## The Art of Bonsai By Eugene Howell

The art of bonsai is a pleasant pastime. It is enjoyable to trim the new growth and move branches to attain that "perfect" look, but periodically we must knuckle-down and accomplish some of those tasks that are not so entertaining. One of these is pot cleaning.

Here in Florida, and probably in all areas of the country, the outside of pots will eventually become unattractive from mildew, algae, moss, or mineral deposits. While these are not necessarily harmful (they can harbor pests and disease) they are unsightly and detract from the beauty of the tree planted in the pot; so it is worthwhile to give each one a thorough cleaning periodically.

Three factors primarily determine the frequency that your pots need cleaning.

First is the way the pot was made. If it is glazed on both the inside and outside, mineral deposits, algae and moss are slower to build up. The pores of the clay have been sealed by the glaze so little material sticks to the surfaces. An unglazed pot, on the other hand, has pores and will absorb liquids. This will cause mineral salts to build up within the pot walls and these will eventually travel completely through the walls and begin to show on the outside surface of the pot. There are those that associate mineral salts build-up on a pot with poor quality or shoddy workmanship in making the pot (a really cheap pot), but this is not the case. All unglazed pots, regardless of cost, will absorb moisture and minerals into its pores and eventually show them on the exterior surface.

Second, the type of water used will greatly affect how fast mineral deposits accumulate. City water has had much of the mineral content removed and therefore takes a longer time to cause deposits on the pot. Well water, particularly here in Florida, has a high content of iron and calcium and will quickly begin to show on pots.

Third, the amount of fertilizer given to the tree will affect the speed of mineral salts build up. Since all fertilizers are soluble in water, if the water is not taken up by the tree or washed from the pot by the next watering, the mineral salts will eventually be deposited on the pot. If the pot is unglazed then these mineral salts are deposited in the pores of the pot and eventually show on the outside surface of it.

So what is it that we can do about it?

Unglazed pots are very attractive and are generally considered "masculine" so they fit well with strong looking trees. It therefore is not practical to recommend that only glazed pots be used. Water-softener mechanisms designed specifically for garden-watering can be purchased, but these are fairly expensive and require routine maintenance, so this is also not recommended. The bottom line is that you need to just accept the fact that this is one of the "drawbacks" of the bonsai hobby.

Having accepted the idea of needing to clean pots every now-and-then, it helps if we know how to do it.

There generally are two chemical methods of making the job easier. Both methods require the tree to be removed from the pot. If it has been in the pot for more than a year-or-so the root ball should be dense enough that this can be done without much trauma to the tree. However, while it is out of the pot the root ball must be kept constantly moist.

Make a mixture of 1 part vinegar to 4 parts water and completely submerge the pot in this for an hour or so. When removed from the solution, gently wire-brushing the pot may be needed to remove the last of the deposits. The other chemical method is to use 1 part bleach in 6 parts water and soak the pot for 24 hours. Following this, the pot should be soaked in water for an hour to make sure that the bleach has been removed. This last method has the secondary benefit of sterilizing the pot. After soaking for 24 hours in chlorine, few (if any) disease organisms will still be alive. In the gardening world, this is a standard method of eliminating the spread of disease from plant to plant. Not only are the pots soaked, but the tools are also. Chlorine has a tendency to rust tools badly if not properly cared–for after the soak, so it is not generally recommended for those expensive bonsai tools in most tool kits.

If the objective is to clean only the outside of the pot to temporarily get it ready for a show, then simply wiping the outside with a sponge soaked with vinegar will take care of the problem for a few days. If you

are really lazy, then wiping the outside of the pot with WD-40 just before the show will hide the problem for about 24 hours.

Since trees can usually remain in the same pot for a couple of years before the mineral deposits begin to show, having to clean them once during that period should be something we all can live with. Just accept it as normal maintenance and get-on with it.