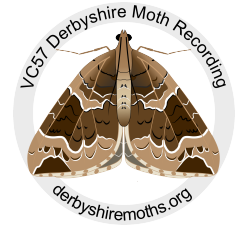


NATIONAL MOTH RECORDING SCHEME

Micro-moth Verification Guidelines Introduction

VC57 - Derbyshire

September 2024



An introduction to the National Guidelines.

The following 'Verification Guidelines' were devised and compiled to help recorders, verifiers and County Recorders (CRs) decide which micro-moths need careful consideration before records should be finally verified and submitted to the National Moth Recording Scheme/ iRecord. In some cases the Regional, or even the National panels, that have been put in place to support the County Recorders may need referring to.

There will be plenty of the larger micro-moths, such as *Pleuroptya ruralis* (Mother of Pearl), *Anania hortulata* (Small Magpie), *Hypsopygia costalis* (Gold Triangle) and *Pterophorus pentadactyla* (White Plume Moth), where the moths can be easily identified and where no similar looking species occur. Typically, these records will be accepted as submitted and only those which occur outside their usual flight period, habitat or geographical range are likely to be questioned. However, it will help the verifier if these checks are made to rule out any potential misidentifications before submitting the record.

This sort of information is readily available in books and on-line facilities. Once experience has been gained with the different families there will be many species that can be accepted without further evidence being required. If a recorder has had the species checked before, it is unlikely that subsequent records of the same species will need querying again (unless dissection is required or, perhaps, the species is very scarce). It is also important to remember to consider poorly marked or worn specimens, as these may require a higher level of confirmation.

The Derbyshire Recording Team promotes in the first instance that records are submitted directly to iRecord or via the National Moth Recording Scheme (NMRS), but not both, in order to avoid duplication of records. If records are submitted directly to the joint CR's, or via the Records Team, then we would need to obtain permission off the recorder in order to be able to submit to iRecord on the recorders behalf. This is not our preferred method of submitting your moth records.

Remember that many micro-moths are not straightforward to determine. In these cases it is best to assume that species that have not been encountered before will be best retained as a photograph (or in some cases a specimen, see the guidelines/ categories) for examination by the Derbyshire Recording Team or in certain cases, by an experienced micro-moth recorder.

When taking photographs of micro-moths, ensure that the moth is not too worn (this can make identification by this means difficult or impossible). It is important that the moth is clearly visible, that the picture is not blurred and that, preferably, two images from different angles are submitted. Often a micro moth is best photographed from the side. An idea of scale should be included in the image if possible.

All new VC57 species records should be supported by one or more good quality images or, in some cases, a specimen. Please bear in mind many species cannot be determined without a specimen (see guidelines). If a scarce or very scarce species is suspected and a specimen is likely to be required for accurate determination, please ensure that only one, or at most a very few, specimens are retained.

Your records should include a full level of supporting detail, which would need to include: Date of trapping (if evening then the date of the evening/collecting method was stated, state if it is a daylight record), type of light trap used, location with a suitable grid reference (six figures), any additional supporting evidence such as a photograph, if the "specimen is retained" or "specimen is provided", a gen det has been completed and who undertook and verified the "gen det".

The criteria which is contained in these guide-lines aims to provide a framework for the verification of micro-moths for the National Moth Recording Scheme. These criteria cover the adult moths and also species more regularly recorded as leaf-mines or as larval cases.

The criteria are applicable at the UK level, but at local level we can adapt individual species gradings. The grading assumes that moths identified were in a good or adequate condition when originally determined.

Adult Micro-moth Verification Grade Categories - VC57 Derbyshire

Category 1: Distinctive species unlikely to be confused with others.

Usually accept record within documented range and usual occurrence period for the region; otherwise one or more good quality photographs, or possibly a specimen, would be required. Applies to species which will quickly become familiar to those gaining experience in micro-moths.

Category 2: Can be confused with other species. Good quality photographs or possibly a specimen will be required if the recorder is not familiar with the species. If records have previously been submitted and accepted, Category 1 criteria may apply subject to confirmation from the Recording Team. Worn examples are likely to be unidentifiable unless a specimen is retained for microscopic examination.

Category 3: Very rare/ scarce species (includes very scarce adventives/immigrants).

A voucher specimen may be required by the Recording Team (seek advice before releasing the moth). A good set of photographs showing all critical identification features clearly may suffice in some cases.

Category 4: Dissection required.

Species that cannot be reliably identified as adult by external features/characteristics alone. Dissection is required to confirm records to full species. Where appropriate, a few species pairs can be recorded as 'aggregates' (e.g. *Acleris ferrugana/notana*) if not dissected.

Category 5: A Specimen Required

A species where there are currently no previous, confirmed or post VCH records. Contact the Recording Team as a voucher specimen may be required. Please contact one of our county recorders before releasing the moth or otherwise. In some exceptional circumstances, a good quality set of images showing all the critical identification features may be sufficient to support a record.

Leaf-miners

Category A: Record accepted without the need to see the actual leaf or a good photo.

Category L: Either the leaf or a good photograph required if the recorder is not familiar with the species. If records have previously been submitted and accepted, grade A criteria will apply.

Category R: Moth will need to be reared and, in some cases, possibly dissected.

Larval cases:

For many larval case records (and particularly for the *Coleophoridae*), great care should be taken to ensure the food-plant is correctly named. A wrongly named food-plant will almost certainly lead to an incorrect moth determination. Pabulum is used below to indicate that some larvae (such as in the *Psychidae*) feed on non-plant material.

C1: Same as Adult Grade 1.

C2: A good quality photo or specimen of the case and plant/pabulum is required if the recorder is not familiar with the species.

C3: A good quality photo or specimen of the case and plant/pabulum and the bred moth is required.

C4: As in **C3** and the moth requires dissection.

These criteria are intended as a guide. More or less evidence may be required depending on the recorder's location and experience. If you think your record is a county first (from looking at the maps and records) then a valid photograph would be essential to show to your County Recorder.

Micro-moth grades based on Butterfly Conservation national guidelines compiled by Dr John Langmaid, Stephen Palmer, Mark Parsons and Dr Mark Young - January 2016.