A new record of *Typha shuttleworthii* (Typhaceae) in Poland

Marcin Nobis, Agnieszka Nobis, Elżbieta Jędrzejczak
& Ewelina Klichowska

A new record of *Typha shuttleworthii* (Typhaceae) in Poland. – Acta Mus. Siles. Sci. Natur., 64: 107-109, 2015.

Abstract: The paper presents a new locality of *Typha shuttleworthii* W.D.J. Koch & Sond. in Poland. The species was found in wet roadside ditch in Kryg village near Gorlice (ATPOL grid square EG09). The distribution map of the species in Poland is provided.

Key words: *Typha shuttleworthii*, distribution, Carpathians

Introduction

Typha shuttleworthii W.D.J. Koch & Sond was recently recorded as a new to Poland (Kozłowska *et al.* 2012). Like the other three species representing the genus *Typha*, namely, *T. latifolia* L., *T. angustifolia* L., *T. laxmannii* Lepech, it is established in Poland (Mirek *et al.* 2002, Kozłowska *et al.* 2012).

Typha shuttleworthii is quite similar to *T. latifolia* and they can be easily misidentified. *T. shuttleworthii* has leaves 0.5-1.0(-1.5) cm wide, as long as stem with inflorescence or slightly longer while leaves of *T. latifolia* are 0.8-2.0 cm wide and much longer than stem with inflorescence. Male inflorescence of *T. shuttleworthii* is 4-5(-12) cm long and significantly shorter than female inflorescence. *T. latifolia* has male inflorescence (5-)10-20 cm long, equal or longer than female inflorescence, sometimes slightly shorter. *T. shuttleworthii* and *T. latifolia* differ slightly also in length of seeds and anthers (Kozłowska *et al.* 2011).

In Europe, species range extends from eastern France to Ukraine and western Russia (Leonova 1979, Cook 1980, Dubina *et al.* 1993, Felbaba-Klushina 2011, Kapitonova *et al.* 2012). In Asia, it has been noted in Turkey and Iran (Baytop 1984, Hamdi *et al.* 2009). *Typha shuttleworthii* is usually recorded at lower mountain elevations. In Poland, *T. shuttleworthii* has been found at several localities at elevations from 500 to 600 m in Bieszczady and Beskid Niski Mts by Kozłowska *et al.* (2011). Populations of *T. shuttleworthii* in Poland are located on the northernmost range limit of the species in Central Europe.

Typha shuttleworthii is a semi-aquatic plant occurring both in natural and anthropogenic habitats. It grows mainly in wet ditches, stream and river valleys, in the areas of stagnant or slowly flowing waters. In Europe *Typha shuttleworthii* has been noticed in plant communities belonging to the Phragmitetea class or the Molinietalia order (Kozłowska *et al.* 2011).

New locality

During field investigations conducted in the Beskid Niski Mts (within the Carpathian range) in 2014 new locality of *Typha shuttleworthii* has been found near Kryg village near Gorlice (GPS coordinates: 49°39'19.8"N/21°16'31.0"E; EG09 ATPOL square 10 km x 10 km; Figs 1, 2). The collected specimens of *Typha shuttleworthii* are deposited in the Herbarium of Jagiellonian University in Kraków (KRA).

The population of *Typha shuttleworthii* consisted of about 30 specimens growing in roadside ditch about 500 meters SEE from Kryg village. Specimens of the taxon occurred there together with: *Juncus inflexus*, *Alnus glutinosa*, *Juncus articulatus*, *Lythrum salicaria*, *Valeriana officinalis*, *Alisma plantago-aquatica*, *Melilotus officinalis*, *Carex contigua*, and *Calamagrostis epigeios*.

Fig 1: Distribution of *Typha shuttleworthii* in Poland; • – previously known locality, • – new record.

Fig 2: *Typha shuttleworthii* near the Kryg willage.

References

- Baytop A. (1984): *Typha* L. In: Davies P.H. (ed.): Flora of Turkey and the East Aegean Islands. 8: 558-563. Edinburgh University Press, Edinburgh.
- Cook C.D.J. (1980): *Typha* L. In: Tutin T.G., Heywood V.H., Burges N.A., Moore D.M., Valentine D.H., Walters S.M. & Webb D.A. (eds): Flora Europaea. 5: 275-276. Cambridge University Press, Cambridge, London, New York, New Rochelle, Melbourne, Sydney.
- Dubina D. V., Hejny S. & Proudova Z. (1993): Makrofity – indykatory izmenenii prirodnykh sredy. Akademiya Nauk Ukrainy, Institut Botaniki N. Cholodnovo, Kiev.
- Felbaba-Klushyna L. (2011): *Typha shuttleworthii* in Ukraine and adjoining regions: tendencies of dynamics of distribution, ecological and coenotic peculiarities. – Botanica Serbica 35(2): 121-124.
- Hamdi S.M.M., Assadi M. & Ebadi M. (2009): Revision of study of *Typha* genus: three new records species of the genus *Typha* (Typhaceae) in Iran and their micromorphological pollen and capsule studies. – Asian Journal of Plant Sciences 8(7): 455-464.
- Kapitonova O.A., Platonova G.R. & Kapitonov V.I. Pogozy Vyatsko-Kamskogo kraya. Udmurtskii univ., Izhevsk [in Russian].
- Kozłowska K., Nobis A. & Nobis M. (2011): *Typha shuttleworthii* (Typhaceae), new for Poland. – Polish Botanical Journal 56(2): 299-305.
- Leonova T.G. (1979): Typhaceae Juss. – rogozovye. In: Fedorov A.A. (ed.): Flora evropeyskoy chastii SSSR. 2: 326-330. Izdatel'stvo Nauka, Leningrad.
- Mirek Z., Piękoś-Mirkowa H., Zając A. & Zając M. (2002): Flowering plants and pteridophytes of Poland – a checklist. W. Szafer Institute of Botany, Polish Academy of Sciences, Krakow.
- Nobis M., Nobis A. & Nowak A. (2006): *Typhetum laxmannii* (Ubrizsy 1961) Nedelcu 1968 – the new plant association in Poland. – Acta Soc. Bot. Poloniae 77(4): 325-332.
- Zając A. (1978): Atlas of distribution of vascular plants in Poland (ATPOL). – Taxon. 27(5–6): 481-484.

Authors' addresses: Marcin Nobis, Agnieszka Nobis, Elżbieta Jędrzejczak & Ewelina Klichowska, Department of Plant Taxonomy, Phytogeography and Herbarium, Institute of Botany, Jagiellonian University, Kopernika 27, 31-501 Kraków, Poland; Marcin Nobis, Laboratory of Biodiversity and Ecology, Institute of Biology, Tomsk State University, 36 Lenin Prospekt, Tomsk, 634050, Russia
Corresponding author: m.nobis@uj.edu.pl.