularia, imparipinnata. *Foliola* 9-11, 16-18 mm longa, 11-13 mm lata, suborbiculata ad late obovata, utrinque minute strigillosa semiconduplicata. *Inflorescentiae* axillares, racemosae densae, floribus multis, roseae. *Flores* 8-9 mm longi rosei, unoquoque bractea caduca filiformi 5-7 mm longa subtenti. *Tubus calycis* 2 mm longus, lobis 3plo brevioribus; lobis calycis omnibus linearibus, complanatis, villosis. *Vexillum* 8-8,5 mm longum, 4,2-4,7

mm latum, anguste ovatum. *Petala alarum* 8 mm longa, 2 mm lata. *Laminae carinae* 8 mm longae, 2 mm latae, manifeste saccatae. *Pistillum* 4,5 mm longum, glabrum sessile, ovulis 5-7. *Antherae* valde apiculatae, dorsifixae, squamis basalibus ad 0,5 mm longis; vagina stamineali 6 mm longa. *Fructus* cylindraceus (10)15-25 mm longus, 3 mm latus dehiscens; septa 2 mm lata, doliiformi, semina secedenti. *Semina* 2,25 mm lata et longaque, flavovirentia maculis purpurascensibus graduum variorum.

TYPE. — Cape, 3419 (Caledon): near Vogelpool, Vogelgat (-AD), I. Williams 2439 (PRE, holo.!, K, iso!; NBG, iso!; Vogelgat Herbarium, iso!).