
During botanical explorations to the lateritic plateaus of the higher ranges of the Western Ghats in Karnataka, we collected *A. nateshii*, which was hitherto known only from type locality in the Konkan region of Maharashtra. The collection of this species extends its distributional range to Karnataka State. Its collection from different topographical conditions indicates that this morphologically unique species may have much more ecological amplitude.


Perennial, tuberous, freshwater, aquatic herbs. Tubers 1.2–1.5 × 0.9–1 cm, globose-ovoid, elongated roots fibrous. Leaves totally submerged; petioles 9–10.5 cm long, channelled above, glabrous; lamina 17.5–30 × 4–6.8 cm, ovate-lanceolate, pale green, attenuate-rounded at base, undulate along margins, acute-obtuse at apex. Inflorescence a simple spatheate spike; spathes membranous, caducous, occasionally retained at the tip of the spike, acute-acuminate, enclosing young inflorescences. Peduncles up to 80 cm long, cylindrical; spike simple. Tepals 2, 0.8–1.5 × 0.7–1.4 mm obovate, obtuse, concave, 1-nerved, fleshy, whitish, unequal. Stamens 6, in two whorls; anthers pale yellow, basifixed, dehiscing longitudinally; pollen yellow. Carpels 3, free; stigma decrement; ovules usually 1 or rarely 2 per carpel. Follicles 3, beaked, ovoid, beak 2–6 mm long, curved. Embryo globular, with spirally arranged 10–12 ovate, green appendages (Image 1).

Specimens Examined: 372 (BSI, SUK and Herbarium of Department of Botany, Goa University, Goa (Image 2)), 17.x.2015, Surla, Khanapur Tehsil, Belgaum District, Karnataka, India, coll. S.S. Kambale & R.R. Kolte.

Flowering & fruiting: August–October.

Distribution: India: Maharashtra and now also in Karnataka (Fig. 1).

Notes: *Aponogeton nateshii* is a recently described species, which was known only from its type locality. Its unique embryo bears 15–20 ovate-lanceolate, spirally arranged appendages.
The species grows in seasonal ponds along coastal plains of Konkan region of Maharashtra at an altitude of 68m. However, the population now located at Surla plateau (Karnataka part) is at an altitude of 828m. This indicates that the species is adapted to elevations ranging from 68–828 m. Certain variations have been noted in the population at Surla plateau: (1) the peduncle is up to 200cm long in the population at Konkan region while it is up to 80cm in the population located at Surla plateau. This variation seems to be because of the depth of water in the respective ponds; (2) there is reduction in the number of appendages of embryo, 10–12 in Surla plants as compared to 15–20 in Konkan plants. Hence it is found that this species is variable. Its occurrence on elevated plateaus in Karnataka indicates that the extensive surveys are necessary to locate this unique species at other places.
Extended distribution of *Aponogeton nateshii* Kambale et al.

References


Image 2. Herbarium of *Aponogeton nateshii*