

WEED CONTROL OPTIONS WITH MESOSULFURON IN SPRING WHEAT. Dean W. Maruska, Kevin B. Thorsness, Jack D. Otta, Michael C. Smith, and Mary D. Paulsgrove, Field Development Representative, Bayer CropScience, Research Triangle Park, NC 27709.

SILVERADO™ Wild Oat herbicide is a new specially formulated herbicide containing the active ingredient mesosulfuron-methyl in a 2 WDG formulation with a highly effective wheat safener, mefenpyr to control wild oat in spring and durum wheat. Mesosulfuron-methyl is an inhibitor of acetolactate synthase (ALS) and will control both susceptible and ACC-ase resistant wild oat and some broadleaf weeds. Rapid soil degradation of mesosulfuron will allow many important follow-crops to be planted within 90 days of application and all crops may be rotated within a maximum of 12 months following a SILVERADO™ Wild Oat herbicide application.

2.5 – 3.0 g ai /ha of mesosulfuron were applied using the 2 WDG SILVERADO™ Wild Oat herbicide formulation with 1.75 L/HA methylated seed oil (MSO) at 1 leaf to 2 tiller wild oat stage of growth. Additionally, various broadleaf herbicides containing active ingredients MCPA ester, bromoxynil, thifensulfuron, tribenuron, clopyralid or fluroxypyr were tankmixed with the SILVERADO™ Wild Oat herbicide plus MSO or basic blend adjuvants to evaluate crop tolerance, broadleaf weed control and the potential for wild oat antagonism.

Results show that SILVERADO™ Wild Oat herbicide alone or in combination with the commonly available broadleaf herbicides tested has good crop tolerance, excellent wild oat control and a wide spectrum of broadleaf control options. SILVERADO™ Wild Oat herbicide will have an important fit in integrated weed control management systems in cereals because of broad crop rotational choices with excellent application flexibility and efficacy, notably the control of susceptible and ACC-ase resistant wild oat.