# CRITICAL NOTES ON RHYNCHOSIA LOUR. AND DUNBARIA WIGHT & ARN. (FABACEAE)

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## ABSTRAC

Notes on a few endemic species of Rhynchosia Lour., and nomenclature of Dunbaria fusca Kurz are discussed.

### INTRODUCTION

Revisionary studies on the Indian species of *Rhynchosia* Lour., and *Dunbaria* Wight & Arn. were undertaken for the Flora of India programme.

Out of the 26 species of *Rhynchosia* recorded for the Indian flora, few are rare and endemic such as *Rhynchosia beddomei* Baker., *R. filipes* Benth., *R. heynei* Wight & Arn., *R. jacobii* Chandr. & Shetty and *R. velutina* Wight & Arn.

The nomenclature of *Dunbaria fusca* Kurz is also discussed.

 Rhynchosia beddomei Baker in Hook, f., Fl. Brit. India 2: 222. 1876; Gamble, Fl. Pres. Madras 374. 1918; Sharma et al., Fl. Karnat. 80. 1984.

Erect shrubs. Leaflets lanceolate, silky pubescent within, canescent without. Flowers yellow, in axillary racemes, pedicellate. Pods oblong, minutely pubescent, 1-seeded.

The species is endemic to Andhra Pradesh, Karnataka and Tamil Nadu. Gamble (l. c.) mentioned Bellary under distribution but actually no specimen from this district is present in Madras Herbarium. Sharma et al. (l. c.) quoted Bellary on the basis of Gamble's flora. The species is not reported from Tamil Nadu (Henry et al. 1983) but a specimen from Vandalur, Chingleput district collected by Gamble is present in DD.

Specimens examined: Andhra Pradesh: Chittor district, Horseleykonda, 1400 m Sept. 1918, Fischer 446 (CAL), 1500 m, July 1884, Gamble 15075 (CAL); on way to Kapalathirtham, 900 m, March 1959, Subramanyam 7854 (MH); Dec. 1975. G. V. Subbarao 46862 (MH); Thirumala to Papanasam, 1000 m, Jan. 1984, D. C. S. Raju 11300 (CAL); Cuddapah district, Codon hills, Nov. 1929. Collector s. n. (MH), Cuddapah hills, Beddome s. n. (MH). Tamil Nadu: Chingleput district. Vandalur, Jan. 1883, Gamble 10729 (DD).

R. filipes Benth. in Linnaea 24: 644. 1851;
Baker in Hook. f., Fl. Brit. India 2: 221. 1876;
Gamble, Fl. Pres. Madras 374. 1918;
Fyson, Fl. South Ind. Hill Stat. 1: 173. 1932 (Repr. ed. 1977);
Nair et Henry, Fl. Tam. Nad. (Ser. 1) 1: 119. 1983.

Trailing herbs; branches woody. Leaflets obovate to orbicular. Flowers in racemes. Pods oblong, finely pubescent, 2-seeded.

The species is confined to the Western Ghats on hilly tracts of Nilagiri, Pulney and Shevaroy hills at altitudes between 1500-2500 m. There is no specimen from Shevaroys in MH but there exists one specimen from Travancore hills without collector's name etc.

Many a times this species is confused with Atylosia rugosa Wight & Arn. beacuse of its similarity in general appearance, thickness and venation of leaflets.

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Specimens examined: Tamil Nadu: Kodaikanal, Perumal Peak, 1800 m, Sept. 1913, Aug. Sauliers 84 (CAL); Dindigul district, Upper Planis, 2166 m, Sept. 1911, Fischer 2898 (CAL); Kodaikanal, 2500 m, Nov. 1959, Saldanha 4731 & 32 (BLAT); New ghat road to Kodaikanal, Jun. 1898, Bourne 955 (MH); Kodaikanal, Silvar cascade falls, Oct. 1919, Jacob 16108 (MH); Nilgiris, Coonur and Dodabetta, 1890, Collector s. n. (MH). Kerala: Travancore Hills, Collector s. n. (MH).

3. Rhynchosia heynei Wight & Arn., Prod. Fl. Pen. Ind. Or. 240, 1834; Baker in Hook. f., Fl. Brit. India 2: 220. 1876; Gamble, Fl. Pres. Madras 374. 1918; Ramasamy & Razi, Fl. Bang. 298. 1973; Nair & Henry, Fl. Tam. Nad. (Ser. 1) 1: 119. 1983; Sharma et al., Fl. Karnat. 80. 1984.

Trailing shrubs with diffuse branches. Leaves ovate to elliptic. Flowers in condensed racemes, few, covered below by a large bract. Pods oblong, gland dotted.

The species is endemic to south India (Andhra Pradesh and Karnataka?). Baker (l. c.) quoted Nilgiris under distribution which was followed by Nair & Henry (l. c.) but actually no specimen from Nilgiris is present either in CAL or MH. Similarly Gamble (l. c.) quotes Mysore and Bellary in the distribution which was followed by Ramasamy & Razi (l. c.) and Sharma et al. (1984) but no specimen could be found in MH or BSI, Pune.

Specimens examined: Andersh Pradesh: Cuddapah district, Tummalabailu, Jan. 1958, Wagh 7752 (BLAT); Cuddapah forests, 1880, Beddome s. n. (MH); Chittor district, Mamundur, Mar. 1918, Fischer 4273 (MH); Thirumala hills, Papanasam, 1000 m, Jan. 1985, Raju & Ahamed 13024 (CAL); Ananthapur district, Pennu Kondah, Collector s. n. (MH).

 R. jacobii Chandr. & Shetty in Bull. Bot. Surv. India 15: 139-141. 1973; Nair & Henry, Fl. Tam. Nad. (Ser. 1) 1: 119. 1983. Trailing herbs. Leaflets ovate-oblong to elliptic. Flowers solitary or two. Pods subfalcate, 2-seeded.

The species is endemic to Tamil Nadu and has been collected only twice so far. Rangachari collected this species in 1916 from Mahendragiri, Tinnevelly district but could not identify it, leaving therewith a remark "Rhynchosia sp." on the specimen (MH 13545). Later Chandrasekhar and Shetty (l. c.) collected it from the same locality after a gap of 50 years and described it as a new species.

Specimens examined: Mahendragiri, Tinnevelly district, Sept. 1916, Rangachari s. n. (MH); Thulukkamparai, Mahendragiri hills, 425 m, July 1966, Shetty and Chandrabose 17989 (MH).

R. velutina Wight & Arn., Prod. Fl. Pen. Ind. Or. 238. 1834; Baker in Hook. f., Fl. Brit. India 2: 224. 1876; Gamble, Fl. Pres. Madras 375. 1918; Henry & Swaminathan in Bull. Bot. Surv. India 21: 227. 1979 (1981); Nair & Henry, Fl. Tam. Nad. (Ser. 1) 1: 120. 1983.

Twining herbs. Leaflets suborbicular, pubescent above, thinly pubescent below. Flowers 1 or 2. Pods oblong, narrowed towards the base, much curved, 2-seeded.

The species is rare in India but is distributed in Africa from Kenya to Tanzania. It is confined only to Tamil Nadu in India. It grows on sandy soils along the coast. The species has been collected by Henry & Swaminathan in 1978 after a lapse of 100 years. This constitutes the only collection after the type, made in 1878 from Nagapatam, Tanjore district by Wight 832. Baker (l. c.) erroneously mentioned 'Nilgiris' under distribution but Gamble corrected it as occurring along east cost of south India. Recently it has been reported from Tropical East Africa by Verdcourt (1971).

Kurz (1874) described Dunbaria podocarpa as a new species from Tenasserim, Burma. While describing this species, he mentioned the following under a footnote: "Phaseolus fuscus Wall. Dunbariis est adnumerandus" This has made all the future workers to attribute Kurz as the author of Dunbaria fusca eventhough Kurz has never made the combination. Kurz never intended that it should be Dunbaria fusca when he mentioned Phaseolus fusca Wall, in his description of the new species (Dunbaria podocarpa). He meant that in all probability the Wallichian plant is the same as his new species. So the combination Dunbaria fusca, attributed to Kurz by all later workers is erroneous. The correct nomenclature of this plant is as follows:

Dunbaria fusca (Wall.) P. Satyanar. & Thoth. comb. Nov. Phaseolus fuscus Wall., Pl. Asiat Rar. 1: 6. 5. 6. 1829; Baker in Hook. f., Fl. Brit. India 2: 204. 1876. D. fusca auct. non Kurz, Prain in Journ. Asiat. Soc. Beng. 66(2): 434. 1897; Maesen, Agri. Univ. Wageningen, Pap. 84 (5). 213. 1986.

#### REFERENCES

- HENRY, A. N. AND M. SWAMINATHAN. Rediscovery of Rhynchosia velutina Wight & Arn. (Papilionaceae). Bull. Bot. Surv. India 21: 227. 1979. (1981).
- Kurz S. Description of few Indian Plants. Journ. Asiat. Soc. Beng. 43 (2): 185-186. 1874.
- NAIR, N. C. AND A. N. HENRY. Flora of Tamil Nadu, India (Ser. 1) 1: 118-120. 1983.
- VERDCOURT. B. Studies in Leguminosae Papilionoideae for the 'Flora or Tropical East Africa'. Kew Bull. 25: 65-146. 1971.