

Newsletter: March 2009

Prays oleae (Bernard) (Lepidoptera, Yponomeutidae) - A new Yponomeutid to Britain and Ireland

I was visiting a garden centre in Addlestone Surrey on January 22nd 2009 with a view to looking for mines of *Phyllocnistis citrella*, which I had found there on a previous visit in 2007 and had hoped to find an inhabited mine to breed through.

On entering the centre there was a large olive tree outside for sale. I was reminded of an item posted by Rob Edmunds to the internet discussion group ukleafminers in July 2008 about finding a probable mine of *Prays oleae* on an olive tree on display at the Hampton Court Flower Show. I decided to have a quick look and very quickly found several mines suggestive of this species, one of which appeared to be occupied and a pupa between two leaves loosely held together with silk.

I collected several mines plus the pupa with the aim of trying to breed the moth. As luck would have it the pupa emerged but the moth failed to inflate its wings. To compound the frustration my attempts to determine the species by examination of the genitalia proved inconclusive. The moth was a female and seemingly lacked a bursa (or I lost it during preparation).

Fortunately, two of the mines collected proved to be occupied and the larger of the two larvae compared very well with images sourced from the internet.



Prays oleae mines on olive

The larger of the two larvae pupated within approximately two weeks (the photo below shows the larva spun up ready to pupate on 14th February 2009)



Prays oleae larvae and habitation



Pupating larva

To my delight, the adult moth emerged ten days later and was confirmed as being *Prays oleae* by Martin Honey of BNHM. This constitutes the first proven record of *Prays oleae* for Britain.

Subsequent to the first moth emerging, the second larva was also successfully bred through to the adult.



Adult *Prays oleae*

Although clearly an accidental importation with the olive tree to the garden centre, *Prays oleae* must be considered a potential colonist. Given the large numbers of olive trees now in garden around the country, the tree on which the mines were found could quite easily have been sold (given a large enough wallet!) and been introduced to a garden before anyone had noticed the occupied mines and indeed the live pupa.

My thanks go to Rob Edmunds for bringing this species to my attention and particularly to Martin Honey who, as always, was very willing to help an inept amateur find his way and put another species onto the British list. The adult moth has been set by Jim Porter and will be exhibited at the British Entomological and Natural History Society Annual Exhibition at Imperial College, London when it is held in 2009.

A more complete article on the discovery will be published in due course.

Images and article © Andy Mitchell

***Chromatomyia aprilina* (Goreau) (Diptera, Agromyzidae) 'winter' mines**

Keith Palmer says 'On 26th February, I found on Sevenoaks Common, Kent, two separate plants of Honeysuckle (*Lonicera periclymenum*) supporting, on the newly-emerged leaves, dipterous mines.

This was not the first time I had seen mines at this early date on the fresh leaves of Honeysuckle. Indeed during the last two or three years at various localities mines have been noted, once as early as the middle of February.

These mines had always been something of a puzzle to me. Information on the British leafminers website indicated that the first miner in the year likely to be found on honeysuckle would be *Aulagromyza cornigera* and that from mid-Spring.

However on examination these mines did not fit either the gallery pattern or frass pattern of that species. Indeed morphologically they resembled *Chromatomyia loniceræ* with much more linear frass than the single grains of *A. cornigera*.

Although the date was incredibly early for the summer mining *C. loniceræ*, I had conjectured that this might be an earlier generation arising as a result of global warming.

When I posted a message on the ukleafminers Yahoo groups site, Willem Ellis showed an interest and asked me to send photos of the mines.

He tentatively confirmed the identification of these mines as *Chromatomyia aprilina* in an "enigmatic" winter generation completely lacking the attachment to the leaf midrib that is normally associated with *C. aprilina* later in the year.

This is a form of the mine that he had previously observed in the Netherlands but to his knowledge had not been previously recorded in the UK.

He asked me to try to bring the feeding larvae through to pupation and when I sent a photo of the highly distinctive green pupa with posterior spiracles projecting through the leaf surface, he confirmed the identification.

Until Willem mentioned this winter form I was quite unaware of the existence of it but my hunch is that it will be likely to be found to be widespread on the early leaves of honeysuckle in February and March and conceivably earlier, appearing (like the lepidopterous *Eriocranias* on Birch), soon after the unfolding of the leaves. It occurs at a time when leaf mining enthusiasts are unlikely to be active in the field and therefore I suspect it has been long overlooked.

The species was also located in 2009 in Gloucestershire by Robert Homan and these two records appear to constitute the first UK records for this unusual winter form of *Chromatomyia aprilina*'.

Robert Homan found mines on 7th March in Southam, East Gloucestershire, VC33 and on 22nd March at Hay Wood, West Gloucestershire, VC34, also finding mines in two other woods in that general area (and these are shown opposite and on the previous page).

Robert says ' These are fairly distant locations, about 28 km apart so on that basis the mines are widespread. The other thing that struck me was the irony of this last winter being not at all mild. The leaves on which I have found mines are, I would suggest, new spring foliage rather than over-wintering leaves.

The plants in all cases were wild honeysuckle, *Lonicera periclymenum*, growing in sheltered woodland settings'

© Keith Palmer and Robert Homan



Chromatomyia aprilina mines



Detail of frass



The pupa

Images © Robert Homan