THE USE OF RIMFIRE[™] HERBICIDE FOR GRASS CONTROL IN WHEAT. Kevin B. Thorsness, James E. Anderson, Dean W. Maruska, Jack D. Otta, Michael C. Smith, and Mary D. Paulsgrove, Technical Service Representative, Bayer CropScience, Research Triangle Park, NC 27709.

Rimfire is a new postemergence wheat herbicide developed by Bayer CropScience to control ACCase resistant and susceptible wild oats and numerous broadleaf weeds, while suppressing important grasses such as foxtails, quackgrass, cheat, downy brome, Japanese brome, barnyardgrass, foxtail barley, and Persian darnel. It is formulated as a 10.17% WDG that is composed of mesosulfuron methyl, a sulfonylurea and propoxycarbazone, a sulfonylaminocarbonyl triazolinone, plus the safener, mefenpyr diethyl, to provide excellent crop tolerance in spring, durum, and winter wheat.

Rimfire was applied at 12.5 g ai/ha to spring wheat in the tillering stage of growth and grass weeds in the 1-leaf to 2-tiller stage of growth. Several options for spray adjuvant systems were tested: methylated seed oil at 1.75 L/ha, basic blend at 1% v/v, or NIS at 0.5% v/v + UAN at 4.7 l/ha.

Maximum crop response in spring wheat was 11% with Rimfire, regardless of adjuvant system or broadleaf tank mix partner. Rimfire plus a basic blend adjuvant provided 80% control of barnyardgrass and 85% control of Japanese brome. While Rimfire plus a methylated seed oil provided 75% control of yellow foxtail. Regardless of adjuvant system tested, Rimfire alone provided 94% or greater control of wild oat. When Rimfire was combined with broadleaf herbicide tank mixes, wild oat control was 91% or greater regardless of adjuvant system or broadleaf tank mix partner.

Rimfire will provide growers with an important tool for management of wild oat including ACC-ase resistant wild oat as well as other important grass weeds in spring, durum, and winter wheat.