

RIMFIRE - A NEW SELECTIVE HERBICIDE FOR GRASS CONTROL IN WHEAT. Dean W. Maruska, James E. Anderson, Jack D. Otta, Michael C. Smith, Kevin B. Thorsness, and Mary D. Paulsgrove, Field Development Representative, Bayer CropScience, Research Triangle Park, NC 27709.

Rimfire is a new postemergence wheat herbicide designed to control ACC-ase resistant and susceptible wild oats and numerous key broadleaf weeds, while providing partial control of grasses such as foxtails, quackgrass, cheat, downy brome, Japanese brome and Persian darnel. It is formulated as a 10.17% WDG containing the sulfonyleurea mesosulfuron methyl and propoxycarbazone, a sulfonylaminocarbonyl triazolinone, both inhibiting ALS (acetolactate synthase). These active ingredients are combined with a crop safener, mefenpyr diethyl to provide excellent tolerance in spring, durum and winter wheat.

Rimfire was applied at 12.5 g ai/ha targeting 1-leaf to 2-tiller grasses. Several adjuvant system options are available: methylated seed oil at 1.75 l/ha, basic blend at 1% v/v or NIS 0.5% v/v + 4.7 l/ha UAN. Maximum spring wheat crop response was 6% when applied alone and less than 9% when tank mixed with a broadleaf herbicide.

Rimfire provided greater than 94% control of AVEFA when applied alone or in combination with a broadleaf herbicide. Research data also show residual effects on secondary weed flushes. There was a numerical reduction in emergence of both AVEFA and CHEAL 4-5 weeks after application without crop interference.

Rotational crop flexibility for key crops is excellent with Rimfire. Wheat and millet may be planted 0 to 4 months, respectively, after an application of Rimfire and alfalfa, barley, canola, dry beans, flax, lentils, oats, peas, soybeans, safflower and sunflowers may be planted 10 months after application.

Rimfire will control numerous broadleaf weeds including mustard species and volunteer canola. Flexible tankmix options with broadleaf herbicides can be tailored for specific, season-long grass and broadleaf weed control. The Rimfire label was approved by EPA on Nov 8, 2005.