

**PIGMENT COMPLEX OF LEAVES OF *BETULA PENDULA*
(BETULACEAE) AND *POPULUS TREMULA* (SALICACEAE) GROWING
IN SPRUCE FORESTS OF THE KOMI REPUBLIC**

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SUMMARY

The purpose of the study was to analyze the photosynthetic pigment content and proportion in leaves of *Betula pendula* Roth and *Populus tremula* L. which grew in spruce forests. The research was carried out in the northern and middle taiga subzone in the European North-East. The pigment content in leaves was determined by spectrophotometry. The leaves of *B. pendula* and *P. tremula* accumulated 1.47–6.24 and 1.78–6.07 mg/g of chlorophylls, and 0.72–1.65 and 0.81–1.50 mg/g dry weight of carotenoids correspondingly. Leaves in the basal part of tree crown of *P. tremula* accumulated large amounts of green pigments and chlorophyll located in the light-harvesting complex of photosystems. This was an adaptive reaction of plants to low light conditions in the canopy of coniferous forests. Content of photosynthetic pigments and ratios of their components in leaves of *B. pendula* in forest phytocoenoses of the European North-East did not vary in relation to latitude.

Key words: *Betula pendula*, *Populus tremula*, leaf, chlorophyll, carotenoids.