

Effect of Fungus *Trichoderma harzianum* and Seed Magnetization on Some Growth Properties of Wheat Plant (*Triticum aestivum*).

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ABSTRACT

To study the effect of fungus *Trichoderma harzianum* and magnetization seeds distressed 800 Kaus before planting on growth of wheat plant (*Triticum aestivum*), field experiment was conducted in the College of Agriculture – Diyala University of the agricultural season 2010 – 2011. Randomization Complete Block Design (RCBD) was used with four treatments and three replicates per treatment. The results showed that the fungus and magnetization (800 Gs) treatment significantly increased ($P < 0.05$) the shoot system fresh and dry weight of wheat plants with spike, plant height, length of spike, dry weight of the root system and the number of tillers 17.303 g, 7.571 g, 72.666 cm, 15.650 cm, 1.351 g and 9.833 tiller.m⁻² which corresponds to 135.799%, 55.749%, 62.382%, 59.433 %, 8.608% and 32.878% increase relative respectively, followed by magnetization treatment which significantly increased ($P < 0.05$) the shoot fresh weight of plant with spike, plant height and number of tillers 12.256 g, 62.833 cm and 9.066 tiller.m⁻² which corresponds to 67.143%, 40.408% and 22.513% increase relative respectively, while the magnetization treatment revealed no any significant differences in the shoot dry weight of plant with spike, the length of the spike and the dry weight of the total root. Fungus treatment showed significant differences in plant height and dry weight of the root system (55.583 cm and 0.885 g) which corresponds to 24.207% and 9.459% increased relative respectively, while fungus treatment with spike showed no significant differences in the shoot system fresh and dry weight of wheat plants with spikes, and the length of the spike (10.580 gm, 5.670 gm and 11.533 cm) compared to the comparison treatment.

Key words: *T. harzianum* fungus, Magnetization, Wheat plant and Growth Characterization.