## $Evaluation \ of \ Storm^{@} \ and \ Ultra \ Blazer^{@} \ for \ the \ control \ of \ tansy \ mustard \ in \ fall-sown \ peas \ Henry \ Wetzel \ and \ Drew \ Lyon$

A trial was established at the Claassen Farm near Ritzville, WA to evaluate Storm and Ultra Blazer for the postemergence control of tansy mustard in fall-sown peas. Storm contains both bentazon (group 6) and acifluorfen (group 14), and Ultra Blazer contains only acifluorfen. Both of these active ingredients do not have the ability to move systemically within the target weed species and are known as contact herbicides. Treatments were applied on April 1<sup>st</sup> with a CO<sub>2</sub>-powered backpack sprayer set to deliver 15



gpa at 45 psi at 2.3 mph. The air temperature was 43 °F, relative humidity was 49% and the wind was out of the west at 5 mph. The soil at this site is a Ritzville silt loam with 1.5% organic matter and a pH of 5.3.

At the time of the application, tansy mustard plants were large and abundant. Plants were 0.5 to 8.0 inches in diameter and 0.5 to 3.0 inches in height, with a mean diameter and height of 3.5 inches and 1.0 inch, respectively. There were an average of 14 tansy mustard plants per square foot in the nontreated check plots. Fifteen days after treatment (4/16), crop injury was evident among all treatments applied. Storm- and Ultra Blazer-treated plots exhibited the highest level of injury. However, the injury was short lived, and plants were nearly recovered on April 30th, 29 days after treatment. Fifteen days after treatment (4/16), the three rates of Ultra Blazer and Storm applied at 24 fl oz/A were providing better tansy mustard control than the standard treatment, Vulture (imazamox, group 2). When evaluated 44 days after treatment (5/14), Vulture was providing much better control than the previously mentioned treatments. Temperatures were below average for the duration of the study. April was a relatively dry month where rainfall events on 5/20 (0.67 in) and 5/30 + 5/31 (0.67 + 0.21 in) were above average. Even though Vulture appeared to be providing the best control of tansy mustard, at the conclusion of the study the plants did not die and produced seed possibly because of the favorable environmental conditions for plant growth. Had these treatments been applied in the fall shortly after the tansy mustard emerged, we may have seen more effective control from the products evaluated.

|                                 |                                  | 4/16             | 4/30 | 4/16                  | 5/14   |
|---------------------------------|----------------------------------|------------------|------|-----------------------|--------|
| Treatment                       | Rate                             | Crop Injury      |      | Tansy Mustard Control |        |
|                                 | fl oz/A                          | %                |      | %                     |        |
| Nontreated Check                |                                  |                  |      |                       |        |
| Vulture + Synurgize + COC       | 4.0 + 2.0 qts/100 gal + 1.0% v/v | 4 a <sup>1</sup> | 0 a  | 55 cd                 | 91 a   |
| Rhomene + Metribuzin 75DF + NIS | 12.0 + 5.33  oz + 0.25%  v/v     | 13 b             | 3 ab | 44 d                  | 45 cd  |
| Ultra Blazer + NIS              | 12.0 + 0.25%  v/v                | 18 bc            | 0 a  | 71 a-c                | 51 b-d |
| Ultra Blazer + NIS              | 16.0 + 0.25% v/v                 | 21 c             | 0 a  | 73 a-c                | 63 bc  |
| Ultra Blazer + NIS              | 24.0 + 0.25% v/v                 | 21 c             | 5 b  | 83 a                  | 70 b   |
| Storm + NIS                     | 16.0 + 0.25% v/v                 | 13 b             | 0 a  | 59 b-d                | 35 d   |
| Storm + NIS                     | 24.0 + 0.25% v/v                 | 15 bc            | 0 a  | 75 ab                 | 70 b   |

<sup>1</sup>Means, based on four replicates, within a column, followed by the same letter are not significantly different at P = 0.05 as determined by Fisher's protected LSD test, which means that we are not confident that the difference is the result of treatment rather than experimental error or random variation associated with the experiment.

## **Disclaimer**

Some of the pesticides discussed in this presentation were tested under an experimental use permit granted by WSDA. Application of a pesticide to a crop or site that is not on the label is a violation of pesticide law and may subject the applicator to civil penalties up to \$7,500. In addition, such an application may also result in illegal residues that could subject the crop to seizure or embargo action by WSDA and/or the U.S. Food and Drug Administration. It is your responsibility to check the label before using the product to ensure lawful use and obtain all necessary permits in advance.