

**2004 Control of Japanese Brome in Spring Wheat at Hettinger.** (Eriksmoen) Reeder hard red spring wheat was seeded on April 15. Treatments 1 - 8 were applied to 3 ½ leaf wheat and to Japanese brome that was tillering on May 20 with 43° F, 94% RH, clear sky and 2 mph NW wind. Sequential treatments 7 and 8 were applied to 4 leaf wheat and to tillering Japanese brome on May 28 with 54° F, 91% RH, clear sky and calm wind. All treatments were applied with a tractor mounted CO<sup>2</sup> propelled plot sprayer delivering 10 gpa at 40psi through 8001.5 flat fan nozzles to a 5 foot wide area the length of 10 by 28 foot plots. The experiment was a randomized complete block design with four replications. Japanese brome population was 4 plants per sq. foot. The trial sustained frost on May 13 (16° F) and on June 18 (25° F), and received a total of 5.4 inches of growing season rainfall (April 1 - July 31). Evaluations for crop injury were on June 6 and for Japanese brome control on June 17 and July 13. The trial was not harvested.

| Treatment | Rate   | 6/6                     | 6/17 | 7/13 |      |
|-----------|--|-------------------------|------|------|------|
|           |  | HRSW                    | Jabr | Jabr |      |
|           |  | ----- % Control -----   |      |      |      |
|           |  | oz/A                    |      |      |      |
| 1         | Assert + Bronate Adv. + MSO                        | 16 + 12.8 + 24          | 2.5  | 83   | 65   |
| 2         | Everest + Bronate Adv + Basic Blend                | 0.45 + 12.8 + 1%        | 1.2  | 98   | 99   |
| 3         | Silverado + Bronate Adv. + MSO                     | 1.75 + 12.8 + 1%        | 0    | 92   | 75   |
| 4         | Discover NG + Bronate Adv.                         | 12.8 + 12.8             | 1.2  | 20   | 25   |
| 5         | Puma + Bronate Adv.                                | 10.6 + 12.8             | 0    | 23   | 7    |
| 6         | Achieve + Bronate Adv. + S'Chrg + AMS              | 7.25 + 12.8 + 0.5% + 1% | 1.2  | 33   | 43   |
| 7         | Everest + Basis Blend / Discover NG + Bronate Adv. | 0.16 + 1% / 4 + 12.8    | 5    | 98   | 98   |
| 8         | Silverado + MSO / Discover NG + Bronate Adv.       | 0.58 + 1% / 4 + 12.8    | 0    | 25   | 26   |
| 9         | Untreated  | 0                       | 0    | 0    | 0    |
| C.V. %    |  |                         | 215  | 60.5 | 60.3 |
| LSD 5%    |  |                         | NS   | 47   | 44   |

### Summary

Crop injury was minor for all herbicide treatments. Treatments containing Everest (trts 2 and 7) had excellent season long control of Japanese brome. Treatments 1 and 3 also provided significant Japanese brome control over the untreated check. All other treatments showed relatively minor activity on Japanese brome.