

## Water Treatments for Palms

RALPH VELEZ

15461 Devonshire Circle, Westminster, CA 92683

I have grown palms in containers for the past twenty years and have had plenty of happy and unhappy experiences in my efforts not only to germinate seeds, but also to grow them past the difficult seedling stage.

A number of years ago, when I first became aware of various water treatment techniques, I made inquiries as to the cost factor. I concluded that for a hobby, the costs were too prohibitive. Like many hobby growers, I saved rain water and used it for special plants. It was a great deal of work, and took up a lot of space. Certainly I couldn't use bottled water or rain water for the large number of plants I am growing. This past spring, I visited the Sherman Foundation, a small botanical garden in Corona del Mar, California and was thoroughly impressed with the good health and vigorous appearance of the plants. After some inquiries, I concluded that the most outstanding difference between us was the fact that they utilized R. O. (Reverse Osmosis) and D. I. (Deionized) water. Once again, I contacted various water companies and found that I would not be able to get a suitable unit for my needs for less than \$50.00 or \$60.00 a month. Well, that might not seem like much, but that added to my other plant expenses such as water, gas, electricity, fertilizer, soil emendments, etc. all mount up. Need I say more? If I were in business, I could claim a tax deduction, but I am not. A little investigating showed that phosphoric acid, readily available and quite inexpensive, would lower the pH factor. I then purchased a simple pH test kit at a local aquarium supply store and immediately

tested the pH of my tap water, my stored rain water, water treated with Green-o-matic, and vinegar water. The different water tested had at least one thing in common: a 6.2 to a 6.4 pH. The tap water, however, read about 7.5 to 8.0 pH.

I then purchased a Siphon-X which draws up a concentrated solution of Peters water (soluble fertilizer with NPR of 10-10-10) in the ratio of 16 to 1. I planned to fertilize my plants every time I watered with a pH of about 6.2. I experimented by adding small amounts of phosphoric acid to a pail and tested the outgoing water with litmus paper purchased from the aquarium supply store. After a short while, I was able to duplicate the reading of my rain water and bottled distilled water. At last I had found a method to water easily and efficiently my potted plants. The only thing left to do was to fit my faucet and hoses with a quick coupling device, so as to facilitate a rapid change from tap water to treated water, to either hose down the patio or water the plants in the ground. The only disadvantage to using the Siphon-X is that there is a drop in the water pressure but I soon became used to it.

The only thing left to do was to bide my time and see if all the trouble I had gone through would make any difference in the health and appearance of my plants. My opinion is that it does make a big difference, especially when it comes to seedlings. Species that I have always had trouble with are doing better. Growth and color are noticeably improved. This includes other plants, not just the palms.

I realize that there are many areas that do not have a specific pH water problem,

but in the southwest U.S.A. it is one of our biggest. All I can say is that I don't even want to think of all the seedlings and palms I have lost over the years because I couldn't give the young plants the rain

water they obviously needed. I also enjoy not having to think about fertilizing the plants at a given time. I simply do it every time; except that I hold back on it during the months of January and February.

*Principes*, 33(1), 1989, pp. 50-51

## Palm Growing in Central Florida

HERSHELL L. WOMBLE

*Rt. 1, Box 162, Groveland, FL 32736*

Palms are generally easy to grow in central Florida. Only a few specific guidelines must be considered in their propagation and cultivation. As you may have observed, there are several palms which are hardy here. First of all, don't overlook the natives, as they are excellent for several reasons.

Propagation of palms is generally from seed; however, the clustering types may sometimes be amenable to division. In order to be more assured of germination, the collected seeds must first be cleaned of pulp (fruity tissue) and then dry for a few days if the seed is wet from the pulp. Palm seeds generally are not viable for long periods so it is advisable to plant them within a week or two of collecting. Seeds are readily available if you are willing to look around. They can be found in parks, along streets, in private yards, in the woods, and you can purchase them. Mature seeds are usually available from July until November here in central Florida. If you spot seeds on a palm which interests you and it is on private property, just ask the owner; most people are very generous. Purchasing of palm seeds is another matter, as most seed supply houses specialize in quantity. Of course, as a member of The International Palm Society, you have access to the whole world by way of The Seed Bank.

Once the seed is ready to plant, a well drained soil mix should be obtained. Composition of the mix isn't extremely important as long as it has the following characteristics: must be porous and well drained, should contain at least 60 percent organic material, and be free of pests. Place the soil in a container with good drainage, gently firm the soil (do not pack) so that it is within one inch of the top of the container, scatter the seeds on top and cover with soil to a depth of about one half the seed diameter. Wet the soil thoroughly and allow to drain. Germination of palm seed requires from a few weeks to several months, depending upon the species. The seeds must be kept moist but not soggy until they germinate. When the temperature is kept at 80 to 85° F degrees, they germinate much faster. That does not mean that they will germinate in a few days, but that they will germinate in a few months instead of several. One way to maintain a uniform moisture level is to place the container of soil and seed in a plastic bag and seal it. Keep it in a warm shady place.

After germination of the seed, you may separate the seedlings and transplant them as desired in individual containers. Most landscape type palms should be transplanted singly, whereas, those used for interior purposes are generally planted as multiples to a obtain bushy appearance.