

P62 : MORTALITY AND LD₅₀ CONCENTRATIONS OF PYRETHROID INSECTICIDE ISOLDESIS ON LARVAE OF *ARCHIPS ROSANA* (LINNAEUS, 1758)

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Aim: Isoldesis is a synthetic pyrethroid insecticides that is used against of *Archips rosana* and other pests in agriculture. This study aimed to investigate LD₅₀ and mortality of different concentrations of Isoldesis on larvae of *A. rosana*.

Method: Commercial form of the pesticides; Isoldesis 2,5 EC (Deltamethrin) was used as test substance at recommended dose (7,5 µM r.d) and 1. 10⁻¹, 1.10⁻², 1.10⁻³, 1.10⁻⁴ fold diluated r.d. in laboratory conditions (24±2°C and % 50±5 humidity). After a single dose application the mortality and LD₅₀ values were obtained after 24, 48 and 72 h on larvae.

Findings: The LD₅₀ concentrations of isoldesis for larvae forms were 1.47, 0.619, and 0.57 µM for 24, 48 and 72 h respectively. 10⁻¹ ve 10⁻² fold diluted concentrations of Isoldesis still have %55-70 mortality on larvae of *A. rosana*.

Result: It is important to study the concentrations that are effective on pests. Therefore, this approach may be helpful for integrated pest management programmes.

Keywords: Archips rosana, Insecticide, Isoldesis, LD50, Mortality

Table 1. Mortality ratio of larvae forms of *A. rosana* after 24, 48 and 72 h following single exposure of different concentrations of Isoldesis.

Applied concentrations of Isoldesis	Mortality % ± S.E.		
	Times after application		
	24 h	48 h	72 h
- Control	0,0±0,0	0,0±0,0	0,0±0,0
Recommended dose	100,0±0,0***	100,0±0,0***	100,0±0,0***
10-1 r.d.	30,0±5,0***	55±5,0***	55±5,0***
10-2 r.d.	20,0±5,0**	50±7,9***	70±5,0***
10-3 r.d.	15±6,12*	20,92±9,3	25±7,9**
10-4 r.d.	0,0±0,0	0,0±0,0	0,0±0,0
LD50	1,47	0,619	0,57