Lyonetia prunifoliella (Hubner) : a new micromoth arrival in VC37 Worcestershire

Tony Simpson

01. *Lyonetia prunifoliella* (Hubner) imago. a new micromoth arrival in VC37 Worcestershire. Oliver Wadsworth

There was only one confirmed UK record of *Lyonetia prunifoliella* (Hubner) (01) when mines were found and moths bred from Worthing, Sussex in 1893. There were no UK records after this until a small number of imagines were recorded at light between 2007 and 2016 in Somerset, Cornwall, Hampshire, Sussex, Middlesex and Norfolk and a moth bred from a mine in Kent in 2016. Then many mines were found in Devon in 2017 (Heckford & Beavan 2020). Following this, it has been spreading in southern England. These records are presumed to be a new arrival of this species from Europe. Other old records have been shown to be erroneous, including a record from Boughton, Worcester by John Fletcher in VCH 1901. The specimen is in the Worcester Museum and was found to be a misidentified imago of the common *Lyonetia clerkella* (Linnaeus).

On 28th September 2023 Nigel Voaden, who had stopped off at Tiddesley Wood SO928454 on his way back to Scotland from Somerset, emailed me to say he had found vacated mines of L. *prunifoliella*. I went to look at nearby sites in the same 10km square on 29th September where I knew there was plenty of the foodplant, Blackthorn *Prunus spinosa*. I found a small number of vacated and some tenanted mines (02 & 03) on the edge of Deerfold Wood SO908475 and on the edge of Stoulton Community Woods SO910492. Later Oliver Wadsworth found a few vacated mines near Kemerton SO939366 on 7th October 2023.

02. *L. prunifoliella* larval leaf mine is initially a narrow gallery mine. Tony Simpson.

03. *L. prunifoliella* larval leaf mine then becomes a blotch. Tony Simpson

The larval leaf mine is initially a narrow gallery mine (02) similar to that of *Lyonetia clerkella*, but which then becomes a blotch (03) similar to the mine of *Stigmella plagicolella*, excepting that the *prunifoliella* larva extrudes its frass in thin small black beads from the underside of the leaf, often connected together with silk. This leaves a pale brown mine with an elongate green larva which seems to prefer feeding in leaves on young, paler-leaved upright shoots of the foodplant. Often there are many mines in the same shoot and sometimes several to a leaf. The larva can change mines and start a new blotch mine often in another leaf, with no initial narrow gallery. It then pupates in a thin silken cocoon in a silk hammock slung below a leaf (04).

04. *L. prunifoliella* pupates in a thin silken cocoon in a silk hammock slung below a leaf. Tony Simpson.


05. *Lyonetia prunifoliella* (Hubner) imago. Oliver Wadsworth.

I went and searched for mines at Monk Wood and Monk Wood Fields and further south at the Old Hills, near Clevelode and around Brotheridge Green on 31st September 2023 but could find no evidence of it here or around Tenbury Wells. Therefore it appears to have just started to invade Worcestershire from the south and may well continue to spread.
I bred 12 moths on 14th and 15th of October, all of which were of the white form (01 & 05). Like *L. clerkella* it hibernates as an imago.

References
Heckford, R.J. & Beavan, S.D. 2020. *Lyonetia prunifoliella* (Hübner, 1796) (Lepidoptera: Lyonetiidae): a review of the species in England and consideration of *L. padifoliella* (Hübner, [1813]). *The Entomologist's Gazette vol.71:no.4:pp221-247*

Images
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