

Plant defences and plant disease: practice questions

3 questions · 8 marks · mark scheme at the back

For Edexcel GCSE Biology 1BI0 and Combined Science 1SC0. **Triple only** is not in Combined Science. **Higher tier** is only on the Higher paper.

Name

Total / 8

1 **Triple only** [2 marks]

Describe two physical barriers that help to protect plants from pathogens.

2 **Triple only** [2 marks]

Some plants make chemicals as a defence against attack. State one way these chemicals protect the plant and one way they can be used by humans.

3 **Triple only** **Higher tier** [4 marks]

A farmer notices spots on the leaves of some of her tomato plants. Describe how the cause of the spots could be found.

Mark scheme

One mark for each point unless a maximum is given. Words in brackets are not needed for the mark.

1. [2] Triple only

- leaf cuticle: a waxy layer that pathogens cannot easily pass through (1)
- cell wall: a strong layer around the cell that pathogens must get past (1) allow made of cellulose

2. [2] Triple only

- kill / slow the growth of microorganisms, or poison pests (1) allow deter pests from eating the plant
- used as medicines to treat disease or relieve symptoms (1) allow a named example such as aspirin from willow

3. [4] Triple only Higher tier

- eliminate environmental causes, for example check soil nutrients, water supply or temperature (1)
- record where the affected plants are / distribution analysis, for example clusters around one point suggest a spreading pathogen (1)
- observe the visible symptoms and compare them with known diseases (1)
- diagnostic tests in a laboratory to identify the pathogen (1)