

LASCA LEAVES



Los Angeles County Department of Arboreta and Botanic Gardens

Bonanza Sellout

FIFTEEN THOUSAND five hundred and ninety-five people, 3,500 in the first half hour, descended on the Arboretum last May 7th, buying orchids, ferns, Arboretum plant introductions, cycads, vegetables, pelargoniums and just about every other sale-tagged plant in sight. The attraction, of course, was the eighth annual Bonanza plant sale and, counting the 2,200 attending the preview the evening before, it set a new attendance record.

The photos on this and the following pages will give some idea of the activity on what was an exceptionally beautiful day. Some 30 visitors held the winning numbers for raffle prizes that included rakes, sponge rock, a tiller, plants, and five grand prizes: a lath house, garden furniture, an assortment of gardening products, a water color, and a greenhouse.

The California Arboretum Foundation's superb volunteer organization, Las Voluntarias, the Arboretum staff, Baldwin Bonanza chairman Jean Atkinson, and Arboretum superintendent John Provine, can be proud of a job that was well planned and conducted. The proceeds of the sale will go towards the construction of the Hall of Environmental Education. The amount will be announced in the next issue of *Garden*.



Where am I? Obscured by his purchase, a lush *Polypodium aureum* (hare's nest fern), this Bonanza patron makes his way to the exit with the assistance of his equally obscured wife. About 3,000 ferns were sold, including Boston, staghorn, and some rare *Platynerium* cultivars.

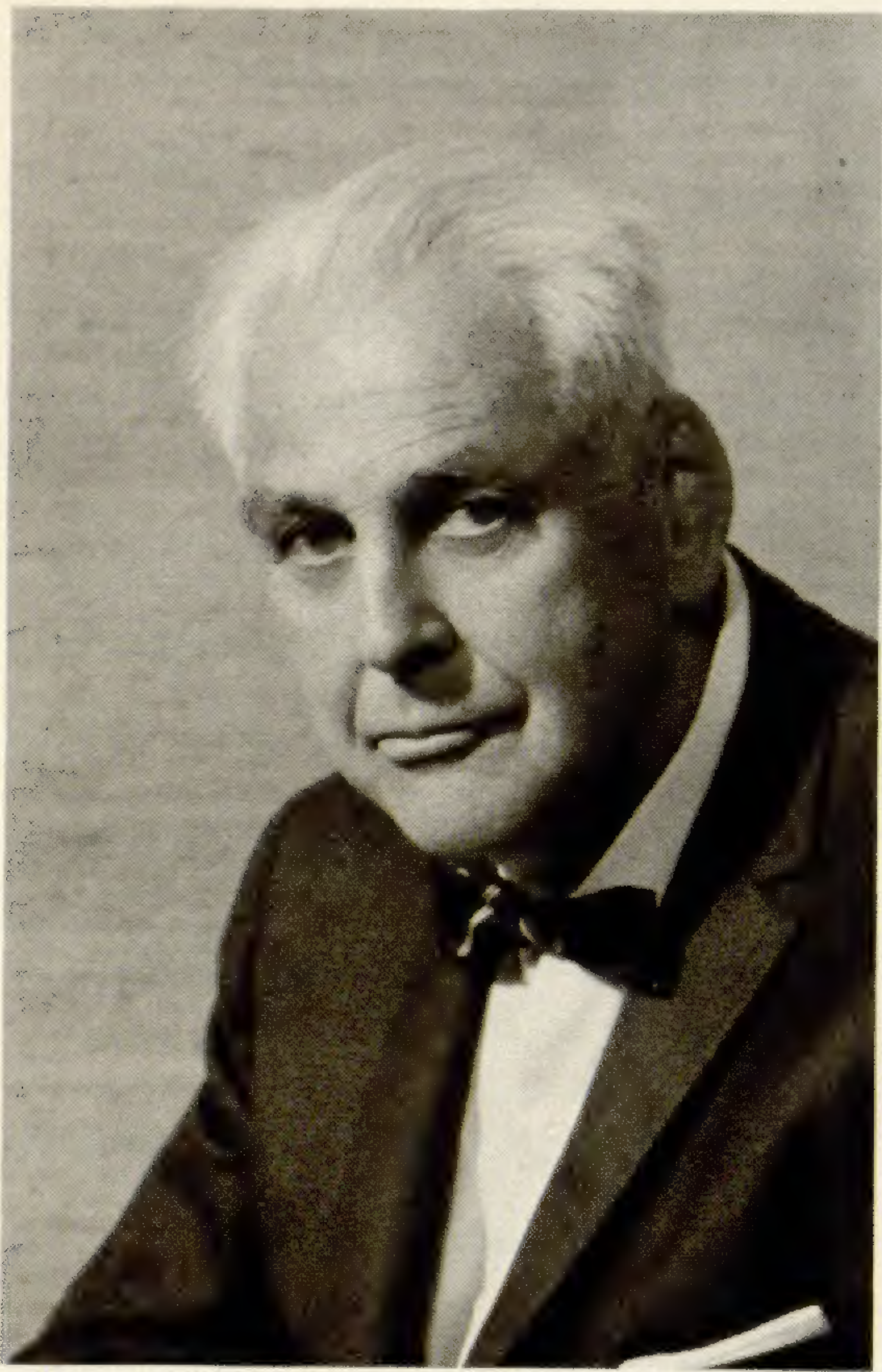


Determined! This young woman, carrying about 15 pounds on her head as she strides through the edible grape collection, has selected an Aechmea fasciata (bromeliad) and cymbidium orchids in a 5-gallon can. But the most popular and biggest sale items turned out to be the pelargoniums — over 5,000 sold in seven hours!

All LASCA photos in this issue by William Aplin.

Here, a group of succulent enthusiasts look over a collection of sedums. These and other patio plants were very popular. Miniature roses, fuchsia baskets, and "living sculptures," mostly bromeliads attached to pieces of driftwood, were all sold out.





Dr. Samuel Ayres, Jr.

Medal of Honor Award

EACH YEAR the Garden Clubs of America selects through its 182 member clubs throughout the country a person on whom to bestow its prestigious Medal of Honor, "awarded for outstanding and distinguished service to horticulture." This year's award was presented to Dr. Samuel Ayres, Jr. at the annual medal awards dinner in Birmingham, Alabama, last April 5th. Dr. Ayres, accompanied by Mrs. Ayres, was there to receive the presentation from Mrs. Robert Homans, the club's National Medal Awards Chairman.

Dr. Ayres' name was submitted by the Diggers Club of Pasadena through Mrs. Stephen M. Farrand, the Diggers Club medal awards chairman. In listing his contributions to horticulture, Mrs. Farrand was at the same time setting forth Dr. Ayres' unique position in the field. As most Southern Californians with more than a passing interest in plants know, Dr. Ayres was largely responsible for the creation of the Los Angeles State and County Arboretum, selecting the site and leading

the citizens' committee work necessary to persuade local and state authorities to purchase the land. For 35 years he has been collecting seeds from Hawaii, South America and Australia during vacation periods from his profession as a dermatologist, giving most of them to the Arboretum for testing and evaluation as part of the Plant Introduction program.

In addition, Dr. Ayres, together with Dr. Mildred Mathias, vice-chairman, at the time, of the botany department at UCLA, the late Ralph Cornell, landscape architect and photographer, Henry Davis, publisher, the California Arboretum Foundation, the Southern California Horticultural Institute, and Los Angeles Beautiful, undertook the publication of a series of booklets dealing with the many colorful plants that could be grown in Southern California. This was a five-year project which resulted in the publication of five colorful booklets. In 1974, the booklets were combined into a single publication, *Color For the Landscape: Flowering Plants For Sub-Tropical Climates*, fulfilling yet another of Dr. Ayres' many projects aimed at enriching the horticultural community for the benefit of the people.

Today, at age 84 and with no thought of retiring, Dr. Ayres continues working both in his profession and as an amateur horticulturist intent on helping to make Southern California and Los Angeles more beautiful places in which to live.

Mrs. E. W. Menninger

AS HAS BEEN observed in these notes before, the Arboretum has been the recipient of many gifts in its 30-year history, and it is no exaggeration to say that its plant collections, library, and other departmental divisions have been greatly enriched by the generosity of a long succession of garden-loving friends.

One of the Arboretum's most dedicated friends is Mrs. E. W. Menninger, a close neighbor and one of the first ten members of the California Arboretum Foundation. On several occasions during 1977, Mrs. Menninger donated various books, research equipment, and plants to the Foundation which, in accord with legal requirements, requested the Board of Supervisors to accept them on behalf of the County for use by the Los Angeles State and County Arboretum. At a Board meeting held last January 31, the Board gratefully acted upon a motion entered by Supervisor Peter F. Schabarum, accepted Mrs. Menninger's gift with thanks, and expressed its appreciation in a letter to her which noted that the items were valued at almost \$30,000 and would "further enhance the many activities at the Arboretum."

Retirement

IN THE FALL of 1956, a new telephone operator was hired at the Arboretum to operate a new switchboard in a new administration building that was about to be dedicated. The operator was Marge Wood, a soft-spoken, good-humored lady with an infectious laugh who before long came to be known as the "voice of the Arboretum."

Last March 30, after 22 years of service, Marge was the guest of honor at a retirement luncheon held in the Arboretum lecture hall. Among the 125 fellow workers and friends who attended were a number of Arboretum retirees who came from all parts of the county. A highlight of the program was a recorded take-off on comedienne Lily Tomlin's famous switch board-operator skit. The proceedings ended with the presentation of a service pin and a number of gifts, including a large money tree that was grown especially for Marge, and a warm round of farewells for a lady who will be long remembered.

Tabebuia, the Trumpet Tree



Gary Cromwell

Tabebuia species are among the showiest plants of the New World tropics. Flowers of the one hundred or so species vary from white to tints of yellow, red, pink, lavender and purple and virtually cover the trees during blooming periods, which usually last from one to two months. The flowers also have an attractive form, essentially trumpet-shaped, from which they receive their popular name of trumpet tree.

Trumpet trees are native to nearly every country of Central and South America and to certain islands in the Caribbean Sea. Specimens also may be found in cultivation in places around the globe having tropical and subtropical climates, such as India and Florida. In southern California, the genus was introduced to the nursery industry in 1964 by the Los Angeles State and County Arboretum.

Because of their beauty and widespread occurrence within their natural ranges, *Tabebuia* species are believed to have been familiar to highly-developed cultures such as the Incas, Aztecs, and Mayas. Representative genera of the family Bignoniaceae, including *Tabebuia*, have been reported growing near old ruins in remote tropical jungle areas. For example, these plants have been observed near the base of the Great Pyramid in the Mayan city of Chichen Itza, on the Yucatan peninsula of Mexico. Flowers simi-



Tabebuia impetiginosa

lar to those of tabebuias and other bignones occasionally also appear on ornate stone carvings and other artwork of ancient peoples of the Americas.

Tabebuia species have been known by such exotic vernacular names as Ipe (Amazon Valley), Poui (Hawaiian Islands), Ahan-Che, and Xha-Hua-Che. The last two names are thought to be examples of Nahuatl, the Uto-Aztecan language, and they

refer to *Tabebuia chrysantha*.

Tabebuia trees vary from 15 to 100 feet high, with an average height around 30 feet. The whitish-gray bark has many small fissures which give the trunk a wrinkled appearance. The trees are prized as ornamentals, and some species are recommended for shade. There are many open spaces between the equally-dichotomous branches, and the foliage often is not dense, but the over-

all structure lends itself to varied uses in the home garden. Additionally, tabebuias make good lawn or garden trees because they seem to be disease- and pest-free.

Leaves are opposite and vary from simple to palmately-lobed. Leaf margins may be entire or toothed, and compound leaves have three to seven leaflets, depending upon the species. Leaflets are yellowish-green to dark green and are periodically shed from the trees.

The brightly-colored flowers of *Tabebuia* species occur in spike-like arrangements (scattered along an elongated axis) to large dense terminal clusters. Flowers of many species appear in spring, usually from March to May. They may develop on leafless trees or may coincide with small developing leaflets. The funnel-form corollas usually have five distal nearly-circular lobes and are more or less two-lipped. Each petal has a rough texture, and along its inner surface are shallow furrows and recurved hairs. There are five stamens, four fertile ones in pairs of unequal length and a fifth sterile one. The outer surface of the calyx of *T. chrysotricha* (Golden Trumpet Tree) is covered with a golden-brown pubescence comprised of microscopic star-shaped hairs. These flowers are visited by both ants and bees. Fruits are pendant pod-like capsules up to about 20 inches long and one-half inch wide. Seeds are numerous, winged, and lack endosperm (a nutritive tissue in many flowering plant seeds).

Because the white or brownish wood generally has exceptional beauty in both grain and color, some tabebuias are economically important for their timber. Both *T. pallida* and *T. avellanadae* are valued highly as sources of cabinet wood. The wood of *T. palmeri* and *T. guayacan* is olive-brown, quite dense, and extremely durable, so much so in fact that the ceiling



Tabebuia chrysotricha

beams of an old church in Panama, made of wood from *T. guayacan*, are said to have successfully resisted weathering for nearly three centuries!

Trumpet trees tend to do best in full sun. They demand well-drained soils and will respond nicely to frequent watering and fertilizing. Plants may be propagated by seed, cuttings, or air layering, and they often begin to flower when only a year old.

Tabebuia is represented by several presumably different species here at the Arboretum. A handsome 30-foot specimen of *T. impetiginosa*,

one of the oldest (23 years) of our trumpet trees, grows just south of the tram waiting-area. A smaller but equally beautiful member of this species is located on the north side of Peacock Pavilion, and more specimens grow in numerous locations on the grounds. Two dozen small trees of *T. chrysotricha* are planted on the west side of Baldwin Avenue along the south approach to the Arboretum's Santa Anita Depot. Plantings of this species also are growing east of the library building, west of the administration complex near the African section, and on the south side of the research

building. Specimens of *T. chryso-tricha* have been planted in Arcadia at irregular intervals along the Baldwin Avenue street island from the Arboretum south to Live Oak Avenue on the Arcadia-Temple City boundary. This species also occurs as a street and lawn tree in many other southern California communities.

A large assemblage of tabebuias has been planted on the Arboretum's Tallac Knoll, especially in an area

east of the aquatic garden. Here grow plants of *T. avellanae*, *T. umbellata*, *T. heptaphylla*, *T. palmeri*, *T. impetiginosa*, *T. chryso-tricha*, *T. pallida*, *T. rosea*, and an interesting specimen believed to be a hybrid of *T. impetiginosa* x *T. chryso-tricha*.

Tabebuias are both fascinating and unusual plants which every visitor can enjoy. Perhaps not many people realize that some of our *Tabebuia* specimens were trans-

planted to their present sites after having attained nearly full size. Gardening staff here also have discovered that *T. avellanae* plants may fail to flower until the plants have been excavated, potted, and replanted. The operative physiological mechanism is a curious one.

Gary Cromwell is a biologist and plant taxonomist in the Department's Research Division.

The New Polyploid Felicias

Paul L. Scott

MOST BLUE FLOWERS have a short blooming season, are faded by the sun, and are difficult to grow in the home garden. The felicia, formerly known as agathea, is one perennial that is covered with non-fading blue blooms almost continuously. Its daisy-like flowers are held well above the low-growing foliage. Because it is naturally adapted to a Mediterranean climate, it is easy for the home gardener to grow and propagate.

The primary disadvantage of the original felicia was its sprawling growth habit. The author has developed many improved varieties of felicias through modern genetic engineering and years of patient selection. These new felicias were distributed to commercial growers and are available now in nurseries throughout Southern California.

There are two commonly grown perennial felicias whose names are often mixed, *Felicia amelloides* and *Felicia rotundifolia*. The leaf of *F. amelloides* is narrow and oblong,

about one-tenth of an inch wide, whereas the leaf of *F. rotundifolia* is broadly oval or rounded. This leads to the conclusion that the hybrid polyploid varieties were derived from *F. rotundifolia* because the leaves are oval.

The large-flowered polyploid varieties are the result of many hours of hand pollenizing and selecting seedlings derived from Felicia 'Santa Anita'. This tetraploid variety originated at the Los Angeles State and County Arboretum when the propagator, Quinn Buck, treated a felicia with colchicine, causing it to double the number of chromosomes in its seedlings.

Because *F. 'Santa Anita'* was tetraploid, it was assumed it could possibly produce progeny with larger flower heads than diploid strains. This proved to be so, but the rangy growth habit of *F. 'Santa Anita'* had to be improved upon by discarding all the straggling seedlings, working only with the compact ones.

Next, the problem of shrinking

flowers had to be overcome because as the size of the plant was reduced the flower heads also became smaller. Some very dwarf, compact seedlings with small flower heads and short ray petals appeared. However, it was decided that large heads with wide petals were most desirable, so the selecting continued over many years.

A race with extra large flower heads and stems long enough for cut flowers also evolved but the plants were not as compact as the previous type. The effort was to develop desirable varieties of both the compact and the large-flowered strains.

The first clone selected for distribution to commercial growers was *F. 'Jolly'* (plant patent #3017), whose light to medium blue flowers stay open at night.

Two felicias, *F. 'Martha Chandler'* and *F. 'Betty Marshall'*, with similar heavy growth and clear, medium blue flower heads were distributed next. One of the most freely

flowering seedlings, F. 'Astrid Thomas,' blooms continuously in favorable weather. This felicia is like a large F. 'Jolly' and is so far the best commercial variety for potted plant culture.

Two other seedlings were distributed. F. 'Rhapsody in Blue' has very heavy and compact growth but the wide-petalled, medium blue flowers roll slightly under at night. The other seedling, F. 'Midnight', has large flower heads of intense dark blue on long stems. Although it is not compact in growth and doesn't stay open completely at night, the richness of the blue color makes it striking in a massed planting. A beautiful dark blue felicia having good-sized flower heads on a vigorous, compact plant was introduced during 1977 under the name of felicia 'Marilia Scott'. Also, two other good dark blue varieties introduced the same year and having compact plants were named F.

'George Lewis' and 'Annie Oviedo'.

Several strains have extra petals in the blue ray flowers and some have small petaloids growing out of the yellow disk flowers. This indicates that some day double felicias could be developed just as were the anemone-flowered marguerites.

Because the most popular felicias in Southern California originally came from coastal South Africa, they grow best in the cool part of our year. They also prefer a neutral to slightly acid soil and are hardy to about 28 degrees F. Felicias are easily grown in any spot with light, well-drained soil that receives plenty of sun. They should be clipped back after flowering to encourage new crops of flowers throughout the summer and fall.

Felicia seeds sown one-eighth of an inch deep during the spring or fall in a mixture of 1/2 peat moss and 1/2 Sponge Rok with enough dolomite to make the pH about 6.5

will germinate in 3 or 4 weeks in a night temperature of 50-55 degrees. Tip cuttings taken when the flower buds are developing will root in 3 or 4 weeks at 55-60 degrees night temperature when placed in Sponge Rok, preferably under intermittent mist during the day. If three plants are grown together in a six-inch pot, or six plants are grown together in a ten-inch pot, the results are more pleasing for commercial growing.

Felicias may be grown into standard or tree specimens by staking the plants in a greenhouse during the winter; they can also be trained into cascading plants. A large container planted with short, stocky felicias makes a refreshing pool of blue on a sunny patio.

Paul Scott is an instructor in the Department's adult education program, a newspaper garden editor, and for many years an amateur hybridist.

LOS ANGELES STATE AND COUNTY ARBORETUM, Arcadia

JULY 15, 16 — Sat. 1 p.m. to 5 p.m.
Sun. 9 a.m. to 5 p.m.

Begonia Show
Presented by American Begonia Society

JULY 21-23 — 9 a.m. to 5 p.m.

Fern Show
Presented by Los Angeles International Fern Society

JULY 23 — 10 a.m.

Sunday Morning Walk
Australian Section
Dr. Gary Wallace, biologist

AUGUST 20 — 10 a.m.

Sunday Morning Walk
Tallac Knoll/Aquatic Section
Dr. Leonard Enari, senior biologist

SEPTEMBER 23, 24 — 9 a.m. to 5 p.m.

Herb Show
Presented by Herb Society of America

SEPTEMBER 30, OCTOBER 1 —

10 a.m. to 5 p.m.

Bonsai Show
Presented by Akebono Bonsai Society

DESCANSO GARDENS, La Canada

JULY 1 — 2:30 p.m. to 4:30 p.m.

Dixieland Band
Grice Axtman, Director
Presented by Descanso Gardens Guild

CALENDAR

JULY, AUGUST, SEPTEMBER

JULY 2 — 2:30 p.m. to 4:30 p.m.

Adult Swing Band of Pasadena
City College
Paul Killian, Director
Presented by Descanso Gardens Guild

JULY 9 — 10 a.m.

Sunday Morning Walk
Rose Gardens
George Lewis, superintendent

JULY 9 — 2:30 p.m. to 4:00 p.m.

"Sweet Adelines" of Verdugo Hills
Bobbette Gantz, Jackie Morgan, Bonnie Sherburn, Directors
Presented by Descanso Gardens Guild

JULY 15 — 2:30 p.m. to 3:30 p.m.

"An Afternoon with the Children's Players"
Lee Barlow, Director
Presented by Descanso Gardens Guild

JULY 15, 16 — 3:00 pm.

La Canada Players
Presented by Descanso Gardens Guild

SEPTEMBER 2, 3 — 9 a.m. to 5 p.m.

Bonsai Show
Presented by Descanso Gardens
Bonsai Society

SEPTEMBER 10 — 10 a.m.

Sunday Morning Walk
Trees of Descanso Gardens
George Lewis, superintendent

SEPTEMBER 22 — 7 p.m. to 10 p.m.

Fund Raising Dinner
Presented by Camellia Council and
Descanso Gardens Guild

SOUTH COAST BOTANIC GARDEN, Palos Verdes Peninsula

AUGUST 17-20 — 9 a.m. to 5 p.m.

Dahlia Show
Presented by Inglewood Dahlia Society

SEPTEMBER 10 — 2 p.m.

Sunday Afternoon Talk
Indoor Container Gardening
Ed Hartnagel, assistant superintendent

SEPTEMBER 17 — 10 a.m.

Sunday Afternoon Walk
Australian Native Plants
Jeffrey Hook, staff education assistant