



How-To: COVER CROPPING

Cover cropping is the process of sowing crops to protect and enrich the soil. For many reasons, cover crops are valuable in organic gardening systems.



CRIMSON CLOVER AND OATS COVER CROP IN A SCHOOLYARD GARDEN



CRIMSON CLOVER



FIELD PEA AND OAT SEEDS

WHY COVER CROP?

Cover crops provide a variety of benefits.

- **Erosion control** When an area of the garden is bare, soil washes and blows away. The roots of cover crops hold onto the soil. Their leaves shelter the soil from the weather.
- **Weed suppression** Cover crops shade and crowd out weeds.
- **Soil conditioning** Some cover crops add Nitrogen to the soil, and all cover crops add organic matter.
- **Beneficial insect attraction** When cover crops bloom, they provide nectar and pollen for a host of beneficial insects, including pollinators.
- **Soil aeration** Some cover crops permeate the soil with their tap roots, providing soil aeration.

CHOOSING COVER CROPS

Each type of cover crop offers unique benefits and drawbacks. To select the type of cover crop that is right for you, consider the following points and see the chart on page two.

1. **Planting time** Each cover crop variety has its own ideal seeding window. For a thriving cover crop that covers the ground well, be sure to plant the crop at the appropriate time.
2. **Growth rate** For areas with high weed pressure, choose a cover crop that establishes quickly. Quick-growing cover crops can also be used to cover garden areas that have a brief fallow period in the middle of the season (for instance, a lettuce bed that was planted and harvested in the spring and will be planted again in the fall). Cover crops that are slow to establish work well in areas that will be held in cover crop for longer amounts of time.
3. **Winterkill** Some cover crops will die over the winter, making spring gardening preparations easy. To prepare the spring garden, simply rake dead plants off of the beds. Other cover crops survive the cold, providing excellent coverage through the winter months but needing to be tilled or otherwise incorporated in the spring. Choose cover crops wisely with this trait in mind, to avoid creating unwanted work in the spring.
4. **Nitrogen fixation** Cover crops that are legumes take Nitrogen from the air and make it available to the plant using nodes on their roots. Legumes that are incorporated into the soil release a significant amount of Nitrogen which can then be used by other plants.



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Cover Crop	Ideal Planting Time	Establishment	Winterkill?	Adds Nitrogen?	Notes
BUCKWHEAT	SPRING TO SUMMER	FAST	Y	N	FAST GROWTH - PLANT BETWEEN CROPS DURING SEASON. NEEDS TO BE MOWED OR INCORPORATED QUICKLY AFTER BLOOM.
CLOVER, CRIMSON	SPRING TO SUMMER	FAST	N	Y	BEAUTIFUL BLOOMS DRAW BENEFICIALS.
CLOVER, SWEET	SPRING TO SUMMER	MEDIUM	N	Y	THICK COVER CAN GROW UP TO 6 FT IN YEAR 2.
CLOVER, NZ WHITE	SPRING TO SUMMER	SLOW	N	Y	LOW GROWING - CAN BE PLANTED UNDER LARGER CROPS TO SUPPRESS WEEDS.
FIELD PEA	SPRING OR FALL	FAST	Y	Y	PEA SHOOTS ARE EDIBLE. SOW WITH A GRAIN, WHICH ACTS AS A SUPPORT.
FORAGE (OILSEED) RADISH	LATE SUMMER	FAST	Y	N	BREAKS UP SOIL COMPACTION WITH DEEP TAPROOTS. DECOMPOSITION IN SOIL DETERS SOME PESTS.
OATS	SPRING TO LATE SUMMER	FAST	Y	N	PROVIDES STRUCTURE FOR FIELD PEAS. SOW BY EARLY SEPT. FOR WINTER COVER.
RYE, WINTER	ANYTIME	FAST	N	N	THICK COVER, VERY HARDY. NEEDS TO BE TILLED OR SOLARIZED TO KILL.
RYEGRASS	ANYTIME	MEDIUM	N	N	QUICK, THICK COVER NEEDS TO BE TILLED OR SOLARIZED TO KILL.
VETCH, HAIRY	ANYTIME	SLOW	N	Y	BLOOMS AND ATTRACTS BENEFICIAL INSECTS IN YEAR 2.

HOW TO PLANT

STEP 1 Decide which cover crops to plant, based on your goals for the area you will be cover cropping.

STEP 2 Clear garden plants and weeds from the area. Use a tiller, broadfork, hoe, or garden claw to loosen and prepare the soil. Rake to create a smooth seedbed.

STEP 3 Determine and weigh out the amount of cover crop seed you need to cover the area (most seed companies list a weight per 1000 sq. ft.).

STEP 4 Broadcast the seed over the area as evenly as possible. For large areas, handheld broadcast seeders work well.

STEP 5 Lightly rake the area.

STEP 6 Sprinkle straw lightly over the seeded space, to deter birds and retain moisture (optional).

STEP 7 Water the area well.

TIPS

- Combine cover crops for multiple types of benefits from one planting. A common combination is field peas and oats.
- Cover crops can be managed by mowing or weed-whacking as well as by tilling and winterkilling.
- Be sure to cut back or incorporate cover crops before they go to seed, as cover crops that drop seed can create a weed problem.
- Short cover crops can be sown below food crops after they are established.
- Some cover crops can be killed by mowing them very short. After the plants have died back, seedlings can be planted in this area without tilling.
- When choosing cover crops, avoid types of plants in the same crop family as food crops that have had major pest or disease problems in your garden.