

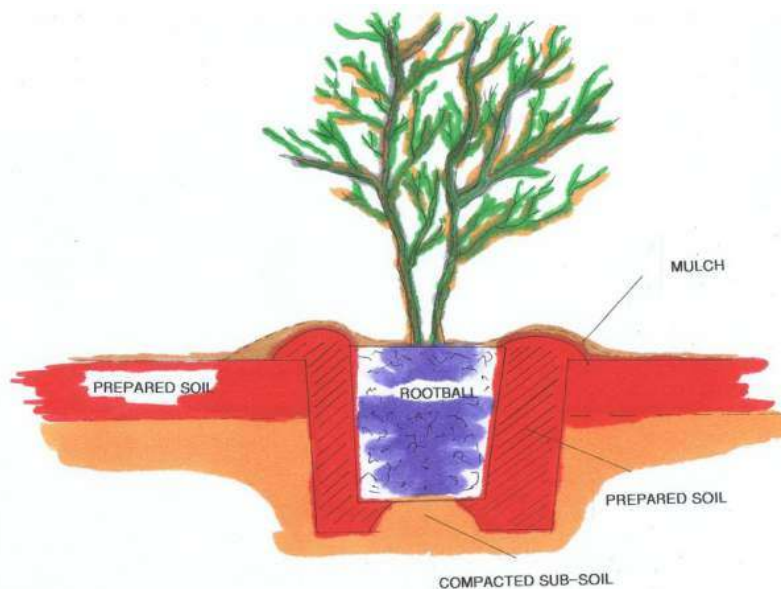
PLANT INSTALLATION AND SOIL PREPARATION

OR
IS IT MORE QUESTIONS THAN ANSWERS?

This could be one of the more boring topics to some folks, but in my opinion it is vital to do the soil preparation correctly. Now is the time to start prepping those beds for your flowers, perennials and landscape plantings. You have to remember where we are living. To start with, we are planting in the Piedmont N.C. area where they make Clay Pots and Bricks. Now that should get you thinking!

Due to the very heavy clay content in our soil in the Winston-Salem area it becomes imperative to plow in organic soil amendments. The old school used to "turn in" peat moss. While Peat has a great Humus or organic content and great for house plants, it is a quick death to plants planted in the ground in this region of N.C. because it holds so much water. Our best

recommendations would be something like rotted leaves or compost you would have in your back yard after the tree leaves fall. They need to be composted for about 6-8 months and turned once a month and add some nitrogen fertilizer as that will assist in the breakdown of the compost. The other choices would be rice hulls, or expanded shale. What we use that is currently available is Milled Pine Bark. Notice we said Pine Bark. Not Hardwood! Pine works great as it breaks down slowly, opens up the soil for better aeration, increases CEC or Cation Exchange Capacity which is how electrical charges in the soil assist in the plant being able to take up nutrients through its root system. Pine bark also is a good buffer for the pH and will not adversely change the pH. Hardwood bark on the other hand does cause one big negative issue. As Hardwood bark decomposes it soaks up almost every available trace of Nitrogen. So, should you "plow in" old saw dust or rotten hardwood bark and notice that in a



few years your plants look chlorotic (or yellowing) of the leaves; it is because the plants are starving! One solution if you have such a situation is to remove the hardwood bark or sawdust. If it is already turned into the soil you can apply a relatively high Nitrogen fertilizer to apply to the entire bed to "Feed the Mulch" and then the plants should respond by the end of the growing season. This has to be done every spring until the cows come home. You have to be very careful not to apply too much. You will want to use a slow release fertilizer like a Sta-Green Fertilizer or Osmocote (Coated Fertilizer) or what seems to work real well is Holly-Tone from Espoma fertilizer company. Use only by direction and as with all treatments i.e. chemicals, or fertilizers more is NOT better.

Once you get the beds clear of all weeds, rock and debris, be sure the soil is graded to run water away from you structure. Raised beds are always suggested in these type of soils as well. Apply a generous amount of soil conditioner i.e. milled pine bark in this case; (2-3" deep), add a complete fertilizer which means as an example only 18-24-12. The number 18 represents the amount of Nitrogen in that bag by percentage the next number 24 represents Phosphorus as a percentage of the bag, and likewise the 12 number represents the amount of Potassium. When looking at fertilizers you do not want to use a field grade fertilizer like 10-10-10. It is for use on row crops such as corn, soybeans, cotton, or your vegetable garden, etc. You can use it on cotton if you are wanting to make a sweater! Field grade fertilizer are usually less expensive but will release very quickly doing damage to your \$40.00 perennial you just bought. Go with a slow release fertilizer such as Sta-Green or Osmocote or similar (Coated Product) or you can go with an organic like Espoma's Holly-Tone which you will have to apply once early in the spring and once again in late June. These products should also contain Minor Elements which you will need in tiny quantities. Liming new beds is also required at about 15-20 min. lbs. / 1000 sq. feet. You can go as high as 20-30lbs. / 1000 sq. feet without much concern for newly prepared beds. You should also lime the beds at the 15-20lb. rate every 2-3 years mostly to get Magnesium into the soil. Conifers love magnesium. It will make the colors of most plants really "POP"!

Plow in all of the 'Betty Crocker' mix with a tiller as deep as the machine or your shovel can reach. Then planting will be fun again. There is some truth in my experience about digging the \$50. hole for the \$10. plant. After you gently slide out the plant from the container you should break up the rootball by either vertically cutting the rootball if it is root bound or by butter-flying the sides and bottom of the rootball. You should set the top of the rootball of the plant to about 15-20% above the surrounding bed height and bring the soil up to just the edges of the rootball. See diagram. Pack the prepared soil around the rootball and firmly pack with your foot or hand to anchor in the rootball. You really do not need to put any soil on top of the rootball. The mulch you chose should cover this portion. Be sure to have the plant straight and the best side of the plant facing the viewing direction. Remember if you use hardwood mulch you will need to add about a pound of nitrogen per 1000 sq. feet each

year so you plants don't start looking sad. Prior to mulching you will also need to apply a pre-emergent Herbicide (Granular) is easier to keep the weeds down. This keeps the weed seeds down to a minimum. Follow directions. Please do not apply black plastic around plantings as it will cut out all of the available Oxygen. Also it looks terrible once the mulch slides off of it.

Once everything is in the ground break out the Ice Tea and watch it grow.