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A forgotten hybrid of *Verbascum olympicum* Boiss. × *V. thapsus* L. (Scrophulariaceae)

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Abstract

Two specimens of an unknown hybrid of *Verbascum olympicum* Boiss. and *V. thapsus* L. were found in the herbaria of Budapest (BP) and Vienna (W). The hybrid originated in the botanical garden of Innsbruck in 1878 and was labelled with the unpublished name *V. eximium* by its collector Berthold Stein. Since this hybrid has not been mentioned in literature before, all data available for it are presented here.

Key Words: botanical garden, Berthold Stein, BP, W, Innsbruck

In the herbaria of the Hungarian *Natural History Museum* (BP; herbarium acronyms according to Thiers 2020) and the Natural History Museum Vienna (W), two specimens of an undescribed hybrid of *Verbascum olympicum* Boiss. and *V. thapsus* L. are preserved: BP 342570 [ex collectio Haynald] and W0119198 (at https://w.jacq.org/W0119198)[ex herbario H. G. Reichenbach = Rchb.f.] (Fig. 1). Both specimens were collected by Berthold Stein (1847–1899), garden inspector at Innsbruck. Stein was later active in his home town Wrocław (Breslau) in Poland, where he also died (Frahm & Eggers 2001: 502). The name used on the labels, *V. eximium* Stein, has not been published.

Both specimens contain a simple part of the inflorescence and one cauline leaf. A more detailed description is therefore hard to make based on this sparse material. Cauline leaves are shortly decurrent, density of leaf indumentum is intermediate between parental species, consisting of rather dense hairs, but not woolly like in V. thapsus and not as lax as in V. olympicum. Capsules are not fully developed. Particular important diacritical characters can be derived from the characters which both parent species have in common. The habit of the plants was probably similar to that of the attractive V. olympicum, which is indicated by the name "eximium" (=excellent) given to the hybrid by the collector. Plants are biennial, eglandular, with robust stem, corolla yellow with outer part tomentose, anthers of two anterior stamens are inserted obliquely, filament hairs white,

The labels of both specimens are almost identical ("h.[ortus] b.[otanicus] Oenipont. [Innsbruck], sponte ostum. [month] 78, B. Stein.") except for the month: at BP it is "6[June]", at W "7 [July]". Two specimens of the parental species *V. olympicum* collected by Stein in the botanical garden, probably together with the hybrid, and deposited at BP are dated June and July as well. Hence it is very likely that the hybrid also was flowering during that time and the months stated on the labels are not mistaken.

Since distribution ranges of both parental species do not overlap, the hybrid currently cannot form in nature, hence the hybrid has not been mentioned in literature so far. The endemic *V. olympicum* occurs in Turkey only on "Olympus Bithyniae" (= Mt Uludağ)

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Fig. 1. Specimen of the hybrid of *Verbascum olympicum* Boiss. and *V. thapsus* L., W0119198 (at https://w.jacq.org/W0119198)

(MURBECK 1939: 26, HUBER-MORATH 1978: 552) and is cultivated worldwide for its attractive appearance. *V. thapsus* has a wide native range including Europe, northern Africa and Asia, from the Azores and Canary Islands in the West to western China in the East, and from the British Isles, Scandinavia, and Siberia in the North to the Himalayas in the South. It has been introduced in many countries. According to MURBECK (1933, 1939: 11), it is missing from Turkey but recent works, i. e. HUBER-MORATH (1984) and KARAVELIOĞULLARI (2012: 869) mention its common spread in the *Black Sea region*. The minimum distance to Mt Uludağ is about 500 km, but in case the spread of *V. thapsus* continues contact zones may be formed.

Hybrids in the genus *Verbascum* are sterile (MURBECK 1933: 42), very frequent, and their origination in botanical gardens is possible and not unexpected. While the characters of the supposed hybrid are clearly intermediate between the parents, the fact that the collector had the possibility to compare both parental species with spontaneous hybrid in one place further support the hybrid status of the specimens.

Following the recommendation H.10B.1 of the ICN (TURLAND et al. 2018) no binomial is provided for this hybrid.

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References

FRAHM J.-P. &EGGERS J., 2001: Lexikon deutschsprachiger Bryologen. – Norderstedt: Books on Demand,

HUBER-MORATH A., 1978: *Verbascum* L. – In: Davis P.H. (ed): Flora of Turkey and the East Aegean Islands, 6: 461–603. – Edinburgh: Edinburgh Univ. Press

KARAVELIOĞULLARI F.A., 2012: *Verbascum*. – In GÜNER A., ASLAN S., EKIM T., VURAL M. & BABAÇ M.T. (eds), 2012: Türkiye Bitkileri Listesi (Damarlı Bitkiler). – Nezahat Gökyiğit Botanik Bahçesi ve Flora Araştırmaları Derneği Yayını. İstanbul: ANG Vakfı.

MURBECK S., 1933: Monographie der Gattung *Verbascum*. – Lund: Håkan Ohlssons Buchdruckerei.

MURBECK S., 1939: Weitere Studien über die Gattungen *Verbascum* und *Celsia*. – Lund: C. W. K. Gleerup; Leipzig: Otto Harrassowitz.

THIERS B., 2020 [continuously updated]: Index Herbariorum: A global directory of public herbaria and associated staff. – New York Botanical Garden's Virtual Herbarium. Online. Available from: http://sweetgum.nybg.org/science/ih/ (accessed 10 October 2020).

TURLAND N.J., WIERSEMA J.H., BARRIE F.R., GREUTER W., HAWKSWORTH D.L., HERENDEEN P.S., KNAPP S., KUSBER W.-H., LI D.Z., MARHOLD K., MAY T.W., MCNEILL J., MONRO A.M., PRADO J., PRICE M.J. & SMITH G.F. (eds), 2018: International Code of Nomenclature for algae, fungi, and plants (Shenzhen Code) adopted by the Nineteenth International Botanical Congress Shenzhen, China, July 2017. – Regnum Vegetabile 159.

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