CANOPIES OF MEDITERRANEAN TREES AS ARTHROPOD HABITATS

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This work approached and compared the arthropod community of five tree species. Into the canopies of cypresses, olive trees, almond trees, fig trees and lemon trees were put yellow sticky traps and pots filled with trapping liquids (glycol or soapy water), during spring and autumn. The Shannon index was calculated and all statistical analyses were performed using SPSS software v.17.0. A total of 23 arthropod taxa were collected. The most abundant taxa were six insect orders (Diptera, Homoptera, Hymenoptera, Thysanoptera, Coleoptera, Psocoptera) and spiders. The dipteran species are attracted to the yellow traps. The results of liquid traps were combined and compared to the results of the yellow sticky traps in order to remove this bias. Heteropteran captures in olive trees were significantly higher than in all the other examined plant species, according to ANOVA and all non parametric indices (Duncan, Tukey, Scheffe and LSD). There was also significant difference in spiders' captures between fig and lemon trees, with intermediate values for the other three plant species. Generally, the liquid traps with soapy water were the most effective for the total of Arachnida (spiders, harvestmen, mites, pseudoscorpions), but glycol showed excellent results in the cypress canopy. According to the Duncan and LSD indices, significantly more Hymenoptera were captured in the canopy of fig trees than in the other three species (olive tree, lemon tree and cypress). Cypress canopy biodiversity was the highest, followed by those of the lemon tree, while the olive tree was ranked last.