



## Neotypification of *Solidago* × *niederederi* (Asteraceae)

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*Solidago* × *niederederi* Khek (1905: 22) (Asteraceae) was described by Khek (1905) as a natural hybrid between *S. canadensis* Linnaeus (1753: 878) and *S. virgaurea* Linnaeus (1753: 880). The hybrid was discovered by Niedereder in the area of Stoder (Austria) in the beginning of the twentieth century. It is morphologically more or less intermediate between the presumed parents, especially in characters such as capitula size, leaf shape and venation (Khek 1905, Nilsson 1976, Karpavičienė & Radušienė 2015). Moreover, it is characterized by reduced pollen viability, and produces only very few well-developed achenes (Nilsson 1976, Migdalek *et al.* 2014, Karpavičienė & Radušienė 2015). According to the protologue (Khek 1905) the pappus is absent in the hybrid (“Pappus fehlend”), however, I noticed the pappus in all examined generative specimens of the hybrid from Poland. The parental species of *S.* × *niederederi* belong to different taxonomical sections: *S. canadensis* is a member of *S.* sect. *Unilaterales* Don in Loudon (1830: 348), and *S. virgaurea* is a member of *S.* sect. *Solidago* Linnaeus (1753: 878) (Nesom 1993). The hybrid has been reported from several countries in Europe: Austria, the United Kingdom, Denmark, Sweden, Norway, Germany, Poland, Lithuania, and Russia (Nilsson 1976, Burton 1980, Sunding 1989, Mayorov *et al.* 2012, Pliszko 2013 and literature cited therein, Karpavičienė & Radušienė 2015). It is usually found in anthropogenic habitats together with both parental species, and its presence emphasizes the invasive character of *S. canadensis* (Pliszko 2013).

The type specimen of the hybrid has not been found among the materials of Khek’s personal herbarium deposited at the Herbarium of the Natural History Museum in Vienna (W), thus the following specimen from W is proposed as a neotype. The specimen was collected by Khek and has the upper cauline leaves and well-developed synflorescence with visible pappus within capitula. It can be accessed via the virtual herbarium (<http://herbarium.univie.ac.at/database/detail.php?ID=284978>).

*Solidago* × *niederederi* Khek (1905: 22)

Neotype (designated here):—AUSTRIA. Oberösterreich. Am Waldrand in Vorder Stoder, August 1920, *E.J. Khek Flora Austriae Superioris s.n.* (W! 1926-0029601).

### Acknowledgements

I would like to thank Ernst Vitek, Director of the Department of Botany of the Natural History Museum in Vienna, and Armin Löckher, research associate of the Natural History Museum in Vienna, for helping me find the specimen of *Solidago* × *niederederi* from Eugen Khek’s collection.

### References

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