

Short Communication

Viola ×*palmata* L. (Violaceae) new for Austria and Europe

E. Vitek*, J. Danihelka** & W. Adler***

Key Words: Flora of Vienna, flora of Austria; *Viola*, *V.* ×*palmata*.

Viola ×*palmata* L. (pro spec.) is mentioned neither in the Flora of Vienna (ADLER & MRKVICKA 2003) nor in the latest edition of the Exkursionsflora for Austria (FISCHER & al. 2008). Recently this violet was surprisingly found by W. Adler in the centre of Vienna. It grows vigorously in stone fissures bearing many seeds developing from cleistogamous flowers, but no open-pollinated flowers could be observed yet due to late season. The plants were tentatively identified by J. Danihelka, and the identification was confirmed by the late K. Blaxland.

Viola ×*palmata* is a perennial tufted stemless violet with a short and thick rootstock. Its leaf-blades are heart-shaped to ovate in outline but palmately divided into 5–11 narrow segments and have a slightly cordate or almost truncate base. Stipules are not fused with the petiole. Flowers, appearing in spring, are reddish violet, on long stalks, with slightly bearded lateral petals and the style slightly curved and beaked at the apex. Cleistogamously formed capsules are first more or less buried in the soil but later on arching stalks (compiled from CULLEN et al. 1997 and JÄGER et al. 2008). It may be easily identified using the cited floras.

This species is classified into the polyploid sect. *Plagiostigma* GODR. (represented in Central Europe, for instance, by *V. palustris* L. and *V. pinnata* L.), subsect. *Boreali-Americanae* W. BECKER. It is hypothesized to be of hybrid origin (supposed parents *Viola sagittata* AITON, *V. sororia* WILLD. and other *Boreali-Americanae* species like *V. affinis* LECONTE, *V. cucullata* AITON (BLAXLAND, pers. comm.) or *V. brittoniana* POLLARD or *V. pedatifida* × *V. affinis* or *V. sororia* (USDA Plants Database 2012). Of this subsection, *V. sororia*, especially as ‘Freckless’ with spotted blue and white petals, is frequently cultivated in European gardens (CULLEN & al. 1997). It has been recorded as a garden escape, for instance, in Austria (FISCHER & al. 2008) and Hungary (DAISIE 2012). The most similar violet also found in gardens is *V. pedatifida* G. DON; it is another member of *Boreali-Americanae*, native to central North America (for differences see CULLEN & al. 1997 and JÄGER & al. 2008).

* Ernst Vitek, Botanische Abteilung, Naturhistorisches Museum Wien, Burgring 7, 1010 Wien, Austria – ernst.vitek@nhm-wien.ac.at

** Jiří Danihelka, Department of Botany & Zoology, Faculty of Science, Masaryk University, Kotlářská 2, CZ-611 37 Brno, Czech Republic & Institute of Botany, Department of Vegetation Ecology, Academy of Sciences of the Czech Republic, Lidická 25/27, CZ-657 20 Brno, Czech Republic – danihel@sci.muni.cz

*** Wolfgang Adler, Schönbrunner Straße 67, 1050 Wien, Austria.

Viola ×palmata is naturally distributed in the eastern parts of the USA and Canada (USDA Plants Database 2012). It is rarely cultivated in Europe (CULLEN & al. 1997, JÄGER & al. 2008) and offered by special garden shops for rarities. As older specimens demonstrate, it has been cultivated in Vienna around 1790 and 1827. Since that time there have been no records from Vienna. The tendency to escape from cultivation can be shown also by the record from Bremen (Germany). However, so far we know, this has been the first ever published report for whole Europe (see CLEMENT & FOSTER 1994, DAISIE 2012). A possible establishment or naturalization of this species has to be observed.

Specimens: Wien 1., Fahnengasse, Abgang zur U-Bahn, 48°12'15"N 16°22'00"E; Ritzen in der Marmorverkleidung des U-Bahn-Abganges, nicht blühend, offenbar kleistogam; 9. 10. 2010, W. Adler s. n. [W 2011-0012126], photo det Jiří Danihelka & Kim Blaxland 2012; – Wien 1., Ecke Herrengasse / Fahnengasse, 48°12'15"N 16°22'00"E; Asphaltspalten rund um eine Telefonzelle, ca. 6 Exemplare rund um die Telefonhütte; 5. 11. 2010, W. Adler s.n. [W 2011-0012125], photo det Jiří Danihelka & Kim Blaxland 2012;

Hort. Schönbr. [Hortus Schönbrunnensis (Vienna)], s. dat. [c. 1790], Jacquin pat. [W 0031150]; – H. B. V. [Hortus Botanicus Vindobonensis (Vienna)], 5. 5. 1827, Hayne 894 [W 0031149];

Bei Bremen an einem Graben zwischen Sumpfwiesen an der Weser, 5. 1840, Sonnenburg [W 1889-0178859].

References

- ADLER W. & MRKVIČKA C.A., 2003: Die Flora Wiens gestern und heute. – Wien: Naturhistorisches Museum.
- CLEMENT E.J. & FOSTER M.C., 1994: Alien Plants of the British Isles. – London. Bot. Soc. of the British Isles.
- CULLEN J., KNEES S.G. & CUBEY H.S. (eds.), 1997: The European Garden Flora. Vol. 5. Dicotyledons (Part III). – Cambridge: Cambridge University Press.
- DAISIE European Invasive Alien Species Gateway, 2012: <http://www.europe-aliens.org/index.do> – visited 5 January 2012.
- FISCHER M.A., OSWALD K. & ADLER W. (eds.), 2008: Exkursionsflora für Österreich, Liechtenstein und Südtirol. – Linz: Oberösterreichische Landesmuseen.
- JÄGER E.J., EBEL F., HANELT P. & MÜLLER G. (eds.), 2008: Exkursionsflora von Deutschland. Vol. 5. Krautige Zier- und Nutzpflanzen. – Berlin & Heidelberg: Springer-Verlag.
- USDA Plants Database, 2012: <http://plants.usda.gov/java/> – visited 4 January 2012.