

# AGROMYZIDAE NEWSLETTER

## LATEST NEWS FROM THE NATIONAL AGROMYZIDAE RECORDING SCHEME

### A BRIEF UPDATE

#### RECORDS

In March, a total of 142 records were received by the NRS, whilst April resulted in 102 been submitted. *Phytomyza ilicis*, again, was the most recorded species, forming 73% of total records received

The mines of *Chromatomyia aprilina* and *Phytomyza ranunculi* were also well recorded, with several records been submitted.

Many thanks as always to everyone who is contributing to the NRS!

Robert Homan recorded the vacated mines of *Agromyza idaeiana* in Kendal during the last week of March. His photo is shown below.

The mines were found on Bramble (*Rubus sp.*), showing the typical initial corridor followed by a large blotch which is formed in-between the veins of the leaf.

This is one of the earliest records the NRS holds for this species, which is a touch surprising considering how cold and miserable the weather has been this spring!

Thanks for the record Robert.



Larval mine of *Agromyza idaeiana* © Robert Homan

### WHAT'S ABOUT.....

#### MAY

During this month, the mines of many species become more obvious and it is well worth looking on Saxifrage (*Pimpinella spp*) for the larval feeding signs of *Phytomyza pimpinellae*.

This species forms an elongated, upper-surface blotch which has conspicuous primary feeding lines;



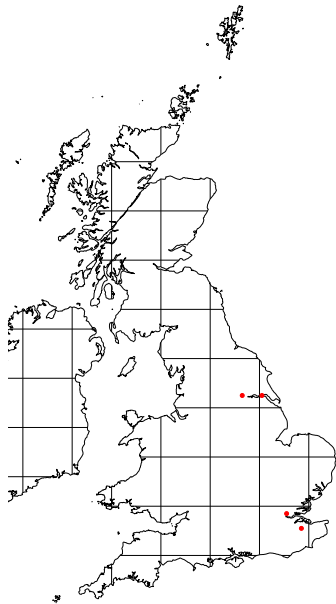
*Phytomyza pimpinellae* mines © Barry Warrington

There are other miners on Saxifrage which can cause similar looking mines but these tend to be either more blotch-like or linear than *P.pimpinellae*. However, it may be prudent to rear adult material and dissect any males that emerge. The males genitalia is shown below;



*Phytomyza pimpinellae* aedeagus © Barry Warrington

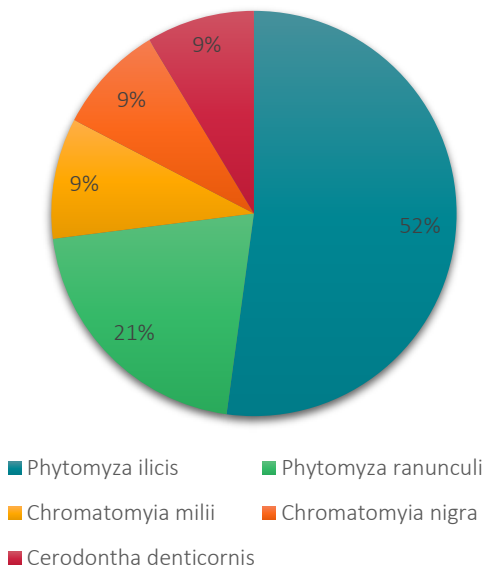
*Phytomyza pimpinellae* appears to be quite a scarce species, with the NRS holding only ten records (none are held on the NBN Atlas), seven of which come from Yorkshire;



Distribution map of *Phytomyza pimpinellae*

The chart below illustrates the top five species that are recorded during May, based on all records held by the NRS;

**Top 5 Agromyzidae species recorded during May**



It is no surprise that *Phytomyza ilicis* and *P.ranunculi* are the two most recorded leaf-miners, however, it is interesting that even though there are many other leaf-mines which can be abundant

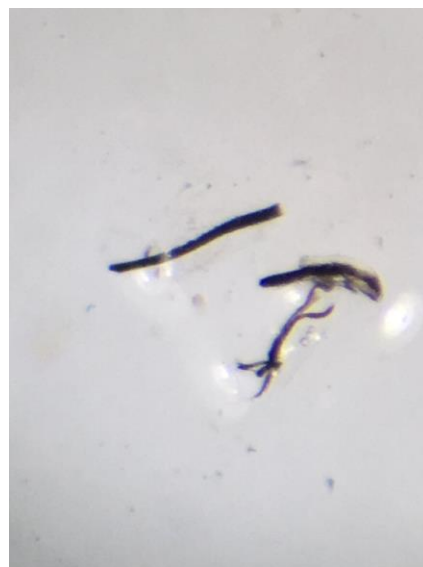
during May, the other three species are all based on records of adult material.

All three can be readily collected by sweeping in any grassy habitat and the two *Chromatomyia* can be easily determined by a quick examination of the male's genitalia. *Chromatomyia nigra* is shown below;



*Chromatomyia nigra* aedeagus © Barry Warrington

James McCulloch collected a pair of *Chromatomyia milii* at the start of March and successfully dissected the male to reach his determination;



*Chromatomyia milii* aedeagus © James McCulloch

For anyone who may be interested in starting to collect and determine adult Agromyzidae, these three species are a really good starting point. Naturally, all Agromyzidae records are of great importance but adults make up just 25% of the total records held by the scheme.

It would be fantastic if more adult records could be collated and of course, the NRS is always happy to assist with determining any species you may collect or rear.

## AGROMYZID HELPS TO REACH MILESTONE

BUTTERCUP MINER IS 10,000<sup>TH</sup> SPECIES

James McCulloch writes;

“At the end of 2016, Sussex naturalist and pan-species lister Graeme Lyons took it upon himself to compile a pan-species list of all the Sussex Wildlife Trust reserves. After a lot of painstaking effort, the total came to 9770 species!

Over the following year, species continued to be added to the list until 20<sup>th</sup> August 2018, when I unknowingly recorded the 10,000<sup>th</sup> species on a Sussex Wildlife Trust reserve: *Phytomyza ranunculivora* on Graffham Common.

Being what I had thought was quite a widespread species, this came as a surprise to me, and it goes to show how under-recorded some groups are and even with a list of 10,000 species there are still many gaps to fill.

However, as of the beginning of 2017 there were 33 species of agromyzid recorded on Sussex Wildlife Trust reserves, from 11 genera.

The genera with the most species were *Phytomyza* with 9 species, and *Liriomyza* with 8.

The most recorded species were *Cerodontha denticornis* and (unsurprisingly) *Phytomyza ilicis*, both recorded on 4 reserves.

It will be really interesting to see how the list of Agromyzidae recorded on Sussex Wildlife Trust reserves progresses!”



The 10,000<sup>th</sup> species – *Phytomyza ranunculivora* © James McCulloch

Well done to James on being the one to record the 10,000<sup>th</sup> species – nice to hear it was an Agromyzid too!

## HOGWEED PROJECT

## A BIT MORE INFO....

So far, recorders in 13 VC's have agreed to take part in this year's Hogweed miner project. Of course, this is fantastic but naturally, the more who participate, the greater the amount of data collated, allowing a much better understanding of the two target species, *Phytomyza pastinacae* and *Phytomyza spondylii*. So please do spread the word!

The NRS organiser collected *many* Hogweed mines during the autumn of 2017 and to date, *P.pastinacae* appears to be the dominant species in East Yorkshire (VC61), making up 84% of the adults reared (the ratio being 64:12). It will be very interesting to see if the ratio is similar in other parts of the UK!

As highlighted in a recent tweet by the NRS, please do go careful when collecting Hogweed leaves, they can cause skin irritation so it may be prudent to wear gloves.

The recording spreadsheet will soon be sent out to those who have kindly agreed to participate. Hopefully, the spreadsheet is self-explanatory but if anyone has any questions, please do get in touch.

There are other species which mine Hogweed, such as *Phytomyza heracleana* and *Phytomyza sphondyliivora* (which can cause similar looking mines to the target species) so please do record these too and submit via iRecord or direct to the NRS (with a supporting photo of course!) – thank you!

Once the collecting season is over and all adults have been determined, a newsletter discussing the findings of the project will be sent out.

Many thanks once again to everyone who will be taking part!

## 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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