

Recording some easily-identified sawfly larvae in Wiltshire

By John Grearson

In Britain there are more than 500 species of sawflies and around 300 of these are known to occur in Wiltshire. The identification of adults is tricky and needs to be done by experts but some of the larvae are totally unique and unmistakable. This article introduces a few of these, some common and some less so, which can be found in Wiltshire and are all easily identified. Most of them have only been recorded a few times because few people search for them deliberately and are unable to recognise them when they see them. It is, however, quite likely that these sawflies occur wherever their respective larval food plant is found. Hopefully this article will encourage observers to look at these plants more carefully and submit records of any of these sawfly larvae they find. This will help us to obtain more comprehensive data of their distribution within the county and ensure their future conservation.

Sawfly larvae are superficially like lepidopteran larvae (butterflies and moths) but the latter have three pairs of thoracic legs, five pairs or less of abdominal prolegs and a pair of anal prolegs at the back. Most sawfly larva have six or seven pairs of abdominal prolegs in addition to the thoracic legs and anal prolegs. The exception to this is in the sawfly species which live inside the leaves, twigs and timber of plants where evolution has reduced the function of the legs which are virtually absent in these species, however since these larvae are seldom seen this is not important to the casual observer.

The British sawflies are usually referred to by entomologists by their scientific names which are unambiguous and in universal use in all countries. For the purpose of this article I have introduced common names for the species being described which will enable observers to associate the larva they are looking at with the food plant on which it is found and, in two cases, the distinctive colour of the larva.

WHITE ALDER SAWFLY

Eriocampa ovata (Linnaeus, 1761)



This larva is found, solitarily, on *Alnus glutinosa* and *A. incana* between June and September. It reaches up to 20mm in length and when resting curls up and looks like a bird dropping. The white powdery substance is easily rubbed off and in the final instar, when feeding is finished, the white powder is lost and the larva adopts a pale green appearance. There are two generations each year.



SOLOMON'S SEAL SAWFLY

Phymatocera aterrima (Klug, 1816)



The gregarious larvae of this species, which are up to 14mm in length, are found in June wherever the host plant *Polygonatum* (Solomon's Seal) occurs, either in gardens or in woodlands. The black, dumpy adults are often found flying around the plants in April, they are slow-flying and quite approachable. The plants are infested by the larvae after flowering and can appear to suffer quite severe damage. This is unsightly but plants always recover by the following spring.

I have a sprinkling of records from across the county but would expect many more because this is a very common garden plant. The plant is also quite widespread in the wild in central and southern Wiltshire.

BLACK SLUGWORM SAWFLY

Caliroa cerasi (Linnaeus, 1758)



This distinctive creature should be widespread and common throughout the county since it eats a wide variety of plants, however I only have three records in my database. There are several similar species in Britain, all up to 11mm long and covered in slime, but this is the only black one. The head is at the thick end and tucked in so that it appears to be looking downwards. In the early instars the larva eats only the upper epidermis of the leaf but when the third instar is reached the mesophyll beneath is also eaten and brown patches become apparent in the lower epidermis giving rise to the skeletonisation of the leaf which is a typical sign of the presence of the species. The species is polyphagous including the following:- *Pyrus* spp., *Prunus* spp., *Rosa* spp., *Rubus* spp., *Crataegus* spp., *Sorbus* spp., *Amelanchier* spp., *Mespilus germanicus*, *Cydonia* spp., and *Cotoneaster* spp. This photograph is by P.Becker, © RHS, Wisley.

SCABIOUS SAWFLY
Abia sericea (Linnaeus, 1767)



This larva can be found sitting openly on Scabious plants between June and September. *Succisa pratensis* (Devil's-bit Scabious) is the usual choice of food plant but according to the literature *Knautia arvensis* (Field Scabious) is also used and on the continent *Dipsacus* spp. This is a big species with larvae up to 30mm in length which can assume a sandy background colour when they are fully grown whilst retaining the distinctive black and yellow spots. They occur widely across the chalk downland of central Wiltshire and at a few sites in north Wiltshire but I do not have many records. The adults are spectacular metallic green insects with fat bodies and shading on the wings; these can be found buzzing round the food plants earlier in the year.

A word of warning with this one is that there is a similar species, *Abia candens*, which is rare and only known at two Wiltshire sites. The larvae of *candens* are similar, see below, but do not have the row of black spots along the centre of the back and the large black spots on the flanks are not heart-shaped as in *sericea* but teardrop-shaped. There are also no black spots above the prolegs in *candens*.



Abia candens

LARGE BIRCH SAWFLY

Cimbex femoratus (Linnaeus, 1758)



This is one of the largest British sawflies. The larva is found solitarily on *Betula* between June and September and can grow up to 45mm in length. It is very similar in appearance to the following species from which it can be easily distinguished by only having a single row of black spots along the sides and by its host plant. The literature indicates that this should be a common species but there are currently only two Wiltshire records.

LARGE ALDER SAWFLY

Cimbex connatus (Schrank, 1776)



The family resemblance to the last species is obvious. As mentioned above the additional row of black spots is diagnostic and it is only found on *Alnus*. In Wiltshire there are three records, all recent, and all from the Avon and its tributaries in the south of the county. Two of these were adults but one was of a larva found at the Smallbrook Meadows reserve. Formerly thought to be an extreme rarity and perhaps extinct in Britain, there have been several recent records in southern England including some in Devon where the species has been found on *Alnus cordata*, the Italian Alder, planted to landscape a supermarket car park. Photo by John Walters.