



Boxwood (*Buxus* sp.) pests and diseases

Box trees, belonging to the genus *Buxus*, are iconic evergreen shrubs and small trees prized for their dense, compact foliage and versatility in formal garden design.

Their slow growth and tolerance for pruning make them ideal for creating intricate hedges, topiary, and parterres, contributing a sense of structure and permanence to landscapes. Beyond aesthetics, boxwood provides a valuable habitat for various insects and small wildlife.



Box Tree Caterpillar (*Cydalima perspectalis*)

Background

The Box Tree Caterpillar, *Cydalima perspectalis*, is the most significant Box pest (both tree & hedges), particularly in urban environments, posing a serious threat to both their appearance and health.

Native to East Asia, it has spread across the UK, Europe and North America,

These caterpillars are the larval stage of a moth, and they rapidly defoliate box plants, leaving webs and damaged. Early detection is key, as unchecked infestations can seriously weaken or even kill box plants. Even if they recover, plants are still weakened and may ultimately die.

Symptoms

- Presence of distinct adult moths and caterpillars (Fig. 1 a&b).
- Defoliation and webbing are often obvious (Fig. 2).
- Brown patching throughout the plant.
- Damage to stems and bark during heavy infestations.



Fig 1. *Cydalima perspectalis*, a) adult, b) caterpillar.



Fig 2. Typical defoliation and webbing from caterpillar feeding.

Boxwood Psyllid (*Psylla buxi*)

Background

The boxwood psyllid, *Psylla buxi*, is a small insect pest that targets box trees. While the damage is primarily aesthetic, it can be visually unappealing and in combination with other pests on Box can weaken the plants.

They are common in temperate regions, and have a one year life cycle.

Symptoms

- White, cottony wax covering foliage, produced by nymphs for protection (Fig. 1).
- Cupped or curled leaves, primarily affecting new growth (Fig. 2).
- Heavy infestations can lead to stunted and weakened shoots.
- Leaf discoloration (not as dramatic as box blight).
- Tiny, yellowish-green nymphs on the inside of curled leaves (Fig. 3).



Fig 1. White cottony wax produced by nymphs of *P. buxi*

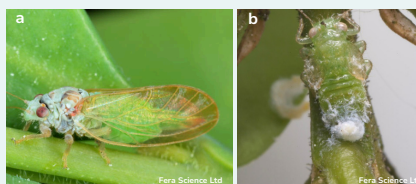


Fig 3. *Psylla buxi*: a) adult and b) nymph.



Fig 2. Psyllid nymphs with wax inside a cupped boxwood leaf.

Box Blight (*Cylindrocladium buxicola*)

Background

Box blight, is caused by two fungal pathogens of the genus *Calonectria* spp., but commonly referred to as *Cylindrocladium buxicola*. It is a devastating disease impacting boxwood (*Buxus* spp.) plants.

This fungal infection poses a significant threat to the health and aesthetics of these prized ornamentals, leading to rapid defoliation, and stem dieback.

Symptoms

- Affected leaves turn brown or straw-coloured and rapidly fall off, leading to bare patches (Fig. 1).
- Dark brown or black streaks and lesions on the stems, particularly on younger growth (Fig. 2).
- The disease causes dieback of stems and branches.
- In humid conditions, white spore masses may be visible on the undersides of infected leaves (Fig. 3).



Fig 1. Brown leaves due to Box Blight.

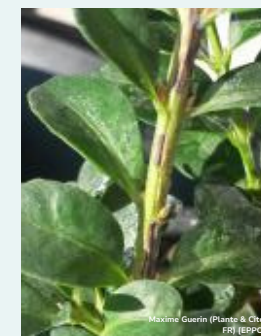


Fig 2. Lesions on stems of *Buxus* spp. due to Box blight.



Fig 3. White spore masses on leaves of *Buxus* spp. due to Box blight.