

Using cover crops to improve soil fertility, help drainage, prevent erosion, and get your vegetable gardens ready for the next season.

Most of us have heard the term 'cover crop' but few of us have used them and *even fewer* of us know exactly what they are and how they benefit our gardens. **The term 'cover crop' is applied to any plant that is grown specifically to address the needs of the soil, rather than being grown for the crop itself.** From commercial farms to home gardens alike, this practice improves the soils fertility, helps with erosion control, ends disease and bacterial outbreaks, enhances the quality of your soil, and therefore your plants.

Soil fertility is the cornerstone of every successful garden. A fertile soil provides all of the essential nutrients a plant needs to flourish. Many gardeners have gotten accustom to increasing their soils fertility strictly by introducing packaged fertilizers and bagged composts or manures. Cover crops offer a solution for gardeners looking to step away from conventional fertilizing to incorporate sustainable and effective practices to improve their soil health.

So just how do cover crops impact your soil? Let's explore this topic with a timeline.



Fall is the time to remove spent vegetable plants from beds and sew cover crop seeds in soil. The ideal cover crop is a mix of grasses, such as buckwheat and rye, which add organic matter to your soil, paired with a legume, such as clover or hairy vetch, which add nitrogen. Be sure hot summer temperatures have cooled off before planting your cover crops as many require cool fall weather to germinate. It's always a good idea to cover seeds with a layer of organic soil or mulch, such as Soil Building Conditioner, to protect them and to help them remain cool and moist...



In the winter your cover crops work hard to protect valuable soil micro-organisms from the cold world above. They also help preserve an incredibly important fungus in your soil called mycorrhizae, a beneficial fungi that will help your future crops with root growth and nutrient absorption. Your cover crops also will be fighting off any fungal or bacterial diseases leftover in your garden from the previous season, and preventing any weeds from germinating in the beds.



Spring in the Pacific Northwest is known for heavy rainfall. Cover crops help to combat soil erosion by working as a mulch. The roots from your crops also create "pores" in the soil, this eliminates water run off (which also depletes your soil of nutrients), and helps with proper absorption. During this time you will start to prep your garden for this seasons harvest. Cover crops should be mowed down and tilled into the soil at least one month prior to planting. This is also called "green manure" as it is still green when being used.



As the summer begins and your vegetables start to grow, the cover crops you planted last fall are now breaking down in the soil beneath. They release nitrogen and other vital nutrients they have been absorbing since you planted them. For an idea of just how much nitrogen cover crops help to introduce, a study from the University of Maryland showed, "The contribution of organic matter to the soil from a good stand of a green manure cover crop is comparable to the addition of 9-13 tons per acre of poultry manure."