

Date _____ Operator _____ Equipment _____

Calibration for Boom or Boomless Sprayer:

With a clean, functional sprayer, calibrate your sprayer on the same terrain that you will be spraying.

Tools needed: Paper or notepad, Pencil/pen, Calculator, Stopwatch, Graduated measuring container, 5 gallon empty clean bucket, 1 inch hose 3 feet long

Travel speed is generally 5mph or faster if allowed. Speed is not as important as it is to maintain a consistent speed or RPM of the vehicle.

Measure a LENGTH - generally 100 or **200** feet

Turn on all nozzles or booms and run for a few seconds. Wait about 1 minute for the outer margins to dry and measure the EFFECTIVE distance or WIDTH that the sprayer is spraying. In our case its effective distance is **15** Feet.

Drive your 200 feet at your chosen speed. With or without sprayer running (generally 25 psi of pressure). We usually will do it with the sprayer running so that we can see how effective the spray pattern is operating.

At this same time, use your stopwatch to time how long it takes to drive the 200 feet.

It is important to time the vehicle with it moving at the appropriate speed when it crosses the start and finish lines.

Stop the vehicle and with pump running capture the amount from the nozzles for the same time that it took the vehicle to travel the 200 feet.

If multiple nozzles - capture one or two of the nozzles output and multiply by the number of nozzles.

If boomless nozzle - use 1 inch hose over the nozzle and direct the flow into a 5 gallon bucket.

Distance travelled _____ feet (A)

Swath width _____ feet (B)

$A \times B =$ _____ sq ft $\text{sqft}/43,560 =$ _____ acre (C)

There is 43,560 sqft in one acre

Amount caught per nozzle _____ oz $\text{oz}/128 =$ _____ gallon (E)

There is 128 oz in one gallon

$E / C =$ _____ Gallons per acre or GPA

Example: $200 \text{ ft} \times 15 \text{ ft} = 3000 \text{ sqft}$ $3000/43560 = 0.0689\text{ac}$

2 boomless nozzles - 75 oz per nozzle = 150 oz total $150/128 = 1.172\text{gallon}$

$1.172 \text{ gal} / 0.0689 = 17 \text{ gallon per acre}$

Therefore if you have a 30 gallon tank, each tank will treat 1.76 acres per tank.

If using Milestone at 7.0 oz per acre = $7 \times 1.76 = 12.35 \text{ oz}$ of product per 30 gallon tank