

The dynamics of the allocation of selected micronutrients in the one-year seedlings of Scots pine (*Pinus sylvestris* L.) and Norway spruce (*Picea abies* (L.) H. Karst) during their growth in the nursery container

Dynamika alokacji wybranych mikroelementów w jednorocznych sadzonkach sosny zwyczajnej (*Pinus sylvestris* L.) i świerka pospolitego (*Picea abies* (L.) H. Karst) w czasie ich wzrostu w szkółce kontenerowej

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The production of high quality seedlings requires the usage of fertilization in plant nurseries. In addition to irrigation, in modern container nurseries, fertilization is a fully controlled and automated process during plant production. In a container nursery, liquid fertilizers supplied with sprinkler irrigation are prevalently used because of the small volume of lump peat substrate, from which the solid fertilizer could be quickly washed out.

In 2014, from May to October in two-week intervals (13 times), one-year seedlings of Scots pine and Norway spruce were taken for chemical analysis. The gathered material was separated into individual parts of seedlings. In the shoots, needles and roots of the seedlings, the content of boron, copper, iron, manganese, molybdenum, sodium, and zinc were examined by using an ICP-OES emission spectrophotometer. The aim of the study was to investigate the distribution and difference in the allocation of the micronutrients in different parts (root, shoot, needle) of the plants between Scots pine and Norway spruce. Allocation of the considered elements varied depending on the species and the part of the analyzed seedlings.