

Study Name: Evaluation of herbicide efficacy and crop tolerance in lentils.

Study Number: 9916

Objectives: Evaluate several herbicides for efficacy and crop tolerance in lentils. Identify which products merit further evaluation for potential use by lentil growers.

Results: Most of the treatments caused injury to the lentils early in the growing season. Hail in July caused extensive crop damage. Therefore, only one injury rating is reported below. We saw excellent lentil tolerance to Spartan in 1997 and 1998. In 1999, Spartan caused severe crop injury. The injury is likely due to high moisture conditions at planting and time of application. There was a light rain during the PRE applications. We will repeat this study in 2000. The lentils also appear somewhat tolerant to Axiom and Valor. Any product containing flumetsulam (Broadstrike + Treflan, Python) appear to cause too much injury to lentils. We will continue evaluating Spartan and Valor for crop tolerance.

Table. Evaluation of herbicide efficacy and crop tolerance in lentils.

Treatment	Rate	Timing	<u>June 9</u> % Lentil Injury
Untreated			0
Python	1 oz	PRE	28
Spartan	0.125 lb ai	PPI	40
Spartan	0.25 lb ai	PPI	68
Spartan	0.5 lb ai	PPI	90
Spartan	0.125 lb ai	PRE	45
Spartan	0.25 lb ai	PRE	58
Spartan	0.5 lb ai	PRE	85
Axiom	15 oz	PRE	12
Valor	1.5 oz ai	PRE	40
Frontier	32 fl oz	PRE	14
Sonalan	3 pt	PPI	3
Sencor	0.25 lb ai	PRE	2
Broadstrike+Treflan	2 pt	PPI	82
Treflan	2 pt	PPI	3
Prowl	3.6 pt	PPI	12
Sencor + Treflan	0.25 lb ai + 0.5 lb ai	PPI	0
LSD			17
CV			30