Sprayer Calibration

DO IT RIGHT AND DO IT OFTEN! Helmut Spieser, OMAF

The mere mention of sprayer calibration makes some people cringe. Everyone knows that calibration is an essential part of the spraying system but nobody likes to do it. There are many calibration techniques available including calibration bottles, jugs, calibration calculators and many more.

Calibration means different things to different people. Depending on your definition of sprayer calibration, various techniques give you more information than others. If your calibration technique involves spraying a given amount of water over a known area, the only thing you know with confidence is the average output of the boom per unit area. Variability within nozzle to nozzle or boom section to boom section will not be evident using this method.

Ranking Calibration Techniques

1. Check every nozzle measuring true ground speed, nozzle spacing, etc.
2. Spray a known amount of water on a known area.
3. Start with full sprayer, spray known area, measure water added to fill sprayer.

Proper calibration of a sprayer should tell you two things. First, calibration will show you the exact application rate, gallons/1000 ft², of your sprayer with the nozzles, spray pressure and travel speed that you have chosen. This application rate is then used to calculate the amount of product required per tankful of spray.

Second, calibration will show you the uniformity of output of each nozzle across the boom. As you apply 1 gallon/1000 ft² and higher, any small differences in internal diameter of fittings or differences in internal hose resistance may... → page 12