объяснить разницей ландшафтов и уменьшением эффекта экранирования кроной лиственных деревьев на крутом склоне.

Список литературы

1. Capozzi F. et al. // Environmental Pollution. 2016. V. 214. P. 362-373.

Study of the dynamics of the accumulation of chemical elements by moss-transplants

E.A. Kolotova, N.S. Rogova, N.K. Ryzhakova

Tomsk Polytechnic University, Tomsk, 634030, Lenin 30

Fentazi.Drakon@mail.ru

"Active" monitoring with the help of bioindicators is an actual area of research. A review of the literature on active biomonitoring shows that there is no single methodology for conducting such studies, including the choice of exposure time [1].

In this paper, the dynamics of the accumulation of chemical elements by the epiphytic moss-transplant Pylaisia polyantha is considered depending on the time. For the transplantation of moss into two investigated areas, frameworks were made. Moss samples were collected every month from July to October. The content of the chemical elements was determined by neutron activation analysis on a TPU research reactor.

The tendency to increase in concentrations with increasing exposure time is traced for elements Sm, Ce, Cr, Yb, Hf, Fe, Zn, Sc, La. This dependence can be observed only for mosses, which were located on a steep slope near the road. On another site, where mosses were transplanted to trees located on a mild slope, a number of elements whose concentrations increase with time are much smaller. Only for Ce and Hf is the dynamics in accumulation observed.

For Ba, Sr, and Ca, the concentration decreases with time, which is probably due to the washout of these elements.

The difference in the number of elements in the different areas, which can be traced in the dynamics of accumulation over time can be explained by the difference of landscapes and reducing the effect of shielding the crown of deciduous trees on a steep slope.

References

1. Capozzi F. et al. // Environmental Pollution. 2016. V. 214. P. 362-373.