

A Level Biology A H420/02 Biological Diversity

Question Set 9

1 For centuries, artificial selection has been used to improve the quality of crop plants used forhuman consumption.

Explain, with reference to selective breeding, why it is important to maintain viable wild populations of crop plant species.

Selective breeding promotes genetic variation. Using the gene bank, which is a source of useful alleles, plants can be cross bred with various other types of crops to introduce different traits and increase genetic variation. This is beneficial because this prevents inbreeding depression or promotes hybrid vigour. This also can be a source of replacement if cultivated population is in danger due to a disease.

[6]

Total Marks for Question Set 9: 6



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