VEGETATION DIVERSITY IN BLACK ALDER WOODLAND KEY HABITATS

IEGULDĪJUMS TAVĀ NĀKOTNĒ





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The aim of the study

To estimate the vegetation diversity on black alder WKH's in southern Latvia



Distribution map



Black alder forest stands – 2,5% (Latvian State forests)

 Alder swamp woods are wet, adapted to water level fluctuation, mosaic cover of vegetation and hummocks

 Black alder swamps has substantially decreased in Latvia. The main reason was start of extensive forest drainage







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Materials & Methods

• 4 study sites;

• The history of study area;

• Edge effect assessment;



- Braun Blanquet method, Ellenberg indicator values;
- Data analysis: One-way analysis of Variance (R version 3.0.0), Cluster analysis (PC-ord 5);

Results

• A total of 104 species were recorded;

 In the moss layer – 25, herb layer – 77, shrub layer – 10 and tree layer – 4 species were established;



Results



Results



Cluster analysis



Conclusions

- The results of present study suggest that vegetation in black alder swamp woods are affected by forest drainage and felling activities nearby, therefore the buffer zone creation around these woodland key habitat type is essential required to provide the specific microclimate into it.
- Althought, when evaluating edge effect on vegetation there are many other aspects to take into account. For instance, as important aspects could be habitat patch size, the occurrence, richness of indicator species and rare and endangared species and site history.

Acknowledgments

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Thank for your attention!



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