BROME CONTROL IN WINTER WHEAT WITH PROPOXYCARBAZONE-SODIUM (OLYMPUS HERBICIDE). George Simkins, Kevin K Watteyne, Jack D. Otta, and Shane S. Hand, Bayer CropScience RTP, NC 27709.

Olympus Herbicide is a new postemergence herbicide developed by Bayer CropScience for weed control in winter wheat. Olympus Herbicide is comprised of the active ingredient propoxycarbazone-sodium. This herbicide acts as an inhibitor of acetolactate synthase (ALS) and is a member of the sulfonylaminocarbonyl triazolinone class of chemistry. Olympus Herbicide will control many important grass weeds in winter wheat and is highly active on downy brome, cheat, Japanese brome, and soft chess as well as a multitude of broadleaf weeds such as wild mustard and tumble mustard. Olympus Herbicide exhibits excellent winter wheat tolerance at 30 to 45 g ai /ha.

In field experiments in North America, Olympus Herbicide controlled downy brome, cheat, Japanese brome, soft chess, wild oat, canarygrass, and windgrass as well as wild mustard, Tansy mustard, and blue mustard. Olympus Herbicide is applied to grass weeds up to 2-tillers in size and broadleaf weeds up to 1-2 leaf in size. Applications of Olympus Herbicide must include a tankmix partner of a non-ionic surfactant at a rate of 0.25-0.5% v/v.

Olympus Herbicide has a very favorable ecological, ecotoxicological and environmental profile with low acute mammalian toxicity and no genotoxic, mutagenic or oncogenic properties noted. Microbial degradation is the primary degradation pathway of propoxycarbazone-sodium in the environment. Olympus Herbicide offers a flexible recropping profile to succeeding crops.

The low use-rate, excellent weed control and crop safety combined with very favorable toxicological, ecotoxicological and environmental properties will make this product a valuable new tool for winter wheat farmers.

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