

Cover It Up!

By Kate O'Lenic, Master Gardener

After your garden is cleared out for the season, rejuvenate the soil with a cover crop. A cover crop, also known as green manure, is planted in late summer or early fall. Benefits of a cover crop include suppressing weeds, improving soil structure and fertility, and preventing erosion during the winter months. Some crops are also helpful in loosening clay soil.

Selecting the Crop

To decide which cover crop or crops to use, consider the following goals:

- Adding nitrogen
- Suppressing weeds
- Easing soil compaction, loosening clay soil
- Building organic matter

Of course, you can have more than one reason for using a cover crop. Mixing crops is commonly done to achieve the desired end results. Seed mixes are available to make sowing more than one crop much easier.

To help fix nitrogen in the soil, legumes will do the trick. Legumes recommended for clay soil include Austrian winter peas, crimson clover, and hairy vetch. Winter peas and clover grow quickly and decompose quickly. Be aware, though, that peas and crimson clover will attract deer. Hairy vetch is relatively cold-hardy and may be more difficult to kill in the spring.

Grasses and cereals used as cover crops include winter wheat, barley, and oats. They are excellent for increasing organic matter in your soil. Oats are a great option because they germinate faster than some other plants and provide weed suppression early on. Please note that rye is NOT recommended as it is difficult to terminate in spring.

Brassicas that are used include mustard, rapeseed, and tilling radish which are great for loosening clay soil. These are usually mowed and worked into the soil for maximum benefit.

Tips regarding growing these crops

- Remove spent garden plants and debris.
- Rake to smooth the soil.
- Sow seeds between August 15 and October 10th to allow time for some growth before a hard frost.
- Broadcast the seed preferably before a rain, and gently rake seeds evenly into the soil. Then walk on the seeds to press them into the soil.
- Water when needed.
- Don't allow flowering crops to go to seed. Turn them under when some of them are in flower for best results.

For first-time cover crop planting, oats are a good choice. They are killed by the first hard freeze, the dead material provides a nice mulch over winter and adds nutrients into the soil as it decomposes. Then in the spring, it can be worked into the soil for added benefit.

Terminating the Crop

At least two to three weeks before planting your spring garden vegetables, it is time to end the cover crop to allow time for the vegetation to decompose before planting vegetables. Depending on the crop used, it can be mowed, tilled under or, in small gardens, it can be hand pulled and spaded into the soil. The crops that are not winter hardy will die back naturally and can be worked into the soil. The grasses and cereals can be mowed and left in place to serve as mulch.

Working the crops into the soil adds organic matter which improves soil structure and fertility. Organic matter is necessary for maintaining the bacteria, fungi, earthworms, and other living organisms that make soil healthy.

One final note about cover crops, soil is not meant to be left bare. By growing cover crops, you can make your garden bed look nice over the winter, loosen up clay soil, add organic matter, suppress weeds, and add nitrogen. All of which benefits your next vegetable garden. So, cover it up!

For additional insight into cover crops, see the excellent video by Adam Watson, Washington County, TN Agriculture Agent on YouTube:

<https://www.youtube.com/watch?v=dJpPwDsFxWY>

Resources

Try Cover Cropping- A Guide for Home Gardeners, <https://caldwell.ces.ncsu.edu/2022/07/try-cover-cropping-a-guide-for-home-gardeners/>

Improve Vegetable Garden Soil with Cover Crops

<https://extension.psu.edu/improve-vegetable-garden-soil-with-cover-crops>

Cover Crops for Gardens

<https://extension.umd.edu/resource/cover-crops-gardens>

Tips for Planting Cover Crops in Home Gardens

<https://extension.psu.edu/tips-for-planting-cover-crops-in-home-gardens>

How do I ask a question?

If you have a question for the Master Gardeners, submit them to us on our website at www.netmga.net. Click the link at the top of the page, "ASK A MASTER GARDENER" to send in your question. Questions that are not answered in this column will receive a response from a Master Gardener to the contact information you provide.

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