

Fluxes of Biogenic Substances in Precipitation and Throughfall in Woodland Ecosystems of Słowiński National Park – Agnieszka Parzych, Aleksander Astel, Jan Trojanowski

Summary

In the study the dynamics of concentration level changes was analyzed in the period between 2002 and 2005 concerning N-NH_4^+ , N-NO_3^- , P-PO_4^{3-} and pH in bulk precipitation and throughfall in two different woodland ecosystems of Słowiński National Park. Both woodland ecosystems were influenced by the same weather conditions. On the basis of obtained results it was found that chemical variability of throughfall waters is mainly determined by both species composition and the kind of forest stand, as well as its trophic conditions. Comparing to bulk precipitation (collected at an open area) throughfall samples collected at the *Vaccinio uliginosi* – *Betuletum pubescentis* ecosystem were poor in N-NH_4^+ and P-PO_4^{3-} , enriched in N-NO_3^- and slightly more acidic (by 3.9%), while at the *Empetro nigri* – *Pinetum* ecosystem were poor in N-NH_4^+ , enriched in P-PO_4^{3-} and N-NO_3^- and more acidic (by 4.4%).