

- *RATNAM, B.V. & M.C. JOSHI (1952): An ecological study of vegetation near about a temporary pond in Pilani. *Proc. Rajasthan Acad. Sci.* 3: 45-59.
- *REICH, P.B. & R. BORCHERT (1982): Phenology and ecophysiology of the tropical tree, *Tabebuia neochrysantha* (Bignoniaceae). *Ecology*: 294-299.
- SHARMA, K.C. & R. SHARMA (1992): Trophic evaluation of an urban wetland of Ajmer, Rajasthan. Inteclo's IV International Wetland Conference, Ohio State University, Columbus. Ohio, USA.
- SHARMA, RENU & K.C. SHARMA (1992): Floristic diversity of wetlands of Aravalli ecosystem, a survey of Anasagar lake of Ajmer. National Seminar on Ecological Restoration of Aravalli Hill ecosystems of Rajasthan at Ajmer. DST, Jaipur.
- SHARMA, V.S. (1958): The flora of Ajmer. *J. Bombay nat. Hist. Soc.* 55: 129-141.
- *SINGH, A., P.K. RALHAN & R.P. SINGH (1998): Phenological studies on conditioned stocks of Shisham (*Dalbergia sissoo* Roxb.). *Indian J. Ecology* 26(1): 114-122.
- VIJAY, S.K. (1997): Phenological observations of some rare vascular plants of Pushkar Valley, Ajmer (Abstract). *Proc. of Nat. Conf. on Environment & Ecodevelopment of Pushkar Valley of Rajasthan*. Pp. 11.
- VIJAY, S.K. (1999): Ecomorphological investigations of wetland plants in selected sites of Ajmer with special reference to Amphibiousness (Abstract). *International Conference on Tropical Aquatic Ecosystems*, Nainital, India. Pp. 137.
- VIJAY, S.K. (2000): Phenological observations of marshy wetland flora of Ajmer, Central Rajasthan (Abstract). *Proc. of the 87th ISCA Pune*. Pp 74-76.
- VYAS, L.N. (1964): A study of hydrophytes and marsh plants of Alwar and environs. *JIBS* 43: 17-30.
- ZUTSHI, D.P. (1975): Association of macrophytic vegetation of Kashmir lakes. *Vegetatio* 30: 61-62.
- *Not seen in original.

50. *TYPHONIUM HORSFIELDII* (MIQ.) STEENIS, FAMILY ARACEAE, A NEW REPORT FOR INDIA

(With one text-figure)

While revising the Indian Araceae, it was found that a specimen at CAL which had been collected in Mizoram by B. Godfrey and labelled as *Arisaema tortuosum* (Wall.) Schott var. *curvatum* (Roxb.) Engl. had been later determined as *Typhonium horsfieldii* (Miq.) Steenis by Nicolson, a well-known aroidologist. A perusal of literature reveals that this species is confined to Java in Indonesia. As the specimen in question is from Mizoram, the species becomes an addition to the flora of India. A detailed description and an illustration (Fig. 1) are provided to facilitate identification.

Typhonium horsfieldii (Miq.) Steenis in *Bull. Jard. Bot., Buitenzorg* Ser. 3, 17: 403. 1948; *Backer & Bakh. f., Fl. Java* 3: 123. 1968. *Sauromatum horsfieldii* Miq., *Fl. Ind.-Bat.* 3: 196. 1856; Engl. in A. DC., *Monogr. Phan.* 2: 571. 1879. Type: Java (U). *Typhonium fallax* N.E. Br. in *J. Linn. Soc., Bot.* 18: 260. 1880; Engl., *Pflanzenr.* (IV. 23 F) 73: 121, f. 17 F - N. 1920.

Heterostalis pedata Schott in *Ann. Mus. Bot. Lugduno-Batavum* 1: 278. 1864, non *Typhonium pedatum* Schott 1857. *Typhonium pedatum* sensu Engl. in A. DC., *Monogr. Phan.* 2: 613. 1879, non Schott 1857.

Cormous herb; corm c. 0.9 x 0.8 cm, subglobose. Cataphylls 3-3.5 cm long. Leaves pedatisect; petioles 10-40 cm long, sheathing; leaflets 7-9, sessile, lanceolate, acuminate; middle leaflet 5.5-7.5 x 0.6-1 cm; lateral leaflets gradually becoming smaller, 1.2-5.5 cm long. Peduncle 4-20 cm long; spathe 8-10 cm long; tube 2-3 cm long, oblong, convolute; limb 6-7 x 2-2.5 cm, oblong-lanceolate, cuspidate. Spadix 5.8-10 cm long. Pistillate-flowered portion 0.2-1 x 0.4-0.6 cm. Neuter-flowered portion 2-2.2 cm long followed by stipe c. 7 mm long. Staminate-flowered portion 0.7-1 x c. 0.3 cm, terminating in a stipitate appendix. Pistillate flowers c. 1 x 0.5-0.8 mm, dense; ovary ovoid, 2-ovuled; stigma capitate, coronate. Neuters

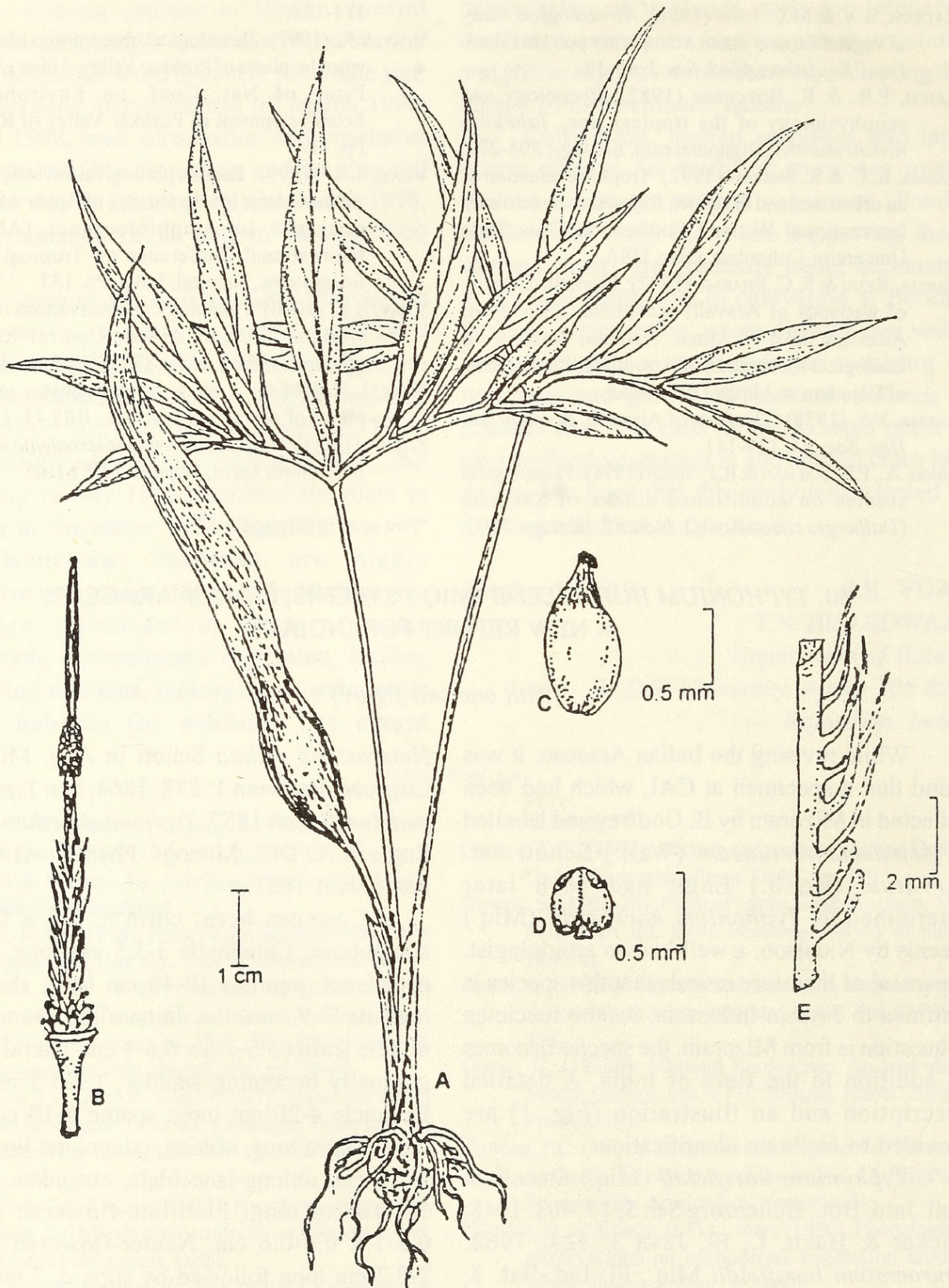


Fig. 1: *Typhonium horsfieldii* (Miq.) Steenis; A. Habit, B. Spadix, C. Pistillate flower, D. Staminate flower, E. Neuters

elongate-clavate at base, 1.5-2.5 mm long, linear above, 4-5.5 mm long. Staminate flowers c. 0.5 mm long; anthers broadly ovate, shortly stalked, dehiscing by apical slits. Appendix 2.2-5 cm long, cylindrical.

Fl. & Fr.: Not known.

Distribution: INDIA: Mizoram. WORLD: Indonesia (Java).

Specimen examined: MIZORAM: Lushai hills, Aijal, B. Godfrey 527 (CAL).

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51. LECTOTYPIFICATION OF *POLYSTICHUM SQUARROSUM* (D. DON) FEE VAR. *BEDDOMEI* MANICKAM & RAJKUMAR, FAMILY DRYOPTERIDACEAE

Polystichum squarrosus (D. Don) Fee is a tropical fern with morphological diversity and taxonomic complexity. Rajkumar and Manickam (*Pak. J. Biol.*, 2(3): 755-758, 1999), while analysing the spore morphology of *Polystichum squarrosus* have observed two distinct types of perine and have construed them as two varieties. The specimen with winged smooth hyaline perine have been placed under var. *beddomei* and the crescent dark brown perined specimens have been placed under var. *squarrosus*. Of 20 specimens, they have found 5 specimens (XCH 241, 350, 419, 897, 922) to be var. *beddomei* and the rest (XCH 9, 291, 307, 319, 320, 415, 434, 443, 470, 561, 684, 713, 738, 824, 867) to be var. *squarrosus*. Unfortunately, var. *beddomei* has not been typified. Hence, as per the ICBN rules it is lectotyped here. The lectotype has been selected from the specimens preserved at St. Xavier's College Herbarium (XCH), Palayamkottai.

Polystichum squarrosus (D. Don) Fee var. *beddomei* Manickam & Rajkumar, *Pak. J. Biol. Sci.*, 2(3): 755-758, Fig. 3a (1999).

Lectotype: India, Tamil Nadu, Nilgiri Hills, Thottabetta (2,650 m), 24.x.1991, Manickam, XCH 419.

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52. A COMPARATIVE STUDY ON THE REPRODUCTIVE BIOLOGY OF THREE INDIAN SPECIES OF *MARSILEA*

A comparative reproductive biological study was conducted on three Indian *Marsilea* species of the *coromandeliana* group. The species

having monomorphic megaspores showed microsporal aberrations, while those with megasporal aberrations had normal microspores.



Sasikala, K., Vajravelu, E., and Daniel, Pitchai. 2002. "Typhonium Horsfieldii (Miq.) Steenis, Family Araceae, a new Report for India." *The journal of the Bombay Natural History Society* 99, 581–583.

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