

Do Cover Crops Deliver a Yield Bump?



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There's little doubt that deploying cover crops can protect against soil erosion and bolster soil health. But new research from the Conservation Technology Information Center (CTIC) suggests farmers who use cover crops could see a modest yield boost as well.

CTIC surveyed more than 1,200 farmers earlier this year. Respondents reported a mean increase of 3.66 bu. per acre for corn (2.1%) and an average 2.19 bu. per acre in soybeans (4.2%). It was the third year in a row that CTIC has seen yield increases following cover crops.

The number of acres planting cover crops has increased steadily over the past five years, according to the CTIC, with acres more than doubling during that time period.

“What’s particularly interesting is that while seeing an immediate benefit like a yield bump from cover crops is great, the large majority of farmers who plant cover crops told us they actually rate improvements in soil health, increases in soil organic matter, reduced soil erosion and improved weed control far higher than yield increases when they list the benefits they enjoy from the practice,” says Chad Watts, CTIC program director. “That shows a strong appreciation for the wide range of long-term benefits cover crops deliver.”

Watts adds that other benefits of cover crops remain “under-appreciated,” such as how cover crops can fix atmospheric nitrogen in the soil, scavenge nutrients before they leave the root zone and cycling these nutrients for later use.

“It shows us that we have more work to do in communicating about these nutrient management benefits,” he says.

University of Missouri agronomist Rob Myers says many farmers are planting cover crops despite lower commodity prices and absent any financial incentives. According to the survey, nearly three of every four respondents said commodity crop prices have little or no influence on their decision to plant cover crops, Myers says. Only 9% of respondents indicated they will only plant cover crops if they receive financial incentive, he says.

“On the other hand, 92% of the farmers who do not currently plant cover crops say economic incentives would somewhat or always influence cover crop adoption,” Myers adds. “These results illustrate that economic incentives can help encourage farmers to consider cover crops, but once they start using them, the multiple benefits they are seeing will motivate them to continue using covers.”

