Department for Environment, Food & Rural Affairs

Allotment pests & diseases

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Allotments

- It is estimated that there are around 330,000 plots in the UK today
- Wide variety/diversity of Cultivars and crops grown
- Engaged and active community.
- If pests and diseases show up in allotments this could indicate a wider spread and bigger problem.

Sources: https://thenas.org.uk/benefits-of-allotments

Top 5 Vegetables grown on UK allotments

- 1: Potatoes
- 2: Tomatoes
- 3: Beans (all types)
- 4: Onions
- 5: Soft Fruits (e.g., strawberries, raspberries, blackcurrants)

Source: NAW25 Survey, The National Allotment Society (2025)

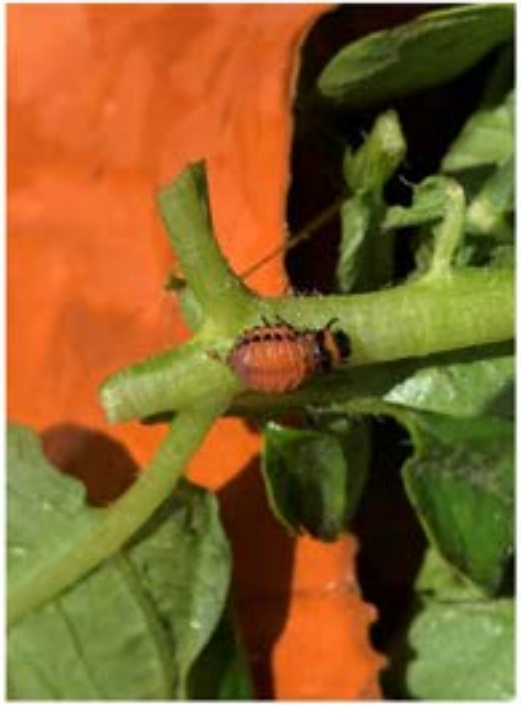
Potatoes

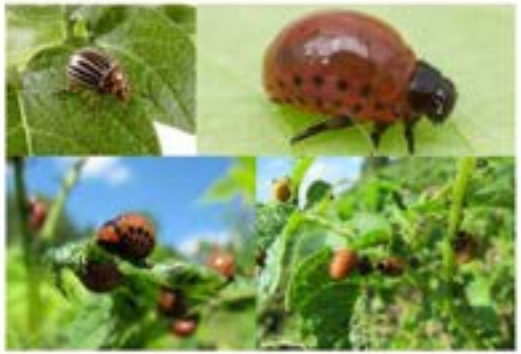
- Viruses (**Andean potato latent virus** & **potato yellowing virus**), bacteria (**brown rot** & **ring rot**) & invertebrates (**Colorado beetle**, **nematodes**, **slugs** etc…)
- Main pathways for pests and diseases to enter the UK is on ware potatoes (grown for human consumption) or on novel exotic species such as Ulluco and Yacon, and contaminated soil (nematodes)
- **DO NOT plant ware potatoes** (however tempting!) as these potatoes are not subject to as strict measures as seed potatoes and can still harbour potentially damaging pathogens.
- Recently there has been a rise in the cases of ring rot due to the planting of ware potatoes.

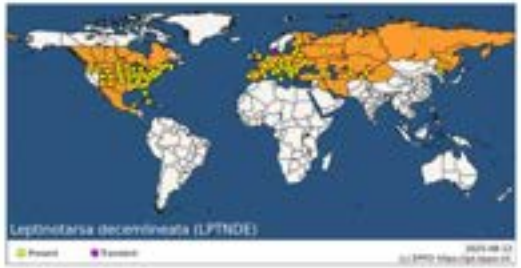
Sources: https://planthealthportal.defra.gov.uk/assets/factsheets/Plant-Pest-Factsheet-brown-rot-final.pdf & https://planthealthportal.defra.gov.uk/assets/factsheets/Ring-Rot-Factsheet-Final-version2.pdf

Leptinotarsa decemlineata (**C**olorado **P**otato **B**eetle)

- **serious pest of potato, present in the EU, but currently absent from the UK.**
- Originally from North America, it was introduced to Europe and Central Asia in the 1920's and has since spread further eastwards and westwards.
- The beetle causes **20-100% reduction in potato yield** through feeding on foliage.
- Findings have been linked to imported potatoes. As well as entering the UK on potatoes, beetles are also occasionally imported as hitchhikers on non-host plant material, such as leafy vegetables, salad leaves, fresh herbs and grain.
- **Adult Colorado beetles** have a **distinctive yellow and black pattern**, and are **10-12 mm in length**. L**arvae** also have a distinctive look being **round and globular and approximately 15 mm in length**.
- There was an incursion of this beetle in the UK in July 2023 in Kent. It is unknown how it got here and could have been via natural spread on the wind or flotsam, it is a well-known hitchhiker, and common on the continent, it could turn up imported plants from Europe.






Leptinotarsa decemlineata (LPTNDE)

Tomatoes

- A lot of **viroids** and **viruses**! Often arrive in infected seed or plants for planting, are easily transmissible, via insect vectors, touch or gardening tools and can persist in the environment for long periods of time.
- Virus symptoms do vary but typical virus symptoms include **mosaicking**, **leaf distortion**, **bronzing** or **streaking**, **stunted growth**, **reduced yield**, and **uneven ripening**. Viral infections are not curable, so prevention and early removal of infected plants are key.
- **Tomato bacterial canker disease** (*Clavibacter michiganensis*). Main source of infection is via contaminated seed, with just 1 in 10000 seeds being enough to cause an infection, spread locally via infect plant material and water (rain splash or irrigation). Young plants are most susceptible. The bacterium colonises the xylem vessels in the plant and spreads rapidly, causing **pustules** and **lesions** on stems and **patches of dead tissue** on leaves.

Further reading: https://planthealthportal.defra.gov.uk/assets/factsheets/Plant-Pest-Factsheet-Pests-of-tomatoes-June-update.pdf

Tomato fruit blotch virus (*Blunervirus solani*) ToFBV

- ToFBV is an emerging virus of tomato.
- First described from an infected tomato in Italy in 2018
- Following this description, ToFBV has been detected in other European countries, suggesting that it might be already more widespread than originally thought.
- ToFBV affects tomato fruits, and no leaf symptoms have been reported to date.
- fruit show **irregular and blotchy ripening**, **dimpling and dark spots**.
- Transmitted by tomato russet mite (*Aculops lycopersici*)
- Pathways into the UK – young tomato plants, from countries where ToFBV and mite vector(s) occur?

Source: https://gd.eppo.int/taxon/TOFBV0


Blunervirus solani (TOFBV0)

Beans

Leaf miners, the larvae of small flies that feed inside plant leaves, the genus ***Liriomyza*** has several pest species of interest that are not present in the UK. Species can be identified by the mines they cause.

Bacteria such as **brown spot of bean (*Pseudomonas syringae pv. Syringae)***

Bean rusts are fungi (***Uromyces* spp**) that affects various types of bean (broad beans, runner beans, and French beans). Symptoms include **reddish/orange-brown pustules**, **on the leaves** and sometimes stems and pods. The pustules produce spores that spread the disease, particularly in warm, damp conditions.

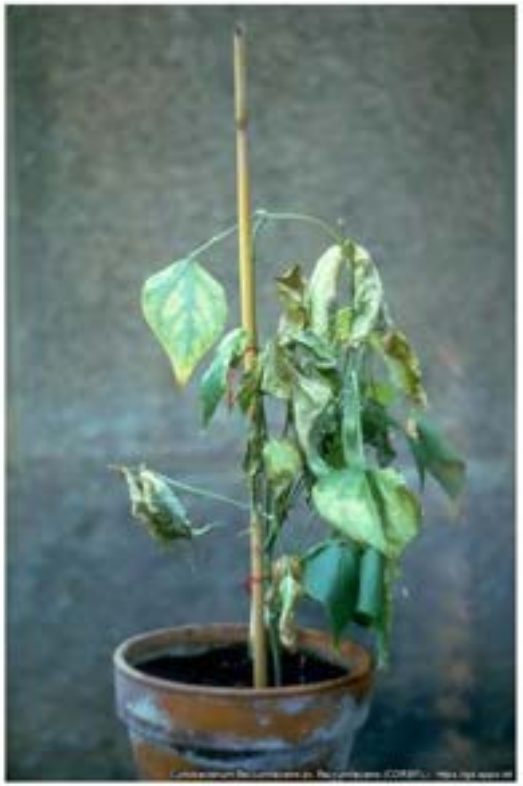
Pathways into UK – infected seeds, plants for planting and insect vectors. Local spread can be via water such as rain splash or irrigation water.

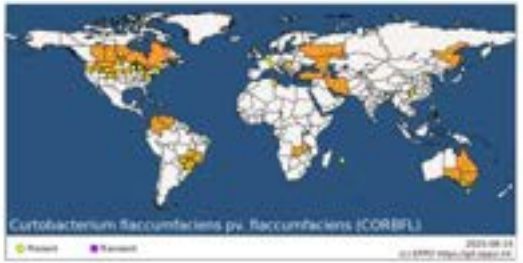
The use of certified, disease free seed and resistant varieties as well as removal of debris are the most effective means of control.

Bacterial tan spot of bean

- A new and emerging disease caused by a seed-borne bacteria (*Curtobacterium flaccumfaciens pv. flaccumfaciens*). It is classified as a quarantine pest in UK and EU due to its potential to spread and cause economic damage.
- Primarily infects Fabaceae, particularly beans (*Phaseolus vulgaris* varieties/cultivars)
- Causes wilting of leaves, yellowing and necrosis, and vascular discoloration
- Thought to originate in the Americas, recently (2024) detected in the Netherlands in imported seeds from USA. Detected in three fields used for vegetable production

Source: https://gd.eppo.int/taxon/CORBFL/datasheet




Curtobacterium flaccumfaciens pv. flaccumfaciens (CORBFL)

Onions

Onion maggot fly (***Delia antiqua***) and onion thrips (***Thrips tabaci***) are damaging to Onions (and other Alliums). The onion fly, lays its eggs in the young leaves and necks of seedlings, once these eggs hatch the larvae tunnel down into the bulb to feed causing damage. Onion thrips, feed and breed in the flowers and leaves of onions, they cause “silvering” of the leaves as they feed on the chlorophyll. Thrips can also vector plant viruses such as **tomato spotted wilt virus.**

Leaf blight/rot is caused by fungi (***Botrytis* spp**) they affect various types of *Allium*. Symptoms include, oval or circular white leaf flecks with greenish water-soaked margins leading to leaf dieback. Sunken and black bulb scales, often with grey mould in stored bulbs. These fungi favour, both cool and warm damp conditions.

Pathways into UK – infected seeds/potting soil, plants for planting and Local spread can be via water such as rain splash or irrigation water. Insects can fly locally and be assisted by the wind.

Onion stem nematode (*Ditylenchus dipsaci)*

- An endoparasitic (lives internally) nematode that infests stems and bulbs. It is one of the few nematodes capable of surviving desiccation and reproducing on soil fungi, making it highly resilient and difficult to eradicate. Found across Europe, North America, and parts of Asia
- It is a Regulated non quarantine pest in the UK and EU due to its threat to commercial production of hosts.
- Pest on Onions, garlic and leek, but can also infect other hosts such as beans, beet and tulips.
- Symptoms include Swelling, distortion, and stunting of stems and leaves, Necrosis and rotting of bulbs and tubers, and Bloat disease in onions

Source: https://gd.eppo.int/taxon/DITYDI/datasheet


Ditylenchus dipsaci (DITYDI)

Soft Fruits

- Cane and soft fruits are host to a wide range of pests and diseases and substantial losses in yield and fruit quality occur throughout Europe.
- Mites can be significant pests of soft fruit especially in strawberries and cane fruit the red berry mite (*Acalitus essigi)* is a microscopic mite that causes uneven ripening of fruits in Rubus spp.
- Viruses such as Raspberry leaf spot and leaf mottle virus can be spread by other soft fruit pests such as the large raspberry aphid *Amphorophora idaei*.

Source: https://fruitdisease.hutton.ac.uk/pestsdisease/raspberry-leaf-spot


Lycorma delicatula (LYCMDE)

What you can do

- Clean Tools & Equipment before and after use, especially between different plots if possible.
- Footwear especially after handling soil, compost, or plants, or if your boots have been off site at garden centres or other gardens or allotments.
- Source wisely where possible buy certified disease-free seeds, plants & compost – look out for Plant Healthy certified nurseries.
- Dispose of waste properly remove infected plants and dispose of them off-site or burn if permitted.
- Monitor & Report regularly inspect for signs of disease or pest report unusual symptoms to local plant health authorities.

Plant Health officials contact details

For **England and Wales**, contact your local **APHA Plant Health and Seeds Inspector** or the **PHSI Headquarters** in York.
Tel: 0300 1000 313
Email: planthealth.info@apha.gov.uk

For **Scotland**, contact the **Scottish Government's Horticulture and Marketing Unit:** Agricultural crops contact the local RPID officer:
http://www.gov.scot/Topics/farmingrural/Agriculture/AOcontacts/contacts
For non-agricultural crops, email: hort.marketing@gov.scot

For **Northern Ireland**, contact the **DAERA Plant Health Inspection Branch:**
Tel: 0300 200 7847 Email: planthealth@daera-ni.gov.uk
Web: https://www.daera-ni.gov.uk/topics/plant-and-tree-health

Source: https://planthealthportal.defra.gov.uk/pests-and-diseases/reporting-a-pestdisease/