Efectul galatului de potasiu asupra răspunsului plantelor de Phaseolus vulgaris l. la deficitul de apă

Anastasia STEFÎRŢĂ, Lilia BRÂNZĂ - Institutul Fiziologia Plantelor al Academiei de Ştiinţe a Republicii Moldova, Chişinău

In the field experiences the possibility of exogene regulation of water homeostasis and enhancement of Phaseolus vulgaris L. plants resistance was verified through seed treatment before sowing and leaf surface with aquatic solution of potasium sulphate and galate. The plant treatment with solution of K+ galate in combination with polyvinilpirolidon (PVP) conditioned a real increase in plant.s leaves of water content and the diminution of saturation deficit. The experimental withering of plants caused a little tissue dehydratation in variants with K+ compound administration. The possibility to regulate the water absorption by thr roots and it.s consumption trough transpiration allow the water exchange optimization through the treatment of aerial part of plant in reduced humidity conditions. The maximum effect on bean yield was established at plants treated with K+ galate in combination with PVP. The treated plants are characterized by well-balanced water exchange and increased resistance to dehydratation. The experimental results are interpreted as argument of idea about turgor and antistress effect of K+ galate.