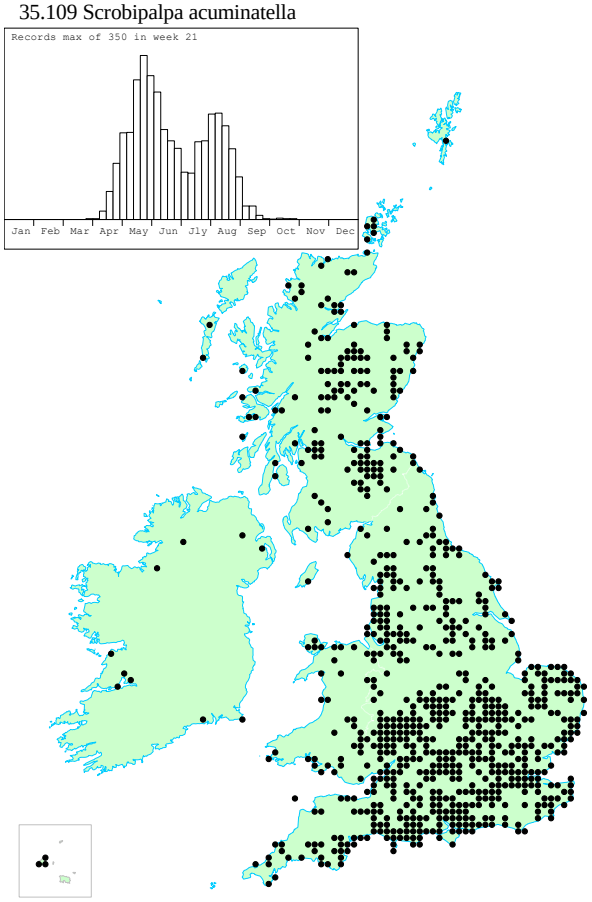
Species to look for in June

Lep: Gelechiidae:

(i) *Scrobipalpa acuminatella*

35.109 Scrobipalpa acuminatella



Map produced using MapMate

This larva can be found in most areas where the larval food plants occur, such as rough or broken ground, footpaths and roadside verges, banks, rough meadows, edges of fields and parkland etc.

Larval food plants include various *Carduus* and *Cirsium* species (thistles) and on one occasion, in Scotland, it was found mining *Tussilago farfara* (colt's-foot). An intriguing report of the larva mining a sow-thistle species a few years ago unfortunately remains unconfirmed.

Do keep a note of the particular thistle you find the mines on and if you are fortunate enough to locate one utilising another plant species, do consider breeding the moth through and please send a photo to: s.palmer12(at)btopenworld.com of the Gelechiid Recording Scheme.

The mines appear as distinctive, often large, pale blotches on the leaves, sometimes with more than one larva per leaf. It is initially an obvious upper-side mine over the midrib, usually near the base of the leaf. As the mine expands it branches sideways into the leaf blade to both left and right of the central portion of the mine.

Photo ©Ben Smart

Photo ©Rob Edmunds

The larva, particularly when small, often positions itself above the midrib when not feeding and can be difficult to spot. The larva is shown below:

Photo ©Ben Smart

This species is widespread and common throughout most of the British Isles although it appears to be less common the further west you go. Perhaps larval searches might produce more records in both Ireland and Northern Ireland?

Although a very scarce moth*, Scrobipalpa pauperella* may possibly mine in a similar manner on *Cirsium palustre* (marsh thistle) in Britain (it has been reared from this plant in Finland). Attempts to confirm this at the main site for this moth in England have so far proved negative. Maybe more breeding through of *S. acuminatella* mines on this plant across the UK will help towards resolving this issue in the British Isles?

© Steve Palmer

Further details:

Gelechiid Recording Scheme:

https://www.gelechiid.co.uk/

Dip: Agromyzidae:

This month we have three Agromyzids to find in and on your garden Aquilegias:

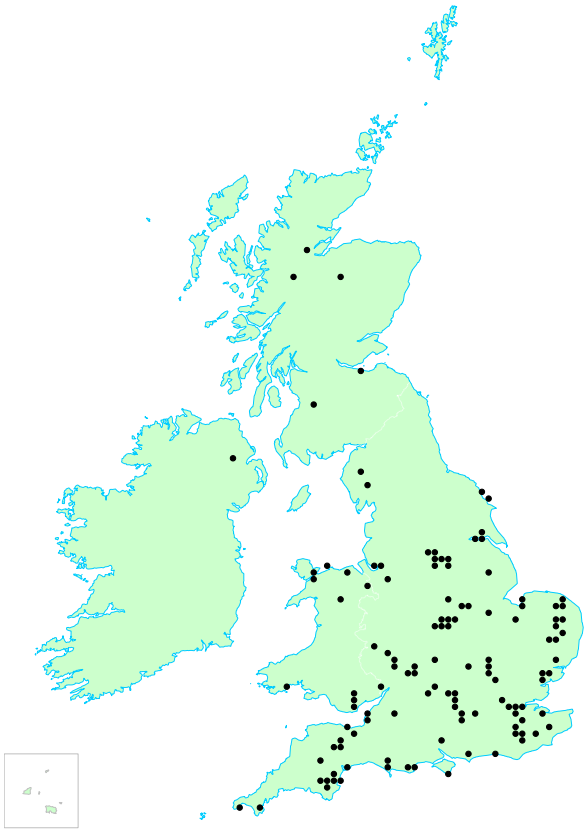
(i) *Phytomyza aquilegiae*:

This leaf miner forms large, whitish, blotches on the leaf, which can have a slight greenish tint:

Photos ©Rob Edmunds

Although not as common as the next species we discuss, it is still frequently encountered in gardens and parks, becoming scarcer in the north;

Phytomyza aquilegiae



Map © National Agromyzidae Recording Scheme

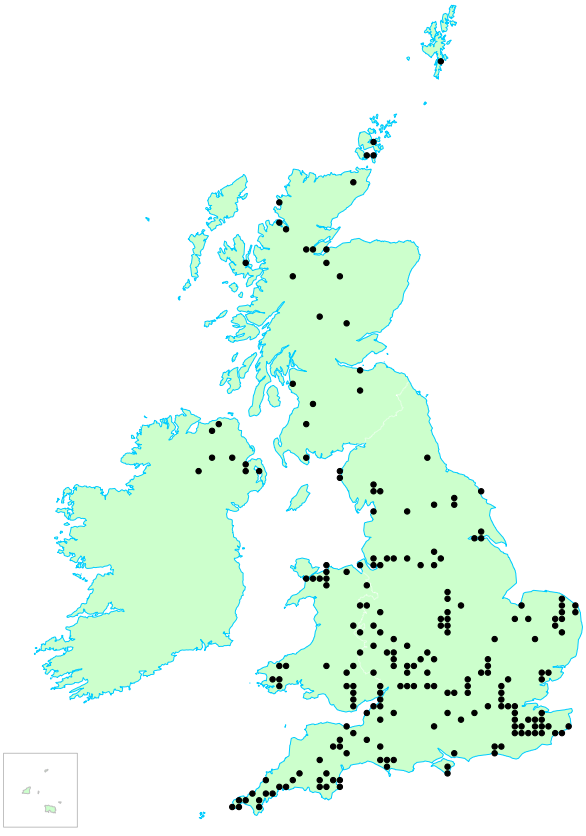
(ii) *Phytomyza minuscula:*

This leaf miner forms short linear mines with the frass in conspicuous black stripes:

Photos ©Rob Edmunds

This is a relatively common and widespread species and can often be abundant where it does occur. Its distribution is shown below;

Phytomyza minuscula



Map © National Agromyzidae Recording Scheme

(iii) *Phytomyza krygeri:*

The larvae of this species feed inside the seed capsules of Aquilegia, causing the seed capsules to discolour and become brown.

Photo ©Barry Warrington

The presence of a larva can be detected as the eaten seeds stay brown, whereas the unaffected seeds blacken as they mature:

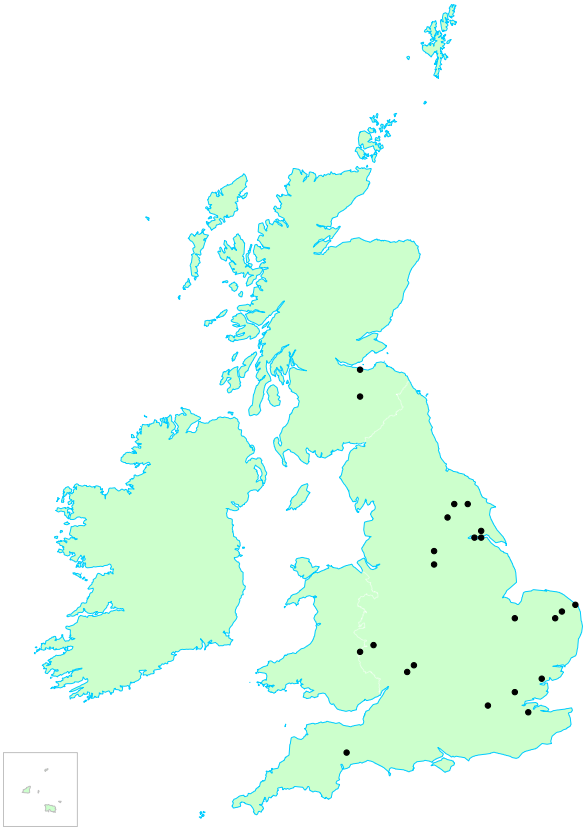
Photo ©Rob Edmunds

The larva also can swap seed capsules and congruent holes may be seen, as they leave one capsule to enter another to feed:

Photo ©Rob Edmunds

Although the below distribution map gives the impression *P. krygeri* is a rather scarce species, it is probably much more common than the records suggest;

Phytomyza krygeri



Map © National Agromyzidae Recording Scheme

Further details:

Can you add records to these maps?

If you find either of these Agromyzid miners then please photograph and iRecord.

National Agromyzidae Recording Scheme:

agromyzidaers@gmail.com

This next section concentrates on Birch leaves, where three different groups of leafminers may be found this month – lepidoptera, hymenoptera and coleoptera:

Lep: Nepticulidae:

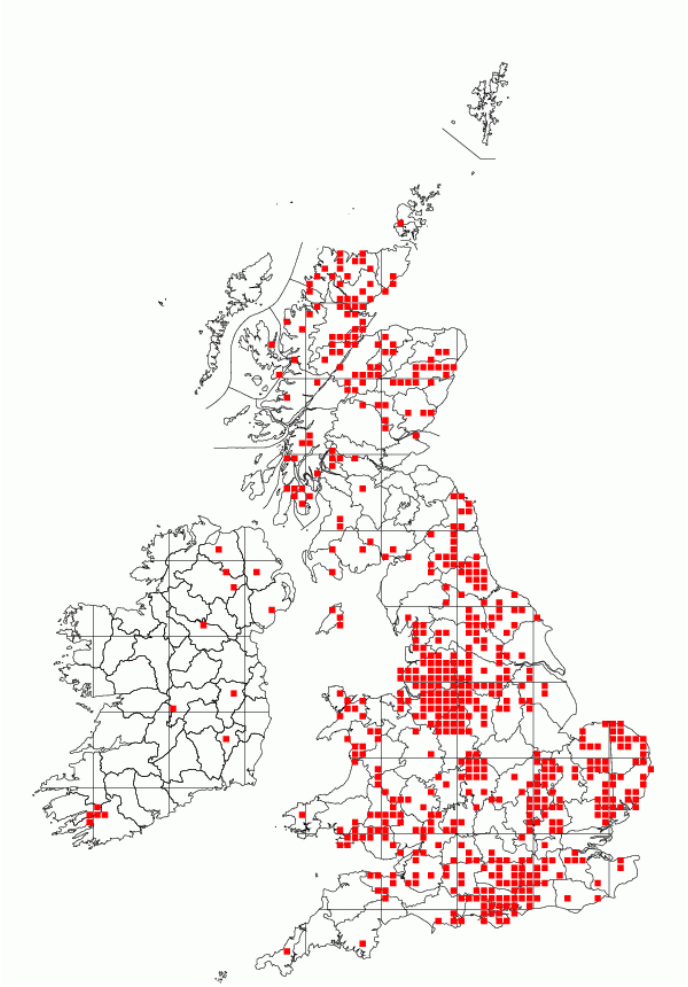
Stigmella lapponica and Stigmella confusella:

Stigmella lapponica is an early miner of Birch leaves in May and June, forming long mines which often follow a vein.

A distinguishing characteristic is that the early gallery is filled with green frass:

Photo ©Rob Edmunds

It is a common leaf miner throughout Britain as the distribution of *Stigmella lapponica* from the Leaf-miner Moths Recording Scheme shows:

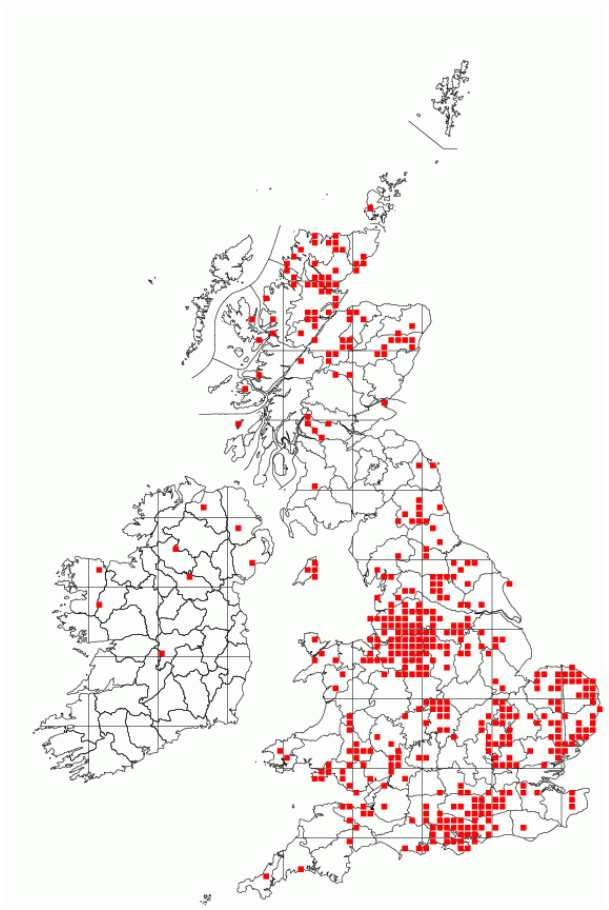


Another mine appears on this host in June – the appropriately named *Stigmella confusella*.

The mines are very similar, apart from the fact that S.*confusella* has linear frass throughout:

Photo ©Rob Edmunds

Again *Stigmella confusella* is widely distributed, as the map from the Leaf-miner Moths Recording Scheme shows:



Col: Curculionidae:

Orchestes rusci:

Another very striking miner in Birch, with the early broad gallery at the leaf edge leading to a cut out, in which the larva pupates:

The larva is seen in the disc prior to excision and the pupation:

Photos ©Rob Edmunds

Hym: Tentredinidae:

Fenusella nana:

This is another miner of Birch and it forms an unmistakeable triangular plug of frass at the tip of a leaf vein:

The frass may get disturbed or washed away during heavy rain, but the remains of this triangular plug is usually visible (bottom–centre in the photo).

The larva is green initially but turns yellowish as it matures:

Photos ©Rob Edmunds

If you find this species please iRecord it and your record will be picked up and verified.

Dip: Drosophilidae:

Scaptomyza flava:

This is a good leafminer to search for in your garden, looking at flowers such as Nasturtiums and vegetables such as Brassicas.

The mine starts as a long corridor which develops into a large white blotch usually at the basal portion of the midrib.

The early mine and then a developed mine are shown on Nasturtiums:

Photos ©Rob Edmunds