

## VARIATIONS OF PHOSPHORUS, SULPHUR AND NITROGEN IN LICHENS IN THE FORMER MANUFACTURED AREAS

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**Abstract.** The aim of this research was to evaluate the pollution level of phosphorus, sulphur and nitrogen in the former manufactured areas (former drainage pipe factory and landfill site) and compare with the forest area using lichens as a bioindicators. During research also was an estimated correlation between these element content in lichens and soil. For this research were chosen three sampling sites in Latvia: the former Kuprava drainage pipe factory, the former landfill site and Sita forest with the distance between them 10-25 km. The research results show that in the former drainage pipe factory area and landfill site are the observable elevated levels of phosphorus, sulphur and nitrogen content in comparison with Sita forest. In the case of phosphorus and nitrogen are observable a positive correlation between soil and lichen samples.

**Keywords:** lichens, soil, phosphorus, sulphur, nitrogen.