

Biopotential of Introduced False Indigo and Albizia's Weevils in Host Plant Control and Duration of Its Development Stages in Southern Regions of Panonian Basin

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Abstract : The paper present the results of the entomological experimental studies of the biological, ecological, and (bionomic) insect performances, such as seasonal adaptation of introduced monophagous false indigo and albizias weevil's *Acanthoscelides pallidipennis* Motschulsky. and *Bruchidius terrenus* (Sharp), Coleoptera: Chrysomelidae: Bruchinae, to phenological phases of aggressive invasive host plant *Amorpha fruticosa* L. and *Albizia julibrissin* (Fabales: Fabaceae) on the territory of Republic of Serbia with special attention on assessing and monitoring of new formed and detected inter species relations between autochthons parasite wasps from fauna (Hymenoptera: Chalcidoidea) and herbaceous seed weevil beetle. During 15 years (2006-2021), on approximately 30 localities, data analyses were done for observed experimental host plants from samples with statistical significance. Status of genera from families Hymenoptera: Chalcidoidea.: Pteromalidae and Eulophidae, after intensive investigations, has been trophicly identified. Recorded seed pest species of *A. fruticosa* or *A. julibrissin* (Fabales: Fabaceae) was introduced in Serbia and planted as ornamental trees, they also were put undergo different kinds of laboratory and field research tests during this period in a goal of collecting data about lasting each of develop stage of their seed beetles. Field generations in different stages were also monitored by continuous infested seed collecting and its dissection. Established host plant-seed predator linkage was observed in correlation with different environment parameters, especially water level fluctuations in bank corridor formation stands and riparian cultures.

Keywords : amorpha, albizia, chalcidoid wasp, invasiveness, weevils

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