

Plant Crime Scene Investigation

An unhealthy plant may not look like much of a crime scene, but plant diseases and pests can lead to loss of crops, damage to the environment and unhappy gardeners.

A plant 'crime scene' needs careful examination. It is only after you have found and examined the evidence that you can identify the culprit and decide how to control it.

Your investigation

- Your task is to work in teams to examine a selection of box plant (*Buxus* spp.) samples. You need to produce a list of the visual symptoms for each sample and then identify the disease or disorder causing the problem.
- You will then use the names and the descriptions of symptoms to create a key to box plant problems.

Can someone else use your key on an unlabelled box plant sample and make the correct diagnosis?

Safety: Do not open the petri dishes of plant samples
Wash your hands at the end of the lesson

Discussion questions

1. What is meant by the word 'pathogen'?
2. Can you think of examples of pathogens which infect humans?

Just like humans, plants can be infected by bacteria, fungi, viruses and protoctista.

3. What is a plant disease and how does it differ from a disorder?
4. How do pathogens spread?
5. How can we control the spread of plant pathogens?

RHS web profiles for pests and diseases:

Cultivation of box: www.rhs.org.uk/advice/profile?PID=88

Box problems and control: www.rhs.org.uk/advice/profile?PID=851

Further links to individual diseases, pests and disorders can be found within these pages.

NB. Roses have a number of pests and diseases. They can be used instead of box plants.

Rose problems web profile: <https://www.rhs.org.uk/advice/profile?PID=776>