Simple No-Math Calibration of an Orchard Weed Sprayer

Ralph Whitesides, Brent Black, Tiffany Maughan

**Step 1.** Establish a calibration plot

Set out a calibration plot that is equal to 340.3 square feet. Following are plot lengths for different herbicide strip widths:

a. 3 foot strip, 113.4 feet long.

b. 5 foot strip, 68.1 feet long

c. 6 foot strip, 56.7 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 4-wheeler. Calibration should take place on the same type of terrain that will be sprayed.

**Time Required = _____ Sec.**

**Step 3.** Spray into a bucket for the same number of seconds it took to spray the calibration plot.

**Step 4.** Measure the number of ounces of water in the bucket.

**Volume Sprayed in Bucket = _____ Oz.**

**Step 5.** 340.3 feet is equal to 1/128th of an acre. Since there are 128 ounces in 1 gallon, and 128 calibration plots in 1 acre, the number of ounces collected from the bucket is equal to the number of gallons per acre the sprayer is delivering.

**Gallons per Acre = _____**  
(Same number as the ounces from step 4.)