



Cover Crop Seeding Rate Calculator

Optimize your planting to maximize results and savings

The Challenge

Cover cropping can address critical environmental concerns, such as decreasing soil erosion, improving soil health, crowding out weeds, conserving water, and supplying nitrogen. To use cover crops successfully, growers must choose seeding rates appropriate for their specific cover crop or species mixture, as well as their field conditions, goals, and financial considerations.

Our Response

We developed the online Cover Crop Seeding Rate Calculator (covercrop-seedcalc.org) to help farmers strike the right balance between costs and benefits when selecting seeding rates and creating mixtures. We built this free, user-friendly, open-source decision support tool using a framework developed by USDA Natural Resource Conservation Service personnel, existing data sets, and our own on-farm research results. The the four regional U.S. cover crop councils—in the Northeast, South, Midwest, and West—provided species information tailored to their regions and collaborated with us to test and fine-tune the tool. Data for the Midwest and West will be available by the end of 2025.

How to Use the Cover Crop Seeding Rate Calculator

1. Create a free account for a personalized history and seamless cross-device experience (optional).
2. Select your state, then choose whether to enter site information yourself, import calculations, or have the tool populate it.
3. Indicate your field's location by entering an address, moving the pin, and/or drawing a polygon, then select "edit details."
4. Input the field's size and approximate soil fertility level, as well as your cover crop species of interest. The tool generates preliminary seeding rates (and mix ratios, if applicable), showing pounds of seed per acre and seeds per square foot.
5. Select your planting method, adjust the seeding rate based on your goals, enter seed tag info, and review your mix. The tool's final page allows you to calculate seed costs.



Part of the Review Your Mix page in the Cover Crop Seeding Rate Calculator

Explore All Our Cover Crop Tools

precisionsustainableag.org/decision-support-tools



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