

Question 27 (7 marks)

Evaluate an Integrated Pest Management (IPM) program for a named pest or disease of an animal host you have studied. In your answer, include examples of management strategies used in this program.

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Selective breeding has been the bases of the Integrated Pest Management Program to reduce the effect of the mite Varroa Destructor on honey bees. Regular precautions have been taken to reduce the risk of this mite in apiaries today such as quarantine laws and regular checking of bees but this precaution isn't enough. The mite can kill a whole hive very quickly, they continue to spread to other nearby hives. Due to this scientists have been selectively breeding bees with a resistance to the mite. In a controlled environment the mite is let into a colony and observed then removed after a certain time. The bees that were resistant to the mite were removed and selected to breed with other resistant bees. This IPM program has allowed beekeepers to now purchase queen bees as ~~resistant~~ resistant well as others that are allows the control of the mite while eradication and other management strategies are formed.