

Three new additions to the flora of Eastern Ghats

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पूर्वी घाट के वनस्पतिजात में तीन संयोजन

आलोक आर. चोर्गे, एल. राशिंगम, पी. वी. प्रसन्ना एवं एम. शंकर राव

सारांश

एमोर्फोफैलस कोणकनसिस हेट. एस. आर. यादव एवं के. एस. पाटिल, ड्रिमिया पॉलियान्था (ब्लॉट. एवं मैककैन) स्टेर्न एवं कैलेन्चे भिडेई टी. कुक, तीन जातियों को पूर्वी घाट, आंध्र प्रदेश से प्रथम बार अभिलेखित किया गया है।

ABSTRACT

Three species viz., *Amorphophallus konkanensis* Hett., S. R. Yadav & K. S. Patil, *Drimia polyantha* (Blatt. & McCann) Stearn and *Kalanchoe bhidei* T. Cooke are reported for the first time from Eastern Ghats of Andhra Pradesh.

Keyword: *Amorphophallus*, Andhra Pradesh, *Drimia*, Eastern Ghats, *Kalanchoe*

INTRODUCTION

While exploring the flora of Eastern Ghats of Andhra Pradesh, the authors have collected *Amorphophallus konkanensis* Hett., S.R.Yadav & K.S. Patil (Araceae), *Drimia polyantha* (Blatt. & McCann) Stearn (Asparagaceae) and *Kalanchoe bhidei* T. Cooke (Crassulaceae) from different localities. Perusal of literatures revealed that these three species have not been reported from Eastern Ghats (Pullaiah & Chennaiah, 1997; Reddy & al., 2008). Hence, all are reported here as new additions to the flora of Eastern Ghats. A detailed description, photo plates and other information are given for easy identification.

Amorphophallus konkanensis Hett., S. R. Yadav & K. S. Patil in Blumea 39: 289. 1994; Hett. & Ittenb. in Aroideana 19: 90.1996; Jaleel & al. in Bangladesh J. Plant Taxon. 18(1): 9, t. 3. 2011.

Tuberous herbs, up to 40 cm high; tuber globose or depressed globose, 3–6 × 3–4 cm. Leaf dissected, solitary; petiole smooth, 20–50 cm long, brown or greenish brown; leaflets lanceolate, acuminate, 5–15 × 1–4 cm. Inflorescences long-peduncled, 25–50 cm long; spathe erect, ovate, acute, 3.5–8 cm × 2.3–7 cm, pinkish-brown, veins dark purplish brown, inside maroon, base within dark maroon, longitudinally ridged. Spadix stipitate, up to twice as long as spathe, 10–15 cm long; female zone

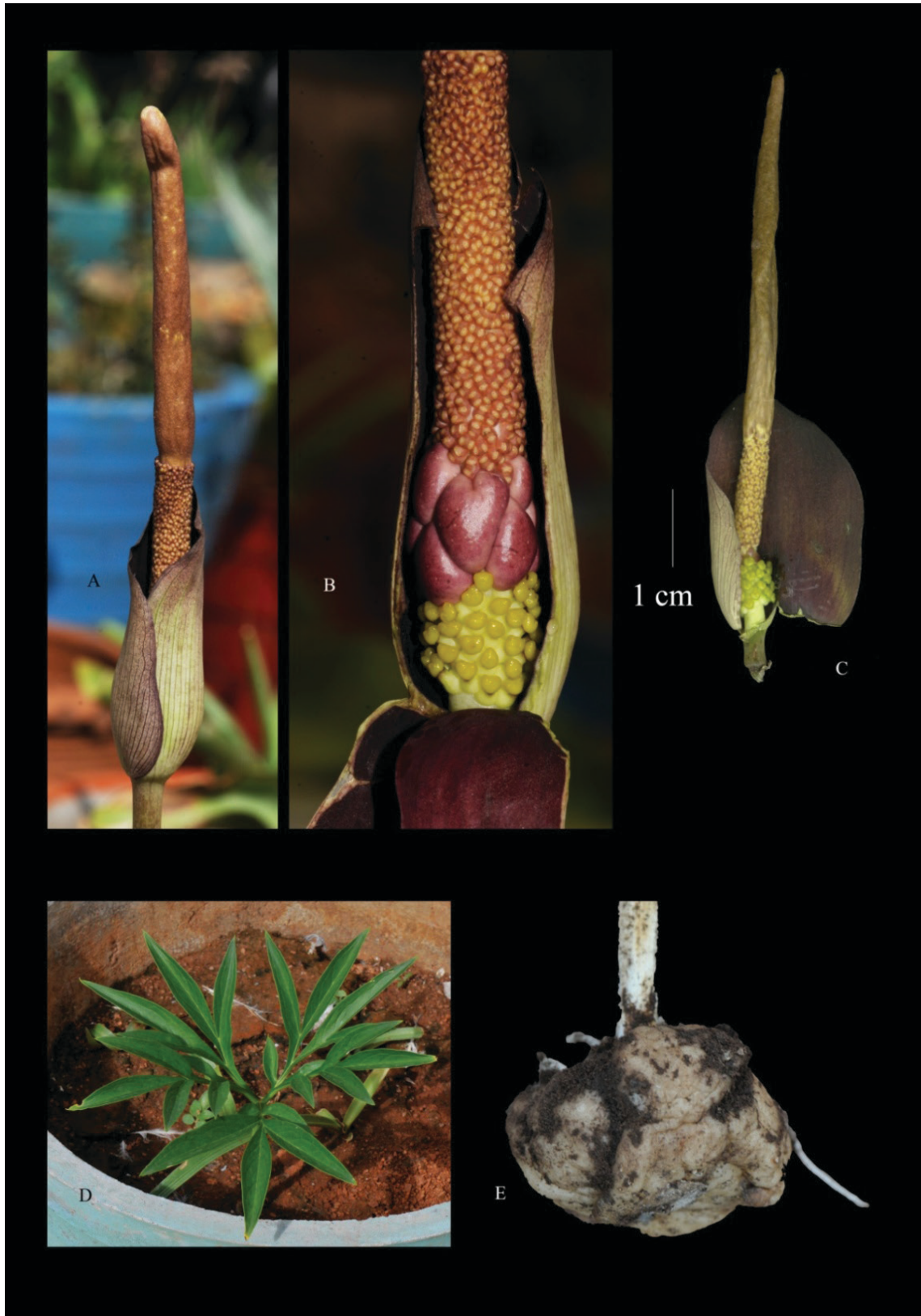


Fig. 1: *Amorphophallus konkanensis* Hett., S. R. Yadav & K. S. Patil: A, B & C. Inflorescence showing 3 different type of flowers; D. Leaf; E. Tuber.



Fig. 2: *Drimia polyantha* (Blatt. & McCann) Stearn: A. Habit; B. Inflorescence; C. Flower.



Fig. 3: *Kalanchoe bhidei* T. Cooke: A. Habit; B. Leaf; C. Flower; D. Calyx; E. Corolla; F. Pistil

cylindric, 1–2 cm long, flowers congested; malezone cylindric, 1.5–3 cm long, flowers slightly distant; staminodial zone between female and male zone 0.5–1.5 cm long, staminodes congested; appendix elongate conic, apex blunt, 5–10 cm long. Ovaries depressed-globose, diamond-shaped in cross section, $2-3 \times 0.8-1$ mm high, pale green, near the top becoming purplish; stigma large, sub-circular or slightly irregular in cross section. Male flowers consisting of 4–6 stamens; stamens c. 1 mm long; filaments 0.2–0.3 mm long, connate. Staminodes ovate or rhomboid in cross section, slightly convex, $3-6 \times 2.5-4$ mm, pinkish-brown in colour.

Flowering & Fruiting: May–July.

Distribution: India: Andhra Pradesh, Goa, Madhya Pradesh and Maharashtra (Endemic).

Ecology: Common in open rocky grasslands of dry deciduous forests.

Specimen examined: Andhra Pradesh, Kadapa district, Sidhout, 400msl, 28th June 2012, *L. Rasingam & M. Sankara Rao* 2867 (BSID).

Drimia polyantha (Blatt. & McCann) Stearn in Ann. Mus. Goulandris 4: 209. 1978. *Urginea polyantha* Blatt. & McCann in J. Bombay Nat. Hist. Soc. 32: 735. 1928.

Bulbs ovoid or globose, white, c. 5×7 cm with 8–10 roots at base, neck c. 1.5 cm long. Leaves 2 or 3, linear-oblong, $40-53 \times 1-2.5$ cm, acuminate at apex, ashy green coloured. Inflorescences up to 60 cm long. Flowers about 1 cm long; pedicels filiform, c. 6 mm long. Bracts triangular, c. 1mm long. Perianth rotate, yellowish-green; lobes obtuse, $5-6 \text{ mm} \times 3 \text{ mm}$. Stamens c. 2.5 mm long. Ovary oblong, 6 grooved; style short, stout; stigma trigonus.

Flowering & Fruiting: February–May.

Distribution: India: Andhra Pradesh and Maharashtra (Endemic).

Ecology: Common on the rocky crevices of dry deciduous forests.

Specimen examined: Andhra Pradesh, Nellore district, Penchalakona, 600 msl, 6th September 2012, *L. Rasingam, M. Sankara Rao & Alok Chorghe* 2977 (BSID).

Kalanchoe bhidei T. Cooke, Fl. Bombay 1: 467. 1903; Gamble, Fl. Madras 1: 318. 1919; Gandhi in Saldanha and Nicolson, Fl. Hassan Dist. 209. 1976; Srinivasan in Nair & Henry, Fl. Tamil Nadu (Analysis) 1: 145. 1983; Sharma & al., Fl. Karnataka 98. 1984; Godbole & Das Das in Singh

& al., Fl. Maharashtra 1: 840. 2000; N. B. Singh & al., Crassulaceae of India 54, t. 2. 2011.

Perennial, erect, succulent herbs, 70–100 cm high, stem terete, yellow-reddish in colour, glabrous. Leaves simple, opposite, ovate-oblong, $9-11 \times 4-5$ cm, obtuse at apex, attenuate at base, serrate along margins; petiole 1–2 cm long. Inflorescences terminal, cymose, paniculate, spreading, $18-22 \times 13-17$ cm. Flowers bisexual, 4-merous, $12-14 \times 3-4$ mm, whitish-pink in colour, pedicellate, pedicels 8–10 mm long; bracts linear-lanceolate, 2–3 mm long. Sepals free, $3-4 \times 1-2$ mm, linear-lanceolate, acuminate at apex, broader at base, greenish-pink. Corolla whitish-pink, $1.3-1.4 \times 0.6-0.7$ cm, tubular, 4-lobed at apex; lobes $4-4.5 \times 1.8-2$ mm, oblong, mucronate at apex. Stamens 8, arranged in two rows, epipetalous; filaments 2–3 mm long. Carpels 4, erect; style 3–4 mm long; nectar scales 4, linear, 2–2.5 mm long, present at the base of the carpels.

Note: The Plant List, Kew treats this as an unresolved name.

Flowering & Fruiting: January–March.

Distribution: India: Maharashtra, Karnataka, Tamil Nadu and Andhra Pradesh (Endemic).

Ecology: Rare along the rocky cliffs and exposed rocky areas of above 700m in deciduous forests.

Specimen examined: Andhra Pradesh, Nellore district, Penchalakona, 700 msl, *L. Rasingam, M. Sankara Rao & Alok Chorghe* 2926 (BSID).

ACKNOWLEDGEMENTS

The authors are grateful to the Director, Botanical Survey of India, Kolkata for facilities and encouragements. Authors are also thankful to Forest Department, Government of Andhra Pradesh for the necessary permission to survey the forests.

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