P.45 - Coffee berry borer triple-action integrated pest management

Dufour, B.P.

Coffee berry borer (*Hypothenemus hampei* Ferrari) control is presented in the form of triple-action integrated pest management: meticulous agronomic control of the coffee plantation, strict branch stripping and trapping. Agronomic control includes coffee tree pruning, shade tree pruning and rehabilitation of the coffee plantation (cleaning). Branch stripping is done by picking and eliminating all the fruits that remain on coffee trees after harvesting. Trapping enables the capture of CBB during their migratory flights. Triple-action IPM experiments conducted in shaded coffee plantations have shown that it is possible to reduce CBB infestation by over 90% compared to control plots. In plantations, some of the CBB females emerging from residual fruits survive by taking refuge in dry fruits remaining on the branches. They can then colonize new fruit as soon as the fruit becomes appetizing and so continue their development. The IPM strategy is therefore to capture part of the populations from residual fruit on the ground and eliminate fruit-refuges. Of the three IPM operations, only trapping requires any major investment. The advantages of this technique are numerous: efficient basis for control, no risk of contaminating the environment; it is a preventive strategy that is simple to apply, it is compatible with biological control and it does not affect biodiversity.