

3628: Occurrence of baculovirus infecting the soybean looper, *Crysoideixis includens* (Walker) (Lepidoptera: Noctuidae), in Brazil

Thursday, September 29, 2016

02:30 PM - 02:45 PM

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Introduction: Soybean Looper *Crysoideixis includens* (Walker) (Lepidoptera: Noctuidae) is a major pest of soybean and cotton in Brazil.

Methods: A total of 1,647 caterpillars were collected in soybean fields, in two different locations during a two year period of cropping system. Larvae were reared individually on artificial diet and observed daily. Each larva with baculovirus symptom was macerated with sterilized water, filtered and provided to healthy larvae from the artificial rearing. Those larvae that died with symptoms were collected together, for each isolate. After purification baculovirus isolate 15 was used in the 10^6 e 10^7 concentrations with 15,16,17 and 18 days old larvae, room temperatures of 25°C and 28°C. 16 larvae per treatment were fed for 24h in soy leaves infected with purified baculovirus.

Results and conclusions: In the first year 2.8% and 23.0% of the larvae collected in the field died with baculovirus symptoms in the first and second location, respectively. In the second year 1.94% of larvae died with baculovirus symptoms. Highest mortality was achieved with 15 to 17 day old larvae, ranging from 87.5 to 100%. Lowest mortality was achieved by 18 day old larvae at 25°C. Mean weight of infected larvae was higher at 25°C with 16 and 18 day old larvae. Polyhedral Inclusion Bodies (Pib) was higher for 16 and 17 day old larvae at 25°C and 28°C, and 25°C, respectively, achieving 1.32×10^{10} pib. Some isolates have potential to be used in a biological control program.

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