

INTRODUCTION TO WOLVERINE™ - A NEW HERBICIDE FOR GRASS AND BROADLEAF WEED CONTROL IN NORTHERN PLAINS CEREALS. Dean W. Maruska*, Kevin B. Thorsness, Mary D. Paulsgrove, Michael C. Smith, George S. Simkins, and Mark Wrucke, Field Development and Technical Service Representatives, Product Development Manager, and Market Support Manager, Bayer CropScience, Research Triangle Park, NC 27709.

Wolverine™ herbicide is a new postemergence grass and broadleaf herbicide that has been developed by Bayer CropScience for use in spring wheat, durum, winter wheat, and barley. Wolverine has a very favorable ecological, ecotoxicological, and environmental profile with low acute mammalian toxicity and no genotoxic, mutagenic or oncogenic properties noted. Wolverine is a pre-formulated mixture containing the novel active ingredient, pyrasulfotole, with bromoxynil, fenoxaprop p-ethyl and the highly effective herbicide safener, mefenpyr-diethyl. This unique combination of active ingredients provides consistent broad spectrum grass and broadleaf weed control with excellent crop tolerance. Rapid microbial degradation is the primary degradation pathway for pyrasulfotole in the soil environment, with no soil activity from fenoxaprop and bromoxynil. Therefore, Wolverine has an excellent crop rotation profile, allowing re-cropping to all of the major crops grown in the northern cereal production area.

Wolverine is specially formulated as an emulsifiable concentrate for easy handling and optimized for grass and broadleaf weed control. Apply Wolverine after the cereal crop has emerged and before flag leaf emergence. Grass weeds should be treated with Wolverine between the 1 leaf and 2 tiller stage of growth and broadleaf weeds should be treated with Wolverine between the 1 - 8 leaf stage of growth depending on weed species.

Wolverine will be labeled on 63 different weed species with many of them common in the northern cereal production area of the United States. Wolverine provides excellent control of key grass and broadleaf weeds such as wild oat, yellow foxtail, green foxtail, kochia, pigweed sp., wild buckwheat, common lambsquarters, mustard sp., Russian thistle, field pennycress, prickly lettuce, common waterhemp, white cockle, and nightshade sp. Excellent control of sulfonyleurea resistant weeds such as kochia, prickly lettuce and Russian thistle biotypes has been confirmed with Wolverine in field trials. Wolverine has been tested on spring wheat, durum wheat, and barley varieties and crop tolerance was excellent on all varieties tested. Broad spectrum weed control across a wide range of grass and broadleaf weeds, excellent crop safety, and very favorable toxicological, ecotoxicological and environmental properties make Wolverine a safe and easy to use tool for cereal grain farmers.