

## 2011 Bayer Winter Wheat Herbicide Trial

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Pre-plant (PP) treatments were applied on October 6, 2010 to 3 leaf downy brome (dobr) with 54° F, 55% RH, sunny sky and southwest wind at 5 mph. 'AP503CL2' HRWW was seeded no-till on October 11. Spring treatments (SPOST) were applied on May 19, 2011 to tillering wheat, tillering downy brome and 2 leaf Japanese brome (jabr) with 46° F, 80% RH, cloudy sky and northeast wind at 3 mph. Wild oats (wiot) had not yet emerged. Treatments were applied with a tractor mounted CO<sub>2</sub> 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, OM of 3.2% and 85% hrsw residue ground cover. The trial was a randomized complete block design with four replications. The trial had an application of 12 oz/A Huskie herbicide + 8 oz/A Headline fungicide on June 4, 2011 to control broadleaf weeds and foliar diseases. Weed populations for downy brome, Japanese brome and wild oats were 20, 2 and 0.25 plants /ft<sup>2</sup> respectively. Plots were evaluated for crop injury on May 19, June 1, June 22 and July 18, and were evaluated for weed control on May 19, June 22 and July 18. The trial was harvested on August 5.

| Treatment   | Product rate                   | Timing      | ----- May 19 ----- |       | 6/22                        | ----- July 18 ----- |     |      |      | Test weight | Grain yield |      |
|---|--------------------------------|-------------|--------------------|-------|-----------------------------|---------------------|-----|------|------|-------------|-------------|------|
|   |                                |             | inj                | stand | dobr                        | dobr                | inj | dobr | jabr |             |             | wiot |
|   | oz/A                           |             | %                  | %     | ----- Percent Control ----- |                     |     |      |      |             | lbs/bu      | bu/A |
| 1 R'up Weather Max + AMS                              | 16 + 17lbs                     | PP          | 0                  | 54    | 92                          | 84                  | 0   | 82   | 20   | 0           | 51.6        | 25.2 |
| 2 R'up W. Max + Olympus + AMS                         | 16 + 0.6 + 17lbs               | PP          | 0                  | 58    | 94                          | 91                  | 0   | 95   | 79   | 0           | 52.9        | 30.2 |
| 3 R'up W. Max + Olympus + AMS                         | 16 + 0.9 + 17lbs               | PP          | 0                  | 60    | 91                          | 89                  | 0   | 91   | 94   | 0           | 53.1        | 33.2 |
| 4 R'up W. Max + PrePare + AMS                         | 16 + 0.3 + 17lbs               | PP          | 0                  | 50    | 96                          | 84                  | 0   | 88   | 38   | 0           | 52.6        | 31.7 |
| 5 R'up W. Max + Olympus + AMS fb<br>Olympus + NIS     | 16 + 0.6 + 17lbs<br>0.6 + 0.5% | PP<br>SPOST | 0                  | 70    | 95                          | 99                  | 0   | 99   | 99   | 55          | 52.4        | 31.7 |
| 6 R'up W. Max + Olympus + AMS fb<br>Rimfire Max + MSO | 16 + 0.6 + 17lbs<br>3 + 20     | PP<br>SPOST | 0                  | 69    | 95                          | 97                  | 0   | 98   | 96   | 58          | 52.4        | 33.2 |
| 7 R'up W. Max + PrePare + AMS fb<br>Everest + NIS     | 16 + 0.3 + 17lbs<br>0.3 + 0.5% | PP<br>SPOST | 0                  | 78    | 90                          | 91                  | 0   | 94   | 97   | 70          | 53.0        | 36.8 |
| C.V. %  |                                |             | 0                  | 28    | 4                           | 5                   | 0   | 5    | 21   | 34          | 2.2         | 20.1 |
| LSD .05   |                                |             | NS                 | NS    | NS                          | 6                   | NS  | 7    | 24   | 13          | NS          | NS   |

NS = no statistical difference between treatments

### Summary

Crop injury was not observed. All herbicide treatments with the exception of Roundup alone (trt1) provided good season long control of downy brome. Pre-plant treatments 1, 2 and 3 provided marginal activity on Japanese brome and no activity on wild oats. Sequential treatments (trts 5, 6 & 7) provided excellent season long control of both downy brome and Japanese brome and provided some activity on wild oats.