

Varisto: A new postemergence herbicide premixture for use in dry bean

Christy Sprague

Raptor (imazamox) plus Basagran (bentazon) is one of the most popular postemergence herbicide treatments applied to dry edible beans. One of the main purposes for adding Basagran to Raptor is to “safen” (decrease crop response) dry beans from Raptor applications alone. At least 8 fl oz per acre of Basagran 4L is needed to “safen” dry beans from Raptor applications. However, increasing the Basagran 4L rate to at least 16 fl oz per acre has helped improve common lambsquarters control and has provided additional control of both common cocklebur and jimsonweed without increasing dry bean injury. This combination applied with a crop oil concentrate (1% v/v) and ammonium sulfate (12-15 lb/100 gal) or 28% UAN (2.5% v/v) has been standard for many years. However, this year it looks like Raptor will be in short supply for postemergence weed control in dry bean. One option that growers have is to use the new herbicide premixture, **Varisto 4.18L**. Varisto is a premixture of Raptor plus Basagran. The standard application rate of Varisto is 21 fl oz per acre, which is equivalent to 4 fl oz per acre of Raptor and 21 fl oz per acre of Basagran 4L. A **crop oil concentrate** (1% v/v) and a **nitrogen source** (ammonium sulfate at 12-15 lb/100 gal or 28% UAN at 2.5% v/v) should be included with postemergence Varisto applications. The application window for Varisto is between **one fully expanded trifoliolate** up until dry beans start to bloom. Severe crop damage and/or yield reductions may occur if Varisto is applied outside of this application window. The preharvest interval for Varisto is 30 days. In 2013, we conducted weed control and crop tolerance studies with Varisto and found weed control and crop safety similar to the tank-mixture of Raptor plus Basagran at equivalent rates. Dry bean yields were also similar to our weed-free control. One important thing to keep in mind is the crop rotation restrictions for Varisto will be similar to the Raptor plus Basagran tank-mixture: 3 months for wheat and alfalfa, 8.5 months for corn, and 18 months for sugarbeets (soil pH \geq 6.2).