

THE EFFECT OF TOXIC ELEMENTS ON THE MICROANATOMY OF THE LEAVES OF THE *SALIX ALBA* L.

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We started an experiment with plastic growing pots on soil contaminated with toxic elements on a plant species with woody stem (white willow) tolerant to stress factors. Our aim was to examine the effect of toxic elements on the microanatomical parameters of the leaves of the tested plant. We examined the following parameters: stomatic density, stoma width and length, leaf thickness, adaxial and abaxial epidermis thickness, mesophyll thickness, palisad and spongy parenchyma thickness, main vein width and length. The experiment had the following results: with the presence of toxic elements, the thickness of the leaf increased, within this, there was a significant growth in the thickness of the spongy parenchyma. The width and the length of the main vein decreased, so did the extent of the xylem cavities. The extent of the collenchymal stock of the leaf venation increased. The number of stomas increased, but the size of the stomas decreased. As a result of toxic element contamination, the number of Ca-oxalate crystals increased within the leaf mesophyll.