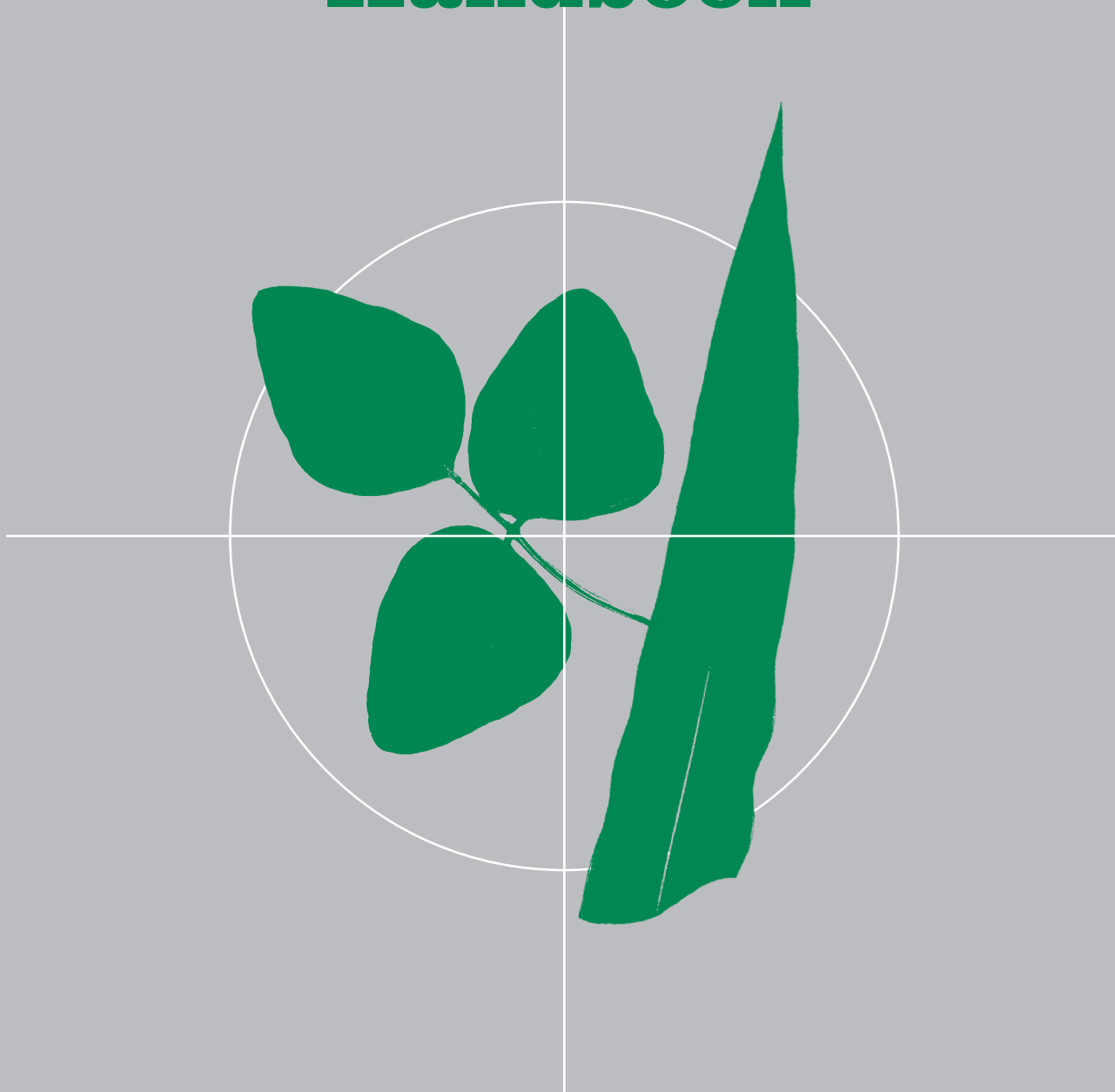


2008 Illinois Agricultural Pest Management Handbook



Serving agriculture and the environment for 60 years



UNIVERSITY OF ILLINOIS
EXTENSION

**2008 ILLINOIS
AGRICULTURAL PEST
MANAGEMENT HANDBOOK**

SERVING AGRICULTURE AND THE ENVIRONMENT



UNIVERSITY OF ILLINOIS
EXTENSION

College of Agricultural, Consumer and Environmental Sciences

The information in this handbook was prepared by specialists employed by the University of Illinois at Urbana-Champaign, College of Agricultural, Consumer and Environmental Sciences; and University of Illinois Extension. The information is revised extensively every year. **Because laws, regulations, pest-management practices, and pest-control products change significantly from year to year, out-of-date copies of this handbook may contain recommendations that are no longer legal or appropriate for the current calendar year.** The suggestions in this handbook should be used during 2008 only.

University of Illinois Extension assumes no liability for the recommendations for using pesticides that are included in this handbook. These recommendations are incomplete; therefore, they should be used only as guidelines. Complete instructions for the use of a specific pesticide are on the pesticide label. Read and follow the label directions and precautions before applying any pesticides. The pesticide user is responsible for applying pesticides according to label directions, as well as for problems that may arise through misapplication or misuse of the pesticide.

Not all pesticides registered for crop pests are included in this handbook. Effective pesticides that do not present an undue hazard to the user and the environment are suggested whenever possible. Trade names have been used for clarity, but their use does not constitute an endorsement by the University of Illinois, nor does it imply discrimination against other products.

Label changes, product cancellations, and changes in recommendations may have occurred since the publication of this handbook. Check with your nearest Extension office if you are in doubt about a pesticide that you plan to use. Announcement of new registrations, label changes, and changes in recommendations will be made through newsletters and appropriate media sources.



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College of Agricultural, Consumer and Environmental Sciences

College of Agricultural, Consumer and Environmental Sciences
University of Illinois at Urbana-Champaign

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Conversions

Fluid

$\frac{1}{8}$ fluid ounce (oz) = 1 teaspoon (tsp)
 $\frac{1}{2}$ fluid ounce = 1 tablespoon (tbs) = 3 teaspoons
 1 fluid ounce = 2 tablespoons = $\frac{1}{8}$ cup = 29.57 milliliters
 8 fluid ounces = 1 cup = $\frac{1}{2}$ pint (pt)
 16 fluid ounces = 2 cups = 1 pint
 32 fluid ounces = 4 cups = 1 quart (qt) = 946 milliliters
 128 fluid ounces = 16 cups = 1 gallon (gal.)

Linear

1 inch = $2\frac{1}{2}$ centimeters (cm) = $25\frac{1}{2}$ millimeters
 1 foot = 12 inches (in.)
 1 yard (yd) = 3 feet (ft)
 1 rod = $5\frac{1}{2}$ yards = $16\frac{1}{2}$ feet
 1 mile = 320 rods = 1,760 yards = 5,280 feet

Weight

1 ounce = $28\frac{1}{3}$ grams (g)
 1 pound (lb) = 16 ounces = $453\frac{1}{2}$ grams
 $2\frac{1}{5}$ pounds = 1 kilogram = 1,000 grams
 1 ton = 2,000 pounds = 907 kilograms

Area

144 square inches = 1 square foot
 9 square feet = 1 square yard
 $30\frac{1}{4}$ square yards = 1 square rod = $272\frac{1}{4}$ square feet
 43,560 square feet = 1 acre
 4,840 square yards = 1 acre
 160 square rods = 1 acre
 640 acres = 1 square mile

Dilution Tables

Amount of Liquid Pesticide Product Required to Obtain Recommended Rate

Concentration of liquid formula	Recommended pesticide active ingredient (a.i.) per acre or 100 gallons of water				
	$\frac{1}{4}$ pound	$\frac{1}{2}$ pound	1 pound	2 pounds	3 pounds
	Amount of Pesticide Required				
1 pound/gallon	1 quart	2 quarts	1 gallon	2 gallons	3 gallons
$1\frac{1}{2}$ pounds/gallon	$1\frac{1}{3}$ pints	$1\frac{1}{3}$ quarts	$5\frac{1}{3}$ pints	$5\frac{1}{3}$ quarts	2 gallons
2 pounds/gallon	1 pint	1 quart	2 quarts	1 gallon	6 quarts
4 pounds/gallon	8 ounces	1 pint	1 quart	2 quarts	3 quarts
6 pounds/gallon	6 ounces	10 ounces	$1\frac{1}{3}$ pints	$1\frac{1}{3}$ quarts	2 quarts
8 pounds/gallon	4 ounces	8 ounces	1 pint	1 quart	3 pints

Amount of Dry Pesticide Product Required to Obtain Recommended Rate

Concentration of dry formula	Recommended pesticide active ingredient (a.i.) per acre or 100 gallons of water				
	$\frac{1}{4}$ pound	$\frac{1}{2}$ pound	1 pound	2 pounds	3 pounds
	Amount of Pesticide Required				
15%	$1\frac{2}{3}$ pounds	$3\frac{1}{3}$ pounds	$6\frac{1}{2}$ pounds	13 pounds	20 pounds
25%	1 pound	2 pounds	4 pound	8 pounds	12 pounds
40%	10 ounces	$1\frac{1}{4}$ pounds	$2\frac{1}{2}$ pounds	5 pounds	$7\frac{1}{2}$ pounds
50%	8 ounces	1 pound	2 pounds	4 pounds	6 pounds
65%	6 ounces	12 ounces	$1\frac{1}{2}$ pounds	3 pounds	$4\frac{1}{2}$ pounds
75%	$5\frac{1}{3}$ ounces	11 ounces	$1\frac{1}{3}$ pounds	$2\frac{2}{3}$ pounds	4 pounds
80%	5 ounces	10 ounces	$1\frac{1}{4}$ pounds	$2\frac{1}{2}$ pounds	$3\frac{3}{4}$ pounds