PLANT RESEARCH AND RECORDS

Plant Information

The Botanical Information Consultant is responsible for overseeing a group of volunteers who answer telephone questions regarding botanical and horticultural information from the public from 9:30 a.m. to 12:30 p.m., Monday through Friday. During the biennium the Consultant held three botanical seminars to train and update volunteers engaged in this activity. The total number of plant information inquiries answered in 1988-89 was 4,619 and in 1989-90, 4,402. The Consultant directly responded to other public inquiries on topics including plant diseases, garden pests, fertilizers and chemical usage, landscaping material, and plant identification.

The following public agencies were served and botanical questions were answered in detail:

L.A. County Sheriff's Training Academy
Cities of Bradbury and Monrovia
Pasadena Library
L.A. County Public Works, Flood Control District
J. Paul Getty Museum
Los Angeles Beautiful

Herbarium

The Herbarium contains a collection of dried ornamental plant specimens found in Southern California. These specimens are used as a reference for plant identification. The Herbarium Curator performed approximately 700 identifications a year for staff members, schools, universities and government agencies. Approximately 500 specimens were added to the collection each year, and there are now approximately 21,000 specimens in the herbarium collection. Over 300 duplicate specimens were culled out of the main collection and offered on exchange to provide space for new specimens. Volunteers contributed over 2,800 hours of assistance in this section during the biennium.

The Herbarium Curator, with the assistance of an additional 2,200 hours of volunteer time also coordinated the inventory of the living plant collection. Fifty-three 200' x 200' sections were surveyed, plant lists were updated, both for the computer and file cards, and plant labels were replaced. Other activities included training summer interns in herbarium practices and teaching botany classes for field leaders.

Research Activities

Plants Introduced during the Biennium

During the biennium the Department introduced the following new ornamentals to Southern California horticulture:

1988-1989

Myoporum cv. South Coast

1989-1990

Bauhinia variegata cv. Royalty
Reevesia thyrsoidea

Plants Being Evaluated

During the biennium the following plants were undergoing evaluation for future introduction into the Southern California landscape:

Rosmarinus officinalis cultivars
Callistemon cultivars
Eriocephalus africanus
Hypericum species
Maireana sedifolia

Weather

The Plant Records Unit serves as an official site for the United States Cooperative Weather Bureau, recording data for the benefit of the Fruit Frost Warning Service of San Gabriel Valley and for Arboretum horticulturists.

Data for the weather seasons, Oct. 1 to Sept. 30:

	1988-89	1989-90
Lowest temperature:	Feb. 6, 1989 27 degrees	Feb. 16, 1990 32 degrees
Highest temperature:	July 4, 1989 107 degrees	June 27, 1990 111 degrees
Total days of rainfall:	37 days	32 days
	1988	1990
Heaviest monthly rainfall:	Dec. 4.11 in.	Feb. 4.04 in.
Yearly rainfall:	10.77	11.56

Curatorial Staff Projects

A Curator, Ornamental Horticulture, joined the staff on June 26, 1989, filling the endowed Samuel Ayres, Jr., Chair of Ornamental Horticulture. During the biennium his responsibilities included locating and contacting sources for potential introduction materials and developing a formal evaluation procedure for existing holdings. He also contributed significantly to the collections planning process and assisted in the continuing development of an automated plant records system.

A Biologist was added to the staff on November 16, 1989. Among his duties, he assisted with plant identifications, participated in evaluating introduction material, helped with field inventory, and contributed to the maintenance of plant records.

New Accessions

During 1988-89 there were 733 new accessions to the plant collection. Among the following highlights of this period were:

147 accessions of water conserving plants for the Water Conservation Garden
19 accessions of *Plumeria* or frangipani
62 water-loving plants for the Bog Garden and Weep Wall.
50 orchid accessions
19 New Zealand plants for introduction testing
46 accessions of *Hypericum* for testing

In 1989-90 there were 506 new accessions. Highlights of this period were:

36 accessions of *Chamaedorea* palms
57 new orchid accessions introductions
48 accessions of native California plants for the Water Conservation Garden

Collections that were emphasized during the biennium included both water conserving and high-water use plants, as well as orchids, *Pittosporum, Callistemon,* and *Hypericum.*

Plant Inventory Update and Computer Uses

For most of the biennium, the computerized plant records were maintained on an Alpha-Micro computer set up for four pre-determined report formats. However, in July 1989, the plant records were converted in order to install them into a more advanced computer with a very flexible program. This popular software, dBASE, allows for tremendous flexibility in entering various types of information and in designing customized reports as needed by the Department. At that time, the records were redesigned around a new set of international standards to allow for communication among all botanical gardens. The new system made it possible to begin planning to link various departmental offices on a network and to integrate office functions for greater efficiency.