What to Look For in a Rose Garden by Monty Justice *Louisville Rose Society*

What Should You Look For? What Are Your Plants Trying to Tell You?

* Is the ground crusted? If so it needs to be forked around to loosen the soil and allow for air percolation.

Is there sufficient moisture in the soil: at the root zone depth?

Are the tips of the terminal leaves straight out, dipping slightly or drooping? This will identify sufficient water if straight out or lacking water if drooping. Blooms with dried margins also indicate lack of moisture.

* Is there new red growth? If ground temperatures are not below 70 degrees F. during most of the darkness of night for 3 or more days, there will be little or no root growth and therefore no new red top growth.

* Has there been sufficient moisture for new red growth? Cold tap water applied in the evening will help reduce ground temperatures. Frequent daily watering to keep the top two inches of the medium moist is optimum.

* Are the leaves on the plant getting smaller as the plant gets taller? This will help to let you know whether or not sufficient nutrients are available for optimum plant growth or over watering has filled up the air spaces in the soil with water.

* Are there any yellowing leaves? The few "nitrogen chevron" leaves is to my thinking unavoidable if you fertilize in hot daytime temperatures 85 degrees or higher

* Yellow "blending" leaves at the bottom of the plant could mean too much water being held filling the air spaces between the soil particles and oxygen or air to the roots is lacking. If the leaves are shaded from the sun by foliage above, or a lack of magnesium in the plant you may experience this problem. The central molecule of chlorophil is magnesium. The sun does not perform its function of giving energy to the plant if this element is lacking. Some soils are deficient a small amount (2 tablespoons per plant) epsom salts broadcast beneath each rose plant every four to six weeks will keep leaves green to the bottom.

Leaves with green veins and blonding color:
At the top of the plant: Lack of iron.
At the bottom of the plant: Lack of magnesium

* Look for stems with bore holes and cut back. As far as needed eliminate them when you cut a thick stem cover (darken) with wet soil. The bore will think it's dead and not stop to lay its eggs.

* Spider mite damage accurs when daytime temperatures are hot and dry basically over 80 degrees. Wash off with a hard water spray on the under side of the leaves twice weekly. Pay particular attention to the leaves close to the ground. Since the mites crawl

from the ground up the stem of the rose and on the underside of leaves. They multiply rapidly. The plants will like the cooling effect and will not cause blackspot.

* Blackspot will only adhere to leaves when moisture is on the leaf for at least eight hours or humidity approaches 100%. Frequent watering to keep the top 2" of the rose bed moist and leaves washed off before dark will be beneficial.

* Every rose garden has a different culture, amount of sunshine, trees and shade, soil texture and water holding capacity. All of these and other variables affect results. Therefore when you go to take care of roses you evaluate their condition, taking into consideration the variables and the things that they are telling you so act accordingly. Soil drainage is most important for plant growth.

* Always water and feed with Monty's Joy Juice before you spray pesticides. Roses are heavy feeders. Apply a little balanced plant food frequently rather than a whole lot at a time. If a dry fertilizer is applied, don't let the ground dry out or leaves will show "burning", brown on the leaf margin or worse.

* The single most important factor for plant growth is good drainage - plenty of air or pour spaces in the soil for the roots to reach out. The thickness of the roots will determine the density of the medium. The more the air the more the thin feeder roots. The more dense the medium, the fewer thicker, and slower to reach out the roots. There is little or no stem and leaf growth without nightime root growth.

Evertime you water, you are adding fresh needed air to the soil. A regularly applied balanced plant food to a pourous medium with 6 to 8 hours of sun should yield desired results.

I've not mentioned soil pH. Roses need a slightly acid soil 6.0 to 7.0. Because I grow my roses in potting mix in a hole 10" wide x 20" deep in the ground, the medium is desirably neutral. Feedings and watering is only in the hole. The huge number of fine short feeder roots supply quickly the plants when the nutrients have been applied. Some of the best exhibiters have said that their best roses are grown in large pots with potting mix. I've taken this information one step farther - and put a soiless mix in the ground. It's simple, it's easy and it works well for a long time period. I would be happy to discuss any concerns that you may have. I'm 5 years with this planting process and see many advantages and can't think of any regrets.