# CALIBRATION WORKSHEET FOR SPRAYERS WITH BOOMS 

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## Sprayer Information

Make: $\qquad$ Model: $\qquad$ Year: $\qquad$
Gear: $\qquad$ and engine RPM: $\qquad$ Speed: $\qquad$ (if available)
Pressure: $\qquad$ Nozzle type/model: $\qquad$

## Step 1

Measure the distance (in inches) between nozzles.
Nozzle spacing: $\qquad$ in

## Step 2

Determine the length of the course you'll need for calibration. See Table 1 on Page 13 of Purdue Extension publication PPP-104, available from the Education Store, www.the-education-store.com.

## Distance to travel:

$\qquad$ ft

## Step 3

Fill the tank at last halfway with water.

## Step 4

Time how long it takes to travel the calibration course.
First Pass Second Pass Average Time

## Step 5

Collect water from each nozzle for the average time measured in Step 4.

| Nozzle 1 | fl oz |
| :---: | :---: |
| 2 | fl oz |
| 3 | fl oz |
| 4 | fl oz |
| 5 | fl oz |
| 6 | fl oz |
| Total | fl oz |

## Remember

Some booms have less than six nozzles. If your container measures in milliliters, convert to fluid ounces by dividing by 29.57 .

## Step 6

Add up the total amount of water you collect over the calibration course and divide that amount by the number of nozzles.
Average output: $\qquad$ fl oz

## Step 7

Check the nozzle output. Did any individual nozzle output vary by more than 10 percent of the average? If no, proceed to Step 8. If yes, check to see if the nozzles or screens are partially plugged. After cleaning or replacing, go back to Step 5, and recalculate the average nozzle flow.

## Step 8

Determine the sprayer's output in gallons per acre. It's the same number from Step 6.
$\qquad$ gals/A

## Step 9

If you need to determine sprayer output for 1,000 square feet, then divide the number from Step 8 by 43.56 .
$\qquad$ $($ from Step 8$) \div 43.56=$ $\qquad$ gals $/ 1,000 \mathrm{ft}^{2}$

If you prefer to know how many fluid ounces to use per 1,000 square feet, multiply the answer above by 128.
$\qquad$ $\left(\mathrm{gals} / 1,000 \mathrm{ft}^{2}\right) \times 128=$ $\qquad$ fl oz/1,000 ft ${ }^{\mathbf{2}}$

## Step 10

Determine whether sprayer output meets your specifications. If not, change your nozzle size, pressure, or travel speed.

## Step 11

If you make any adjustments in Step 10, repeat the calibration process until the ride-on is calibrated to your specifications.

