

# SPRAYER CALIBRATION GUIDE

## for 1 Gallon Spray Solution

1. Select the proper equipment for the job to be done. This includes nozzles, pumps, hoses, pressure regulators, etc.
2. Do not use pesticide during calibration. A spray colorant is recommended to aid in determining spray pattern, droplet size, coverage and pressure.
3. Calibrate properly and check calibration periodically.  
Calibration of Backpack, Hand Can Sprays and Shower Head Type "Guns"  
(Broadcast Application)  
Flat fan nozzles and shower head guns are generally used in broadcast applications.
  - A. Measure a 20' by 50' area or 1,000 sq. ft.
  - B. Fill the sprayer with water (and optional spray colorant) to a known mark.
  - C. Spray the 1,000 sq. ft. area.
    1. Keep walking speed and pressure constant. Use of the colorant will show light, heavy or skipped areas of application.
  - D. Measure the amount of water required to refill the sprayer to the known mark. This is the spray volume per 1,000 sq. ft.
  - E. The amount of pesticide to be added to 1 gallon of water can now be determined using the following formula:

$$\frac{\text{Label Rate in ounces/1,000 sq. ft.}}{\text{Spray Volume in gallons/1,000 sq. ft.}} = \text{number of ounces of pesticide to be added per gallon of water.}$$

**Example 1:** The pesticide label rate is 1.2 ounces/1,000 sq. ft. The spray volume is 0.5 gallons/1,000 sq. ft.

$$\frac{1.2}{0.5} = 2.4 \text{ ounces of pesticide per gallon of water.}$$

**Example 2:** The pesticide label rate of 1.5 ounces/1,000 sq. ft. The spray volume is 2 gallons/1,000 sq. ft.

$$\frac{1.5}{2} = .75 \text{ ounces of pesticide per gallon of water.}$$