

14. Dodder is a plant that grows up blueberry bushes using root-like structures to remove sugar and other nutrients from the stems of the blueberry bushes.



blueberry stem

dodder

- (a) The relationship between the dodder plant and the blueberry bush is symbiotic.

- (i) Identify this type of symbiosis.

1

- (ii) Justify your answer.

2

14. (continued)

- (b) An investigation was carried out into the effect of dodder on blueberry yield. Blueberries from two fields, one of which was infected with dodder, were harvested and yields recorded.

The results are shown in the table.

Treatment	Average blueberry yield (kg per hectare)
Infected	18 000
Uninfected	22 500

Each field had an area of 6.7 hectares.

- (i) Calculate the reduction in blueberry yield due to the dodder infection. **1**

Space for calculation

_____ kg

- (ii) Explain why the uninfected field is included as a control in this investigation. **1**

- (iii) It was suggested that each large field could have been separated into many small plots and the treatments randomised.

State why this would be considered as good experimental design. **1**

[Turn over



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