

THRIPS IN *OLEAE EUROPAEA* L.: ORGANIC VERSUS CONVENTIONAL PRODUCTION.

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Abstract:

A study was carried out to evaluate differences between thrips communities in olive orchards under organic or conventional production regimes. Four olive orchards, two under organic production and two under conventional production, were selected in the Alentejo region, south of Portugal. Thrips were collected in the olive canopy every fortnight, between April and November of 2000, by the beating technique and identified. The results indicated the presence of seven *Terebrantia* thrips genera, namely *Aeolothrips* sp., *Frankliniella* sp., *Limothrips* sp., *Melanthrips* sp., *Neohydatothrips* sp., *Tenothrips* sp., and *Thrips* sp. Nine species were identified: *Aeolothrips intermedius* Bagnall, *Frankliniella tenuicornis* (Uzel), *Limothrips cerealium* Haliday, *Tenothrips discolour* (Karny), *Thrips angusticeps* Uzel, *Thrips atratus* Haliday, *Thrips australis* (Bagnall), *Thrips meridionalis* (Priesner), and *Thrips tabaci* Lindeman. One morphotype still under identification and *Limothrips* sp. were the most abundant. Differences in the thrips communities composition between organic and conventional olive orchards were not observed by PRC and Kruskal-Wallis, and a dimethoate spray applied in the conventional orchard, only accounted for 0.4% of the total thrips matrix variation. Spatial (orchard location) and temporal (sampling date) explanatory variables accounted for 0.6 and 13.8% respectively, according to the partitioning variance technique.

Keywords: olive thrips community, dimethoate, spatial effects, temporal effects