

## SCORZONERA TOMENTOSA L. (ASTERACEAE), A NEW RECORD FOR THE FLORA OF IRAN

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*Scorzonera tomentosa* L. is reported for the first time from Iran, it has been collected from Kordestan, NW. of Iran.

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**Key words:** Asteraceae; *Scorzonera*; new record; taxonomy; Kordestan; Iran

گونه *Scorzonera tomentosa* L. گزارشی جدید از تیره Asteraceae برای ایران

سیدرضا صفوی: استادیار پژوهش، مؤسسه تحقیقات جنگلها و مراتع کشور، سازمان تحقیقات، آموزش و ترویج کشاورزی، تهران، ایران  
*Scorzonera tomentosa* L. که از کردستان در شمال غرب ایران جمع آوری گردیده، برای اولین بار از کشور گزارش می شود.

### INTRODUCTION

The author has worked on the project "Flora of Iran (Asteraceae, Lactuceae)" in the herbarium of Research Institute of Forests and Rangelands (TARI) since 1998. During one of the plant excursions in 2004, a new record of *Scorzonera* L. was collected from Kordestan mountains, in NW. of the Iran. This specimen have been compared with many specimens of *Scorzonera* deposited in the Iranian herbaria and matched with descriptions of *Scorzonera* species in Iran and around countries flora too (Chamberlain, 1975; Komarov, 1964; Rechinger, 1955 and 1977; Safavi & al. 2013); The studies showed that this specimen is a new record for the Flora of Iran. Since the time of the revision of the genus *Scorzonera* by Rechinger (1977) for the Flora Iranica, two new species (Safavi 2006 & 2016), one new variety (Safavi 2006) were described and two new records have been added to the flora of Iran (Safavi, 1998 & 2004).

### MATERIALS AND METHODS

During the work on taxonomy of tribe *Lactuceae* in Iran, some specimens of *Scorzonera* were collected from Kordestan province in NW. of Iran and deposited in TARI by author. After exact determination of the

specimens, a new record of *Scorzonera* was recognized among the collected specimens. The specimen was matched with descriptions of *Scorzonera* species in Iran and neighbouring countries flora (Chamberlain, 1975; Komarov, 1964; Rechinger, 1955 and 1977; Safavi & al. 2013) and was compared with many specimens of *Scorzonera* in the herbaria of TARI, Tehran University (THU) and Iranian Research Institute of Plant Protection (IRAN) too. Also, the type materiel of the species was seen by online service of "Linnean Society of London Herbarium". After careful consideration, it was concluded that the specimen was a new record for the flora of Iran.

### RESULTS

*Scorzonera tomentosa* L., Sp. Pl. ed. 2: 1112 (1763). Iran. Kordestan: Between Dezli village and Geallneh pass, N: 35° 21' 18"; E: 46° 09' 45", 1660 m., 29 Jun 2004, rocky – sandy mountains, Maassoumi & Safavi 106218-TARI (figs. 1 & 2).

Stout erect caulescent perennial, ± tomentose, 16-40 cm; rootstock thick, cylindrical. Basal and lower stem leaves entire, Lamina 6-12 × 1-5 cm, lanceolate to ovate, 2-6 × as long as broad, sparsely villous-tomentose to densely canescent-pannose, margin often ±

cartilaginous, sometimes undulate; petioles 0-5 cm. Upper stem leaves often broader than lower, subsessile. Capitula 4-10 (-many) per stem, 20-25 mm. long. Outer phyllaries 17-19 mm, aristate-lanceolate, lanate; inner 16-21 mm. villous. Flowers yellow. Achene c.  $10 \times 1$  mm., glabrous, ridges acute, smooth to tuberculate; pappus yellow to brownish, hairs barbellate to base, rarely plumose,  $2n=12$  (Martini & al., 2012). (figs. 1 & 2).

*Habitat:* Mountainous steppe and rocky slopes and cliffs, 800 to 2800 m.

*Distribution:* An Ir.-Tur. element belongs to Turkey and NW. Iran (map 1).

## DISCUSSION

*Scorzonera tomentosa* is similar to *Scorzonera*

*veratrifolia* Fenzl, which is distributed in Turkey, Iran (Azerbaijan & Kordestan) and Iraq (Safavi & al. 2013). It belongs to subgen. *Scorzonera*, sect. *Nerrosae* Lipsch. too. It differs from *S. veratrifolia* in the following aspects: Plant  $\pm$  tomentose (not pannose); stem 16-40 cm (not 20-70 cm); with basal leaves (not without basal leaves); lower leaves lamina lanceolate to ovate (not lanceolate to elliptical),  $6-12 \times 1-5$  cm (not  $10-14 \times 2-4$ ); capitula outer phyllaries 16-21 mm (not 14-17); achene c.  $10 \times 1$  mm (not  $8-10 \times 1$  mm.); Pappus yellow to brownish (not light yellow), (figs. 1 & 2).

## ACKNOWLEDGMENT

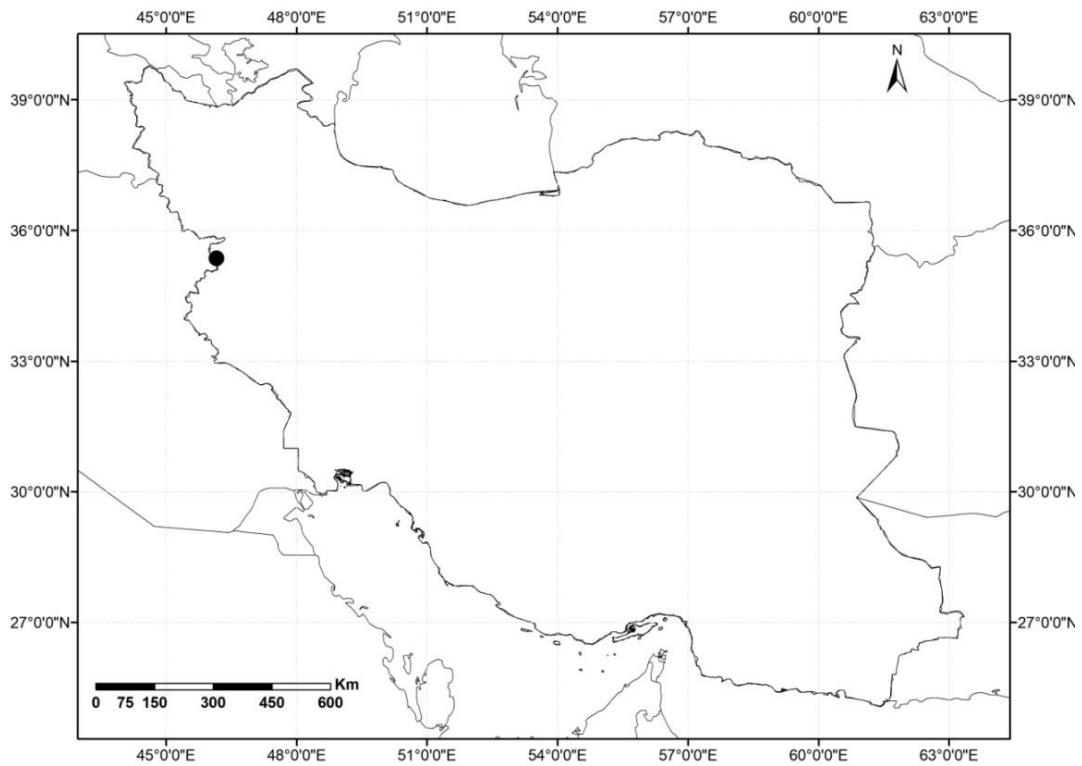
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Fig. 1. Image of herbarium specimen of *Scorzonera tomentosa* L. (TARI).



Fig. 2. Achene and capitule of *Scorzonera tomentosa* L. (106218-TARI).



Map 1. Distribution of *Scorzonera tomentosa* L. in Iran.

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