

## **Peanut Tolerance to Valor Herbicide Applied Preemergence at Seminole, TX, 2008**

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### **MATERIALS AND METHODS:**

Plot Size:	8 rows by 900 feet, 3 replications
Planting Date:	May 3
Variety:	Flavorranner 458
Application Date:	Preemergence, May 5
Harvest Date:	October 31

### **RESULTS AND DISCUSSION:**

Valor SX was registered for use in peanut in 2001. According to the Valor SX label, weeds controlled include kochia, common lambsquarter, several pigweed species including Palmer amaranth, golden crownbeard, and several annual morningglory species including ivyleaf morningglory. Valor SX may be applied prior to planting or preemergence. Preemergence applications must be made within 48 hours after planting and prior to peanut emergence. Applications made after plants have begun to crack or after they have emerged may result in severe injury. Splashing from heavy rains or cool conditions at or near emergence may also result in injury and even delayed maturity and yield loss. In 2008, several studies were conducted across the High Plains to gain experience and confidence with this relatively new peanut herbicide. At this location in west Gaines County (Mr. Chuck Rowland), Flavorranner 458 was planted on May 3 and Valor at 2 and 3 ounces per acre was applied on May 5 (within 48 hours of planting). An untreated control was used for comparison purposes. A rainfall event occurred on May 6, which delivered approximately 1.0 inches. No difference in peanut stand was observed between the control plots and the Valor-treated plots (Table 1). Visual injury and peanut canopy width was recorded on May 27, Jun 16, Jul 9, and Sep 18. No injury (greater than 1%) nor canopy width differences were noted between the Valor treatments and the non-treated control (Table 1). Peanuts were dug on October 10 and harvested with a small-plot peanut trasher on October 31. Peanut yield from the Valor-treated plots ranged from 5796 to 5938 lb/A and were not different from the non-treated control (5630 lb/A). Weed control observations were not made at this location because the primary focus was crop response. A blanket application of Treflan (in a 16-in band) and Cadre postemergence effectively controlled carelesweed (Palmer amaranth), tumbleweed (Russian thistle), and annual morningglory (iveleaf). Results from this study and several others across the High Plains suggest that Valor is a safe option to peanut producers in our region. Although peanut injury has been observed in other states and in the High Plains when rates exceeded labeled recommendations, we feel that this herbicide is a good option for peanut growers for early-season weed control (4 to 6 weeks of soil residual activity).

Table 1. Peanut injury and yield as affected by Valor applied preemergence in Seminole, TX, 2008<sup>a</sup>.

Treatment	Rate lb ai/A	Prod. oz/A	Timing	Stand	Peanut Injury				Peanut Canopy Width				Yield lb/A
				May 27 Plants/3ft.	May 27 -----%	Jun 16	Jul 9	Sep 18	May 27 -----in.	Jun 16	Jul 9	Sep 18	
Non-treated	---	---	---	9.7	0	0	0	0	4.3	11.5	22.4	33.7	5630
Valor SX	0.064	2	PRE	9.0	0	0	0	0	4.3	11.0	23.3	34.3	5938
Valor SX	0.096	3	PRE	9.7	0	0	0	0	4.2	11.1	22.5	33.0	5796
CV				3.53	0.0	0.0	0.0	0.0	7.79	4.03	2.83	4.02	2.88
pValue				0.1111	1.000	1.000	1.000	1.000	0.7901	0.4081	0.2911	0.5378	0.1915
LSD <sub>(0.10)</sub>				NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

<sup>a</sup>Abbreviations: PRE, preemergence