Community Structures and Diversity of Natural Enemies Between Integrated Pest Management and Conventional Management of Jujube Orchards (Abstract)

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Abstract

The communities and diversities of the beneficial insects on jujube trees were studied in jujube sites in Taigu, Shanxi Province of China. The results showed that 8 orders, 25 families, 58 species and 5009 individuals were found in the integrated pest management (IPM) site, while the corresponding numbers were 8, 18, 27 and 1911 in the conventional pest species were Inoccllia sp., Coccinella septempunctata (Linn.), Chrysopa shansiensis, Chelonos chinensis and Anysis saissetiae. Principle species dominances of beneficial insects were higher in the IPM than in the CPM, but ecological dominant concentration indexes of principal groups in both sites were almost the similar. The diversity and the evenness of the beneficial insect community as well as the predatory sub-community in the IPM site were obviously higher (P<0.05) than those in the CPM site. In the IPM site, it was the abundance of species of beneficial insects that mostly influenced the diversities within communities, but in the CPM it was the uniformity and the number of individuals, besides the abundances of species.