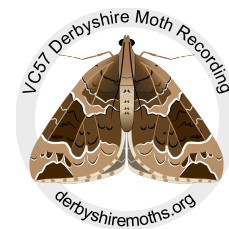


Derbyshire Moth Recording Team.



Verification and Guidelines for Leaf Miners VC57 - Derbyshire February 2025

Identifying leaf mines is a complex field which requires diligent searching but knowing what host plants to look for facilitates these searches. Bear in mind that many species of leaf-miners cannot be identified at adult stages and can only be identified by the galleries they leave behind in the foliage.

Leaf-mining moths lay their eggs on the foliage of suitable host plants. After hatching, the larvae tunnel through the internal leaf tissues. When they have completed their feeding, the larvae of some species pupate within the foliage, but in others the larvae exit the mines and pupate elsewhere on the plant or in the soil.

Due to the complexity of identifying the mines of leaf mining moths, we have set a minimum level of Category L, as our Verification guideline. Category L requires that all records of the mines of all leaf-miners are to be accompanied by photographic evidence. This is required to help accurately determine to species level. This may still not be sufficient to aid identification and further evidence may be required.

The Categories for adult leaf mining moths remain unchanged, and the Categories are set at the National Category status guidelines.

Thank you for following these guidelines.

So, why do we require photographs of the upper and lower leaf mine?

- a) Some species can be separated or identified by where they lay their egg on their host plant - upper or lower leaf surface for example.
- b) Some species create different types of mines within the upper and/or lower leaf or stem, which helps with identification.

Category Level 2 - Our definition for Verification purposes.

1. A good quality and in-focus photograph of the whole upper and lower surface of the leaf, clearly showing the shape and structure of the leaf mine.
2. Backlit photograph of the frass/gallery pattern (leaf held close to the camera lens, positioning the main light source behind the leaf).
3. As much information about the larval food plant as possible, ideally to species level but certainly to Genus level.

Here are two examples of good quality Leaf Mine images, clearly showing the features of the leaf mine. The third image shows key characteristics of the Leaf Mine *Stigmella hybnerella*



Stigmella nylandriella - Dave Evans



Stigmella lapponica - Dave Evans

