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# Botanical Garden Quarterly

Botanical UC Garden

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## What's in a name?

By Robert Ornduff, Director

One common problem expressed by numerous visitors to the botanical garden concerns the names of the plants that are embossed on the familiar green metal labels that are stuck in the ground next to each plant. "Why," they ask, "do you give these complex, often unpronounceable, unfamiliar name that seem to be in a foreign tongue instead of a common name that we can all understand?"

The most important reason that common names generally are not given on the labels is that most plants in the world have no common name. The names that are given to all plants, however, are the two "scientific" names used in communication among botanists — and also used by knowledgeable amateurs, gardeners, and others. How this scientific system of naming plants came about might be of some interest to visitors to the garden.

**Linnaeus triumphs**

A legalistic side of botany called taxonomy deals with the principles, rules, and practice of naming plants. The universal system of naming plants and animals with two Latin names, a generic and a specific one, goes back to the middle of the 18th century when the famous Swedish naturalist, Carolus Linnaeus (or von Linne) attempted to write a catalogue of the world's plants. Botanists at that time had identified fewer plant species throughout the world than are now known to occur in California alone.

Prior to the publication of Linnaeus' *Species Plantarum*, various unsatisfactory systems of plant nomenclature were in use. Some of these employed the so-called common or vernacular names of various spoken European languages, while others used Latin phrases consisting of several descriptive words. Linnaeus' feat was to develop a logical and consistent Latinized system of binomials (two names) for all plants. And since this *Species Plantarum* was comprehensive as well, the Linnaean system became widely and rapidly adopted.

**Latin streamlined by taxonomists**

Because Latin was the language of communication among scholars in the 18th century, it was naturally used for

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## Plants from the mountains of Mexico

By Bruce Bartholomew, Curator

Through a grant from the Stanley Smith Horticultural Trust, the U.C. Botanical Garden is participating in a project of bringing plants into cultivation from the mountains of Chiapas, the southermost state of Mexico. This is a joint project with the California Academy of Sciences and the Saratoga Horticultural Foundation. The reason for combining the efforts of these three organizations is that each has special capabilities and facilities which are being used in completing the project.

Dennis Breedlove of the California Academy of Sciences has for many years been working on the flora of Chiapas, and his role in this project was to collect seeds during the autumn of 1976. In addition to the over 3000 herbarium specimens he collected during five months of field work in the mountains of Chiapas, Dennis collected seeds of 186 species of plants that he believes have potential horticultural value.

Many of the areas in which he collected have probably not been visited previously by botanists, and in many of his seed collections are species unknown in horticulture. Often Dennis had to visit localities more than once in order to be sure that he could collect the seeds when they were ripe.

Most seeds were collected from elevations of 7000 feet or above in order to insure that the plants will have sufficient frost hardiness to survive the Bay Area winters. Another reason for collecting seeds from high elevations is that this region represents an outlier or isolated pocket of temperate vegetation that is thousands of miles removed from climatically comparable temperate areas to the north. This region is occupied by plants of outstanding horticultural value, as well as those of botanical and phytogeographic interest.

The second phase of this project involves the U.C. Botanical Garden. We have the facilities to grow plants from all 186 seed collections and to maintain living specimens in the newly developed Mexican Area.

The third phase of the project involves

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# Naming plants

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plant names and descriptions. And Latin has remained the contemporary language of taxonomy despite the wide usage of English, French, and German in scientific circles today. New species, to be validly named, must be described in Latin, although the Latin description generally is accompanied by a paraphrase or translation into a modern tongue as well. The kind of Latin that is used in taxonomy would raise the hair of a classical scholar, since it is telegraphic, streamlined, and contrived.

**Arguing over the "right" name**

When there is a question as to the correct binomial for a plant species, the principle of priority is usually applied. That is, the first name "legitimately" used for a plant species is considered its correct name. This name is always tied to a nomenclaturally important collection of plant material that contains the so-called type specimen. The type specimens of a large number of California plants are housed in herbaria in such diverse places as London, Paris, Berlin, Geneva, Indiana, Massachusetts, and Pennsylvania. The type specimen of our state flower, the California Poppy, resides in Leningrad.

For various reasons, a number of plants have several binomials that refer to them, although only one of the binomials is "legal." Often the same species was collected by several individuals and named independently by various taxonomists. This is one reason that some plant species have been known by more than one binomial, but application of the principle of priority allows us to select the single correct binomial for the plant. Lest the reader think that naming plants or determining the correct name for plants is easy, the procedures and regulations governing these matters are contained in the *International Code of Botanical Nomenclature,* which is a sizable book whose contents — in three languages — are revised periodically during an international botanical congress. The most recent of these was in Leningrad in 1975.

**History, humor affect naming**

Although binomials are treated as if they are Latin, some plant names have come directly from other languages. For example, our *Sequoia* (coast redwood) is named after a Cherokee Indian, and *Tsuga,* the genus to which our western and mountain hemlocks belong, is a Japanese word. *Pinus* is true Latin, but *Yucca* derives from a Carib Indian name, and *Ribes* (the gooseberry or currant genus) is traceable to Arabic and Persian.

Also, some generic names represent classical names for the genus (such as *Pinus* for pine), while others are contrived (such as *Rhododendron* or "red tree"). Some are commemorative *(Washingtonia),* while others have geographical connotations *(Hesperolinon* or "western flax"). Occasionally, a name will refer to an ancient use that was made of a plant, such as the *Asplenium* or "spleenwort", used to treat diseases of the spleen.

Some generic names are anagrams. For example, *Muilla* is *Allium* spelled backwards, and *Legenere* (a curious little annual member of the lobelia family) has a generic name that is an anagram of the name of E.L. Greene, a distinguished and prolific early California botanist.

Humor creeps into naming plants as well — there is *Eriogonum inflatum* var. *deflatum* and *Ceanothus gloriosus* var. *exaltatus* (which someone reportedly said should be called "Halleluiah!"). There are also some unfortunate bloopers that cannot be resolved because of the Code mentioned earlier. Thus, we are stuck with *Simmondsia chinensis* "Chinese jojoba" as the correct name for our southwestern desert jojoba even though the shrub does not occur in China. Likewise, we must retain *parviflorus* ("small flower") as the proper species name for the thimbleberry, surely one of the largest-flowered members of the genus *Rubus.*

**Common names confusing**

Common names are fine when unambiguous, but often this is not the case. For example, I am very uncomfortable in referring to what I call the corn lily *(Veratram)* as skunk cabbage, since to me the latter refers to the beautiful swamp plant, *Lysichiton americanum.* At the Oregon border, the California bay becomes miraculously transformed into the Oregon myrtle. What does one call the white-flowered subspecies of baby blue eyes? Moreover, owl's clover and prairie clover are not clovers. In looking through Munz' *A California Flora* and paying particular attention to families with large and colorful flowers such as the phlox, mint, and legume families, I discovered that about 85% of the species in my samples have no common name. Perhaps that in itself is a compelling argument toward the value of the binomial system, since *all* plants in the world — except those that are as yet undiscovered — have one and only one correct binomial.

Further reading: A.W. Smith, A Gardener's Dictionary of Plant Names, Cassell & Company Ltd., London. 1972.

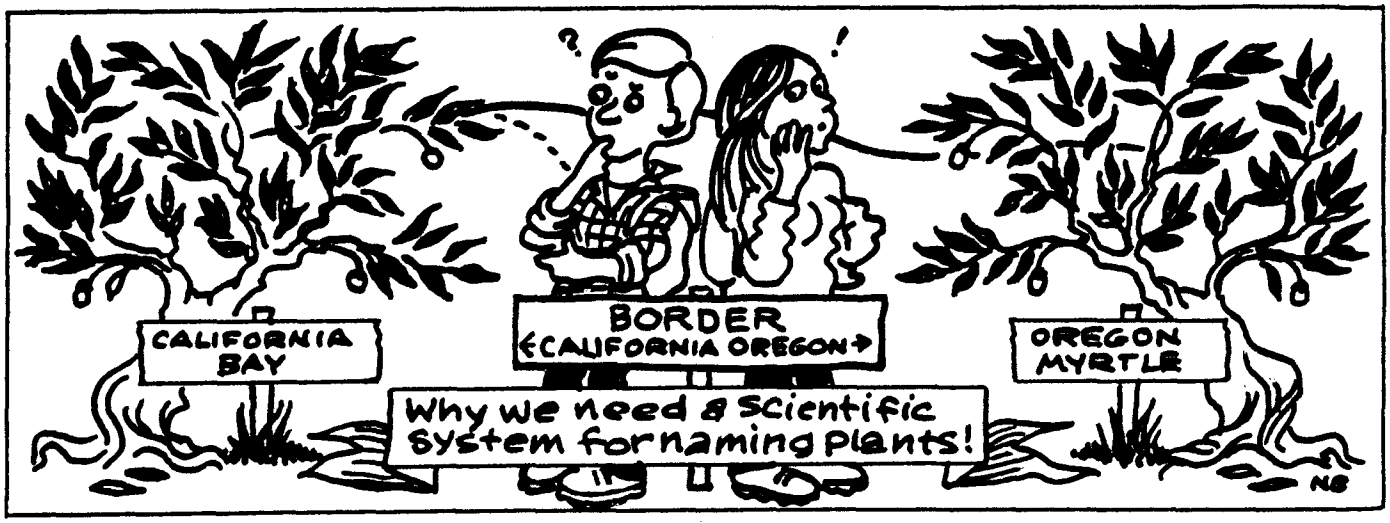
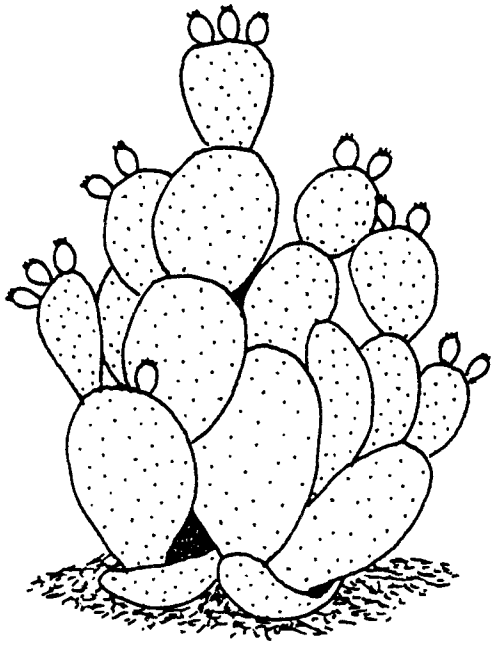



illustration by Nancy Bechtle

# Plant highlights

By Mary Schroter, docent



*Opuntia robusta, or prickly pear*
illustration by Laurianne Hannan

**Prickly pear**

*Opuntia robusta* or prickly pear, with its fruits ripening to a deep red is seen just off the main path in the New World Desert area. Although *O. robusta* is native to central Mexico, it has been cultivated for its edible fruit in other warm regions, especially Argentina. The sweet fruits are frequently eaten raw — after the tough outer skin is peeled off. Other traditional methods of preparation include boiling the fruit down to a syrup, baking it in pits, or drying it in the sun for later eating. The plant is also known by the popular names, Indian fig and tuna cactus. The generic name, *Opuntia,* is derived from a town in Greece where cactus-like plants are said to have grown. Specimens of this plant have been growing in the botanical garden since 1932.

**Giant kangaroo paw**

The giant kangaroo paw, *Anigozanthos flavida,* from Western Australia is a distinctive perennial in the Australasian area (bed 512C) easily spotted from the main path. Quaint small yellow flowers are carried on long stems above sword-shaped leaves. These flowers remain in good conditions for many weeks. In the unopened stage, the flower gives the impression of a kangaroo's paw. About eight other species of *Anigozanthos* are found in Western Australia including *A. manglesii* (the tall red and green kangaroo paw), the state emblem of Western Australia.

**Golden fruit of the Andes**

Immediately to the right upon entering the Tropical House, *Solanum quitoense* is blooming and possibly in fruit. Naranjilla, or golden fruit of the Andes is a gigantic herb of the northern Andes which grows up to ten feet tall, with leaves (note the spines) more than one foot long. Small orange tomato-like fruits are produced during every season of the year. The green acidic pulp is crushed to make a refreshing juice, and the fruits are made into preserves and pies. The juice is rich in protein and mineral salts. Plants develop fruit when six to twelve months old and bear continuously for two to four years. The Golden fruit of the Andes is extensively cultivated in Ecuador and Colombia between 3,000 and 7,000 feet. It has been introduced into several tropical countries. A member of the nightshade family, S. *quitoense* is closely related to tomatoes, eggplant, peppers, and potatoes.

**Himalayan plants**

In the Himalayan area bordering the lawn, *Hemiphragma heterophyllum* can be seen growing close to the ground. This plant was collected by the garden's curator, Bruce Bartholomew, in Bhutan between the Paro Valley floor and Taktsang monastery. Notice the lovely small red fruits. Considered by one English author as an "impermanent prostrate straggler," perhaps we should enjoy it while we may. Continuing up the steps, one can see a planting of *Gentiana stylophora,* native to the Himalayas and also collected in Bhutan above Paro Valley. This is a striking plant with large bell-shaped flowers perched on top of stems that can grow as high as six feet.

**California sagebrush**

In the California area, the California sagebrush *(Artemesia californica),* a rounded gray shrub found growing on dry slopes in mixed chaparrel along the southern coast, is now showing its numerous small greenish flowers. The leaves have a clean, bitter aroma. In the early days, the miners laid sprays of it in their beds to discourage fleas. The Spanish settlers in California regarded it as a cure-all for many ills and also used it as a wash to bathe wounds and swellings. Paiute Indians made sacred wands from the wood of many species of sagebrush, and crushed the leaves to make an aromatic tea.

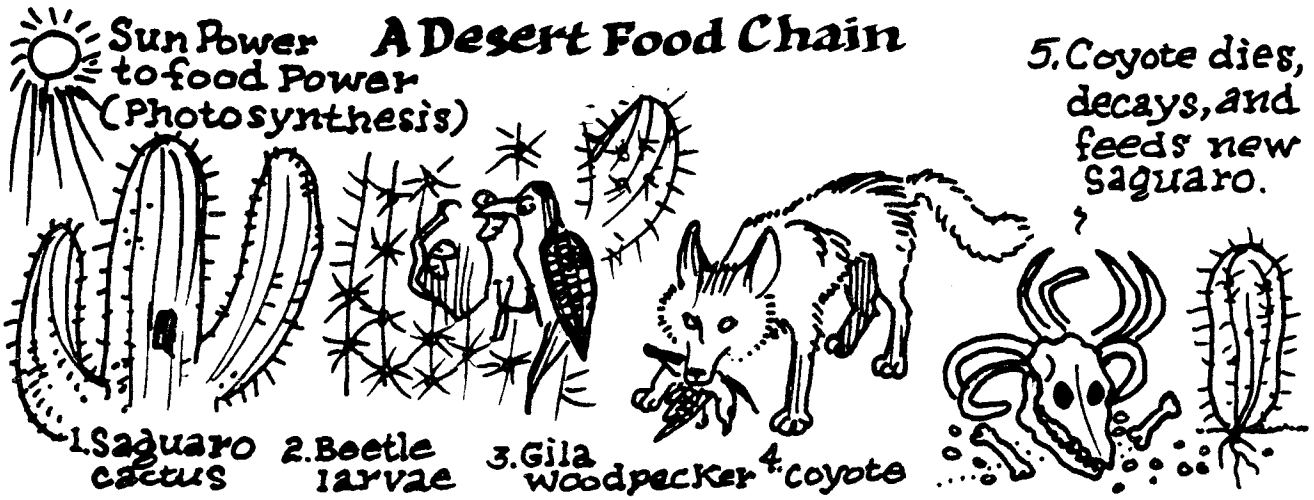
## AN UNUSUAL GARDEN WEED

By Robert Ornduff, Director

Although the orchid family is coveted for its many members that thrive in warm greenhouses and produce showy flowers, readers might be interested to learn that one of the commonest weeds in the outdoor beds at the garden is an orchid. This weed is the helleborine *(Epipactus helleborine),* an Old World native that resembles the chatterbox orchids of California *(Epipactis gigantea).*

The first report of the helleborine in North America came in 1879, when the plant was discovered near Syracuse, New York. Since its introduction into eastern North America, it has spread widely there, and also has been reported in Indiana and Montana. In California, it apparently was first reported in Golden Gate Park, though subsequently it has been found elsewhere in the bay area.

It is probable that the helleborine may have been introduced into the botanical garden along with the rhododendrons that were brought over from Golden Gate Park when the garden was moved to Strawberry Canyon in 1928. For years the plant was mostly limited to the Rhododendron Dell, but more recently it has appeared elsewhere in moist, shaded locations in the garden. Though the flowers are small, they are quite attractive, and resemble those of the cymbidium. The plant is not noxious and perhaps as a result of its charm the garden staff leaves this particular weed alone.




# Tours teach children

By Nancy Bechtle, docent

Now that more people have become concerned about the world around them, and are awakening to the fact that all ecosystems are in delicate balance, it is a good time for children to learn about the mechanisms of "food chains." Tours offered in the botanical garden, such as *Life in the Desert and the Forest*, help children understand some of the basic principles of ecology. (For information and reservations, call 642-3352.)

When the docents take a group of children on a tour of the forest or desert adaptations exhibited in the botanical garden, one of the highlights of the tour is frequently the obliging appearance of a lizard or a scrub jay. This is our cue to tell the children in the group about the interdependence of plants and animals.

Tour guides use the concept "food chains" to help children understand the food relationships of the plants and animals that make up a biotic community. A highly simplified food chain is described as consisting of green plants which convert sun energy into food energy through the process of photosynthesis. Herbivores or plant-eaters (such as rabbits, squirrels, mice) depend on vegetation as their source of energy, while carnivores or meat-eaters (such as lions, coyotes) eat the herbivores. In some food chains, omnivores (such as human and grizzly bears) eat the other two, plus green plants. Also, since several organisms usually rely on the same food source, "food chains" become interlinked to form complex "food webs."

The order and symmetry of food webs is finally displayed in the "last" act of the drama, when the plants, herbivores, carnivores, and omnivores die. Decomposers such as fungi, small animals (mites, earthworms, millipedes), bacteria, and weather break them down into chemical compounds which act as fertilizer to feed new plant growth. Thus, the children learn that the last act is also the first act, as the web of life is maintained; death providing sustinence for life ... unless one chain is altered or broken. Tour guides emphasize that altering a single link in a food chain can have repercussions throughout a biotic community, and may even cause extinction of many plant and animal species.

The botanical garden, with its numerous mini-environments, is a good resource for demonstrating the varied ways that nature has adapted its plants and creatures to their own special niches in this world.

The garden's present docent-led tour program was begun in 1972. Since that time, three more docent training classes have been held, raising the number of volunteer tour guides to 40. The docents are given instruction on many aspects of the garden, and are presented with different strategies for leading tours for all age groups — ranging from kindergarten to adult. Tours offered in the garden include *Sensory Awareness* (primary grades), *Life in Early California* (intermediate school grades), *Economic Plants* and *Life in the Forest and Desert* (intermediate-high school), *General Tour* (intermediate-adult), plus *Flowering Plants and Their Pollen Vectors*, *California Plant Communities*, and *Plant Diversity and Adaptation* (high school-adult).

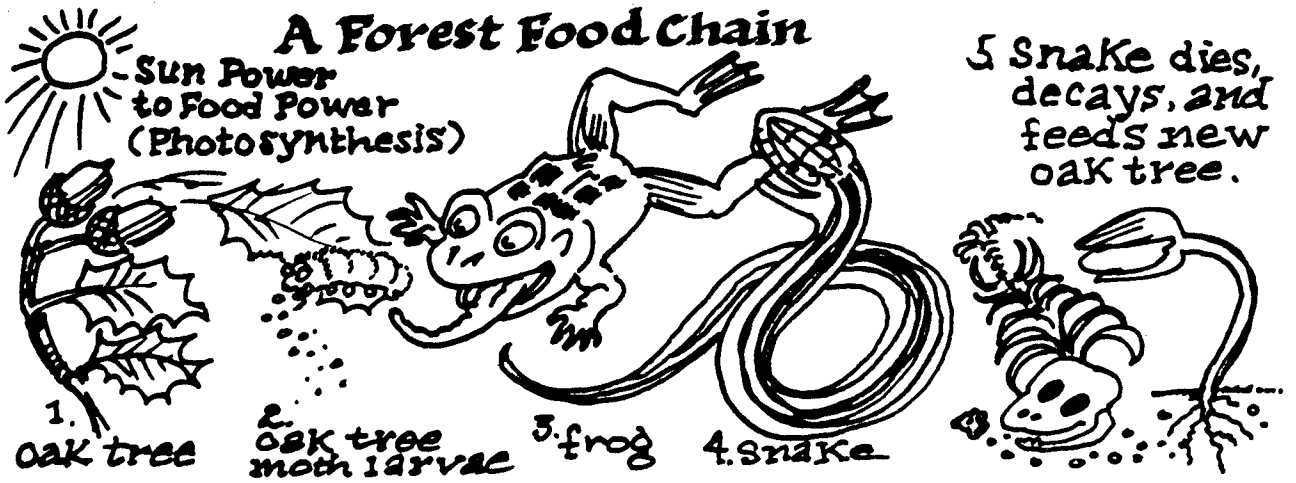
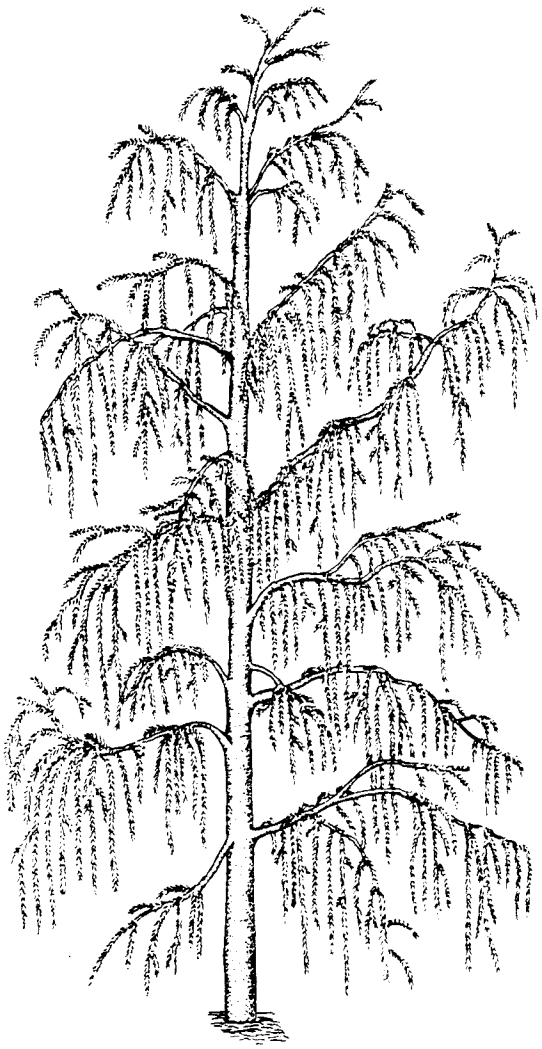



illustration by Nancy Bechtle

# Not just a podocarpus

By Carole Schemmerling, docent



*Dacridium cupressinum*
illustration by Sharon Smorsten

When most people think of a podocarpus, they envision the narrow and columnar *Podocarpus macrophylla* (yew pine), which is often used in landscape design. Or they picture *P. gracilior* (fern pine) which has a more spreading, somewhat weeping habit and is also popular as a landscape plant. Most people are probably not familiar with the exotic members of the family.

Members of the podocarpus family are coniferous, resinous evergreens once classified as members of the Taxaceae, or yew, family. They are now classified under a separate family (Podocarpaceae) and are characterized by yellow, male catkins and solitary, greenish female reproductive parts. The fruits are odd-looking structures which bear naked seeds at the top of fleshy red or purple bracteate bases. The podocarpus family includes the genus *Podocarpus*, as well as several other genera including *Dacridium*, *Microstrobus*, *Phyllocladus*, and *Saxegothaea*.

The botanical garden has some of the more unusual species of these various genera. Most are in the New Zealand section of the Australasian area. The most striking of these is *Dacridium cupressinum*, a lovely, light, airy, green tree with branchlets that droop gracefully. This is found in bed 508 along the path that separates the Australasian area and the Rhododendron Dell. The *Dacridium cupressinum* is a tree of the lowland and mountain forests of New Zealand, particularly the west coast of South Island. It does well in deep, rich, moist soil and will tolerate dry conditions when mature. It is the main timber tree of New Zealand as the wood is used for many purposes, ranging from furniture and paneling to plywood.

Up the slope from the *Dacridium cupressinum* is a dark scraggy-looking tree with narrow, scale-like leaves. This is *Podocarpus dacrydioides* in its juvenile form. The mature tree is more attractive, with dark green foliage instead of brown, and a denser, conical appearance. This is a tree of the valley floors and swamp forests throughout New Zealand, and does best in a moist place at the edge of, or even in, the water. When Captain Cook discovered the tree, the Maoris were in the custom of gathering the fruit for food. And near the picnic table is a handsome tree with dark green yew-like foliage. This is a *Podocarpus alpina* from the Australian island of Tasmania.

On the other side of the picnic table near the road that passes along East Asian hill is another distinct-looking and extremely interesting member of the podocarpus family, the *Phyllocladus trichomanoides var. minor*. This plant has branchlets that are flattened into leathery leaf-like bodies called cladodes, which are lobed and bear the female flower and fruit. The true leaves are reduced to scales. This variety of *Phyllocladus trichomanoides* will remain a small tree, although the normal sized species can grow to seventy feet. The timber is useful and the bark contains a large amount of tannin, but it is particularly interesting because it is so different in appearance from the other members of the Podocarpaceae.

There are other members of the Podocarpaceae in the botanical garden, but the ones mentioned are the easiest to find and demonstrate best the interesting differences in foliage and habit of the family.

## FRIENDS/BG CO-SPONSOR BREEDLOVE TALK

The well-known authority on plants of southern Mexico, Dr. Dennis Breedlove, will present a slide-illustrated lecture on Thursday, Nov. 17, 8 p.m. in room 2003 of the Life Sciences Building on the UC campus. This event is sponsored by the Friends of the Botanical Garden and the California Botanical Society.

Dr. Breedlove's talk, "Vegetation Types and Wild Flowers of Chiapas," builds on many years of field experience in this fascinating state that borders Guatemala. Dr. Breedlove began work on the plants of southern Mexico in 1964 when he, Brent Berlin, and Peter H. Raven began ten years of ethnobotanical research among the Mayan Indians of the Highlands of Chiapas (see *Principles of Tzeltal Plant Classification: An Introduction to the Botanical Ethnography of a Mayan-speaking People of Highland Chiapas*, 1974, Academic Press). Since 1971, he has been collecting widely on a project that ultimately will be published as *A Flora of Chiapas*, now tentatively scheduled for completion in 1980 and comprising 7000 pages.

Dr. Breedlove, who speaks Tzeltal Mayan, is currently working on another large comparative ethnobotanical monograph with the ethnographer Robert M. Laughlin of the Smithsonian Institution, the goals of which are to provide a detailed study of highland Mayan plant classification and uses with some suggestions for a reconstruction of the proto-Mayan plant knowledge that played such an important role in Mayan civilization.

Dr. Breedlove is currently the Associate Curator for the Department of Botany at the California Academy of Sciences. In addition to his life-long interests in plants, Dr. Breedlove is an avid collector of the music of Vivaldi and good California red wines.

# Guide to plants of the garden

By Laurianne L. Hannan, Educational Coordinator

If you were inclined, you could walk through the botanical garden and see at least one member from every major group of higher plants. There are two major divisions in the plant kingdom according to many botanists: the lower plants or thallophytes which lack roots, stems, leaves, and embryos (for example, fungi and algae), and the higher plants or embryophytes which tend to have all these structures.

Nearly all the embryophytes or higher plants have roots, stems and leaves — and all have an embryo. ("Embryo" refers to the young sporophytic plant while it is retained in the gametophyte or seed.) There are seven major groups of embryophytes, and you can see members of each group in different parts of the garden.

The most primitive group includes mosses and liverworts which lacks true roots, leaves, stems, and conductive tissues, but do have an embryonic stage in their life cycle. You can commonly find mosses on moist shady rocks, ledges, and tree trunks. If you look carefully, you can find the flat, deep-green liverworts appressed to rocks in the dampest parts of the garden.

The second group, the psilopsids, were much more abundant in the geological past. These plants lack roots and leaves, but do have a true stem and tissues for conducting food and water. They too have an embryonic stage in their life cycle. The most familiar member of this group is the whisk broom plant, *Psilotum.* There is an individual of *Psilotum* on the east side of the pond in the Tropical House.

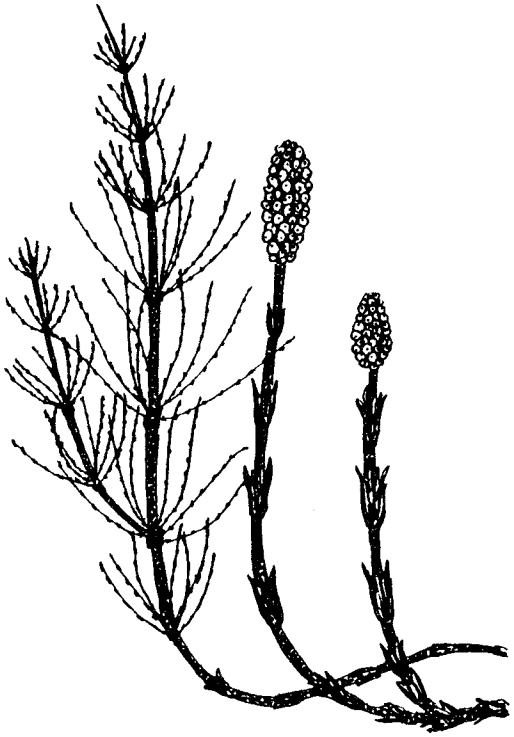
The third major group, the lycopods, includes club moss *(Lycopodium)* and spike moss *(Selaginella).* Both of these are very primitive but are still relatively widespread today. They have leaves, roots, stems, conductive tissue, and an embryonic stage in their life cycles. There are individuals of *Lycopodium* and *Selaginella* in the new Fern House near the entrance to the garden.

Horsetails *(Equisetum)* are the next most advanced group of higher plants. They were very widespread in the geological past but there are relatively few species alive today. In fact, fossils of plants similar to horsetails have been found in rocks nearly 400 million years old. They have roots, stems, conductive tissue and an embryonic stage in their life cycle. Their leaves have become reduced to scales. Horsetails are commonly seen by the hundreds in spring in Strawberry Creek.

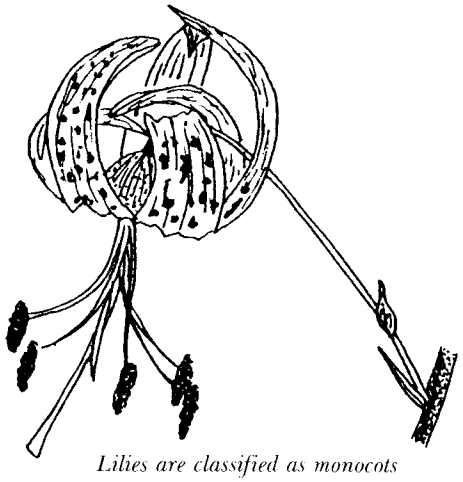
Ferns are a very large and diverse group of higher plants. They generally have a well-developed root and stem system and well-developed leaves or leaflets. The stems and leaves have a peculiar way of unfolding called circinate vernation. As they unfold they look like the necks of fiddles. Ferns have conductive tissues, an embryonic stage in their life cycle, and distinctive patterns of spores, often borne on the undersurface of the leaves. Ferns grow well in northern California and do especially well in the botanical garden. You can see many ferns in the Mather Grove, Rhododendron Dell and new Fern House.

Gymnosperms, including the cone-bearing plants, have all the features mentioned in the previous groups but they also possess a new feature, the seed. Prior to the development of gymnosperms, no plant had a dormant or resting stage between fertilization and full growth. Gymnosperms were also the first true trees. The most primitive gymnosperms are the cycads, followed by *Ginkgo,* then the conifers including pines, redwoods, firs, cedars, cypresses and junipers, and also Mormon tea *(Ephedra),* and *Welwitschia* and *Gnetum.* There are examples of each of the plants mentioned above in the garden.

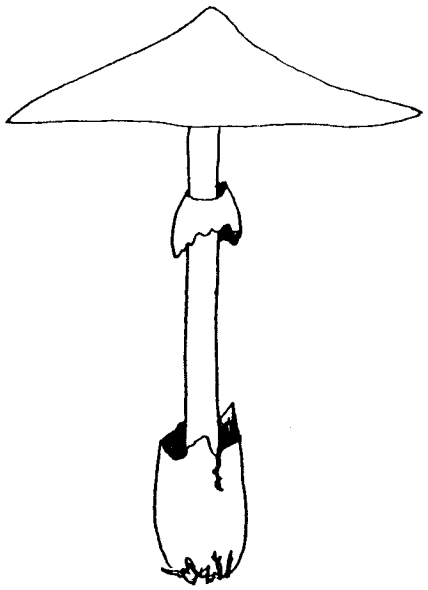
The most advanced group of higher plants are the flowering plants. They also have all the features mentioned above, including the seed. The difference between this group and the previous one is that the seeds of the flowering plants (angiosperms) are enclosed within an ovary that protects them from the external world. There are two groups of angiosperms, the monocots and dicots. Familiar monocots are grasses, orchids, and lilies. Monocots usually have leaves with parallel venation and flowers with three or six parts. The monocot embryo has only one cotyledon or seed leaf. Familiar dicots are sunflowers, magnolias, poppies and roses. Dicots have leaves with a net-like venation and flowers with four or five parts. The dictt embryo has two cotyledons or seed leaves. Flowering plants make up most of the plants we are familiar with and one can find them throughout the botanical garden.



*Equisetum, an ancient plant which can be traced back 400 million years*



*Lilies are classified as monocots*



*fungi have no roots, stems, leaves, or embryo*

illustration by Laurianne Hannan

# Mexican plants

*continued from page 1*

the Saratoga Horticultural Foundation. This organization will be involved in evaluating the material and selecting those collections which show the greatest potential as cultivated plants. The former Director of the Saratoga Horticultural Foundation, Dick Hildreth, was initially involved in this project, but since his move to Utah the project has been taken over by the Acting Director, Dennis White, with the very able assistance of the Propagator, John Coulter.

After consulting with Dennis Breedlove concerning growth habit and climatic conditions where the plants grow in nature, Dennis White and John Coulter selected 82 collections which they believe should be grown for initial nursery trials at Saratoga. Plants that were not selected for these initial trials can be reevaluated at a later date using specimens grown at the U.C. Botanical Garden.

Future articles in the *Botanical Garden Quarterly* will describe some of the plants collected by Dennis Breedlove, and as the plants are placed in the Mexican Area it will be possible to follow the development of this very interesting collection.

# Friends of the Botanical Garden notes

**Recent appointments.** A new treasurer and four committee chairpersons were appointed at the recent board meeting of the Friends of the Botanical Garden. Gene Opton, owner of The Kitchen restaurant on Shattuck Avenue has been elected to replace retiring treasurer Vincent Clemens. Also, Jeanne Vogt took over as chairperson of the program committee — Fitzhugh Rollins having recently stepped down from that position. (Ms. Vogt, one of the original docents, organized the first docent plant sale three years ago.) Pat Haynes, another charter docent, was appointed to chair the finance committee. Docent Mike Gerba was appointed chairman of the membership committee, and Jim Novosel, who is designing the new information center for the garden, will chair a new committee on planning and development.

**Special meeting scheduled.** A special meeting of the Friends of the Botanical Garden has been scheduled for Monday, Jan. 9, 1978, at 2:30 p.m. in the botanical garden. The purpose of this meeting is to elect officers and board members to take over on July 1, 1978 when the new bylaws effecting a merger of the Friends/BG and the Docents become effective. The new slate of officers to be voted on includes the following selections by the nominating committee: *president,* Jerry Carlin; *vice-president,* Mary Lee Jefferds; *secretary, Nancy Wilson; treasurer,* Gene Opton. The nominating committee has also recommended the following persons to serve as executive board members: Brent Berlin, Alan Dundes, Garrett Eckbo, Michael Gerba, Pat Haynes, Jim Novosel, Marvin Schmid, and Jeanne Vogt.

**Chancellor Bowker helps garden.** A few weeks ago, Director Robert Ornduff and Vice-Chancellor Robert Kerley met with several docents, along with staff members from the UC Architects and Engineers office to discuss plans for construction of a docents' information center on the foundation of the dismantled tropical house near the entrance to the garden. In late October, Kerley informed the docents that Chancellor Bowker (who is a member of the Friends of the Botanical Garden) had offered to match their funds up to $5,000 to assist in financing the new building. More details on the information center will be provided in future issues of the *Quarterly.*

**Director Ornduff on sabbatical.** From October 1, 1977 to June 30, 1978, Director Robert Ornduff will be on sabbatical leave. During this period, Lincoln Constance will serve as acting director. Dr. Ornduff plans to spend most of his leave in Berkeley.

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University of California, Berkeley
Botanical Garden

Robert Ornduff, Director
*(on sabbatical leave)*
Lincoln Constance, Acting Director

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| ___ $15 Family | ___ $100 Sponsor | ___ $1,000 Benefactor |

Please make checks payable to: Friends of the Botanical Garden

# Join Friends of the Botanical Garden

You are invited to become a member of the Friends of the Botanical Garden. This organization was developed to provide assistance to the botanical garden in improving and extending the plant collection, enriching the education program, and meeting general capital requirements.

Members, in return, are offered special programs on plants and gardening, a 25% discount on selected UC Press books (such as *California Spring Wildflowers* by Munz), preview priviledges for the annual sale of unique plants from the garden, and a quarterly publication which covers topics of general interest to plant enthusiasts as well as news of the garden.

Student and Senior Citizen memberships are discounted to $5. Standard dues are $10 for an individual, $15 for a family. The Friends of the Botanical Garden function as a support group under the auspices of the UC Berkeley Foundation, and dues and gifts are tax deductible.

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