



# Simple No-Math Calibration of a Vegetable Boom Sprayer

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## Step 1. Establish a calibration plot

Measure a calibration plot that is equal to 340.3 square feet (1/128<sup>th</sup> acres). Following are plot lengths for different sprayer boom widths:

- a. 9 foot boom, 37.8 feet long.
- b. 12 foot boom, 28.4 feet long.
- c. 15 foot boom, 22.7 feet long.

## Step 2. Spray plot with water

Time the number of seconds required to spray the measured calibration plot. It is important to be as consistent as possible with the speed of the tractor (gear, range, rpm's). Calibration should take place on the same type of terrain that will be sprayed.

**Time Required = \_\_\_\_\_ Sec.**

**Step 3.** Collect spray from individual nozzles for the same number of seconds it took to spray the calibration plot.

**Step 4.** Measure the number of ounces of water collected from each nozzle. All nozzles should put out about the same volume of water. Add each nozzle amount together and divide by total number of nozzles to find average nozzle volume.

**# of Nozzles \_\_\_\_\_ x Average Nozzle Volume Collected \_\_\_\_\_ oz. = \_\_\_\_\_ Oz.**

**Step 5.** 340.3 feet is equal to 1/128<sup>th</sup> of an acre. Since there are 128 ounces in one gallon, and 128 calibration plots in an acre, the number of ounces collected (step 4) is equal to the number of gallons per acre the sprayer is delivering.

**Gallons per Acre = \_\_\_\_\_**

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