

# BIOSECURITY PEST ALERTS FOR 2019

As a current member of the European Union (EU), the UK receives pest alerts from the European Plant Protection Organisation (EPPO). These alerts act as an early warning system for potentially invasive pests. This allows the UK to assess the possible economic risk from the pest and possible pathways for entry. The UK may decide to take extra precautions around moving and trading of plants to try and reduce the likelihood of the pest entering the country.

If the EPPO's assessment of a pest shows it is of significant economic concern, it may add the pest to its list of regulated or quarantine pests. Plant species which are known hosts of this pest, may be subject to strict regulations for moving and trading within the EU. Please send any feedback on this update [planthealth@rhs.org.uk](mailto:planthealth@rhs.org.uk)

## ***Tomato brown rugose fruit virus (Alerted 01/2019)***

*Tomato brown rugose fruit virus (Tobamovirus, ToBRFV)* is an emerging virus that was first identified on tomatoes in Jordan in 2015, since then outbreaks have recently occurred in Italy, Mexico, Turkey, China and the United Kingdom. The virus causes major concerns for growers of tomato and capsicum. In tomatoes the symptoms vary depending on cultivar and include chlorosis, mosaic, mottling with occasional leaf narrowing. Necrotic spots on peduncles, calyces and petioles. Fruit show yellow or brown spots with rugose symptoms and can be deformed and have irregular maturation; often fruit is rendered non-marketable. In Jordan, in the first reported outbreak in tomato, the disease incidence reached almost 100%. On capsicum, foliar symptoms include deformation, yellowing and mosaic. Capsicum fruits are deformed, with yellow or brown areas or green stripes. Pathways for entry include Plants for planting and seed from countries where the virus occurs. The virus is also spread locally by contact. You can find out more about the symptoms of the virus at this link [ToBRV symptoms](#)

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## Beech leaf disease (Alerted 04/2019)

Beech leaf disease (BLD) is a newly emerging disease of unknown aetiology which is infecting beech trees (*Fagus* spp.) in forest areas in Eastern USA and Canada. The disease is raising serious concerns among foresters and local communities in affected areas. The disease was first reported on *Fagus grandifolia* in Ohio in 2012, and has rapidly spread to other areas (Pennsylvania, New York, and Ontario (Canada)). BLD is thought to affect a number of other beech species including the European



beech. Leaves of affected trees become leathery, show stripes, stunting and curling. Aborted buds, reduced leaf production, and premature leaf drop can be seen on trees where the disease has progressed. Sapling-sized trees die within 2-5 years and larger trees within 6 years. While the causal agent of BLD is unknown, a nematode species, *Litylenchus crenatae* n. sp., newly described from Japan on *Fagus crenata*, is suspected as a possible vector. Pathways for entry include Plants for planting, cut branches of *Fagus* spp. from countries where the disease occurs. You can find out more about the symptoms of BLD at this link [BLD symptoms](#)

## The red turpentine beetle (Alerted 05/2019)

The red turpentine beetle (*Dendroctonus valens*) is native to North America but has made a continental leap to China via traded unprocessed logs. In China it has spread voraciously causing major damage to *Pinus*. The beetle can be found on many pine species (*Pinus* spp.) and occasionally on spruce (*Picea* spp.) and larch (*Larix* spp.). Damage to the tree can be severe and feeding galleries in the inner bark of its host can girdle the tree trunk and ultimately kill the tree. Several fungal species have also been reported in association with the beetle although their possible role in tree mortality needs to be further studied. These beetles are strong fliers and have been known to travel up to 35 km and have even travelled over mountain ranges in China. The pathways for entry are Plants for planting, (bonsais), wood and bark, wood packaging material, dunnage made from *Pinus* spp. from countries where *D. valens* occurs. **Picture: Adult *D. valens* – Steven Valley, Oregon Department of Agriculture, [Bugwood.org](#)**

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## Elm borer (Alerted 06/2019)

The Elm borer (*Saperda tridentate*) is a pest of *Ulmus* species and is native to North America. The borer has been intercepted in the EPPO region several times on traded elm wood from the USA. Known hosts include the American elm, the Slippery elm and the Cedar elm. There is some literature to indicate that the borer may not infest the English elm (*U. minor*), but until more conclusive data is obtained, EPPO are taking a cautionary approach towards this pest. Damage to susceptible hosts can be extensive as adults feed on the leaves and petioles resulting in branch death. The larvae will feed under the bark and whole sections of the bark can eventually peel off. Larval feeding galleries can girdle the tree and ultimately kill the tree. In addition to direct damage caused by larvae, it is reported that beetles can transmit Dutch elm disease (*Ophiostoma ulmi*) from diseased to healthy trees. Pathways for entry include Plants for planting, wood and bark, wood packaging material other wood products of *Ulmus* spp. from countries where *S. tridentata* occurs. **Picture Adult *D. valens* – Steven Valley, Oregon Department of Agriculture, [Bugwood.org](http://Bugwood.org)**



## Polyphagous Spider mite (Alerted 09/2019)

This polyphagous spider (*Tetranychus mexicanus*) mite could be a risk for glasshouse crops in the UK. The mite has around 100 hosts (in 44 plant families). Hosts of concern include *Citrus* spp., *Malus domestica*, *Vitis vinifera*, as well as many ornamentals. The damage seen by this mite is similar to other spider mites. Feeding punctures lead to whitening or yellowing of leaves, followed by desiccation, and eventually defoliation. The mite can move short distances only but they can be transported further distances via the wind. The main pathways for entry are Plants for planting, cut foliage fruits with green parts.

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## The flat-headed apple tree borer (Alerted 10/2019)

The flat-headed apple tree borer, (*Chrysobothris femorata*) is native to North America and was recently intercepted in Europe on *Juglans nigra* logs imported from the USA. This pest can attack more than 30 species of deciduous trees commonly present in the UK, including most fruit, forest and shade trees. Maples, apples and poplar are the most common hosts, but other hosts affected include chestnut, beech, ash, oak, elm and *Prunus* species. Feeding activity disrupts the transportation of water and nutrients in the tree and the beetle can kill young trees within a year. Larger trees can be damaged and killed in successive years with stressed trees being the most vulnerable. The main pathways for entry are planting are Plants for planting, wood, wood chips from countries where *C. femorata* occurs. (Picture - Adult. Courtesy: Eduard Jendek, EPPO).



## Lesser cornstalk borer (Alerted 11/2019)

The Lesser cornstalk borer (*Elasmopalpus lignosellus*) is a polyphagous moth, native to the Americas. Ireland and the UK have recently intercepted the pest on imports of asparagus from Peru. Although the borer attacks many cultivated crops including cereals and legumes, it can also cause damage and mortality to tree seedlings in nurseries including cedar and pine. Damage is caused by the moth larvae which feed and tunnel inside the stems (or stalks) of host plants. The larvae bore stems at their basal part or just below the soil surface and bore upwards leaving frass filling the gallery. Wilting is one of the first signs of attack, which may be followed by stunting, deformation, and plant mortality. Plants attacked by *E. lignosellus* are more susceptible to secondary fungal or bacterial infections. Trade of infested plants or parts of plants, is the main pathway for entry and spread. Pictures of the pest can be viewed at the following link. [Lesser cornstalk borer](#).