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Abstract: Oilseeds, pulses, and cereals that are kept are seriously harmed by insects. The volatile chemical mixtures that make up essential oils (EOs) of plants are frequently used as bioactive agents. The present work aimed to determine the insecticidal effects of the essential oil (EO) of Lavandula angustifolia (LA) against Pyrrhocoris apterus and Oulema melanopus in different concentrations.

Introduction

Insecticides remain a crucial tool for combating insect pests that pose a hazard to agriculture and serve as disease vectors . The present work aimed to evaluate the toxicity effect of the essential oil of *L. angustifolia* against the *Pyrrhocoris apterus* and *Oulema melanopus* for the possibility of using this essential oil as an insecticide.

Results and discussions

The best insecticidal activity of LAEO against *P. apterus* was found at 12.5 % concentration. The greatest insecticidal activity was gained against *O. melanopus* when LAEO concentration was 50 %.

Material and method

LAEO was purchased from Hanus s.r.o. On the model organisms *P. apterus,* and *O. melanopus,* the tested essential oil insecticidal activity was assessed. The Petri dish contained 30 members of the appropriate insect species.

Conclusions

An all-natural alternative to synthetic pesticides, LAEO demonstrated insecticidal properties. In conclusion, the highest insecticidal activity of *L. angustifolia* has against *Oulema melanopus.*

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