

Department of Entomology

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Calibrating a Backpack Sprayer: Ounces to Gallons Method

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Supplies needed: *PPE*, measuring tape and/or wheel, backpack sprayer, stopwatch, measuring pitcher, markers for corners of sprayed area.

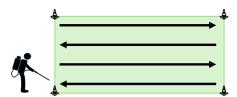
- o Using appropriate PPE, make sure the sprayer is clean and in working order without leaks.
- Mark out an area of 340 square feet (1/128th of an acre).



o Completely fill the backpack sprayer to top mark with water.



 Spray the marked area using the walking speed, attention to coverage, and maintaining pressure as you would when making an application. Most applicators have about 20% spray overlap between passes to provide even coverage.



 Carefully measure the amount of water it takes to refill the sprayer back to the original top mark. Repeat the process again, spraying the marked area and measuring the water needed to refill the sprayer.





Calculate the average number of ounces of water to refill the sprayer. The average number
of ounces required to refill is equivalent to the output in gallons per acre for the backpack
sprayer at the walking speed, coverage technique, and pressure used during calibration.

Ounces of water to refill sprayer = Gallons per acre (GPA)

Of course, ALWAYS READ AND FOLLOW LABEL DIRECTIONS FOR SAFE USE OF ANY PESTICIDE!

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