

- 5 The photograph below shows seed pods of a Canola plant (*Brassica napus*). Canola is a plant grown as a crop because the seeds are rich in oil. The extracted oil is used in cooking and as a sustainable fuel.



Magnification $\times 0.1$

- (a) Suggest why the production of oil from Canola seeds can be described as **sustainable**.

(2)

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- (b) Farmers provide the plants with fertiliser containing nitrate ions.

Explain the importance of nitrate ions for the growth of plants.

(2)

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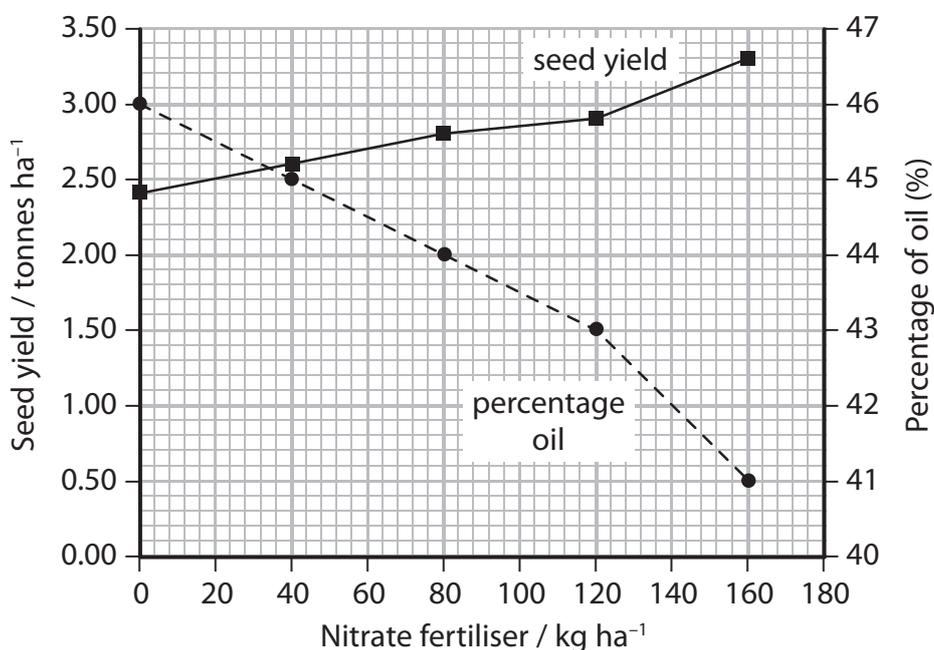
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(c) Scientists carried out an investigation into the effect of nitrate fertiliser on the yield.

The graph below shows the results of this investigation.



(i) Place a cross in the box next to the correct word or words to complete the following statement.

The mass of nitrate fertiliser added and the percentage of oil produced show

(1)

- A** a negative correlation
- B** no relationship
- C** a positive correlation
- D** a proportional relationship



