EFFECT OF IRRIGATION INTERVALS FLOWERING AND NITROGEN FERTILIZER LEVELS ON GROWTH CHARACTERS AND YIELD IN COTTON(*Gossypium hirsutum* L.)

Rajaa M . Hameed* **Mohamed A . Abod***
*** Hort. Dept. - College of Agriculture - Diyala University.**

ABSTRACT

Field experiment was carried out in Diyala during growing season 2008 , to investigate the effect of three irrigation date (17،14،21،Day) after flowering and two Levels of Nitrogen (100،200 kgN .h-1) on growth characters and yield and yield component of cotton (var .lashata) . The experimental design was randomized complete block design in factorial experiment with three replications . The results were as follows:

1.The irrigation date at21 day gave higher percentage of plant height (43.55%) number of nodes (44.85 %) ,leaf area (55.44 %) ,leaf number (42.86 %) as compared with irrigation date at 7 days , an gave length of inter nodes (5.47 cm) , number of sympodia branch per plant (27.78) compared of irrigation date 7 days (5.40 cm ،13.94 branch) respectively, and gave higher percentage of cotton yield (68.20%) as compound of irrigation date 7 days .

2. High level of nitrogen with 200 kgN .h-¹ .gave higher percentage of plant height(11.38%),number of nodes (18.56%),length of inter nodes(6.56%), leaf area (62.35%), leaf number (38.06%), number of sympodia branch per plant (69.08%), and cotton yield (84.39 %) as compared of application (100kgN . h-¹).

3.Significant interaction were observed between irrigation date at 21 and Nitrogen applied at (200 kgN .h-1) in all studied characters .