

Abstract

The world population is growing by the day, and an area of favorable agricultural soils is not enough for food. According to the nutritional value of wheat and its role in the food supply would have Soils were poor and saline waters for agriculture to solve the problem of food shortages in the world. The use of saline water for irrigation is inevitable in these circumstances. There are many ways to solve the salinity problem. The particular attention to the use of growth promoting bacteria to mitigate the effects of salinity that produce various hormones to increase food intake and also using jasmonic acid and salicylic acid biochemical pathway involved in stress response genes in plant controls there. The effect of *Bacillus* as a type of bacteria PGPR is a factorial experiment in a completely randomized design in 3 replications University of Shiraz and the two levels of salinity (0 and 200 Mm) and the use of bacteria on inoculated and non-inoculated plants was used. Found that bacteria under salt stress increased proline and catalase activity were susceptible and resisting in both cultivars. But POD was not shown increase in resistant cultivars under stress. It also increased the total protein in the susceptible cultivar. Bactericidal effect was not significant on seed weight, seed weight, but because of the growth parameters that are difficult to change. The slightest change in the plan was that it would be effective and, ultimately, the use of this bacterium causes changes in the pattern of susceptible and resistant band was under stress and non-stress.

Keywords: Salinity, *Bacillus amyloliquefaciens*, protein, SDS_PAGE



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The effect on the bacteria *Bacillus amyloliquefaciens* gene and protein expression patterns of two wheat varieties Shiraz and cimolina in salinity stress

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