Cover Crops

- Increase Soil Fertility
  Increase Crop Production
- Improve Soil Quality
  Add Vital Organic Matter
- Weed Suppression
  Crowd-out Competing Plants
- Reduce Water Runoff
  Stop Soil Erosion Due To Runoff

www.mtviewseeds.com • 503-888-7333
INTRODUCTION
WHAT ARE COVER CROPS
Cover crops are crops planted primarily to manage soil fertility, soil quality, water, weeds, pests, diseases, biodiversity and wildlife in farm systems.

Cover crops are of interest in sustainable agriculture as many of them improve the sustainability of farm attributes and may also indirectly improve qualities of neighboring natural ecosystems. Farmers choose to grow and manage specific cover crop types based on their own needs and goals but can also be influenced by the biological, environmental, social, cultural, and economic factors they operate in.

SOIL FERTILITY
INCREASE CROP PRODUCTION
One of the primary uses of cover crops is to increase soil fertility. These types of cover crops are referred to as “green manure.” They are used to manage a range of soil macronutrients and micronutrients. Of the various nutrients, the impact that cover crops have on nitrogen management has received the most attention from researchers and farmers, because nitrogen is often the most limiting nutrient in crop production. Often, green manure crops are grown for a specific period, and then plowed under before reaching full maturity in order to improve soil fertility and quality.

Green manure crops are commonly legumes. Legume cover crops are typically high in nitrogen and can often provide the required quantity of nitrogen for increased crop production. This quality of cover crops is called fertilizer replacement value.

SOIL QUALITY
ADD VITAL ORGANIC MATTER
Cover crops can also improve soil quality by increasing soil organic matter levels through the input of cover crop biomass over time. Increased organic matter enhances soil structure, as well as the water and nutrient holding and buffering capacity of soil.

Soil quality is managed to produce optimum circumstances for crops to flourish. The principal factors of soil quality are soil salinity, pH, microorganism balance and the prevention of soil contamination.

Cover crops are crops planted primarily to manage soil fertility, soil quality, water, weeds, pests, diseases, biodiversity and wildlife in farm systems.

Cover crops are of interest in sustainable agriculture as many of them improve the sustainability of farm attributes and may also indirectly improve qualities of neighboring natural ecosystems. Farmers choose to grow and manage specific cover crop types based on their own needs and goals but can also be influenced by the biological, environmental, social, cultural, and economic factors they operate in.

WEED SUPPRESSION
CROWD OUT COMPETITION
Thick cover crop stands often compete well with weeds during the cover crop growth period, and can prevent most germinated weed seeds from completing their life cycle and reproducing. If the cover crop is left on the soil surface rather than incorporated into the soil as a green manure after its growth is terminated, it can form a nearly impenetrable mat. This drastically reduces light transmittance to weed seeds, which in many cases reduces weed seed germination rates.

In a recent study released by the Agricultural Research Service (ARS) scientists examined how rye growth and planting patterns affected cover crop production. The results show that planting more pounds per acre of rye increased the cover crop production as well as decreased the amount of weeds. The same was true when scientists tested seeding rates on legumes and oats; a higher density of seeds planted per acre decreased the amount of weeds and increased the yield of legume and oat production. The ARS scientists concluded that increased seeding rates could be an effective method of weed control.

REDUCE RUNOFF
STOP SOIL EROSION AND BETTER UTILIZE WATER
By reducing soil erosion, cover crops often also reduce both the rate and quantity of water that drains off the field. Cover crop biomass acts as a physical barrier between rainfall and the soil surface, allowing raindrops to steadily trickle down through the soil profile.

Just before cover crops are killed they contain a large amount of moisture. When the cover crop is incorporated into the soil, or left on the soil surface, it often increases soil moisture. On farms where water for crop production is in short supply, cover crops can be used as a mulch to conserve water by shading and cooling the soil surface. This reduces evaporation of soil moisture.

CHOOSE YOUR COVER CROP
WHAT IS BEST FOR MY FARM
Choosing the correct cover crop can often be a challenging task. We have made it simple by including the chart above to help select the correct crop, planting method and management practice for you.

Cover crop grass and legume performance varies depending on environmental conditions. No single cover crop type or variety is best in all environments. The adaptation of a species or its potential longevity in the field, is determined greatly by genetic cold-hardiness traits, and its tolerance of other site, soil, and use conditions.

When selecting a cover crop species, or several species for use in a seed mixture, first consider their appropriateness for the intended use (pasture, hay, etc.) and for the expected longevity on the site.

Among the other factors that affect the suitability of a cover crop species are: drought tolerance, soil pH level, fertilizer nutrient requirements, soil damage, intensity, and harvest or grazing.

7 EASY STEPS TO SUCCESS
1. Obtain a soil analysis and improve soil conditions
2. Prepare a firm seed bed with good seed-to-soil contact
3. Plant at 1/8 - 1/4 inch deep
4. Irrigate if needed
5. Lightly graze or mow the first time
6. Fertilize
7. Renovate
Sheltered by Mt. Hood, the Willamette Valley enjoys mellow sunshine, gentle rain and mild winters. It’s the grass seed production capital of the world.

In 1946, farmers in Pratum, just east of Salem, founded a co-op to handle the prime seed that grows in our fertile soils. More than a half century later, Mountain View Seeds still reaps the benefits of the outstanding Willamette Valley climate.

In the northern part of the valley, crop rotation and abundant irrigation produce clean, high-quality turf seed.

The grain elevator at the Pratum Co-op has been a Willamette Valley landmark since 1946. For 35 years, the co-op handled public grass seed varieties, adding private varieties in the 1980’s. Mountain View Seeds, Ltd., a subsidiary of the Pratum Co-op, was created to manage mounting demand of grass seed production.

At Mountain View Seeds, we rely on experience and people. We know grass seed research, production and processing — after all, we have more than 50 years of experience.

We also take pride in the knowledge and skill of our staff. From research and development to production to order fulfillment, we hire the best... to make buying grass seed easy.

www.mtviewseeds.com • 503-588-7333

Managing cover crops is just like managing your other crops. Planting methods vary from no-till drilling to flying-on. Some crops can be sprayed out and others worked into the ground. Refer to our guide to help you choose the best option.

Mountain View Seeds brings Oregon’s best to you.

Distributed by:

TOP CHOICE®
PREMIUM COVER CROP SEED