DULLETIN OF THE ENTOMOLOGICAL SOCIETY OF MALIA (2017) VOL. 9

4th International Congress on Biodiversity "Man, Natural Habitats and Euro-Mediterranean Biodiversity", Malta, 17-19th November 2017

Managing biotic interactions for plant protection: the case of the invasive *Tuta absoluta* (Lepidoptera: Gelechiidae) on tomato crop

Mario V. BALZAN1

Since its recent introduction in the Mediterranean Region, the tomato leaf miner, *Tuta absoluta* (Meyrick) (Lepidoptera: Gelechiidae) has become widespread and an important pest throughout the region and beyond. This study presents key results from empirical research, carried out in greenhouse and open field conditions to monitor fluctuations in pest populations and to test the effectiveness of different plant protection strategies aimed at reducing pressure from insect pests of tomato and in particular from the invasive *T. absoluta*.

Plant protection studies discussed in this communication utilise biotic interactions to reduce pest pressure from *T. absoluta*. Results provide evidence that pest-natural enemy interactions that regulate the suppression of damage from this pest respond to variables at both the local field and landscape scales. Finally, pest management strategies, which incorporate biotic interactions for the control of *T. absoluta* and other insect pests of tomato crop, will be briefly discussed.

¹Institute of Applied Sciences, Malta College of Arts, Science and Technology (MCAST), Paola, Malta