# Frequently asked questions

Q: If I calibrate my sprayer once at the beginning of the season, do I have to do it again?

A: It is important to calibrate your sprayer every time you use it to ensure it is in proper working order.

Q: How do I know how much pesticide mixture I need for a spot application?

A: When making spot applications such as to a single shrub or a row of vegetables, do a trial application with clean water before adding the pesticide. Fill your sprayer with water to a level that is easily recognized and spray the plant(s) to be treated, being sure to get complete coverage. Determine how much water was used by measuring the amount of water needed to refill the sprayer to the same level that you started with. Before you calibrate your hand sprayer, check that it is in proper working condition. Be sure the sprayer’s cover gives a tight seal to keep the sprayer in proper working order.

Q: How do I calibrate the hand sprayer?

A: This brochure will explain how to calibrate hand sprayers (see figure). The calibration procedure on the next panel is for a broadcast application (a uniform spray over the entire area) to areas such as lawns and vegetable gardens. You can use hand sprayers to apply pesticides to your lawn, garden, trees, or shrubs.

To find out how to calibrate a hand sprayer, refer to Home PEST brochure #8, “Hand Sprayer Calibration.”

## What is Calibration?

Equipment calibration is a process that ensures that you are applying the exact amount of a pesticide uniformly over the target area. It involves adjusting your equipment as well as calculating its delivery rate (output). Improper calibration often causes the use of unnecessary pesticide.

You should calibrate your equipment to:

- Make sure you are applying the right amount of pesticide to control pests without the excessive pesticide residues or plant injury that over-application causes.
- Avoid the misuse of pesticides by using equipment properly adjusted and working properly.
- Save money by buying only as much pesticide as you need.

This brochure will explain how to calibrate hand sprayers (see figure).

## Using a hand sprayer

You can use hand sprayers to apply pesticides to your lawn, garden, trees, or shrubs.

### Advantages
- Good for spot treatments
- Easy to use

### Disadvantages
- Difficult to maintain uniform output
- Difficult to make uniform application because of changes in pressure, air pressure, and walking speed

Before You Calibrate

Check the following before hand sprayer calibration:

- Check that it is in proper working condition. Be sure the sprayer’s cover gives a tight seal to keep the sprayer in proper working order.
- Check all hose connections for leaks or worn, damaged, or partially plugged, which would distort the spray pattern.
- Make sure that the nozzle opening is not distorted or plugged, which would distort the spray pattern.
- Use the correct nozzle for the intended application.
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- Be sure to move your wand evenly and consistently over the area.
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- Check the label for the minimum volume to apply per 1000 square feet. If the volume in Step 5 is less than the label specification, the mist would be too coarse to adequately cover the target area; repeat Steps 2-3 but decrease your walking speed in Step 3 to increase output.
- Determine the amount of pesticide needed for each gallon of water and for each tankful.
- Check all hose connections for leaks or worn, damaged, or partially plugged, which would distort the spray pattern.
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