



Hoverfly Leaf-miners in the UK (Dip: *Syrphidae*)

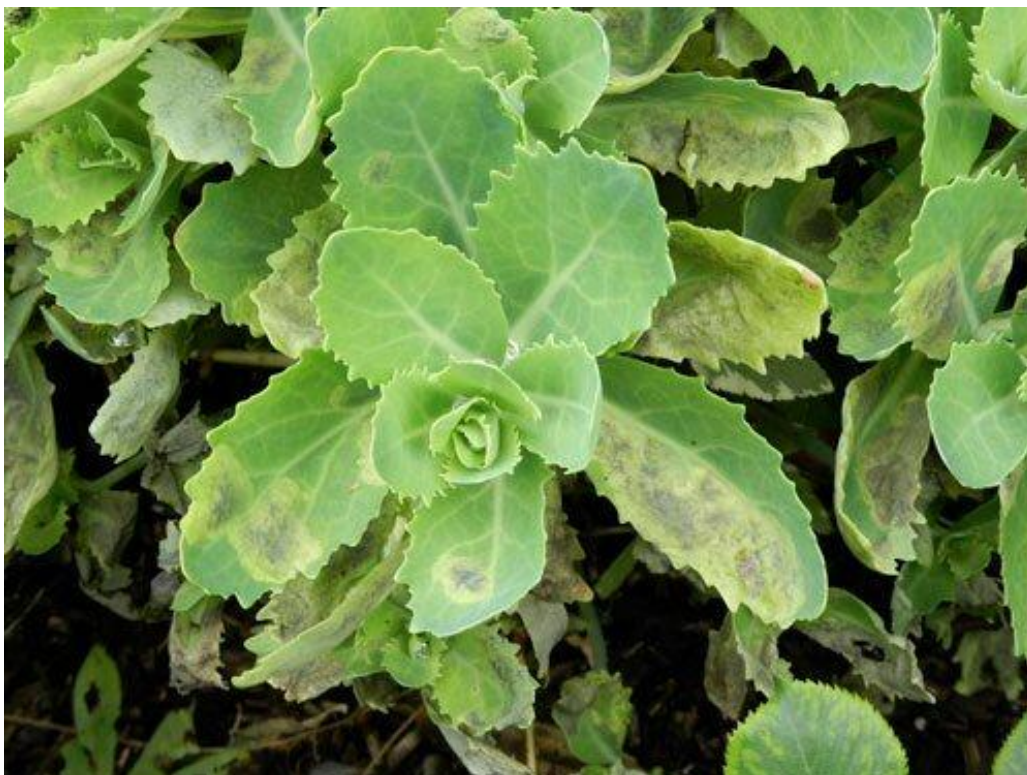
There are two uncommon hoverfly leaf miners found in the UK: *Cheilosia semifasciata* (Becker, 1894) and *Cheilosia caerulescens* (Meigen, 1822). Records tend to come from adult sightings, but leafmines indicate presence of these flies.

1. *Cheilosia semifasciata*

The photo below shows the mines caused by larvae on *Sedum telephium* (Orpine). It also feeds on *Umbilicus rupestris* (Navelwort). Opine is an uncommon plant in the UK but Navelwort is more common in the West and Ireland.

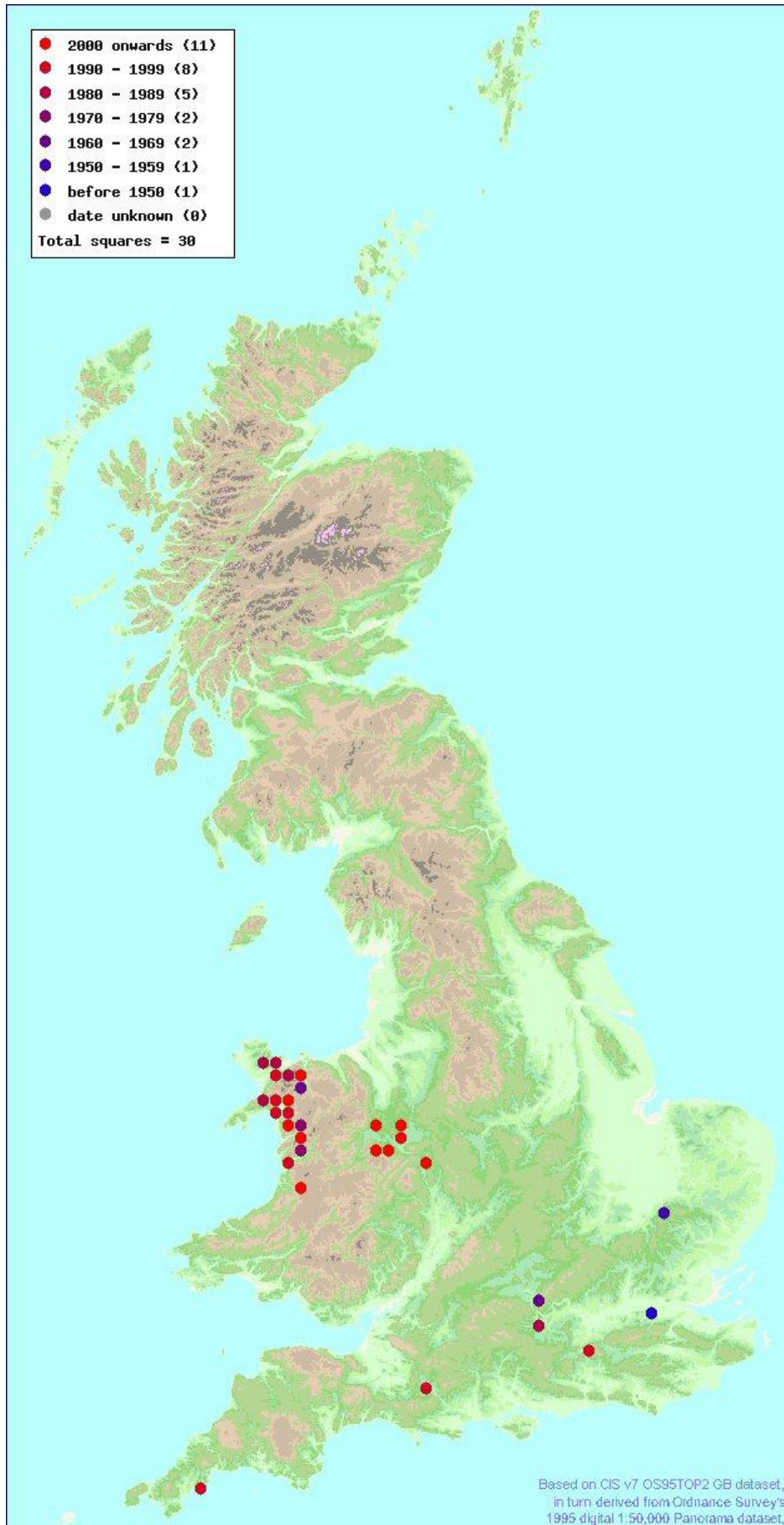
The larvae will mine through up to five or six leaves, leaving exit holes, on the underside of the leaf. The mined leaves have a mottled appearance. The presence of larvae seems to be detected more where the plants have an extended growing season. Mines are found in May–June.

Care needs to be taken in identifying this fly as there are several similar looking species.



Mines of *C. semifasciata* on *Sedum telephium*.

Photo © Willem Ellis





Cheilosia semifasciata

Photo © Peter Lindenberg

2. *Cheilosia caerulescens*

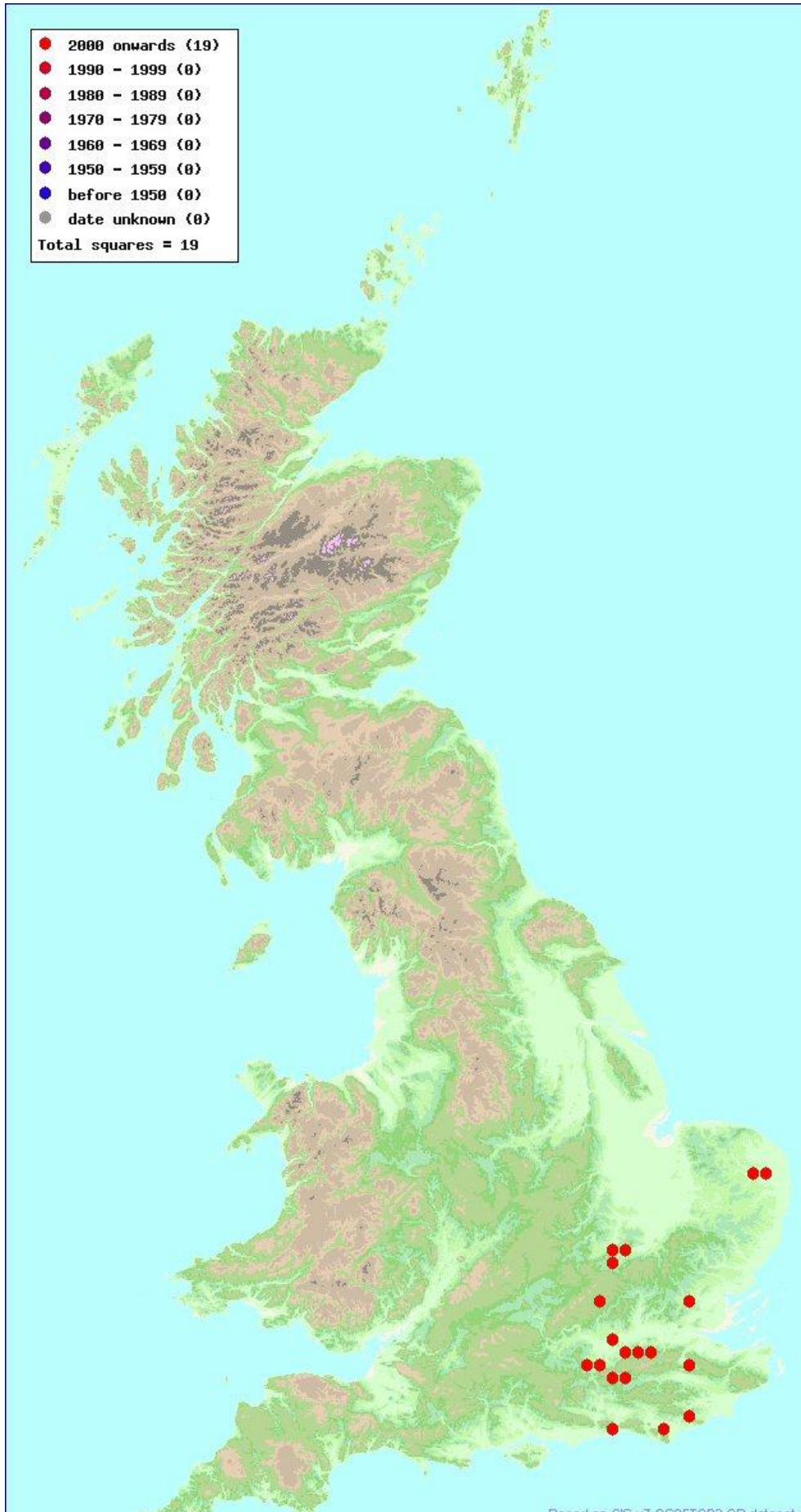
This was first discovered in 2006 in Surrey and is slowly spreading in the UK. It is thought to have arrived in the UK with imported plants.

It mines the leaves of *Sempervivum tectorum* (Common houseleek), *S. arachnoideum* (Cobweb houseleek) and *S. montanum* (Mountain houseleek). The outer leaves of the rosette are mined and they become greyish, limp and ultimately shrivel up. The larvae feed on several leaves, leaving exit holes as they do so. It is bivoltine, with mines present in May-June and again in August-September.



Mines of *C.caerulescens* on *Sempervivum* sp.

Photo © RHS/Andrew Halstead



*Cheilosia caerulescens*

Photo © Mark Horton Photography

Distinguishing hoverfly larvae from other diptera larvae

Willem Ellis writes '*Syrphidae* form a large and complex family, and there are many types of larvae (think about the the free-living aphid killers, the rat-tail larvae of *Eristalis* in polluted waters, and the many gall-forming larvae); but at least in our part of the world only a few species of the large genus *Cheilosia* live as miners. They are maggot-like, but immediately recognizable because the rear spiracula are elongated and fused into a common, yellow, well-chitinised tube.'

This can be seen in the following two larvae:

Larva of *Cheilosia fasciata*
(Dip: *Syrphidae*)

Note the rear spiracula are fused into a single tube.

Photo © Carina Van Steenwinkel



Larva of *Aulagromyza tremulae*
(Dip: Agromyzidae)

Note the spiracula are paired

Photo © Rob Edmunds

***Cheilosia fasciata* Schiner & Egger, 1853: one to look out for as not yet recorded in the UK**

This leaf miner of Wild Garlic or Ransoms (*Allium ursinum*) can form large blotch mines, which may engulf the whole leaf. The mines are formed in May–June. It is recorded throughout Europe.

The female hoverfly is shown below



Photo © John Smit

The mines of *Cheilosia fasciata* on *Allium ursinum* are shown below:



Photo © Jean-Yves Bagnée

For more information on British Hoverflies: Hoverfly Recording Scheme
www.hoverfly.org.uk