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The genus *Cryptocoryne* is endemic to tropical Asia extending from India in the west to the Philippines in the east, onwards to Malaysia, through Indonesia to Papua New Guinea. In India so far five species have been recognized (Bogner 2004). The genus is characterized with linear-lanceolate leaves, inconspicuous spadix inflorescence. The genus has about 50 species distributed in tropical areas of Asia and the Malay archipelago (Mayo et al. 1997).

Materials and Methods: During floristic exploration surveys in 2012–13, a species of *Cryptocoryne* Fisch. ex Wydl was collected from a good population near Holi Village in Rajapur Taluka of Ratnagiri District of Maharashtra. The location has been recorded with the help of Global Positioning System (GPS-Garmin GPSMAP 60Csx) as 16°36'56.10"N & 73°21'43.40"E. After critical examination and reference to relevant taxonomic literature, it was identified as *Cryptocoryne cognata* Schott (Sharma et al. 1996; Yadav 1998) (Image 1). The collected specimens were processed and deposited in the Herbarium, College of Forestry, Dr. Balasaheb Sawant Konkan Krishi Vidyapeeth, Dapoli, Ratnagiri.

ADDITIONAL INFORMATION ON THE THREATENED *CRYPTOCORYNE COGNATA* SCHOTT (ARACEAE): A NEED FOR REASSESSMENT OF THE IUCN RED LIST STATUS

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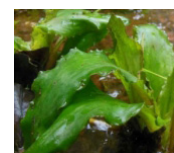
Cryptocoryne cognata

Schott, Bonplandia 5: 222. 1857, Prodr. Syst. Aroid. 16. 1860; Engler in DC., Mon. Phan. 2: 629. 1879; Hooker, Fl. Brit. India 6: 494. 1893; Cooke, Fl. Pres. Bombay 2.



Cryptocoryne cognata

NOT EVALUATED	DATA DEFICIENT	LEAST CONCERN	NEAR THREATENED	VULNERABLE	ENDANGERED	CRITICALLY ENDANGERED	EXTINCT IN THE WILD	EXTINCT
NE	DD	LC	NT	VU	EN	CR	EW	EX



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Conflict of Interest: The authors declare no competing interests.

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Image 1. A & B - Habit of *Cryptocoryne cognata*; C - Fruiting; D & E - Spadix with dark purplish spathes

819. 1908; De Wit, *Het Aquarium* 31(2): 31. 1960; Patil, Yadav & Dixit, *Aqua Planta* 17(2): 59-65. 1992.

Type: India, Concan, Law, s.n., (Holo-K)

Rhizomatous plants, to 2x1 cm, brownish. Leaves 15–20 cm long; Petioles to 8cm long, green or reddish tinge, sheathed to 2.5–8 cm. Lamina ca 10x3.5 cm, broadly lanceolate, narrow at base and tip, margins entire or undulate. Peduncle to 3cm long, white. Spathe to 15–20 cm long; kettle to 4–5 cm long, lower part 0.6cm wide, white or light pinkish coloured, upper tube to 1.5–2x0.4–0.5 cm; spathe margins forming a tube pressed to each other, but not fused; limb ca 11x9 cm, collar present at base of the limb, bears cream background with irregular purple spots, absence of transverse ridges inside and denticulation on margins of the limb, limb purple coloured and warty within, purplish green on the outside, spirally twisted 1 to 2 times. Spadix to 4–6 cm long; female portion to 0.4cm long, female flowers six in number; sessile stigma; ovary with 11–15 ovules; sterile naked interstice 3–4 cm long; male portion to 0.32cm long.

Material examined: H-10 (COFD), 01.ix.2012, Kudavale, Dapoli (17°51'43.84"N & 73°14'3.37"E), Ratnagiri District, Maharashtra, India, coll. Kamlakar H. Patil; H-68 (COFD), 09.x.2012, Holi Village, Rajapur (16°36'56.10"N & 73°21'43.40"E), Ratnagiri District, Maharashtra, India, coll. Sidanand V. Kambhar.

Distribution: Endemic to southwestern India - Goa, Karnataka and Maharashtra states. There are two known localities in Maharashtra State, one in Ratnagiri District in the villages Phansop and Pali; and another in Sindhudurg District in the villages of Pimpalwadi. The species is also reported from Goa.

Ecology: Plant sprawl on the stream bed in rapid currents.

Discussion: Recently, Singh et al. (2013) reported on scanty populations of *Cryptocoryne cognata* Schott from Sindhudurg district of Maharashtra. It was also claimed op. cit. that the species was 'strictly endemic to Sindhudurg district' and was 'Critically Endangered'. The authors also could not find any traces of any individual in the entire Konkan stretch covering Goa, Karnataka

and Maharashtra. In fact, they found that one of the populations at Aijaon had totally vanished while another at Vaibhavwadi had shrunk.

It is well-known that *C. cognata* is threatened, having been lost to science for nearly 150 years and known from only a few localities. Without belittling the conservation importance of this species, we communicate that it is listed as 'Endangered' in the latest IUCN Red List (Gupta & Kumar 2011). It is true that the authors had referred to BSI publications for the status. In IUCN report, Patil et al. (1992) mention that the species was reported from Ratnagiri District also. Based on present observations and published reports, it is confirmed that there are more populations of this species in Ratnagiri District, in the Konkan region itself and elsewhere too. This is contrary to what has been reported by Singh et al. (2013).

The species was found in Holi Village with a healthy population spread over a stretch of about 500m along the stream. Further, we were informed of a population at Pavas in Ratnagiri Taluka (16°51'54.30"N & 73°20'10.92"E) through personal communication with Mr. S.S. Wadkar of Smt. Kasturbai Walchand College, Sangli. Thereafter, we remembered and confirmed that Kudavale in Dapoli Taluka (17°51'43.84"N & 73°14'3.37"E) of same district also had a population of this species. At all these locations, good populations with flowering and fruiting were observed. These locations are about 100–250 km away from the localities mentioned in the report of Singh et al. (2013).

Conclusion: *C. cognata* has been reported from a few other places - near Phansad Wildlife Sanctuary in Raigad district in the National Board for Wildlife-Agenda notes (2011); on Kas plateau in Satara District,

at streamlet banks by Bhattarai et al. (2012); and on high level ferricrete plateaus of northern Western Ghats by Watve (2013). The exact location is not mentioned in last of these records, but the studied high level ferricrete plateaus are located at higher elevations. This amply proves that the range of *C. cognata* needs to be reassessed by the scientific community.

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