

MCCC North Central Soybean Farmers Cover Crop Survey

Hello, Soybean Grower --

We are conducting a survey of North Central Region soybean growers to learn more about the use and challenges of including cover crops before and after soybeans from a farmer's perspective. This survey is funded by a North Central Soybean Research Program grant and carried out by a team from the Midwest Cover Crops Council.

You can complete this paper survey or access it online via the following link:

<https://www.surveymonkey.com/s/BGTMJ2S>

Return completed paper surveys to your workshop/meeting representative. Or, mail to:

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Email: grossp@msu.edu**

We appreciate your time!

Please note:

This survey contains the same questions and content as the online version. If you have already completed an online survey, do not complete a printed survey.

This survey should take less than 10 minutes to complete. Your answers will remain anonymous.

This survey is intended for soybean growers.

For the purposes of this survey, a cover crop refers to any crops intentionally planted between traditional spring/summer crop production periods.

All information in this survey is confidential and will be used for statistical purposes only.

1. How many acres do you farm?

2. How many acres of soybeans did you plant in:

2011

2012

2013

3. Do you use cover crops in your soybean rotation(s)?

- ☐ Yes (continue on page 2)
- ☐ No (skip to page 6)

4. Where do cover crops fit into your soybean rotation(s)?

Check all that apply.

- ☐ a. Cover crops in a continuous soybean program
- ☐ b. Cover crops following corn and before soybeans
- ☐ c. Cover crops following soybeans and before corn
- ☐ d. Cover crops following a small grain cash crop before soybeans
- ☐ e. Cover crops on fields receiving manure
- ☐ Other (please specify)

5. Do you grow cover crops **BEFORE** soybeans?

- ☐ Yes (continue on page 3)
- ☐ No (skip to page 4)

6. How many acres of cover crops did you plant BEFORE soybeans planted in:

2011

2012

2013

7. Which of the categories of cover crops listed below do you use BEFORE soybeans? Check all that apply.

- ☐ a. Winter cereal grains (e.g., winter wheat, cereal rye, winter barley)
- ☐ b. Annual grasses (e.g., annual ryegrass, sorghum, sorghum/sudangrass, oats)
- ☐ c. Legumes (e.g., clover, winter pea, vetch)
- ☐ d. Brassicas (e.g., oilseed radish, mustards, rape, turnips)
- ☐ e. Summer annual broadleaf (e.g., buckwheat, cowpea)
- ☐ f. Two-species mix
- ☐ g. Multi-species mix (3 or more species)
- ☐ Other (please specify)

8. What method do you use to seed cover crops BEFORE soybeans? Check all that apply.

- ☐ a. Drill
- ☐ b. Planter
- ☐ c. Broadcast only
- ☐ d. Broadcast with shallow incorporation
- ☐ e. Broadcast into standing crop (non-aerial)
- ☐ f. Aerial
- ☐ g. Mixed with fertilizer and spread
- ☐ h. Highboy seeding in combination with spray application
- ☐ i. Seeding with equipment on harvester
- ☐ j. With manure application
- ☐ Other (please specify)

9. Do you use cover crops AFTER soybeans?

- ☐ Yes (continue this page)
- ☐ No (skip to page 6)

10. How many acres of cover crops did you plant AFTER soybeans harvested in:

2011	<input type="text"/>
2012	<input type="text"/>
2013	<input type="text"/>

11. Which of the categories of cover crops listed below do you use AFTER soybeans? Check all that apply.

- ☐ a. Winter cereal grains (e.g., winter wheat, cereal rye, winter barley)
- ☐ b. Annual grasses (e.g., annual ryegrass, sorghum, sorghum/sudangrass, oats)
- ☐ c. Legumes (e.g., clover, winter pea, vetch)
- ☐ d. Brassicas (e.g., oilseed radish, mustards, rape, turnips)
- ☐ e. Summer annual broadleaf (e.g., buckwheat, cowpea)
- ☐ f. Two-species mix
- ☐ g. Multi-species mix (3 or more species)
- ☐ Other (please specify)

12. What method do you use to seed cover crops AFTER soybeans?

Check all that apply.

- ☐ a. Drill
- ☐ b. Planter
- ☐ c. Broadcast only
- ☐ d. Broadcast with shallow incorporation
- ☐ e. Broadcast into standing crop (non-aerial)
- ☐ f. Aerial
- ☐ g. Mixed with fertilizer and spread
- ☐ h. Highboy seeding in combination with spray application
- ☐ i. Seeding with equipment on harvester
- ☐ j. With manure application
- ☐ Other (please specify)

13. What are your biggest challenges with using cover crops BEFORE soybeans or preventing use of cover crops BEFORE soybeans?

Check up to three (3) of your most significant challenges.

- ☐ a. Selecting the right cover crop species for my operation
- ☐ b. Establishing cover crops
- ☐ c. Increases overall crop production risk
- ☐ d. Cover crop becomes a weed the following year
- ☐ e. Nitrogen immobilization (N not available for the crop)
- ☐ f. Cover crop sometimes uses too much soil moisture
- ☐ g. Increased disease potential
- ☐ h. Increased insect potential
- ☐ i. Time / labor required for planting and increased management
- ☐ j. Cost of planting and managing cover crops
- ☐ k. No measurable economic return
- ☐ l. Yield reduction of the following crop
- ☐ m. Cover crop seed cost
- ☐ n. Cover crop seed availability
- ☐ o. Residual herbicide carryover
- ☐ p. Difficulty terminating cover crops
- ☐ q. Uncertainty of crop insurance rules
- ☐ Other (please specify)

14. What are your biggest challenges with using cover crops AFTER soybeans or preventing use of cover crops AFTER soybeans?

Check up to three (3) of your most significant challenges.

- ☐ a. Selecting the right cover crop species for my operation
- ☐ b. Establishing cover crops
- ☐ c. Increases overall crop production risk
- ☐ d. Cover crop becomes a weed the following year
- ☐ e. Nitrogen immobilization (N not available for the crop)
- ☐ f. Cover crop sometimes uses too much soil moisture
- ☐ g. Increased disease potential
- ☐ h. Increased insect potential
- ☐ i. Time / labor required for planting and increased management
- ☐ j. Cost of planting and managing cover crops
- ☐ k. No measurable economic return
- ☐ l. Yield reduction of the following crop
- ☐ m. Cover crop seed cost
- ☐ n. Cover crop seed availability
- ☐ o. Residual herbicide carryover
- ☐ p. Difficulty terminating cover crops
- ☐ q. Uncertainty of crop insurance rules
- ☐ Other (please specify)

15. What benefits do you look for or would you like from a cover crop?

Check up to three (3) of the benefits most important to you.

- ☐ a. Control of insects
- ☐ b. Control of weeds
- ☐ c. Nitrogen source
- ☐ d. Nitrogen scavenging
- ☐ e. Reduces diseases
- ☐ f. Reduces soil compaction
- ☐ g. Reduces soil erosion
- ☐ h. Winter kills easily (no spring burn-down needed)
- ☐ i. Winter hardiness/survival
- ☐ j. Economic return (e.g., haying, grazing, biofuels)
- ☐ k. Decreases cost of producing following crop
- ☐ l. Increases yield of the following crop
- ☐ m. Fibrous rooting system
- ☐ n. Deep tap roots
- ☐ o. Ease of terminating cover crop
- ☐ Other (please specify)

16. How much per acre (in whole dollars) are you willing to spend to plant cover crops on an annual basis – broken into seed cost, establishment (operations) cost and herbicide cost?

Seed cost \$/acre

Establishment cost

(e.g., labor, equipment,
or contractor cost)

\$/acre

Herbicide cost above

normal burn-down

\$/acre

17. List some topics for which research could reduce the challenges or improve the performance of cover crops used in soybean rotations.

Topic 1:

Topic 2:

Topic 3:

18. In what ZIP code is your home located?
(enter 5-digit ZIP code; for example, 00544 or 94305)

Thank you for participating in this survey!