

**Project Title** : Distribution and natural effectiveness of *Tuta absoluta* (Meyrick,1917)(Lep.: Gelechiidae) egg parasitoid *Trichogramma euproctidis* (Girault, 1911) (Hym.: Trichogrammatidae) in field tomato areas of İzmir and Manisa provinces and side effects of some pesticides on this parasitoid under laboratory conditions

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**Supporting Body** : GDAR (General Directorate of Agricultural Research and Policy)

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**Co-researchers** : -

**Summary** : Tomato leaf miner, *Tuta absoluta* (Meyrick) (Lepidoptera.:Gelechiidae) after its initial detection in Turkey in 2009 it rapidly has become the main pest and serious threat to tomato production . Because of the biology and feeding behaviour of this pest, chemical control is difficult and it becomes resistant to the pesticides.

In Turkey and in the world a numerous biological control agents are used against *T. absoluta*. As egg parasitoid *Trichogramma* species are most commonly used against Lepidopteran pests. Some of these important egg parasitoids are *T. achaeae* Nagaraja & Nagarkatti, *T. pretiosum* Riley, *T. cacoeciae* Marchal, *Trichogrammatoidea bactrae* Nagaraja, *T. exiguum* Pinto&Platner ve *T. evanescens* Westw species. *Trichogramma euproctidis* (Girault, 1911), an egg parasitoid of *T. absoluta*, was found for the first time in Çanakkale on field tomatoes in 2012 in our Turkey.

Selection of the pesticides used against pests and diseases is the most important factor contributed to conservation of natural enemies. Selective pesticides, which are effective against pests and have low negative on natural enemies, are necessary to use for the aim of protecting or renewal of the natural balance. Determination of the side effects of the pesticides on natural enemies is possible by test them.

With this study, the dispersal and natural effectivity of egg parasitoid *T. euproctidis* on *T. absoluta*, and determination of side effects of some pesticides against this species is aimed. The results of the side effect studies will be helpful to select suitable pesticides for the conservation of natural enemies in integrated pest management.