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POTAMOGETON \times ANGUSTIFOLIUS J. PRESL (POTAMOGETONACEAE) IN ITALY

Abstract - The distribution in Italy of *Potamogeton* \times *angustifolius*, a hybrid between *P. gramineus* and *P. lucens*, is reviewed. So far, this *taxon* was recorded only for Bolzano province (Alpine region) and Sicily. Here it is for the first time recorded for peninsular Italy, where it was found in Campotosto Lake (Abruzzo). A brief description of the hybrid is given and its distribution map in Italy is shown.

Key words - *Potamogeton* \times *angustifolius*, *Potamogetonaceae*, phytogeography, Italy.

Riassunto - *Potamogeton* \times *angustifolius* J. Presl (*Potamogetonaceae*) in Italia. Nel presente lavoro viene esaminata la distribuzione di *Potamogeton* \times *angustifolius* in Italia. Si tratta di un ibrido naturale tra *P. gramineus* e *P. lucens* presente in diverse località anche in assenza di una o entrambe le specie parentali. In Italia questa specie era fino ad oggi nota solo per la provincia di Bolzano e la Sicilia; viene quindi presentato il primo ritrovamento per l'Italia peninsulare presso il Lago di Campotosto (Abruzzo). Dopo una breve descrizione della specie, viene riportata la carta della distribuzione in Italia.

Parole chiave - *Potamogeton* \times *angustifolius*, *Potamogetonaceae*, fitogeografia, Italia.

provides for the British Isles the following description of the floating leaves: lamina elliptical to oblong-elliptical 55-105 \times 22-40 mm, with petioles (10-) 20-65 mm long and usually shorter than the lamina. Fruiting spikes 25-50 mm long with peduncle 40-90 mm long, thicker than the stem; fruits 3-3,5 mm long; the fruits are fertile (Kaplan & Fehrer, 2007). According to Preston (1995) *Potamogeton* \times *angustifolius* shows some morphological variation and it appears as an intermediate between the parents; in the whole it is more robust than *P. gramineus* and more slender and graceful than *P. lucens*; the best characters for separating *P.* \times *angustifolius* from *P. gramineus* are the larger leaves and stipules whereas it differs from *P. lucens* in usually having sessile submerged leaves. However, *P.* \times *angustifolius* can show lower and, more often, upper petiolate leaves. When *P.* \times *angustifolius* presents floating leaves, it can easily be distinguished from *P. lucens*. From an ecological point of view, in some regions of Great Britain *P.* \times *angustifolius* grows in mesotrophic lakes and rivers slightly alkaline but apparently insufficiently rich in limestone to support *P. lucens* (Preston, 1995).

INTRODUCTION

During a survey on a group of broad-leaved *Potamogeton* species in Italy, two specimens of *Potamogeton* \times *angustifolius* J. Presl from Campotosto Lake (Abruzzo, Central-Italy) were discovered. *P.* \times *angustifolius* is a natural hybrid between *P. gramineus* and *P. lucens*. It can sometimes occur without one or both parental species (Preston, 1995).

MORPHOLOGICAL FEATURES

Rhizophyte with slender and perennial rhizome and branched, terete, annual stems; submerged leaves sessile to petiolate (1-7 mm, see also Preston, 1995) (in the upper part of stem developed as transitional leaves with petioles up to 50 mm), with lamina narrowly elliptical to oblong-obovate, 12-22 mm wide, 60-132 mm long; stipules (10-) 15-45 mm long; floating leaves are not fully developed in the Italian specimens. Preston (1995)

NOMENCLATRURAL NOTES

From a nomenclatural point of view, this *taxon* was described under several names [e.g. *P. lucens* var. *coriaceus* Mert. et W.D.J. Koch, *P. lucens* var. *heterophyllus* Fr., *P. coriaceus* (Mert. et W.D.J. Koch) Fryer ex A. Benn., *P. zizii* W.D.J. Koch ex Roth, *P. angustifolius* J. Presl; see also Wiegleb & Kaplan (1998) for the complete list of synonyms]. The question of the correct name for this hybrid was analysed by Kaplan (1997) who lectotypified the name *P.* \times *angustifolius* J. Presl and proved its nomenclatural priority.

DISTRIBUTION IN ITALY

Potamogeton \times *angustifolius* was recorded from many countries mainly in the northern part of Europe (see also Raimondo, 1996); Pignatti (1982) recorded *P.* \times *angustifolius* from only one locality (Girlander Lacke, near Bolzano); this record (derived from Dalla Torre

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Fig. 1 - Distribution map of *Potamogeton xangustifolius* in Italy. Black dots: specimina visa; black triangles: literature records.

& Sarnthein, 1906-1913) is cited also by Wilhalm *et al.* (2006), together with a new locality (Haidersee) reported for the first time by Melzer *et al.* (1993). In the *Flora Alpina* (Aeschimann *et al.*, 2004) this *taxon* was reported as extinct for the Italian province of Bolzano. It was recorded also from Sicily (Lago di Pian del Leone, Filaga) and this record is reported by Raimondo (1996) and Giardina *et al.* (2007). Both parental species occur in Trentino-Alto Adige and in Sicily (Conti *et al.*, 2005; 2007); in the locality Lago di Pian del Leone *P. gramineus* is also present. The finding of *P. xangustifolius* in Abruzzo region represents the first record for peninsular Italy. In the Campotosto lake both parental species are present (Conti & Tinti, 2008).

Specimina visa selecta

Potamogeton xangustifolius: Lago Pian del Leone (Filago, Palermo) in prossimità della sponda meridionale, 829 m s.l.m., 8.8.1996, E. Schimmenti & G. Sca-

fidi (PAL) sp. pl. - Lago di Campotosto (Campotosto, L'Aquila), acque stagnanti, 1315-1350 m, 13.8.1997, F. Conti, 2927 (APP, sub *P. lucens*) - Lago di Campotosto (Campotosto, L'Aquila), rive, 1315 m, 8.9.2002, D. Tinti, 2158 (APP, sub *P. lucens*).

Potamogeton lucens: Lago di Campotosto, acque stagnanti, 1315-1350 m, 2.07.1999, F. Conti, D. Tinti, 2928 (APP).

Potamogeton gramineus: Lago di Campotosto, sotto Mascioni, 1315 m, 7.08.2002, F. Conti, D. Tinti, 1912 (APP). Lago Pian del Leone (Filago), 829 m, 18.7.1996, E. Schimmenti, G. Scaffidi (PAL) - ibidem, 8.8.96, E. Schimmenti, G. Scaffidi (PAL) - ibidem, 20.7.96, G. Giardina (FI).

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