Interaction effects amang some nutritive elements of yiled and chemical compostian of canoplant

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Three field experiments were conducted at Ismailia Agricultural Research station, to study the effect of nitrogen (0, 30, 45 and 60 kg/fed.), sulphur (0, 250 and 500 kg/fed.), phosphorus (0, 15, 30 and 45kg/fed), Boron (0, 5 and 1 Oppm) and Zinc as ZnSO4.7H20 (0, 0.25, 0.5 %) and their interactions on oil of canola seeds (Brassica napus L). Designed factorials of complete randomized blocks with three replicates were used. Pactol cultivars of canola being used in all experiments were planting on 24 November 2004.The obtained data were analyzed statistically and the obtained results could be summarized as follows:5.1. Effect of nitrogen fertilizer levels on canola plant: 5.1.1. Growth parameters1-Plant height at both 90 days after sowing significantly and progressively increased with increasing nitrogen level up to 60 kg/fed.2-Dry weight at 90 days after sowing significantly increased as nitrogen level increased up to 60 kg/fed.5.1.2. Yield and yield components1- Number of branches per plant at 90 days after sowing increased with increasing nitrogen rate up to 60 kg/fed.Summary and Conclusion -75-2-Increasing nitrogen fertilizer rate increased the number of pods per plant and number of branches per plant and the 1000- seed weight.3-Increasing nitrogen fertilizer rate increased the number of pods per plant, number of branches per plant and the 1000-seed weight. Increasing the applied nitrogen rate up to 60 kg/fed4-Significantly increased both seed and straw yield of canola plant.5.1.3. Seed quality:1-Seed oil percentage decreased as a result of increasing nitrogen fertilization levels.2-Seed protein percentage significantly increased due to increasing nitrogen level.3-Increasing nitrogen level up to 60 kg/fed significantly increased protein yield.5.1.4. Canola content and uptake of N, P and. K:1- The N fertilization progressively and significantly increased N and. K content in canola plant tissue at 90 days after sowing as well as in seeds and straw at harvesting however, the nitrogen application tended to decrease P content in plant tissue as well as seeds and straw.