

VARIABILITY OF NITROGEN AND PHOSPHORUS CONCENTRATION AND THE
NET PRIMARY PRODUCTION OF *VACCINIUM VITIS-IDAEA* L. AND *VACCINIUM*
MYRTILLUS L. IN CHOSEN WOODLAND ECOSYSTEMS OF THE SŁOWIŃSKI
NATIONAL PARK

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Abstract: *Vaccinio uliginosi-Betuletum pubescentis* and *Empetro nigri-Pinetum* are characteristic of their diverse frequency and density *Vaccinium vitis-idaea* L. and *Vaccinium myrtillus* L. on the forest floor. The examined berry under-shrubs show differences in content of nitrogen and phosphorous compounds and the volume of the over-ground net primary production. An average content of the examined biogenes in leaves of the bilberry (*Vaccinium myrtillus*) within the area of the Słowiński National Park was 1.311% N, 0.102% P and 40.8% C in *Vaccinio uliginosi-Betuletum pubescentis* and 1.159% N, 0.095% P and 38.7% C in *Empetro nigri-Pinetum*. Red bilberry leaves are thought to contain nitrogen, phosphorus and carbon in such proportions: 1.083% N, 0.097% P and 44.70% C in *Vaccinio uliginosi-Betuletum pubescentis* and 0.868% N, 0.085% P and 44.70% C in *Empetro nigri-Pinetum*. The variable concentration of nitrogen and phosphorus in sprouts of the examined species of berries shows a positive correlation of those elements. The over-ground net primary production of *Vaccinium myrtillus* is 534.905 kg/ha in *Vaccinio uliginosi-Betuletum pubescentis* and 216.594 kg/ha within the coastal crowberry coniferous forest. *Vaccinium vitis-idaea* in *Empetro nigri-Pinetum* reaches 155.283 kg/ha of over-ground net primary production and only 113.220 kg/ha in *Vaccinio uliginosi-Betuletum pubescentis*.