ABSTRACT OF THESIS

Thesis title: PYRETHROID RESISTANCE MONITORING OF POLLEN BEETLE

(Brassicogethes aeneus) IN HUNGARIAN RAPE FIELDS

Author name: KIRUI DANIEL KWEMOI

Course, level of education: MSC IN PLANT PROTECTION

Host Department/Institute: PLANT PROTECTION

Primary thesis advisor: Dr ZSOLT MARCZALI (Associate professor)

This research article presents the results of a two-year survey on pyrethroid susceptibility of the pollen beetle, a major pest of European oilseed rape crops. The aim of the study was to monitor

the spread of pyrethroid-resistant pollen beetle populations because they require different control

measures, and affected countries must develop strategies to control them in the future.

Samples of approximately 1500 pollen beetles were collected from two villages in Hungary and

subjected to varying concentrations of active ingredient lambda-cyhalothrin in a laboratory test.

Materials and methods used include IRAC susceptibility test method No. 011-v3 and the Kruskal-

Wallis mortality Tests for analyses. The results showed an increasing trend of resistance among

the pollen beetles, with lower mortality rates at higher concentrations of the insecticide. The study

highlights the need for effective management strategies to control the spread of pyrethroid-

resistant pollen beetles in oilseed rape growing areas.