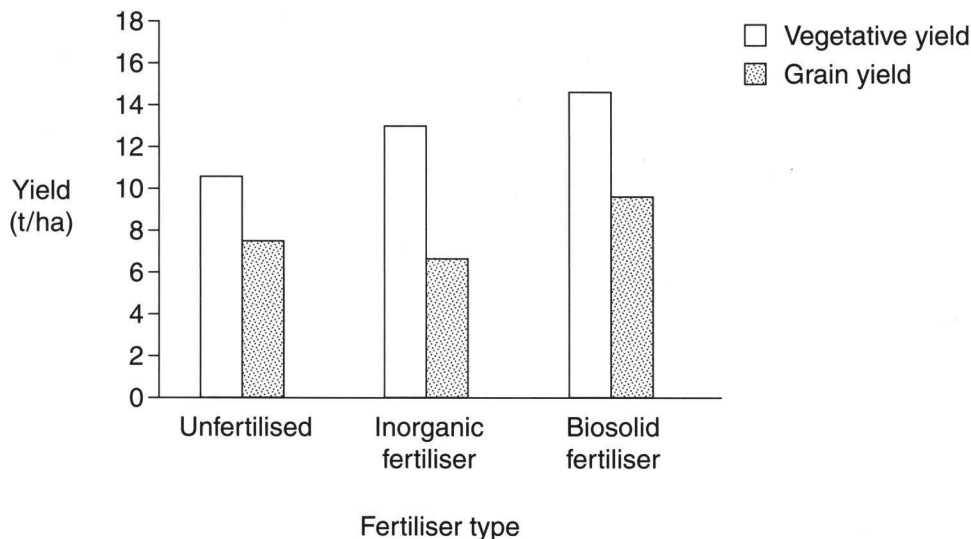


Question 25 (7 marks)

Digested 'biosolid' (the solid residue produced from effluent) is being applied as a fertiliser as an alternative to inorganic fertilisers.

A study was carried out to investigate the effects of biosolid fertiliser on the growth and grain yield of maize. The level of vegetative yield (t/ha) and grain yield (t/ha) are shown.



- (a) Explain why the grain yield from the application of inorganic fertiliser differed from that of the control. 3

The grain yield had differed as the control had no additional fertilisers added to it where as inorganic was added to the other one. There may have been additional fertiliser added to the inorganic resulting in a lower yield. Inorganic fertiliser may have been added at different rates disrupting the growth of some grain resulting in higher yield of the control

Question 25 continues on page 18

Question 25 (continued)

- (b) Explain why a maize producer may decide NOT to use biosolid fertiliser.

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A maize producer may not decide to use biosolid fertiliser as shown in the results to the other experiment did not benefit the grain yield as maize is part of the grain family. It may also cost the farmer more to add biosolid fertiliser than what he is getting out of the yield. As there is seen to be more vegetative to compared to the actual grain as it benefits the vegetative side of the grain where the farmer doesn't want any of that only the grain.

End of Question 25