

## Adenine and Guanine application and its Effect on Salinity tolerant of Wheat plants and Pest infestations

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**Abstract:** For study the response of wheat plants to the nitrogen basics treatments and salinity, a pot experiment was conducted in the greenhouse of the National Research Center in the winter season of the 2010 / 2011. Wheat plants irrigated by 4000 ppm diluted seawater and tap water as a control and sprayed by 150 ppm of guanine and adenine. The control plants were sprayed by the same quantity of distilled water. A negative relationship could be shown between vegetative growth characters i.e. plant height, number of green leaves and area of green leaves. Moreover, stem, leaves, spikes and whole plant dry weight were similarly responded. Irrigation wheat plants with salt solution (4000 ppm) decreased these characters compared to that of plants irrigated with fresh water, respectively. Growth, fresh and dry weight of plants markedly decreased with salinity. The results showed that the aphids infections were significantly decreased in Ad and Gu treatments in wheat pots.

**Keywords:** Wheat (*Triticum aestivum* L)-Salinity-Adenine-Guanine- Growth-Chlorophyll-Carotenoids *Rhopalosiphum padi*, *Rhopalosiphum maidi*, *Sitobion avenae* aphids.

Hussein M.M.*et al* /Int.J. ChemTech Res. 2015,8(12),pp 121-129.

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