

Ash (Fraxinus excelsior)

The Ash (*Fraxinus excelsior*, Linn.) is one of the most common trees in Britain, readily distinguished by its light-grey bark (smooth in younger trees, rough and scaly in older specimens) and by its large compound leaves, divided into four to eight pairs of lance-shaped leaflets, tipped by a single one. The leaflets have sharply-toothed margins. In April or May, the black flower-buds on the previous year's shoots expand into small dense clusters of a greenish white or purplish colour. Bunches of 'keys' hang from the twigs in great clusters, at first green and then brown as the seeds ripen.

They remain attached to the tree until the succeeding spring, when they are blown off and carried away by the wind to considerable distances from the parent tree. They germinate vigorously and grow in almost any soil. Ash and Privet are the only representatives in England of the Olive tribe: *Oleaceae*.

There are about fifty species of the genus *Fraxinus*, and cultivation has produced and perpetuated a large number of distinct varieties, of which the Weeping Ash and the Curl-leaved Ash are the best known.

CULTIVATION: Grows optimally on calcereous soils although will grow on all except poorest and acid soils (below ph 5.5). Prefers moist but well drained fertile soils. Found growing up to 450m in altitude preferring full or partial sun.

PESTS AND DISEASES Ash is susceptible to a number of pests and disorders. Root and butt rots (*Ganoderma*, *Perenniporia fraxinea*, *Pholiotia squarrosa*), bacterial and necrotic canker are major fungal diseases that attack this species whilst scale, ash bud moth and mites are the major insect pests.

Chalara Fraxinea, a more recent and serious disease responsible for ash die-back within the UK, is a quarantine pathogen under national emergency measures. The disease caused by a fungus known as *Chalara Fraxinea*, causes premature leaf loss and crown dieback in ash trees, which can ultimately lead to death in infected trees. Presently, control consists of felling infected trees. It is important that the wood is burned on site and any equipment used sterilised.

Recommended Monitoring for Ash

Mid October–Dec	Sample soils for nutrient and pH levels especially if deficiency symptoms were evident during the growing season. If plants exhibit decline, sample roots or root collar for <i>Phytophthora</i> root rot.
December-February	Prune to remove dead, dying, diseased and interfering limbs. Apply winter wash of tar oil to kill overwintering insect eggs (ash bud moth and scale). Excavate mulch from root collars. Add additional mulch to root zone as required.
March-April	Apply first soil treatment on plants with honey fungus or <i>Phytophthora</i> root rot. Inspect for scale and foliage feeding caterpillars of the ash bud moth. Treat as needed (soap or spray oil).
April	Monitor for scale, mites and foliage feeding caterpillars. Treat as required. Apply fertilisers and soil treatments based on soil test results.
May	Monitor for aphids scale crawlers, foliage feeding caterpillars. Treat as required. Inspect irrigation and soil moisture levels to reduce moisture stress and prevent root disease. Inspect mulch levels and adjust as necessary. Hand pick any leaf galls and remove from property.
May-June	Monitor for mites and scale. Treat as needed. Inspect irrigation and soil moisture levels to reduce moisture stress and prevent root disease.
June-July	Monitor for mites and aphids. Inspect irrigation and soil moisture levels to minimize moisture stress and prevent root disease. Apply a second fungicide soil treatment on plants with honey fungus or <i>Phytophthora</i> root rot.
July-August	Monitor for scale and mites. Treat as needed. Inspect irrigation and soil moisture levels to minimize moisture stress and prevent root disease.
Late August- Early September	Inspect plant for evidence of root decay fungi. Record tree strength index if required. Inspect irrigation and soil moisture levels to reduce water stress and prevent root disease. Apply fertiliser and soil treatments as needed.
September- Mid October	Inspect plant for evidence of root decay fungi. Record tree strength index if required. Remove mulch from stems to reduce risk of disease/rodent injury.