

## عنوان مقاله:

Management of *Neoleucinodes elegantalis* (Lepidoptera: Crambidae) in Tomatoes Using Mating Disruption and Attract and Kill

## محل انتشار:

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## نویسندگان:

S. M. Franca - *Rural Federal University of Pernambuco, Av. Dom Manoel de Medeiros n/n, Two Brothers, 52171-900, Recife, Brazil*

J. V. Oliveira - *Rural Federal University of Pernambuco, Av. Dom Manoel de Medeiros n/n, Two Brothers, 52171-900, Recife, Brazil*

C. A. Badji - *Academic Unit of Garanhuns, Federal Rural University of Pernambuco, Av. Good Shepherd, n / n, Boa Vista, 55292-270, Garanhuns, PE, Brazil*

C. A. Guedes - *Rural Federal University of Pernambuco, Av. Dom Manoel de Medeiros n/n, Two Brothers, 52171-900, Recife, Brazil*

B. L. R. Duarte - *Rural Federal University of Pernambuco, Av. Dom Manoel de Medeiros n/n, Two Brothers, 52171-900, Recife, Brazil*

C. M. Oliveira - *Rural Federal University of Pernambuco, Av. Dom Manoel de Medeiros n/n, Two Brothers, 52171-900, Recife, Brazil*

M. O. Breda - *Rural Federal University of Pernambuco, Av. Dom Manoel de Medeiros n/n, Two Brothers, 52171-900, Recife, Brazil*

## خلاصه مقاله:

The mating disruption technique has been widely used for the control of several lepidopteran pests. In the present study, we assessed the efficiency of two formulations of SPLAT Neo, a wax emulsion containing E-11-hexadecenol, with and without the insecticide cypermethrin, in affecting mating disruption of *Neoleucinodes elegantalis* (Guenée). We also determined the best phenological age or stage of the crop for the application of the pheromone formulation, based on its effectiveness in reducing injuries on tomato fruits. We performed two field trials. The first field trial had three treatments: (1) Areas treated once (30 days after transplanting seedlings) with SPLAT Neo (mating disruption, formulation without cypermethrin); (2) Areas treated once with SPLAT Cida Neo (attract and kill, formulation with cypermethrin), and (3) Control plots, i.e. areas treated with the growers' pest management procedures, based on pre-scheduled calendar applications of conventional insecticides. The use of SPLAT Neo with and without cypermethrin resulted in a significant season-long reduction of the average number of *N. elegantalis* eggs throughout the tomato cycle, compared to the control. Areas that received two SPLAT Neo applications had a lower number of males captured by monitoring pheromone traps, a lower number of eggs laid in the field, and significantly lower levels of fruit

injury at pre, first, and second tomato harvests. The crop subjected to a single SPLAT Neo application, however, experienced reduction in fruit injury only at the second harvest. Our data suggest that two SPLAT Neo applications .promote efficient control of *N. elegantalis*, resulting in significant reduction of fruit damage in tomato

## کلمات کلیدی:

Behavioral control, Pheromone release technology, Sexual pheromone, SPLAT, Tomato phenology

## لینک ثابت مقاله در پایگاه سیویلیکا:

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