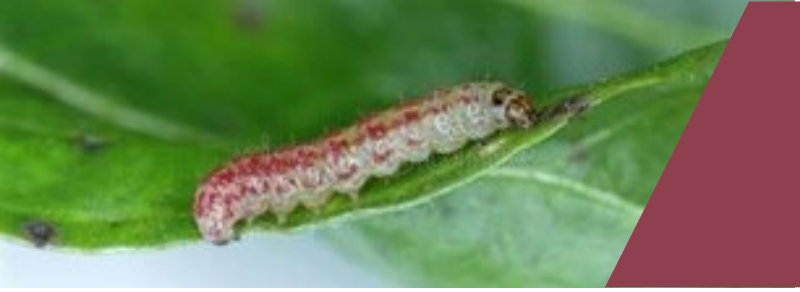


Pests

Beet Moth

Beet Moth

Scrobipalpa ocellatella

Identification:

Moths: Small brown moths with a c.1cm wingspan. Dark dot on the wing which looks like an eye. Caterpillars: 0.5-2cm White caterpillars often tinged pink or brown.

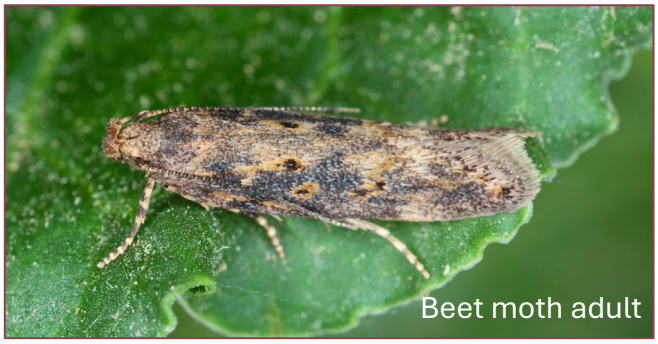
Burrowing activity: Caterpillars usually enter plants at the base of the petiole (stem) and move down towards the crown where they burrow into the heart.

Eggs: Beet moth eggs are very small, round white dots. Despite moths and caterpillars being common in the crop, eggs are hard to find.

Damage: Beet moth larvae cause damage to the crown of the beet as they burrowing and feed on leaves. An early sign of damage is black frass (faeces) appearing around the heart leaves. This shows there are caterpillars present. These can often be found by pulling apart the inner leaves and looking into the crown or splitting the base of the petiole. Severe damage will cause loss of the heart leaves and can lead to holes in the crown where the caterpillars have burrowed in. Sugar levels in the root could be compromised due to leaf re-growth. Damaged crowns can be problematic as they are more susceptible to root rots and frost damage. Consider lifting badly damaged fields early.

Control: Heavy rainfall events appear to cause a dip in adult moth population numbers (observed via pheromone traps). For 2026, Coragen (Chlorantraniliprole) is available via an Emergency Authorisation until 30th September.

Beet moth larvae feeding



Beet moth adult

Spraying considerations:

A range of thresholds are advised in Europe ranging from 10-40% of the field affected, the UK doesn't currently have a threshold for spraying. For 2026 we recommend early intervention as soon as damage can be seen. This will limit development of additional generations of beet moth later in the season.

Monitor efficacy by using the scoring scale overleaf and estimate the percentage of the field affected when making spray decisions.

Water volumes: Chemical controls require high water volumes to help the product reach the heart leaves. Reducing water volumes can result in inadequate product uptake and therefore poor control.

Beneficials: Consider the numbers of beneficials in your crop as these will help control populations of moths. Do not use a broad-spectrum insecticide (e.g. pyrethroids) as, whilst a low-cost option, these will eliminate the beneficial populations and can exacerbate other pests e.g. aphids & virus yellows.

Harvest timing: If the field is scheduled for early lifting you may not need to spray as the beet will be lifted before damage gets too severe.

Help identifying beet moth is available through the BBRO Plant Clinic. We encourage you to use this service as this pest is a developing issue and we are keen to gather information on its impact.

British Beet BBRO Research Organisation

Beet Moth damage scorecard


Score: 1
- First signs of foliage damage in the leaf system or heart with regrowth ongoing and significant canopy remaining
- First signs of short and limited surface tunnelling limited to the root crown and shoulders


Score: 2
- Damage is causing regrowth to be hampered, damage seen as no more than a £1 coin from above with notable canopy remaining
- Tunnelling extends beyond the tap root shoulders, in limited separate short runs


Score: 3
- Limited if any new growth from the heart, damage could be similar to a £2 coin or bigger, remaining canopy is less than 50% of original
- Tunnelling is a more obvious network extending below soil level


Score: 4
- Significant attempts of damaged heart regrowth leading to increased risk of sugar quality being reduced
- No regrowth coming from the crown and most of the remaining canopy has limited potential
- Tunnelling affects large areas of the tap root surface


Score: 5
- Foliage is senescing or dead, no new growth remains
- tunnelling and damage is widespread over the taproot and secondary infections may have taken hold