



Impact of rhizobacteria on some enzymatic processes in maize plants (zea mays l.) in vitro

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The influence of several rhizobacterial strains on the growth of maize plants (hybrid Oana) was examined for 47 days. Caryopses inoculated with a microbial suspension (test preparation) and sterile caryopses (control preparation) were transferred in vegetation containers under controlled conditions. At two stages (at 25 and 47 days, respectively), the catalase and peroxidase activities were determined. The 25 day old control plants exhibited a more intense catalase and peroxidase activity (i.e. 5.085 CU/g/min, respectively 109.071 PU/g/min) than the test plants (4.45 CU/g/min, respectively 100.481 PU/g/min). At 47 days the situation reversed, that is the enzymatic activities in the test plants were higher (2.406 CU/g/min, respectively 79.611 PU/g/min) than in the control ones (1.958 CU/g/min, respectively 76.24 PU/g/min).