NOTES ON UNKNOWN FRUITS AND SEEDS OF SOME PLANTS FROM SOUTH INDIA

Andrographis lawsonii Gamble in Kew Bull. 375. 1923 et Fl. Pres. Madras 1050. 1924.

J. S. Gamble (1923) while describing this species has stated, *"capsula ignota"*. Later on he himself has given the description of the fruit in *Flora of the Presidency of Madras* (p. 1047. 1924) as, "capsule .6 inch long, .1 inch broad, very glandular hirsute". However, there was no mention about the seeds. The author while studying the specimens of this species represented in the Madras Herbarium (MH) found out that the specimens already seen by Gamble consist of only young fruits. Since some specimens having large matured fruits with seeds were also observed, it was felt worthwhile giving a detailed description with figures of the capsules and seeds:

Capsules 2.0-2.2 × 0.4-0.5 cm, brown, linear-oblong or elliptic-oblong, sharply pointed at apex, compressed at right angles to the septum with a median longitudinal groove, densely glandular hirsute, 6-10 seeded. Seeds ±1.8 × 1.0 mm, subquadrate, deeply grooved longitudinally with a marginal fold on the lateral sides, osseous, rugosely pitted, glabrous, situated on retinaculae; retinacula ±2 mm long, curved up, spathulate. (Figs. A: 1-4).

Specimens examined: TAMIL NADU: Nilgiri Dt., Bangy Tappal, November 1883, *Lawson* Acc. No. 38097 (MH); Bangy Tappal, January 1886, *Lawson* Acc. No. 38098 (MH); Ooty, August 1905, *Rangachari* Acc. No. 38094 (MH); Upper Bhavani to Bangihalla, 19 December 1970, *Shetty* 37484 (MH).

Isachne bourneorum Fischer in Kew Bull. 324. 1932 et in Gamble, Fl. Pres. Madras 1796. 1934; Bor, Grass. Burma, Ceylon, India & Pakistan 579. 1960.

C.E.C. Fischer (1932) described this species without caryopsis and stated, *"caryopsis non visa"*. Further, he (1934) has not made any mention about the caryopsis in the *Flora of the Presidency of Madras*. Also N.L. Bor (1960) has not indicated anything about the fruits of this species. While studying some of the specimens represented in MH, interestingly a few sheets have come to light possessing the caryopsis:

Caryopsis ± 1.5 × 1.0 mm, free between the lemma and palea, elliptic in outline, dorsally convex, ventrally flat, pubescent with adpressed hairs; hilum small and basal. (Figs. B: 1-3).

Specimens examined: TAMIL NADU: Nilgiri Dt., Tenace, October 1886, *Gamble* 18309 (MH); Naduvattam, 15 August 1889, *Collector*? Acc. No. 54375 (MH).

Teucrium plectranthoides Gamble in Kew Bull. 266. 1924 et Fl. Pres. Madras 1158. 1924; Mukerjee in Rec. Bot. Surv. India 14(1): 222. 1940.

While describing this species J. S. Gamble (1924) has stated *"Fructus ignotus"*. While compiling the *Flora of the Presidency of Madras* also, he has not mentioned anything about the fruits of this species. S. K. Mukerjee (1940) also has stressed this point and referred it as, *"Nutlets not seen"* in his work, *A Revision of the Labiatae of the Indian Empire*. Critical studies of the specimens belonging to this species represented in MH, have brought to light a few sheets possessing the fruits:

Fruit of 4 nutlets; each nutlet 1.2-1.5 × 1.0-1.2 mm, obovoid, reticulate; hilum large, oblique. (Figs. C: 1-2.).

Specimens examined: TAMIL NADU: Tinnevelly Dt., Sengalteri, 25 September 1916, *Collector*? Acc. Nos. 41771, 41774, 41779 (MH); Naterikal to Sengalteri, 7 March 1917, *Collector*? Acc. No. 41783 (MH); Mancholai, Singampatti, 28 February 1958, *Sebastine* 5432 (MH).

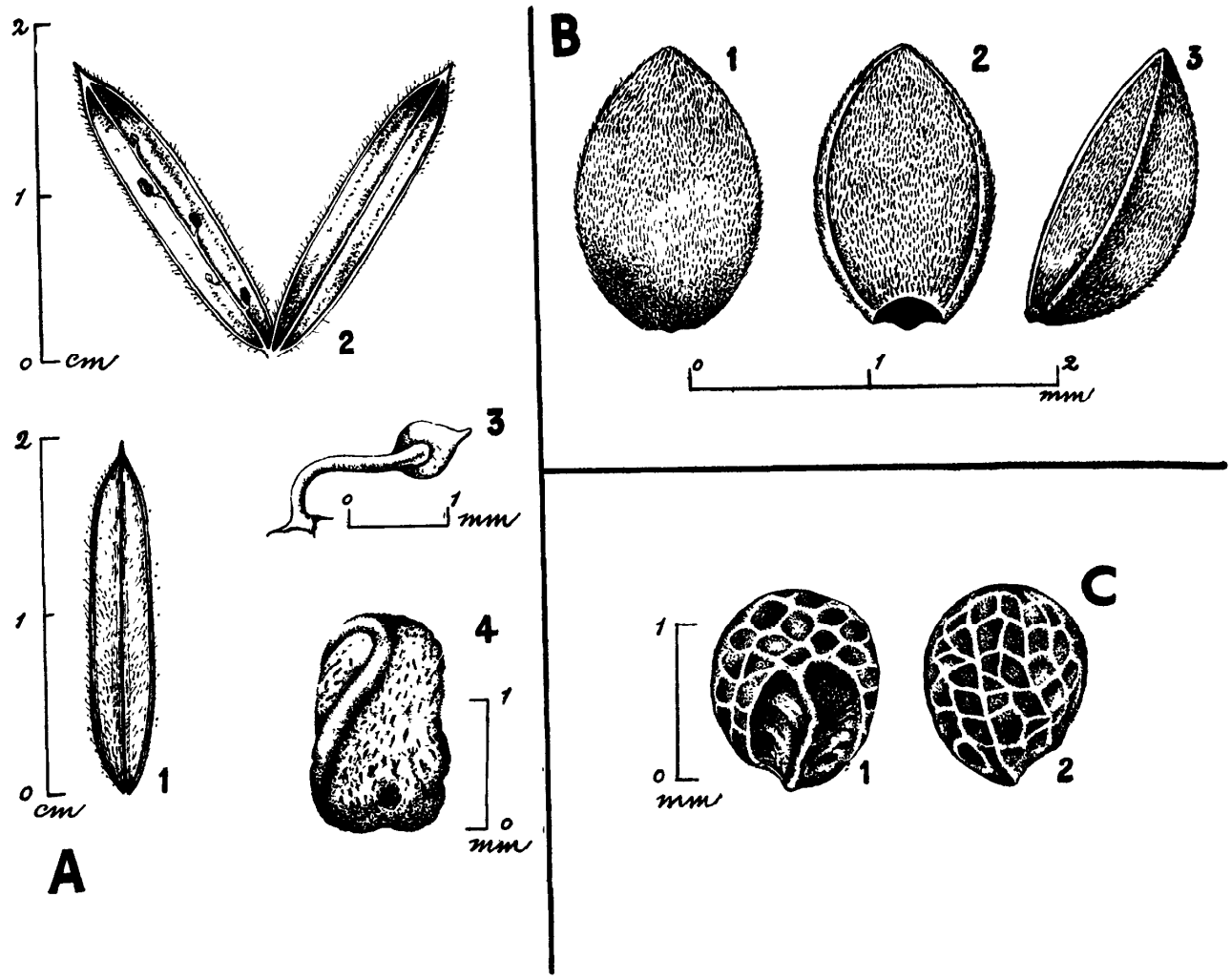


Fig. A(1-4) : *Andrographis lawsonii* Gamble
1. Capsule. 2. Dehisced capsule showing the seeds. 3. Retinaculum. 4. Seed.
Fig. B(1-3) : *Isachne bourneorum* Fischer
1. Caryopsis—dorsal view. 2. Caryopsis—ventral view. 3. Caryopsis—lateral view.
Fig. C(1-2) : *Teucrium plectranthoides* Gamble
1. Nutlet—ventral view. 2. Nutlet—dorsal view.

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VARIATIONS IN THE FLORAL ORGANS OF *MALACHRA CAPITATA* L.

In the present investigation an attempt has been made to study the variations in floral organs in *Malachra capitata*.

Nine plants of *Malachra capitata* L. were selected for studying different floral characters. Flowers were plucked at fortnightly