Cover Crops:

Plants with a Helpful Purpose

Cover crops are planted for the purpose of building healthy soil. These plants create a living mulch that suppresses weeds, protects soil from erosion and holds nutrients from running off. Grass and broadleaf cover crops add organic matter (carbon) and legume cover crops add nutrients (nitrogen) into the soil by partnering with beneficial bacteria and fungi. Their deep roots repair compacted soil. They can activate unplanted areas of your garden and attract pollinators and other beneficial insects. And when combined with using compost, cover cropping is a powerful carbon farming practice.

Of course you should love your cover crops, but don't get too attached. The key to growing a successful cover crop is understanding they need to be chopped down in their prime (a few weeks after flowering, right before going to seed) and allowed to break down into the soil. If you allow cover crops to go to seed, they will use up many of the nutrients they originally put into the soil. For this reason, growing cover crops happens over a short period of time, usually between growing seasons.



fava bean, cool season legume



fava bean root nodules, fixing nitrogen

Cool Season Crop Mix

Covers 300 square feet:

- 1-ounce **Barley** (grass)
- 1-pound **Fava Bean** (legume)

Plant in September-October. Use a rake to loosen the top of the soil and pull up weeds. First, broadcast Barley seeds and rake in 1 inch. Second, plant Fava Beans flatly in 1-2 inch trenches and cover. Water to keep soil moist until plants germinate and grow 2-4 inches tall. Water Occasionally thereafter. 2-3 weeks after flowering, use a scythe, machete, or push mower to chop or bend plants at their base, allowing stalks to lay on top of soil. Leave roots intact within the soil.

Warm Season Crop Mix

Covers 300 square feet:

- 1.5-ounce **Common Buckwheat** (broadleaf)
- 1-pound **Cowpea** (legume)

Plant in March-April. Use a rake to loosen the top of the soil and pull up weeds. First, broadcast Buckwheat seeds and rake in 1 inch. Second, plant Cowpea seeds in 1-2 inch trenches and cover. Water to keep soil moist until plants germinate and grow 2-4 inches tall. Water occasionally thereafter. 2-3 weeks after flowering, use a scythe, machete, or push mower to chop or bend plants at their base, allowing stalks to lay on top of soil. Leave roots intact within the soil.

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sheet mulched rows layered over chopped cover crops

After chopping, use a lightweight sheet mulching recipe (newspaper, compost, and straw) to cover the chopped crops. Water thoroughly, and allow to break down over 4 weeks. Alternatively, allow chopped crops to lay flat on the surface to dry out into a mulch. Decomposition occurs more quickly the finer the cover crop material is initially chopped.

Do not rototill cover crops into your soil. Rototilling will damage your soil structure and harm the bacteria and fungi responsible for breaking down your cover crops.

Wait at least 4 weeks after chopping before following up with planting a food crop. By then, the soil will be rich with freshly added organic matter and nutrients, ready to grow you something delicious!

Frequently Asked Questions

Which cover crops should I plant in my garden?

Is your soil light in color or dusty to the touch? Grass and broadleaf cover crops add organic matter to your soil. Are you growing a fruit and vegetable garden? Legume cover crops add nitrogen to your soil. Of course, we always suggest growing a mix of both at the same time.

field pea, vetch, and barley mix in a raised bed

Where can I buy cover crop seed?

See <u>StopWaste's Local Gardening Resources</u> webpage to find local partner nurseries and online seed catalogs that carry cover crop seeds.

What happens if I let cover crops continue growing rather than chopping them down?

Your cover crops will be pollinated and go to seed, pulling some nutrients from the soil. Certain crops may become next year's weeds. However, letting crops go to seed allows gardeners to harvest seed for replanting the following season, or in the case of edible crops like fava bean and cowpea, to harvest food.