

**Performance of runner peanut cultivars in fields with a history of Verticillium wilt in  
Gaines County, TX, 2008**

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**MATERIALS AND METHODS:**

Plot size:	2-rows by 50 feet, four to five replications
Cultivars:	Flavorrunner 458, Tamrun OL02, Tamrun OL07, Tamnut OL06, ACI-48, Florida-07, and McCloud
Locations:	Rowland Doctor Field (Trial 1), Jackson East Field (Trial 2), and Jackson West Field (Trial 3)
Planted:	29-Arp to 6-May
Harvested:	17-Oct to 22-Oct

**RESULTS AND DISCUSSION:**

Verticillium wilt pressure was high during the 2008 growing season. Although disease ratings were above 30% for all cultivars, differences in disease incidence were observed. When combined across the three locations, Verticillium wilt was highest for Tamnut OL06 and ACI-48 and lowest for Florida-07 and Tamrun OL07. Pod yields were lowest for Tamnut OL06, and highest for ACI-48, Tamrun OL07 and Flavorrunner 458. Grades were generally low in all three trials; however, Flavorrunner 458 and ACI-48 grades consistently ranked higher than the other cultivars. Two of the three fields used in this study had a history of Sclerotinia blight. All plots were cover sprayed with two midseason applications of Omega (1.5 pt/A). These results indicate that there are differences in performance of commercially available runner-type peanut cultivars; however, considerable levels of disease can be observed in all of the cultivars evaluate. Additional studies are needed to identify cultivars with improved resistance or tolerance to Verticillium wilt.

**Table 1.** Verticillium wilt incidence, pod yields, and grades for seven runner peanut cultivars in three trials conducted in Gaines County, TX (2008)

Cultivar	Disease incidence (%) <sup>a,b,c</sup>	Pod yield (lb/A) <sup>b,c</sup>	Grade (%smk+ss) <sup>c</sup>		
			Trial 1 <sup>d</sup>	Trial 2 <sup>d</sup>	Trial 3 <sup>d</sup>
1. Flavorranger 458	43.8 ab	3836 a	75.7 ab	73.3 a	72.9
2. Tamrun OL02	38.9 bc	3584 ab	74.0 abc	68.9 b	73.3
3. Tamrun OL07	37.7 c	3858 a	72.4 c	69.3 b	74.0
4. Tamnut OL06	48.0 a	2531 c	71.7 c	65.5 b	71.1
5. ACI-48	45.5 a	3903 a	75.8 a	73.2 a	71.7
6. Florida-07	37.1 c	3551 ab	73.0 abc	65.9 b	73.0
7. McCloud	43.4 ab	3224 b	75.0 abc	69.1 b	72.9
LSD ( $P \leq 0.05$ )	10.0	577	3.3	3.8	ns

<sup>a</sup> Percentage of row feet within a plot exhibiting symptoms of Verticillium wilt prior to digging.

<sup>b</sup> Due to the lack of a significant cultivar  $\times$  trial interaction, data were pooled across trials (n=12).

<sup>c</sup> Means within a column followed by the same letter are not significantly different according to Fisher's protected LSD ( $P=0.05$ ).

<sup>d</sup> Due to a significant cultivar  $\times$  trial interaction, grade data for each trial were analyzed independently (n=4).