Mendesia farinella Antenna finely ciliate, especially in male, rough-scaled; male genitalia (Figs. 1, 2) with valva broad, peaked apically, uncus not developed, gnathos elongate, digitate process undeveloped; female genitalia (Fig. 5) with ostium bursae and antrum bulbous, corpus bursae without signum.

Elachista argentella Antenna not ciliate, scales loosely appressed; male genitalia (Figs. 3, 4) with valva narrow-elongate, rounded distally, uncus large, incised, gnathos short-ovate, digitate process slender-elongate, juxta broadly triangulate-quadrate; female genitalia (Fig. 6) with U-shaped sclerotised medial area around ostium, antrum narrow, signum present as an irregular platelet with dentate margins.

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Observations of the egg-laying behaviour of the Argent and Sable moth *Rheumaptera hastata* (L.)(Lep.: Geometridae)

The UK BAP moth project is looking for suitable sites to study the egg-laying and larval behaviour of the Argent and Sable *Rheumaptera hastata* in lowland woodland. Sites with strong populations are needed.

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Most of my own such observations have taken place in ancient woodland sites where mixed broadleaves have been cleared to establish young conifer crops and are in habitat similar to that formerly created on a regular basis in many of our woodlands by coppicing. The low birch re-growth in the deer lawns sometimes maintained for deer watching and control is another situation in which I have regularly seen the moth breeding. A couple of my field notes are particularly detailed. I recall watching a female in fresh condition laying eggs at 15.20 hours on 9 June 1984 on re-growth of Silver Birch Betula pendula two metres tall growing along the edge of a ride in the Shabbington Wood complex in Buckinghamshire. The re-growth was sparse and the moth was able to fly amongst the sprays of leaves. I saw her lay a single, pale, cream egg on the underside of a birch leaf. The spray was in the shade of other leaves, but the bush itself was in full sunshine. The birch plant was on the north side of the east-west ride, below and in front of a tree of Western Hemlock Tsuga heterophylla. The ride itself was grassy and 8-10 metres wide, not bare earth. The trees of the conifer crop were spaced seven metres from tree to tree, with some low birch re-growth between, so there were both ample sun and shelter from wind. Trees were sparse, because there had been a fire on the site some years before. The same day I watched another female, in Waterperry Wood, Oxfordshire at 17.45 hours. She was flying low, and I followed her for 200 metres across a recent clearfell, which had only just been deer-fenced. I watched her lay five eggs on stump-shoots of Silver Birch only 30cm tall, in full sunshine in the centre of the clearing. Each egg was laid on the underside of a birch leaf, three eggs on one leaf and the other two on separate leaves about 50cm apart. During egg-laying, her flight was never more than one metre above ground. But after laying these eggs she ascended to about ten metres and her flight took her out of the clearing and up into tall birches on the edge. I had seen the first Argent and Sable of the season at this site on 31 May, so these observations were at least ten days into the flight period. It is obviously much easier to record egg-laying when it occurs near the ground and we do not know at present how much, if any, breeding takes place in tall trees. This will only be discovered by sampling for larvae at different heights. Low foliage in open but sheltered ground is likely to enjoy a warmer microclimate than canopy foliage. The striated brownish larvae conceal themselves within spun birch leaves and I reared a couple from the above eggs. It is worth remembering that in northern Britain the moth breeds on Bog Myrtle Myrica gale as well as birches, in open moorland situations, and the larvae can be found spun between terminal shoots, with the Bog Myrtle usually less than one metre in height. If you have any observations like those above, David Green at Butterfly Conservation is keen to hear from you (The moth has disappeared from many former haunts and may now have been lost from the two woods mentioned above. Lack of frequent small-scale clearances, exacerbated by heavy browsing by deer, are the currently favoured suggested causes of the decline.-PAUL WARING, 1366 Lincoln Road, Werrington, Peterborough PE4 6LS.



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