A Preliminary Glance at *Maronea* (Fusciaceae) in North America

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While preparing a treatment of *Maronea* for the Ozark ecoregion it became clear that North American specimens differed chemically and morphologically from *M. constans*. Currently three species of *Maronea* are recognized in North America, *M. carolinae* H. Magn., *M. constans* (Nyl.) Hepp and *M. polyphaea* H. Magn. I believe that only a single species is present in North America since I have not been able to verify any specimens of *M. constans* and the other two names are synonymous. All material seen thus far is referable to a single species agreeing with the types of both *M. carolinae* and *M. polyphaea* which were published simultaneously in Magnusson's 1934 revision. I have chosen to adopt the epithet 'polyphaea' since 'carolinae' seems inappropriate for a widely distributed species. The description below is based mostly on Ozark material.

**MARONEA** A. Massal.
Flora 39: 291. 1856. Type (monotype): *M. berica* A. Massal. (= *Maronea constans* (Nyl.) Hepp)


Description: Thalli mostly occurring as small, separate patches, mostly less than 1 cm in longest dimension, occasionally several fusing, gray-green, matt, continuous, rugose or ± bullate, to 150 µm thick; prothallus sparse, white or not evident; cortex colorless, amorphous to weakly cellular, thin, ca. 10-15 m

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²As usual Hasse types are a problem and lectotypification requires further study.
³Annotated as “Typus” by Magnusson but not published as such.
Fig. 1 Maronea polyphaea (Arkansas, Izard Co., Buck 40225, NY); scale bar = 1.0 mm.

Fig. 2 Maronea constans (Switzerland, An Buchen bei Liestal, Hepp s.n., NY); scale bar = 1.0 mm.
Fig. 3. Distribution of *M. polyphaea* in eastern North America based on specimens in FH and NY.

thick; medulla white, KOH-, C-, KC+ red, PD- or yellowish (aleurionitic acid; reactions sometimes spotty and variable in intensity, especially in specimens from shade which apparently have lower concentrations of lichen acids). Apothecia sessile, crowded to scattered, 0.5-1.0 mm across; disk dark brown, with sparse, ± coarse, white pruina; margin rather thick, raised, concolorous with thallus, with cellular cortex, ca. 25-35 µm thick, with distinct white medulla, and with medulla/algal layer 50-75 µm thick. Hymenium not inspersed, ca. 70-90 µm thick, colorless below, upper ca. 20 µm olive-brown (some pigment in gel matrix, with thin sheath of paraphysis tips darker brown). Paraphyses irregular, branched, easily separable, with tips intricately intertwined forming ± distinct epihymenium of short, very irregular branches, with cells ± enlarged. Asci *Fuscidea*-type, cylindrical to weakly obclavate, 60-80 x 15-20 µm with many spores. Ascospores broadly ellipsoid or ± oblong, sometimes pinched in the middle (as in some other *Fuscideaceae*), 4-6 x 2.5-4 µm. Pycnidia colorless, immersed, ± globose, ca. 0.1 mm across. Conidia fusiform or narrowly ellipsoid, 3 x 1.5 µm.

Discussion: *Maronea polyphaea* has been and is most likely to be confused initially with species of *Rinodina*. Under the dissecting microscope a quick KC test on the stark white medulla (apothecial medulla often gives the best reaction) will identify *Maronea polyphaea* as there is no North American *Rinodina* on bark which reacts KC+ red. A section of the apothecium, of course, will reveal colorless, nonseptate ascospores, many to the ascus in *Maronea* vs. brown and septate in *Rinodina*. *Maronea constans* differs from *M. polyphaea* in being generally larger in all respects, in having an inspersed hymenium, and in
containing divaricatic acid (TLC). Additional material will have to be investigated to confirm the presence or absence of *M. constans* in North America. I suggest *M. constans* be retained in the North American checklist pending confirmation of its presence, noting that it may be based on misidentifications.

The material from California described by Hasse as *M. constans* var. *sublecideina* is rather poor but is here considered conspecific with eastern material pending discovery and study of additional western material. Magnusson (1934) did not regard this varietal name as validly published and did not treat it in full.

*Maronea polyphaea* is widely distributed in eastern North America has been seen from New Hampshire and Maine south to South Carolina and northern Alabama, Kentucky and the Ozarks. Interestingly it has not yet been seen from west of the Appalachians north of the Kentucky-Ozark axis nor are there any recent collections north of Kentucky and Tennessee. In the West it is known to me only from the Hasse collections cited above. The syntype of *M. constans* f. *obscura* cited by Magnusson as “Sitchfield, Washington” is actually from Litchfield, Maine (Magnusson frequently misread handwritten labels from North America.) It is common in the Ozarks, perhaps mostly a pioneer species, on twigs and branches of deciduous trees and shrubs with a few collections from boles. Many of the collections, both in the Ozarks and elsewhere, come from open, acid glades but it has also been collected in more continuous forest types.

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**LITERATURE CITED**