

## CONTROLLING *TUTA ABSOLUTA* (MEYRICK, 1917) BASED ON EMAMECTIN BENZOATE USAGE

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### ABSTRACT

The experiment was developed in the first culture of the planted tomatoes in the greenhouse during the year 2014-2016. We have used Emamectin Benzoate (AFFIRM 095 SG) to control *Tuta absoluta* besides mass capture. The bio-insecticide Emamectin benzoate is a new macrocyclic lactone insecticide derived from the avermectin family of natural products. These products have been developed for the control of Lepidoptera pests on a variety of vegetable crops worldwide, with a particular efficacy against *Tuta absoluta*. The compound shows translaminar activity, with rapid plant uptake and it is metabolized by photo-oxidation yielding non-toxic levels. This favors its selectivity for biological control agents. The decision scheme of using insecticides for management of *Tuta absoluta* is largely based on adult captures in sexual pheromone traps as adult catches are correlated with larval damages and yield losses. The dosage of AFFIRM was 150 gram per 100 liter water. For each generation are done two treatments as per the above dosage with intervals application 14 days. *Tuta absoluta* is a very harmful insect for tomato plants in Albania climatic condition, so using Emamectin benzoate based on experimental results in our farm is a new alternative to control it. It is very important to alternate Emamectin benzoate with other chemical compound for avoiding the insects` resistance.

**Keywords:** Emamectin benzoate, *Tuta absoluta*, monitoring, sexual pheromone.