

Cladonia metacorallifera (lichenized Ascomycota, Cladoniaceae) new to Poland and additional record from Slovakia

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Cladonia metacorallifera ASAHINA is red-fruited lichen with largely corticated podetia producing squamules. The cups are at least at the tops decorticated and blacked. The thallus is yellow-tinged and contains usnic, squamatic and didymic acids in a typical chemotype. In the second chemotype (= var. *reagens* ASAHINA), squamatic acid is replaced by thamnolic acid (e.g. TØNSBERG, 1975).

The species was described by ASAHINA (1939) from Japan. Later, it was recorded from Alaska and Southern America. In 1975 the species was found for the first time in Europe from Austria and Norway (see TØNSBERG, 1975 and literature cited therein). Now it is known also from Estonia (RANDLANE & SAAG, 1999), Finland (VITIKAINEN et al., 1997), Germany (SCHOLZ, 2000), Great Britain (PURVIS & JAMES, 1992), Slovakia (PISÚT 1997), Sweden (SANTESSON, 1993), United States and Canada (e.g. ESSLINGER & EGAN, 1995). For Austria and Norway see also

HAFELLNER & TÜRK (2001) and SANTESSON (1993).

During the revision of some *Cladonia* specimens deposited in the lichen herbarium of Gdańsk University we found two collections from Poland and Slovakia, which appeared to be *C. metacorallifera*. Both specimens represent typical chemotype. The species has not been previously known from Poland and is reported here for the first time for this country. In Slovakia it was earlier known from only one locality in Velická dolina valley in High Tatra Mts (PISÚT 1997).

Cladonia metacorallifera was found only in mountain situations at altitudes ca. 1250–1400 m (Fig. 1). Polish specimen was growing on soil, while Slovakian, including that reported by PISÚT (1997), on rocks. Probably the species is restricted to high mountains in Poland and Slovakia and might be more common in both countries as there are many available localities. It might also occur in Polish part of Tatra Mts as well as in Czech part of Karkonosze Mts.

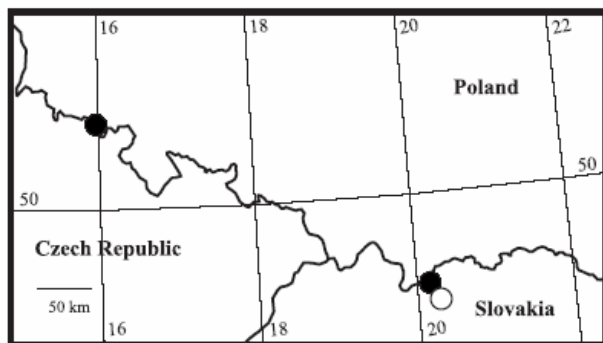


Fig. 1. Known localities of *Cladonia metacorallifera* in Poland and Slovakia; ● – new; ○ – reported by PISÚT (1997).

The species can be mistaken for very similar *Cladonia borealis* STENROOS and *C. coccifera* (L.) Willd., but *C. metacorallifera* has podetia blackening at the tops (sometimes almost entire cups have blackish medulla) and microsquamulose surface, even in the cups. There is also difference in the chemistry between these three taxa. All of them produce usnic acid, but *C. borealis* additionally contains barbatic acid, *C. coccifera* zeorin, whereas *C. metacorallifera* didymic and suaqmatic (or thamnolic) acids (e.g. STENROOS, 1989; PURVIS & JAMES, 1992).

Specimens examined: Poland. Karkonosze Mts, Karkonoski National Park, ca. 0.5 km SE of tourist resort 'Pod Śnieżką', W of Śnieżka Mt, near the boundaries with the Czech Republic, alt. ca. 1400 m, open and sunny area, on soil, 07.09.2001, leg. M. KUKWA 1176 (UGDA-L-8150); *Slovakia* Vysoké Tatry Mts, Tatra National Park, Bielowodská dolina valley, S of Lysá Poľana, alt. ca. 1250 m, on stone, 17.8.1999, leg. M. KUKWA s.n. (UGDA-L-8151).

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