

P.13 - Molecular identification of three populations of Trichogramma collected in Spanish vineyards

Moreno-Grijalba, F., Menéndez, C., Carvajal-Montoya, L.D., Hernández-Álamos, M.M., Marco-Mancebon, V., Pérez-Moreno, I.

Trichogramma Westwood are tiny parasitoids of the eggs of other insects which are widely used as biological control agents against many pests (mainly Lepidoptera) in several different crops. They are also known to lack morphological distinctiveness making species identification in this group problematic. A survey was conducted in La Rioja (Spain) to collect and identify local *Trichogramma* species by means of molecular tools. Three *Trichogramma* populations were captured during the fouryear survey. All of them have been mass-reared in laboratory on a factitious host since then and identified to species level by amplifying and sequencing their ITS-2 ribosomal DNA sequence. A restriction analysis (RFLP) was also performed using three restriction enzymes: Eco R1, Mse 1, and Bsm 1. DNA was extracted following a chemical method. ITS-2 sequence was compared with those deposited in the GenBank. Size of PCR product (580 pb aprox.), RFLP pattern and ITS-2 sequence confirmed that the *Trichogramma* strains belonged to *Trichogramma* cacoeciae Marchal species (98, 99 and 99% homology, respectively). This is the first record of *T. cacoeciae* for Spain. Molecular tools used in this study showed its usefulness when identifying species belonging to this taxonomically troublesome genus.