

# Taxonomy and evolutionary ecology of lepidopteran leafminers

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A leafmining moth, *Ectoedemia cerviparadisicola* Sato (Nepticulidae), and its leafmine on a leaf of *Quercus gilva* (Fagaceae).

Leafminers are insects larvae of which feed on leaf tissues within leaves. Among them, lepidopteran leafminers are the most diverse, generally having very narrow host plant ranges and being attacked many species of parasitoid wasps in comparison with external feeders. Considering these features of leafminers, I study members of the families Nepticulidae, Tishceriidae and Gracillariidae in the contexts of (1) taxonomy based on morphological characteristics, (2) population ecology including life history traits, (3) genetic differentiation of local populations using phylogeographic approaches, (4) interactions between leafminers and their host plants, and (5) structure, function and species coexisting mechanisms in parasitoid communities associated with leafminers.

Keywords : parasitoids, life history, populations, moths, phylogeography