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O 15. CONTROL OF THE OLIVE MOTH, PRAYS OLEAE (BERN.), IN ORGANIC OLIVE GROVES

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Olive tree is an important crop in Trás-os-Montes region (northeast of Portugal), where about 75,000 ha of surface are cultivated. In this region, 85% of the crop is conducted in traditional system, with low intensification and productivity, but with high quality of the olive oil produced. The organic production is one way to increase sustainability of this important agroecosystem. In this region, the olive surface certified in organic production has high potentiality of increasing. The olive moth, Prays oleae (Lep.: Plutellidae), which is one the most serious pests of olive trees in the Mediterranean basin, is the key pest of the crop in Trás-os-Montes region. This moth develops three generations per year, attacking successively the leaves (phyllophagous), olive flowers (antophagous) and the fruits (carpophagous) and causing significant damage and crop loss. In this communication, we summarize the work developed by our research group during the last 15 years, to control olive moth in the northeast of Portugal. The implementation of indirect measures (e.g. the conservation and maximum use of naturally occurring biological control agents and active augmentation of natural enemies), and direct measures (e.g. sprays with the microbial insecticide Bacillus thuringiensis (Berliner) against the flower generation, the use of inundative releases of tricogramma and chrysopids, and on the use of the mating disruption technique and chemical control, with authorized pesticides) are presented and discussed.

KEYWORDS: PRAYS OLEAE, NATURAL CONTROL; BACILLUS THURINGIENSIS (BERLINER); INUNDATIVE RELEASES; TRICHOGRAMMA, CHRYSPIDS, MATING DISRUPTION