



Alleviation of water Stress on Wheat by Benzyl adenine

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Abstract : Two field experiments were carried out to study alleviation of skipping an irrigation at certain development stage of growth by foliar spraying with Benzyl adenine(BA).The results indicate that drought stress was imposed by missing an irrigation at tillering, heading or milk-ripe stage .Benzyl adenine was foliarly sprayed at 0.0,75nd150mg/l. Water stress significantly decreased the growth, the content of chl. a, chl. b and carotenoids per blades, total carbohydrate per dry grains, as well as, yield and its components except crop index and harvest index . The most sensitive growth stage to drought stress of wheat was the tillering stage, followed by heading stage and milk-ripe stage respectively. On the contrary, drought stress caused significant increment in protein percentages per dry grains and crop index and harvest index compared with normal irrigation. Moreover, foliar application with BA alleviated the adverse effects of water stress on wheat plant, where growth parameters, photosynthetic pigments content per wheat blades, protein%, carbohydrate percentage per dry grains and yield and its components was increased by BA treatment. The effect of BA was more pronounced at 150 mg/l BA. The data were discussed in terms of the interaction between water stress and BA concentrations on wheat plants.

Key Words: Wheat, Water stress , BA.

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