

AWARD OF MERIT WINNER

Soils: Dead or Alive? **By Beverly Rose Hopper** **Master Rosarian**

Do you have dead dirt or soil that is alive? Even if you don't know the answer to this question, undoubtedly your roses do. Anybody can dig a hole, stick a rose in the ground and figure it will grow or not. Sort of a "survival of the fittest mentality." And for some, it works. Perhaps the roses grow and bloom just to spite the owner "see I don't need you!" My philosophy is just the opposite – if a rose is OK without much care, just think how great it would be if properly looked after! And to look after your roses properly, it is important to consider what kind of a home you are giving them – and that means looking after the soil.

Does your soil have soul?

Years ago I was asked what was the difference between "dirt and soil" and my response was "dirt was free and soil costs money." That of course was a flip answer. Though purists would declare that "dirt" to be a dirty word, that the correct term for all dirt is soil, I tend to think of dirt being what we find in a garden plain and unadorned, and soil is what we get when we dig in it, add to it, and work it to create a garden. In the wild, plant and animal material decompose into the soil as humus, creating rich earth for new plants to grow. In urban gardens it's up to the gardener to help provide what Mother Nature cannot; to supplement the soil with amendments such as compost and manures to help create a living earth in which microorganisms and plants can thrive.

What is good soil?

Articles by and for the scientific set delve into detailed descriptions of soil featuring the periodic table of elements but that is not the scope here. Let's keep it simple, and simply put, the structure of soil is made up of four components – inorganic minerals, organic matter, water and air. Good soil has a friable texture that is it is somewhat crumbly in the hand, and is referred to as sandy loam. In much of California, our native soils are heavily clay, even adobe (think of all those missions built with adobe brick!) so the concept of "sandy loam" may seem a bit daunting and may tempt you to run to the hardware store for bags of sand to achieve the ideal. A word of advice - Don't! Even though adding sand to clay soils will not really result in cement, it is much better to add organics that will improve texture, drainage, and nutrients.



Redwood Compost makes good mulch

Now according to the American Rose Society *Consulting Rosarian Manual*, “A Consulting Rosarian should never recommend treatment of another person’s rose bed without first recommending a complete soil test.” *Puhleeze!* Let’s be realistic, John Q. Public is not going to spend several hundred dollars on a soil test just to grow a few roses. However if they are interested I can tell them the Soil and Plant Lab will do a jolly job. Personally, I’ve been growing roses for over twenty years and though I used to employ a pH meter and various other gizmos, now rather than reading test strips I simply “read my roses” Do they look happy? Roses grow best in soil that is slightly acidic, 6 to 6.5 being considered ideal for roses. Some variation is fine, but if you give your roses a sensible diet of balanced fertilizers you lesson the risk of throwing the soil out of balance.

Healthy soil makes happy roses.

The best soil amendments not only feed the roses but also feed the soil and improve soil texture. After the roses have been pruned but before new growth has started (February) is an excellent time to add soil amendments. Because the roses are cut back there is more maneuverability in the garden and less chance to knock off fragile new growth. Be generous with organics. My favorites to add each year is manure, alfalfa pellets, *Mills Magic Mix*, topped off with a thick layer of redwood compost which doubles as mulch. Do be careful not to tramp all over the rose bed after a rain when the ground may be still be soggy, to avoid undue compaction of the soil. Compressing the soil squeezes out oxygen, which is needed for microbial action and can cause drainage problems. Also keep in mind that the yearly adding of amendments though beneficial can alter not only the soil texture and composition, but also the soil level. A few years ago we replaced our fence to discover our yard was 5 inches higher than the neighbors! Dan Bifano who is a consultant for many celebrities rose gardens, including Oprah's advocates removing a layer of soil every year to keep the ground level before adding fresh amendments, to avoid this potential problem.

Finally remember that **soil is a living thing**.

An indicator of healthy soil (besides beautiful roses) is earth-worms. They benefit the soil not only by their castings, but also by aerating the soil as they wriggle through it.