EFFECT OF SOAKING SEEDS IN ZINC SULPHATE SOLUTION ON VEGETATIVE GROWTH , FLOWERING AND YIELD , OF TWO

CULTIVARS OF PEA (Pisum sativum L.).

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ABSTRACT

This study was conducted at vegetable farm / Research of Horticulture and forestry / Alrashidea /Mosul /Iraq .The objective of this research was to study the effect of soaking of Pisum seeds for two cultivars Joff and Anward in zinc sulphate solution (0.25, 0.50, and 1.0) % in addition to the control treatment (soaking the seed in tap-water for 12 hours), for both two seasons 2000/2001 and 2001/2002.

The results showed that there were significant increasing in the rate of germination ,plant length ,the number of branch per plant, and reduction in the days for flowering as a result for soaking the seeds in the solution of zinc sulphate .Also there was significant increasing in pods characteristics (length ,weight and the number of pods /plant) and then increasing in the yield /plant and production for unit area ,the highest production for unit area was (2.64 ,2.91) ton /donum for both first and second seasons respectively as a result for the interaction treatment of soaking seed in 1.00% solution of zinc sulphate, and Joff cultivar gave highest production (2.28 ,2.32) ton/donum for both two seasons than cultivar Anward .