Overview

A cover crop is grasses, legumes, forbs or other herbaceous plants that are established for seasonal cover and conservation purposes.

Cover crops are planted in the late summer or fall around harvest and before spring planting of the following year's crops. Common cover crops used in Minnesota include winter hardy plants such as rye and wheat. Other less common, but also effective cover crops include oats, barley, spring wheat, hairy vetch, red clover, turnips, canola, radishes, and triticale.

Purpose

This practice may be used to reduce wind or water erosion by establishing cover after a minimal residue crop, to use up excess nutrients in the soil profile, for weed suppression, to provide nutrient for the next crop, to increase carbon sequestration and improve soil structure.

Where the practice applies

Cover crops may be used on all lands needing vegetative cover for natural resource protection and improvement. They are an excellent tool for helping to improve soil health.

Cover Crop Benefits

- Reduce Soil Erosion
- Improve Soil Health
- Increase Soil Porosity & Infiltration
- Weed Fighter
- Improve Soil Microbiology
- Produce/Scavenge Crop Nutrients
- Reduce Soil Compaction
- Improve Nutrient Cycling
- Improve Soil Organic Matter
- Protect Water Quality
- Protect the Environment
- Enhance Wildlife Habitat

Planting Tips

Cover crops can be seeded with drills, broadcast equipment, or aerially applied to get the cover crop started early enough to achieve the desired results.

Cover crops are ideal for planting after early harvested crops such as wheat, sweet corn, seed corn, peas or other vegetables, and silage corn.

To learn the proper time of year cover crops should be inter-seeded into mature corn and soybeans contact your local NRCS or SWCD office.

Choosing Cover Crops

To get the maximum benefit from cover crops, they need to become an integral part of your cropping system. Whether you grow just corn and soybeans or you have a more diverse rotation that includes wheat or vegetable crops, livestock and manure, there are opportunities to include cover crops in your production system. When you select a cover crop, make sure it provides benefits that meet your farming objectives



Rye cover crop seeded into corn residue.

Photo: courtesy USDA

Decision Making During Drought

Cover crops can trap nitrogen remaining in the soil, that was not utilized by failing crops. They then release nitrogen at the optimum time in the spring for the new crop. It is important to plant the correct cover crop for the job.

Oats and cereal rye are a great combination for cover crops and wildlife habitat. However, even better if mixed with some turnips or crimson clover. Many grass, legume, and bassica mixes are massive root producers with roots often reaching four feet or more in depth. These root channels make it easier for crop roots to find their way down to nutrients and water later.

More Information

For more information about Cover Crops, visit your local USDA service center, or visit the Minnesota NRCS website at www.mn.nrcs.usda.gov

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