THE EFFECTS OF COTTON BRANCH REMOVAL ON YIELD PARAMETERS ACROSS DIFFERING IRRIGATION REGIMES

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Abstract

A study was conducted at the Texas A&M AgriLife Research farm located near College Station, Texas, during the 2012 and 2013 growing seasons. The objective of this study was to examine the impact of branch removal on yield of cotton grown under differing irrigation regimes: irrigated and dryland. Irrigation regimes were utilized solely for creating different crop canopies. Branch removal occurred at three specific growth stages (first flower, peak bloom, and first cracked boll) and consisted of 0, 25, 50, 75, and 100 % branch removal, respectively, at each of the above specified growth stages. At all of the specified growth stages and branch removal treatments, irrigation increased yield and compensatory growth. Branch removal at first flower resulted in the highest compensatory growth for lint yield for irrigation and dryland at the 75 and 100% branch removal. Peak bloom and first cracked boll lint yield significantly decreased at the 75 and 100% branch removal for both irrigation and dryland.