March / April 1982

# 1986 Manual Control



Los Angeles County Department of Arboreta and Botanic Gardens

### INSTITUTE OF MUSEUM SERVICES GRANT

The Los angeles County Department of Arboreta and Botanic Gardens was recently awarded a \$33,460 grant from the Institute of Museum Services which will be used to support the Department's educational and public service programs at the Arboretum, Descanso Gardens and South Coast Botanic Garden, according to Francis Ching, director.

Providing educational and public service programs to meet the needs of Southern California continues to be one of the primary functions of the Department since it was established in 1948.

An example of the new and innovative information provided to
visitors deals with plant labels.
Universally, plant labels found in
botanical gardens usually consist of
the scientific and common name. In
response to a growing demand for
information by the people, our
labels now include a brief description of the plant including its size,
kind of flower, growth habit, and
cultural information.

People come to the gardens not only to enjoy plants and landscape features but to be afforded the opportunity to learn about the many qualities and facts of plant life and how plants can improve their everyday environment. Interpretive centers at arboreta and botanic gardens are relatively new innovations and are designed to interpret the plant collection in interesting and informative ways.

An interpretive center in the Prehistoric and Jungle Garden outlines development of the earth and evolution of the primitive plants that are concentrated in the area around the lagoon. Satellite displays located in the extensive cycad collection garden give further information on these plants which dominated the landscape during the Carboniferous Age.

In the Herb Garden, benches flank a roofed, glass-covered case filled with changing informative examples of uses for popular herbs. The interpretive center under construction in the South African section will inform visitors about the wide variety of plants from that geographic area which are so well adapted to the Southern California climate that they are often considered native plants by laymen. Plans are being made for another interpretive center in the Australian section that will explain the unique trees and shrubs concentrated here in the largest geographically oriented area of the Arboretum.

More specific information on the plant collection is available from brochures and leaflets such as Trees at the Los Angeles State and County Arboretum and A Guide to the Tropical Greenhouse. The literature is designed to disseminate knowledge gained at the Arboretum to local gardeners and people from around the world who make use of the Arboretum facilities. In addition, more than 300,000 leaflets and brochures on practical horticultural and gardening information are distributed annually. These publications give detailed advice on many topics ranging from mulching and watering on through cultural information on roses, vegetable gardens and native oaks among other subjects.

Several other scientific resources draw the members of the general public and scientific community to the largest public botanic garden on the West Coast. The Plant Science Library contains more than 23,000 cross-referenced volumes dealing with botanical and horticultural sub-

(Continued on LASCA page 4)

The fragrance of a rare orchid was the first hint visitors to the Santa Anita Flora and Garden Exposition had of the unusual show in store for them. As they moved further into the Hall of Environmental Education they could see that the first impression was indeed accurate. Exotic landscapes created by 16 specialty plant growers filled the 9,000-square-foot hall with camellias, bromeliads, rare fruits, fuchsias, palms, ferns, and much more. Several displays and a plant sale overflowed the main building onto the patio and lawn area.

Exhibitors at the show that ran from Nov. 20 through 29 included Rainforest Flora, Inc.; Bill and Helen Shortt; Plant Shop's Botanical Garden; California State Polytechnic University at Pomona; Temple City Camellia Society; Stewart's Orchids, Inc.; The Collector's Corner; Loran Whitelock and Superior Nursery; Armstrong Garden Center; Burkard Nurseries, Inc.; San Gabriel Valley Orchid Hobbyists; California Rare Fruit Growers, Inc.; National Fuchsia Society; Southern California Horticultural Institute; Los Angeles State and County Arboretum; and the California Arboretum Foundation, Inc.

The support of several other individuals and organizations was essential to the success of the Santa Anita Flora and Garden Exposition. They were: American Plant Growers, Inc.; Amfac Garden Products; Boething Treeland Nursery; John Galbraith; Kellog Supply, Inc.; Los Angeles Flower Market; Monrovia Nursery Company; Nuccio's Nursery; Ota's Nursery; Sunnyslope Gardens; and Sunset Magazine.

Right The new ramada adds 24,000 square feet of outdoor display space to the Hall of Environmental Education.

# SANTA ANITA FLORA AND



A fountain and pergola contrast with camellias and ferns in a shade garden display at the nine-day show.



## GARDEN EXPOSITION





Chrysanthemums, succulents, reindeer and bromeliads highlight some of the imaginative gardens at the Santa Anita Flora and Garden Exposition at the Arboretum. Exhibits by 16 specialty plant growers filled the Hall of Environmental Education and the front patio. (Photos by Lu-Ann Munns)







#### IMS — Continued

jects. The library, probably the only comprehensive library of its type in Southern California, is open to the public daily. A computerized plant record that lists every specimen on the Arboretum grounds is also housed in the library building to make it accessible to visitors. The Herbarium contains preserved examples of most of the woody ornamental plants from the plant collections here.

Other educational public service programs offered to the public include a number of different guided tours. During a 45-minute narrated tram tour, visitors learn about the plants in the five geographically oriented sections of the garden, as well as the specialty plantings such as the Herb Garden and the California Native Plant Section. Volunteers lead groups of elementary school children and adults on special walking tours tailored to match the interest levels of each. The children learn about either the relationship between humans and plants or about California history during morning tours designed for them. The afternoon tours for adults focus primarily on the horticultural and botanical information available at the Arboretum.

Another popular Arboretum feature is the historical complex surrounding the Los Angeles State and County Arboretum lagoon that was the heart of the E. J. "Lucky" Baldwin's fabled Rancho Santa Anita. The buildings and plantings in this section depict early California history including glimpses into the Indian, Mexican and American ways, of life emphasizing the varying uses these groups made of the land around. At this single site visitors are able to observe the history of California from the Indians to the use of the land in modern California.

The outstanding informational public service programs the Department continues to produce was a

primary reason for approval of the grant by the Institute of Museum Services, a federal agency established in 1977 to help institutions in their dual roles of educators and conservators of our cultural and scientific heritage.

Of the 588 IMS grants awarded in 1981, 17 went to arboreta and botanic gardens. The IMS grants program is uniquely designed to help museums meet the financial pressures brought about by escalating operating costs and increased public demand for museum programs and services.

### NEW RAMADA ENHANCES HALL OF ENVIRONMENTAL EDUCATION

A RAMADA completed in November over the front entrance of the Hall of Environmental Education adds 2,400 square feet of outdoor display space to the hall. The new structure extends across the width of the building and projects 24 feet over the front patio.

From conception through con-

struction, the portico was largely the project of John Galbraith, prominent Pasadena architect. Besides donating his services and architectural drawings, Mr. Galbraith also arranged for the engineering plans that were donated by Roger Parks and the 20-inch laminated main beams and 12-inch cross beams that were donated by Pacific Roof Structures.

The California Arboretum Foundation provided much of the remaining materials needed for the ramada, including the 180 redwood 4 x 4s running parallel to the main beams that complete the lattice.

After a crane, also supplied by Mr. Galbraith, raised the main beams atop the concrete columns in front of the hall, Mr. Galbraith and his son, Mark, did much of the work. They donated their efforts to the California Arboretum Foundation.

The finished ramada not only complements the main hall but greatly increases the usefulness of the building as experienced during the Santa Anita Flora and Garden Exposition.



Mark Galbraith (left) and his father, John, check plans as a crane begins lifting the ramada beams into place.

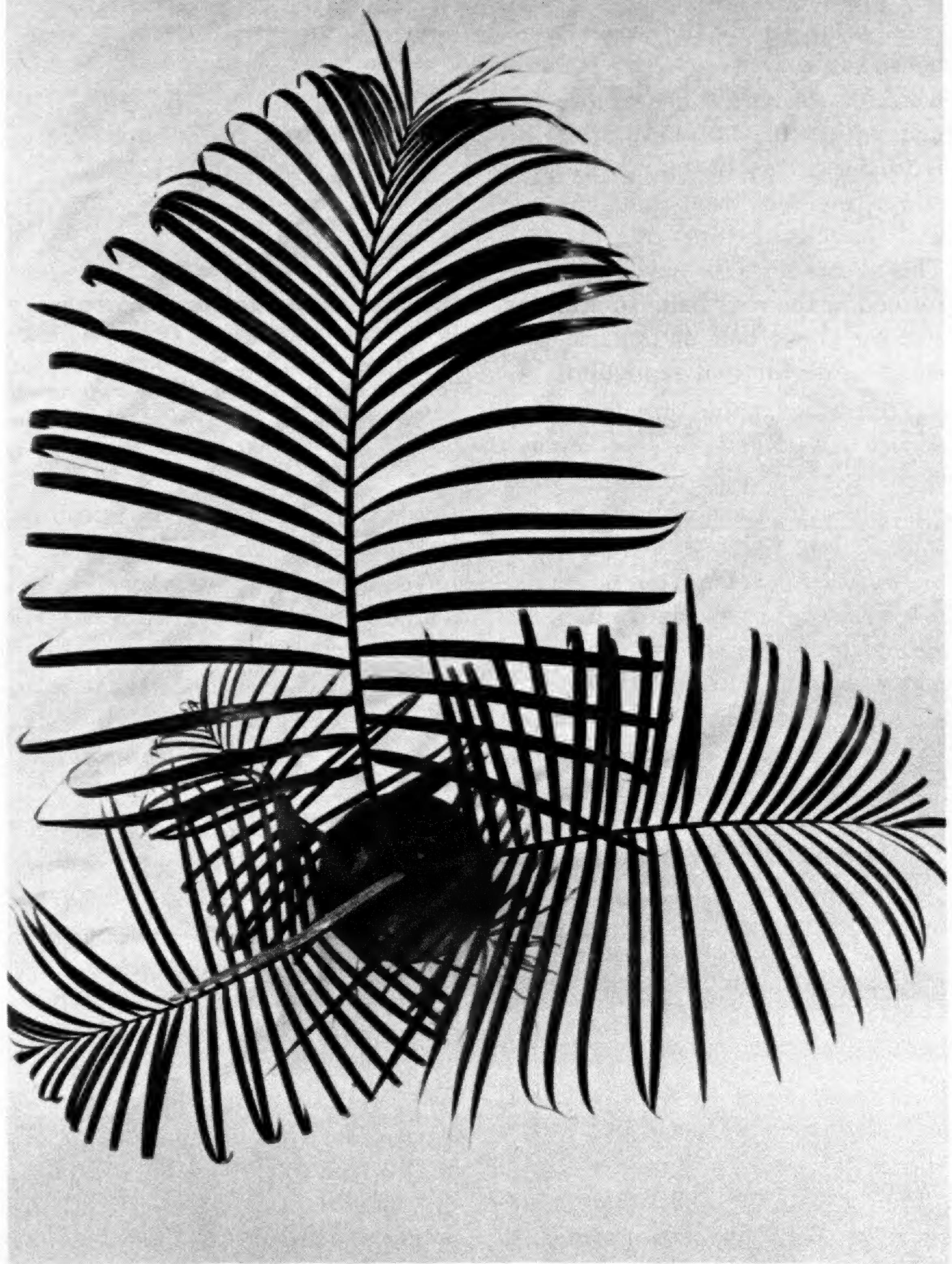
Jim Johns

# PALM PANORAMA



DALMS OF MANY DIFFERENT forms I and sizes crowd the large palm booth during the Baldwin Bonanza every May at the Los Angeles State and County Arboretum. By the time the plant sale closes, local gardeners will have purchased most of them because tidy growth habit and adaptability to Southern California gardens make palms superior ornamental plants here. Although books on palm culture list dozens of species suitable for subtropical landscaping, many of the unusual members of the 4,000 strong Palmae family are often hard to find in local nurseries.

Given the mild climate of Southern California, a number of attractive palms from dwarf clumps to 200-foot-tall single stemmed trees may be grown here with relative ease. The skyline of Los Angeles is replete with the tall silhouettes of Mexican fan palms that lend character to the city's landscape. The prime limiting factor in Southern California is not the occasional frost but instead the successive cold nights that normally occur during the winter months. Since even a home garden can have areas of differing temperatures, it pays to determine the optimum location before planting a palm. A partially shaded south or southeast corner will warm up fairly quickly each morning without burning the palm leaves. Areas with light, well-drain-



The featherlike fronds of Neodypsis decaryi spiral out from a triangular trunk. (Photos by Jim Johnson)

ed soil will be a few degrees warmer, as will locations next to water or on a hill slope.

Once the location has been established the soil should be prepared before planting the palm in spring or early summer. As a group, palms are unusually responsive to good amounts of fertilizers, organic amendments, and water. After digging as large a hole as patience allows, half fill it with compost, wellrotted manure or other organic material and incorporate it into the topsoil. After the earth has settled a bit, planting can commence. It is possible to readily shift large palms because new roots generate from the trunk base where it comes into contact with soil. The best procedure is to dig a trench around the palm about four feet from the trunk several months before transplanting. This allows time for new roots to be formed in the root ball. In addition, remove about half of the leaves to compensate for root reduction.

Established palms are long-lived, durable, relatively free of diseases and insects, and require only minimum maintenance. All palms will benefit from having a 6-inch mulch of peat, compost or decomposed manure incorporated into the soil around the base, once in spring and again in summer. In addition, apply organic or inorganic fertilizers about twice a year. Large, established palms will take from 10 to 15 pounds per treatment, while small palms should be given one to five pounds of balanced fertilizer. As a general rule, remove dead, yellow or damaged foliage as soon as it's noticed. If desired, selective pruning of a palm's leaf bases may be done to create attractive trunk patterns. Rinsing by hose periodically will help keep down insects like spider mites.

Palms are monocots, that is, related to bamboos and grasses, so they have a quite different trunk materials, thatch, clothing, fuel, phorbe lagenicaulis); the trunk base



Deep green foliage and adaptability to low light situations earn Chamaedorea elegans the common name of "parlor palm." This well-mannered palm grows to about 4 feet at maturity.

tree. The trunks don't produce annual growth rings; the trunk interior is relatively soft but shot through with very hard siliceous fibers. This type of construction gives support to the tall trunk and supplies the resilience to easily endure high winds that would topple other, more rigid, trees.

Graceful palms silhouetted against the sky epitomize the tropics for most temperate dwellers because the majority of palm species grow naturally only in warm climates. In fact, some are of major economic importance, particularly the coconut and African oil palms, both of which provide vegetable fat for processed foods. In North Africa the staple food is fruit from the date palm, and the natives of tropical islands depend on palms for shelter, building structure from the typical forest starch, sugar, oil and wine. Some thickens towards the middle, and

cultures are entirely based on the palm and its products.

Palms are broadly divided into two types - those with fan-like leaves and those with feather-like leaves. Within these groups a tremendous variety of color, fruit and size can be found. Therefore palms can be used for a whole range of ornamental effects. Placed adjacent to swimming pools they give a tropical atmosphere, while larger palms make striking corridors as avenue plantings. Many make excellent houseplants when young and can be relocated outside when they mature.

The fishtail palms of the genus Caryota make beautiful specimen plants in frost-free areas or potted plants for patios and indoors. Caryotas are the only palms with bipinnate leaves which resemble maidenhair fern foliage on a larger scale. At Baldwin Bonanza XII the eight following Chamaedorea species will be for sale: cataractarum, radicalis, oblongata, schippii x erumpens, metallica, seifrizii, costaricana and microspadix. They all naturally grow in deep shade, making them excellent minimum-care house plants. As chamaedoreas slowly increase in size they may be shifted to porch or patio situations, and ultimately planted outdoors in a shaded space. The feather-like leaves form a small crown above single or clustered bamboo-like stems.

A very well-known palm grown indoors in California is the coconut. It requires warm temperatures and ample water and light to thrive. Young coconuts make fine potted plants for about 10 years before they become too large for indoor use. More commonly seen is the kentia or sentry palm (Howea fosteriana), a single stem tree with long, drooping, feather-like leaves.

An unusual trunk shape is exhibited by the bottle palm (Hyothen narrows like a bottleneck to the crownshaft. It's best used as a specimen tree. A good outdoor palm for a confined space is the small, dainty pygmy date palm (Phoenix roebelenii). Rarely more than six feet tall, this slim tree has been called the aristocrat of date palms; the thin leaflets give a soft, fragile effect. Neodypsis decaryi, another feather-like palm, is an unusual specimen from Madagascar. The leaf bases spiral up the trunk in three vertical rows, giving it a very distinctive triangular shape.

An example of fan-type palms is the genus Rhapis, or lady palm, small, often beautifully variegated plants, from southern China. The Japanese developed many named cultivars of Rhapis excelsa over the centuries that they have grown the exquisite dwarf palms. Two solid green cultivars 'Daruma' and 'Kadaruma' and the more rare variegated 'Zuikon-Nishiki', will be available in two sizes during the Bonanza. Typically, Rhapis palms are kept moist, in high humidity, and appear best when grown in shade. As the trunk elongates, one can either air-layer the top to maintain a compact indoor Rhapis, or transfer it to the yard as an outdoor palm. Currently Rhapis are increasing in popularity among collectors, and are becoming available commercially.

Rhapis varieties and the other palms previously described can be purchased during the Baldwin Bonanza preview party on the evening of April 30. California Arboretum Foundation members and their guests will have the opportunity to choose among the unusual palms, some of which are available in only limited numbers, before the plant sale opens to the general public May 1 and 2.

Julia Martens received her M.S. in ornamental horticulture from Ohio State University.



Finely divided foliage of the pygmy date palm (Phoenix roebelenii) tops a slender trunk that will grow to about 6 feet tall.



The dwarf lady palm (Rhapis excelsa) 'Zuikon-Nishiki' is one of the rare palms for sale at Baldwin Bonanza XII.



Eight species of chamaedorea palms will be for sale at Baldwin Bonanza XII.

### LOS ANGELES STATE AND COUNTY ARBORETUM, Arcadia

MARCH 6, 7 — 12:30 to 4:30 p.m.

Girl Scout Flower Show
Sierra Madres Girl Scout Council\*\*

MARCH 20, 21—Sat. 12:30 to 4:30 p.m.
Sunday, 9 a.m. to 4:30 p.m.
Spring Flower Show
Monrovia Garden Club and the
Arcadia Garden Club\*\*

MARCH 27 — 9 a.m. to 4:30 p.m. Environmental Education Fair. Hosted by the L.A. State & County Arboretum

APRIL 3, 4 — Saturday 1 to 4:30 p.m. Sunday 9 a.m. to 4:30 p.m.

Aril Show Aril Society International\*\*

APRIL 10, 11 — 9 a.m. to 4:30 p.m.
Bonsai Show
Mame Society of So. Calif.\*\*

APRIL 17, 18 — Saturday 1 to 4:30 p.m.

Sunday 9 a.m. to 4:30 p.m.
Lily Show
Southern California Hemerocallis and
Amaryllis Society\*\*

APRIL 24, 25 — Saturday 1 to 4:30 p.m. Sunday 9 a.m. to 4:30 p.m.

Rose Show Pacific Rose Society\*\*

MAY 1, 2 — 9 a.m. to 3 p.m.
Baldwin Bonanza, a plant sale\*

MAY 16 — 11 a.m. to 4:30 p.m. Epiphyllum Show Epiphyllum Society\*\*

MAY 22, 23 — 9 a.m. to 4:30 p.m. Satsuki Show Valley Satsuki Society\*\*

#### CALENDAR

MARCH, APRIL, MAY, 1982

MAY 29, 30 — 9 a.m. to 4:30 p.m. Bonsai Show

Santa Anita Bonsai Society\*\*

\*Sponsored by California Arboretum Foundation

\*\*Cosponsored by California Arboretum Foundation

### DESCANSO GARDENS, La Canada

MARCH 20, 21 — Sat. noon to 4:30 p.m. Sunday 9 a.m. to 4:30 p.m. Daffodil Show

Southern California Daffodil Society\*\*

APRIL 3 thru 18 — 9 a.m. to 4:30 p.m. Spring Flower Show\*

MAY 1 thru 9 — 9 a.m. to 4:30 p.m. Bonsai Show and Sale

Descanso Gardens Bonsai Society\*\*
\*Sponsored by Descanso Gardens Club

\*\*Cosponsored by Descanso Gardens
Club

### SOUTH COAST BOTANIC GARDEN, Palos Verdes Peninsula

MARCH 7 — noon to 4:30 p.m.

African violet show and demonstration\*

Ralph Breden

MARCH 14 — 2 p.m.

Display of gemstones and fossils of

Palos Verdes Peninsula Beach Cities Gem, Mineral, & Fossil Society

MARCH 21 — 2 p.m.

Biblical herbs and their uses
South Bay Herb Society\*\*

MARCH 28 — 2 p.m.

Hawaiian plants for your garden
Southern California Horticultural
Institute

APRIL 4 — 2 p.m.

Flower arranging demonstration\*

Claude Smith, John Turman,

Jason Terry, and Jim White

APRIL 18 — 2 p.m.

Spring Concert\*

Richard Schwalbe, Palos Verdes

Symphonic Band

APRIL 25 — 2 p.m.

Talk on bromeliads
Leslie Walker
National Bromeliad Society\*\*

MAY 1, 2 — Saturday 1 to 4:30 p.m.
Sunday 9:30 to 4:30 p.m.
Bromeliad Show

South Bay Bromeliad Association\*\*
MAY 15, 16 — 9 a.m. to 4:30 p.m.

Fiesta de Flores, a plant sale\*

MAY 22, 23 — Sat. 12:30 to 4:30 p.m.

Sunday 9:30 to 4:30 p.m.

Rose Show South Coast Rose Society\*\*

MAY 30 — 2 p.m.

Plants for coastal gardens\*

Virginia Fleener

\*Sponsored by South Coast Botanic Garden Foundation \*\*Cosponsored by South Coast Botanic Garden Foundation