

DEEP BARK CANCKER OF WALNUT



Fluid flowing from longitudinal cracks in trunk.
Courtesy B. Teviotdale



Symptoms of systemic infection, with reddish brown fluid weeping from cracks in trunk and limbs.
Courtesy B. Teviotdale

Status: Non-quarantine

Causal organism: *Brenneria rubrifaciens*

Host species

English, or Persian, walnut (*Juglans regia*) and black walnut (*Juglans hindsii* and *Juglans nigra*) are susceptible to deep bark canker.

Distribution

Deep bark canker of walnut has been recorded in the USA, Spain and Iran.

Occurrence in the UK

B. rubrifaciens has not been detected in the UK.

Symptoms of the disease

The disease is characterised by deep vertical cankers developing on the stem of the tree. It differs from shallow bark canker in that the cankers develop deep into the phloem tissue, often resulting in cracks running along the length of the stem. Underlying the cankers are lesions that often ooze reddish-brown to dark-brown fluid. The disease initially starts on the stem of the tree, but with time moves to branches, eventually affecting the productivity of the tree. Rootstocks are not usually affected by the disease.

Control measures

Preventative: Good water management, fertilisation, pruning and pest management help prevent predisposition of trees to deep bark canker. These management practices are also recommended to reduce canker formation.

Curative: None known. Chemical applications and antibiotic injections are not effective in reducing cankers. Similarly, removing cankered areas is ineffective and often harmful to the trees.

