SOME NEW AND NOTEWORTHY PLANTS FROM INDIA

BY V. N. NAIK

(Department of Botany, Marathwada University, Aurangabad)

Received September 4, 1969

(Communicated by Prof. L. Narayana Rao, F.A.Sc.)

ABSTRACT

The paper deals with three species of flowering plants of which Indigofera duthiei Drum. ex Naik is new to Science. Amaranthus dubius Mart. ex Thell. is a new record for India. Biophytum helenae Busc. et Musch. is the correct name of the plant widely occurring in India and recorded as B. sensitivum DC.

During the course of studies on the Flora of Osmanabad District of Marathwada region, a few interesting plants were noticed. This paper deals with three of them namely Biophytum helenae Busc. et Musch., Indigofera duthiei Drum. ex Naik and Amaranthus dubius Mart. ex Thell.


Erect annual 3–20 cm tall; leaves abruptly pinnate, crowded into rosette at the base of the stem, 2–8 cm long; petiole short; rhachis slender, glabrous or hairy; leaflets 6–15 pairs, elliptic to obovate, 3–10 × 2–6 mm, obliquely rounded and apiculate at apex, subsessile, pale beneath. Flowers heterotristylous, in terminal umbels; pedicels hairy; pedicels slender, short. Bracts lanceolate, acuminate, 1–2 mm long, crowded beneath the pedicels. Sepals lanceolate, acuminate, 3–4 mm long. Corolla yellow to orange-yellow, much exceeding the sepals; lobes rounded, spreading. Capsules ellipsoid, 3–4 mm long apiculate. Seeds fusiform, brown, transversely striate.

Common weed of cultivated fields and on wet soil. Flowers and fruits—August to February.

This plant was tentatively identified as B. sensitivum DC. but as suggested by Dr. C. G. G. J. van Steenis, it was critically examined in the light of a paper of Veldkamp (1968) and turned out to be the above species. This
plant, although occurring widely in India, has been so far recorded as *B. sensitivum* (Linn.) DC. For differences between the two species see Veldkamp (l.c.)

**Indigofera duthiei** Drummond ex Naik sp. nov.

Planta lignosa, annua, caulibus valde ramosis, 30-60 cm longis, ramulis adpressi albo-pilosis. Folia 3-foliata, petiolis ca 1 cm longis gracilibus pilosis, stipulis minutis. Foliola 10-15 × 4-7 mm, oblanceolata, rotundata vel emarginata et minutim apiculata ad apicem, parce adpressi albo-pilosis supra, glauca infra; foliolarum lateralium petiolulis paulo longioribus quam eis foliolarum terminalium. Flores dispositi in racemos breves sessiles 4-8-floros; pedicellis brevissimis. Sepala 1 mm longa, triangularia acuta pilosa. Corolla alte rosea; vexillum 2 mm diam. orbiculare, ungue brevilata ornatum, dense pilosum ad dorsum. Alae falcato-oblanceolatae, vexillo acuillongae. Carina oblanceolata, pilosa ad dorsum. Legumina 8-10 × 2 mm, deflexa, plus minusve tetragona, adpressi albo-pilosis, alis 4 angustis ornata (ala ad utrumque latus suturarum). Semina 2-4 compressa pallide olivaceo-viridia.

Differs *I. trifoliata* Linn. pilis adpressis albis et leguminibus semina paucu ferentibus.

Typus Naik 1319, lectus in silva Ram-Ling, 16 km ad septentrionem urbis Osmanabad die 16-10-1966, positus in herbario Marathwada University, Aurangabad.

**Indigofera duthiei** Drummond ex Naik sp. nov.

Woody annual. Stems much branched, 30-60 cm long, branchlets appressedly white hairy. Leaves 3-foliolate; petioles about 1 cm long, slender, hairy. Stipules minute. Leaflets 10-15 mm long, 4-7 mm broad, oblanceolate, rounded or emarginate and minutely apiculate at apex, sparsely white appressed hairy above, densely hairy, punctate and glaucous beneath. Petiolules of lateral leaflets slightly longer than those of the terminal ones. Flowers in sessile, 4-8-flowered, short racemes. Pedicels very short. Sepals about 1 mm long, triangular acute, hairy. Corolla deep pink; the standard about 2 mm in diameter, orbicular, with a short broad claw, densely hairy on the back. Wings falcately oblanceolate, as long as the standard. Keel oblanceolate, rounded at apex, hairy on the back, as long as the standard. Pods 8-10 × 2 mm, deflexed more or less 4-gonous, appressedly white hairy with 4 narrow wings, one on each side of the sutures. Seeds 2-4, compressed, pale olive-green,
Differs from *I. trifoliata* Linn. in having white appressed hairs and few seeded pods.

**Fig. 1. Amaranthus dubius* Mart. ex Thell. 1. A portion of a twig. 2. A female flower Br, bract; Bl, bracteole. 3. A male flower. 4. A fruit. 5. A seed.

Type, Naik 1319, collected in Ram-Ling Forest, 16 km north of Osmanabad Town, on 16–10–1966, is deposited in the herbarium of the Marathwada University, Aurangabad.

Common in pasture land throughout Osmanabad District in association with *I. glandulosa* Roxb. ex Willd. and grasses. Flowers and fruits—September to November.

The specimens of this species could not be satisfactorily identified in India and were, therefore, sent to Kew. The Director of the Royal Botanic
Biophytum helenae Busc. et Musch.  

Indigofera duthiei Drum. ex Naik.
Gardens, Kew, opined that my specimen was matching with *I. duthiei* Drum. which is not described so far. It is, therefore, described here on the basis of the specimen identified at Kew.

Dr. Ali of Pakistan considers this to be a form of *I. trifoliata* Linn. which I have not come across during the last seven years of my field work in this area.


Erect, much-branched herb about 30-90 cm tall or taller. Stems striated, usually pink, glabrous or slightly pubescent. Leaves ovate or broadly lanceolate, 5-15 × 1-7 cm, acute or emarginate, cuneate at base, prominently nerved. Petioles 3-10 cm long. Flowers in axillary clusters as well as in axillary and terminal, interrupted, 8-20 cm long spikes or panicles. Bracts and bracteoles lanceolate, aristate, 0.5-1 mm long, with hyaline margins. Male tepals 5, longer than bracteoles, aristate. Female tepals 5, as long as bracteoles, aristate. Stamens 5, longer than the tepals. Ovary ovoid; styles 3, hairy. Fruit rugose. Seed black, polished.

Common on waste land along roadsides and on old walls. Flowers and fruits—July to November.

Native of Tropical America. Backer (*l.c.*), states "rather a recent introduction to Java, collected for the first time in 1922." It is being recorded here for the first time to be occurring in India; source and time of introduction, however, is not known.

ACKNOWLEDGEMENTS

The writer is deeply grateful to the Director, Royal Botanic Gardens, Kew, for the identification of the plants and to Dr. C. G. G. J. van Steenis for some valuable suggestions. He is indebted to the late Rev. Fr. H. Santapau for the Latin transcription and to Prof. K. B. Deshpande for facilities and keen interest.

REFERENCES