

**THE EFFECT OF EPISODIC DROUGHT STRESS ON YIELD AND FIBER QUALITY OF COTTON  
CULTIVARS IN WEST TEXAS**

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**Abstract**

Cotton irrigation is a very important issue in West Texas. The objective of this work was to evaluate cotton yield and fiber quality in response to irrigation suspension periods. Field experiments were conducted at the Texas Tech New Deal Research farms during the 2010 and 2011 seasons. There were differences in yield and fiber quality parameters in response to the cultivar selection and also to episodic drought period. In 2010 cultivars DP0935 and FM1880 showed highest yields when subject to episodic drought periods and DP0912, DP0924, DP0935 and FM1880 presented highest yields in the fully irrigation regime. In 2011 DP0912 and DP0935 had the highest yields in the regime irrigate throughout all the season. The early flowering drought stress treatment resulted in the most yield reduction of any treatment. These results can be important in supporting management practices for irrigated cotton crops.