

# **Sprayer Calibration (Tank & Backpack)**

- 1. Select the proper equipment for the job to be done. This includes nozzles, pumps, hoses, pressure regulators, etc...
- 2. Do not use pesticides during calibration. Dy'on® is recommended to aid in determining spray pattern, droplet size, coverage and pressure.
- 3. Calibrate properly and check calibration periodically.
- 4. Record all information on back of this sheet.

#### TANK SPRAYER AND BACKPACK CALIBRATION:

(Flat fan nozzles and shower heads are generally used in broadcast applications, solid cone for spot treating.)

- 1. Measure a 20' x 50' area or 1000 ft² (For best accuracy, test areas of 1000 ft² are recommended. If doing an area less than 1000 ft², input that known area in ft² in the formula on the back of this page.)
- 2. Fill sprayer with water (and optional Dy'on®)
- 3. Using a stop watch, time the applicator spraying the 1000 ft<sup>2</sup> area. (Keep walking speed and pressure constant. Use of Dy'on® will show light heavy a skipped areas of application.) Do more than once and record the average time.
- 4. Now spray into a measured container for the amount of time you recorded spraying 1000ft² and record in fl oz. Divide your fl oz caught by 128 and you will now know your gal/1000 ft². To determine gal/Acre. Multiply your spray volume gal/1000 ft² by 43.56. (Formula and useful conversion on back)

## **EXAMPLE -**

After spraying an area of 1000 ft2 it took us 1 min to apply that area. We did a catch into our container for 1 min and measured 256 ft oz. Now we can calculate gal/1000 ft $^2$ ; 256  $\div$  128 = 2 gal/1000ft $^2$ 

#### DETERMINING AMOUNT OF PRODUCT TO ADD TO SPRAY SOLUTIONS PER TANK:

## Calculation / 1000 ft<sup>2</sup> -

- 1. Amount of water in tank (gal)  $\div$  Spray volume (gal/1000ft²) = The amount of area you will cover with that volume in 1000ft². Example; We have a 200 gallon tank that has been calibrated to put out 2 gal/1000 ft². 200  $\div$  2 = 100 (1000ft²)
- 2. Label rate per 1000 ft<sup>2</sup> x coverage area in 1000 ft<sup>2</sup> = amount of product in tank.

## Calculation / Acre -

- 1. Amount of water in tank (gal)  $\div$  Spray volume (gal/1000 ft²)  $\div$  43.56 = The amount of area you will cover with that volume in Acres. **Example; We have a 200 gallon tank that has been calibrated to put** out 2 gal/1000 ft². 200  $\div$  2 = 100 (1000 ft²)  $\div$  43.56 = 2.295 Acres.
- 2. Label rate per 1000 ft<sup>2</sup> x 43.56 x coverage area in Acres = amount of product in tank.



# **NOTES AND CONVERSIONS**

SPRAYER INFORMATION							
Sprayer Information							
Sprayer ID							
Pump PSI							
Spray gun							
Nozzle Type							

CALIBRATION INFORMATION							
Amount caught in fl oz <b>(a)</b>							
Area in ft² <b>(b)</b>							
Time to spray area in seconds							
Formula to get GAL/1000 ft² =	( <b>(a)</b> × 1000) / (128 × <b>(b)</b> )						

# **USEFUL CONVERSION**

- 1 GALLON = 128 FLUID OUNCES
- 1 GALLON = 4 QUARTS
- •1 QUART = 32 FLUID OUNCES
- 1 PINT = 16 FLUID OUNCES
- 2 PINTS = 1 QUART
- 1 TABLESPOON = 1 OUNCE
- 3 TEASPOONS = 1 TABLESPOON
- 1 POUND = 16 OUNCES
- 1 ACRE = 43,560 FT<sup>2</sup>
- 43,560 FT<sup>2</sup> = 43.56 (1000 FT<sup>2</sup>)





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