

2010 Evaluation of Weed Control with Rimfire Max on Spring Wheat

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‘Howard’ HRSW was seeded on April 15. Treatments were applied on May 23 to 3 leaf wheat and to jointing downy brome (dobr), tillering Japanese brome (jabr), 4 leaf wild oat (wiot) and 2 leaf Persian danel (peda) with 62° F, 55% RH, mostly sunny sky and east wind at 5 mph. Treatments were applied with a tractor mounted CO₂ propelled plot sprayer delivering 10 gpa at 30 psi through PK-01E80 nozzles to a 5 foot wide area the length of 10 by 28 foot plots. The soil is classified as a silt-loam with a pH of 6.2 and OM of 3.2%. The trial was a randomized complete block design with four replications. Weed populations for downy brome, Japanese brome, wild oat and Persian danel were 4, 12, 0.5 and 0.5 plants per square foot, respectively. Plots were evaluated for crop injury on June 1 and June 14, and for weed control on June 14, July 1 and July 28. The trial was harvested on August 9.

| Treatment | Product rate oz/A | 6/1 | June 14 | ----- July 1 ----- | | | ----- July 28 ----- | | | Test weight | Grain yield | | |
|-----------|------------------------------------|-----------------------|---------|--------------------|------|------|---------------------|------|------|----------------|----------------|--------|------|
| | | inj | inj | dobr | jabr | peda | wiot | wiot | dobr | | | jabr | peda |
| | | ----- % Control ----- | | | | | | | | | | lbs/bu | bu/A |
| 1 | Untreated | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 55.1 | 30.2 |
| 2 | Rimfire Max + Huskie + MSO* | 2 | 0 | 65 | 81 | 99 | 99 | 99 | 70 | 99 | 99 | 57.7 | 48.4 |
| 3 | Rimfire Max + Huskie + BB* | 0 | 0 | 59 | 70 | 99 | 96 | 99 | 50 | 99 | 99 | 58.3 | 47.8 |
| 4 | Rimfire Max + Huskie + HSOC* | 1 | 0 | 74 | 79 | 99 | 69 | 96 | 86 | 99 | 99 | 58.1 | 47.4 |
| 5 | Rimfire Max + Bro. Adv. + BB | 3 | 0 | 72 | 76 | 99 | 99 | 99 | 58 | 99 | 99 | 58.9 | 51.7 |
| 6 | Rimfire Max+Affinity TM+Starane+BB | 2 | 0 | 40 | 62 | 15 | 76 | 66 | 38 | 98 | 0 | 58.3 | 42.9 |
| C.V. % | | 160 | 0 | 20 | 18 | 13 | 33 | 30 | 38 | 1 | 0 | 3.3 | 7.5 |
| LSD .05 | | NS | NS | 15 | 17 | 16 | 38 | 36 | 29 | 1 | 1 | NS | 5.1 |

* MSO = methylated seed oil, BB = basic blend, HC = high surfactant oil concentrate NS = no statistical difference between treatments

Summary

Crop injury was minimal when observed and quickly diminished. All herbicide treatments provided excellent season long control of Japanese brome, wild oats and Persian danel with the exception of Rimfire Max + Affinity TM + Starane (trt 6) which appeared to have antagonistic effects on grassy weed control resulting in a lower grain yield than the other herbicide treatments. It appears that HSOC (trt 4) enhanced downy brome control by Rimfire Max + Huskie compared to other adjuvants (trts 2 & 3). Rimfire Max provided only marginal control of downy brome.