

**WHEAT PLANTS ION UPTAKE FROM SUBSTRATE UNDER THE INFLUENCE OF
ALLELOPATICALLY ACTIVE COMPLEX OF CHUFA AND RADISH METABOLITES**

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The study addresses the effect of a complex of exogenous and endogenous metabolites of chufa and radish grown on a soil-like substrate (SLS) on the growth of sprouts and morphological parameters of wheat plants, the intensity of electrolytes leakage, partially characterizing the stability of root cell membranes, as well as the intensity of potassium and nitrate ions uptake by the wheat root system. Water extracts of chufa inhibited wheat seed germination and growth of sprouts, and also caused a significant decrease in the wheat yield and morphological parameters of plants at the end of the growing season. A decrease in the intensity of nitrate ions uptake both from the irrigation solution and the model nutrient solution was also observed. The intensity of the electrolytes leakage from root tissues was higher after exposure to aqueous extracts of chufa compared to the control. It was found that the aqueous extract from the tissues of radish plants did not have such a significant effect on wheat plants as the aqueous extract from the tissues of chufa plants.

Key words: allelopathy, ions uptake, wheat, chufa, radish.

