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**ABSTRACTS
SUPPLEMENT**

APPROBATION OF WHITE WATER TRAPS FOR MONITORING PREDATORY FLIES (DIPTERA, EMPIDOIDEA)

Grichanov I Ya, Ovsyannikova E I

All-Russian Institute of Plant Protection, St.-Petersburg, Pushkin, Russia

The experiment was carried out in a vicinity of St. Petersburg near irrigation channel at an experimental field with various agricultural cultures. As has appeared, dipterans dominated in samples all over the season. Small number of hymenopterans, small beetles, aphids, moths and some other insects were trapped together. Empidoidea prevailed among Diptera, being present in all samples. The following species are found among Dolichopodidae: *Dolichopus brevipennis*, *D. plumipes*, *D. pennatus*, *D. popularis*, *D. simplex*, *Medetera jacula*, *Sciapus albifrons*, *Chrysotus microcerus*; among Empididae - 5 species of *Empis*, *Platypalpus*, *Stilpon*. However, the abundance of empidoid flies in our trial was low in comparison with literature data obtained in natural stations. Obviously, it is connected with anthropogenic influences on species and quantitative structure of entomofauna of an agricultural field, annually exposed to strong press of fertilisers, pesticides etc. Fast contamination and overfilling at strong or long rains and high sensitivity to microclimatic conditions of stations are technical demerits of the used type of traps. For example, the number and specific structure of Empidoidea considerably varies, depending on remoteness of a trap from border of a reservoir. It is possible to regard this method of quantitative ecological researches perspective for the decision both theoretical and applied questions, in particular for study influence of environment pollution on biodiversity and dynamics of Empidoidea, who are considered good bioindicators for industrial and pesticide pollutants.

GEOGRAPHICAL VARIATIONS IN SPECIES-SPECIFICITY OF LEPIDOPTERAN SEX ATTRACTANTS

**Grichanov I Ya, Bulyginskaya M A, Ovsyannikova E I, Selitskaya O G,
Shamshev I V**

*All-Russian Research Institute of Plant Protection, St.-Petersburg, Pushkin,
Russia*

New sex attractants were found for several species of Lepidoptera by use of field screening method. Species-specificity of standard Lepidopteran sex attractants was studied in atypical environment (i.e., biotopes and stations lacking main host plants for model species) in comparison with typical habits. Different (from high to median) extent of species-specificity of standard sex attractants was demonstrated in orchard for north-western Russia. Alteration of species-specificity was traced during the summer-autumn season, and when sex attractant traps were also placed in atypical geographical and ecological conditions. It was firstly demonstrated that the studied species could be distributed into the three groups according to an extent of absolute and confamily species-specificity reduction in forest biotope as compared with apple orchard. Species diversity and abundance for the main groups of moths were also studied on experimental plots located within dominating ecosystems in Leningrad and Pskov Regions during the whole season. Comparative analysis of sex attractant species-specificity in fruit and vegetable-potato ecosystems, on one side, and forest communities, on the other side, allowed recognising partly ecological mechanisms of reproductive isolation of moth species having close structure of pheromone systems.