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Distributional note on magnificent grass lilly, *Iphigenia magnifica* (colchicaceae) in Tamilnadu, India

Chinnaiyan Rajasekar, Palliyalil Sivasankaran Anurag and *Ramalingam Kottaimuthu¹

Department of Botany, Alagappa University, KARAIKUDI-630003 (TAMILNADU) INDIA ¹Botanical Survey of India, Eastern Regional Centre, SHILLONG-793 003 (MEGHALAYA) INDIA ^{*}Corresponding Author: E-mail : rkmlegumes@gmail.com

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ABSTRACT

Occurrence of endemic ephemeral, *Iphigenia magnifica* (Colchicaceae) is confirmed here in Tamil Nadu. The species is hitherto known to occur only in the Western Ghats of Goa, Karnataka, Maharashtra and Eastern Ghats of Andhra Pradesh.

Figure : 01	References : 17	Table : 00
KEY WORDS: Distribution, Endemic, Tamil Nadu, Western Ghats		

Introduction

The members of the genus *Iphigenia*⁹ (Colchicaceae) are recognized as grass lily and the genus is currently represented by seven species¹². Among them *I. magnifica*², *I. mysorensis*³, *I. pallida*⁴, *I. sahyadrica*², *I. stellata*⁵ and *I. ratnagirica*¹ are endemics^{10, 12, 15}. *Iphigenia magnifica* is popularly called as 'Magnificent Grass Lily' and it is hitherto reported from the Central and Northern Western Ghats, ^{2, 6, 10, 12, 15, 16} Eastern Ghats of Andhra Pradesh¹⁷ and Telangana⁷.

Materials and Methods

During botanical surveys conducted from 2017 to 2018, the first author located the species in the grass lands of Solur mattam and Pakkasuran malai, Nilgiri District. Perusal of literature survey revealed that *I. magnifica* has been erroneously included by some authors in the Colchicaceae of Tamil Nadu^{8, 13}. These reports are based on Plant Resources of Tiruvannamalai District¹⁴ which do not include *I. magnifica*, thus questioning the occurrence of *I. magnifica* in Tamil Nadu. Hence the collections from Nilgiri form a first authentic report from Tamil Nadu and also extend the distribution range further south in Western Ghats. Recent additional collections from the plains of Pudukkottai District confirm the common distribution of this endemic grass lily in Tamil Nadu. A brief description, photo-plate and other relevant details are furnished here for its easy identification.

Result

Iphigenia magnifica^{1,10,11} (Fig.1)

Erect herbs, 25–45 cm high; corms sub–globose, 1.5– 2.5 × 1–2.0 cm, narrowed into a short neck, covered with membranous tunics. Stem distinctly branching. Leaves simple, alternate, 4–8, sessile, grass like, linear– lanceolate, 20–25 × 0.5–0.7 cm, sheathing at base, acute at apex. Inflorescence 4–6-flowered. Pedicels 2.5–5.5 cm long, elongating up to 9 cm long in fruits, grooved. Bracts linear or linear–lanceolate, 4–5 cm long, leafy. Tepals 6, linear–subulate or elliptic, dark purple or maroon colored, 1–3 veined, acute at apex, reflexed. Stamens 6; anthers ovoid or oblongoid,1–2 mm long, dark purple; pollen grains spheroidal, 30 ×16 µm, monoporate, colpus finely defined, long, broad, exine

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Fig. 1 : *Iphigenia magnifica,* a-Habit. b-Corm. c-Flowers, close up. d-Fruit, close up. e-Seeds. f-SEM micrograph of seed. g-SEM micrograph of pollen grain

continuous with well-defined margins and frequently adorned by micro-echinate spines; filaments 3–5 mm long, glabrous, swollen at base. Ovary oblong or oblong– obovoid, 3–4 mm long, green; styles 3, up to 2.5 mm long, united in the lower half, recurved; stigma 3–fid. Capsules oblong or oblong–obovoid, 1–1.8 × 0.5–1 cm; seeds many, sub-globose, 2–3 mm across, brown with a conspicuous band of raphe.

Flowering and Fruiting: September–October.

Distribution

In India (Andhra Pradesh, Goa, Karnataka, Maharashtra, Tamil Nadu and Telangana).

Endemic Specimens examined: INDIA. Maharashtra, Dhule Dist., Mukti Lake area, 5 October 1969, *R.D. Pataskar 118218A* (CAL0000001131!). Tamil Nadu, Nilgiri Dist., 3.11°26'10.31" N; 76°57'57.86" E, Solur mattam, 25 September 2018, *Rajasekar 78*; 4.11°18'59.62" N; 76°50'09.02" E, Pakkasuran malai, 19 October 2018, *Rajasekar 103*; Tamil Nadu, Pudukkottai District, Vanniampatti marshy areas, 25 September 2021, *Narmadhai Naachiyaar 22*; same place, 26 November 2022, *Rajasekar et al. 154* (Alagappa University Herbarium!).

Taxonomic affinity: *Iphigenia magnifica* very closely resembles *I. indica* in having dark purple or maroon colored flowers but differs distinctly by its 25–45 cm hight (upto 15 cm hight in *I. indica*), branching stem (unbranched stem in *I. indica*), leaves 20–25 cm long (10–18 cm long in *I. indica*), pedicels 2.5–5.5 cm long, reaching up to 9 cm long in fruits (2.5–4 cm long, reaching up to 5.5 cm long in fruits in *I. indica*) and filaments glabrous (hairy in *I. indica*).

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