

# SOIL & BED PREPARATION

## Care Sheet

The foundation of a healthy plant is healthy soil. The soil is a storehouse for the nutrients, organic matter, air and water that plants need to grow. Properly prepared and cared for soil can be improved each year and will continue to grow plants forever. Uncared for soil will soon become suited only for growing weeds.

### SOIL TYPES

Most gardeners are not fortunate to have perfect soil (in West Texas we have all 3 soil types). Some are very sandy. Some are sticky clay and others are rocky and shallow. Sandy soils usually do not hold enough water and nutrients. Clay soils usually hold too much water and do not allow enough air to enter the soil. Plants also have difficulty growing roots into rocky and clay soils.

### HOW CAN YOU RECOGNIZE 'GOOD' SOIL?

Most plants grow best in a well-drained soil with adequate organic matter. Good garden soil that is slightly moistened will not form a hard ball when squeezed in the hand. It will crumble easily when forced between the fingers. It should not crack or crust over when dry.

### BED PREPARATION STEPS

1. Remove grass, weeds, and debris from your proposed bed area. Troublesome weeds such as nutgrass and bermuda can be eliminated easily with systemic weed killers such as Manage, HiYield Post Emergence Grass Herbicide or Round-Up. These herbicides quickly kill weeds, roots and all, without contaminating your soil. After application, wait until all weeds have completely died before cultivating your soil.
2. Cultivate the existing soil with a shovel, spade or tiller to a depth of 8 to 12 inches.
3. Improve the soil. Almost all garden soils need to be improved. Organic soil additives are materials added to soil to make it more workable and hold nutrients and moisture at stable levels. Organic matter loosens tight clay and helps sand hold more water and nutrients.

Some common organic matter additives are:

Compost – Made of decayed plant materials, these can be specialty mixes of peat moss or composted cotton burs. You can also use well decomposed grass clippings, straw and leaves from your compost pile.

Bark Mulch – Use only a premium grade bark mulch, such as, Meadows Lake Cypress Mulch that has been composted for at least 6 months. Bark generally lasts longer than compost, however, composted cotton burs make a richer, looser soil and is best for flower beds.

Green Manure – The term refers to tilling in cover crops and existing plants like annual rye, crown vetch and old spent garden refuse to build the soil. Be sure to let it fully decompose before planting in the area. Don't try to till in persistent weeds and grasses like bermuda grass. They will just come back up stronger than ever.

### HOW MUCH TO USE?

Most soils will improve substantially when a 3 inch layer of organic material is worked into slightly moist soil. One cubic foot of organic matter will cover 4 square feet with a 3 inch layer.

Use this 1:4 ratio to calculate how much organic material you will need. (Example: 100 square feet divided by 4 equals 25 cubic feet of organic matter needed. In this example, you could use 8 – 3 cubic feet bags of Nature Life Soil Conditioner).

Most heavy clay soils also benefit from the soil additive gypsum. It adds some nutrients and helps make clay soil more workable. Work in about 10 pounds of gypsum per 100 square feet.

#### FERTILIZERS

Your fertilizer requirements will depend on what you are planting. Bedding plants and vegetables will benefit from a variety of chemical fertilizers or manures worked into the soil before planting. Our nursery professionals can help you determine the best fertilizer for your needs.

#### BUILD YOUR SOIL OVER TIME

We recommend you add 4 – 6 inches of organic material each year to replenish lost nutrients and to account for erosion. By adding organic matter to the soil and replenishing nutrients through appropriate fertilizer applications each season, you will continue to improve the quality of your soil and build a sturdy foundation for your plants to flourish and thrive!

If you have any question please call, write or drop by:

*Little Red Riding Hood Nursery*

4006 34th Street | Lubbock, TX 79410

P 806.795.4834 | F 806.795.5420

**[www.littlerednursery.com](http://www.littlerednursery.com)**