

## INSECTICIDAL ACTIVITY OF EXTRACT FROM *Hypericum perforatum* L. on *Plutella xylostella* (Lep.: Plutellidae)

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In recent years, extract of medicinal plants have received much attention as chemical control agents because of their insecticidal, repellent and antifeedant properties. In this research, extract of powdered leaves, stems and flowers of *Hypericum perforatum* L. was obtained by a rotary evaporator apparatus and was tested under laboratory conditions for its ability to control *Plutella xylostella* (Lep.: Plutellidae). The experiments were conducted by the method of Leaf disk bioassay at  $27\pm 1^{\circ}\text{C}$ ,  $65\pm 5\%$  RH conditions. After extracting, several concentrations including 10000, 20000, 30000, 50000, 70000 and 100000 ppm with control were prepared. Then 10 larvae (3<sup>rd</sup> instar) of *P. xylostella* were introduced into each treatment. After 48h, high increases in mortality were seen. Data probit analysis demonstrated that lethal concentration to kill 50% ( $\text{LC}_{50}$ ) and 95% ( $\text{LC}_{95}$ ) of the population was estimated as 21731 and 53922 ppm, respectively. Therefore, extract from *H. perforatum* could have potential for controlling of *P. xylostella* in organic food management.

**Key words:** extract, *Hypericum perforatum*, *Plutella xylostella*, insecticidal activity

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