

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

Huskie™ is a new postemergence broadleaf herbicide that has been developed by Bayer CropScience for use in spring wheat, durum, winter wheat, barley, and triticale. Huskie has a very favorable ecological, ecotoxicological, and environmental profile with low acute mammalian toxicity and no genotoxic, mutagenic or oncogenic properties noted. Huskie is a mixture of a novel active ingredient, pyrasulfotole plus bromoxynil in combination with the highly effective herbicide safener, mefenpyr-diethyl. Huskie includes both an HPPD and PSII inhibitor for a new and unique mode of action in cereal grains. This combination of active ingredients provides a consistent broad spectrum herbicide with excellent crop tolerance. Huskie provides fast control of numerous broadleaf weeds. The highly active safener, mefenpyr-diethyl ensures that Huskie exhibits excellent crop tolerance when applied alone or in tank mixtures. Rapid microbial degradation is the primary degradation pathway for pyrasulfotole in the soil environment. Therefore, Huskie has an excellent crop rotation profile, allowing re-cropping to all of the major crops grown in the northern cereal production area. Additionally, Huskie appears to inhibit second flushes of select weeds, such as redroot pigweed, kochia, and common lambsquarters.

Huskie is formulated as an emulsifiable concentrate for easy handling. Apply Huskie after the cereal crop has emerged and before flag leaf emergence. Broadleaf weeds should be treated with Huskie between the 1 - 8 leaf stage of growth depending on weed species. Huskie provides optimum weed control when it is mixed with AMS at 0.5 kg/HA or 28% UAN at 2.34 L/HA.

Huskie has been tested on more than 50 different weed species in numerous field experiments in the northern cereal production area of the United States. Huskie provides excellent control of key broadleaf weeds such as kochia, pigweed sp., wild buckwheat, common lambsquarters, mustard sp., Russian thistle, field pennycress, prickly lettuce, common waterhemp, white cockle, nightshade sp., and false chamomile. Excellent control of sulfonylurea resistant weeds such as kochia, prickly lettuce and Russian thistle biotypes has been confirmed with Huskie in field trials. Huskie has been tested on several spring wheat, durum wheat, and barley varieties. Crop tolerance with Huskie has been excellent on all varieties tested. The excellent weed control and crop safety combined with very favorable toxicological, ecotoxicological and environmental properties makes Huskie a valuable tool for cereal grain farmers.