

AGROMYZIDAE NEWSLETTER

LATEST NEWS FROM THE NATIONAL AGROMYZIDAE RECORDING SCHEME

A BRIEF UPDATE

RECORDS

A superb total of 241 records were received by the scheme during September. *Phytomyza ilicis* continues to be the most recorded species, forming 17% of this month's total. However, many records of *Liriomyza amoena* and *Phytomyza agromyzina* were also submitted, the latter hopefully as a result last month's newsletter!

Graham Moates recorded *Agromyza ferruginosa*, a scarce species and says; "I was inspired to look at leaf-miners following a churchyard survey in Norfolk I completed with local naturalist James Emerson. Whilst initially looking at moths, this led to interest in leaf-mining flies at the same time as the *Agromyzidae* recording scheme was getting started.

During my late summer holiday in Dorset, blotch leaf-mines of *Agromyza ferruginosa* were spotted on comfrey (*Symphytum sp.*) at two locations on the RSPB Radipole Lake reserve in Weymouth on 17th September. One was located close to the reserve paths in this wetland habitat and the other in the adjacent car-park. I have since obtained further records of *A. ferruginosa* at Riddlesworth and Wymondham in Norfolk – both of which were on fairly damp ground close to streams. At both Norfolk sites, despite large amounts of comfrey being present, careful searching was required to find affected leaves.

I am still very much a beginner with this group but have managed to submit 62 verified records across 19 species of *Agromyzidae* so far. The prompt verification is much appreciated as this allows for further examination if required." Graham's photos can be see below;



WHAT'S ABOUT.....

NOVEMBER

Although mines are becoming less frequent now, there are still records to be made, with the mines of *Phytomyza aquilegiae* often been found during this month.

This species mines Columbine (*Aquilegia vulgaris*), which is relatively common in gardens and parks.

A large blotch is formed, often containing several larvae, which is purple-brown in colour. Frass is scattered throughout the mine but isn't visible unless the mine is opened.



The larva leaves the mine to pupate via an exit slit in the upper epidermis. Sometimes, the puparium can be found attached to the leaf but it is quickly dislodged by rain and wind.

Another species which uses Columbine as its host is *Phytomyza minuscula* and the two can often be found on the same plant. This species forms a short, upper surface corridor, which contains frass in conspicuous black strips. Again, the larva leaves the mine to pupate and the puparium can sometimes be found adhered to the leaf.



Finally, the larval mines of *Phytomyza leucanthemi* may be found on Oxeye Daisy at this time of year.

A long gallery is formed, mostly on the lower leaves, which has frass in irregular but not connected grains.



The larva leaves the mine to pupate, with the puparium been black;



SCHEME HELPS LEPIDOPTERA RECORDER ☺

A NOTE ON RECORDING AGROMYZIDAE

Andy Banthorpe, VC30 Moth Recorder writes; “Encouraged by this recording scheme and the enthusiasm of its organiser, Barry Warrington, I have been going through some old scans of leaves that had remained unidentified. My wife Melissa and I keep a collection of leaves with lepidopteran leafmines and all are also scanned, many with both reflected and transmitted light (using a flatbed scanner). For fly mines I tend to just scan the leaf but going through these has enabled me to add some past records, mostly of species I have not looked for since. I am gradually building up a knowledge of what I can record without breeding though and these newsletters have been very helpful in pointing out species to look for in the coming month. My Agromyzid mine recording this autumn has all been when I have been out and about looking for lepidopteran leaf mines and I have been pleased to find *Phytomyza conyzae* on Ploughman’s Spikenard *Inula conyzae* and *Phytomyza terasticha* on Water Mint *Mentha aquatica* (pic below);



I think the most attractive mines I have identified from past records are *Phytomyza glechomae* (pic below) on Ground Ivy *Glechoma hereracea* and *Phytomyza minuscula* on *Aquilegia*. Hopefully I will be able to contribute more records in 2018 once I get familiar with more host plant species.”



A NEW HOST PLANT FOR LIRIOMYZA CONGESTA (BECKER, 1903)

LIRIOMYZA CONGESTA CONFIRMED ON TRIFOLIUM OCHROLEUCON

Rob Edmunds found mines on *Trifolium ochroleucon* and successfully reared an adult. He writes;

“We have a couple of large ornamental clovers growing in our garden in Downham Market, Norfolk and I noticed, on 12.viii.2017, that the *Trifolium ochroleucon* had been extensively mined (see photo below). Some mines had larvae in and I decided to try and rear some through as this would be a new host plant.



Pupae were formed on 15.viii.2017 and resembled those of *Liriomyza congesta*;



Initially I thought that the mines were due to *Agromyza frontella* (Rondani, 1875), but the broad central green, smeared, frass band, as shown opposite, would indicate *Liriomyza congesta*.



On 25.viii.2017 an adult emerged which I thought was *Liriomyza congesta*. I sent the specimen to Barry Warrington who confirmed it was indeed *Liriomyza congesta*.

This is a widespread species, particularly on the leguminosae and this is the first record on *Trifolium ochroleucon*. Interestingly this was growing adjacent to another ornamental Clover, *Trifolium rubens*, but there were no mines on this plant, in spite of them growing through each other.

Care must be taken in distinguishing the mines of *Liriomyza congesta* and *Agromyza frontella*.

Those of *Liriomyza congesta* have a broad green central band and the gallery widens quite quickly, whereas those of *Agromyza frontella* have a central frass band with small frass grains at the side of this.

The gallery of this species tends to spread irregularly across the leaf, staying quite small initially, then widening considerably at the end;



I am grateful to Barry Warrington for confirming my identification.”

AGROMYZIDAE TRAINING COURSE

SCHEME CONSIDERING RUNNING A TRAINING DAY

The scheme is considering running a training day for anyone interested in identifying and recording Agromyzidae.

Early discussions have taken place with Berrycroft Hub, which runs courses and workshops in various fields, from science subjects to practical crafts.

Click [here](#) to find out more about their work!



Workshop participants at Berrycroft Hub © Sally-ann Spence

Initial indications suggest this would be popular but at present, the content of the course/workshop is still to be decided.

For those who would consider participating, please do get in touch as it would be great to hear any thoughts you may have in terms of what you would like to get out of the day, what level you would like it to be pitched at (beginner, intermediate, more advanced?) or any other suggestions.

Some early suggestions include a workshop purely on the leaf mine side to *Agromyzidae*, to one covering rearing and dissection of adult material.

Updates will be provided in future newsletters and via the schemes Twitter account.

Many thanks!

UPCOMING NEWSLETTER

REQUEST FOR READERS THOUGHTS AND COMMENTS

The next newsletter will be slightly different to the previous ones, as it will acknowledge that the scheme is one year old!

To mark this occasion, it would be fantastic if readers could send in a few words, telling how they have found the scheme since its inception.

Without you, the scheme wouldn't be the success it appears to be so to hear your thoughts along with any suggestions of things you would like to see the scheme implement would be really welcomed indeed.

This could range from just a couple of sentences to a whole page, so please do get in touch and they'll all be included in the newsletter!

Thank you.



CONTACT

IF YOU HAVE ANY QUESTIONS OR WOULD LIKE TO KNOW MORE ABOUT THE SCHEME, PLEASE DO GET IN TOUCH WITH US;



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