

Sprayer calibration procedure

Based on 1/128th of an acre

1. Fill the tank of the sprayer and run the sprayer to check functionality as well as for leaks
2. Measure the distance between nozzle tips to determine spacing
3. Either calculate or drive the distance, based on the nozzle spacing, to determine the catch time
 - a. Ex: for 18" spacing, 227 feet is needed and would be covered in 31 seconds at 5 mph
4. With the tractor parked and running at the same pressure, catch spray volume from an individual nozzle for the measured travel time using a measuring jar
 - a. Repeat this process for multiple nozzles down the boom to ensure a uniform rate
5. The average nozzle output in ounces is equal to the application rate in gallons per acre (GPA)

Things to keep in mind:

- **Pressure Adjustment:** Lower pressure to reduce spray; increase to apply more. Stay within the nozzle's recommended pressure range.
 - Keep in mind the volatility of chemicals and suggested nozzle pressures when increasing pressures
- **Speed Adjustment:** Slower speeds apply more spray; faster speeds apply less.

5940 Equation (Going back and forth between GPM and GPA):

$$\text{GPM (Per Nozzle)} = \frac{\text{GPA} \times \text{mph} \times W \text{ (in, spacing between nozzles)}}{5940}$$

$$\text{GPA} = \frac{\text{GPM (Per Nozzle)} \times 5940}{\text{mph} \times W \text{ (in, spacing between nozzles)}}$$

Use of the SpotOn

- Used to check flow rates from nozzles
- The unit will provide a nozzle flow rate in gal/min, l/min, and oz/min
- Hold the unit at a 10-15° angle and allow to fill until both electrodes are covered
- It is recommended to repair or replace nozzles that are outside ±10% of the average output rate