Evaluation of Tamrun OL11 under Varying Field Conditions.

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Cultivar selection is one of the most economically important decisions made by peanut producers. The development of genotypes capable of maintaining yield and grade under a wide range of conditions is important so that profitability can be maximized. Issues such as declining irrigation capacity and diseases limit production in parts of Texas. Efforts of the Texas AgriLIFE Peanut Breeding Program are to develop genotypes with improved yield potential, grades, and disease resistance. Cultivar trials were conducted in 2009, 2010, and 2011 to evaluate the performance of the cultivar Tamrun OL11, formerly breeding line TX-55308. Trials were established in several different production areas under various field conditions and included the commercial standards Flavor Runner 458 and Tamrun OL07. Yields were similar for Flavor Runner 458 and Tamrun OL07 at 4052 and 4049 lb/A, respectively; whereas, Tamrun OL11 averaged 4326 lb/A. Grades for Tamrun OL11 were 1.3 and 2.4% higher than Flavor Runner 458 and Tamrun OL07, respectively. When grown under three irrigation levels, yields of Tamrun OL11 increased 645 lb/A when comparing the base irrigation treatment to the low irrigation treatment (base - 33%). The addition of the high irrigation treatment (base + 33%) resulted in a 400 lb/A increase over the base irrigation treatment. In additional field studies, Tamrun OL11 performed equal to or better than Flavor Runner 458 and Tamrun OL07 under varying irrigation levels. When comparing cultivars in fields with a severe history of Sclerotinia blight (caused by Sclerotinia minor) yield increases of 1107 and 1990 lb/A were observed for Tamrun OL11 over Tamrun OL07 and Flavor Runner 458, respectively. Results from these studies clearly illustrate the high yield potential and superior grades of Tamrun OL11.