

Los Angeles County Department of Arboreta and Botanic Gardens

Tenth Anniversary

LUNCHEON CELEBRATING the 10th anniversary of the founding of Las Voluntarias, the hardworking volunteer corps of the California Arboretum Foundation, was held last November 15th in the Arboretum lecture hall. One hundred eighty members attended the event, which was organized by Foundation president Mrs. Leland (Ruth Mary) Larson who, with the assistance of Mrs. Varick (Diane) Martin, also prepared the meal.

founder of the organization and wife of the former Department director, the current president of Las Voluntarias, Mrs. John (Marilyn) Llewellyn, and three of the four former Las Voluntarias presidents: Mrs. John (Margaret) Griffith-Jones, Mrs. Leland (Ruth Mary) Larson, and Mrs. Thomas (Mitzi) Moore. The first Las Voluntarias president, Mrs. Peter L. (Alice) Douglas, was at her home in Hawaii and was unable to attend.

Las Voluntarias developed out of the need for a regular corps of volunteers who would help maintain the restored buildings in the historical section - clean them, keep furniture, costumes, and other period artifacts in good repair, and maintain a fresh supply of flowers in the main rooms of the Queen Anne Cot- nel. At the time, membership was



Among the guests of honor were From left, Las Voluntarias presidents and founder: Margaret Griffith-Jones, Mrs. William S. (Maria) Stewart, Mitzi Moore, Marilyn Llewellyn (current), Ruth Mary Larson, Maria Stewart.

been done sporadically by various individuals or groups of volunteers who were available. Then, Maria Stewart, a longtime California history buff, organized a group of her friends to take on the job on a scheduled basis. This group became known as Las Voluntarias. On the first executive board of the new organization were Alice Douglas, president; Margaret Griffith-Jones, vice-president; and Mrs. Alan (Annabelle) King, secretary-treasurer.

In early 1971, when the County instituted the first of a series of budget cuts among county departments, Alice Douglas was asked to try to double Las Voluntarias membership as a means of offsetting the freeze on the hiring of new person-Until 1967, the work had over fifty. A series of membership

drives were started, and by the end of the year the goal was reached. In successive years, Las Voluntarias asked to increase its membership because of staggering County cutbacks and today, together with Los Ayudantes, it has over 300 members. Since then, Las Voluntarias have become involved in practically every phase of Arboretum activity. They are totally responsible for the maintenance of the Garden For All Seasons, a prime attraction for visitors; they do a major job in the presentation of the annual Baldwin Bonanza, Spring Extravaganza, and biennial Queen Anne Frolic; members of their various committees serve in the library, research division, herbarium, youth education, historical section, Foundation gift shop, and at the Information Center window. The De-

partment is particularly indebted to them for their steady service as field leaders in the field trip program conducted by the Los Angeles County School District. Approximately 500 nature or history tours are given to school children each year. They also undertake numerous clerical tasks, notably the tedious but important task of preparing over a thousand Arbor Day resource kits for teachers each year. Clearly, Las Voluntarias is an unusually active group, performing a wide range of public services that play a truly significent role in making the Arboretum one of the outstanding institutions of its kind in the country.

New President

Mrs. david (Joan) Malafronte was elected president of Las Voluntarias, the official volunteer arm of the California Arboretum Foundation, at the organization's 1977 year-end meeting held last January 23rd. She succeeds Marilyn Llewellyn, who is due congratulations not only for the fine job she did during her two-year term but also for the impending birth of her first child.



Joan Malafronte.

Joan joined the Foundation and Las Voluntarias about three-anda-half years ago and a few months after moving to Arcadia from New York. A typical Las Voluntarias activist, she plunged into a variety of activities as soon as she had completed the orientation sessions for newcomers. Last year, she served as chairman of the Baldwin Bonanza, co-chairman of the Queen Anne Frolic, and chairman of the volunteer greenhouse where members propagate plants for sale at the annual Bonanza and at the Foundation's gift shop.

Garden Center

Garden Center at South Coast Botanic Garden has reached the halfway stage with the relocation of the youth education greenhouse, installation of basic landscaping, and laying out of field plots. The aim of this new project is to bring field and classroom educational activities together in one area and to give the public a close view of gardening through demonstrations and displays. The classrooms already having been built in the auditorium building in the new Administration Center, the next step was to relocate the greenhouse and develop garden plots and a demonstration garden some place close by. This turned out to be two hitherto undeveloped acres just south of the tramloading area and a short walk from the classrooms.

The South Coast Botanic Garden Foundation donated two thousand dollars toward renovation of the old youth education greenhouse, nine hundred dollars of which was received as a gift from the horticultural publishing company, Regensteiner Press. The 30- x 12-foot structure had to be disassembled, trucked over to the location, and reassembled with improvements made from materials donated by the Aluminex Corporation, the company that provided the original building. Heaters, fans, and humidity control are now fully automatic, made possible by laying new gas and electric lines, a major cost in the overall renovation.

The new area is surrounded by berms planted with different varieties of gazanias and other ground covers and with different varieties of erythrinas. Later on, there will be garden plots for use in youth and adult education workshops and a demonstration garden similar to the Garden For All Seasons at the Arboretum.

Arbor Day

The development of the new Garden Center at South Coast Botanic Garden has reached the halfway stage with the relocation of the youth education greenhouse, installation of basic landscaping, and laying out of field plots. The aim of this new project is to bring field and classroom educational activities together in one area and to give the

A thousand seedlings had been growing in five-gallon cans for almost a year at the Los Angeles State and County Arboretum in anticipation of their distribution to Los Angeles County School District schools participating in the Department's program. The schools will be mostly elementary, but also some junior high and high schools, and they will plant their tree, which they receive free, somewhere on campus grounds during a ceremony each will hold on March 7th, the traditional date for observing Arbor Day in California and many other states.

The packet of resource material that teachers receive each year is prepared by the Department's Education Division. This year's packet begins with some suggestions to the teacher on ways of utilizing the material, followed by mostly single-page outlines of basic biological facts, a crossword puzzle testing environmental knowledge, an Arbor Day pledge, and an illustrated report from the American Forest Institute, all intended to serve as models

for original classroom projects. Thanks are due the members of Las Voluntarias who undertook the laborious job of assembling this material. The Department is also indebted to the Oak Tree Foundation of Arcadia, which, as it did last year, gave a thousand dollars through the California Arboretum Foundation to help underwrite the costs of the Arbor Day program.

Baldwin Bonanza III

HIS YEAR'S Baldwin Bonanza, the eighth of the Arboretum's oncea-year plant sales, will be held on Sunday, May 7th, from 9 a.m. to 4 p.m. Will it differ from last year's Bonanza? Not much, according to Bonanza chairman Jean Atkinson. "You can't, or maybe shouldn't, do too much with a proven formula," she said, "but there will be a few things that are different.' One thing different she and her co-chairman, Marjorie Roos, have planned, is more raffle prizes. Those so far confirmed are a lath house, a Brown and Jordan patio set, a plant assortment from Germaine's, and an E. Margaret Wilson water color.

The site for the sale will again be the 12,000-square-foot saran-covered area west of the Garden For All Seasons. Familiar booths will include Arboretum introductions offering Blue Hibiscus, Crown of Gold and Gold Medallion trees, Snake Bush, Black Boy, and others; Ferns and Palms; House Plants; Shade Plants; Sun Plants and Cactus; Children's Booth; Edibles; Orchids; Miniatures; Crafts; and a wide selection of eycads.

On the preceding Saturday evening, there will be the customary preview party from five-thirty to eight for California Arboretum Foundation members and their guests. Tickets musts be purchased in advance and can be obtained by calling the Foundation office (213) 447-8207.



New Arboretum greenhouse.

Greenhouse

THE ABOVE VIEW of a new greenhouse constructed at the Arboretum gives no indication of the sophisticated climate-control devices with which it has been equipped.

It is fully automatic in terms of humidity, temperature, and air movement, the last of which features a plastic tube running along the top of the building for its full length, evenly dispersing warm and recirculated air through outlets a few feet apart. The air, propelled by a fan, first passes through charcoal filters to minimize pollution and the possibility of transmitting disease. This kind of care is necessary where critical plant breeding or tests are in progress, currently the case with crape myrtle and guayule projects.

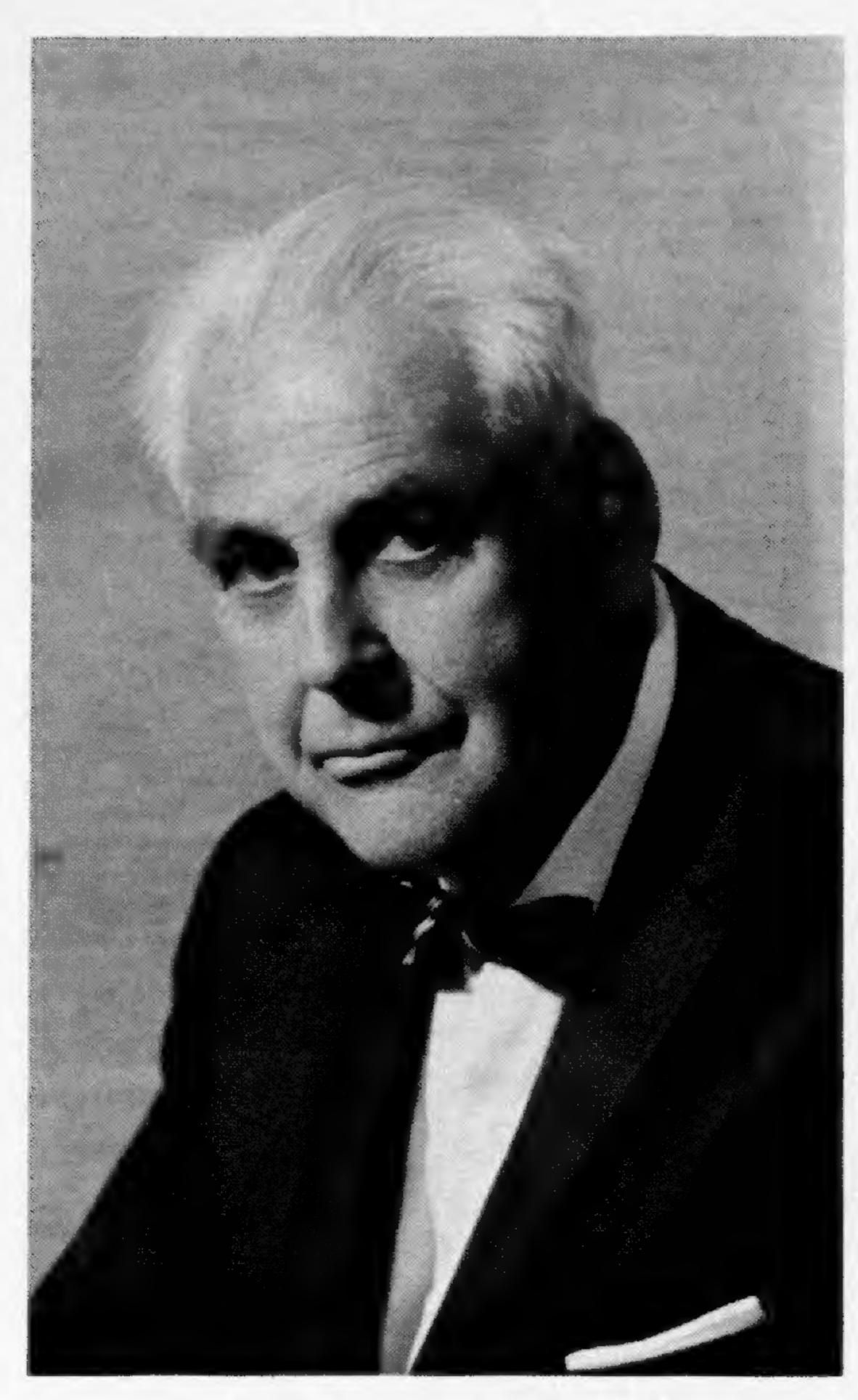
The crape myrtle project is aimed at developing varieties tolerant of powdery mildew to which the tree

is commonly subject, and at developing new flower colors.

As previously reported, this greenhouse will be part of the planned Hall of Environmental Education building complex. Major funding for it was provided by the California Arboretum Foundation and represents the Foundation's first concrete step in fulfilling its half-million dollar pledge in support of the project.

American Horticultural Society 1977 Congress

THE 32ND ANNUAL CONGRESS of the American Horticultural Society gathered at the Huntington-Sheraton Hotel in Pasadena last October for five days of talk and botanical sightseeing under the theme, "Plants and People." With members and staff of the California Arboretum Foundation and the Los Angeles State and County Arboretum serv-



Dr. Samuel Ayres, Jr.

ing as hosts, Society members were shown a variety of plant life that could only be found in Southern California. Among the highlights were visits to a number of private and public gardens and tours of the Department's three major gardens, the latter led by members of the volunteer organization at each garden.

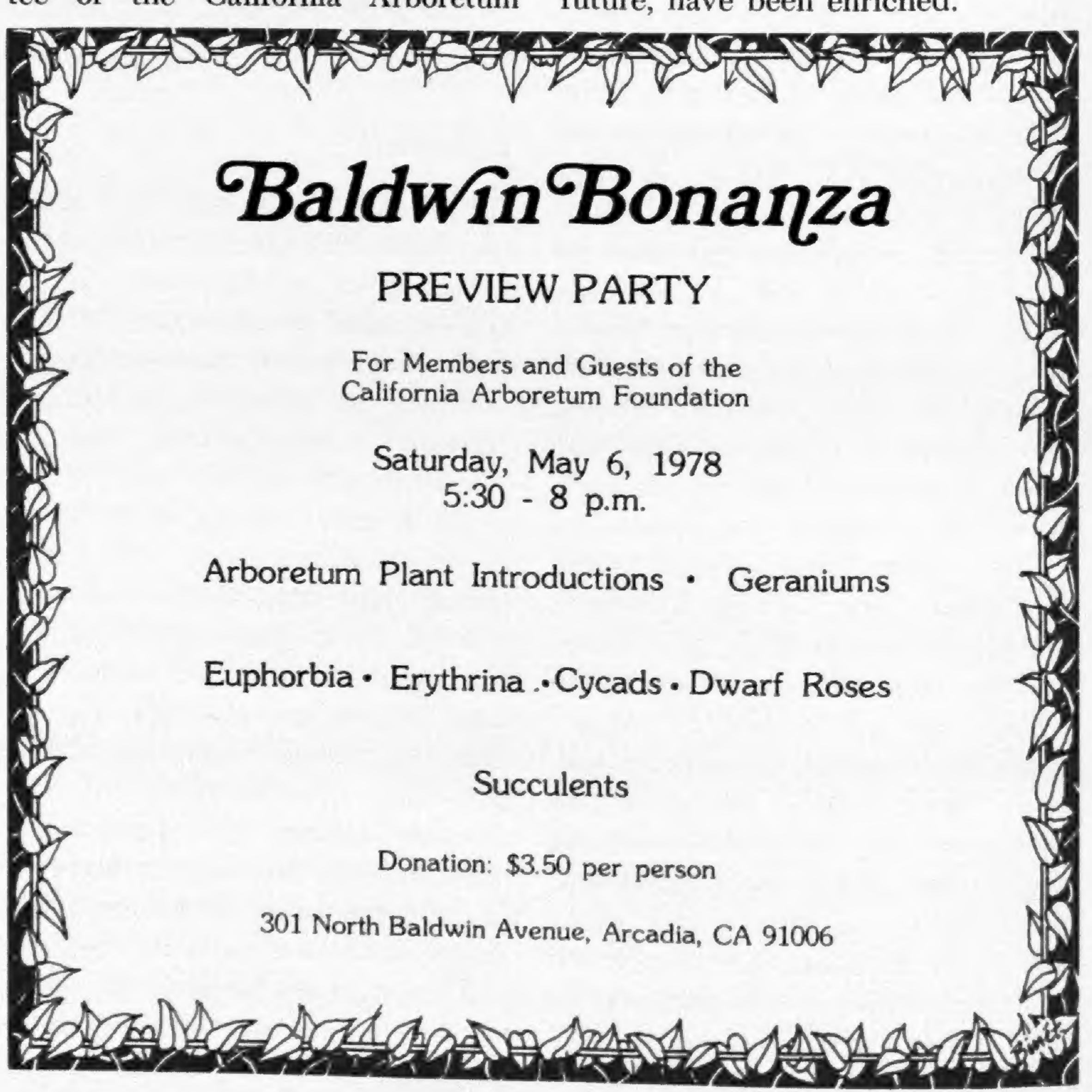
Another highlight of the Congress was the Annual Awards Banquet, held in the hotel's Viennese Room the second evening. Among those recognized for their achievements in the world of horticulture was Dr. Samuel Ayres, Jr., who was presented with the Society's Amateur Citation for his vision and efforts that led to the founding of the Los Angeles State and County Arboretum. He had had the idea of establishing an arboretum somewhere in the Los Angeles area nearly forty years ago and had made his idea a reality. He was also cited for his direction of the publishing project that produced the book, Color For The Landscape. A determatologist by profession, Dr. Ayres has been a dedicated plantsman all his life and is directly or indirectly responsible for the introduction of many new colorful trees into the Southern California landscape. He has been a member of the Board of Trusteees of the California Arboretum Foundation since the day the Arboretum was born.

Mrs. Archibald B. Young

CINCE ITS FOUNDING nearly thirty years ago, the Arboretum has been the object of the benefactions of a considerable number of people who have found in it their own ideal of beauty and community service. One of these was Mrs. Archibald B. Young, a kind and thoughtful lady who made contributions that would extend beyond her death, which came last November when she was in her nineties. Mrs. Young's association with the Arboretum began in 1950 when she and her husband served on the membership committee of the California Arboretum

Foundation under which the Arboretum was then being operated. In 1956, she became an active, and later, honorary, member of the Foundation's Board of Trustees. At the same time, she began a ten-year term on the Department's Board of Governors.

In 1960, she and her family donated one of the four greenhouses that today contain the Arboretum's extensive orchid collection. Perhaps her most enduring contribution came in 1965 when she gave the Arboretum the twelve Italian Stone Pines that border both sides of the forecourt entryway. Mrs. Young quietly assisted the Arboretum on numerous occasions in other years, notably in the development of the Peacock Pavilion for which she supplied funds for the building and some of the interior furnishings. It was her joy to do so, and because of her generosity the Arboretum and its thousands of visitors, past and future, have been enriched.



PLANT PORTRAITS

Beauty and Durability: The Spotted Gums

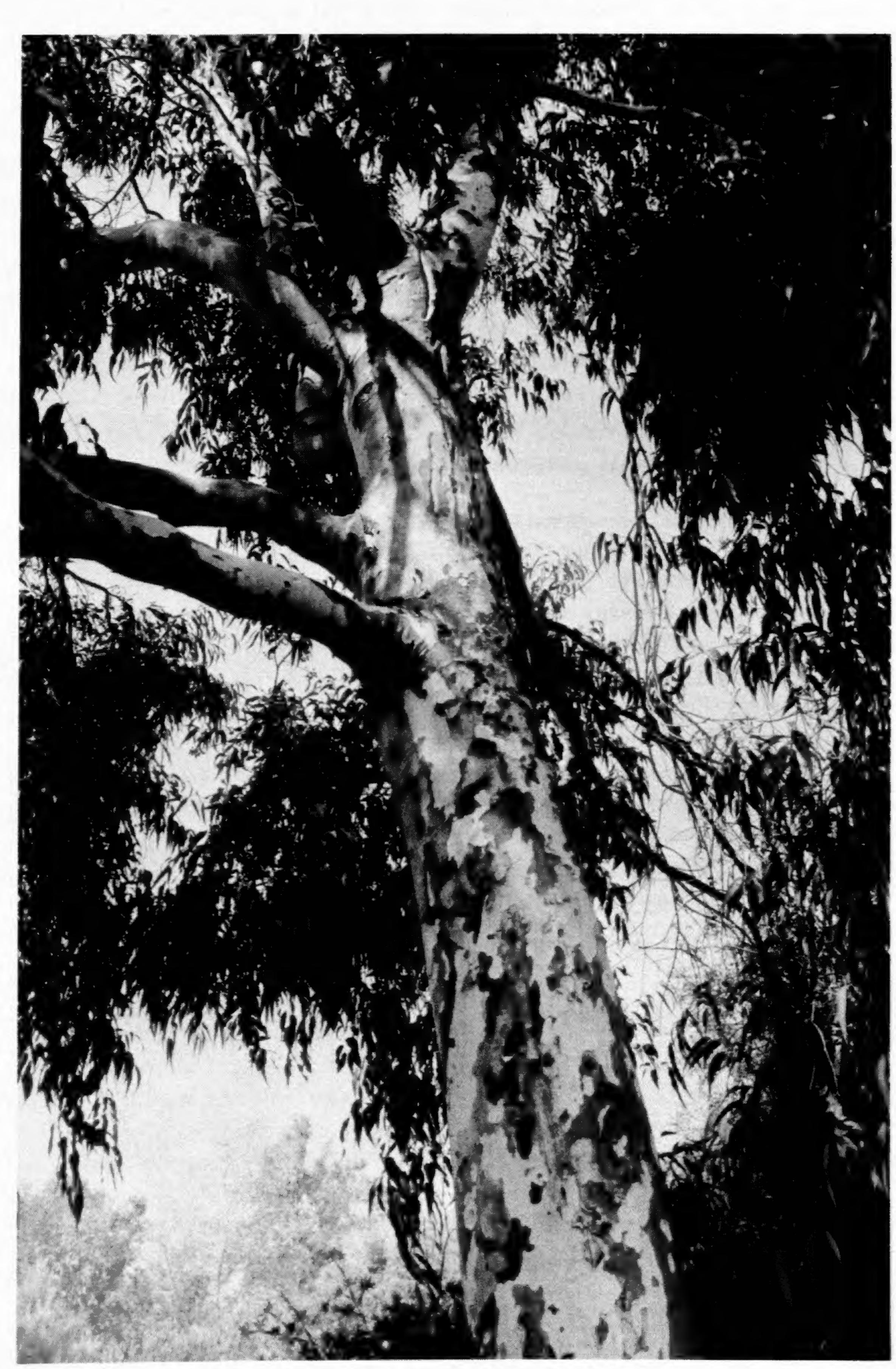


Gary Cromwell

UCALYPTS, OR GUM TREES, are members of the myrtle family. They are one of the most conspicuous plant groups of the Australian vegetation and comprise more than seventy percent of Australian tropical and temperate woodland trees. They also occur commonly as low shrubby growth forms in the mallee scrub on the edge of the inland deserts of that continent. A small number of species are indigenous to Tasmania and Indo-Malaysia.

As eucalypts are so widespread in Australia and are considered to be ancient landmarks, it is not surprising that they were familiar even to early peoples. Historical accounts indicate that aboriginal tribes used the wood of gums for such purposes as household utensils, hunting weapons, grave posts, and for certain ceremonial occasions. The strength and insect resistance of gum wood may also have permitted its usage as framework material in native housing shelters.

Among the most attractive of Eucalyptus species are the spotted gums, so called because of a tendency for small pieces of older bark to remain within shallow depressions on the tree trunks after seasonal shedding of the bark has occurred (photograph). The spottted gums refer generally to two species, Eucalyptus maculata Hooker and E. citriodora Hooker. These are sometimes known as skyline or landscap-



Eucalyptus maculata Hooker

ing trees, as they are tall and create a soft, interesting silhouette against the sky. Both are suitable for parks and highway plantings.

Eucalyptus maculata is commonly called Spotted Gum, Spotted Iron Gum, or Mottled Gum. Its natural range includes the moister coastal regions of southern Queensland and New South Wales (map), and it forms one or two isolated, nearly pure stands within the Mottled Ranges of eastern Victoria. It grows in cultivation in more than six African countries, as well as in Portugal, Chile, Brazil, and in drier portions of the western coastal United States. It has a relatively broad ecological tolerance with regard to moisture preference and soil requirements; in Australia, it is found from sub-tropical areas to rather arid ones, and it grows from valley slopes to stony ridges, from sea level to around 3300 feet in elevation. Optimum growth of *E. maculata* is obtained in moderately moist areas on well-drained, heavily-textured, shale-derived sandy soils. On less favorable sites within its range, it is variously associated with grey box, iron bark, stringy bark, and grey gums. It is probably closely related to the bloodwood gums, known for their deep red sapwood.

Spotted Gum is a handsome tree, with a clean and often long symmetrical bole. In more favorable habitats, it may reach 150 feet in height and 5 feet in diameter. In drier areas, its height may average only 80 to 120 feet and a diameter of 2 to 4 feet. It forms a dense, wide-spreading crown of large, glossy, dark-green leaves. Its bark is shed in irregular scroll-like to circular patches, leaving a smooth white-to-salmon-pink trunk. The

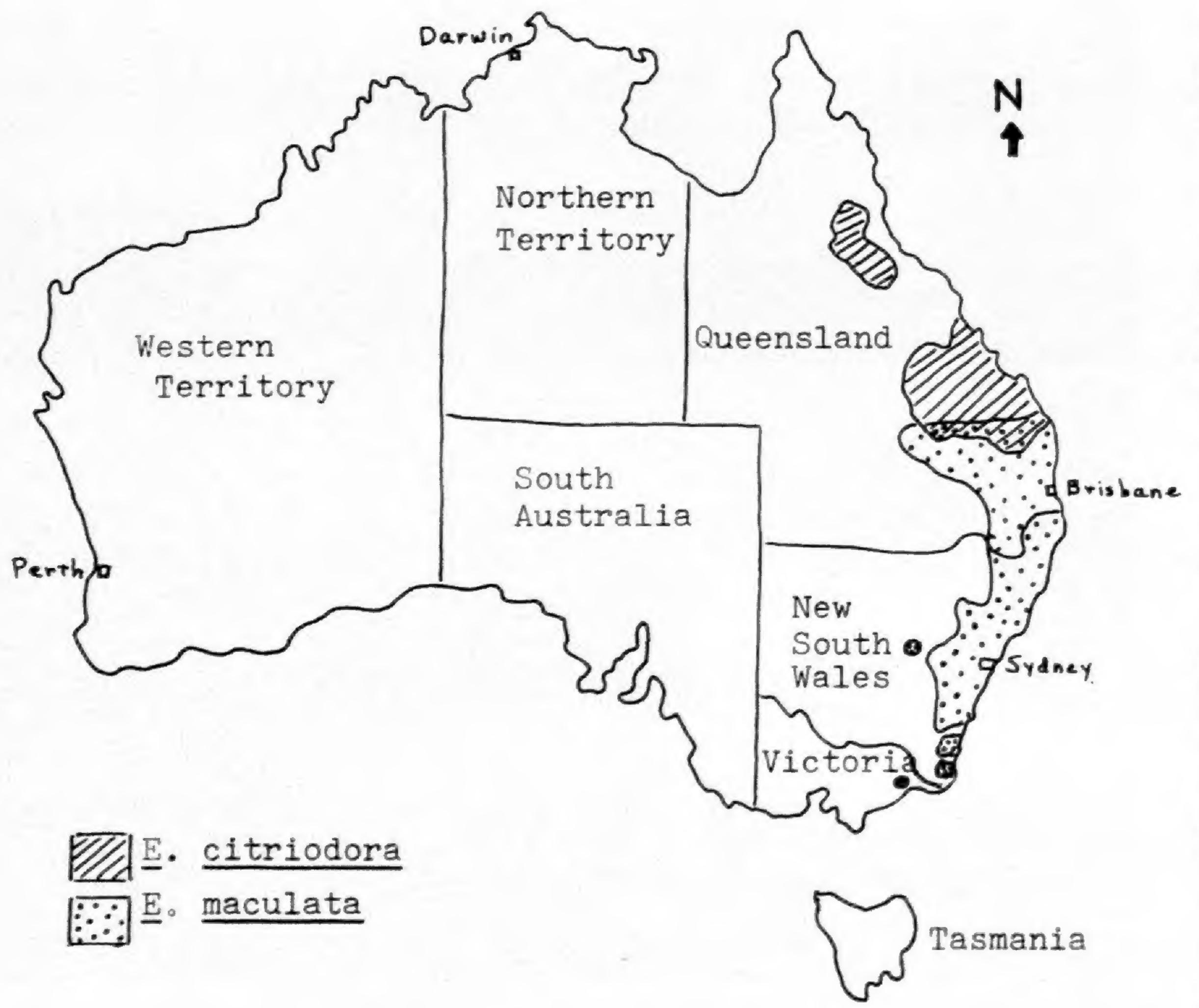
bark varies from creamy to bluegrey, olive-green, pink, or reddishbrown in color. Trees are both drought- and fire-resistant. Seedlings are frost-tender, but apparently this passes with age.

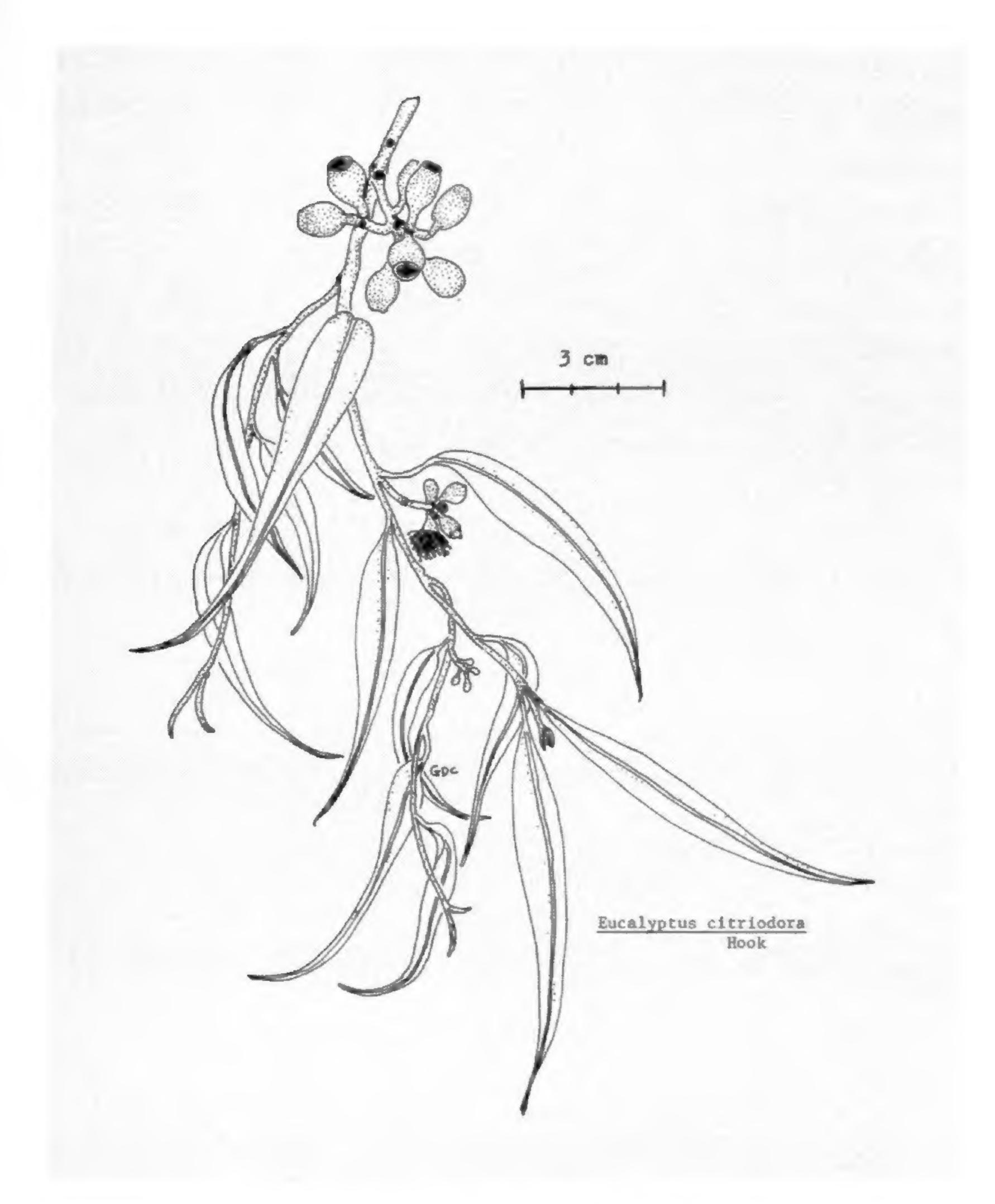
E. maculata is of considerable economic importance. Its most valuable uses are ornamental and as a timber source. Although the sapwood tends to decay and to be attacked by a small number of specific insects, the wood generally is highly durable, of good quality, and much in demand for flooring, room paneling, fencing, shipbuilding, furniture manufacture, and tool handles. This tree is moderately important also as a source of honey, pollen, and kino.

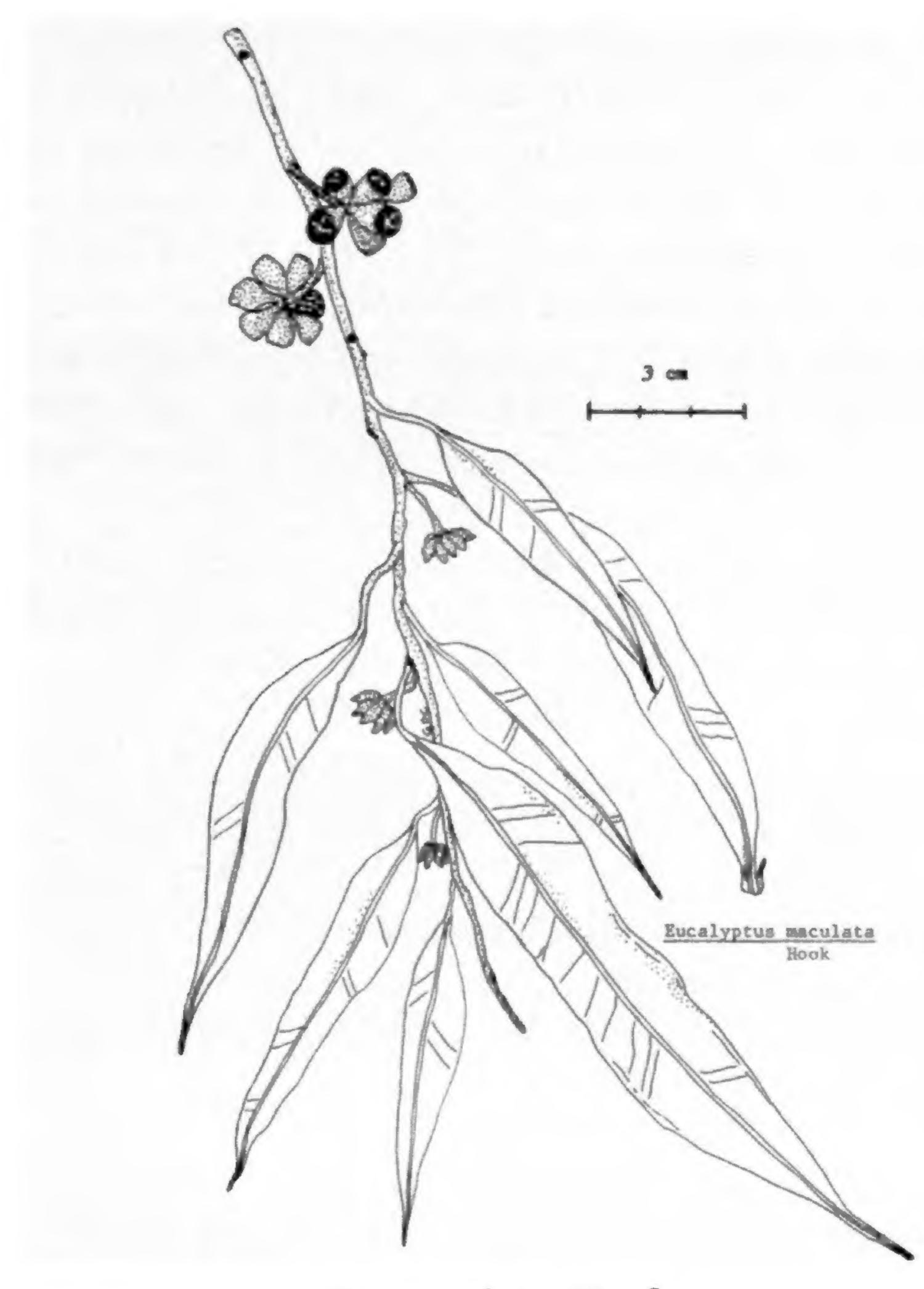
Mature leaves are alternate (the first 5 or 6 pairs of juvenile leaves are opposite), 4 to 12 inches long by 1 to 2.5 inches wide, lanceolate to broadly lanceolate, somewhat dark to dull green, and petiolate. Veins are moderately conspicuous. The inflorescence is usually an axillary cluster. Flowers are whitish, occur densely at the branch tips, are 1 to 3 inches wide, and appear in July and August. These often are not conspicuous. Fruits are urnshaped and have a rough surface. They vary from less than 0.4 to 0.8 inch in length. The lid is double, with an inner membrane layer, and it has a short pointed tip. The disc is wide, depressed, and the valves are enclosed.

At the Los Angeles State and County Arboretum, *E. maculata* grows resplendently among other eucalypts in park-like areas of the Australian section. One specimen which was started from seed 25 years ago, easily dwarfs other trees growing around it. It is 50 feet tall and nearly 2 feet d.b.h. (diameter at breast height), with a long sturdy stem and outer leaves shining in the sun. The bark is entire for 1.5 feet above the ground, and it hangs in scattered strips along the rest of the

NATURAL DISTRIBUTION OF SPOTTED GUMS







E. citriodora Hook.

trunk. Certain other specimens provide a stately landscaping accent near the roads in this section of the Arboretum.

Eucalyptus citriodora is known as Lemon-Scented Gum, Citron Gum, Citron-Scented Gum, Lemon-Scented Iron Gum, or sometimes as Spotted Gum. Aborigine people of Queensland called it "Kangar." It is restricted in the wild to central and northern coastal areas of Queensland map), although its range extends as far inland as 200 miles from the coast. It grows at altitudes from near sea level to around 1970 feet in sub-tropical and frost-free areas. As a mature tree, it will endure light frosts inland at higher altitudes. Seedlings of E. citriodora are frostsensitive.

Lemon-Scented Gum is tolerant of a variety of soils, but it tends to do best on well-drained somewhat gravelly subsoils. In Australia it is found in rolling countryside, including dry ridges and plateaus. It nearly always grows in mixed stands

with other eucalypts such as whitemahogany, grey gum, and iron-barks.

This species is a beautiful, fragrant tree of moderate size, from 80 to 130 feet high and 2 to 4 feet in diameter. It has a clean straight stem and bark which is smooth and white to pale pink or faintly bluish, with a powdery surface. The bark is shed in thin pieces of irregular shape, almost like scales. The asymmetrical crown is impressive against the sky, but it is sparsely-leaved and permits much light to reach the soil surface; for this reason, it is not a recommended tree for use in shelter belts.

E. citriodora, as is true of its very close relative, E. maculata, is prized for both its ornamental value and its durable timber, but especially for its citrus-scented foliage. The leaves contain oil of citronellal, a pungent unsaturated fatty aldehyde, which is retained long after the leaves have senesced. Here at the Arboretum, one can walk beneath Lemon-Scented Gums on cool mornings and smell the delicious frag-

E. maculata Hook.

rance from the leaves. Later, on picking up long-dead leaves from the ground and crushing them in hand, one often is able to detect a still strong citron-like odor!

Oil of citronellal and a mentholsource compound are only two of many extractions from this tree used in perfumes, soaps, and in certain pharmaceutical products. The tree is cultivated in Australia, Java, Fiji, Sri Lanka (Ceylon), India, the Seychelle Islands, in nations of westcentral and southern Africa, and in Southern California. It responds readily to cultivation, and care must be taken to prune it if an abundance of leaves is desirable. Otherwise, it will grow tall and straight, producing adequate wood for lumber and relatively sparse foliage.

Adult leaves are alternate (the first 3 or more pairs of rough hairy juvenile leaves are opposite), narrowly lanceolate, 4 to 7 inches long and 0.7 to 1 inch wide, with wavy margins. They are light green and smooth on both surfaces. Veins are

moderately conspicuous and regular. the lid has a short point. Flowers clusters. It flowers from July to again in mid-winter. Fruits are eggshaped, 0.7 by 0.6 inch, with a wide depressed disc and enclosed valves.

E. citriodora grows at the Los Angeles State and County Arboretum in several sections, including the central street island and along

both sides of Baldwin Avenue, near Buds are short-stalked, oval, and the eastern boundary of the Arboretum. Here, beautiful specimens grow are whitish, indistinctive, and in in varying stages of development, from around 10 to 45 feet in height. August and, in Southern California, The trees have been planted in years past in order to provide a striking and appropriate addition to a main northern entranceway into the city of Arcadia. Near the Arboretum's main gate is a 40-foot specimen which was planted as a seedling 20 years ago. It illustrates how

well E. citriodora seems to soften the harsh angular outlines of buildings. This species may also be seen as a street tree in several Southern California communities.

Both E. maculata and E. citriodora may be propagated from seeds, and both are relatively rapidgrowing.

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

LOS ANGELES STATE AND COUNTY ARBORETUM, Arcadia

March 10 - 8 p.m. Theodore Payne Foundation Lecture "Rare Plants of California Desert" Dr. Kristin H. Berry, Bureau of Land Management, Desert Staff

March 11, 12 - 9 a.m. to 5 p.m. Cactus and Succulent Show Presented by San Gabriel Valley Cactus and Succulent Society

March 19 — 2 p.m. Sunday Afternoon Talk "Exotic Economic Plants" Dr. Leonid Enari, senior biologist

April 1, 2 - Sat. 1 p.m. to 5 p.m. Sun. 9 a.m. to 5 p.m.

Aril Show Presented by Aril Society International

April 9 — 2 p.m. Sunday Afternoon Talk "Selected Herbs for Your Garden" Dr. Gary Cromwell, biologist

April 16 — 10 a.m. Sunday Morning Walk "Groundcovers" Charles Lee, horticultural consultant

April 22, 23 — 9 a.m. to 5 p.m. Hemerocallis and Amaryllis Show Presented by the Southern California Hemerocallis and Amaryllis Society

April 23 — 10 a.m. Sunday Morning Walk "Asiatic/North American Section" Dr. Gary Wallace, botanist

April 29, 30 — 9 a.m. to 5 p.m. Rose Show Presented by Pacific Rose Society

May 6 — 5:30 p.m. to 8 p.m. Baldwin Bonanza Preview Party (For Foundation members and their guests)

May 7 — 9 a.m. to 4 p.m. Baldwin Bonanza Presented by California Arboretum Foundation

May 21 — noon to 5 p.m. Epiphyllum Show Presented by Epiphyllum Society of America

CALENDAR

MARCH, APRIL, MAY

May 27, 28, 29 — 9 a.m. to 5 p.m. Bonsai Show Presented by Santa Anita Bonsai Society

DESCANSO GARDENS, La Canada

March 4, 5 — Sat. noon to 5 p.m. Sun, 9 a.m. to 5 p.m. Camellia Festival

Presented by Southern California Camellia Council

March 18, 19 — Sat. noon to 5 p.m. Sun. 9 a.m. to 5 p.m.

Daffodil Show Presented by Southern California Daffodil Society

April 23 — 2 p.m. Sunday Afternoon Talk "Lilacs" George Lewis, superintendent

SOUTH COAST BOTANIC GARDEN, Palos Verdes Peninsula

March 5 — 2 p.m. "Dividing and Growing Orchids" Presented by South Coast Botanic Garden Foundation

March 11 -- 9 a.m. to 5 p.m. "Amigos del Jardin" Childrens Day Presented by South Coast Botanic Garden Foundation March 12 — 2 p.m. "Division and Culture of Iris" Presented by South Coast Botanic Garden Foundation

March 19 — 10 a.m. Sunday Morning Walk "Lawns and Groundcovers" Armand Sarinana, superintendent

March 31, April 1, 2 — 9 am, to 5 p.m. Flower Show Presented by Costa Verde District of Southern California Garden, Clubs, Inc.

April 9 — 2 p.m. Theodore Payne Foundation Lecture "Flora of Northern Mojave Desert" Joseph Keese, chairman, Botany Dept., Glendale College

April 16 — 2 p.m. Concert, Palos Verdes Symphonic Band, Presented by South Coast Botanic Garden Foundation

April 23 — 2 p.m. "Dahlias, Division and Culture" Sponsored by South Coast Botanic Garden Foundation and the Inglewood Dahlia Society

April 30 — 2 p.m. Demonstration "Moss-Lined Wire Baskets" Sponsored by South Coast Botanic Garden Foundation and Crest Nursery

April 30 — 10 a.m. Sunday Morning Walk "Flowering Plants" Armand Sarinana, superintendent

May 7 — 2 p.m. "Flower Arrangement Demonstration" Presented by South Coast Botanic Garden Foundation

May 7 — 2 p.m. Japanese Gardens in Containers Edna Schoenbaum, president Ikebana International, Presented by South Coast Botanic Garden Foundation

May 20, 21 — 9 a.m. to 5 p.m. Fiesta de Flores Presented by South Coast Botanic Garden Foundation

May 27, 28, 29 — 9 a.m. to 5 p.m. Cactus and Succulent Show Presented by South Coast Cactus and Succulent Society