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Research Article

Colocasia affinis (Araceae) - A new record for Kerala, India

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Abstract

Colocasia affinis Schott is reported for the first time in Kerala, India. It occurrence in Thalassery, Kannur district of Kerala state forms an extended distribution. A detailed description, illustration, and photograph are provided.

Keywords: Araceae, *Colocasia affinis*, New Record, Kerala, India.

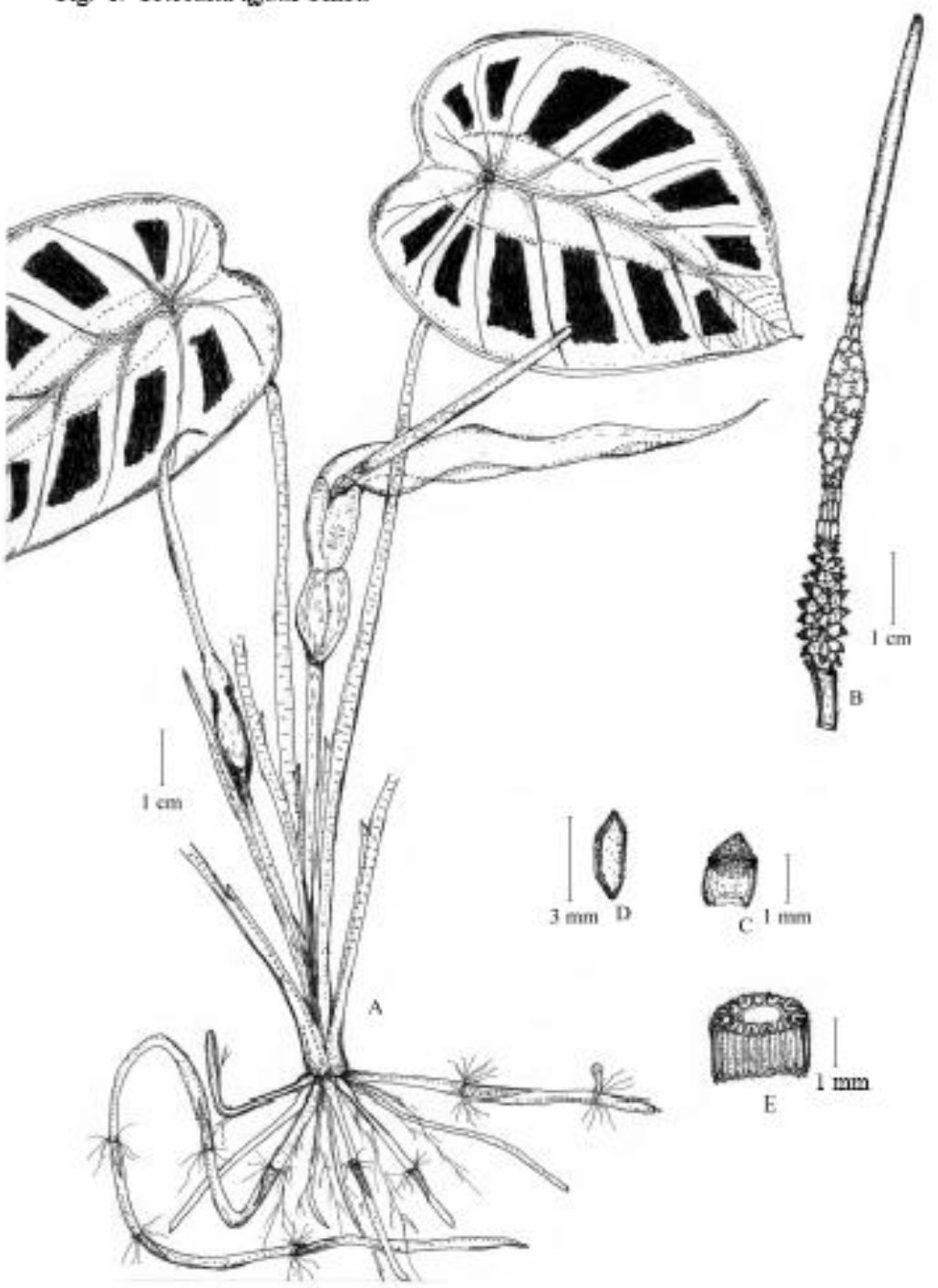
Introduction

The genus *Colocasia* Schott is represented by 20 species in the world, distributed in tropical Asia to Indomalaya and Polynesia (Engler & Krause, 1920; Mayo *et al*., 1997 and Li Heng & Boyce, 2010). In India it is represented by 7 species (Sivadasan, 1982; Karthikeyan *et al*., 1989; Sasikala, 2000 and Gogoi & Borah, 2013). Of these, *Colocasia affinis* Schott is found in C. to E. Himalayas, NE. India, Karnataka, N. Bangladesh, Myanmar and Nepal; *C. fallax* Schott is found in C. to E. Himalayas, NE. India, N. Bangladesh, Myanmar and Nepal; *C. mannii* Hook.f. is reported from NE. India and Andaman & Nicobar Islands; *C. boyceana* Gogoi & Borah and *C. dibangensis* C.L. Long & K.M. Liu from Arunachal Pradesh; *C. lihengiae* from Assam, Arunachal Pradesh and China and another species *C. esculenta* (L.) Schott is widely distributed throughout the tropics and subtropics and is naturalized.

During our regular botanical surveys the authors came across an interesting population of *Colocasia* on the road cuttings in the plains, near Temple gate of Thalassery, Kannur district, Kerala. On critical examination and perusal of literature it was identified as *Colocasia affinis* Schott. Its occurrence in Kerala forms an extended distribution. A detailed description, an illustration and photograph are provided to facilitate easy identification.

Colocasia affinis Schott in Bonplandia 7: 28. 1859 & Prodr. Syst. Aroid.: 138. 1860; Engl. in A. DC., Monogr. Phan. 2: 492. 1879; Hook.f., Fl. Brit. India 6: 523. 1893; Engl. & Krause in Engl., Pflanzenr. (IV. 23 E) 71: 64. 1920; Deb in Bull. Bot. Surv. India 3: 122. 1961; Panigrahi & Joseph in Bull. Bot. Surv. India 8: 155. 1966; A.S. Rao & D.M. Verma in Bull. Bot. Surv. India 11: 412. 1969 & 18: 26. 1976; Hara & al., Enum. Fl. Pl. Nepal 1: 91. 1978; Balakr., Fl. Jowai: 564. 1983; Deb & Dutta in J. Econ. Taxon. Bot. 10: 60. 1987; Karth. *et al*., Fl. Ind. Enum., Monocot.: 10. 1989; Bhat in J. Bombay Nat. Hist. Soc. 90: 138. 1993; R.C. Srivastava in Hajra & D.M. Verma, Fl. Sikkim 1: 191. 1996. - Type: Sikkim, *Hook. f. s.n*. (K). *Colocasia affinis* var. *jenningsii* (Veitch) Engl. Monogr. Phan. 2: 493. 1879. *Alocasia jenningsii* Veitch, Gard. Chron. 1868: 26. 1868.

Fig. 1. *Colocasia affinis* Schott



a: Habit; **b:** Spadix; **c:** Pistillate flower; **d:** Neuter; e**:** Staminate flower.

Figure 2: *Colocasia affinis* Schott

a:Habit; **b**: Stolon without tubercles; **c**: Inflorescence; **d**: Spathe spread open to show spadix; **e**: Staminate flower-portion; **f**: Pistillate flower-portion.

Herbs, terrestrial, perennial, to 45 cm high, stoloniferous without tubercles; stolons spreading, sheathing, light green to brown; stem cylindric; internodes 3 - 4.5 cm long, rooting at nodes. Cataphylls 1 - 3, lanceolate, 6 - 15 cm long, membranous. Leaves 4 - 6, peltate, broadly ovate, (5-)7.5 - 18 x (3.5-)5.5 - 15 cm, more or less connate at base, entire or slightly undulate at margins, cuspidate at apex, glaucous on both surfaces, green with dark purple blotches between lateral nerves above, pale green beneath, blotches absent or lighter in young leaves; lateral nerves 3 - 6 pairs, very slender, compressed below, anastomosing towards margin; petioles slender, to 25 x 0.5 cm, slightly mottled with black transverse lines or stripes, sheathing; sheath (5)7.5 - 18 cm long. Inflorescence 1 or 2; peduncle (8)10.5 - 20 x 0.4 - 0.6 cm, slender at base, green. Spathe constricted, (9.7 -)10.5 - 15.5 cm long; tube ovoid, 2 - 3 x 1 - 1.5 cm, convolute, oblique at base, green; limb linear-lanceolate, 7.7 - 12.5 x 1 - 1.5 cm,

convolute at base for *c*. 2 cm, undulate along margins, acuminate for *c*. 2.5 cm, yellow. Spadix 6.5 - 9.5 (-10) cm, included, sessile; pistillate flower-portion and staminate flower-portion separated by a narrow neuter flower-portion and ending in a terminal appendix. Pistillate flower-portion cylindric to conical, (1.4 -)1.6 - 2 x *c*. 0.5 cm; pistils arranged spirally; ovary subglobose, 1.0 - 2 x 1- 1.5 mm, white or cream, 1-loculed; ovules many, parietal; stigma sessile, discoid-capitate or conoid, cream to brown after anthesis. Staminate flower-portion 0.7 - 2.1 x *c*. 0.4 cm, orange-yellow; staminate flowers compactly arranged, 6 - 12-androus, synandrium, 1 - 2 x 2 - 3 mm. Neuter flower-portion 3 - 7 x *c*. 1 mm, orange-yellow; neuters *c*. 3 x 1 mm, flat, pentagonal to hexagonal, present at the constriction of spathe. Appendix slender, 3.3 - 5.5 x 0.1 - 0.2 cm, orange-yellow, base with 2 or 3 rows of neuters, 4 - 5 mm long; each neuter 1.5 - 2 mm long. Fruit not seen.

***Flowering*:** August.

Habitat: Moist shady places, along road cuttings in plains; MSL ± 2.13 m.

***Distribution*:** India: C. to E. Himalayas; NE. India - Arunachal Pradesh, Sikkim, Assam, Manipur, Meghalaya, Mizoram, W. Bengal and Karnataka. N. Bangladesh, China, N. Myanmar and Nepal.

***Specimens examined*:** INDIA: Kerala, Kannur district, Thalassery, Temple gate, 21.8.2011, *K. Sasikala*, 401 & 26.8.2011, *K. Sasikala* 415 (MH).

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