

Intensive Biological Control in Spanish Greenhouses: Problems of the Success

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Abstract : Currently, biological control programs in greenhouse crops involve the use, at the same time, several natural enemies during the crop cycle. Also, large number of plant species grown in greenhouses, among them, the used cultivars are also wide. However, the cultivar effects on entomophagous species efficacy (predators and parasitoids) have been scarcely studied. A new method had been developed, using the factitious prey or host *Ephestia kuehniella*. It allows us to evaluate, under greenhouse or controlled conditions (semi-field), the cultivar effects on the entomophagous species effectiveness. The work was carried out in greenhouse tomato crop. It has been found the biological and ecological activities of predatory species (*Nesidiocoris tenuis*) and egg-parasitoid (*Trichogramma achaeae*) can be well represented with the use of the factitious prey or host; being better in the former than the latter. The data found in the trial are shown and discussed. The developed method could be applied to evaluate new plant materials before making available to farmers as commercial varieties, at low costs and easy use.

Keywords : cultivar effects, efficiency, predators, parasitoids

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