

The outer surface is covered by a glossy, proteinaceous periostracum. The high percentage of organic material makes the shell relatively flexible and soft.

Lining the inside of the valves is the mantle, which secretes the shell, and encloses the mantle cavity. Within this cavity is the lophophore, with cilia that beat and give rise to a water current that helps the animal in feeding and respiration. The animal occupies only the posterior part of the shell.

**Pedicle:** A long extension of the body, which is used to anchor the animal in its burrow. The epithelium of the posterior end of the pedicle secretes glue-like mucous that adheres to the sediment in the bottom of the burrow, thereby temporarily anchoring the animal. Lingulids are not permanently anchored and can change position. Pedicle contains an evagination of the coelom and is hollow. Pedicle length varies and hence is not considered for comparison.

**Discussion:** On the basis of various morphological characters, the animal was identified to species level. In these waters, *Lingula* is found in two types of habitat, sand and silt. Better growth and survival was noted in the sandy area. *Lingula* collected from Amadalli were larger than those collected from Kali estuary and Manzil creek. According to Emig *et al.* (1978) too, lingulids usually inhabit sandy marine bottoms from the inter-tidal to the circa-littoral zone.

There are various contradictions concerning the burrowing behaviour of *Lingula*. Emig (1983) mentioned the non-reburrowing characters in Asamushi, Japan, but

Hyman (1959) and Savazzi (1991) say that it is capable of reburrowing.

At the time of collection the animal was found burrowing deeper and hence the pedicle length was seen to vary greatly. Emig (1983) mentions that the pedicle can attain a length 20 times greater than its shell.

The maximum shell length found at Amadalli was 49 mm (Table 2), whereas according to Mahajan and Joshi (1983) the maximum shell length (SL) was 47.56 mm. Yatsu mentions the maximum length of Japanese *Lingula anatina* as 35 mm (Hyman 1959). This indicates that Indian species are much larger in size.

The *Lingula* found here are adaptable as the highly fluctuating parameters appeared to have very little effect on the animal (Table 1).

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#### 28. *MUCUNA SEMPERVIRENS* HEMSL. (LEGUMINOSAE: PAPILIONOIDEAE) – A NEW REPORT FOR ARUNACHAL PRADESH

Recently, during a botanical exploration in Dibang Valley, Arunachal Pradesh, we collected an interesting specimen of *Mucuna* (c. 1300 m, 18.xi.2000, M.K. Pathak & M. Bhaumik 3204-CAL) c. 26 km north of Roing on the way to Myodia Pass. A critical study revealed that it was *Mucuna sempervirens* Hemsl., hitherto unreported from Arunachal Pradesh.

A brief description of our collection and other relevant data are given to facilitate its identification in the field.

*Mucuna sempervirens* Hemsl. in Forbes & Hemsl., *J. Linn. Soc. Bot.* 23: 190. 1887 & in Curtis *Bot. Mag.* t. 7978. 1904; Grierson in Grierson & Long (eds.), *Fl. Bhutan* 1(3): 686.

1987; Wilmot-Dear in *Kew Bull.* 39: 39. 1984 & 42: 27. 1987; Sanjappa, *Leg. India* 218. 1992. *M. mairei* H. Lev. In Feddes *Repert.* 13: 337. 1914. *M. japonica* Nakai in *Bot. Mag. Tokyo* 46: 57, 631. 1932.

Woody climber; stem longitudinally ridged, glabrous. Racemes arising from leafless older stems, 10-15 cm long, c. 10 flowered. Pedicels c. 2.5 cm long, pubescent; bracteoles deciduous. Calyx 8-12 x 18-25 mm, cup-shaped. Corolla dark purple; standard 3.2-4 cm long, keel 6-7 mm long. Staminal tube c. 4 cm long. Ovary and style pubescent.

**Fl. & Fr.:** May-October.

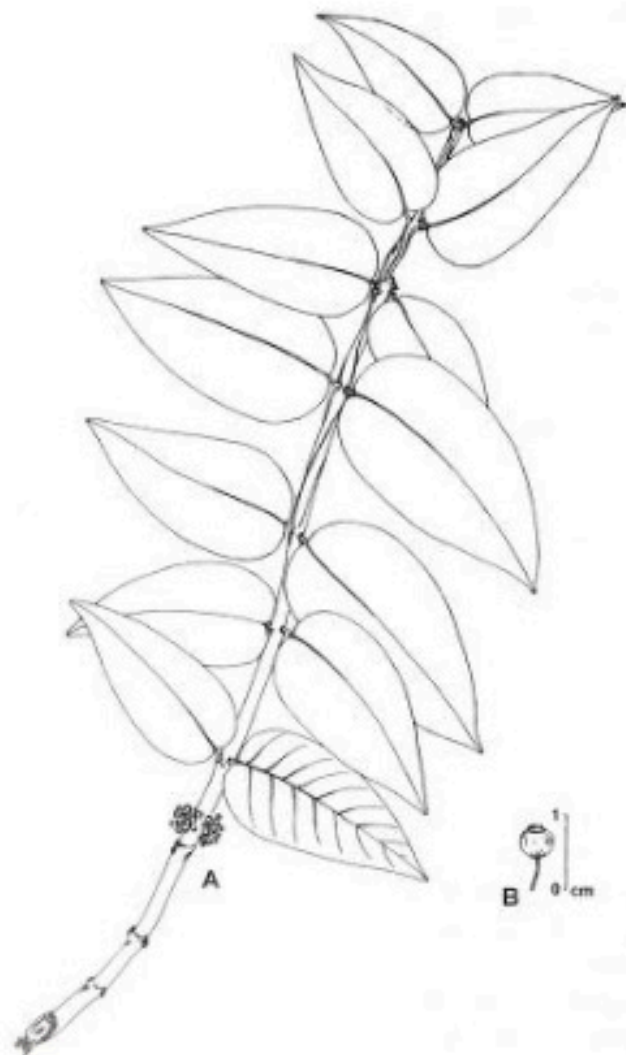
**Distribution:** INDIA: Arunachal Pradesh, Manipur, Sikkim, West Bengal; Bhutan, China, Myanmar.

**Notes:** The plant was found growing in subtropical forest at an elevation of c. 1,300 m on humus-rich soil, beside a stream. The area experiences heavy rainfall and the plant was found to reach the top of the forest canopy. We could not locate the species in any other locality of Dibang Valley.

A copious amount of watery sap was found to ooze out on cutting the stem.

### 29. *MEMECYLON WIGHTII* THW. (MELASTOMATACEAE), A NEW RECORD FOR MAHARASHTRA STATE

During studies on the flora of Savantwadi taluka and thereafter Chaukul and Ramghat area of Sindhudurg district of western Maharashtra, a number of interesting flowering plants were collected. A rare plant belonging to the genus



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*Memecylon* of Family Melastomataceae drew the attention of the author. Critical study of the collected materials confirmed its identity as *M. wightii* Thw.

Nomenclature, a short description and differences between the related species are given in the note. Illustrations of flowering twig and a fruit are provided (Fig. 1).

*Memecylon wightii* Thw., Enum. 113. 1859; Cogniaux in DC., Monogr. Phan. 7: 1145. 1891; C.B. Clarke in J.D. Hooker Flora British India 2: 554. 1897; Woodrow in J. Bombay Nat. Hist. Soc. 11: 638. 1898; Cooke, T. The Flora of the Presidency of Bombay 2: 503. 1903; Talbot, Forest Flora of the Bombay Presidency and Sindh 2: 55. 1911.

A small tree; branchlets slender, quadrangular, winged; wings broader between each node. Leaves shortly petiolate, ovate-oblong, acute or somewhat acuminate, glabrous, thick, shining above, penninerved beneath. Flowers crowded cauliflorous, borne on the bare basal portion of the branchlet in between two nodes, pedicellate; pedicel slender, tube campanulate; limb slightly 4-lobed or almost truncate. Petals blue, obtuse. Berry spherical, conspicuously crowned with the calyx-limb.

*M. wightii* Thw. resembles *M. randerianum* Almeida & Almeida in general appearance, however, it varies from *M. randerianum* in the following characters.

| <i>M. wightii</i> Thw.                               | <i>M. randerianum</i><br>Almeida & Almeida       |
|--|--|
| 1. Branchlets quadrangular winged.                   | 1. Branchlets terete.                            |
| 2. Leaves shortly pedicellate, rounded at base.      | 2. Leaves sessile, amplexicaule rounded at base. |
| 3. Flowers cauliflorous in clusters.                 | 3. Flowers axillary.                             |
| 4. Pedicel very slender, pendulous, peduncle absent. | 4. Pedicel stout, peduncle erect.                |