

CULTURAL AND CHEMICAL WEED CONTROL IN FIELD CROPS—2009

Information in this publication is based on research by the Minnesota Agricultural Experiment Station, other experiment stations and U.S. Department of Agriculture on the effectiveness of cultural practices and chemicals for controlling weeds. The suggested chemical uses in this publication are within clearances established by the U.S. Environmental Protection Agency (EPA).

Herbicides are registered by the EPA under the Federal Insecticide, Fungicide, and Rodenticide Act as amended for uses involving food or feed on the basis of finite chemical tolerances or exemptions from the requirement of tolerances established by the Food and Drug Administration. The Federal Food, Drug, and Cosmetic Act, as amended by Public Law 518 (Miller Amendment), makes liable for seizure any raw agricultural commodity which carries a pesticide residue: 1) for which no exemption or tolerance has been established or 2) which exceeds the tolerance established by the Food and Drug Administration.

Instructions for registered uses of herbicides are given on container labels. Read and follow these label instructions carefully. Use products that are labeled specifically for the intended use. Some formulations of a chemical may not be labeled for certain uses. Persons using herbicides in a manner contrary to the label instructions are subject to penalty under federal and state laws.

This publication is for your information. The University of Minnesota or its officers or employees make no claims or representations that the chemicals discussed will or will not result in residues on agricultural commodities and assume no responsibility for results from using herbicides.

Some registrations are under review; therefore, some uses suggested in this bulletin could change during the year. New information will be available from County Extension Agents as changes occur. The herbicide effectiveness ratings listed in this publication show general comparative control ratings based on field observations. Under unfavorable conditions, any of the herbicides may give unsatisfactory results. Under favorable conditions control may be better than indicated.

Read the label and follow instructions in using herbicides. The EPA classifies herbicides for “**general use**” or “**restricted use**”. General use herbicides can be used by anyone, and if label directions are followed carefully, there is little chance of harm to humans or the environment. Restricted use herbicides are frequently more toxic than general use herbicides or potentially damaging to the environment. Only certified applicators that receive special training in handling and applying herbicides are allowed to purchase and apply restricted use herbicides. Contact your county agent if you wish to become a certified applicator. For your protection three signal words are used on herbicide labels to indicate different degrees of toxicity of herbicides. Either “Caution” for a slightly toxic, “Warning” for a moderately toxic, or “Danger” for a highly toxic herbicide, will be printed on the label along with an explanation of the specific danger and what precautions should be taken in handling or using the herbicide.

Rates: Application rates listed in this publication are broadcast rates and refer to acid equivalent or active ingredient rather than commercial product. In practice, rates will need to be adjusted for varying row widths if applied in bands and for the concentration of the particular product used.

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Read the pesticide label and follow the instructions as a final authority on pesticide use.