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INFLUENCE OF HIGH PLANT DENSITIES ON YILED, ROW QUALITY AND EARLINESS IN ULTRA-NARROW COTTON (*gossypium hirsutum* L.) IN THE SAN JOAQUIN VALLEY OF CALIFORNIA

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Abstract

Experiments on the effect of plant population densities and row spacing on growth parameters and yields of *Gossypium hirsutum* L. were conducted in 2000 and 2001. Plant densities ranged from 70,000 to 150,000 plants/acre in 38 cm rows and 35,000 to 75,000 plants/acre in 76 cm rows. Node counts were reduced in 38 cm row spacing and higher plant population densities. No differences were found in percentage stem, bolls, or vegetative/reproductive biomass. The highest percentage of first position bolls was retained in 38 cm row spacing treatments. The highest percentage of bolls set on fruiting branches 1 through 10 was in 38 cm row spacing treatments. As plant population density increased and row spacing decreased the number of bolls/acre increased and boll size decreased. No earliness in crop maturity was detected. No significant differences were found in length, strength, or micronaire. The highest yield was obtained in the 38 cm row spacing with 120,000 plants/A.