A NEW RECORD OF THE GENUS MANDRAGORA (SOLANACEAE) FOR THE FLORA OF IRAN

M. Dinarvand & H. Howeizeh

Received 2014.01.14; accepted for publication 2014.09.03


During the project of collecting plants in Khuzestan province, the specimens of Mandragora autumnalis were collected from Shimbar protected area. It grows in two marginal locations of this wetland. Mandragora autumnalis is reported as a new record for the flora of Iran.

Mehri Dinarvand (correspondence <mdinarvand2003@yahoo.com>), Research Center of Agriculture and Natural Resources of Khuzestan province & Ferdowsi University of Mashhad, Iran.- Hamid Howeizeh, Research Center of Agriculture and Natural Resources of Khuzestan province, Ahvaz, Khuzistan.

Key words: Mandragora; Solanaceae; New record; Shimbar wetland; Khuzestan; Iran.

INTRODUCTION

The genus Mandragora from Solanaceae family includes about 6 species, distributed in Mediterranean Region in West to Himalayas in East; one species (Mandragora turcomanica) has been known in the USSR (Linczevsky 1955). Schonbeck-Temesy (1972) recognized this genus in Flora Iranica only with one species (Mandragora turcomanica) which was considered as an endemic of Turkmenistan. There is one species in Turkey (Davis 1978) and Palestine (Zohary 1978) named M. autumnalis. There are two species in Europe M. autumnalis & M. officianrum L. (Hawkes 1972). Akhani (2003) reported the species Mandragora turcomanica Mizgir, from gardens of Dahaneh village in Golestan Province (NE of Iran) as a transplanted from wild population by local people many years ago but he did not determined the real wild population. Khatamsaz (1998) in Flora of Iran noted that no specimen of this species has been collected in Iran, but it was used by people as a medicine plant.

In a program of collecting plants in Khuzestan, the specimens of Mandragora autumnalis were collected from Shimbar wetland. It grows wildly in two marginal locations of this wetland and among oak forest in the protected area.


Specimen examined: Khuzestan province: Andica, Shimbar protected area, 1400m, Dinarvand, Howeizeh & Mohammadi, 8960 (TARI and Herbarium of the Research Center of Agriculture & Natural Resources of Khuzestan).

Habitat: The Shimbar or Shirin bahar with an area about 53000ha is located in 45 km north east of Masjed Soleyman, Andica town and north of Shahid Abbaspour Dam, in Zagrosian district of Irano-Turanian Region. This area contains two parts: oak forests and wetland. Mandragora autumnalis was found in the margin of wetland and oak forest in the protected area. The ambrotermic diagram of the Shimbar area is shown in fig. 1.
Perennial herbs. Stemless, rosette with 90 to 120 cm diameter. Root branched (very similar to man body), more than 3 cm in diameter, white. Leaves large, 18 to 30 cm wide and 35 to 45 cm long, ovate to oblong-ovate, crispate in margins, cuneate at base; petiole long, 10 to 12 cm. Flowers axillary, 3 cm long, violet; pedicels 11 to 13 cm, sparsely hairy. Calyx 2 cm, then grows to 5 cm in fruiting, lanceolate, with large lobes, sparsely hairy. Corolla longer than calyx, 3 cm long, sparsely hairy at outside, recurved, ovate. Stamens 5, filaments 1 cm, with tufted long hairs at the base; anthers violet. Style longer than stamens, 2 cm long. Berry globose, 5 cm in diameter, smooth (figs. 2 & 3).

This species wildly grows in two marginal locations of wetland and oak forest in the Shimbar protected area. Each site was about with 20 individuals, so it is likely an endangered plant in Iran.

Distribution: Mediterranean Region.
This species is similar to M. officianum but it is different from the later by the color of its flowers.

ACKNOWLEDGEMENTS
Special thanks are due to Mr. Adel Molla and Mehdi Sadeghy Hasanvand from Khuzestan Organization of Environment and Mr. Ghasem Ghafehi for their helps during mission. We wish to thank Mrs. Farahdust, the artist of TARI herbarium for preparing the illustration.

REFERENCES
Fig. 2. *Mandragora autumnalis*. A, leaf; B, fruit; C, flower dissected. Scale bar = 2 cm.
Fig. 3. Root of *Mandragora autumnalis*.