

Green Manure Cover Crops

By David Blood, Alameda County Master Gardener

Autumn is in the air so it's time for Bay Area gardeners to think about a winter crop.

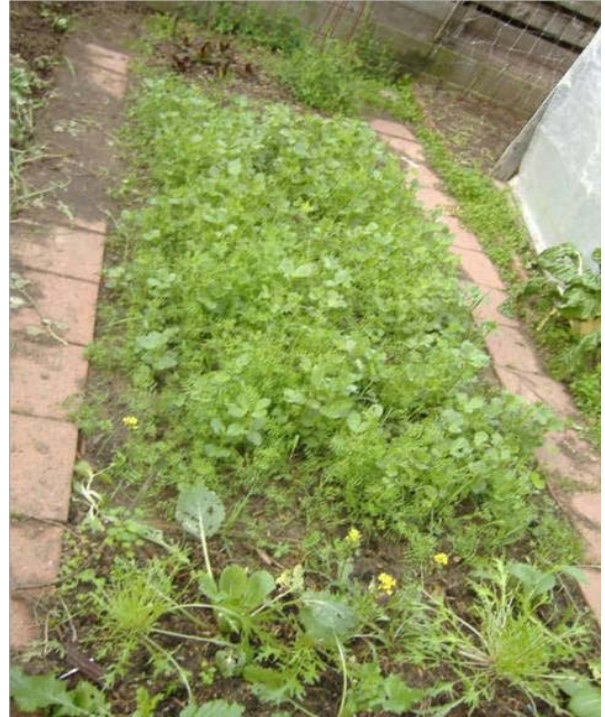
Here we can plant lettuce, peas, turnips, kale, broccoli, cauliflower, parsley, potatoes, onions, garlic and many more vegetables in the fall. If you've a garden like mine, four plots double-dug and based on the bio-intensive system, your soil is tired. After a long summer season, a minimum of 1 inch of good home-made compost is in order. Two inches would be even better.

If you're like me, the Gardener is also tired after a long summer season. But if the garden is not replenished and just left fallow through the winter, there will be problems in the spring. The garden will still need compost and be overrun with weeds. Is there another route?

Yes there is. A crop can be planted anytime in the fall which will choke out weeds and add both nitrogen and vegetable matter to the soil. The legume family, which includes beans and peas (plus a few plants we don't eat like vetches and clover) has the ability to fix nitrogen from the air.

When the plants die, that nitrogen becomes available to the next plant occupying the soil. The biggest contribution from green manure plants is to add biomass to the soil (much like compost). Another benefit is loosening of the soil since roots can reach seven feet in depth. The cover crop aspect of the green manure results in weeds being suppressed all winter long. Once the plants begin growing, the crops act like a gardener while the real gardener can sip tea and read seed catalogs.

Since I'm fairly lazy, I buy a mix of seeds designed as a green manure cover crop. Any mix should include legumes for nitrogen and



root penetration and a grass or cereal crop for bio mass and root penetration. I get a soil builder mix that has two vetches, two peas and oats but there are other combinations generally available in most garden centers..

The crop is easy to plant. After clearing the garden, scatter the seed per the directions and turn over the first few inches of soil. From there, just keep watering until the plants emerge. If it's a very dry winter, water when the plants wilt. The plants can be cut to the ground and left to compost or turned into the soil. If the plants become too large (such as with fava beans) they can be chopped and added to the compost heap.

It's best to turn the crops into the soil one month before planting, although I have waited only two weeks without any apparent problems.

Green manure cover crops replenish the soil and rest the gardener, such a deal!