CAPPARIS CLEGHORNII DUNN, A SPECIES FROM SOUTHERN INDIA (CAPPARACEAE)

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Among recent collections from the evergreen forests of Mysore State in southern India, material was found of *Capparis cleghornii* Dunn which had only been known from the original collection made by Cleghorn in 1846 and from a Stocks specimen from "Kanara". Further scrutiny of fresh collections from the type locality established the identity. Mr M. Jacobs of the Rijksherbarium, Leyden, who is engaged in a study of the genus, informed us that little material was known and that he never had seen a fruit. The original description by Dunn is quite brief. A more detailed description is given below, based on living material which accounts for the larger sizes of the parts than are found in dried specimens. A considerable amount of collections have been made and a number of duplicates have recently been distributed to the Herbaria at Kew, Leyden, Paris, Berlin, and Geneva.

Capparis cleghornii Dunn, Kew Bull. (1916) 61, descr.; in Gamble, Fl. Madras 1 (1915) 46, nomen; Blatter, J. Bomb. Nat. Hist. Soc. 31 (1927) 905. — Fig. 1.

Armed scandent shrub with flagellate purplish twigs densely fulvous pubescent to puberulous. Leaves pinkish when young, 6—10 mm petioled; lamina elliptic, 3.5—10 cm long, 2-4.5 cm broad; glabrous above, minutely puberulous beneath, venation indistinct; secondary nerves 4-7 pairs, divaricate. Inflorescence terminal, corymbose, often solitary, axillary in subterminal shoots, fulvous pubescent, 6—10-flowered, pedicels pubescent. Flowers bracteate, white, showy, 3.5-4.5 cm across. Sepals caducous, subequal, pubescent outside, glabrous within, 10-12 mm long, 10 mm broad. Petals white, rosy on ageing, caducous, in two unequal pairs spreading like butterfly wings, obovate oblong, upper two ones 2.2–2.5 cm long, 1–1.2 cm broad, lower ones 1.6–1.8 cm long, 1.2-1.4 cm broad, puberulous at base, veins prominent. Stamens 65-80, white, scarlet on ageing. Pistil on a slender 3-3.5 cm long gynophore; ovary ovoid, purple, 3-3.5 mm long, 2 mm acros, unilocular; ovules few, 10-12 on 3 parietal placentae. Fruits baccate, 4-5 developing in a corymb, pendant at maturity on a slender elongated stalk, the jointed peduncle and gynophore 6-8.5 cm long; fruits ovoid or subglobose, 3-4 cm long, 2-3 mm across, apex prominently umbonate, dark violet, purple on ripening; pericarp thin; endocarp scarlet. Seeds reddish brown, 1-4, dorsally compressed, obovoid or orbicular, 1.5-1.8 cm long, 1.4-1.5 cm broad; embryo coiled; cotyledons foliaceous, 18-20 mm long, 7-8 mm broad, elliptic, acute; radicle thick.

Type specimen: Cleghorn D. 176 (K, phot. seen), India, Mysore, Ballalrayandurga, 13 April 1846, fl.

Distribution. Endemic in the evergreen forests on the eastern slopes of the Western Ghats in Mysore, between 700 and 1400 m altidude, with a rainfall of 5-8 m per year. — Fig. 2.



Fig. 1. Capparis cleghornii Dunn. — 1. Habit with fruits; 1a. habit with flowers; 2a. sepals; 2b. petals; 2c. stamens; 2d. pistil; 2e. section through ovary; 3. seed; 3a. section; 3b. seedling (1 & 1a $\times \frac{1}{2}$; 2 a—d, 3, 3a—b nat. size; 2e \times 5).

Notes. Two collections, as it seems, have been mounted on the type sheet of the Kew Herbarium, viz. Cleghorn D. 176 on the upper half, and Wight Kew Distr. 68 on the lower, separated by a pencil line and conspecific in both Jacobs' and our opinion. However, a Calcutta specimen (sh. 28761), also labelled "Wight, Kew Distr. 68", belongs to Capparis roxburghii DC. Information obtained from Kew revealed Nagari and Pulicat in Madras as the places where this number should have been collected, which is out of the range of C cleghornii, although C. roxburghii is common there. It was also confirmed by Kew that the two species had indeed been distributed under the same number 68. Moreover, there is another sheet, in the Madras Herbarium (MH 1645), labelled as "Herb. R. Wight prop. — presented 1871", which is also C. roxburghii, but the locality



Fig. 2. Capparis cleghornii Dunn, distribution. — The figures refer to the localities where material was taken, as follows: 1. Agumbe, 2. Gubigga, 3. Hulical, 4. Kavaledurga, 5. Kimmane, 6. Yedur, all in Shimoga District; 7. Mercara, 8. Milknad Palace, 9. Somwarpet, 10. Talacauvery, all in Coorg District; 11. Ballal-rayandurga, the type locality, 12. Bisle-Hassan Ghat, both in Chikmagalur District.

of which could not be traced at Kew. It might have been collected from the neighbourhood of the Nilgiris as Wight in his Icones 3 (1846) t. 1048 stated to have collected C. *roxburghii* from that region.

Dunn, who examined the type sheet in 1914, cited the two specimens on it separately; Jacobs, who examined the sheet in 1961, appointed *Cleghorn D. 176* as the holotype. The present writers, however, on the basis of detailed field observations for the last two years and the study of a wide range of recent herbarium specimens, feel that both specimens on the type sheet (of which they examined a photograph, Kew negative 5723) actually represent one collection, made by Cleghorn. Further, Cleghorn's collection deposited under Wight's herbarium is also indicated by a darker ink inscription on Cleghorn's label as "Dr. Cleghorn ex Herb. Wight". By mistake part of this material was mixed up with *C. roxburghii* under "Wight, Kew Distr. 68" from Pulicat and Nagari.

Due to the paucity of specimens and the meagre descriptions, this species is generally confused with both C. moonii Wight and C. roxburghii DC. Dunn (l.c.) had included "C. roxburghii (non DC. excl. syn.) in Cooke, Fl. Pres. Bombay, 1: 46-47 (1903)" as a synonym of C. cleghornii. In fact, C. roxburghii DC. is not known to occur in any of the localities recorded by Cooke. Further, a careful scrutiny of the specimens in the collections of Cooke and Talbot indicates that the few specimens identified as "C. roxburghii DC." are referable to C. moonii only, and not to C. cleghornii.

Capparis cleghornii is readily distinguished from both C. moonii and C. roxburghii by its fulvous tomentose flower buds, the markedly unequal petals spreading like butterfly wings, the slender stalks supporting the fruits, and the small umbonate fruits with fewer seeds not exceeding four in number. C. moonii can be distinguished from C. cleghornii by the larger size of leaves, flowers, and fruits, the callose stout stalk supporting the fruits, and the numerous seeds. Similarly, C. roxburghii can be differentiated by the glabrous sepals¹), spathulate, pubescent, and almost equal petals, larger size of fruit (5–6 cm across), thin pericarp, numerous but smaller seeds, and the nature of embryo. There is a very close similarity between C. cleghornii and C. moonii in the shape and venation of petals, woody pericarp, scarlet endocarp, size and shape of seed, and nature of embryo. Although there are no collections of C. cleghornii now in the Cooke Herbarium, a careful analysis of the description of his 'C. roxburghii' indicates that it was based upon the flowering material of C. cleghornii and immature fruits of C. moonii. This probability is strengthened by the now known occurrence of both these species in the vicinity of North Kanara Distr. (Mysore State) coupled with the absence of C. roxburghii.

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1) Hooker & Thomson in Hook. f., Fl. Br. Ind. 1 (1872) 175 described the sepals of C. roxburghii as hairy, which is suggestive of C. cleghornii, although they did not cite material from the localities under discussion.