EFFECT OF NEEM ON DIFFERENTS PESTS AND BENEFICIAL INSECTS IN PEACH ORCHARDS

A.L. DOMANGE and U. EISENLOHR G.R.A.B. - Agroparc B.P. 131 F - 84146 MONTFAVET

With the participation of B. SAUPHANOR and C. D. LENFANT - INRA, Station de Zoologie - Apidologie F - 84143 MONTFAVET

The efficience of a Neem (Azadirachta indica) formulation, NEEM AZAL F, has been tested on two pests (grean peach aphid, Myzus persicae and oriental peach moth Cydia molesta) and differents benefitial insects in peach orchards.

The study consisted in laboratory tests and field experiments.

Pests:

In the field experiment, the neem formulation was not effective against an infestation by Myzus persicae which was already quite strong at the beginning of the experiment.

The effect observed in laboratory on first instar larvae and on the fecondity of the emerging adults suggests that there is probably a stronger effect of the neem formulation on young individuals than on already established colonies of aphids.

On the oriental fruit moth, the efficacity of $50\,\%$ of the neem formulation is not sufficient to control this pest on fruit. Further experiments should be made to test the effect of a treatment on the first generation on shoots.

Beneficial insects:

In the field experiment we could not observe a direct effect of the neem formulation syrphid and ladybird oviposition and larvae and on the common earwig, but laboratory tests showed long-term effects on syrphid and on earwig larvae.

The captures of earwig larvae in trap bands suggested that there is a repellent effect of the neem formulation. This could not be confirmed by the laboratory tests. But there was an obvious antifeedant effect on the common earwig and a molt-disturbing effect on syrphid larvae. These long-term effects, which could probably lead to an increase of the infestation, require further research.