

***Sorbus sudetica* in the Karkonosze Mts. (Poland).**

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ABSTRACT: The endemic *Sorbus sudetica* (TAUSCH) BLUFF, NEES & SCHAUER is known to occur in four sites in the Bohemian Krkonoše Mts., but has only two old and vague reports [as *S. aria* (L.) CRANTZ] from the Polish Karkonosze Mts. A herbarium record made by WETTSTEIN in 1897 (WU) has come to light documenting the occurrence of *S. sudetica* near the Mały Staw lake.

KEYWORDS: *Sorbus sudetica*, Karkonosze/Krkonoše Mts., Mały Staw

As demonstrated by KOCIÁNOVÁ & ŠTURSOVÁ (1986), the Krkonoše endemic (KOVANDA 1965) *Sorbus sudetica* (TAUSCH) BLUFF, NEES & SCHAUER occurs, with very varied frequency, in four sites distributed evenly in both the western (Labská jáma glacial cirque, Krkonoš) and eastern (Čertovy rokle gorges, Rudník) parts of the Krkonoše Mts. Its presence in the Úpská jáma glacial cirque remains doubtful. A census made by the authors revealed a total of 135 shrubs. Reviewing the distribution of *S. sudetica*, one is struck by a conspicuous asymmetry: all four sites lie south of the main ridge, in the Bohemian Krkonoše Mts. Only two old vague reports referring to *S. aria* are available from the northern, Polish part of the mountains.

KROCKER (1790) says (under *Crataegus aria*): "Certe adest in montanis Superioris Silesiae, fors etiam in alpibus nostris; locum certum tamen de facto expiscari non poteram". This is the oldest report of *S. aria* in Silesia and may perhaps also concern the Bohemian part of the mountains.

In 1863, Heinrich Robert GÖPPERT, Professor at the University of Wrocław¹, and 19 his students undertook a three days' excursion to the Krkonoše/Karkonosze Mts. They proceeded, with some digressions, along the boundary between Silesia and Bohemia from the Pomezni Boudy by way of Mt. Czarna Kopa/Svorová hora, Mt. Śnieżka/Sněžka, Obří důl, Luční bouda, Srebrny Uplaz/Stříbrný hřbet, Mały Szyszak/Malý Šišák, Petrova bouda chalet, Wielki Szyszak/Vysoké kolo and Labská louka to Mt. Szrenica. The only mention of *S. aria* in his report (GÖPPERT 1864) is that one of the digressions was to Mały and Wielki Staw (then called Kleiner Teich and Grosser Teich) in the Silesian part of the mountains, which were reached from Srebrny Uplaz/Stříbrný hřbet: "...wir wandten uns daher bald nach dem quellenreichen, zwischen 4147-4278 F. abwechselnd hochliegenden Lahnberge, der sich nach den beiden einzigen auf dem Riesengebirge befindlichen Gebirgseen, dem sogenannten grossen und kleinen Teiche, hinabsenkt und zwar zunächst nach dem letzteren in 3590 F. Seehöhe. Auf diesem Wege wurden besonders..." Following this, without any further details of topography, is a list of the plants recorded of which the last named is *S. aria*. Where exactly this was seen remains a matter of guesswork and cannot be inferred from the published account. Authors concerned with the study of *S. sudetica* in recent decades have variously proposed Mały Staw (JENIK 1960) or Wielki Staw (LOKVENC 1959, ŠOUREK 1969) or are irresolute (JENIK 1961, KOVANDA 1965, KOCIÁNOVÁ & ŠTURSOVÁ 1986). The presence in the Karkonosze/Krkonoše Mts. of *S. aria* having never been proved, the old reports of its occurrence can with certainty be related to *S. sudetica*. This had already been described (as *Pyrus sudetica*) by TAUSCH in 1834 and almost immediately transferred to *Sorbus* (BLUFF, NEES & SCHAUER 1837) but Silesian authors (e. g. SCHNEIDER 1838, WIMMER 1840), unlike Bohemian ones, following KROCKER (1790), continued to treat it as *S. aria*. All reported it only from the Bohemian side of the mountains.

One herbarium record of *S. sudetica* from the present Polish part of the mountains is however preserved and has lain unheeded for a century in the herbarium of the Institute of Botany, University of Vienna (WU), which is not normally consulted by students of the Karkonosze/Krkonoše flora. Richard WETTSTEIN Ritter von Westersheim (1863-1931) collected *S. sudetica* near the Mały Staw Lake in 1897. A native of Vienna, expert on the flora of the Alps and the Balkans, Professor at the German University in Prague in 1892-1899, he was apparently only an occasional visitor to the Karkonosze/Krkonoše Mts. which he approached from the Bohemian side and may therefore perhaps be pardoned for making a minor error: he placed the Mały Staw lake in the Bohemian Krkonoše Mts. His label reads: "Böhm. Riesengebirge, um den Klein-Teich". There being nothing in the Bohemian Krkonoše Mts. that could be called "Klein-Teich", the locality of this collection is beyond any doubt the Klein-Teich in the Silesian Riesengebirge, now called Mały Staw, Poland.

¹ See the Appendix

No other records substantiating the presence of *S. sudetica* in the Polish Karkonosze Mts. are known. K. ŚWIERKOSZ, M.Sc., of the Museum of Natural History, University of Wrocław, tells me that only specimens collected in the Bohemian part of the mountains in 1800-1910 and those labelled only generally "Riesengebirge", with no date and name of the collector, are kept in their herbarium. There is of course a remote possibility that specimens survive in other herbaria and await discovery.

It might be worthwhile to search the vicinity of the Mały Staw Lake in detail to decide whether *S. sudetica* has become extinct there or whether it is so extremely rare as to have escaped the attention of botanists from 1897 to this day. It is not mentioned at all in a list of extinct and nearly extinct plants of the Polish Sudeten (FABISZEWSKI & KWIATKOWSKI 1997).

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Appendix

List of German topographical names (in common use before 1945)

Poland

Czarna Kopa	Schwarze Koppe
Karkonosze	Riesengebirge
Mały Staw	Kleiner Teich, Klein-Teich
Mały Szyszak	Kleine Sturmhaube
Srebrny Uplaz	Lahnberg
Szrenica	Reifträger
Śnieżka	Schneekoppe
Wielki Staw	Grosser Teich, Gross-Teich
Wielki Szyszak	Hohes Rad, Grosses Rad
Wrocław	Breslau

Czech Republic

Čertovy rokle	Teufelsgärtchen
Krkonoš	Korkonosch, Goldhöhe
Krkonoše	Riesengebirge
Labská jáma	Elbegrund
Labská louka	Elbewiese
Luční bouda	Wiesenbaude
Malý Šišák	Kleine Sturmhaube
Obří důl	Riesengrund
Petrova bouda	Peterbaude
Pomezni boudy	Grenzbauden
Rudník	Kiesberg
Sněžka	Schneekoppe
Stříbrný hřbet	Lahnberg
Svorová hora	Schwarze Koppe
Úpská jáma	Aupagrund, Aupagrube
Vysoké kolo	Hohes Rad, Grosses Rad

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