

ONOBRYCHIS OXYPTERA BOISS. VAR. UNIFOLIOLATA (FABACEAE), A NEW VARIETY FROM IRAN

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Onobrychis oxyptera var. *unifoliolata* as a new taxon endemic to Iran is described and illustrated from Fars province in southwest of Iran. The new variety belongs to *Onobrychis* Miller subgen. *Sisyrosema* (Bunge) Grossheim sect. *Heliobrychis* Bunge ex Boissier. The new variety differs from typical variety by having simple leaves.

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واريته جدید (*Onobrychis oxyptera* Boiss. var. *unifoliolata* (Fabaceae) از ایران

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واريته *Onobrychis oxyptera* var. *unifoliolata* به عنوان یک آرایه جدید انحصاری برای ایران از استان فارس در جنوب غرب ایران معرفی و شرح داده می‌شود و تصویری از آن ارائه می‌گردد. این آرایه به جنس *Onobrychis*، زیر جنس *Sisyrosema* و بخش *Heliobrychis* تعلق دارد و از واریته تیب با داشتن برگهای ساده تشخیص داده می‌شود.

INTRODUCTION

The genus *Onobrychis* Miller belongs to the tribe *Hedysareae* (Fabaceae). It includes annual and perennial herbs or shrubs, and is mainly distributed in the eastern Mediterranean and West Asia, Iran and Anatolia making this area the main center of genetic diversity of the genus (Yildiz et al. 1999).

In Flora Iranica, *Onobrychis* is divided into two subgenera and nine sections. The new taxon belongs to the section *Heliobrychis* subgenus *Sisyrosema*. This section with about 26 species (Rechinger 1984; Amirabadi-zadeh et al. 2007; Amirabadi-zadeh 2011; Amirabadi-zadeh & Ghanavati 2012; Ranjbar et al. 2004 and 2010) is the biggest section in Iran.

MATERIALS AND METHOD

This study is mainly based on the herbarium material and the field observations during excursions throughout Iran. Plants from different habitats were collected and archived using conventional herbarium methods; voucher specimens have been preserved in Herbarium of Mashhad Research Center (MRCH). The present study is focused on the morphological criteria allows distinguishing a new Iranian taxon from *O.* sect. *Heliobrychis* from Fars province. The specimens in the

herbaria of TARI, IRAN, FUMH, MRCH and all of Iranian Research Centers of Agricultural and Natural Resources, have been checked for new taxon. Flora Iranica (Rechinger 1984), Flora of Iraq (Townsend 1974), Flora URSS (Grossheim 1948), Flora of Turkey (Hedge 1970), Flora of Armenia (Takhtajan 1962), Flora of Azerbaijan (Kariatin 1954) and some general references (Boissier 1872, Sirjaev 1926) were used as the main literature.

RESULTS

Onobrychis oxyptera Boiss. var. *unifoliolata* Amirabadizade & Ghanavati var. nov. Fig. 1.

Differt a varietato typico foliis unifoliolatis nec trijugis; foliolis late ovatis vel subcordatis nec ovatis, 23-72 × 15-39 mm nec 15-25 × 10-15 mm (Table 1).

Typus. Iran, Fars: 73 km NW of Shiraz, Kamfiroz area, after Mammo, in *Quercus* forest, 2100 m, 16 June 1996, Amirabadi & Hatami 5993 (holotypus TARI).

Other specimens examined. IRAN. Fars: 73 km NW of Shiraz, Kamfiroz area, after Mammo, in Oak forest, 2100 m, Amirabadi. & Hatami 5991; 90 km NW of Shiraz, Mammo area, after Bizaa, 2000 m, Amirabadi. & Shirdel 6770; Marvdasht, Kamfiroz, May 11 1996,

Table 1. Morphological comparison of *Onobrychis oxyptera* var. *oxyptera* and *O. oxyptera* var. *unifoliolata*

characters	var. <i>oxyptera</i>	var. <i>unifoliolata</i>
Leaflet pairs	imparipinnate; 3	simple
Leaflet size (mm)	15-25 × 10-15	23-72 × 15-39
Leaflet shape	ovate	broadly ovate or subcordate
Corolla length (mm)	13-14	18-18.5

Neamatti, (without number and altitude).

Perennial, caespitose, with thick woody rootstock, acaulescent herb. Stipules adnate to petioles, free at top, 3-12 mm long, linear or lanceolate-linear, acute, always conspicuously with whitish hairs. Leaves up to c. 18 cm in length, with a large single terminal leaflet; petioles long, robust and arcuate; leaflets somewhat thick, 23-72 × 15-39 mm, broadly ovate or subcordate, mucronate, conspicuously nerved on the dorsal surface, on both sides with white-sericeous indumentums but more densely at lower side. Inflorescence many-flowered, dense, elongating in fruit. Peduncles two to three times as long as leaves, ribbed, strong, upright. Pedicel 1-3 mm long, densely silvery hairy. Bracts 2-5 mm long, linear or lanceolate, pilose. Calyx up to 10 mm long in fruit, densely hairy; teeth about one and a half times as long as tube, lanceolate-subulate with broad base. Corolla concolor or with very pale nerves, dirty-golden yellow. Standard 18-18.5 × 13-15 mm, obovate-suborbicular, emarginated at the apex, with silvery hairs. Wings 12 mm long, elongated oblong-lanceolate, glabrous, acute, somewhat curved at the apex; keel rectangular, glabrous, having a 5 mm long claw. Ovary 1 ovulate, 3.5 × 2.5 mm, with a stipe 1.5 mm long. Pods semiglobular, 9-10 × 8 mm, convex, foveolate on the disc; disc and margin densely covered with long spreading bristles 5- 6.5 mm long ornamented with plumose hairs; stipe 3-3.5 mm long. Flowering season mid to late spring.

World distribution: Endemic.

Iran distribution: SW. in forest and mountain regions of mainly Zagros.

Key to the varieties of *Onobrychis oxyptera* Boiss. in Iran

Leaves simple with a large single terminal, broadly ovate or subcordate of leaflet var. *unifoliolata*

Leaves plurifoliolate with 2-4 pairs of smaller, oval-suborbicular leaflets var. *oxyptera*

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Fig. 1. *Oxobrychis oxyptera* Boiss. var. *unifoliolata*. -a. Plant in fruiting stage -b. Standard. -c. Wing. -d. Keel. -e. Calyx. Scale bar for a=2 cm and b-e=10 mm. the holotype specimen, Amirabadi & Hatami 5993 (TARI).

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