Tips for establishing a new vegetable garden

Nothing beats the taste of fresh produce picked right from the garden. A fresh homemade salad, a delicious side dish or toppings for a cheeseburger, garden-fresh produce is the best.

Novice gardeners who are contemplating installing a new vegetable garden this year should consider a number of factors, including site selection, removing existing vegetation and soil preparation.

When choosing a site for a garden, think about sun exposure, soil, air flow and water supply. A garden needs at least six hours of direct sunlight every day. Choose a site with southern exposure. Well-drained soil with a pH level of 6.6 is optimal for gardening success. Even though the garden is outdoors, air flow is important. Try to avoid choosing a site in a low-lying area because they tend to collect cold air which slows germination and plant development in the spring.

Something else to consider is choosing a site away from any established trees and shrubs, especially walnut trees. Walnuts exude a substance called juglone from their roots which is allelopathic, meaning it can kill other plants. Tomatoes and other solanaceous plants are highly sensitive to juglone.

We know natural irrigation isn’t a sure thing in Oklahoma, so be sure to locate the new garden close to a water source.

With a new garden site, it’s important to start with a clean slate by removing existing vegetation and controlling weeds. Ideally this should be done the summer prior to planting, but it’s not too late. Chemical methods such as applying herbicides will get rid of vegetation, but also consider non-chemical methods such as solarization and smothering. Solarization is a simple technique that captures radiant heat energy from the sun and uses that heat to kill seedlings and weed seeds, along with some soil-borne disease organisms. Solarization can also be combined with the application of soil amendments and fertilizers. In fact, solarization can speed up decomposition of organic matter, releasing soluble nutrients into the soil. To smother weeds, cover the soil with black plastic or several layers of newspaper, cardboard or carpet.

Whatever method is used, it is ideal to control perennial weeds before establishing a new garden. It will be much easier to manage them before the area is planted with vegetables.

Once the vegetation is removed, till the soil to loosen it. This is a good time to enrich the soil by adding manure or other organic material. It’s a good idea to do a soil test as part of your garden
preparation. It is easier to amend soils and add nutrients before planting, rather than after. Soil tests collect information on soil nutrients and pH.

The proper way to collect soil samples is available online in this Oklahoma State University Extension publication, Soil Testing … The Right First Step.

Soil sample bags are available at your local OSU Extension county office, where soil samples may also be submitted. The samples are sent to the OSU Soil, Water, and Forage Analytical Laboratory for testing. Tests cost $10 each and evaluate soil pH, nitrate nitrogen, phosphorous and potassium contents. You can also request micronutrient tests as well as organic matter content and other specific tests. Test results include fertilizer recommendations specific to the type of vegetation growing on the site. Be sure to mark the proper space on the sample label indicating the type of area sampled, such as turf or garden.

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