



BOOMLESS SPRAYER CALIBRATION

Materials needed are: measuring tape, a watch with a second hand or stopwatch, and a measuring jar graduated in ounces.

Note: This calibration method will only work on sprayers with equal distance between nozzles.

1 Thoroughly clean the spraying system and fill the sprayer tank with clean water. Turn on the sprayer and ensure the sprayer is emitting an even pattern.

2 Determine the effective spray width for your sprayer by measuring the total wetted spray width in feet and multiplying by 0.80 or 0.85. Multiply by 0.80 or 0.85 to ensure that you get good overlap in your pattern (Example total wetted spray width of 35 feet x 0.85 = effective spray width of 30 feet).

3 Use the chart at right for distance to drive in field. (Example: An effective swath width of 27.5 feet would require you to travel 199 feet.) For swath widths that are not shown on this chart, use 5,460 divided by the effective swath width to find travel distance.

4 Set the throttle and gear for spraying and operate all equipment to simulate the actual spraying operation. Do not rely on the speedometer to determine speed. Note the seconds required to drive measured distance.

5 Set the desired pressure on the sprayer (If the sprayer is power-take-off PTO driven, keep throttle setting the same as it was in field). With the sprayer parked, collect the output from the sprayer for the recorded travel time in the previous step.

6 Sprayer output in pints equals the gallons/acre applied (10 pints = 10 gallons per acre). If the gallon per acre result you receive is not reasonable for the product applied, change the rate by: a) adjusting the pressure and recalibrating, b) adjusting the travel speed, or c) changing the nozzle size.

7 As nozzles wear, flow rate increases. If nozzle flow rates are 10 percent above those of new nozzles, replace them. Replace all nozzles on a single sprayer at the same time.

Effective Swath Width (Feet)	Travel Distance (Feet)
20	273
22.5	243
25	218
27.5	199
30	182
32.5	168
35	156
37.5	146
40	137
42.5	128
45	121
47.5	115
50	109

If you have any questions, please call your Noble soil/crop consultant at (580) 223-5810.