Foliar Pests

Beet Moth



Capsids



Flea Beetle



Leaf miner



When: Usually summer/early autumn

Symptoms: Heart leaf petioles are superficially eaten, mined and linked together with silken threads.

 $\ensuremath{\textit{Risk:}}$ Low levels in the UK

Severity: When the attack is severe, heart leaves blacken and die, potentially leading to a hollow crown.

Advice: No products registered in the UK, but good on-farm hygiene can help to reduce overwintering of the caterpillar.

When: Seedlings - young plants

Symptoms: Cotyledons and leaves can become xxxx and yellow, especially above the puncture wounds.

Risk: Damage is rarely widespread and very few plants will be infested across a field

Severity: Usually only severe on headlands

Advice: No products registered in sugar beet

When: Seedlings – Mature plants

Symptoms: Small pits, caused by feeding, can be seen on top and underneath leaves. Holes will develop from these pits as the leaf expands

Risk: Cold, dry and sunny spring conditions which lead to slow plant growth place the sugar beet at greatest risk

Severity: Widespread pest which has greatest effect on seedlings

Advice: No established threshold, pyrethroids can be used to control

When: Late spring to early autumn, in which two or three generations develop

Symptoms: White eggs laid onto beet leaves. Eggs hatch and larvae mine into the leaf, causing blisters to form on the surface. First generation most harmful and severe infestations can kill plants. Larvae pupate and adults emerge which then lay more eggs onto the host plants. Later generations feed on the older, outer leaves and can be problematic affecting autumn growth potential of crops

Risk: Surveys of leaf miner in recent years has seen the pest move across the UK from east to west and may be less of a problem than in previous years

Severity: Yield losses of up to 9% from the second and third generations

Advice: Several pyrethroids are approved for leaf miner control but caution should be observed due to impact on beneficial insects and these treatments will not control aphids due to their resistance to these products

Pygmy Beetle



Silver-Y Moth caterpillar



Thrips



Tortoise Beetle



When: Seedlings – 6 leaf stage

Symptoms: Small black pits on the seedlings from feeding by beetle. This can then allow for invasion by parasitic fungi. Feeding can also lead to delayed growth

Risk: Highest risk in areas of intense beet cultivation

Severity: Of greatest risk in fenland areas

Advice: Long rotations will reduce severity. Plants most at risk when immature

When: Summer and autumn

Symptoms: Young caterpillars will do little damage, however, older caterpillars can skeletonise a sugar beet plant and strip it of most leaf material

Risk: Usually occur in small numbers and do not often cause widespread yield losses. However, skeltonised plants can suffer severe yield loss

Severity: In the UK, large populations are rare

Advice: A pyrethroid can be used to control if threshold of 5 caterpillars per plant reached

When: Seedlings and immature plants

Symptoms: Thrips break cell surface on young leaves, which turn red/brown. Heart leaves are particularly affected as they are still curled

Risk: Fields near alliums or brassicas most at risk. Damage is highest in cold dry springs when the crop is developing slowly. However, most crops will grow away from the pest once the weather warms

Severity: Plants not killed, but growth significantly reduced.

Advice: No products registered in sugar beet

When: Seedlings - mature plants - summer

Symptoms: The young larvae eat the underside and inner tissue of the leaf leaving the top surface like a window. This then dries and cracks to leave holes and can skeletonise the leaves

Risk: Warm springs are favourable

Severity: In severe cases affected crops can be defoliated

Advice: No products registered