

A study on the optimal agronomic practices for late planted egyptian cotton

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Two field experiments were carried out and repeated during 1989 and 1990 seasons at Bahtim Agricultural Research Station. Agricultural Research. Center, located in Kalubia Governorate in South Delta. The first experiment: aimed to investigate the effects of seeding rate, thinning date and their interaction on growth, yield and its components, earliness and fiber properties of the late planted cotton. The experiment included 12 treatments which were the combination of 3 seeding rates and 4 thinning dates. Seeding rates were 5, 10 and 15 seeds per hill. These numbers indicate the need of about 16.7, 33.3 and 50 kg seed/fed., respectively. Thinning dates were 20, 25, 30 and 35 days from planting. Planting date was 1st of May in the first season and 25th of April in the second one. A split plot design was used with 4 replications. The main plots were devoted to number of seeds per hill and sub-plots to thinning date. The sub-plot area was 12.6 m² and cotton was planted on ridges 60 cm apart and seeds were placed in hills 20 cm apart. The second experiment: aimed to investigate the effects of distance between hills, nitrogen fertilization level and their interaction on growth, earliness and fiber properties of late planted cotton. It included 16 treatments which were the combination of four distances between hills (15, 20, 25 and 30 cm or 93333, 70000, 56000 and 46666 plants/fed., respectively) and four nitrogen levels (20, 40, 60 and 80 kg N/fed.) A split plot design was used with 4 replications. The main plots devoted to distance between hills and sub-plots to nitrogen levels. The sub-plot area was 12.6 m². Ridges were 60 cm apart and 4.2 m in length. The new cotton cultivar Giza 83 (Giza 67 X Giza 72 hybrid) was used in both experiments. Planting date was similar to that of the first experiment. The soil of the experiments was clay loam in texture with a pH value of 8.1 and has 0.85% organic matter content and 0.095% total nitrogen. The normal cultural practices for growing cotton were followed.