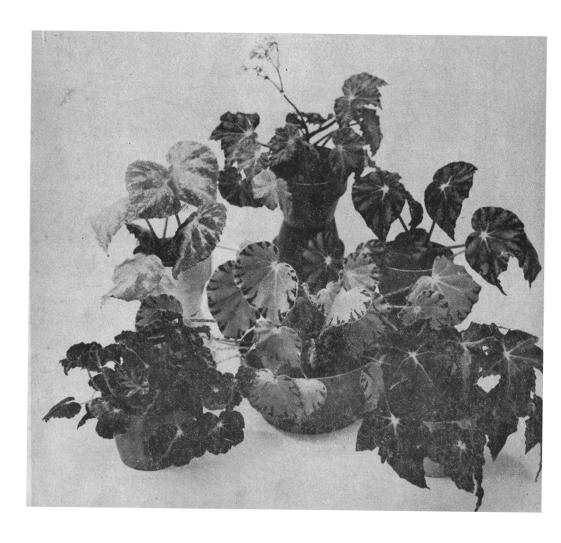
The Begonian

DEVOTED TO THE SHELTERED GARDENS

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The Begonian

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AIMS AND PURPOSES OF THE AMERICAN BEGONIA SOCIETY, INC.

The purpose of this Society shall be: to promote interest in begonias and other shade-loving plants; to encourage the introduction and development of new types of these plants; to standardize the nomenclature of begonias; to gather and publish information in regard to kinds, propagation and culture of begonias and companion plants; to issue a bulletin which will be mailed to all members of the Society; and to bring into friendly contact all who love and grow begonias.

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Some Notes on Begonias

By ALEX D. HAWKES Coconut Grove, Florida

The Begonia Family (Begoniaceae) consists of but four genera, with typical Begonia being the largest by far, containing as it does the bulk of the more than six hundred known specific components.

Begonias — and their immediate relatives — are almost exclusively tropical plants, reaching their greatest development in the mountainous regions of the warm parts of the globe. In such areas they are variously encountered growing in forests in humusy, well-drained soil under trees, on moss-carpeted and fern-carpeted rocks, and, very often, as true epiphytes up in the trees, with orchids and bromeliads as their neighbors.

From these several hundred "wild" begonias, we have come up with several thousand additional representatives of the group. These have been produced by man, and are either hybrids, specialized "sports", or other types of horticulturally-induced mutations. Thus in the Begonia Family, we are dealing with a remarkably large and diverse group of plants.

In our South Florida area, begonias are justifiably popular — and this statement can be echoed in virtually every other warm part of the world, as well as in most temperate zones, as well, where these plants are frequently grown either under glass, or indoors as "house

plants".

With the exception of a rather small proportion of "difficult" species and hybrids, begonias are remarkably easy to grow, hence are cheerfully and heartily recommended to all plantsmen as ideal subjects for their collections.

Their variability is one of their greatest charms. In a recent superlative book on the subject, *All About Begonias*, by Bernice Brilmayer, it is stated: "There is no end to the variety in begonias. They have leaves the size of a penny or a palmetto; with colors — brilliant, subdued, metallic — from one end of the rainbow to the other; and textures from

sheerest silk and velvet to moiré, tweed, velour, and puckered seersucker. Begonia flowers may have four petals or four dozen, in colors from heavenly white to fiery orange and red. Begonias can be climbers, creepers, trailers, pygmy bushes,

or stately trees."

There are several basically distinct kinds of begonias, though all of these are technically members of the same botanical genus — Begonia. Generally speaking, one utilizes only the groups as arranged by their root-form, namely: (1) bulbous, (2) tuberous, (3) rhizomatous, and (4) fibrous. But these terms are at best arbitrary, and one often finds such words as "cane-type" or "basket-type" or "rex type" utilized with equal frequency. As is the case with almost all commonly grown ornamental plants, such a nomenclatorial system is a confusing one, yet it has its definite place in horticulture.

Here in South Florida — and elsewhere in warm climates — begonias can be grown easily either under shade trees or under lath or Saran protection, greenhouses being required only for a special few which are especially ticklish in their requirements. Some of our finest and most comprehensive collections are kept with delicious casualness, in pots and baskets, these set under trees or shrubs (preferably on some sort of gravel to assure perfect drainage) or suspended on hangers from suitable limbs and branches. They are seldom recommended as house plants in tropical areas, even though they (Continued on Page 183)

COVER PICTURE

Group of miniature rhizomatous begonias: 'Kathy Diane'

'Fascination' 'Bow-Arriola' 'Chantilly Lace'

'China Doll' 'Black Falcon'

These are all Dillard (Tropical Paradise) hybrids except 'Bow-Arriola'.

—Photo by Kari Berggrav

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Ferns and Their Culture

By Dr. W.C. Drummond Los Angeles, California

While ferns are among the oldest of living plants, they are today classed as one of the newest and most decorative for planting in the garden with begonias and fuchsias.

Ferns are of the easiest culture once a few simple rules are learned. With proper care they soon grow into plants of great beauty while creating a desirable

tropical atmosphere.

From a cultural viewpoint ferns may be divided into two large groups. First, we have the kind known as epiphytes, or "air plants." They are found growing on trees and mostly in the humid, warm atmosphere of the tropics. In culture the epiphytes need the best of drainage. They are suited for hanging baskets, pots, and for growing on corked oak logs, or on rough boards covered with osmunda fiber. Some demand frost protection in the winter.

For a planting mixture use about one-third each of peat moss, coarse sand, and fir bark. Pot procedure: use several pieces of broken crockery or gravel in bottom of the pot, and over this place the soil mixture. Don't compress too tightly. Also don't bury the rhizome (stem) too deeply, rather pin it down on top of the soil—just bury the fine roots and keep it moist. The foregoing soil mixture has given good results. It provides the best of drainage and a slightly acid reaction which is so desirable for this group of ferns. Line the basket with sphagnum moss.

Desirable epiphtic ferns commonly grown are the Davallias, Platyceriums (as the Stag Horn Ferns), many of the Polypodiums (sometimes called Phlebodium mandianum and Phlebodium aureum, Manda's Polypodium, Hare's Foot Fern) and many others.

The next group of ferns commonly grown in our gardens, in the open soil, is known as terristrial ferns. They constitute the great bulk of our ferns.

For a soil mixture use about one-half

part of sandy loam, with the balance of the mixture consisting of organic matter, such as equal parts leaf mold and peat moss, or you may substitute redwood sawdust, ground fir bark, or light fibrous garden compost. When you use redwood sawdust or fir bark add a little well-rooted steer manure. Milorganite may also be used with benefit in potting soils, for baskets or the garden. Follow directions on the package. These ferns make good pot plants.

In planting or transplanting ferns disturb the root systems as little as possible and never let them dry out. Dig the holes quite large and deep, then fill in with prepared soil mixture. Do not plant ferns too deeply. Always plant your ferns high enough to allow for setting. Water well

after planting.

When planting ferns select a location with filtered light as under lath, in the shade of not too dense a tree, or on the north side of a house. Never plant in windy places. Many ferns once established will withstand morning sun. Pteris tremula and Pteris vitata are ferns which will stand much sun.

Some ferns like an acid soil, especially the epiphytes. Most of the terrestrial ferns grown in Southern California, if planted in a soil containing much organic matter, will grow and seemingly disregard soil reaction. The organic matter does create some acidity as it decomposes. Pteris, Andiantum, and Phyllistis ferns like a little calcium, as old plaster, or crushed limestone, or oyster shells, added to the soil.

Ferns do not grow well, if at all, in heavy clay or adobe soils. If your garden soil is composed of heavy soil add sand and much organic matter as you cultivate it. The construction of raised beds using sand and organic matter helps drainage and insures a better growing medium. To hold their shape, these beds may be surrounded with brick or rocks in small gardens. Never use heavy clay soil for

potting or planting ferns in the garden, and do not compact the soil too firmly in pots or open garden soil. In nature many ferns grow on shaded hillsides where there is much leaf mold and a seepage of slowly moving water, which gives the best of drainage. Try to imitate these conditions as nearly as possible by keeping the soil just moist at all times, but never so soggy wet that all the oxygen or air is driven from the soil. Continuously wet, heavy soil causes the roots to rot.

With low humidity, high temperatures, and long daylight hours of summer, ferns require more water. As the coolness of winter advances, give your ferns less water. Many ferns, as Polypodium Californica, should receive less water while dormant. An exception would be most eastern United States ferns, which receive so much rain naturally during their winter dormancy. Drainage and soil mixture has much to do with amount of water needed.

Ferns like a mulch surrounding them after planting. Use leaf mold, peat moss, or redwood sawdust, with a small amount of old manure. This mulch helps to keep the soil moist and helps create humidity, and regulates soil temperatures. It is also especially beneficial to ferns not fully established.

When the humidity falls below 50 per cent and the temperature is high, around 80 degrees or above, give the fronds of the ferns a good spraying with the hose several times a day. Most ferns like a high humidity. Where the humidity is naturally high, as near the ocean, ferns stand more sun and give better growth with less water.

Fertilizing ferns can easily be overdone. After being planted in the garden or potted, ferns will grow well for sometime without fertilization. Nevertheless, after growth is well established they are benefitted by the application of weak, slow-acting fertilizers such as weak manure water. Milorganite may be used in the soil at planting time or applied later. If commercial fertilizers are used follow directions and dilute well. Remember in fertilizing, "little but often should be the rule." For best results use all com-

merical fertilizers at half strength. Nitrogen should be the main content of the fertilizer for ferns. Ferns respond slowly to fertilizers. Liquid fertilizers give quicker and best results. Do not fertilize in winter, unless plants are hot-house grown. Start fertilizing in the early spring.

CAUSES OF FAILURES

Any one of the following or a combination of them can cause failure in the growth of ferns: (1) Failing to keep the soil moist at all times; (2) keeping the soil too wet with poor drainage, especially in pots; (3) growing ferns in too much sun or wind; (4) planting too deep; (5) planting in too heavy a clay soil with poor drainage; (6) too great a root disturbance in transplanting; (7) planting acid loving ferns in alkaline soil; (8) planting calcium-loving ferns in a strongly acid soil; (9) letting the soil dry out, especially before the ferns are well established; (10) too much or too little air circulation to the very young or newly planted young ferns; (11) too close a cultivation disturbing the root system of ferns; (12) too high a humidity with no air circulation in small greenhouses, causing fungi to develop and attack the rhizome along with insect infestation.

Reference: Circular #891, November, 1951, The Use of Sawdust for Mulches and Soil Improvement, Government Printing Office, Washington 25, D.C. (Price 15 cents), is surely worth reading by every gardener. If you are interested in botanical history and a better description of plant life, go to your library and ask to see a copy of Wilson Botany, 1952. It contains descriptions and illustrations of many plants, and gives classifications and number of each. For those living in the eastern part of the United States, Guide to Eastern Ferns, by E. T. Wherry, 1948, illustrates the ferns while describing the soils where particular ferns grow in nature. Field Guide to Ferns, by Cobb, describes eastern United States ferns. Ferns of the Southeast, by Small, is good. New Zealand Ferns, by Dobbie, describes and illustrates many ferns grown in Southern California.

Hybrids from Paradise

By BERNICE BRILMAYER
Eastern Editor

The story of Mrs. H. E. Dillard, proprietor of Tropical Paradise, was printed in *The Begonian* for September, 1960; but the story of the many luscious begonia hybrids she has bred and introduced is still to be told in detail.

Of particular interest among these new begonias are the miniatures — modest in size, and so suitable for growing on windowsills and other cramped quarters,

but big in colorful appeal.

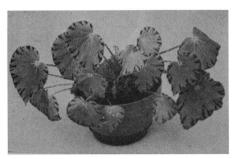
For me, these little plants keep plump and full of leaves on petioles of varying lengths, but all short. All are exquisitely patterned and colored; some have unusual pinkish or silvery tints. They flower daintily and very willingly. They're delightful plants for small pots, even more eye-catching when the rhizomes can creep over the soil and hang down the outside of a hanging basket. For quick effect, plant two or three younglings to a sixinch or eight-inch basket.

Here are thumbnail descriptions of a number of these new Tropical Paradise

hybrids:

Begonia 'Chantilly Lace' (boweri x 'Black Shadows') — Miniature rhizomatous. Small, lobed, chartreuse, cupped leaves with deep black stitching around edges; entire leaf often sprinkled with black dots; leaf edge and petiole hairy. Clusters of pink flowers in winter.

Begonia 'Black Falcon' (kenworthyi x sunderbruchi) — Miniature rhizomatous.



B. 'Chantilly Lace'

Black star-shaped leaves with wide silvergray marking outlining the veins; underleaf red; hairy edge and petioles. Small pink flowers in fall and winter.

Begonia 'Persian Brocade' (boweri x 'Maphil') — Miniature rhizomatous. Fresh green, star-shaped leaves edged in black, leaves laced and innerlaced in black; light green sinus and veins; upper leaf and leaf edge hairy, under-leaf splashed with red. Petioles have red dots, hairy. Flowers pink; winter or spring flowering.

Begonia 'Raspberry Parfait' (Emerald Jewel' x 'Pebble Lane') — Miniature rhizomatous. Olive green, pointed, hairy leaves and stems, light green veins. New leaves are a beautiful raspberry color.

Flowers white; spring bloomer.

Begonia 'Fascination' ('Speculata' x 'Pearli') — Rhizomatous. Oblique, olive green, pebbled leaves, silver-laced veins; new leaves silver-pink; hairy under-leaf and petioles. Clusters of pink flowers.

Begonia 'Midget' ('Joe Hayden' x 'Virbob') — Miniature rhizomatous. Black, star-shaped leaves, light green sinus and veins. Clusters of pink flowers.



B. 'Kathy Diane'



B. 'China Doll'

Begonia 'Kathy Diane' ('Bow-Joe' x 'Bow-Chancee') — Miniature rhizomatous. Small, ovate, pointed brown leaves with chartreuse markings, hairy petioles and leaf edges. Tiny, deep pink flowers in fall.

Begonia 'China Doll' ('Bow-Arriola' x boweri) — Miniature rhizomatous. Tiny, pointed, chartreuse leaves with wide brown veins, hairy petioles and leaf edges. Clusters of pink flowers; winter bloomer.

Begonia 'Oriental Music' (dayi x imperialis) — Miniature rhizomatous. Heart-shaped, pebbled grass-green leaves, new leaves chartreuse. Hairy upper and lower leaves and petioles. White flowers with pink hairs on outside petals. Spring and summer flowering.

Begonia 'Ricky Loving' ('Billy' x sunderbruchi) — Rhizomatous. Large, seven-pointed, black, velvety leaves with silvergray lacing along each side of the green veins. Under-leaf and petiole densely hairy. Rose flowers; fall and winter flowering.

Begonia 'Randy' ('Verde Grande' x 'Missouri') — Rhizomatous. Large, fresh green, seven-pointed, star-shaped leaves with brown-stitched edges, often entire leaf marbled in brown; hairy petioles and leaf edges. Pink flowers; winter flowering.

Begonia 'Enchantment' ('Missouri' x 'Maphil') — Rhizomatous. Seven-pointed, star-shaped tanbark (reddish-brown) leaves; chartreuse veins and sinus; underleaf red and chartreuse. Flowers pink; winter bloomer.

Begonia 'Orangeade' ('Pink Parade' x 'Orange Rubra') — Cane. Long, narrow, lobed, fresh green leaves sprinkled with silver dots. Large clusters of soft orange flowers in spring and summer.

Begonia 'Giesha Doll' ('Confederate Gray' x 'Bow-Joe') — Miniature rhizomatous. Dark gray, dusty rose, starshaped leaves, hairy upper and lower leaf and petioles. Clusters of small, blush-pink flowers.

A few specimens of these delightful new hybrids will add variety and charm to any collection. They are available only from their place of birth, Tropical Paradise, in Overland Park, Kansas.

ELSA FORT BRANCH ACTIVITIES

By Essie V. Morris

Our group has done several interesting things during the past months.

In April we celebrated our eleventh

birthday.

In June we visited the Longwood Gardens, near Kennett Square, Pennsylvania. Here we saw the beauties of nature in a formal setting. There were acres of outdoor beauty but, since it was raining, we confined our visit to the glass house, where we saw all kinds of tropical plants, begonias, cacti, and succulents. At that time they were featuring tuberous begonias of all kinds, which left us filled with envy. There were also lilies, delphiniums six feet tall, and many other plants.

For our July meeting, Mrs. George DeCoursey invited us to her home in Paoli, Pennsylvania. There we visited her flower garden and delightful quarry, where she has many, many flowers that thrive in a damp area. As we wandered along the paths, and Mrs. DeCoursey identified many unfamiliar plants, it was interesting to see huge patches of several varieties of miniature sempervivums clinging to the rock. Glancing down, we could see a frog hiding on the marshy

edge of a small pool.

Buckets of Pollen and Tons of Seeds

By Howard S. Bodger Bodger Seeds, Ltd., Lompoc, California

Condensed from a talk given at the Fifteenth Annual American Horticultural Congress, November 10, 1960, in Pasadena, California. Published by permission of the American Horticultural Society, Inc.

Since this is the first Horticultural Congress in Southern California and I am the first speaker on the program, a few Chamber of Commerce-type facts and figures

would seem to be in order.

Do you know, for example, that within four hours' drive of Pasadena will be found one-half of the world's production of flower seeds? Or that the annual production of flower seeds in California is about 1,400,000 pounds — enough seed to put a flowering plant in every one-third square yard throughout the nine trillion square yards in the United States?

This production comes from about 100,000,000 plants grown for seed on approximately 4,000 acres, most of them concentrated in the Lompoc-Santa Maria area of Santa Barbara County. To obtain this seed harvest, the flowers of each of these plants must be pollinated, either by man or nature. And all this pollination must be controlled or recorded to assure that every packet of seed will produce what the packet illustrates.

While the prevailing summer dryness in this area is ideal for seed production, it necessitates a highly scientific program

of irrigation.

Incidentally, although there are many hundreds of flowering plant species, four of them top the popularity poll by a wide margin. Petunias and zinnias are neck and neck for first place, followed closely by marigolds and then snapdragons.

Part of our necessary precision control of planting in the seed fields is the isolation of separate varieties of the same species to prevent a hodge-podge of cross-pollination. However, controlled mixtures of colors are highly desirable. In fact, color mixtures consistently outsell

seed packets of single colors in any flower you might name.

Some color mixtures are blended from seed of separately grown varieties. In many other cases, the only practical way to produce a mixture of colors is in the field. We have to keep close track of such mixed plantings, partly because of a factor called differential seeding.

Some colors of annuals will outseed other colors. For example, cross-pollination of a red zinnia and a purple zinnia will result in quite a number of purples and some rather dirty reds — not a color range wanted in the mixture at all. Science has played a vital role in helping seedsmen overcome such breeding problems. In the hybridizing of perennials, bulbs, shrubs, trees, and so on, vegetative means can be used to propagate a desirable new variety. In the annual flower (and vegetable) seed business, we have to repeat the crosses. We have to be sure that every time a cross is made the same result is produced. Scientific records are essential.

The slow, laborious single plant and line selection method involves saving seed from plants with superior characteristics, planting them out in rows, then making further selection of the best plant in these rows. This sifting-out, narrowing-down process is repeated, sometimes for ten years, until it produces what is known as a "true strain". Now, thanks to science, the modern F_1 hybrid method is succeeding line selection in the development of a number of major flower species.

The basic technique in producing F_1 hybrids is to make a cross-pollination between two pedigreed lines of the same species; this will result in seed which produces a very vigorous and uniform plant, with superior flowers and more of them. This is the phenomenon known as "hybrid vigor". If seed is saved from that first generation (F_1) cross, the re-

(Continued on Page 187)

Clayton M. Kelly Seed Fund Flight

No. 1—B. paulensis—

Brazil. Shiny, medium green, peltate leaf, distinctively striking with its ivory-white sinus or eye from which radiate the main veins. The prominent veins first carry the ivory color of the sinus, then slowly merge into the green of the leaf, becoming recessive. The radial veins are joined by cross veins which tend in a circle, giving a fascinating spider web effect. There are short, white, stubble-like hairs running the rim of each spider web section. On the underside of the leaf we find the hairs are red, showing up distinctly on an apple-green background and pointing the vein pattern.

The leaf petiole is light green, covered with 1/4 inch hair, which takes on a pinkish cast as it approaches the leaf. At the leaf and petiole junction, there is a small, single-row collar of red hair. New leaves appear quite red on the back with their concentrated red tomentum. When the light shines through a new leaf, the web pattern on the leaf surface appears to be outlined in red and the leaf bordered with the same color. Flowers are large, white inside, fleshy, maroon-colored hairs on the outside. \$1.50 per pkt.

Comment: It has been many months since we started correspondence with the collector in Brazil and at last we have been rewarded with a fair amount of seed. However, the supply is limited to one packet per customer.

No. 2—B. kenworthyi—

Mexico. Herbaceous perennial. Stems erect, thick fleshy, inverted egg-shaped, 5½ inches long, ¾ inch in diameter from side to side, 7/8 inch from front to back. Non-branching, leaves confined to the tip. Internodes ¼ inch long, 3/16 inch at the shortest, spinach-green, dull. Lenticels whitish, more abundant below the leaf scar, 1/16 inch in diameter, leaf stem scar-tan, becoming furrowed with vertical zig-zag fissures, bordered on the lower edge with semi-stiff scale-like hairs with friambiated ends 1/16 inch long and

1/16 inch wide, greenish. The deeply lobed, red-colored leaves are covered entirely with bloom like that on a plum, giving a bluish-gray appearance. *B. kenworthyi* was discovered growing on cliffs, in moderately dry country; therefore, very little water is required. See cover picture August *Begonian*. \$1.00 per pkt.

No. 3—B. crispula-Brade—

Produces a short rhizome, and the short-stalked, round leaves, five to six inches in diameter, spread out more or less flat on the surface of the soil. New leaves spread out over the oldest leaves, almost touching them or even resting on them. In consequence, moisture easily stays between them, and the rough surface of the leaves increases still further the danger of leaf rot to which this species is subject. B. crispula, therefore, must never be sprayed and water must be applied strictly to the soil, never splashed on the plant. This is the only difficulty with this begonia, which is otherwise easy to grow if planted in loose, humus soil and kept moderately moist.

The inflorescence, with its reddish, appressed-hairy peduncle, is six inches high. The male flowers, white inside and pinkish outside, are slightly over ½ inch in diameter. The female flowers are still smaller. The floral display, therefore, is insignificant, but the deeply crisped, shiny green foliage is very attractive, and this species certainly represents an interesting addition to the great multiple of different shapes the genus begonia is able to produce. Seeds are from The Conservatory, Paris, France. \$1.00 per pkt.

No. 4—B. mixed—

Seeds were collected by a school teacher in Oregon, who writes as follows: "Seeds were taken from plants I grew in my class room at the school where I teach. Plants include B. 'Calla lily', double semperflorens (Ball red), a small leaf rex, a small cane type, and a begonia you called 'Delight', which has proved a de-

light to me. It is almost a vine type with small, round leaves and very lovely. Let me say that the seed fund has meant everything to my hobby of collecting begonias. Thank you for making this possible." 25 cents per pkt.

No. 5—B. dregei—

Africa. Medium, smooth, branched. Leaves small, shallowly lobed, toothed, green with purple veins. Flowers white in terminal clusters. Popular plant for hybridizers. 25 cents per pkt.

No. 6—B. rex—

Direct from India. Many of the beautiful American rex hybrids were produced from rex seed from India. Scarce. 50 cents per pkt.

No. 7—B. deliciosa—

Syn. B. Bhotan species. India. Medium, bushy, smooth. Branches frequently angle off from thickened joints and, if near the soil, will send out roots. Leaves deeply palmately lobed, dark olive-green, heavily gray-spotted, red beneath. Flowers large, fragrant. 50 cents per pkt.

No. 8—B. sikkimensis—

India. Stems erect, about a foot high; leaves broad-ovate, about four to six inches, toothed and ciliate. Flowers, pedicels, and bracts bright red. Imported from India. 50 cents per pkt.

No. 9—B. roxburghi—

India. To two feet tall, erect, sparsely hairy; many-stemmed, thick at the base, branched. Leaves large, broad-ovate, glossy bright green, sometimes convex, paler beneath, margins toothed and ciliate. Flowers large, white, fragrant. 50 cents per pkt.

No. 10—B. semperflorens—

Collected in Brazil. 25 cents per pkt.

No. 11—B. 'Organdy'—

Novelty by Benary. Mixture of F₁ hybrid representing an entirely new strain. It contains ten different varieties and all shades from pure white, delicate pink and rose, up to carmine and bright scarlet. In their dwarf, compact character, these varieties correspond to the well known 'Tausendschoen'. All are F₁ hybrids and the heterosis effect assures their abundancy of flowers, their vigorous and healthy growth, their heat and rain re-

sistance, and their long lasting qualities. B. 'Organdy' has been granted an honorable mention and a special award by the American Begonia Society. 25 cents per pkt.

FERNS

My sister and I went on a fern and rock collecting expedition a few weeks ago. Our journey took us to Coloma and Placerville, two places that had much to do with settling California during the Gold Rush of 1849.

Gold was first discovered in Coloma by James W. Marshall in 1848. The town of Coloma grew around Sutter's sawmill at the bend of the American river where it turns northeast. Here, in addition to the first effective gold discovery in California, the first sawmill in the interior was built. The first mining ditch in California was built in 1850 also at Coloma. The first white settlement was built in the Sierra Nevada foothills, from which trails radiated to other mines to the north, east, south, and west, and thus Coloma became "Queen of the Mines".

The placers were largely depleted by the late 1850s and Coloma became a town of homes with pioneer gardens, orchards, and vineyards. Those planted by James Marshall on the terraced hillside may be found today growing among the wild trees in the vicinity of the cabin which he built.

We found many colorful and interesting rocks near an abandoned mine, but most of them were too large to bring home, so we had to be content with those we could lift to the trunk of my car.

Near Placerville, we found an interesting fern which Dr. Drummond has identified as *pteridium aquilinum* var. pubescens. We found it in an apple orchard at about two thousand feet elevation. It is characterized by the indusia being ciliate and pubescent with the ultimate divisions of the fronds woolly beneath. 25 cents per pkt. We expect to offer spores of more native ferns in the near future.

Pityrogramma—

Still available; many spores of pityrogramma, both varieties silver and goldback ferns. 35 cents each variety.

Blechnum gibbum-

(Lomaria) Graceful, symmetrical rosettes, developing a small trunk. Thin, leathery, arching pinnate fronds; the shining green pinnae are long and narrow, and almost thread-like on the fertile fronds. 25 cents per pkt.

Cyrtomium falcatum—

'Holly Fern'. Handsome pinnate fronds on brown, scaly stalks. The leathery, shining, dark green leaflets are ovate, slender pointed, and very durable under adverse conditions. 25 cents per pkt.

Our basket fern-

Cyclophorus lingua won a first award here at the Roseville fair last week.

GREENHOUSE PLANTS

Episcia punctata—

Rank, creeping, almost smooth species with leathery ovate, crenate leaves, green except purple mid-rib, on lightly erect branches. Tubular flowers solitary with spreading fringed lobes creamy white and spotted purple into the throat. 35 cents per pkt.

Aeschynanthus marmoratus—

(Zebrina) Epiphytic trailer with beautiful waxy leaves to four inches long, dark green with a reticulated network of contrasting yellow-green, maroon underneath, tubular green flowers spotted brown. 35 cents per pkt.

Sinningia 'Florence K'-

Developed by Peggy Schultz. New. Interesting foliage with deep rose bloom with outside nearly white. Bloom resembles a small gloxinia. 50 cents per pkt.

Musa velutina—

'Dwarf banana'. Slender, with pinkish stem, petioles, and mid-rib. Leaves to three feet long and one foot wide; erect inflorescence with red bracts, pale yellow flowers and small, red, velvety fruit. Requires rich, moist conditions. 25 cents per pkt.

Russellia—

Scrophulariaceae. Tropical. Stems muchbranched and slender, often pendulous. Leaves in whorls small, sometimes scalelike. Flowers red, in branching clusters. 25 cents per pkt.

OTHER GENERA

The following were collected in the hills of Jerusalem by a friend who lives there: Bellevalia, Allium, Salvia, and wild Tulip. We have no information or botanical description to offer. All are 25 cents per pkt. each variety.

Lagerstrommia (Crepe Myrtle) are now in bloom in Roseville and their beauty defies description. They are everywhere and a solid mass of bloom in colors of pink, two shades of rose, lavender, and purple. The trees are the largest and most colorful we have seen anywhere. We have set two out in our garden.

MRS. FLORENCE GEE Seed Fund Administrator 234 Birch Street Roseville, California

SPEAKERS LIST CHANGE

Mrs. Dorothy S. Behrends, of Encinitas, California, has announced that she will be unable to continue speaking at Branch meetings, and will not be available for future engagements. Her name, therefore, should be removed from Branch program chairmen's lists of speakers.

SOME NOTES . . .

(Continued from Page 175)

often form an integral part of the "indoor gardens" found in many homes in basically cooler climes.

Virtually all types of begonias are very successful in our area, with the notable exception of the handsome tuberous types, which seem to find our warmth and humidity a bit too much to bear.

The matter of cultivation of begonias is one which is very complex, since we are here dealing with a tremendous variety of distinct plants — and, indeed, kinds of plants.

Propagation of these fascinating plants is by several means, either vegetatively or — with collectors who wish to acquire the more "different" begonias not generally available in the trade — by seed. —From *Tropical Plants*, Vol. 2, No. 6, July 15, 1961, copyright 1961 by Alex D. Hawkes, Coconut Grove, Florida.

BEGONIA BASICS

By BERNICE BRILMAYER West Redding, Connecticut



WHY PLANTS INDOORS?

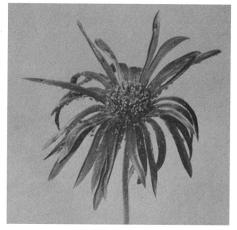
After believing for a number of years that the best thing for house plants in the summer was to plunge them outdoors, I've been given a "second thought" to consider. A new gardening acquaintance casually observed that she kept her house plants indoors the year 'round — that she thought they were better off. There was no question that her twenty-odd plants, including some begonias, looked wonderfully fresh and thriving.

There's no question, too, that my friend provides the best possible indoor growing conditions — large, uncurtained windows admitting plenty of light, the air unclouded by smog and dust. Otherwise, she might be forced to change her plans.

But, blessed by these ideal conditions, she has several good reasons to keep her plants indoors in summer. They're not subjected to the shock of a semi-annual change, for one thing — only to the gradual changes that come with our progress from season to season. There's no danger of a quick nip by late or early frost or even a chill; if it gets cool, she can close the windows. And indoors, the plants don't grow so rambunctiously that she has to hack at them and chop them back — even divide them in halves and thirds — to get them into pots of reasonable size for the winter.

But there's one area where my friend's practice is unquestionably wise. Outdoors, plants are naturally subject to attack by more insects and diseases. I wouldn't want to count the number of times I have taken an apparently healthy plant into the house, only to have it break out with a rash of mealy bugs or aphids some weeks later. And slugs! I'm sure they come into the house with the pots.

Most of this is really food for thought, for next year. But it brings one potent reminder for the time when we bring house plants indoors, this year. We should



Gerbera flower thickly covered with aphids.

do everything possible to prevent bringing in trouble at the same time.

Here's what I am going to try, early this month. I will examine every plant carefully, topside and underside of leaves, along the main stem and at joints, looking with particular care at any new growth, for signs of insects or disease. I will not bring in any plants that are even slightly suspect until I have proved or disproved my suspicions.

I will have a small garbage can or large bucket filled with a solution of all-purpose house plant spray, mixed carefully according to package directions. I will read the label on the spray, and follow instructions to the letter. I will also read the list of ingredients, to make sure that the solution contains a safe but effective insecticide and, if possible, some sort of fungicide.

Each plant that passes inspection will be immersed in this spray solution — plant, soil, pot, and all — and left there for a few minutes. Then it will be set aside to drip-dry before it is hurried into the house.

Preceding this entire procedure, of

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course, I will have taken two precautions: (1) to make sure, in the first place, that the spray I buy is for house plants; not for garden plants or for house insects like flies and ants; for example, not a "house and garden killer", which may not be safe for tender house plants; and (2) to check the ingredients with some reliable book or authority if the names are unfamiliar or if I do not know their function.

BEGONIA OF THE MONTH

It's really not the plant's fault, when an angel wing begonia has stems four feet tall and completely bare except for a sparse tassel of a half-dozen leaves at the top. It would have benefited by some pinching and pruning in its youth. But here's one that — for me, at least — keeps its lower extremities well covered with foliage for a good long time, branches willingly, and almost always has a few happy clusters of dropping scarlet flowers.



B. 'Di-Erna'

B. 'Di-Erna' is a hybrid (dichroa x rubra) created by the late A. D. Robinson, with crisp silver-sprinkled leaves indented sharply at the veins, so the effect is of fluting, and tapered to a slim point at the tip. It is almost always a-glow with flowers. It dislikes only two things—overpotting and overwatering. Its roots should be kept fairly crowded, its soil fairly dry.





A Texas Begonia

BEGONIAS IN TEXAS

By Mrs. Thomas H. Jones Santa Rosa, Texas

This is one of my largest begonias, only two years old and in a twelve-inch pot. It is growing so many new leaves I can hardly carry it around any more. I don't know its proper name. It's not B. nelumbifolia, because the leaf is lobed at the stem end. When I got it, I was told that it is listed only as 'White Giant'.

The weather is very hot and dry here, and we seldom have rain. For the summer, I keep all my begonias in two lath houses, with a burlap fly over the top for shade and coolness. I set the pots on moist sand on tables or benches, with small gravel between the pots; and I set many bowls of water among the plants to increase humidity.

As I write this in July, the plants are lush and beautiful, and full of blooms. Before I worked out this plan, I lost many begonias in the summers.

The begonia in the picture is easily propagated from leaf cuttings. During November and December and on into spring, I have good success rooting both leaf cuttings and stem cuttings of all kinds of begonias in a coled frame. I've also grown some beauties from seeds obtained from the Seed Fund.

Our Used and Abused Sources

By Dorothy S. Behrends Encinitas, California

Begonias are a scarce item in many areas of the United States, as well as other begonia-conscious parts of the world.

In studying the growth or lack of growth of various specialized plant societies, we find that the societies that have grown in numbers of persons actually growing the plants are the organizations that have enough active commercial growers to satisfy the demands of their fans.

The rose, camellia, orchid, African violet societies, and more recently the geranium society, have forged ahead with newly interested amateur fans — thanks to the commercial growers' taking an active interest in the societies. These growers have not only tested and grown plants to distribute, but have accepted the thankless responsibility of holding offices in the various organizations.

In retrospect, let us pay tribute to some of the commercial growers in the American Begonia Society, who actually constructed the Society — our beloved President Emeritus Herbert P. Dyckman and A. D. Robinson, Eva Kenworthy Gray, Ferd P. Neels, appointed when H. L. Weitz (elected) resigned in 1941, along with the pioneer plantswoman, Theodosia Burr Shepherd. With the exception of Ferd Neels, all these commercial growers have gone to receive their reward of peace and harmony away from this world.

Those of us left hope to carry on the delightful hobby and wish to pay them homage.

Then we must remember a dedicated grower who furthered the joy of growing begonias — on the east coast, the late Ernest K. Logee. There are no doubt others, unknown to the writer, that were also instrumental in the Begonia Society world.

Fortunately for us, they are not all gone. In the east we have Mary Ellen Ross, Joy Logee Martin, Elsa Fort, to

name a few, who are willing to further the efforts of the Society during their

busy and overworked lives.

In more recent years Koebig's Nursery was a source of begonias (no longer in existance) during Jack's presidency, while his attractive wife, Mae, actually had the begonia knowledge. Other officers serving in an appointed capacity have been Rudolf Ziesenhenne as an active Nomenclature Director; Louise Schwerdtfeger as an active Public Relations Director; and Sylvia Leatherman as an active Research Director. There no doubt have been others, but I am emphasizing those with a license to sell plants that are regularly inspected by State Inspectors.

Legal sources of begonias have dwindled and so has our membership. I speak of the time when I was the editor and know our membership was almost twice what it is today. This is NOT a reflection on succeeding editors, but a reflection on misunderstandings that have not been corrected in the last seven years.

If you really want to drool — read the advertisements in the 1941 Begonian, for PAST sources of begonias. They are no longer in business, so do not try to contact them, but this is just an example to illustrate how our "sources of begonias" have dwindled — which has actually been harmful to the hobby. The blame can be placed on the members of the Society, for not materially supporting these sources.

We find many licensed nursery or "commercial" persons unwilling to assume an office in the A.B.S., because of recent attitudes of unfriendliness shown by a few members, while the unlicensed or "bootleg" sources go uncensored.

This article will appear after the 1961 ballots are counted and recorded, so it is not to be construed as "never before used campaign material", but it is written while there are two very nice licensed commercial growers running for the office of president-elect of the A.B.S. To

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name them; Sylvia Leatherman, a member of the Society for over eighteen years and materially supporting all past presidents with her source of shade plants which include begonias; Carl Nauman, a member for over three years and not actually handling a source of any specialized plants, just excess plants that are handled under a "hobby license". Plants of both persons are clean and are inspected for pests and disease and neither candidate can be accused of anticipating a profit by assuming such a time-consuming office.

To my knowledge, the forementioned persons have never been accused in the past of "personal gain" from their respective offices. They have actually lost materially, because of the time donated to the activities of their offices. Such persons are "much used and abused".

This is written in the hope that in the future we will correct a misunderstanding under which a few people (including past presidents) are laboring, and give these necessary people proper consideration.

Are the present day requirements for elected office holders to be "unlicensed" begonia sources? Let us hope not, for without a source of begonias, the hobby will collapse.

BUCKETS OF POLLEN . . .

(Continued from Page 180)

sults will not be quite so good, and quality will continue to decline in succeeding generations until it reaches the general level in that particular species. The F_1 hybrids — in petunias, marigolds, and snapdragons among currently prominent flowers — are a kind of Double A grade. The American gardening public obviously knows the value of grade AA and is willing to pay for it.

The greatest progress in seed production and hybridizing has been in petunias. All the F₁ hybrid petunia seed is produced in greenhouses, even though we could produce it outdoors here in California. Anyone who is accustomed to seeing a plant go through its flowering season and make its seed at the end of

the year, then pass away, will hardly recognize our California process.

The young plant is pollinated as soon as it begins to throw flowers and is in continuous seed production for about five months. A potted petunia will produce at least two hundred flowers in its cycle. If a grower has, say, 50,000 pots in his greenhouse, that represents 10,000,000 pollinations on that one crop alone, and each pollination is done by hand. Someone removes the stamens from every flower that is going to be used for seed purposes. In about a week, someone else pollinates the pistil of each flower. In about six weeks someone snips off the seed capsule and puts it in a bag. This sort of attention goes on seven days a week. One of these seed pods produces just about enough for a seed packet. It is an expensive process, but the way in which we produce grade AA.

A pound of this kind of petunia seed has a retail value of about \$40,000. It doesn't have that high a wholesale value, but it has enough wholesale value to give me a healthy respect for it, and the man who buys a pound is a welcome customer. For an individual variety of hybrid petunia, like 'Blue Lustre', 'Glitters', or 'Ballerina', a five-pound annual production is considered to be quite good. There isn't too much of this seed around, but it spreads quite a distance when you consider there are about 5,000,000 seeds per pound.

The F₁ hybrid petunia seed business occupies about ten per cent of the flower seed production in California; in 1956 it didn't even exist in this state. The F₁ hybrid petunia seed is now produced in other places, notably in Japan and in Central America, but there the wages for the essential, large-scale, hand-pollination labor are ten cents an hour. The cost of labor is an uncomplicated factor, however, compared to the complexities of hybrid-seed growing.

But we have broken the F_1 barrier in many garden plants. Petunias, marigolds, and snapdragons are leading the way; F_1 hybrid zinnias should be along in three or four years — and other kinds are sure to follow.

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SEATTLE'S CARNIVAL OF FLOWERS

"Carnival of Flowers" was the theme for Seattle's seventh annual Begonia and Sheltered Garden Show, staged July 29 and 30 by the Seattle Branch of the American Begonia Society and co-sponsored by the Seattle Park Department.

The show featured a simulated flower market. At the entrance to the large gymnasium, where the show was held, were six market stalls separated by shadow-box type partitions that permitted a view of the entire floor and at the same time focused attention on the stalls.

To the left of the entrance was an exhibit of approximately four hundred square feet entered by the Seattle Park Department. Evergreen trees ten feet high served as a background for gigantic foliage begonias, while tuberous begonias were used on both sides of a large cage of beautiful toucans.

There were eight other large exhibits in the main room featuring begonias, fuchsias, ferns, and companion plants. Seven of these were made by members of the A.B.S. and one by the Seattle Saintpaulia Society. Carrying out the carnival theme, one display had a ferris wheel twelve feet in diameter slowly turning six large hanging baskets of begonias. In another display, "Tunnel of Love", glass containers floated in and out of a circular tunnel, with fuchsia blossoms as passengers.

In the foyer, an exhibit by the Puget Sound Fuchsia Society showed blossoms of dozens of varieties in individual containers, and an educational booth advised visitors on propagation and culture of fuchsias.

On the stage, the Men's Garden Club of Seattle had an exhibit consisting of potted begonias, ferns, fuchsias, and other shade plants.

The horticultural section was in another wing of the building, where approximately two hundred specimens of begonias and other shade plants were entered for competition. Here also were the educational booths for African violets, begonias, and ferns.



Display at Seattle's Carnival of Flowers.

The show attracted three thousand visitors, about a thirty per cent increase over last year.

Among the many trophies and awards, the A.B.S. certificate for the best tuberous begonia was won by fifteen year old Kris Tourtellot. Certificates for the begonia sweepstakes and for the best fibrous begonia were won by Cecil Johnson of Montesano, Washington.

RHODE ISLAND SHOW

"Begonias and Other Exotics" was the theme of a show presented recently by the Rhode Island Branch of the American Begonia Society.

In addition to the many lovely begonias and other tropical plants exhibited, there was a special non-competitive display of terraced ferns shown by Mrs. Elsie Hughes, treasurer, and Mrs. Virginia Withee, president. The staghorns, especially, prompted many questions.

The Virginia Withee Annual Trophy was won by Mrs. Earle Harrington of Edgewood, Rhode Island, for her superb Begonia cathayana.

IN MEMORIAM

A deep shadow passed over the members of the San Francisco Branch on the evening of June 22, when we learned of the passing of Daniel Buckley. Dan was an active member for many years and demonstrated an unselfish devotion to the work of the Society he loved. He was well known to many members of the American Begonia Society. We shall miss him greatly.

MINUTES OF NATIONAL BOARD MEETING

The regular monthly meeting of the National Board of the American Begonia Society was held on Sunday Afternoon, July 23, 1961, in the Club Room of the Glendale Federal Savings & Loan Bank in Glendale, California, and was called to order by President Korts at 2:50 p.m. Members and guests were welcomed.

Pledge of allegiance to the flag was led by

Mrs. Gertrude White.

Twenty-three officers, chairmen and representatives responded to roll-call. About fifty members of the Society were present from various Branches in addition to the Board members.

Minutes of the June meeting were read and

approved.

President-Elect Schlanert gave a brief report on progress of the convention arrangements, and as Advertising Manager reported \$45.00 collected and turned over to the Treasurer.

Treasurer Mrs. Cooper was on vacation, therefore no Treasurer's report was available.

Membership Secretary Mrs. Waddington reported 192 new and renewing members for the month with total receipts of \$492.00 and \$25.00 expenses. Mrs. Waddington stated she needed membership cards and cultural bulletins. Motion made and carried that these two items be ordered.

Seed Fund Chairman Mrs. Gee was not present, and no Seed Fund report was avail-

able.

Flower Show Chairman Bert Slatter asked that all Branch Directors try to get as many of their members as possible to bring plants to the Annual Flower Show.

Librarian Mrs. Sault could not be present

and her report was not available.

Historian Mrs. Fahey asked for clippings and pictures from all Branches as she needs them to keep the history book up-to-date. Nomenclature Chairman, Mrs. Graham gave

Nomenclature Chairman, Mrs. Graham gave her report and asked for volunteers to help type index cards. She also stated she would like to have \$6.00 from the Nomenclature Fund to buy additional cards. Motion made and carried that the \$6.00 be allowed Mrs. Graham.

Awards Committee Chairman Mrs. Snodgrass reported that her committee is working on the awards to be given and stated that she wished to thank all of the Branches for having sent in nominations for awards.

President Korts stated that she had little of special interest to report other than that she had been meeting with President-Elect Schlanert and the convention committee, working on plans for the annual convention.

Vice-President Joyce reported as Chairman of the Speaker's Bureau that Mrs. Dorothy Behrends has asked that her name be removed from the Speaker's Bureau List, and that Mr.

& Mrs. Corwin had volunteered to make some new slides for the slide library. President Korts expressed the thanks of the Society to the Corwins for their generous offer.

President-Elect Schlanert stated that the next convention committee meeting would be held August 12 at the home of Mr. and Mrs. Roy Joyce. President Korts reported that the next judging class would be held August 4 and that Mrs. Maria Wilkes would give the lecture on why certain displays receive awards over others.

Branches reporting: Glendale, Hollywood, Inglewood, Long Beach Parent, Orange County, San Gabriel, Ventura, Westchester, Whittier, San Miguel and the Alfred D. Robinson

Branch.

Motion made and carried that the Secretary write a letter of thanks to the Glendale Federal Savings Bank for their courtesy in allowing the Society the use of their beautiful Club Room for our meeting.

There being no further business the meeting was adjourned and refreshments were served

with the Glendale Branch as host.

IRMA JANE BROWN Secretary Pro. Tem.

CALENDAR

September 7 — Westchester Branch. Will celebrate second birthday with a potluck dinner at the Westchester Women's Club. Guest speaker will be Rudolf Ziesenhenne, who will speak on begonias, his favorite topic. Call ORchard 2-5112 or SP 6-0058 for further information.

September 14 — Inglewood Branch. Barbara Jo Hoshizaki, teacher and well known fern horticulturist, will speak on "Ferns and Their Culture".

September 20 — Hollywood Branch. A Roy Joyce, vice-president of the American Begonia Society and member of Glendale Branch, and president of the California National Fuchsia Society, will speak on fuchsias.

September 22 — Redondo Beach Area Branch. Sue Robinson will be guest speaker at a garden party at the home of John and Alice Martin, 640 West 141st Street, Hawthorne. Party begins at 6:30 p.m. Sue will bring valuable information on "Landscaping".

PATRONIZE BEGONIAN ADVERTISERS

Branch Directory

VISITORS ALWAYS WELCOME AT THESE MEETINGS

BRITISH BRANCH

F. J. Bedson, Secy., Kent, England

BUXTON, BESSIE RAYMOND BRANCH

3rd Saturday, Homes of Members Mrs. Percy I. Merry, Secy. 109 Brookside Road, Needham, Mass.

DALLAS COUNTY, TEXAS BRANCH

3rd Thursday, 7:00 p.m., Members' Residences C. Sikkelee, Corr. Secy. 3603 La Joya Dr., Dallas 20, Texas

EAST BAY BRANCH

2nd Thursday, 7:45 p.m., Willard School Telegraph at Ward, Berkeley, California Miss Dorothy F. Osburn, Secy. 5015 Cochrane Ave., Oakland 18, Calif.

EL MONTE COMMUNITY BRANCH

3rd Friday, Members' Homes Miss Lenore Schroeder, Secy. 1828 So. 7th St., Alhambra, Calif.

FOOTHILL BRANCH

3rd Thursday, 8:00 p.m. La Verne Community Bldg. 2039 Third St., La Verne Mrs. Arma J. Shull, Secy. 313 W. 2nd St., San Dimas, Calif.

FORT, ELSA BRANCH

1st Saturday, 1:30 p.m. Miss Lola Price, Secy. 628 Beech Ave., Laurel Springs, N.J.

GLENDALE BRANCH

4th Wednesday, 8:00 p.m. Tuesday Afternoon Club, 400 N. Central Mrs. Isabel Compton, Secy. 2339 Mayberry St., Los Angeles 26, Calif.

GRAY, EVA KENWORTHY BRANCH

3rd Monday, 7:30 p.m. Community House, La Jolla Mrs. Charles Calloway 1311 Torrey Pines Rd., La Jolla, Calif.

GRAY'S HARBOR BRANCH

2nd Monday, 8:00 p.m.
Hoquiam Public Library or
Messingale and Rosenear Music Store
Aberdeen, Washington
Mrs. Jessie B. Hoyt, Secy.
1013 Harding Road, Aberdeen, Wash.

GRUENBAUM, MARGARET BRANCH

4th Tuesday 10:30 a.m. Homes of Members Mrs. Adolph Belser Cor. Secy. Welsh and Veree Rd., Philadelphia, Pa.

HOLLYWOOD BRANCH

3rd Wednesday, 7:30 p.m. Plummer Park, 7377 Santa Monica Blvd. Mrs. Georgina Barton, Secy. 2821 Herkimer St., Los Angeles 39, Calif.

HOUSTON, TEXAS BRANCH

2nd Friday, 10:00 a.m. Garden Center, 1500 Herman Drive Mrs. E. H. Claggett, Secy. 4415 Austin St., Houston, Texas

HUMBOLDT COUNTY BRANCH

2nd Monday, 8:00 p.m. Los Amigos Club, Loleta, Calif. Miss Margaret Smith, Secy. P.O Box 635, Ferndale, Calif.

INGLEWOOD BRANCH

2nd Thursday, 7:45 p.m., Inglewood Women's Club 325 North Hillcrest, Inglewood, Calif. Mrs. Bee Olson, Secy. 13715 Cordary St., Hawthorne, Calif.

KNICKERBOCKER BRANCH

2nd Tuesday, 8.00 p.m. Library, Horticultural Society of N.Y. 157 West 58th St., New York. Mrs. Gertrude Ferris, Secy. 415 9th Ave., New York 1, N.Y.

LONE STAR BRANCH

3rd Monday, Members' Homes, 10 a.m. Mrs. M. F. Scribner, Corr. Secy. 1422 Marfa, Dallas 16, Texas

LONG BEACH PARENT CHAPTER

1st Tuesday, 7:30 p.m., Machinists Hall 728 Elm St., Long Beach, Calif. Mrs. Bessie Anthony, Secy. 153 Ellis St., Long Beach, Calif.

LOUSIANA CAPITAL BRANCH

1st Friday, Homes of Members Mrs. Thomas D. Day, Secy. 4065 Hollywood St., Baton Rouge, La.

MIAMI, FLORIDA BRANCH

4th Tuesday, 8:00 p.m. Simpson Memorial Garden Center Mrs. Ray Rosengren, Secy. 5530 N.W. 21 Ave., Miami, Fla.

MISSOURI BRANCH

3rd Tuesday, 1 p.m. World War Memorial Bldg., Linwood and Paseo Kansas City, Mo. Mrs. R. H. Hyatt, Secy. 6812 Hunter St., Raytown 33, Mo.

ORANGE COUNTY BRANCH

2nd Thursday, 7:30 p.m. Garden Grove Grange Hall, Century and Taft Sts. Garden Grove, Calif. Mrs. Mel Westerdahl, Secy. 16422 Heim Ave., Orange, Calif.

PASADENA BRANCH

Meetings on Call, Homes of Members Col. C. M. Gale, Secy. 40 N. San Rafael, Pasadena 2, Calif.

PHILOBEGONIA BRANCH

2nd Friday, Members' Homes Mrs. J. Perry Long, Secy. 6532 E. Cedar Ave., Merchantville, N.J.

REDONDO BEACH AREA BRANCH

4th Friday each Month 2308 Rockefeller, Redondo Beach, Calif. Opal Murray Ahern, Secy. 1304 Poinsettia, Manhattan Beach, Calif.

RHODE ISLAND BRANCH

1st Saturday, Homes of Members Miss Ruth Harrington, Secy. 372 Lloyd Ave., Providence, R.I.

RIVERSIDE BRANCH

2nd Wednesday, 7:30 p.m., Shamel Park 3650 Arlington, Riverside, Calif. Mrs. Ethel Prior, Secy. 4345 5th St., Riverside, Calif.

ROBINSON, ALFRED D. BRANCH

3rd Friday, 10:30 a.m., Homes of Members Constance D. Bower, Cor. Secy. 2413 — K St., San Diego 2, Calif.

SACRAMENTO BRANCH

3rd Tuesday, 8:00 p.m., Garden Center 3330 McKinley Blvd., Sacramento, Calif. Edward Reuter, Secy. 933 Sonoma Way, Sacramento 19, Calif.

SAN DIEGO BRANCH

4th Monday, Barbour Hall 2717 University Ave., San Diego Mrs. E. R. Bohe, Secy. 3141 N. Mountain View Dr., San Diego 5, Calif.

SAN FRANCISCO BRANCH

1st Wednesday, 8:00 p.m. Garden Center, Golden Gate Park 9th Ave. & Lincoln Way Mrs. Doris Howie, Secy. 1407-42nd Ave., San Francisco 22, Calif.

SAN GABRIEL VALLEY BRANCH

2nd Friday, 8:00 p.m. Los Angeles State & County Arboretum 501 N. Baldwin Ave., Arcadia, Calif. Ruth Eppley, Secy. 4858 Willard St., Rosemead, Calif.

SAN MIGUEL BRANCH

1st Wednesday, Youth Center, Lemon Grove, Calif. Mrs. Lloyd Clark, Secy. 2252 Vulner Ct., San Diego, Calif.

SANTA BARBARA BRANCH 2nd Thursday, 7:30 p.m. Girl Scout Clubhouse, 1838 San Andres St. Mrs. Hilda Gundel, Secy. 1414 Olive St., Santa Barbara, Calif.

SEATTLE BRANCH
3rd Tuesday, 7:45 p.m.
Meeting locations will vary; call the secretary at SUnset 2-2234 Miss Bernice Moore, Secy. 2842 West 59th St., Seattle 7, Wash.

SHEPHERD, THEODOSIA BURR BRANCH

Ist Tuesday, 7:30 p.m.
Alice Bartlett, C.H., 902 E. Main, Ventura, Calif.
Mrs. D. E. Claypool, Secy.
104 Forbes Lane, Ventura, Calif.

SPOONIT

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SMOKY VALLEY BRANCH

3rd Thursday of each Month Mrs. Robert Nease, Secy. 410 South Phillips, Salina, Kansas

SOUTHERN ALAMEDA COUNTY BRANCH

3rd Thursday, 8:00 p.m. Strowbridge School Multi-Purpose Rm. 21400 Bedford Dr., Hayward, Calif. Mrs. Chester Bartlow, Cor. Secy. 37075 Arden St., Newark, Calif.

TALL CORN STATE BRANCH

Mrs. Edna Monson, Secy. South Taylor, Mason City, Iowa

TARRANT COUNTY BRANCH

2nd Monday, 10:00 a.m., Homes of Members Scott Hall, Ft. Worth, Texas Mrs. James O. Burdick, Sr., Secy. 3211 Azle Ave., Fort Worth 6, Texas

TEXAS STATE BRANCH

1st Tuesday Night in Members' Homes E. Weaver, 1325 Thomas Blvd., Port Arthur, Texas

WESTCHESTER BRANCH

1st Thursday, 7:30 p.m. Westchester Women's Club, 8020 Alverstone St., Los Angeles, Calif. Mrs. Ruth Burr, Secy. 8335 Fordham Rd., Los Angeles 45, Calif.

WEST VALLEY BRANCH

2nd Tuesday, 7:30 p.m., Orcutt Playground Clubhouse 21816 Lanark St., Canoga Park, Calif. Joseph Janatka, Secy. 18641 Casandra, Tarzana, Calif.

WESTERN PENNSYLVANIA BRANCH

2nd Wednesday, 11:00 a.m., Homes of Members Mrs. A. S. Lash, Secy. 1228 Oklahoma Drive, Pittsburgh 16, Pa.

WHITTIER BRANCH

1st Thursday, 7:30 p.m.
Palm Park Community Center, 1643 Floral Drive Anne L. Rose, Secy. 1255 Ramona Dr., Whittier, Calif.

WILLIAM PENN BRANCH

3rd Tuesday, 2:00 p.m., Homes of Members Mrs. H. Rowland Timms, Secy. Willow Lane, Wallingford, Pa.

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