The potential use of entomopathogenic nematodes against tomato leaf miner *Tuta absoluta* (Lep: Gelechiidae)

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*Tuta absoluta* Meyrick is native to Central America, widely distributed in South America and known as the most devastating tomato pest all over the world which can cause up to 100 % loss of production. The species was first recorded in 2009 in Turkey and showed a rapid spread, causing serious damages in almost all tomato fields. The extensively use of pesticides against *T. absoluta* was not effective enough and negatively affected its native natural enemies. It is essential that an efficient method for control of the population of the pest to be developed in order the use of insecticides in tomato production areas to be reduced. Entomopathogenic nematodes can be used effectively to control soilborne pests and the use of entomopathogenic nematodes has been rapidly increased all over the world as well as in Turkey. In this study, an extensive survey has been conducted to identify EPNs in Turkey. In addition, the efficacy and the potential of entomopathogenic nematodes against *Tuta absoluta* in tomato fields in Turkey were investigated. In this respect, the success of native natural enemies against alien species in the biological control were discussed.

**Keywords:** *Tuta absoluta*, entomopathogenic nematodes, biological control, tomato.