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Datura discolor Bernh. (Solanaceae), a new record for Tamil Nadu, India

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दातुरा डिस्कलर बरन्ह (सोलानेसी), भारत में तमिलनाडू के लिए एक नवीन रिकॉर्ड

सी. राजासेकर, वी. धारणी एवं आर. कोट्टईमुथु

सारांश

दातुरा डिस्कलर बरन्ह का पहली बार आलेखन पुडुक्कोट्टई जनपद से तमिलनाडू के फ्लोरा के लिए किया गया है। पूर्व में इस प्रजाति का संग्रहण भारत के आंध्र प्रदेश एवं कर्नाटक राज्य से किया गया था। भविष्य के संदर्भ एवं फिल्ड में सुगम पहचान हेतु फोटो-प्लेट के साथ साथ इस प्रजाति का संक्षिप्त विवरण, सवितरण, पारिस्थितिकी एवं पुष्पण समय भी प्रदान किए गए हैं।

ABSTRACT

Datura discolor Bernh. has been recorded first time for the flora of Tamil Nadu from Pudukkottai district. Previous collections of this species were made from Andhra Pradesh & Karnataka state of India. A brief description, distribution, ecology and phenology of the species are provided here along with a photo-plate for the future reference and easy identification of the taxon in the field.

Keywords: Addition, Pudukkottai, Thorn apple, Weed

INTRODUCTION

The genus *Datura* L. belongs to the family Solanaceae, is popularly called as 'thorn apple' or 'jimson weed'. It has greater medicinal value as it contains high levels of tropane alkaloids (Wink, 2003). The native range of *Datura* is America, Mexico and southwestern USA, however during recent past, it is widely naturalized in many parts of the world (Luna-Cavazos & Bye, 2011). Globally, there are about 16 species (POWO, 2021), of these, India is known to have the following six species namely, *D. discolor* Bernh., *D. ferox* L., *D. innoxia* Mill., *D. metel* L., *D. quercifolia* Kunth and *D. stramonium* L. (Kumbhalkar & Nandikar, 2017; Swamy & al., 2020).

During botanical exploration in the plains of Pudukkottai District of Tamil Nadu, we have located two population of *Datura discolor* in Tirumayam and Kadiapatti areas. Perusal of relevant literature review revealed that this Solanaceous member was reported so far only from the states of Andhra Pradesh (Swamy & al., 2020) and Karnataka (Kumbhalkar & Nandikar, 2017). Therefore, as the present collection of this species forms an addition to the flora of Tamil Nadu. As a comprehensive description is given by Kumbhalkar & Nandikar (2017) and Swamy & al. (2020), only a brief description, photo-plate and other relevant notes are provided.

Datura discolor Bernh., Neues J. Pharm. Aerzte 26: 149. 1833; Safford, J. Wash. Acad. Sci. 11: 181. 1921; Kumbhalkar & Nandikar, Curr. Sci. 113 (5): 855. 2017. J.Swamy & al., Nelumbo 62(1): 54. 2020. *Datura thomaslii* Torr., Pacif. Railr. Rep. Parke, Bot. 5: 362. 1857. (**Fig. 1**)

Annual herbs, up to 50 cm high; stem green or sometimes purplish, terete; young parts densely pubescent, glabrescent or glabrous when mature. Leaves simple, alternate, sub-opposite at apex; petiole 1–3 cm long; lamina broadly ovate, 3–7 × 5–9 cm, base oblique–unequal, margin sinuate to dentate, apex acuminate, glabrescent above, densely pubescent beneath, especially on nerves ; lateral nerves 4–5. Flowers solitary, white with purple throat, born in the forks of the branches; pedicel 1–1.5 cm long. Calyx tubular, angular, 5 lobed;

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Fig. 1. *Datura discolor* Bernh.: **A.** Flowering twig; **B.** Flower; **C.** Corolla top view; **D**. Fruit and **E.** Seeds

tube 7–10 cm long, sparsely pubescent; lobes unequal, triangular, 1–1.5 cm long, acuminate at apex. Corolla trumpet-shaped, 14–18 cm long, 5-lobed; limb up to 17 cm across, lobes alternated with short five acute teeths. Stamens 5, epipetalous, included; filaments filiform, up to 12 cm long; anthers linear, 3–8 mm long. Ovary 2–4 mm long; style filiform, up to 15.8 cm long; stigma bifid. Capsules usually globose, sometimes ovoid-globose, 2.5–4.2 cm across; spines sparse, up to 1.2 cm long, densely glandular-pubescent. Seeds reniform with white hilar residue, black, up to 3 mm across, bullate – verrucose.

Flowering & *Fruiting:* July–October.

Habitat and Ecology: Occasional along the road sides and waste lands in association with *Corchorus aestuans* L., *Datura innoxia* Mill., *Indigofera linnaei* Ali, *Malvastrum coromandelianum* (L.) Garcke, *Sida acuta* Burm.f., *Sida cordata* (Burm.f.) Borss.Waalk., *Sida cordifolia* L., *Spermacoce hispida* L. and *Tridax procumbens* (L.) L.

Distribution: INDIA (Andhra Pradesh, Karnataka & Tamil Nadu [present report]), CARIBBEAN ISLANDS, U.S.A. and MEXICO.

Specimens examined: INDIA. Tamil Nadu, Pudukkottai District, near Tirumayam fort, 15 July 2021, *C. Rajasekar* & al. 160 (Alagappa University Herbarium); Pudukkottai District, Kadiapatti, near Chidambara vilas, 18 July 2021, *C.Rajasekar* & al. 166 (Alagappa University Herbarium).

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