Mating Disruption/SIR

Control of Codling Moth in Apple with a Novel Sprayable Attract and Kill Formulation

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Ciba has developed a novel sprayable product for the control of codling moth in apple using the attract and kill strategy to interrupt the life cycle at the adult stage.

The liquid slow-release formulation contains a contact insecticide and specific pheromone as attractant. The formulation is applied in the form of 100 microliter drops onto the leaves of the apple tree with a specially developed application system.

Field trials were successfully carried out in 1988-89 in Switzerland. However, the formulation had to be applied by hand to single leaves and therefore farmers were reluctant to accept and implement this new technology. Improvement of the hand application enabled Ciba to undertake additional field trials in 1993. The further development of the product will mainly depend on acceptance by the farmer.

This new formulation fits very well in tree fruit IPM programs due to its efficacy, selectivity, targeted application and minimal insecticide usage.

Between 1989 and 1993 Ciba also developed SIRENE® for the control of pink bollworm (Pectinophora gossypiella) in cotton, using the same technology as for codling moth. SIRENE® was successfully commercialized in 1994 in Egypt.

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