

Study on the effect of *Wolbachia* on thelytoky of an Iranian strain of *Trichogramma*

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ABSTRACT

In *Trichogramma* thelytokous parthenogenesis is often due to an intracellular microorganism, *Wolbachia trichogrammae* Louis & Pintureau. This microorganism is transmitted transovarially to offsprings. To test the cause of thelytoky in Iranian *Trichogramma*, ten populations from different parts of Iran, including Orumieh (two populations), Mashhad, Amol, Saveh, Chalus, Varamin, Ghazvin, Yazd and Tonekabon were studied using PCR (Polymerase Chain Reaction) method.

Among the ten studied strains, the sole thelytokous strain, Orumieh-1 was shown infected with *Wolbachia*. This strain was determined as *Trichogramma embryophagum* (Hartig). Therefore, thelytoky in this strain does not have genetic origin and is due to the activity of above-mentioned rickettsia. This is the first report of this rickettsia in Iran.

Key words: Thelytoky, *Wolbachia trichogrammae*, PCR.

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