

6. KRSTESKA V.

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Fauna of hoverflies (Diptera: Syrphidae) in tobacco biocenosis

Larvae of the aphidophagous species of hoverflies are of major importance in regulation of the number

of aphids. The main goal of the investigations was to perform faunistic analysis of the family Syrphidae.

The analyses were carried out in the tobacco biocenosis in the Prilep area. We used the following methods: examination of 20 tobacco stalks, the examination of 100 tobacco leaves, the yellow water vessels method, the insect-catcher method and faunistic analyses with the following parameters: active

dominance, active abundance, consistency or frequency.

The quantitative analyses is based on final evaluation of the total number of collected individuals: 2900 of *Sphaerophoria scripta* L., 2147 of *Sphaerophoria rueppelli* Wied., 1833 of *Scaeva pyrastris* L., 647 of *Episyrphus balteatus* De Geer, 146 of *Eupeodes corollae* Fab., 2 of *Syrphus ribesii* L., 184 of *Paragus quadrfasciatus* Meig., 5 of *Paragus bicolor* Fab., 19 of *Paragus tibialis* Fallen, 101 of *Melanostoma mellinum* L., 21 of *Eristalis tenax* L., 7 of *Eristalis arbustorum* L. and 15 of *Syrpitta pipiens* L.

S. scripta, *S. rueppelli*, *S. pyrastris* and *E. balteatus* are dominant species. *E. corollae*, *P.*

quadrfasciatus and *M. mellinum* are sub-dominant species. Other species have very low dominance and they are sub-recedent species. *S. scripta* was the most numerous species in each year of study and

by all study methods. *S. scripta* was euconstant species in 2004 and 2005 and was constant in 2003. *S.*

rueppelli was a constant species during all years. *S. pyrastris*, *E. balteatus* and *E. corollae* were confirmed as less constant. Other species were accidentally present in tobacco entomocenosis in Prilep.

The increase of larval abundance of aphidophagous hoverflies approximates the period of mass reproduction of aphids in tobacco. Based on the results, *S. scripta*, *S. rueppelli*, *S. pyrastris* and *E. balteatus* can be used for biological control within the integral protection of tobacco against aphids.

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