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# CHEMOTAXYS OF Trichogramma pretiosum TO VOLATILES OF TOMATO PLANTS INDUCED BY METHYL JASMONATE 

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#### Abstract

The egg parasitoid, Trichogramma pretiosum Riley (Hymenoptera, Trichogrammatidae), is used in biological control programs of Tuta absoluta (Meyrick) (Lepidoptera: Gelechiidae), a pest in tomato plants. The parasitism efficiency of this organism is associated with hosts search strategies in fields. Thus, females can use chemical cues provided by the plant secondary metabolism, which can be triggered by phytohormones. The aim of this work was to evaluate the chemotaxic responses of $T$. pretiosum to volatiles of tomato plants treated with methyl jasmonate (MeJa). Female of up to 24 hour old were tested in a dual choice glass olfactometer and were submitted to volatiles released by tomato plants in 24, 48 and 72 hours after MeJa application(about 8 mL of 0.5 mM MeJa solution diluted in $1 \%$ ethanol) contrasted with control plants (treated with the same volume of water during the same periods). Parasitoids were more attracted by plants treated with MeJa in 24 and 48 hours after application in relation to control plants ( $p=0.0008$ and $p=0.0139$ respectively). However, after 72 hours, T. pretiosum did not differentiate the volatiles from plants treated with MeJa and control plants ( $p=0,1175$ ). These results indicate that MeJa application is able to modify the volatile profile released by tomato plants, inducing indirect responses to plants in up to 48 hours after application.


