

COVER CROP



We've put together a short and sweet guide to using cover crops in your home garden or farm.

Also known as “green manure,” cover crops are an integral part of sustainable agriculture. They provide an excellent set of benefits to promote and maintain soil health, and also promote bountiful garden yields.

WHY USE COVER CROPS?

Different types and blends of cover crop seeds can address various garden and soil issues. Here is a list of some of the goals cover crops can help you achieve:

- ***suppress & eradicate weeds***
- ***replenish organic matter into the soil***
- ***protect from erosion & compaction***
- ***aid in nutrient management & uptake***
- ***support beneficial bugs & pollinators***
- ***prevent pests & break cycles of disease***
- ***promote biological activity in the soil***
- ***increase garden yields & plant vigor***

The types of cover crops you can use in your garden or farm can be broadly separated into two categories: legumes and non-legumes.

Legumes include crimson, subterranean, red, and white clovers, as well as vetch, field peas, and fava beans. They are best known for fixing nitrogen. By enriching this essential plant food into the soil, they can provide anywhere from 50-150 lbs. per acre of nitrogen for your subsequent crops.

Their rapid leafy growth is also perfect for providing organic matter, and the flowers are attractive to pollinators and beneficial insects.

Non-legumes include cereal grains like wheat, barley, rye grain, oats, and triticale. These, and forage grasses like annual ryegrass or sorghum have fibrous root systems which are great for loosening soil, thereby preventing compaction and erosion while providing organic matter. Broadleaf cover crops such as buckwheat and brassicas are perfect for smothering and outcompeting weeds.

Non-legume cover crops are great at scavenging leftover nitrogen and phosphorus after the season is over. By doing so, they prevent these valuable nutrients from being leached away in winter rains by saving them inside their tissues to be released the next season as they decay.

SOIL FERTILITY AND HEALTH

One of the biggest issues facing gardeners and farmers is maintaining soil texture and health. Cover crops help to improve soil fertility, not only by providing nutrients and organic matter, but also maintaining the ideal porosity and structure of soil. This is essential for optimum nutrient uptake and water-holding capacity.

Not only do the roots of cover crops prevent erosion and compaction; they also provide a critical habitat to preserve beneficial soil microorganisms and fungi which perform many valuable functions during the growing season.

PESTS & BENEFICIAL INSECTS

Using certain cover crops as mulch on top of your soil can help reduce certain pests and pathogens, and eradicate weeds.

Brassicas such as Ethiopian cabbage and forage radish create tremendous biomass, but can also be used as mulch in this way.

When allowed to flower, cover crops like buckwheat, clovers, and brassicas will help to attract beneficial predatory insects, which help keep pest populations in check. Flowering crops support bees and pollinators by providing a good source of nectar and pollen.

WHEN TO CLEAR THE CROP

When your cover crop reaches maturity, you can cut it down and incorporate it into the soil, or use it as mulch on top of the soil. To avoid out of control growth or seed dispersal, cut the plants at the base during or just before flowering time.

After cutting, you can wait a few days for leaves and stems to dry down, or you can dig them in right away. Depending on the height of your cover crop, you can mow or trim them down more than once to maximize their biomass production.

It is important to factor in at least 2-3 weeks for your cover crop to decompose enough in advance of preparing the soil for planting, because available nitrogen will be immobilized for that short period of time.

