FAUNA AND ECOLOGY OF EPIGEIC SPIDERS (ARANEAE) IN APŠUCIEMS FEN

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The spiders in mires in Latvia were not investigated properly. Fragmentary researches were done in the raised bogs (Spuņģis 2008, Šternbergs 1991). The investigated fen is protected (represent calcareous fens of EU habitat directive Annex I). It is also Natura 2000 site because of specific composition of vegetation, soil structure and hydrological conditions. The complex investigation of biota, including invertebrates and particularly spiders was done in the fen.

Traps were arranged on 60 m long transect. 30 pitfall traps were placed on transect and exposed for 28 days from May 20 to June 17. Braun-Blanquet method was used to describe vegetation cover. Detrended Correspondence analysis, Cluster analysis, Indicator species analysis was used for data analysis, correlation coefficients were calculated and dominance estimated after Engelmann (1978).

Totally 559 adult individuals and 68 spider species were identified. Lycosidae was eudominant spider family after number of specimens, Linyphiidae – after number of species. Lycosidae was eudominant or dominant also in the other investigated habitats (personal observations in dunes, coastal meadows).

The results of investigation showed connection between vegetation cover and composition and spider assemblages. Cluster analysis allowed selecting two clusters. Nine indicator species were connected with the first cluster where vegetation composition excluded Sow grass *Cladium mariscus*. Only two spider species *Pardosa pullata* (Lycosidae) and *Drassyllus pusillus* (Gnaphosidae) from the second cluster were connected with territories with Sow grass. Significant correlations ($p>0.01$) between number of spiders and plants were stated: with Sowgrass ($r=-0.489$), with Devils-bit Scabious *Succisa pratensis* ($r=0.489$), with *Scriptus tabernaemontani* ($r=0.550$), with *Potentilla errecta* ($r=0.575$) and moss *Drapenodadus revolvens* ($r=0.466$).Vegetation was not the single factor that influenced spider assemblages. Food supply (not measured) also could play significant role.

New species *Ozyptila gertschi* Kurata, 1944 (Thomisidae) (Cera 2009) was found in the Apšuciems fen.

References

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