

**Zeitschrift:** Veröffentlichungen des Geobotanischen Institutes der Eidg. Tech. Hochschule, Stiftung Rübel, in Zürich  
**Herausgeber:** Geobotanisches Institut, Stiftung Rübel (Zürich)  
**Band:** 107 (1992)

**Artikel:** "Betula x oycoviensis" Besser in the environs of Kraków (S. Poland)  
**Autor:** Staszkievicz, Jerzy / Wójcicki, Jan J.  
**DOI:** <https://doi.org/10.5169/seals-308942>

### **Nutzungsbedingungen**

Die ETH-Bibliothek ist die Anbieterin der digitalisierten Zeitschriften auf E-Periodica. Sie besitzt keine Urheberrechte an den Zeitschriften und ist nicht verantwortlich für deren Inhalte. Die Rechte liegen in der Regel bei den Herausgebern beziehungsweise den externen Rechteinhabern. Das Veröffentlichen von Bildern in Print- und Online-Publikationen sowie auf Social Media-Kanälen oder Webseiten ist nur mit vorheriger Genehmigung der Rechteinhaber erlaubt. [Mehr erfahren](#)

### **Conditions d'utilisation**

L'ETH Library est le fournisseur des revues numérisées. Elle ne détient aucun droit d'auteur sur les revues et n'est pas responsable de leur contenu. En règle générale, les droits sont détenus par les éditeurs ou les détenteurs de droits externes. La reproduction d'images dans des publications imprimées ou en ligne ainsi que sur des canaux de médias sociaux ou des sites web n'est autorisée qu'avec l'accord préalable des détenteurs des droits. [En savoir plus](#)

### **Terms of use**

The ETH Library is the provider of the digitised journals. It does not own any copyrights to the journals and is not responsible for their content. The rights usually lie with the publishers or the external rights holders. Publishing images in print and online publications, as well as on social media channels or websites, is only permitted with the prior consent of the rights holders. [Find out more](#)

**Download PDF:** 31.03.2026

**ETH-Bibliothek Zürich, E-Periodica, <https://www.e-periodica.ch>**

***Betula x oycoviensis* Besser in the environs of Kraków  
(S. Poland)\***

Jerzy STASZKIEWICZ and Jan J. WÓJCICKI

Among the birches occurring in Poland, *Betula x oycoviensis* Besser is of particular interest because, for a long time, it was treated as a Polish endemic species (JENTYS-SZAFEROWA 1960). Long-term taxonomic-experimental studies did not support its endemic character, indicated also that *Betula x oycoviensis* is a hybrid between *Betula pendula* Roth and *Betula szaferi* Jen.-Szaf. ex Stasz. (JENTYS-SZAFEROWA 1952, 1967, WIECKOWSKA 1964, JENTYS-SZAFEROWA et al. 1974, SZWABOWICZ 1972, PAWLOWSKA 1980). The later parental species is "saved" within *Betula x oycoviensis* genotype and occurs in nature ephemerally as its segregate (STASZKIEWICZ 1986).

*Betula x oycoviensis* is a heliophilous tree, reaching a height of 20 m, flowering and fruiting abundantly usually at the age of two years, with 3-5(7) leaves on the short shoot; leaves on the short shoot, 20-42 mm long with 4-6(7) pairs of lateral veins, and leaves on the long shoot (40)60-90 mm long.

*Betula x oycoviensis* was described by BESSER (1809) as a species from Hamernia and Swawola near Krakow (the Krakow-Czestochowa Upland). In 1966, based on herbarium material, KORCZYK revised that opinion, indicating that apart from the localities already known in the surroundings of Krakow, this taxon occurs or occurred in historical periods in some other localities in Poland and also in the southern part of the Scandinavian Peninsula, in Den-

---

\* This paper is dedicated to the memory of Professor Dr. Istvan Karpati (1924-1989) who died on the 4th day of the 19th International Phytogeographic Excursion (IPE), returning from the *Betula x oycoviensis* locality in the Dolina Kobylanska valley.

mark (Zealand), W. Bohemia (KRIZ 1981), W. Ukraine, Romania and middle Russia (Fig. 1).

It forms an interesting subject of quantitative investigations because only a small number of *Betula x oycoviensis* specimens is known. A detailed inventory, taken in 1966 of those growing in the surroundings of Krakow recorded 39 specimens in locus classicus in Hamernia and Swawola (KORCZYK 1966, 1967). In 1985, only six specimens were found there (STASZKIEWICZ and WOJCIKI 1986). *Betula x oycoviensis* suffered great losses in this locality, in spite of a few protection endeavours.

The Dolina Kobylanska valley (Fig. 2, Table 1) is another area where the occurrence of *Betula x oycoviensis* has been thoroughly investigated. Only one tree and four shrubby specimens grew there in 1952. In an inventory in 1966, 35 specimens in five groups, and 239 seedlings growing in one single concentration (E) were recorded. Most of the latter were very likely to succumb to strong competition. At present, *Betula x oycoviensis* has expanded in that territory. The number of shrubby and tree specimens has grown to 116. The results presented above indicate that *Betula x oycoviensis* is regenerating well in the Dolina Kobylanska valley, while in the territory of Hamernia

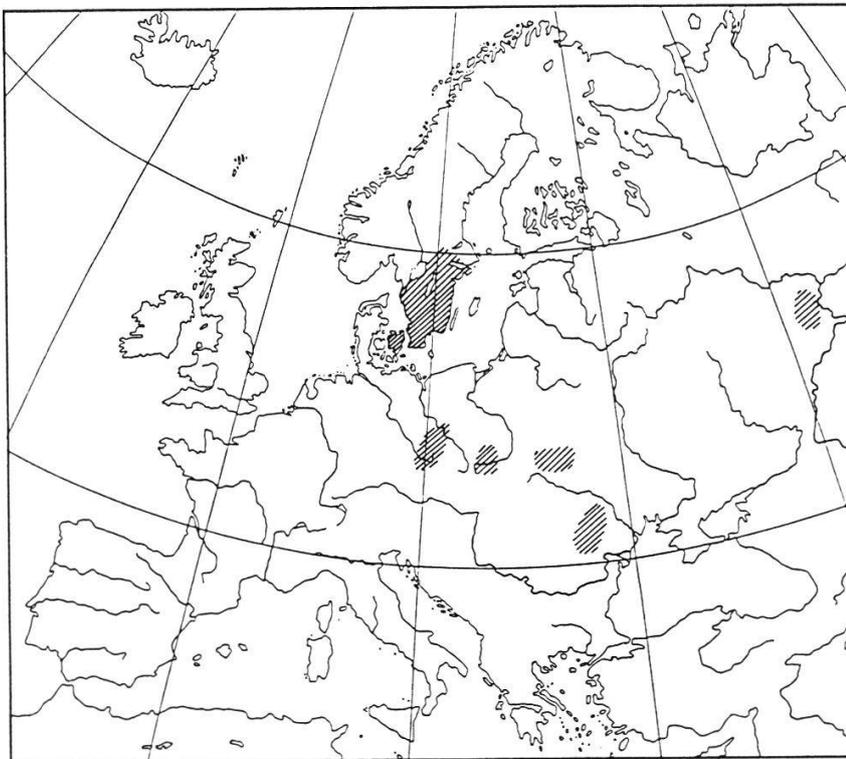
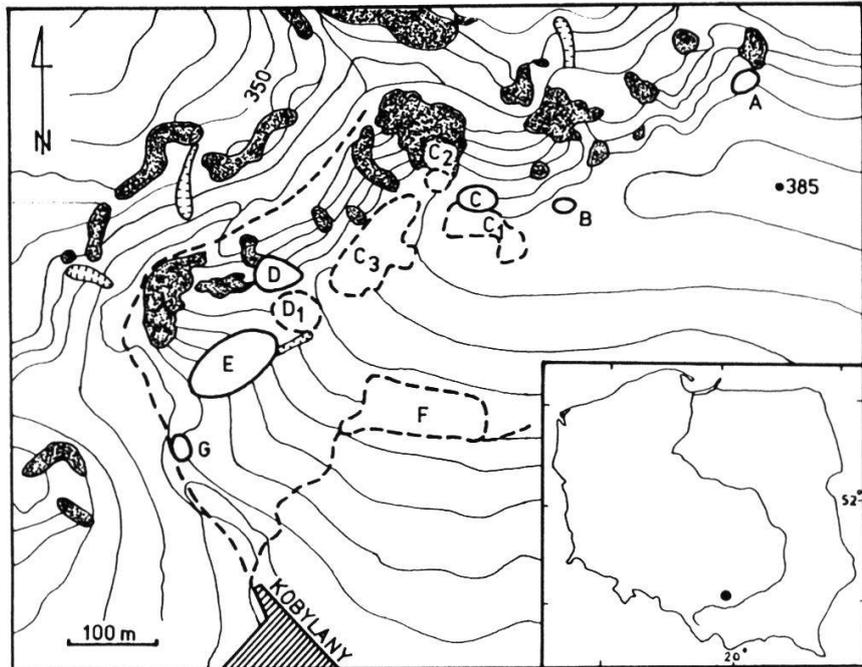


Fig. 1. Distribution map for *Betula x oycoviensis* Besser.

and Swawola it is threatened with extinction, which would be an irretrievable loss because it is locus classicus of this taxon.



**Fig. 2.** Distribution of *Betula x oycoviensis* in the Dolina Kobylanska valley in 1966 (A-E according to KORCZYK 1967) and in 1985 (A-G, C1-C3, D, D1). The rocks are dotted. The number of specimens in the particular groups are given in Table 1.

**Table 1.** The number of *Betula x oycoviensis* specimens in the Dolina Kobylanska valley in 1965-1966 (KORCZYK 1966, 1967) and 1985. A-G as in Fig. 2.

| 1965 and 1966 |                     | 1985  |                     |
|---------------|---------------------|-------|---------------------|
| Group         | Number of specimens | Group | Number of specimens |
| A             | 6                   | A     | 2                   |
| B             | 1                   | B     | 5                   |
| C             | 8                   | C     | 14                  |
|               |                     | C1    | 8                   |
|               |                     | C2    | 2                   |
|               |                     | C3    | 3                   |
| D             | 19                  | D     | 3                   |
|               |                     | D1    | 6                   |
| E             | 1                   | E     | 16                  |
|               |                     | F     | 56                  |
|               |                     | G     | 1                   |
| <b>Total</b>  | <b>35</b>           |       | <b>116</b>          |

## REFERENCES

- BESSER W.S.J., 1809: *Primaetiae Florae Galiciae Austriacae utriusque*. A. Doll, Viennae, 2, 423 p.
- JENTYS-SZAFEROWA J., 1952: Studies on *Betula oycoviensis* Bess. (In Polish with English summary). *Ochr.Przyr.* 21, 34-57.
- JENTYS-SZAFEROWA J., 1960: Some species of birch endemic in Poland. State Council for Conservation of Nature, Poland. Warsaw 7, 1-14.
- JENTYS-SZAFEROWA J., 1967: Experimental investigations on the taxonomy of *Betula oycoviensis* Besser. (In Polish with English summary). *Rocznik Dendr.* 21, 5-56.
- JENTYS-SZAFEROWA J., BIALOBRZESKA M., TRUCHANOWICZ J. and WIECKOWSKA I., 1974: The second decade of studies on *Betula oycoviensis* Bess. (In Polish with English summary). *Fragm.Flor.Geobot.* 22(3), 203-242.
- KORCZYK A., 1966: Geographic distribution of *Betula oycoviensis* Bess. (In Polish with English summary). *Ochr.Przyr.* 32, 133-170.
- KORCZYK A., 1967: *Betula oycoviensis* Bess. in the Dolina Kobylanska valley near Cracow. (In Polish with English summary). *Fragm.Flor.Geobot.* 13(4), 493-497.
- KRIZ Z., 1981: Zur Geschichte von *Betula oycoviensis* Besser. (In Czech with German summary). *Severoces.Prir., Litomerice* 12, 37-46.
- PAWLOWSKA L., 1980: Flavonoids in the leaves of Polish species of the genus *Betula* L. III. The flavonoids of *B. oycoviensis* Bess. leaves. *Acta Soc.Bot.Pol.* 49(3), 311-320.
- STASZKIEWICZ J., 1986: *Betula szaferi* - a new species of the genus *Betula* L. from Poland. *Acta Soc.Bot.Pol.* 55(3), 361-366.
- STASZKIEWICZ J. and WOJCICKI J. J., 1986: The last twenty years in the history of the birch *Betula x oycoviensis* Besser (pro spec.) in the environs of Cracow. (In Polish with English summary). *Chronmy Przyr.Ojcz.* 42(4), 30-37.
- SZWABOWICZ A., 1972: Karyological studies on *Betula oycoviensis* Besser and its progeny. (In Polish with English summary). *Acta Soc.Bot.Pol.* 41(2), 235-252.
- WIECKOWSKA I., 1967: Morphological and biological observations on the seedlings of *Betula oycoviensis* Besser. (In Polish with English summary). *Rocznik Dendr.* 21, 57-76.

Address of the authors: Prof. Dr. hab. Jerzy STASZKIEWICZ  
Dr. Jan J. WOJCICKI  
W. Szafer Institute of Botany  
Polish Academy of Sciences  
Lubicz 46  
31-512 Krakow, Poland