

## Cover Crops

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Cover crops are doing wonders for the soil...but the experts aren't really sure why. Ag Reporter [Sarah Gustin](#) explains one experiment trying to dig up some answers.

(Sarah Gustin / KX News) "Last year these plots were speckled with different cover crop mixes now it's time to see which one of those concoction produces the biggest benefit come harvest time." (Marty Schmer / Research Agronomist) "We had 18 different combinations of cover crops...and one control with no cover crops. Some of these were monocultures. And some of these were in high diversity mixtures of all types of functional groups. And the goal is to see what type of mixtures work best in this type of area." Some of the seed mixtures had sunflowers, some had spring triticale, some had legumes.

This year spring [wheat](#), corn, [Soybeans](#) and dried peas are growing on this 6 acre plot south of [Mandan](#) at the Northern Great Plains Research Lab.

Research Agronomist Marty Schmer is hoping to determine which seeds should and shouldn't be included in the mix and which crops perform best on cover crop ground the following year.

(Marty Schmer / Research Agronomist) "This is our wheat that has a nitrogen response rate. So what we are looking at is if there is possibly a cover crop by nitrogen interaction. What that means is it possible to maybe reduce some of our nitrogen rates on our spring wheat coming out of a cover crop and if so can we get the same amount of yield with our normal nitrogen rates?" Schmer says it's too early to tell any significant differences, but this year the spring wheat and dry peas are performing the best on last year's cover crop ground.

And this might be the perfect year to put the ground to the test.

(Marty Schmer / Research Agronomist) "We will also use this field as a long term study where we will have cover crops on this field every 2 years. If we do find differences this year it will be great. I think with the type of snow fall we had this winter an the type of rainfall we have had this spring and summer time if we do find differences that really shows a positive sign for adding cover crops into your rotational system." South of Mandan for KX News, I am Sarah Gustin."

This is the first year.

Schmer says the experiment will last at least three years.