DATURA STRAMONIUM L. (SOLANACEAE) NEW FLORA RECORD FROM KUWAIT

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ABSTRACT

Jimsonweed, *Datura stramonium* L. (Solanaceae) is recorded for the first time in Kuwait. The species was spotted in 2 separate governorates and 9 months apart in 2020. Species description and photographs are provided to authenticate the finding.

Keywords: Kuwait, New Record, Flora, Datura stramonium, Solanaceae

INTRODUCTION

In Kuwait, the nightshade family (Solanaceae) recorded 7 species of which the thorn apple genus *Datura* is represented by one species, *D. innoxia* (Abdullah 2017 & Amr 2021). *Datura* according to Britannica (2021) is a genus of nine weedy, poisonous flowering plants that can be seen in disturbed habitats and alongside roads. *D. stramonium* was spotted in 2 localities in Kuwait and is presented here as a new record for the local flora.

Species Distribution and Description

The origin of *D. stramonium* is unclear although it has been reported to be of Central American origin (Singh & Singh 2013). It is a medicinal plant that has a distribution range in temperate and warm regions (Yadav et al., 2008). Boulos and el-Hadidi (1989) describe its distribution as worldwide.

D. stramonium L., Am. Med. Lea. Herbs USDA NAL: 30. (1911); Weed Flora EGY: 135. (1989).

Annual, toxic, glabrous herb. *Height* 80 cm or more. *Stem* simple, stout, branched above, straw-yellow in color. *Leaves* 8 to 20 cm long, smooth, ovate, coarsely dentate, pointed tips. *Flowers* 6 to 10 cm, large, erect, funnel-shaped, white, pronounced odor. *Fruit* 4-valve spiny capsule, ovate, contains many black seeds. (Plate 1)

MATERIALS AND METHODS

D. stramonium was observed 9 months apart in 2020 in 2 separate governorates: Al Jahra and Al Ahmadi (Fig. 1). To identify the species, taxonomic literature was used as well as photographs of the 2 observations were posted on the citizen science platform, iNaturalist through a smartphone for further species identification assessment.

Locality 1

Al Jahra Governorate, N29.31394 E47.59164, 27.01.2020. A small community of the species was found on the side of Road 70, westward, southeast of Jahra Equestrian Club (Fig.1).

Locality 2

Al Ahmadi Governorate, N29.18469 E47.81567, 04.11.2020. Several plants were spotted in a private garden used for the cultivation of vegetables in a horse stable in Farwaniya Equestrian Club (Fig.1).

Specimens were not collected at the time of the findings in 2020 but were collected from locality 2 in Al Ahmadi Governorate in 2021. The specimens are preserved in the private collection of Eiman Mansoury.



Plate 1: *D. stramonium*. A - Whole plant. B - Leaves. C - Flower bud. D - Flower. E - Fruits. F - Ripe fruits with seeds.

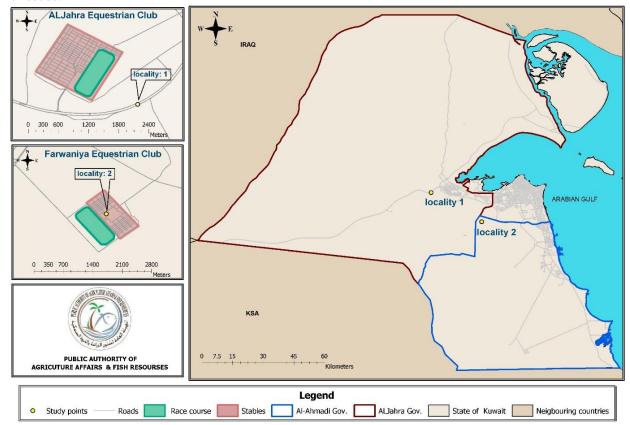


Figure 1: Map of Kuwait showing localities 1 and 2 where D. stramonium was spotted.

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RESULTS AND DISCUSSION

The species was identified as *D. stramonium*. This finding makes *D. stramonium* the second *Datura* species after *D. innoxia* and the eighth Solanaceae species recorded from Kuwait.

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