AQA GCSE Combined Science - Trilogy | 8464

SPECIFICATION POINT 4.3.1.4

Fungal diseases

Past-paper questions

Tier	**Higher**
Question groups	**1**
Available paper years	**2021–2021**

Using this booklet

1. Answer the questions in order and show your working.
2. Original question numbers and marks are retained.
3. Print at actual size (100%) for measuring questions.
4. Use the companion answer booklet to check your work.

Name: _____ **Date:** _____

Whole questions are retained for context, so some parts assess other specification points. Current and legacy sources are labelled. Continue on extra paper if needed.

4.3.1.4 Fungal diseases

Question 01

November 2021 | 8464/B/1H | Original Q4

0 4 Pathogens are microorganisms that cause diseases.

Gonorrhoea, malaria and measles are three diseases in humans.

0 4 . 1 Draw **one** line from each disease to the pathogen that causes the disease.

[3 marks]

Disease	Pathogen
	Bacterium
Gonorrhoea	
	Fungus
Malaria	
	Protist
Measles	
	Virus

Question 4 continues on the next page

4.3.1.4 Fungal diseases

Question 01 · continued

0 4 . 2 Malaria is transmitted by mosquitos.

Male mosquitos can be sterilised so they are infertile.

The spread of malaria is reduced by releasing sterile mosquitos into the environment.

Explain how releasing sterile mosquitos reduces the spread of malaria.

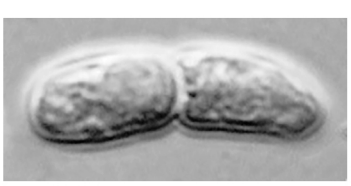
[2 marks]

Pathogens also cause diseases in plants.

Figure 4 shows a rose black spot fungal spore and a tobacco mosaic virus.

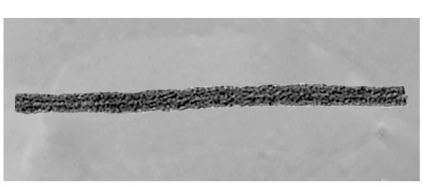
Figure 4

Rose black spot fungal spore



16 µm

Tobacco mosaic virus



2.5×10^{-7} m

Images are **not** to the same scale

0 4 . 3 Name the piece of equipment used to view the virus.

[1 mark]

4.3.1.4 Fungal diseases

Question 01 · continued

0 4 . 4 How many times longer is the fungal spore than the virus?

Use **Figure 4**.

[3 marks]

Number of times longer = _____

0 4 . 5 Explain why plants infected with tobacco mosaic virus grow slowly.

[3 marks]

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