

Ecological infrastructures and conservation biological control in citrus orchards

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The IOBC/WPRS edited recently a book (Boller et al. 2004b) on ecological infrastructures, i.e., any infrastructure at the farm or within a radius of about 150 m that has an ecological value to the farm, such as hedges, grasslands, wildflower strips, ruderal areas, conservation headlands, stone heaps, whose judicious use increases the functional diversity of the farm. One important aspect of functional biodiversity for pest management is the preventive and sustainable regulation of pests by their natural enemies. In this way ecological infrastructures can contribute for conservation biological control by increasing the density of the natural enemies and enhancing their impact on the pest. A minimum surface of 5% of farmland is required by IOBCwprs to be designated as ecological infrastructures (Boller et al. 2004a, b). A synthesis on the results of a project (nº 29 PO AGRO-Medida 8.1-DE&D 2002-2005) aiming at study the influence of ground cover management and hedges in the diversity and abundance of natural enemies in citrus orchards will be presented and discussed.