

OL 301 Assignment Three Discussion

Online Learning: OL 301

Learn How to Grow a Family Vegetable Garden

Center for Sustainable Development

<https://nonprofit.csd-i.org/learn-how-to-grow-a-family-vegetable-garden/>

How You Can Grow a Vegetable Garden: Fresh, nutritious vegetables for your family.

This week's resources on the Student Resource Page:

<https://nonprofit.csd-i.org/301-student-resource-page/>

OL 301 Assignment Three Homework Instructions

OL 301 Assignment Three Discussion

Manure in the Home Garden

OSU Nitrogen-Phosphorus-Potassium Values Of Organic Fertilizers

UGA How to Convert an Inorganic Fertilizer Recommendation to an Organic One

IDEP 4 Healthy Soil

[The Vegetable Gardener's Bible](#) – Edward C. Smith

[How to Grow More Vegetables](#) Than You Ever Thought Possible on Less Land Than You Can Imagine. John Jeavons

Discussion 3. Soil Part One: Select healthy amendments. What kind of soil amendments? Where to get them? The importance of worms for making compost!

This Week's Goal: Choose the soil amendments that you want to use to enrich your soil and get enough to make one planting bed.

This week we're going to look at soil amendments for improving the quality of your soil prior to planting. We are looking for soil that has a soft open texture and nutrients. The soil in your garden that you will turn into a gardening bed for your vegetables probably won't be ideal soil for growing vegetables in. If it's had grass growing on for 20 years it will probably be compacted, deficient in soil nutrients and will probably be very low in organic material.

There are two goals here. The first is to make sure that your soil has enough nutrients for your plants. Your vegetables will need nitrogen, potassium and phosphorus—as well as some micronutrients. I will be leading this course as an organic vegetable gardening course so we will need to get those nutrients from natural substances like compost and manure.

The second goal: soil needs organic material. Organic material in soil loosens up the soil structure so that roots can grow easily. And organic material also stores moisture for plant uptake. Adding organic material will make sure that your soil does not become compacted and is well aerated so that water can penetrate easily and there is enough air and water for the beneficial flora and fauna living in your soil. So the techniques discussed in this assignment will address both of these issues.

So this week we will be looking for different sources of organic material and soil nutrients. Compost is one good source, manure another good source.

So you can do a little reading this week to get some ideas from the student resources page. You also need to find out where you can acquire soil amendments.

Each one of you will come with a different set of resources available. Some of you will be able to run down to your local nursery and buy ready-made and bagged compost for your planting beds.

If you know somebody with a compost bin, they might be willing to give you enough compost for your first bed. This will give you some wonderful soil full of organic matter and hopefully some worms.

Also, this week I will encourage you to plant two or three fast germinating types of seeds. This way you will be able to enjoy the process of watching them germinate and grow during the balance of this course. You're free to plant them in a strip of soil somewhere, in a container, or if you plan on buying some seed trays you can plant the seed trays.

Soil Testing Ideas. For creating your first gardening bed you probably don't need to test your soil—but at some point it's a very good idea. The Vegetable Gardener's Bible has a very good discussion on soil testing.



Test Your Soil. Prior to getting started building your soil a good idea might be to take a soil test. You can buy inexpensive soil testing kits at your garden nursery and also online.

This way, you can find out if perhaps soil is lacking in one key ingredient and make sure that your soil amendments will address that issue

One of the seed companies from assignment two, Ferry Morse has an [inexpensive soil testing kit](#). Lowe's and Home Depot also sell soil test kits.

[Amazon has a huge selection to choose from.](#)

I purchased the [Environmental Concepts 1662 Professional Soil Test Kit with 40 Tests](#) because it allowed me to do 40 tests—it should last me a number of years. Many of the other kits only had enough for one or two tests.

Start a compost pile today! All you need to get started is a corner somewhere where you can begin piling kitchen compost and leaves and yard clippings.

Let's Talk About Importance of Worms in your Compost Pile (and in your soil too).

Earthworms eat the humus and kitchen scraps in the soil, and then convert them into nutrients, this is very good for the soil.

Earthworms will continuously:

- convert humus into nutrients that plants can use
- dig through the soil so that air can enter the soil
- improve soil structure and water drainage
- raise nutrients up from the lower depths of your planting bed to supply food for plant roots

I occasionally purchase red worms for gardening. The population of worms actually live for years and years you go to sleep so once you have an active population you won't need to add them again. If you don't have access to red worms I've heard that you can go to your local fishing supply store and buy worms there.

In summary, here are several ideas:

1. Think about whether you would like to add any amendments to your soil.
2. And, whether you plan to purchase it at a garden center source them yourself.
3. Try and find a kind person who will give you enough compost to fill your first planting bed. This will give you healthy, organic material rich soil to get started with.
4. If you don't have access to soil amendments, you can just use the garden soil in your first planting bed for now.