



Cover Crops in the Home Garden

Cover crops have been used for thousands of years, as early farmers understood their benefits to soil health. Home gardeners can realize these same benefits. Instead of leaving a garden area bare for a season, plant a cover crop to protect and restore the soil for the next season's planting.

Cover crops are grown to enhance the quality of soil, instead of for food production. The benefits of planting cover crops in your garden are numerous:

- Add organic material and nutrients
- Build good soil structure by feeding the microorganisms living in the soil
- Improve drainage so water can move deeper into the soil
- Attract beneficial insects to your garden
- Keep plants more disease and pest resistant

Type of Cover Crops

There are both winter and summer cover crops. If you will not be putting in a fall/winter vegetable garden, planting a winter cover crop in the early fall will protect the soil during the season and improve it for your spring/summer vegetable garden.

Cover crops include both legumes, such as fava beans and clovers, and non-legumes, such as grasses and cereal grains. Legumes add nitrogen, essential for plant growth, to the soil. Grasses and cereal grains are good for weed suppression and they can capture nitrogen left in the soil from the previous growing season. Planting a mixture of several types of legumes and non-legumes is ideal so you get the benefit of each type.

This USDA document provides an extensive list of common cover crops for California:

https://www.nrcs.usda.gov/Internet/FSE_PLANTMATERIALS/publications/capmctn13333.pdf

Be sure to read the description of each cover crop, particularly the Purpose and Pest Alert. For instance, grasses provide great value because they have lots of roots and add carbon to the soil. However, they can be weedy. Watch carefully for seed heads and cut back the grasses so they don't become a future weed problem.

Nitrogen-Fixing Legumes

Legumes are good to include in the mix as they produce nitrogen by forming root nodules with bacteria, called Rhizobium, in the soil. Some soils contain the correct Rhizobium and some do not. Therefore, it's best to apply an inoculum to cover the seed surface with a nitrogen-fixing Rhizobium before planting the seeds. Be sure to use an inoculum prepared specifically for the legume type.

Many quality legume seeds are pre-inoculated. However, since Rhizobium are living bacteria, their viability may decrease over time.

When to Cut

Before the cover crops form seed heads in the early spring, cut the plants at soil level and leave the roots in place to feed the microorganisms. You can chop the stocks and leave them on the soil as mulch or add them to your compost as greens.

Additional Information

Cool Season Green Manures:

http://sonomamg.ucanr.edu/The_Kitchen_Garden/Additional_KG_Articles/Green_Manure_Cover_Crops/