

Background:

Volunteer canola in soybean can compete for moisture, nutrients, and light, thereby reducing crop yield, harvesting efficiency, and seed quality. Successful weed management is one of the most vital aspects of profitable soybean production as competition with weeds can cause substantial reductions in soybean yield and quality. However, control of herbicide resistant volunteer canola can be challenging for soybean growers. As soybean acres spread northwest into Saskatchewan, it is likely that a large portion of the soybean acreage in western Canada will be comprised of RR soybean varieties. Glyphosate-resistant volunteer canola presents a major challenge to soybean production in western Canada because many growers that would choose to grow RR soybean also have grown RR canola. Managing volunteer RR canola in soybean crops will be vital to soybeans becoming widely adopted by growers in western Canada. Therefore, the objective of this trial is to provide soybean growers with some solutions to better manage GR canola volunteers in GR soybean crops.

Method:

RR canola was seeded on the trial site on May 20, 2013 to create an artificial volunteer population. A pre seed application of Roundup weathermax®, Heat® and Express® were applied May 22, 2013 to determine if there was any residual control of the volunteer canola. The canola had not emerged prior to the pre-seed application. RR Soybeans were seeded on May 23, 2013. A post-emerge treatment of Roundup weathermax®, Odyssey®, Viper® and Basagran forte® were applied on June 28, 2013. The trial was set up as a 3 x 4 factorial RCBD with 4 reps.

Treatments:

Pre-seed:

1. Roundup weathermax® 450 gae/ha
2. Heat® 36 gai/ha
3. Express SG® 15 gai/ha

Post-emerge:

1. Roundup weathermax® 450 gae/ha
2. Odyssey® 30 gai/ha
3. Viper ADV® 449 gai/ha
4. Basagran Forte® 1080 gai/ha

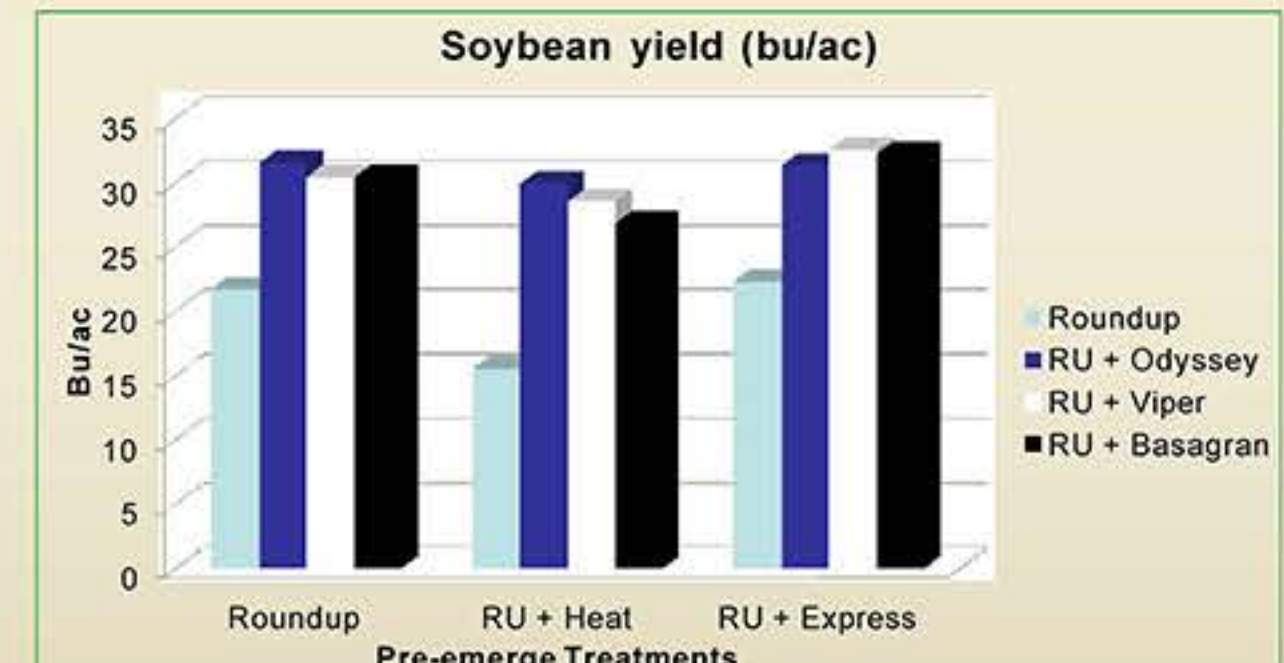
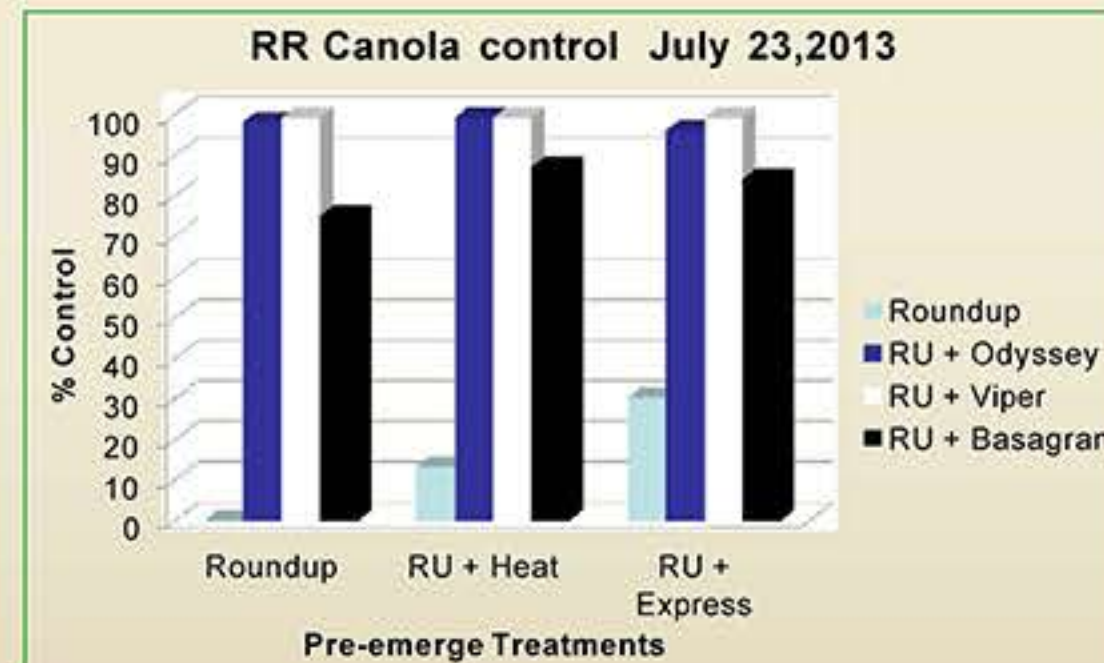
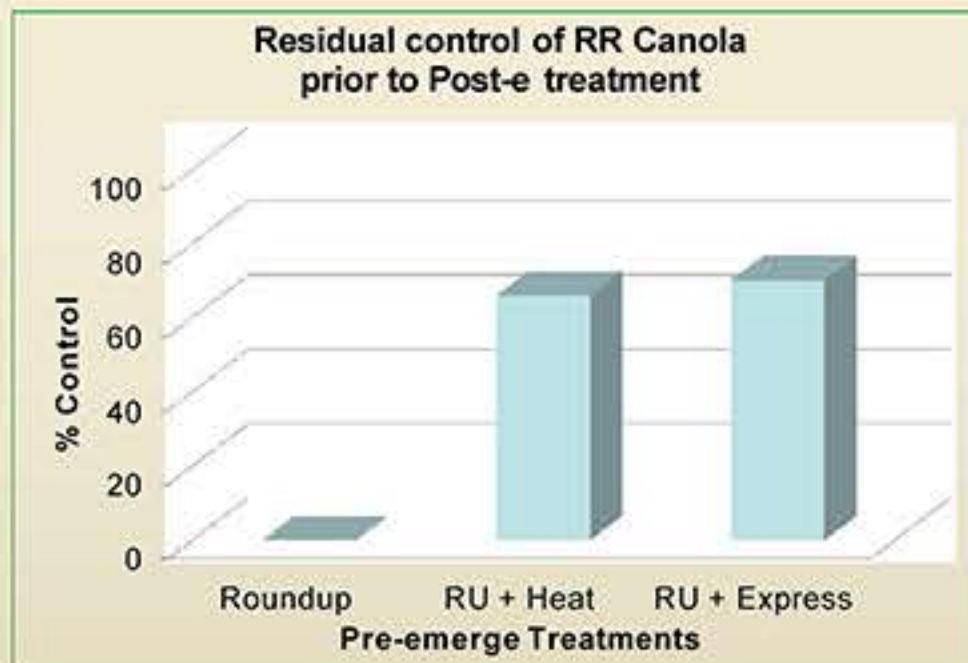
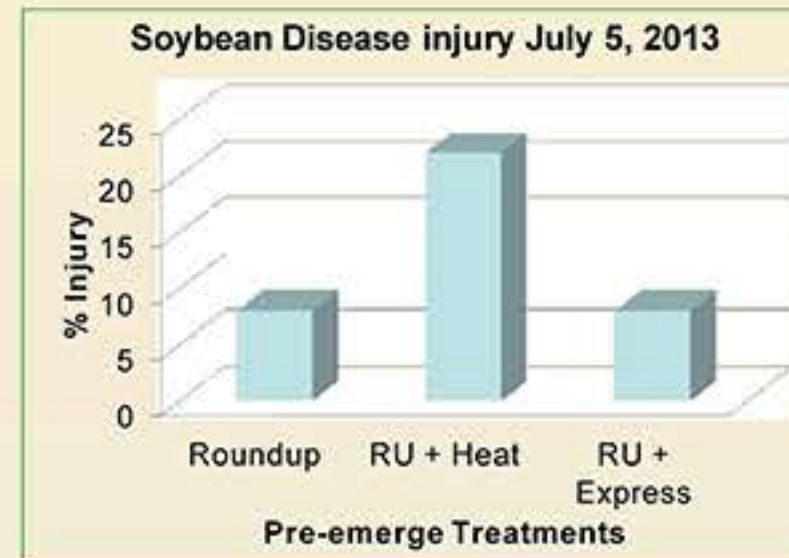
Note: 1.5X rate of Heat was used in error.

Conclusions:

- Pre-emerge application of Heat® and Express SC® provided some residual control of RR Canola.
- Post-emerge Odyssey® and Viper ADV® controlled RR Canola over 97% and Basagran forte® controlled RR Canola 82%.
- Pre-emerge Heat® appeared to predispose the Soybean to higher level of sunscald and septoria brown spot disease.

Discussion:

This was one site year only and is presented as early information for growers. This trial will continue at the U of S, as well as other trials to evaluate products not presently registered in western Canada for weed control in Soybean.



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