

Project No: 13C-3419-7297

Title: Postemergence Canada Thistle Control in Red Raspberry

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Accomplishments: This trial evaluated weed control and crop injury for two herbicides applied at two timings each for postemergence control of Canada thistle (*Cirsium arvense*).

Results:

The trial was conducted in a raspberry field near Burlington, WA (Sakuma Brothers Farm, cooperator) infested with thick patches of Canada thistle (*Cirsium arvense*). Plots were situated on top of these dense patches and herbicides were applied postemergence to Canada thistle plants up to about 8 inches tall (EPOST, May 2) and up to about 3 feet tall (LPOST, May 18). Primocanes at the time of treatment were about 6 and 18 inches tall, respectively, but were sheltered to a large degree by Canada thistle foliage. Weed control was evaluated May 12 and August 7. Canada thistle stems from all plots were removed by hand July 1. Berries were sampled July 20. The experimental design was a randomized complete block with three replicates.

Fruit yield did not differ by herbicide treatments, but fruiting was very spotty due to severe winter injury in the test row. Raspberry response to winter injury was poor enough to warrant removal of the block in late August.

Initial Canada thistle control in August was excellent with Stinger at either timing (98 and 96% control with EPOST and LPOST treatments, respectively). EPOST Casoron granules provided good knockdown, but Canada thistle had largely re-grown by the August evaluation. Sprayable Casoron was not applied at a high enough rate to fairly evaluate it, but continued testing appears to be warranted. As noted above, the raspberry block was destroyed in late August, consequently full evaluation of Canada thistle control from these treatments cannot be accomplished.

Table. Canada thistle control and raspberry yield after treatment with Stinger or Casoron (2006).

Treatment ^b	Timing	Rate	Canada thistle control		Primocane injury		Fruit yield
			5/12/06	8/7/06	5/12/06	8/7/06	
Stinger	EPOST	5.3 fl.oz	%	%	%	%	g/crown
Casoron 4G	EPOST	100 lbs	73	98	12	0	287
Stinger	LPOST	5.3 fl.oz	50	10	12	0	289
Casoron (sprayable)	LPOST	3.2 fl.oz	---	96	---	3	540
Non-treated	---	---	---	43	---	5	239
LSD _{0.05}	---	---	0	0	0	0	823
			9	20	3	ns	ns

^aHerbicides were applied May 2 (EPOST) and May 18 (LPOST).

^bBerries sampled July 20.