EFFECT OF SOME MICRONUTRIENTS WITH UREA AS FOLIAR APPLICATION ON YIELD AND GRAIN NUTRIENT CONTENT OF WHEAT (Triticum aestivum L)

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ABSTRACT

The present investigation was carried out during 1990/91 and 1991/92 seasons on clay soil in the Research and Experiment Center, Faculty of Agriculture at Moshtohor to study the effect of foliar application of urea alone or in combination with Zn, Mn and Fe on wheat yield attributes and nutrient content of wheat grains.

The results indicated that: plant height, number of spikes/m², spike length, number of spikelets/spike, 1000-grain weight, grain and straw yields/feddan as well as protein percentage and protein yield per feddan were significantly increased by spraying urea alone or with the different of micronutrients at booting stage as compared the control treatment. On the other hand, foliar application treatments had no significant effect on number of grains/spike, spike weight and grain weights/spike. The highest grain and straw yields/fed. were obtained by spraying urea with Zn + Mn + Fe, but without significant differences with the urea alone treatment. Foliar application of urea alone or with Zn or with Fe gave the maximum protein content and protein yield/fed. N, Zn, Mn, Fe uptake by wheat grains were significantly increased by foliar application of urea or Zn or Mn or Fe or both of them as compared with the control treatment.