

Frequently asked questions

Q: What should I do if I have extra pesticide or fertilizer after making an application?

A: Pour any product remaining in your spreader back into the product bag. If you do not need a whole bag to complete a treatment, take care not to add too much product to your hopper; it is easier and safer to add more to the hopper if it runs empty than it is to pour excess material from the hopper back into the bag.

Seal the open edge of the bag with tape. Place the bag inside a large, plastic garbage bag and close securely with a twist tie. This will prevent humidity from being absorbed by the product, which would render it useless. Label the garbage bag and store it properly. See Home PEST brochure #4, "Storage and Disposal."

Q: How should I clean my spreader after use?

A: It is important to clean your spreader thoroughly after each use. On a lawn area, wash your spreader with a garden hose and clean water. Allow the spreader to dry completely before storing.

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

A: Different products have their own unique characteristics and behave differently during an application. Thus it is important you recheck the output of your spreader every time you make an application.

Home PEST seeks to provide homeowners with the knowledge they need to make informed decisions about pesticides.

This publication is available from your county Cooperative Extension office.

The Home PEST project was developed by the University of Wisconsin-Extension Pesticide Applicator Training (PAT) program.

Any reference to pesticide products are for your convenience and are not an endorsement or criticism of one product over other similar products.

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#9 - Spreader Calibration

Calibrate a drop or rotary spreader



Home PEST

Home Pesticide Education & Safety Training
University of Wisconsin-Extension

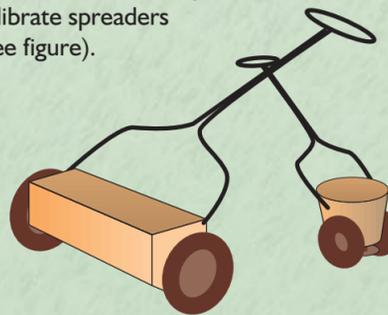
What is Calibration?

Equipment calibration is a process that ensures that you are applying the correct amount of a pesticide uniformly over the target area. It involves adjusting your equipment as well as calculating its delivery rate (output). Improper calibration is often the cause of unsatisfactory pest control.

You should calibrate your equipment to:

- Make sure you apply the right amount of pesticide to control pests without the excessive pesticide residues or plant injury that over-applications cause.
- Ensure a uniform application by using properly adjusted and working equipment.
- Save money by buying only as much pesticide as you need.

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



To find out how to calibrate a hand sprayer, refer to Home PEST brochure

Thinking about spreaders?

You can use spreaders to apply pesticides and fertilizers to your lawn.

Advantages of Drop Spreaders

- More efficient in small areas
- Effective with very light pesticides/fertilizers
- More precise in pesticide placement
- Keeps product off sidewalks and driveways

Disadvantages of Drop Spreaders

- Overlaps or skips can occur
- Turning around causes uneven coverage
- Clogging

Advantages of Rotary Spreaders

- More efficient for large areas
- 20-50% overlap won't cause problems
- Less time required to apply product

Disadvantages of Rotary Spreaders

- Products with mixed granule sizes don't spread uniformly
- Turning around changes rotating plate speed and causes non-uniform coverage
- Granules prone to land on driveways and patios
- Clogging

Before you buy the product

Before you buy a pesticide or fertilizer, measure the treatment area so you know how much to buy (see next panel). You can measure your lot and then subtract the area of your house, paved areas, and other non-lawn areas. If your lawn is much smaller than the total area of your lot, it will be simpler just to measure the lawn.

Granules flow at different rates depending on the product, so check the label for the recommended gate setting for your brand of spreader. If the label doesn't list your spreader, you may wish to buy a similar product whose label does.

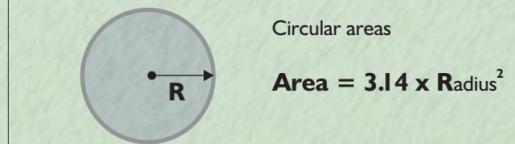
You may also call the product manufacturer if a telephone number is provided on the package. Many manufacturers will give you the setting for spreaders not listed on the label. Do this BEFORE you purchase the product in case the manufacturer has not calibrated the product for your spreader.

Compare the size of your lawn to the area that the product label indicates one bag will cover to see how many bags you need to buy. Make sure your equipment is working properly.

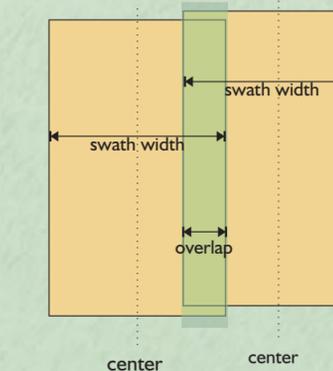
- Keep the hopper walls clean and rust free
- Make sure the metering gate operates freely
- Check for damaged fins on rotary spreaders

Spreader calibration

Treatment area measurements



Rotary spreader overlap



Follow these steps for proper application:

1. Determine the area (in square feet) to be treated.
2. Choose a product whose label or manufacturer provides a recommended gate setting for your brand of spreader.
3. Check the label to see how many square feet one bag of product will cover.
4. Divide the area from step 1 by the area from Step 3 to determine how many bags you will need.
5. Set your spreader to the recommended gate setting and begin the application.
6. If you seem to be applying too much or too little material, change either your walking speed or the setting on your spreader.

For more uniform application, use the gate setting that will apply the granules at $\frac{1}{2}$ the labeled rate and treat the lawn as described twice, with the second application being perpendicular to the first.

Additional steps for a rotary spreader

We don't recommend rotary spreaders for home lawns because it's too hard to get a uniform application; more material is applied in the center of each pass than at the edges. To apply the product uniformly, each pass must overlap the previous pass by 50% (see figure). To do this:

1. Measure the swath width; one-half of that width is applied on either side of you during a pass.
2. Multiply $\frac{1}{2}$ of the swath width by 0.50.
3. Subtract Step 2 from Step 1. This is how far you need to move over for each successive pass.