Additions to the lichen flora of North America IX. Micarea alabastrites and M. synotheoides.

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Abstract. Micarea alabastrites and M. synotheoides are reported new to North America from U.S.A., Washington.

In corticolous lichen material collected in U.S.A., Washington, by one of us (TT), are specimens of *Micarea alabastrites* and *M. synotheoides*. We believe these species are new to North America as they are not listed in the recent North American checklist (Esslinger & Egan 1995), or as far as we know, in any other paper dealing with North American lichens.

Micarea alabastrites (Nyl.) Coppins - U.S.A. Washington. Cowlitz Co., 8 km SW of Mount St. Helens, E of Goat Mtn, N of Goat Marsh Lake, 46°10'N, 122°17'W, alt. 900-1000 m, Tønsberg 24126 (BG, WTU; conf. Coppins 1997). Pierce Co., along the road between Hwy 410 and Crystal Mountain Ski Resort, along forest trail no. 1163 and Silver Creek, 46°58'N, 121°29'W, alt. 1170 m, 1996, Tønsberg 24048a (BG).

Lignicolous on a stump of conifer (24048a) and on a snag in an old-growth, Abies procera forest (24126).

The specimens agree well with European material of the species in having pigment deficient, creamy - to ivory white apothecia, 3-septate spores $16-21 \times (3.5-)4.5-5$ µm, a micareoid photobiont, and by the production of gyrophoric (major), lecanoric (trace), 5-O-methylhiascic (moderate) acids. Other *Micarea* species found lignicolous at the sites included *M. botryoides* (extensive patches N of Goat Marsh Lake), *M. prasina*, and *M. cinerea*. The material of the last species has pigment deficient apothecia like those of *M. alabastrites*, but the spores, 7-septate and up to 37(-40!) µm, are those of *M. cinerea*.

Micarea alabastrites was previously known from Macaronesia and northwestern Europe. With the specimens cited here, it shows a northwestern Africa and western Europe to northwestern North America disjunct distribution.

Micarea synotheoides (Nyl.) Coppins - U.S.A. Washington. Clallam Co., [Olympic Peninsula,] just E of Crescent Lake NE, alt. 220 m, 48°04.9'N, 123°44.4'W, 2000, Tønsberg 28606 (BG). Thurston Co., WNW of Alder Lake,

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bottom of the north-south running ravine 0.7 km SW of summit of Fossil Rock, alt. 210-230 m, 46°49.4'N, 122°25.9'W, 1998, Tønsberg 25672 (BG, WTU; det. Coppins 2000).

Corticolous on shaded trunk of *Tsuga heterophylla* in old-growth coniferous forest in humid ravine, and on sun-exposed trunk of *Pseudotsuga menziesii* in S-facing slope.

Within the genus, *Micarea synotheoides* is distinguished by the acid deficient thallus with a micareoid photobiont, the \pm acicular or rod-shaped, 1-7(-11) septate spores 14-35(-43) × 2-2.5(-3) µm and a greenish, K+ violet hymenium. The species has been confused with *Bacidia beckhausii*, but that species can easily be distinguished by its large-celled (not micareoid) photobiont. In one of the specimens cited above (25627) the greenish pigment occurs in small quantities in the apothecia and the pycnidial wall, but scarcely at all in the thallus—hence the thallus, as well as the apothecia, appears much paler than usual. This specimen apparently represents a pallid morph of *M. synotheoides*. In the other specimen (28606) the greenish pigment is distinct and there is a strong K+ violet reaction in squash preparations of the apothecia.

Micarea synotheoides was previously known from western Europe, Macaronesia and Japan (Coppins 1983, 1992).

Literature cited

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Tønsberg, Tor and Coppins, Brian. 2000. "Additions to the lichen flora of North America IX. Micarea alabastrites and M. synotheoides." *Evansia* 17(4), 135–136. <u>https://doi.org/10.5962/p.346502</u>.

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