NOTES ON THE LARVAL HOSTS AND HABITS OF SOME NORTH AMERICAN ERIOCRANIIDAE AND ACANTHOPTEROCTETIDAE

Additional key words: leafmining, Acanthopteroctetes, Eriocraniella, Quercus, Ribes

Eriocraniidae and Acanthopteroctetidae are two small families of leaf-mining moths, each assigned to its own superfamily. Eriocraniidae is a Holarctic family with 25 species, of which 13 occur in North America (Heppner 2008). As far as is known, all of the world’s species have larval hosts in Fagales, with the exception of the western Nearctic Eriocrania semipurpurella pacifica Davis, which feeds on Holodiscus discolor (Pursh) Maxim. (Rosaceae) (Davis 1978, Wagner 1985, Ellis 2015). There are 10 known species of Acanthopteroctetidae, with five in the western USA (one of them undescribed), two in South Africa (one undescribed), and one each in Crimea, the Tien Shan region, and Peru (the last two undescribed) (Davis 1978, 1984, Kristensen et al. 2014). Acanthopteroctetes unifascia Davis feeds on Ceanothus L. (Rhamnaceae) (Davis & Frack 1987, Robinson et al. 2002), and the hosts of the others are unknown.

Five species of Eriocraniidae are known from North America east of the Great Plains. Dyseriocrania griseocapitella (Walsingham) is widespread, mining leaves of both Castanea Mill. and Quercus L. (Fagaceae). Eriocrania semipurpurella semipurpurella (Stephens) occurs from eastern Canada to southern New York; it is known from several species of Betula L. (Betulaceae) in the Palaearctic, but has not been reported from any Nearctic birches. Eriocraniella medabulla Davis feeds on oaks in the Gulf Coast states. Eriocrania breviapex Davis and Eriocraniella platyptera Davis were each described from a few specimens caught in Ithaca, New York (Davis 1978, Davis & Faeth 1986).

From 9 to 12 June 2013, I collected eriocraniid leaf mines (Fig. 1) from scrub oak (Quercus ilicifolia Wangenh.) at several locations on Nantucket Island, Massachusetts. Mines of eriocraniids are easily recognized by the stringy frass, and there are few other oak leafminers active in spring. The only other leafminers observed on scrub oak at this time (both of which I successfully reared) were Japanagromyza griseocapitella (Walsingham) is widespread, mining leaves of both Castanea Mill. and Quercus L. (Fagaceae). Eriocrania semipurpurella semipurpurella (Stephens) occurs from eastern Canada to southern New York; it is known from several species of Betula L. (Betulaceae) in the Palaearctic, but has not been reported from any Nearctic birches. Eriocraniella medabulla Davis feeds on oaks in the Gulf Coast states. Eriocrania breviapex Davis and Eriocraniella platyptera Davis were each described from a few specimens caught in Ithaca, New York (Davis 1978, Davis & Faeth 1986).

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