

**THE PHENOLOGY, PHYSIOLOGICAL  
AND BIOCHEMICAL CHARACTERISTICS OF *BETULA PENDULA*  
(BETULACEAE) IN NABEREZHNYE CHELNY  
(TATARSTAN REPUBLIC)**

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**SUMMARY**

The data on phenological phases, the content of ascorbic acid, tannins and activity of peroxidase in *Betula pendula* Roth under the conditions of Naberezhnye Chelny city were analyzed. Specific reaction of this species on a complex of negative conditions in anthropogenous environment was defined. The extension of vegetative period of individuals growing in sanitary protection zones (SPZ) and near the highways compared to zone of conditional control was revealed. The content of tannins in *B. pendula* leaves increased during vegetation course reaching the greatest values in August. Intensification of technogenic impact leads to increase of ascorbic acid content in leaves in individuals from plantations in SPZ of the industrial enterprises and those near highways at the initial stages of active vegetation. The peroxidase activity in leaves increased during entire period of active vegetation under technogenic impact.

**Key words:** *Betula pendula*, urban environment, phenological supervision, ascorbic acid, tannins, activity of peroxidase.