CHANGES IN THE COMMUNITIES OF EPIGEIC BEETLES (COLEOPTERA) DEPENDING ON VEGETATION IN CALCAREOUS FENS OF THE MARITIME LOWLAND

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Calcareous fens in the European Union are with high level of protection priority. Ground beetles and rove beetles are epigeic beetles, which can be used as bioindicators, which is why needed information about these beetle families in calcareous fens is.

The aim of the work is to determine epigeic beetle communities' changes depending on vegetation in calcareous fens of the Maritime lowland. The research was done in calcareous fens of the Maritime lowland, collecting epigeic beetles with pitfall traps and determining the projective cover of plant species.

In total 2085 beetles and 122 species from 18 families were collected. In calcareous fens dominant were Carabidae and Staphylinidae. *Agonum viduum, Agonum ericeti, Agonum thoreyi, Agonum livens, Chlaenius quadrisulcatus, Oodes gracilis, Panagaeus cruxmajor, Pterostichus anthracinus, Pterostichus diligens, Pterostichus minor* are characteristic ground beetle species for calcareous fens, but *Paederus riparius, Staphylinus erythropterus, Lathrobium terminatum* characteristic rove beetle species.

For each studied fen there are different beetle species communities. Total composition of beetle species and number of individuals represent each calcareous fen. In fen of Platene, comparing with other fens, founded high number of beetle species.

Plant species diversity had insignificant impact on number of beetle species, however, there was tendency when number of plant species increases, then increases number of beetle species. Vegetation has indirect impact on the communities of epigeic beetles, because from all species that were collected, predators dominated.