

importance that institutions are attaching to this work, indicates that there is now sufficient international, if not national, cooperation to take the studies in Pejibaye to their logical conclusion—that of developing this palm

as a major humid tropical, perennial crop to supply carbohydrates, oils, proteins, vitamins, and income to the people of this region, just as Popenoe and Jiménez pointed out 60 years ago.

*Principes*, 26(3), 1982, pp. 152–153

## NOTES ON CULTURE

### Get Those Palms in the Ground

Almost without exception, palms grow faster with their feet in the ground. Once a container is filled with roots and the nutrients have been used up, growth will slow appreciably. The theory that palms enjoy being root-bound is a myth. The part of the palm we see above ground is directly proportional to the size and health of its root system.

We surface dwellers only enjoy the portion of the palm above the surface, but if we could share the view of the earthworm, we would appreciate how extensive palm root systems are. This spring, while putting in new plantings, I was suprised to find palm roots growing many feet beyond their drip line. Large, fleshy roots were growing horizontally at a depth of 1 to 3 feet.

Many of us water only around the base of a palm or to the drip line. Instead of frequent, shallow watering, less frequent, and deeper soaking of an area several times larger than the palm head would be more effective. To conserve water and direct it to the plant, a large basin should be constructed.

The method I use for palm planting and basin construction is as follows: a suitable location is selected and the hard surface of the soil is soaked for a few days before digging. A soil amendment is spread to a depth of 4 or 5 inches, or about 2 wheelbarrows full for a five gallon palm. For an

amendment, any organic material such as nitrogen-treated saw dust or well-rotted manure is suitable. Using a rotary tiller, I go back and forth over the area until the soil has been thoroughly mixed with the amendment to a depth of about 10 inches. This homogenized mixture is then easily dug out with a shovel and piled to the side of the hole. This process is repeated several times until the walls of the hole become too steep to use the rotary tiller. A large rectangular hole about 18 inches deep can be dug using this method. If additional depth is required, the soil at that depth is soft and can easily be dug with a shovel. The hole should be at least 6 inches deeper than where the root ball will rest, then partially refilled with the loose mixture from the hole. The palm, in its container, is set into the hole and soil is either added or taken away until the proper planting depth is determined.

The palm is removed from the hole and the bottom of the hole is watered. The palm (previously soaked for several days with a vitamin B-1 solution) is removed from its container and placed in the hole. The root ball is quickly covered with the homogenized mixture, minimizing root exposure to sun and wind. Firm the backfill material with your hands or the heel of your shoe until three-fourths full. Water thoroughly to settle the plant and eliminate air pockets, and check to see that the top of the root ball is slightly above soil grade, as some fur-

ther settling is likely to occur. Finish filling the hole to grade.

The soil amendment plus the root ball will leave some soil that won't fit into the hole. This is raked into a circle around the palm creating a basin about 6 inches deep. The palm should be watered well, preferably with a B-1 solution, and frequently watered for the first few weeks. (There are various brand-name root stimulants on the market which contain vitamin B-1 and/or hormones which are thought to reduce transplant shock and promote root development.) To conserve water and retard weeds, several layers of newspaper are put into the basin, wet down, and then covered with 2 or 3 inches of mulch.

Do not add chemical fertilizers in your planting hole, and do not fertilize a newly planted palm, until it is actively growing. An exception might be made by incorporating a slow-acting organic fertilizer, such as bonemeal, in the soil beneath the root ball.

Now that you have all this advice from the voice of experience, I must go out and plant a lot of palms! Unfortunately, I have palms stuck away here and there that should have been planted years ago. Their brothers and sisters tell me so! I can lean against their trunks while their relatives languish in their rotted-out cans.

RICHARD DOUGLAS

## NEWS OF THE SOCIETY

### News from California

*The Southern California Chapter* held its annual banquet February 7th at San Juan Capistrano. Sixty-four members enjoyed a delicious buffet style dinner at the El Adobe restaurant. Guest speaker Ken Foster gave an excellent talk and slide presentation on his palm collecting trips to New Guinea.

Last on the program was a raffle of door prizes which were donated by several members. They included live palms, carvings from *Palandra aequatorialis* seeds, and several cans of hearts of palm.

In March a joint meeting with the Northern California Chapter featured a visit to Lotusland and is described further below.

On April 17th members journeyed to Palm Springs to tour the home and garden of Frank Batey and Craig Corbett. Their beautiful mountainside house overlooks the city. By utilizing existing rocks they have achieved a natural garden with rock pathways leading you in for a closer view of many plants. Refreshments and a raffle of palms donated by members concluded the meeting. Those desiring to see *Washingtonia filifera*, California's only indigenous palm, were invited to view large stands in Palm and Andreas Canyons.

FRANK KETCHUM

*The Northern California Chapter* of the Palm Society enters 1982 with enthusiasm. Our public palm garden in Oakland's Lakeside Park is nearing completion in terms of the procurement and planting of palm species in our landscape plan. Mounds and contours have been created and our watering system completed. The expensive project of surfacing paths and procuring ground cover and companion plants remains to be done. Our members have provided the plant material, irrigation system, labor and all normal maintenance. Mayor Lionel Wilson of the City of Oakland has honored the Palm Society for the past 2 years at his annual reception commending volunteer efforts in Oakland. The money and effort expended by our chapter was a consideration in non-profit status being accorded to us.