Drop Spreader Calibration

You can use a drop spreader to apply pesticides on your lawn. Before each use, calibration is necessary. Calibrating your equipment ensures that you are applying the correct amount of pesticide uniformly over the area. It involves adjusting your equipment as well as calculating the delivery rate.

How do I determine the spreader output?
1. Adjust the spreader setting as recommended by the manufacturer.
2. Measure out a test area.*
3. Add a measured amount of pesticide to the spreader.
4. Spread over the pre-measured area at the same speed you will use when applying pesticide.
5. Determine how much pesticide was used by weighing what is left in the spreader and/or by sweeping up the granules in the test area and weighing them. This is the output for this spreader for that area.
6. If the amount used is too much or too little adjust the spreader setting and run another test.
7. This also is a good opportunity to check the distribution pattern.

* Many home and garden pesticides are labeled for the amount of pesticide in a given amount of water per 1000 sq ft. If so, a test area of 250 sq ft (10 ft x 25 ft) should be used. Multiply this by 4 to get the sprayer output per 1000 sq ft.

How do I determine the amount of pesticide I will need?
1. Determine how many square feet are in the treatment area.
2. If the pesticide is to be applied at 5 lb per 1000 sq ft and your area is 3000 sq ft, then
   \[ 3000 \text{ sq ft} \div 1000 \text{ sq ft} = 3 \]
   \[ 3 \times 5 \text{ lb} = 15 \text{ lb} \]
Conversions

3 teaspoons = 1 tablespoon = ½ ounce
8 tablespoons = ½ cup = 4 ounces
1 cup = 8 ounces
2 cups = 1 pint = 16 ounces
2 pints = 1 quart = 32 ounces
4 quarts = 1 gallon = 128 ounces
1 ounce = 28.35 grams
1 pound = 453.59 grams
2.2 pounds = 1 kilogram
0.035 ounces = 1 gram

Measure accurately! Calibrate often!

References and Resources

Calibrate a Drop or Rotary Spreader. 1997. Home Pesticide Education & Safety Training, University of Wisconsin Extension, Madison, WI.

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