

The Benefits of Cover Crops By Elissa Bunn Master Gardener of El Dorado County

Cover crops are a great resource for home gardeners. They are essentially a ground cover for an area in the garden that might otherwise be bare for a season. They can be used in both cool and warm seasons. Gardeners plant cool season cover crops ranging from legumes (peas, beans, clover, vetch, etc.) to grasses (rye, barley, triticale, etc.) for a variety of purposes.

All cover crops should be sown, sprouted, and cut down before any flowering or seeding begins. You want to get maximum greenery instead of letting the plants put their energy into flowering and seeding. The cut-down plants can be tilled into the soil as food for decomposer organisms, who break down and release the plants' nutrients into the soil, or they can be shredded and left on the top of soil if you prefer the no-till approach. Either way, you are helping improve the health of your soil and health of microorganisms in that soil.

Now for more specifics on different kinds of cover crops.

Legumes help fix nitrogen in soil through a symbiotic relationship with a bacterium. When the bacteria attach to the legume roots, the contact creates small bubble-like nodules that make a ready-to-use form of nitrogen. In a garden bed that has had heavy nitrogen feeder crops like tomatoes, squash, broccoli, or lettuce, a legume cover crop could be seeded and cut down to help restore nitrogen for the next growing season.

Grasses help aerate and perforate dense, poorly draining soils. Grasses have deep, finger-like roots that reach into the soil and break up hard soils like the clay found in El Dorado County. These root systems can improve drainage, especially after the surface grasses are cut and tilled in.

Warm season cover crops are used less in our climate because we love our tomatoes and peppers and want plenty of garden space for them. Nonetheless, some warm-season cover crops include the legume cow peas and the "not-a-grass", buckwheat. Both have deep roots and great green foliage growth. The same rule of cutting them down before flowering applies to warm season cover crops.

Less common cover crops to break up hard soil are daikon radishes, mustard, and other tap root plants. These plants can usually be seeded for cool or warm season; just make sure to read your seed information.

When planting your cover crop seed, warm or cool season, make sure you protect it from bird predation using mulch, floating row cover, or anything in between. Birds just love succulent sprouts when the seasons are changing. Another thing to consider is timing: wait too long to plant in the fall and your cover crop will be fighting cold temps while germinating; plant too early and lack of rainfall might create the need to irrigate.

Which cover crop will be best for your situation? Use the information above, do some research, and try it out! Mix and match or buy a pre-mixed seed; there are many options. We often get discouraged and quit after one try, but remember, this is gardening! There are so many variables! Don't give up after a disappointing result. After three years, I have finally figured out the right cover crop for my home garden. Keep experimenting and you will find the best cover crop for your garden too.

Master Gardeners have been working hard to continue bringing the educational opportunities to the public during the pandemic. We currently have no classes scheduled until next year, but keep checking our calendar of events for future classes at:

<u>http://mgeldorado.ucanr.edu/Public_Education_Classes/?calendar=yes&g=56698</u> to see what will be offered in the future.

Due to the pandemic, Master Gardener events will for the foreseeable future continue to be limited. Please see our calendar of events for learning opportunities. We realize our public classes are valued by county residents and we are doing our best to provide virtual learning opportunities. You can find our recorded classes on many gardening topics:

https://ucanr.edu/sites/EDC_Master_Gardeners/Public_Education_Classes/Handouts_-_Presentations/.

The Sherwood Demonstration Garden, located at 6699 Campus Drive in Placerville, is open to the public, from 9 AM to noon on Fridays and Saturdays through October 31. State and county public health guidelines require us to limit visitors to ten at a time (including our docents) and ask that they practice social distancing and wear face coverings. Restrooms will not be open. Check http://mgeldorado.ucanr.edu/Demonstration_Garden for more information.

Have a gardening question? Master Gardeners are working hard remotely and can still answer your questions. Leave a message on our office telephone: 530-621-5512, or use the "Ask a Master Gardener" option on our website: mgeldorado.ucanr.edu. We'll get back to you! Master Gardeners are also on Facebook, Instagram, and Pinterest.

For more information on the UCCE Master Gardeners of El Dorado County, see our website at http://mgeldorado.ucanr.edu. To sign up for notices and newsletters, see http://ucanr.edu/master gardener e-news.