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31. NOTES ON *CLEMATIS BOURDILLONII* DUNN (FAMILY RANUNCULACEAE)

(*With one plate*)

Clematis bourdillonii was described in 1914 by S.T. Dunn, on the basis of two collections 554 & 860 of T.F. Bourdillon from Merchiston Estate, Travancore (presently in Kerala). He chose the name as a tribute to the memory of T.F. Bourdillon, who botanised Travancore during 1872-1908. The species is distinguished by its larger flowers and prolonged anther connective from *C. gouriana* Roxb. and by the entire leaf margin, without undulations, and glabrous plants (except flowers) from *C. hedysarifolia* DC. This species is endemic to the southern Western Ghats, and is known only by the type collections from Merchiston Estate.

In FLORA OF THIRUVANANTHAPURAM, Mohanan and Henry (1994) state that "This rare species could not be collected and is not represented in MH". They examined both the specimens (syntypes) present at University College herbarium, Thiruvananthapuram, and Bourdillon 860 was designated as the lectotype. Recently, I located one of the type specimens of *C. bourdillonii* Dunn, 554 of T.F. Bourdillon and a photo of Bourdillon 860 in the Madras Herbarium, Coimbatore.

The publication on the rediscovery of *Clematis bourdillonii* Dunn from Kodaikanal Hills by Ramachandran (1998) prompted me to examine the collection from Mathikettan shola, 9.xii.1994, V.S. Ramachandran 10283 Madras Herbarium (MH). The specimens from Mathikettan shola (Ramachandran 10283, MH), characterised by ternate leaves with long,

Murthy, G.V.S.: *Clematis bourdillonii* PLATE 1

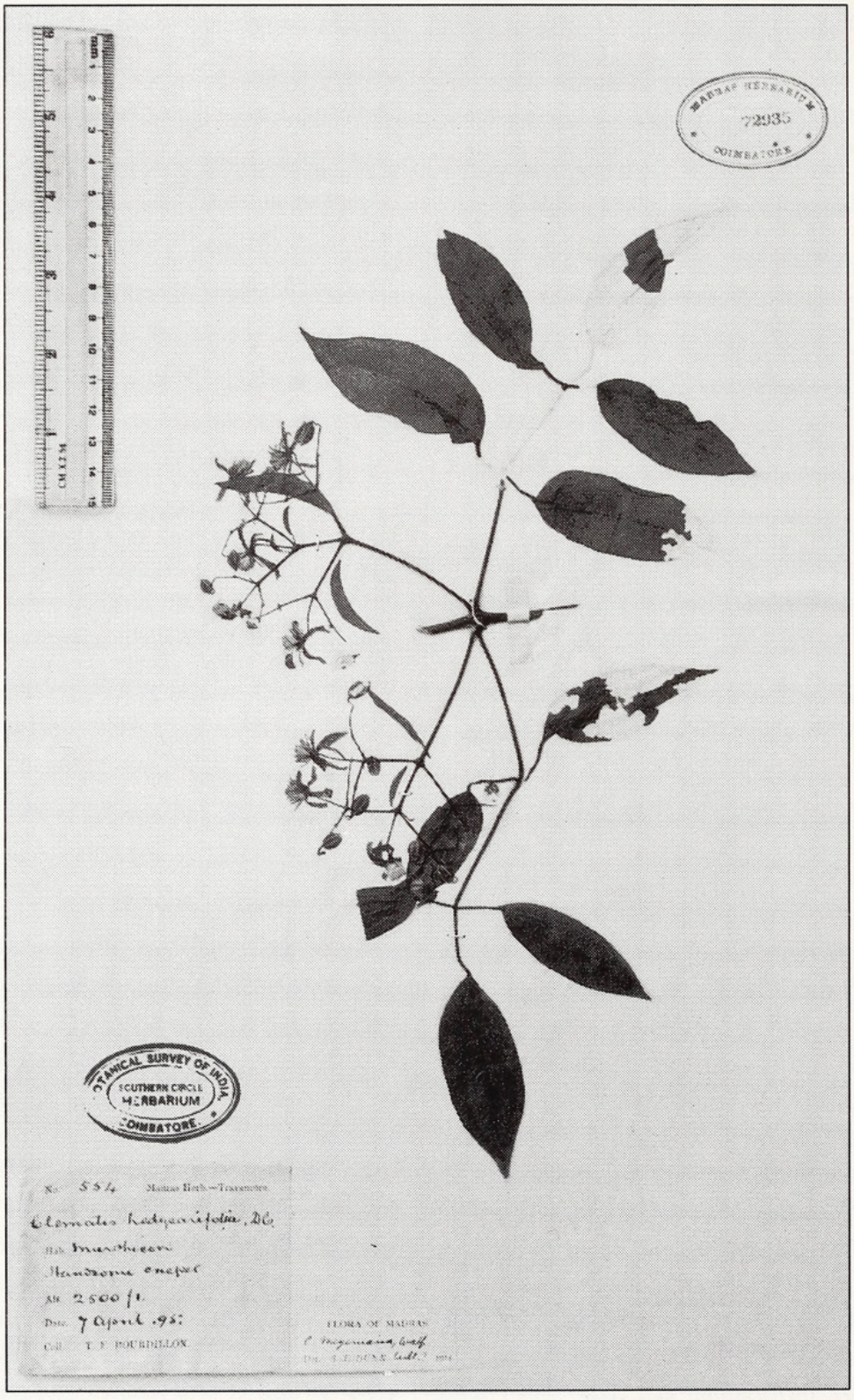


Fig. 1: *Clematis bourdillonii*, Type 554

A COMPARISON OF *CLEMATIS BOURDILLONII* WITH SOME ALLIED SPECIES

	C. bourdillonii	*C. gouriana*	*C. hedysarifolia*	*C. munroana*
Habit	Climber	Climber	Climber	Climber
Stem	Glabrous purplish	Hairy brown	Hairy brown	Glabrous brown
Leaves	Pinnate leaflets oblong-elliptic entire, 3-nerves raised both sides base acute	1-2-ternate-pinnate leaflets entire/dentate, base cordate	Ternate/pinnate dentate 5-nerved, veins raised lower base cordate	Ternate, entire 5-nerves raised below, veins obscure, base acute
Petiole	4-5 cm	2-6 cm	7-8 cm twisting	12-14 cm
Petiole	1-2 cm	1-2 cm	1-2 cm	4-5 cm cirrose
Inflorescence	Cymosely flowered panicle (13 fls.), pedicel 1.6 cm	Panicle, fls. crowded pedicel 1.5 cm	Lower paniculate higher 3-flowered pedicel 1 cm	1-5 flowered, pedicels 10 cm long
Flowers	Greenish-white buds elliptic	Greenish-white buds obovate	Greenish-yellow buds globose /ovate	Maroon buds ovate
Sepals	Oblong, pubescent outside, margins tomentose	Obovate, white pubescent in and out	Ovate, densely hairy outside	Oblong, velvety tomentose outside
Stamen	Connective produced; filaments flat, anthers lateral	Connective not produced: filament linear, anthers terminal	connective produced; filaments flat, anthers lateral	connective produced; filaments linear, anthers lateral

cirriform petiolules and 1-3 maroon flowers with long pedicels, belong to *Clematis munroana* Wight, a well marked species, which has been misidentified by Ramachandran and described as a different species. A comparison of these specimens with the Bourdillon specimen 554 in MH confirmed that they are not *C. bourdillonii*. Similarly, I am sceptical about the identity of the collection Sobha 6223 (KUBOT) and the report of chromosome number n = 24 for *C. bourdillonii* by Sobha and Ramachandran (1980), since the specimens are not traceable (*pers. comm.*).

The description of *Clematis bourdillonii* Dunn in Indian floras is not elaborate (Gamble 1915, Rau 1993, Mohanan and Henry 1994). Further, Rau (1993) described the plants as glabrous or sparsely hairy, leaflets entire or sometimes coarsely toothed (perhaps from key to species from Gamble l.c.), whereas the protologue says that the plants are glabrous (except flowers) and leaflets 6-9 cm, entire (Dunn 1914).

In view of the above findings, a detailed description of *C. bourdillonii* Dunn with a figure and comparative account with allied species is provided.

Clematis bourdillonii Dunn, Bull. Misc. Inform.: 181, 1914; in Gamble, Fl. Pres. Madras 1: 3. 1915; Rau in Fl. India 1: 59. 1993; Mohanan & Henry, Fl. Thiruvananthapuram: 40. 1994. (Plate 1, Fig. 1).

Handsome climber, branches furrowed, glabrous (except flowers), glossy, dark purplish. Leaves opposite, pinnate (1-2 ternate by Dunn), leaflets 5, oblong or elliptical, 6-9 x 1.6-2.5 cm, tip and base acute, entire and plain, nerves 3-5, raised on both sides, reticulate in full length; petiole 4.5-5.5 cm, stipular marks absent; petiolules 1-2 cm. inflorescence axillary or terminal, cymosely flowered panicle (13-flowered); peduncle 6-7 cm, glabrous. Flower buds 7-10 mm long, oblong-elliptic; flowers *c.* 2 cm across; pedicels 1.5-1.7 cm. Sepals 4, greenish, oblong, 10-12 x 2-3 mm, ultimately reflexed, glabrous inside, villous outside, margins tomentose. Stamens *c.* 20, 6 mm long, equal to styles or slightly longer; filaments glabrous, flat,

2-3 x 1 mm, connective produced beyond anther lobes, 1-1.5 mm long; anthers 2-3 mm, Carpels 7-10, hairy, styles hairy. Achenes not seen.

Fl.: April-May.

Ecology: Medium elevations, 753.5 m., secondary forests.

Distribution: INDIA: Endemic to southern Western Ghats in Kerala.

Specimens examined: Travancore, Merchiston Estate, 7.iv.1895, T.F. Bourdillon 554 (MH) (Bourdillon identified as *C. hedysarifolia* DC., Dunn (1914) annotated as *C. meyeriana* Walp. Cult. ?); *T.F. Bourdillon* 860 (MH, photo) (Bourdillon identified as *C. hedysarifolia* DC., Dunn (1914) annotated as *C. bourdillonii*); Merchiston Estate, 9.iv.1895, *T.F. Bourdillon* 554 (K) (identified as *C. gouriana* Roxb., Dunn annotated as *C. bourdillonii* Kew Bull. 181, 1914).

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32. PRESENCE OF *COMMIPHORA GILEADENSE*, FAMILY BURSERACEAE, IN RAJASTHAN

(*With one text-figure*)

On October 15, 1999, while I was on a biodiversity survey in and around the Sitamata Wildlife Sanctuary, at the border of Udaipur and Chittorgarh districts in southern Rajasthan, I noticed many plants of *Commiphora gileadense* near Kedaria Village (Udaipur district) growing naturally. This area falls under the jurisdiction of Aravalli Afforestation Project Range Bhinder of Udaipur (North) Forest Division. Local farmers told me that this species was present in the forest area and beeds (patches of private forests) of surrounding villages also. *C. gileadense* is a bushy plant, having trifoliate leaves on slender petioles. Lateral leaflets are of small size, while terminal leaflets are generally large in most of the observed plants. The leaves of *C. wightii*, which is a rather common species in Rajasthan, do not have slender petioles (Fig. 1).

According to Brandis (1972) and Talbot (1976), *C. gileadense* is an indigenous species confined to the east side of the Nilgiris and dry parts of Sri Lanka. It is also cultivated as a hedge plant all over South India. It is reported from Poona and Khandesh area of Maharashtra (Almeida 1996).

This species is not included in the various Floras of Rajasthan (Bhandari 1990, Sharma and Tiagi 1979, Shetty and Pandey 1983, Shetty and



Murthy, G V S. 2002. "Notes on Clematis Bourdillonii Dunn (Family Ranunculaceae)." *The journal of the Bombay Natural History Society* 99, 148–152.

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