

**RESPONSE OF SEEDS OF TWO COTTON VARIETIES *Gossypium hirsutum* L.  
TO GERMINATE WITH MAGNETIZED WATER.****H.M. AL – Bayaty\*****M. M. Abid\*\***\*Professor - Tech agric. Coll. - Mosul . [hmmood@yahoo.com](mailto:hmmood@yahoo.com)\*\* ass. Prof.- Tech . Inst. / Mosul. [muzahimabed@yahoo.com](mailto:muzahimabed@yahoo.com)**ABSTRACT**

Two laboratory factorial experiments ( 2 × 4 ) were conducted by using randomized complete block design with four replication in order to see the effects of magnetized ( 1000 , 2000 , and 3000 Gouse ) and normal water on the germination percentage , speed of germination and root length of two varieties of cotton ( Coker 310 and Lashata ) .

The two experiment was conducted separated at each temperament ( 15 and 20 ) C°. Statistical analysis results showed that there highly significant differences in the percentage , seed of germination of seed and root length where the percentage of germination of seed as average over the two varieties using magnetized water dose ( 3000 Gouse ) reached 58% and 89.3% at 15C° and 20C° respectively , while the ratio was 33.8% and 73.1% using normal water at the same above temperatures . The varieties did not differ significantly in speed of germination and root length except the highly significant differences for root length at 15C° . The overlap between the varieties and the type of water did not reach the level of significant in the statistical tests of the two experiments. The Coker 310 varieties showed more response for germination and root length in the two experiments. The speed of germination and root length increases with using magnetized water treatments .

**Key words :** cotton seeds ، germination ، magnetic water