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UNIFORM GENITALIA AMONG WING COLOR MORPHS OF OLETHREUTID MOTHS

Most traits are said to be uniform among lepidopteran wing color morphs (Ford 1975, Ecological Genetics, ed. 4, 442 p., John Wiley & Sons, New York). This uniformity presumably includes structure, specifically genitalia. Important as they usually are taxonomically, genitalia are seldom mentioned in literature on wing color polymorphism (Robinson 1971, Lepidoptera Genetics, 687 p., Pergamon Press, New York). Because wing color polymorphism in well studied examples is controlled by only one or a few genes, structural uniformity is expected and hence not likely to be reported.

In olethreutids, wing color polymorphism and its genetics have been little studied. The occurrence of wing color morphs is problematic in many little known species in this family. Empirical evidence for genitalic uniformity among putative wing color morphs could be taxonomically helpful. From Opler's (1971, J. Lepidop. Soc. 25: 115–123) discussion of two species of *Epinotia* having wing color morphs, uniform genitalia can be inferred. I report here explicitly on this point in two additional species.

Sciaphila duplex (Walsingham) (subfamily Olethreutinae), feeding on Populus tremuloides (McGregor 1967, J. Econ. Ent. 60: 1213–1216), has two wing color morphs (Heinrich 1926, U.S. Nat. Mus. Bull. 132, 216 p.), one of which is melanic in both sexes. The melanic morph numbered 5 of 54 specimens from Michigan, Ontario, and Minnesota. Genitalia comparison between the morphs was based on 2 or more genitalia slide preparations of each sex (9 preparations in all).

Epinotia solandriana (Linnaeus) (subfamily Eucosminae), feeding chiefly on Betula, has 4 main wing color morphs (Lindquist and MacLeod 1967, Can. Ent. 99: 1110–1114), each in both sexes. These morphs may not be sharply discontinuous. Using specimens from Ontario, Wisconsin, and Michigan, I compared genitalia among these 4 morphs with 1–7 preparations of each sex (18 preparations in all). Comparisons were made under a light microscope at $60-90\times$, magnifications normally used in genitalia study. There were no genitalic differences between color morphs in either sex of either species. This result confirms expectation and strengthens the usefulness of genitalia for ascertaining presence or absence of wing color polymorphism in olethreutids.

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