

Micarea perparvula in North America

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ABSTRACT. – *Micarea perparvula* is formally reported for North America, from New Jersey and Louisiana.

The name *Lecidea perparvula* Nyl. was overlooked during my revision of European *Micarea* (Coppins 1983) but was drawn to my attention by Christian Printzen while he was preparing his revision of European *Biatora*. The name was found to refer to a hitherto unrecognized species of *Micarea*. I have yet to see further collections from Europe, but I have been sent two collections from the U.S.A., and these are reported here, together with a description and notes on this easily overlooked, diminutive lichen.

Micarea perparvula (Nyl.) Coppins & Printzen, *Bibl. Lichenol.* 60: 204 (1995). – *Lecidea perparvula* Nyl., *Flora* 64: 532 (1881). TYPE: [France:] Mont-Dore, vi 1881, *E. Lamy* (H-NYL 20917!, lectotype).

DESCRIPTION. – Thallus inapparent, endoxylic, hyphal walls sometimes olivaceous, K+ violet. Photobiont ‘micareoid’, cells 4–7 µm diam. Apothecia sessile, immarginate, black, convex-hemispherical to subglobose, (0.08–)0.12–0.2 mm diam. Exciple inapparent. Epithecium 7–9 µm tall, dark brown, HNO₃–, K–, but brown pigment partly dissolving, and then some K+ violaceous areas visible. Hymenium 35–40 µm tall, dilute brown, especially in upper part, HNO₃, K± dissolving. Hypothecium dilute brown, HNO₃–, K–. Paraphyses scanty, (0.5–)0.8–1 µm wide, sometimes widening above to 1.3 µm. Asci clavate, 29–33 x 9–12 µm, *Micarea*-type, with a non-amyloid axial body surrounded by an amyloid tube, 8-spored. Ascospores ellipsoid, ovoid-ellipsoid or oblong-ellipsoid, 6.7–9.8 x 2.5–4 µm, simple or very rarely one or two spores seen to be 1-septate. Pycnidia partly immersed in substratum, black, c. 40 µm diam.; walls olivaceous, K+ violet; conidia (microconidia) bacilliform, 3.8–4.5 x 0.7–1 µm.

CHEMISTRY. – Material insufficient for TLC. Pigments Elachista-brown in epithecium (K+ dissolving, HNO₃–); Sedifolia-grey (K+ violet) in thallus, upper hymenium (often very faint) and pycnidial walls.

The New Jersey material was from a mixed pine (*Pinus rigida*) – oak (*Quercus*) forest with sparse birch (*Betula populifolia*) and maple (*Acer*) woodland. Associated species noted on the herbarium label are *Cladonia* sp., *C. incrassata* Flörke, *Loxospora pustulata* (Brodo & W.L. Culb.), *Diploschistes muscorum* (Scop.) R. Sant., *Mycocalicium subtile* (Pers.) Szatala, and *Trapeliopsis* sp. In addition, I detected ascomata of the ‘hemilichen’ *Epigloea pleiospora* Döbberler on one piece of wood. No associated species are identifiable on the Louisiana collection, although the wood is harder and less decayed.

In most respects *Micarea perparvula* is identical to *M. rhabdogena* (Norman) Hedlund, which has been recorded from Massachusetts as *Biatora punctella* Willey (Printzen 1995: 212). The latter species differs in having narrower, oblong-ellipsoid to bacilliform ascospores, 6–9 x 1.5–2.3 µm. Confusion is more likely with *M. misella* (Nyl.) Hedl., owing to its similar ascospores, but that species differs in lacking the brown, K+ dissolving epithecial pigment (Elachista-brown), having a higher concentration of K+ violet pigment (Sedifolia-grey) in the hymenium, and having its apothecia usually accompanied by stalked pycnidia (Coppins 1983, Czarnota 2007).

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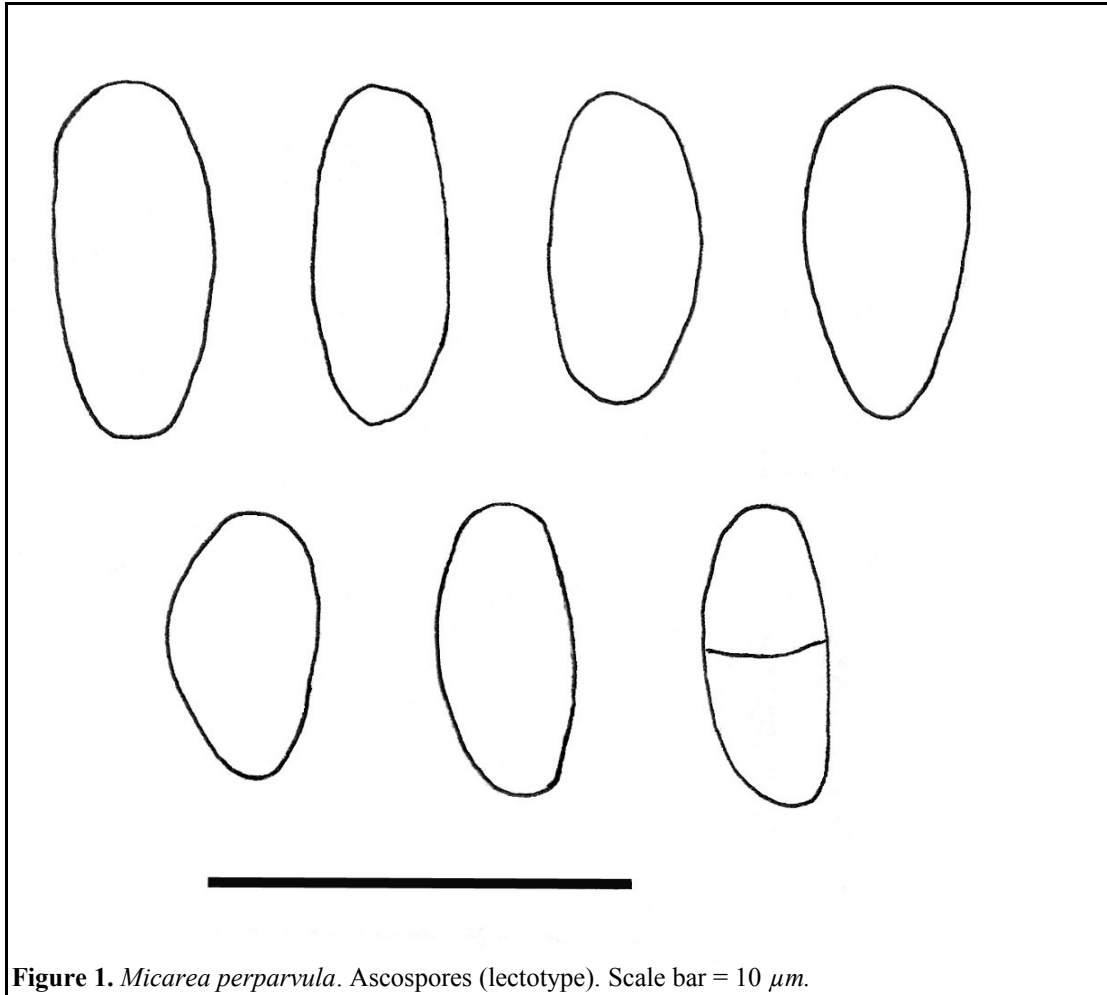


Figure 1. *Micarea perparvula*. Ascospores (lectotype). Scale bar = 10 μm .

SPECIMENS EXAMINED. – USA. NEW JERSEY, ATLANTIC Co.: Wharton State Forest, E of Nesco, NW of Batsto, N of Pleasant Mills Cemetery, elev. 10–20 ft, on a rotting log, 24.x.2004, *J.C. Lendemer 3328* (HB. LENDEMER). LOUISIANA. TANGIPAHOA PARISH.: NE Amite, E end of Ogden Lane, Amite sand hills, on dead wood on sand, 22.ii.1992, *S. Tucker 31396* (E).

ACKNOWLEDGMENTS

My thanks to James Lendemer (via Alan Fryday) and Shirley Tucker for sending me their interesting specimens to examine.

LITERATURE CITED

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