



Adding Cover Crops to Your Operation

Open up any farm magazine and cover crops are bound to be found. It seems that “cover crops” and “going green” are the latest buzz words in the ag industry. Many producers are asking “what’s all the hype about?” Cover crops are definitely not new by any means but many growers are having good success with ground stabilization, nutrient scavenging and yield increases by implementing cover crops into their operations.

Reaping the benefits of cover crops

In recent years growers, universities and government agencies have put a lot of emphasis into cover crops. A large reason for this is for the positive environmental impacts which they provide:

- Ground stabilization that reduces nutrient runoff
- Better water infiltration through increased aggregate stability and root channels
- Improved nutrient cycling in the soil by feeding the bacterial colonies in the soil
- Weed management by smothering out competing weeds
- Reduces the amount of carbon released into the atmosphere
- Builds organic matter
- Fixes nitrogen for the following crop
- Grazing for livestock



Mycorrhizae (white fuzzy growth) colonized in the soil after 60 days of cover crops. This fungus forms a symbiotic relationship with growing plants by acting as an extension of their roots which helps improve nutrient uptake, water absorption and creation of glomalin that aides in the production of stable soil aggregates.

Choosing the Correct Cover Crop

The most important step in choosing which cover crops to plant is determining what goals to achieve with those cover crop (e.g. increase infiltration, build organic matter, weed control etc.). The next step is to decide whether or not to plant cover crops that overwinter. Overwintering species such as cereal rye have benefits over those that winter-kill such as oats. With a crop that overwinters the soil is protected both in the spring and fall with living roots

that continue to feed soil bacteria through traditionally dormant months. However, with overwintering species the biggest challenge is termination in the spring. This is where it's best to keep in mind the increased work load implementing certain cover crops may take. Here is a small list of common cover crops and their benefits:

Cover Crop	Benefits	Winter-kill/ Overwintering
Tillage Radish	Compaction relief	Typically Winter-kills
Rye (Annual & Cereal)	Nutrient scavenging, soil building, weed suppression, soil stabilization, forage option.	Overwintering (Annual will winterkill usually in northern environments)
Winter Barley	Forage, weed suppressant, best for droughty soils	Overwintering
Oats	Soil stabilization, soil building	Winter-kill
Clovers	Nitrogen fixing, soil stabilization	Overwintering
Turnips	Forage, compaction relief, nutrient cycling	Winter-kill

One analogy that fits well is this: If you have livestock and they get fed year round, then why don't we feed our livestock in the soil (bacteria) year-round with cover crops? I encourage anyone who wants to get into cover crops to start small and find out what works best for their operation. If you are interested in learning more please contact your Legend Seeds representative.

Dale Viktora | Legend Sales Agronomist | Hollandale, Minnesota