TITLE:

Control of Russian thistle preplant in peanut

AUTHORS:

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MATERIALS AND METHODS:

Plot Size:	2 rows by 30 feet
Soil Type:	Brownfield loamy fine sand
Application Date:	May 1

RESULTS AND DISCUSSION:

Planting peanuts into areas where Russian thistle has already emerged can cause serious problems because Russian thistle is a very competitive weed, especially when you give it a head start. Rod weeding or the use of preplant herbicides are ways that should provide a clean seedbed at planting. In conservation tillage systems, where rod weeding is not performed, the use of preplant herbicides may be the only option for a clean seedbed. The objective of this study was to determine the activity of a variety of herbicides on Russian thistle preplant in peanut. Gramoxone Max (paraquat) controlled Russian thistle (tumbleweed) 75 to 82% 7 days after treatment (DAT), 95% 18 DAT, and 87 to 90% 27 DAT. This control was more effective than control provided by Roundup WeatherMax, Valor, 2,4-D, and 2,4-DB. This data supports previous work that showed that paraquat has excellent activity on Russian thistle (Table 1).

Table 1. Control of Russian thistle preplant in peanut at the Western Peanut Growers Research Farm near Denver City, TX.

Treatment	Rate (lb ai/A)	Rate (prod./A)	Russian thistle control (%)		
			May 8 (7 DAT)	May 19 (18 DAT)	May 28 (27 DAT)
Non-treated	---	---	0	0	0
Gramoxone Max 3EC + NIS	0.25 + 0.25% v/v	11 oz	75	95	90
Roundup WeatherMax 4.5AS	0.75 ae	21 oz	65	80	72
Valor – 1420 50 WP	0.063	2 oz	20	3	10
Gramoxone Max + NIS	0.375 + 0.25% v/v	16 oz	82	95	87
2,4-D + NIS	0.25 + 0.25% v/v	8 oz	62	73	58
2,4-DB + COC	0.25 + 1 qt	1 pt	55	60	37
$LSD_{(0.05)}$			13	9	21