

TWO NEW RECORDS OF THE GENUS POTAMOGETON (POTAMOGETONACEAE) FOR THE AQUATIC FLORA OF IRAN

M. Dinarvand

Received 02.05.2009. Accepted for publication 02.12.2009.

Dinarvand, M. 2009 12 31: Two new records of the genus *Potamogeton* (*Potamogetonaceae*) for the aquatic flora of Iran. – *Iran. J. Bot.* 15 (2): 164-166. Tehran.

For the preparation of Flora of Iran family *Potamogetonaceae*, the herbarium plant specimens in (TARI) herbarium were identified. Among them one specimen collected from Ardebil province named *Potamogeton trichoides* is recorded as a new for the flora of Iran. Also, *Potamogeton filiformis* collected from Shadegan wetland, Khuzestan province is another new record for Iran.

Mehri Dinarvand (mdinarvand2003@yahoo.com), Research Center of Agriculture and Natural Resources of Khuzestan province, Iran.

Key words. *Potamogeton*, Aquatic flora, new record, Iran.

Potamogetonaceae

Potamogeton

طی نگارش تیره *Potamogetonaceae* برای فلور ایران و شناسایی نمونه‌های هرباریومی مربوط به این تیره در هرباریوم موسسه تحقیقات جنگلها و مراتع کشور گونه *Potamogeton trichoides* برای اولین بار شناسایی و به عنوان گزارش جدیدی برای فلور آبی ایران از اردبیل معرفی می‌شود همچنین گونه *Potamogeton filiformis* از تالاب شادگان در استان خوزستان برای اولین بار جمع‌آوری و به عنوان گزارش جدید برای فلور آبی ایران معرفی می‌شود.

Introduction

Potamogeton L. has about 100 nearly cosmopolitan species (Feinbrun-Dothan 1986) in the world and 10 species in Iran (Dandy 1971; Akhane 1998). This genus is the largest aquatic genus in Iran found in lakes, canals, rivers and ponds. In order to prepare Flora of Iran (Assadi 1986) the aquatic families of TARI herbarium were surveyed. Among all specimens of the genus *Potamogeton* in this herbarium and our recent collection in Khuzestan province, two species namely *P. trichoides* and *P. filiformis* were determined as new records for the flora of Iran. *Potamogeton filiformis* was reported from Turkey (Uotila 1984), Afghanistan, Talish and Pakistan (Dandy 1971); and *P. trichoides* was reported from Turkey (Uotila 1984) and European part of the former Soviet Union, Caucasus and Siberia (Yuzepchuk 1968).

Potamogeton trichoides Cham. & Schlecht.

Specimen seen. Azerbaijan province: Ardebil to Khalkhal, 22 km SE of Budalalou, Neor lake. 1450 m, Zehzad, Jamzad, Taheri & Izadpanah 70520.

Submerged plant. Stems long and filiform, with obviously glands at nodes. Leaves alternate, linear-filiform, less than 1.5 mm broad and 3.5-8.5 cm long,

with a prominent midrib, acute or shortly mucronate; stipules 3 mm long, free, open and membranous. Inflorescence spike, raising from opposite leaves; peduncle 7-9 mm long. Flowers hermaphrodite. Tepals 4, 1 mm long, rounded to spatulate, green and brown at the apex. Stamens 4, 1 mm long, sessile, adnate to base of tepals; anthers with 2 thecae. Ovary superior; carpel 1, 1 mm long, oblique urceolate. Stigma sessile or with short style and discoid.

This species is similar to *P. berchtoldii* Fieb. but differs from it by having longer and narrower leaves and just one carpel. *P. berchtoldii* has 4 carpels and its leaves are 3 to 4.5 cm long and 1.5 to 2 mm broad.

General distribution. Europe, Mediterranean area, Asia and Africa.

Potamogeton filiformis Pers.

Specimen seen. Khuzestan province: 17 km to Shadegan, Shadegan wetland, 10 m, Dinarvand 8043.

Submerged plant. Stems brownish, long and filiform. Leaves alternate, filiform, less than 0.5 mm broad and 4-6 cm long, with a prominent midrib, obtuse to rounded; stipules 3 mm long, closed and membranous. Inflorescence spike; peduncle more than 10 cm long.



Fig. 1. *Potamogeton trichoides* ($\times 1.5$); flower ($\times 16$).

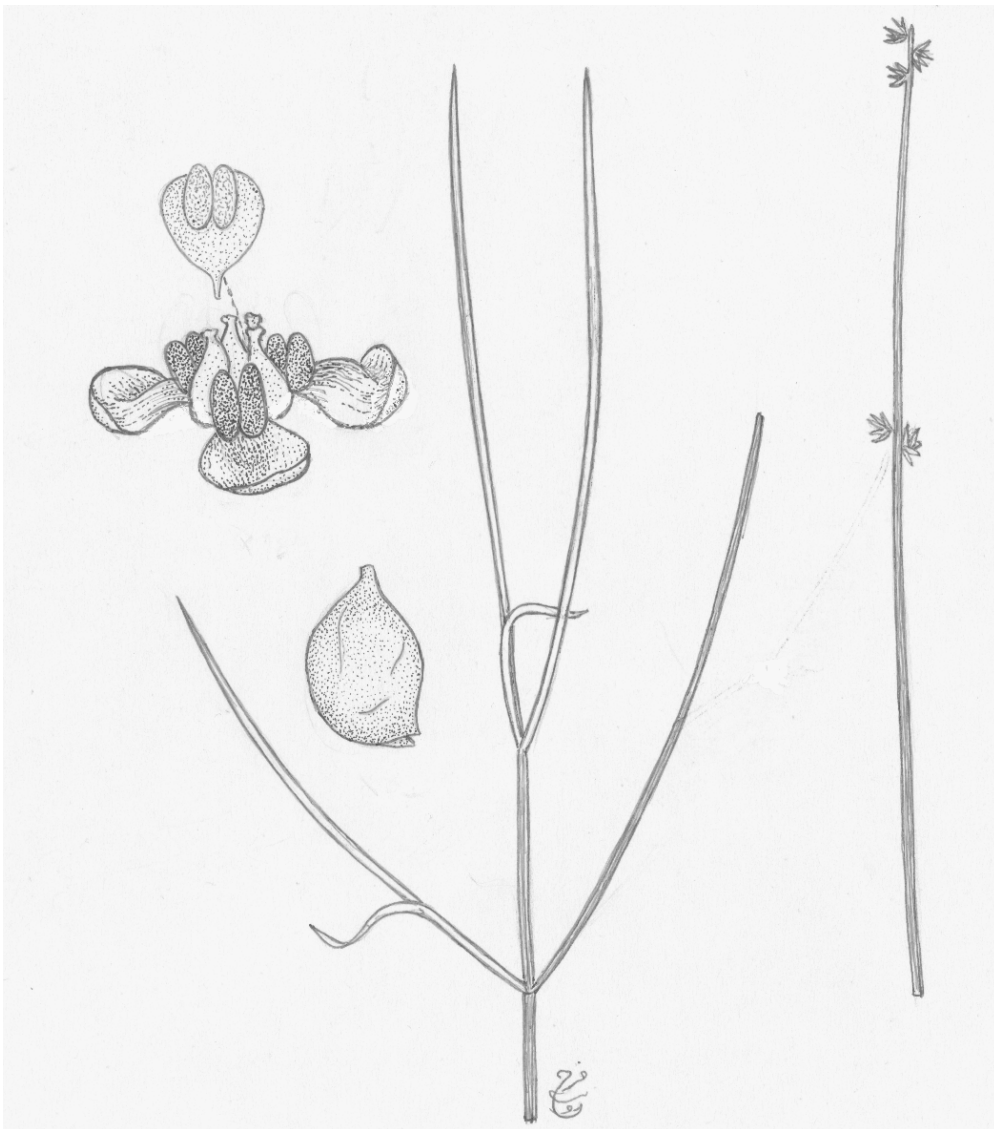


Fig. 2. *Potamogeton filiformis* ($\times 2$): flower ($\times 18$); nutlet ($\times 8$).

Flowers hermaphrodite. Tepals 4, 1 mm long, rounded to spatulate, brown. Stamens 4, 1 mm long, sessile, adnate to the base of tepals; anthers with 2 thecae. Ovary superior; carpels 4, 1 mm long, oblique ovoid. Stigma sessile and discoid. Nutlets oblique ovoid and swollen, 2.5-3 mm long, light brown, with a subapical beak.

This species is near to *P. amblyphyllus* C. A. Mey. but differs by having very narrow or filiform brownish leaves and stems.

General distribution. Europe, Asia and N. America.

References

Akhani, H. 1998: Plant Biodiversity of Golestan National Park, NE Iran.

Assadi, M. 1986: Plan of the Flora of Iran. -Tehran.

Dandy J. E. 1971: Potamogetonaceae in K. H. Rechinger (ed.) Flora Iranica no. 83. -Graz: Akademische Druck- und Verlagsanstalt.

Feinbrun-Dothan N. 1986: Flora Palaestina vol. 4: 7-10. -The Israel Academy of Sciences and Humanities.

Uotila, P. 1984: Potamogetonaceae in P. H. Davis (ed.) Flora of Turkey and the East Aegean Islands vol. 8: 17-24. -Edinburgh.

Yuzepchuk, S. V. 1968: Potamogetonaceae in V. L. Komarov Flora of the U. S. S. R. vol. 1: 230-265. -Leningrad.

