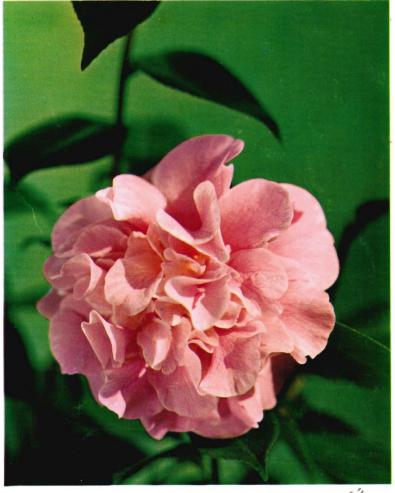


A Publication of the Southern California Camellia Society



'Owen Henry'
Courtesy Harvey Short

Vol. 27

February 1966

No. 4

Southern California Camellia Society Inc.

An organization devoted to the advancement of the Camellia for the benefit of mankindphysically, mentally, and inspirationally.

The Society holds open meetings on the Second Tuesday of every month, November to April, inclusive at the San Marino Women's Club House, 1800 Huntington Drive, San Marino. A cut-camellia blossom exhibit at 7:30 o'clock regularly precedes the program which starts at 8:00.

Application for membership may be made by letter. Annual dues: \$6.00.

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THE COVER FLOWER

Harvey Short thought enough of his new 'Sunset Glory' sport that he named it after his good friend, now deceased, Owen Henry of Ramona, California. 'Owen Henry' is a semi-peony form flower with high built center petals. Most flowers average 5½ inches, with unusual coloring — pale lavender cast over deeper pink, with prominent veinings to the center of the flower showing strawberry shadows. There is some white edging in the petals. It is a vigorous grower with large handsome leaves. Blooming time is from November through March. To quote Harvey, "truly a show flower".



Camellia seeds and seedlings are active in my thinking and doing these days. I am a camellia seed merchant among my other duties with the Southern California Camellia Society. As many of you know, our associations with the Huntington Botanical Garden became close back in the 1940's through cooperation in the building of the Garden's camellia collection. We have for many years marketed their camellia seeds and used the proceeds for the benefit of the Gardens, thus becoming one of the very few places where seeds can be bought. We expect to receive seed orders from former purchasers and from our ads in CAMELLIA REVIEW. SUNSET MAGAZINE refers to us as a source of seeds in their book on CAMELLIA CULTURE and we receive every year some orders from that source.

It is the latest source of orders that prompts this article. Many of you read the article about Camellias in the January issue of READERS DIGEST, about how Dr. and Mrs. John Urabec of La Canada, California grew TIFFANY from a mere handful of seeds. People are now writing to Descanso Gardens, which was featured in the article, and asking about the purchase of camellia seed.

This is all to the good, provided people are approaching it as amateurs, which in my line of thinking means they are doing it wholly for their own pleasures. A few will hit real winners and the camellia hobby will profit from their efforts. Nuccios in Altadena plant about 10,000 seeds a year and feel fortunate if they come up with half a dozen out of this batch that they can market with profit. Every camellia nurseryman who plants seeds discards dozens of "pretty" new seedlings that they might plant in their own gardens, as their own seedlings, but know they cannot market with profit. An amateur need not do this, however, because profit need not, should not be his motive.

Which leads to this: There is no greater pleasure in the camellia hobby, in my opinion, than that which comes from one's own pretty seedlings. I have bored those who read this page with past references to my seedlings. Two more bloomed last week for the first time that I shall add to my personal collection, not that they should be put out to others but because I think they are pretty, prettier, in fact, than many of my grafts that I take on the word of others. This will make on the order of eight or ten in my seedling collection.

I would hope that all these people who are planting camellia seeds will approach it as amateurs and not with the hope of getting a "winner". If they do this, they will have pleasure. If they seek other than pleasure, I am afraid they will achieve disappointment.

Harold Exergeleur

SACRAMENTO A.C.S. MEETINGENTERTAINMENT PROGRAM — MARCH 3-6, 1966

Mary Louise Vaughn

California Festival Association Sacramento, California

A round of activities packed with interest has been planned for delegates to the ACS Annual Meeting in Sacramento March 3 to 6.

The Camellia Society of Sacramento will be host to this 21st annual session. Chairman of the host committee is E. A. Combatalade, a past president of the society, founder and former president of Sacramento's Camellia Festival Association, a man known in the capital as "Mr. Camellia".

A long roster of active members of the society has been working for months to make the ACS delegates' stay in the capital a memorable occasion.

Registration will begin at 8 A.M. Thursday, March 3, in the El Dorado Hotel, Convention headquarters. The first event on the agenda will be the ACS board meeting at 9 A.M. in the hotel.

ACS President Charles Butler of Mobile, Alabama, will be speaker at the Rotary Club of Sacramento luncheon Thursday noon in Hotel Senator. The club is one of the oldest and largest in Rotary International. All ACS visitors, including ladies, are invited to attend the luncheon.

A highlight of the opening day will be a trip down the Sacramento River, leaving by bus at 2 P.M., to visit one of the oldest camellia gardens in the area. On the grounds of the 100-year-old Edinger home in Hood are two camellia trees reputed to be the largest and tallest in the United States. On the return trip a visit to a nursery will be included.

Thursday evening out-of-town delegates will be guests for dinner in the homes of members of the Camellia Society of Sacramento and the Camellia Festival Association.

Friday's program will begin with the annual Queen's Presentation Breakfast, kickoff of the capital's 12th annual Camellia Festival, in the El Dorado. This is an exciting occasion, when one of nine lovely college coeds will learn she has been chosen 1966 Camellia Queen. The suspense will mount higher and higher during a program of entertainment from three local colleges.

Those who take the Coloma trip Friday will leave at 9:15 A.M. to follow the Gold Trail into the foothills of the Sierra Nevada. It was at Coloma in January, 1848, that James W. Marshall found the precious ore that launched the fabulous Gold Rush. The trip will include several of the old mining towns, rich in scenery and history.

The drive will end back in Sacramento at Rancho Cordova for the Golden Treasure Luncheon at 1 P.M.

Delegates will visit California's Governor's Mansion at 2:45 P.M. The old Victorian home was built as a private residence in 1871, and has housed the state's governors since 1903.

The ACS board will meet again Friday afternoon at 4:30 in the El Dorado.

Dinner that evening will be in the El Dorado, following a 7 P.M. reception at which the Camellia Society and the Camellia Festival Association will be hosts.

Saturday morning's entertainment will feature a tour of camellias in famed Capitol Park, the beautiful grounds around the State Capitol. The park has some 2,500 camellias of at

(Continued on next page)

least 800 different cultivars. Many are the parent plants of today's camellias, and some are known to be 100 years old.

There will be lunch and entertainment at the Hotel Senator Saturday at 12:15 P.M.

The high point of the convention will be the preview of Sacramento's 42nd Annual Camellia Show in the Memorial Auditorium. ACS members and guests will visit the show at 2:15 P.M. for a private look at the spectacular displays before the show opens to the general public later in the afternoon.

The show is the oldest continuous camellia show in the nation, and regularly displays 8 to 10,000 blossoms to some 60,000 visitors. In addition to the lavish displays of blooms and

arrangements on the main floor of the auditorium, there will be such attractions as demonstrations of camellia culture in side rooms, and exhibits of the cultures and arts of other nations on the lower deck, the latter sponsored by the Camellia Festival's International Friendship Committee.

A no-host reception in the Sacramento Inn at 7 P.M. Saturday will precede the annual American Camellia Society Banquet. ACS President Butler will make his report, followed by entertainment and the introduction of the 1966 Camellia Queen and her Royal Court.

.Visitors will have a chance to see some of Sacramento's outstanding camellia collections Sunday morning in tours to private home gardens.

While this will be the finale of the



Opening Day crowd throngs into Sacramento's Annual Camellia Show to view 10,000 beautiful camellia blossoms, and hundreds of artistic camellia arrangements. The 42nd Annual Camellia Show, which is expected to attract more than 60,000 visitors, including members of the American Camellia Society attending their 21st Annual Meeting, will be held in the Memorial Auditorium on Saturday and Sunday, March 5 and 6.

ACS activities, those who remain in the capital are invited to attend later events of the colorful Festival: the Pink Perfection Fashion Show Luncheon March 8; Cheer-Up Day March 10; Camellia City Ballet March 11; Children's Camellia Parade March 12; International Friendship Luncheon March 12; Camellia Folk Dance Pageant and Festival March 12 and 13, and the Camellia Cup Regatta on Folsom Lake March 13.

SACRAMENTO A.C.S. MEETING REGISTRATION INFORMATION

The Registration Fee is \$3.00. All those who purchase tickets for all events, excluding the Rotary Luncheon on Thursday, will pay \$22.00. This will include the registration fee. If it is your desire to attend the Rotary Luncheon, the ticket is \$2.50. Ladies are invited.

Those who attend all of the functions where meals are served, except the bus trip to Coloma, will pay \$16.75. If you attend all the functions, including Coloma, the fee is \$22.00.

Anyone attending any one or more events where meals are served will pay the \$3.00 registration fee and the price of the meals as listed:

Friday, Mar. 4, breakfast\$2.25 Friday eve. Reception

Anyone attending any function with the exception of the Camellia Show will be expected to pay the \$3.00 registration fee. The badge of admission to any activity is the badge which is received upon registration.

Out-of-town visitors will be dinner guests at members' homes Thursday night. Advance registrations are necessary.

Registration Chairman

George Brereton 2020 U (You) Street Sacramento, Calif. Phone 451-7657 (Area code 916)

Hotel Registration

Hotel El Dorado Highway 80 at Canterbury Road Sacramento, Calif. 95815 Phone 922-6251 (Area code 916)

Request for reservation must have a \$10.00 deposit for each room. Reservations will be held until 6:00 p.m.

Rates:

Room & Bath one person daily — \$9, \$10, \$11
Room & Bath, two persons (double or twin) — \$12, \$13, \$15
Suites — 2 Rooms \$26, \$30, \$50
3 Rooms \$39, \$45, \$65

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INSECT PESTS OF CAMELLIA WITH EMPHASIS ON CONTROL

J. Alex Munro*

Fortunately for the grower of camellias there are comparatively few pests of this choice ornamental: Morrison (1949) describes them in detail. They are distributed into two main groups from the standpoint of feeding habits; those which feed by sucking sap from the plant tissue, and those which feed by chewing the foliage and other plant parts. Of the various species listed by Morrison, the scale insects predominate.

Pests, such as the scale insects, are usually introduced to plantings with stock from questionable sources. For this reason it is well to purchase only planting stock that has been State inspected annually and certified to be free from such difficult pests. It is thereby possible to avoid introducing these troubles into your planting rather than be obliged to spend money and effort controlling them after they have become established.

When a grower is confronted with a pest that is new to him he will do well to get it identified. Any entomologist will be glad to make the idenfication and suggest means of controlling the pest. Whenever advised to use a pesticide, it is well to be guided by the manufacturer's instructions on the label of the container. The reason for this is that there are many brands, or trade-name products, and specific directions may vary with each formulation. Pesticides are obtainable as liquid concentrates, dusts, granules, or baits. Each will have certain advantages for the purpose intended. Only the applied type of control, by the use of chemicals will be dealt with here.

Scale Insects

Inasmuch as the scale insects predominate, they will receive first consideration. In general, the scale species have much in common; they feed by sucking sap from the plant tissue and undergo practically the same mode of development from egg to adult or the immobile "scale stage". The females are wingless and develop no further than the scale stage; only the males, scarce in some species, are winged and can fly.

Scale insects are among the most prolific of insects; a good example is the black scale, Saissetia oleae. This scale deposits an average of about 2000 eggs underneath her body, which serves as shelter for the eggs during their hatching period. Hatching requires close to three weeks for this species, but will vary somewhat with prevailing temperatures, and the species of scale. In general, hatching is usually completed by midsummer. The operator can readily determine the hatching of the eggs by examining the underside of a few scales. The tiny young, or "crawlers" are most active at the outset; they crawl over the foliage, or new growth, searching for a place to settle down to feed and develop into the scale stage. This is the time, while they are young, when control measures are most effectively applied.

Control: There are a number of insecticides that may be selected for controlling scale infestations. The more commonly used ones are Malathion and Diazinon. Dimethoate, obtainable under the trade-name of Cygon, is also an effective spray, especially in the control of the black scale, brown soft scale, camellia scale, hemispherical scale and tea scale. It is also applied against aphids and mites. A well timed application, that is, a spray applied while the pest is

^{*} Dr. Munro is Entomologist for the Los Angeles County, Department of Arboreta and Botanic Gardens, 301 North Baldwin Avenue, Arcadia, Calif.

in its active, feeding stage, will often completely eradicate an infestation.

It is wise never to exceed the dosage recommended by the manufacturer; this is particularly important in the use of Dimethoate. A stronger concentration of the spray than is recommended is likely to cause burning of the tender foliage and seldom results in improved control. Dimethoate is one of the newer systemic insecticides. It is registered as safe for use on camellias and many other plants. Be guided in this matter by the list of registered uses for Dimethoate on ornamental plants provided by the manufacturer of this product. Meta-Systox, known under the tradename of Scope, is another systemic insecticide that is effective against aphids and a number of other pests and can be used safely on most types of foliage.

These systemics are absorbed into the plant sap and quickly translocated to all parts of the foliage. They leave a residual or killing effect against the sap-sucking species for a period of two to three weeks following the spray application, which is usually sufficient to accomplish its purpose.

Such sap-feeding insects as aphids, mealybugs, whiteflies, and thrips are usually controlled by the same sprays as those used against the scale insects. It is well to apply the spray promptly and before serious pest injury occurs. Prompt application has the added advantage of putting a stop to the deposition of honeydew by aphids and other pests responsible for this sticky exudate; and this, in turn, discourages ants, and prevents development of the unsightly sooty mold fungus associated with the honeydew problem.

Brachyrhinus Weevils

The Brachyrhinus species, represented by the cribrate weevil, B. cribricollis, the strawberry root weevil, B. ovatus, and the black vine weevil, B. sulcatus, are all injurious to the roots or foliage of camellias. Their larvae or grubs are to be found in the

soil underneath the infested shrubs. The larvae of the black vine weevil are particularly injurious through girdling of stems below soil surface. All three species also feed on various other plants as their common names indicate. In that the larvae feed underground, the injury caused is rather hidden to view and often escapes notice. Feeding injury caused by the adults, however, is readily apparent to any observant person. Such feeding characterized by notches eaten around the leaf margins; this results in reduction of the leaf surface and detracts from the appearance of the foliage. Often such injury is wrongly blamed on other leaf-eating pests. The weevils, being nocturnal in their habits, feed mainly at night and so are seldom seen by the casual observer.

Although equipped with wings, these weevils do not fly. For this reason an infestation may remain quite localized for some time. During daylight the weevils hide in the leafmold and other cover beneath the shrubs. They are dark in color and range in size from one-fifth to about one-third of an inch in length, according to species, the black vine weevil being the largest of the three mentioned. When searching for them in the ground cover, they are difficult to locate because of their possum" or feigning death when disturbed; and besides, their dark color blends in with their environment to add to the difficulty.

Control: Following the first sign of feeding by *Brachyrhinus* weevils, the grower will do well to apply <u>Chlordane or Dieldrin</u> in one of their convenient forms. Mark Anthony, Superintendent of Descanso Gardens at La Canada, California, reports satisfactory control of *Brachyrhinus* by scattering 5 percent Dieldrin granules underneath infested camellia shrubs. The insecticide should be applied in the spring when evidence of feeding

(Continued on next page)

is first noted. Repeat applications should be made later on, possibly in midsummer, if there appears to be need for this.

When the insecticides are used as sprays, apply enough that there will be runoff and wetting in the soil to destroy the weevils harboring underneath the shrubs. These insecticides control a number of other pests, including Fuller's rose weevil, grasshoppers, leafrollers, cutworms, ants, and crickets.

Additional insecticides coming increasingly into use against many of the above pests are Sevin and Zectran. We have found these insecticides to control a wide range of pests and to show no harmful effect on plants and shrubs grown in this area; they are particularly effective against various kinds of caterpillars, as well as many other common pests. An interesting feature of Zectran is it is also highly effective against garden snails, and might well be used where it is suspected that these creatures have developed resistance to the commonly used Metaldehyde baits. An old standby insecticide, deserving mention, is Lindane; it is quite effective against aphids and many other insects. Like most insecticides, Lindane is obtainable under various trade-names. Always study the label, when in doubt, to make sure of the actual killing agent.

The grower will do well to avail himself of publications issued by the State Agricultural Experiment Stations and Extension Services, and the U.S. Department of Agriculture. Leaflet 181, Pest Control Guide for California Floricultural Crops, published in 1965 by the University of California, is a most helpful reference; it is available and free upon request by any California resident. You may secure a copy from your County Agricultural Commissioner's Office, or the Division of Agricultural Sciences. University of California at Berkeley or Riverside, California. Another publication which every flower grower will want is Bulletin 237, Controlling Insects On Flowers. This publication is obtainable for 40 cents from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C.

Literature Cited

Morrison, A. E. Insects infesting camellias. The American Camellia Yearbook—1949. Pages 122-140.

San Gabriel Valley Camellia Show

The Temple City Camellia Society will sponsor the San Gabriel Valley Camellia Show to be held in the Lecture Hall of the Los Angeles County Arboretum, 301 North Baldwin Avenue, Arcadia, on February 19-20. This will be the Camellia Society's 17th annual show.

Ernie Pieri is Show Chairman and he advises that registration and entry cards and show regulations will be mailed to all persons who have entered the Los Angeles Camellia Council and Temple City shows during the past 3 years.

Anyone desiring to enter this show may procure the above data from Mr. Pieri by written or telephone request. Mr. Pieri's mailing address is 601 Elm Street, San Gabriel, California, and his telephone number is 287-5977. Registration will be from 7:00 to 10:30 A.M., Saturday, February 19, 1966.

The San Gabriel Valley Camellia Show will be held during the height of the blooming season in Southern California and it is anticipated that the display tables will contain many of the newer types and varieties of Camellias developed during the past several years. It will feature displays of treated blooms as well as those grown under natural conditions,

All camellia growers and enthusiasts are invited to enter and participate in this show.

SOME THOUGHTS REGARDING HYBRIDS

Harold L. Paige

Lafayette, California Author of "Camellias in America"

Excerpts from article in August 1965 issue of THE CAMELLIA BULLETIN

Editor's note: Harold Page is one of the most active as well as most successful amateur camellia hybridizers in California. His views are worth heeding by camellia people who are interested in competing with the bees.

Importance of Good Seed Parents

Many times a hybridizer is tempted to cut off and use for root stock a seedling whose flowers are just fair in quality. It would have been highly rated twenty years ago, but not today. We have learned through experience to keep all these seedlings that look promising until we find out if they are going to be good seed setters. A good parent plant is often more valuable than a sterile plant that produces prize winning blooms. Good seeders like Sylvia May, Mrs. Bertha Harms, Dr. Tinsley, are rather hard to find. When you do find a seedling with exceptional vigor that will cross with many other species, you may well be on your way toward producing a long line of top quality flowers.

The classic example in roses is Dr. Walter Lammerts' seedling Charlotte Armstrong which started a long line of All American Roses, including such notable varieties as Chrysler Imperial and Queen Elizabeth. It is estimated that about 75 per cent of the All American Roses of the last twenty years, produced in this country, have Charlotte Armstrong genes in their background.

The writer came close to cutting off some early seedlings with only fair flowers which later proved to be excellent parent plants. Some of their offspring are now showing very desirable qualities both in plant and flower.

When one checks the results of a season's work in cross pollinating

species and sees long columns of "no takes," he realizes then the value of a reliable seeder. This is not to say that wide crosses with uncertain material should not be attempted. It is impossible to tell where lightning will strike. Nevertheless it would be wise to put at least half one's effort into working with plants that have already demonstrated their worth. None of these well known seed parents have been overworked and the possibilities for new crosses are endless.

Humor the Hybridizer

Encourage the hybridizer. humor him. He works hard years on end, often with little to show for it. However, the main reason for encouraging his efforts is that new cultivars are needed. No flower remains popular long unless interesting new varieties appear each year. Think back and ask yourself if you would be satisfied with the 15 or 20 varieties you started with 15 or 20 years ago. A glance back through the years reminds us that considerable progress has been made, much of which is due to the work of amateurs. True, the bees have contributed a lot to the end results but still it has been necessary for some one to recognize quality in both flower and plant and to keep that quality from disappearing from sight.

Have Fun

Those who have elected to become serious hybridizers are going to find it a marvelous hobby. The writer began something like 12 years ago to assemble species with which to work. Being engaged in a somewhat competitive business, he found time to keep track of the seed parent only.

(Continued on page 31)

SOIL MIX USED BY NUCCIO'S NURSERIES

Julius Nuccio

Editor's note: The following are edited extracts from talk by Julius Nuccio to members of Los Angeles Camellia Society. The talk was tape recorded.

I would like to tell you briefly how camellia culture changes a bit as the years go on and how culture can become complicated when it shouldn't be. We had a man come out to the nursery who had convinced his neighbor to plant camellias and thought it would be a good idea if he talked him into subscribing to the various camellia bulletins, especially the one that has all the new varieties listed. The one that the neighbor caught on to was the one that covered the subject of "gib". He gave this bulletin to his brand new gardener and it practically frightened the gardener out of camellias. Even though gib is here to stay, I want to say that culturewise, camellias are still very easy to grow. You don't have to have an eye dropper to get a lot of pleasure out of blossoms in your garden.

Culturewise, in the nurseries we have changed a little in the last four or five years. I'd like to tell you about it and why we have changed. We used to use a typical camellia soil mixture of 50% peat moss and 50% silt*, and with the silt we have always had 10% coarse sand. We always had excellent results, until we started to get into overwatering, which you can do with peat moss in containers. There are a few areas left that are blessed with good water but most of us are going to get involved with sodium salts in our water.

We went to fir bark and we've had wonderful results again, fine root systems. The basic difference is that fir bark doesn't hold the water, doesn't hold salts in the container like peat moss does. It drains faster. When you water the plant, the water goes right through it so you have better aeration for the root system. Now we are using 50% fir bark and the same amount of soil and sand. We've noticed that where we were having trouble getting white roots, with the roots burning with salts and getting injured, they are now alive and thrifty. It is very easy to overwater, and with an unhealthy root system you don't have the roots of the happy plant to take up the water.

Then we get into what we call sediment rot, a root disease on camellias. It is a regular fungus. Maybe some of you have noticed it when you've had a stunted plant in your garden and you transplanted it. You found brown roots basically, with an occasional white tip trying to come out in spots. This is a rot, a regular fungus that gets started and is attacking camellias more and more in Southern California. This is the stunted look that you get on your plants. They are not dead, you don't have fertilizer burn on them, they are green, but their branches are dying back. You just aren't getting that "push" on them that you're used to seeing every Spring. And this is something for you to remember: if you're not pushing out in the Spring with good growth, your problem basically is down in the root system. This is where the wood has not cured because of this root disease and it makes it more difficult for it to be happy. In other words, the fungus is not as happy in a soil mixture that dries out. You will find that where you use wood (fir bark) you can dry it out much faster than where you use peat.

When you raise 25,000 egg-can camellias and 75,000 gallon-can camellias and liners, you hire people to water. This is a job with them. Their interest isn't in camellias and of course

^{*} The silt that accumulates back of Devil's Gate Dam in the Arroyo Seco between Pasadena and Flintridge.

the wet one is going to get watered again when they walk by it. I know most of you know your collection so well that when you water your plants you can tell which plants will be dry without actually walking through them. This is a problem with every grower who grows any quantity of camellias. Here the fir bark has helped us immensely. The reason we know this is that we are fortunate that we ship a lot of camellias to the southern states and most of our large commercial wholesale growers don't do this. We have to bare-root them and therefore have a good look at what we own at the bottom as well as at the top when we sell a camellia. All the plants we have bare-rooted in wood have had that same old-fashioned lush white root system that you want to see in the bottom.

I'm not trying to sell fir bark to camellia people. I think that you get good results with peat moss. We think it is still a great medium if you can control your watering. If you have good water and can avoid keeping your plants overwatered, you can stay with it.

- **Q.** What about fir bark and reticulatas? I understand that there is a throwing of a little more shoots with fir bark.
- A. They are much happier. Here again we go to the old watering problem. It is twice as bad for a reticulata as for a japonica to be over watered. A good-looking retic at its very best has half as much foliage as a fair japonica so it doesn't need as much moisture. It wants to dry out a little better.
- Q. Tell me why, when you use fir bark (I've been using it a few years too) you add 10% coarse sand. I find when using just silt or soil with fir bark I get such wonderful drainage I don't need any sand.
- A. Sand isn't necessary with fir bark. We had difficulty back in the days when we used peat moss and silt alone when we transplanted our rooted

cuttings into liners. We lost too many of the little plants. We corrected the condition by using sand in the mix. We found when we started to use fir bark that it didn't work with these rooted cuttings. They dried out a little too fast, we couldn't firm the soil nicely around the plant by pushing down without breaking off the roots, and we couldn't make the little plants stand up. So we went back to the peat moss mix for the rooted cuttings, which, you will remember, called for the sand in the mix. Since the sand works well with the fir bark, we see no need to carry two types of soil, one with sand and the other without sand. We wouldn't use the sand, however, if we did not have the cuttings.

- **Q.** Is your 50% by volume?
- A. Yes, by volume. We find, too, that when you use peat moss, you can see the peat moss in the pile of mix. When you mix the fir bark, though, it seems that you have left out some of the fir bark, you seem to lose it. There is a lot of fine material in the bark that works in nicely with the soil. Have you noticed that?

Response: Yes. I've noticed that after you mix the mixture and it has been wet for say two, three or four weeks, that it all turns black and you can't tell that you put fir bark in it.

Nuccio: One of the things that worried us, I might mention that now so that you won't have to give it any thought, is that years ago we tried using wood for camellias, shavings and things like that, and most of us got into trouble. It was fresh wood, and in breaking down it would take all of the nitrogen out of the soil and you would always have a yellow-looking plant. We would try feeding it to bring it up. We chickened out, we quit. With fir bark we have not had that problem. We are still on our basic fertilizing for the year — May, July and September with cottonseed meal and camellia food — and we haven't

(Continued on page 28)

"IN THE SPOTLIGHT"

Caryll and Mildred Pitkin

GUS MENARD

Once you see 'Gus Menard' you will not soon forget it nor will you be likely to confuse it with anything else. It has that highly prized quality of distinctiveness. It is a large, truly white anemone form but in the burst of petaloids in the center will usually be found some that are definitely chartreuse green in color. These have been present in every flower we have seen. As the flower ages and also later in the season the petaloids assume a distinctly yellow cast, yellow enough in fact, that this flower might have some value to our hybridizers who are seeking that elusory color.

The plant grows vigorously, has good dark green foliage and, in its favor, sets only a moderate number of buds.

Ernest Judice of New Orleans discovered it among his seedlings and named it for his good friend Gus Menard of that city. It was registered in 1962 and is being propagated by Tammia Nursery of Slidell, La.

It was on the honor table at Macon in November and Mr. and Mrs. Menard won best of show with it at the New Orleans show on December 12. As it becomes more widely distributed it will take honors in many shows.

CLARK HUBBS

We believe this is the best camellia that has ever been introduced. That is a strong statement and one that we make almost with regret, regret that anything could be consistently better than 'Guilio Nuccio', our longtime favorite.

But because 'Clark Hubbs' did not have commercial promotion it has been slow getting around. For that reason we think it merits a place in the spot light this month. Milo Rowell of Fresno, Calif. bloomed it and registered it way back in 1960. He gave scions to his friends because he liked them and it, just calling it #585. I doubt if Milo realized how good it was until others began blooming it. Then he decided it deserved a name and posthumously Dr. honored Hubbs, a much beloved hobbiest who had served as President of the Pacific Camellia Society and as a Director of the American Camellia Society. Dr. Hubbs spread good cheer wherever he went and the flower named for him will be a bright beacon as long as camellias are grown.

The flower is a very large, gloriously red, heavily fimbriated full peony. It grows on a good, sturdy upright dark green plant. Our prediction is that it will take every honor afforded camellias.

MARY PAIGE

Is completely different from the flowers mentioned above and if they could be described as bold, Mary is demure. But in her way she is just as beautiful and seems destined to be a universal favorite. Really good formals are rare and this one seems to be very good. It is a lush soft pink, four to four and a half inches in diameter and up to two inches in depth. It holds its bud center until the flowers are very old and it drops in one piece.

It grows in a sturdy, vigorous upright manner and has dark green leaves. Harold Paige of Lafayette, Calif. grew it and named it for his wife, Mary. Blooming mid season to late it should hit most of the shows and will certainly be seen on the head table when it becomes more widely distributed.

INNOVATION

It is one of the best of the hybrids with reticulata blood. 'Williams Lavender' times 'Crimson Robe' produced

(Continued on page 32)

Sharing Experiences

Melvin L. Gum

In my previous article I mentioned that my plants are mostly tub culture, and that February and March are the months in which I transplant my larger plants and trim the roots back. Camellias, as few flowering shrubs can, thrive happily for years with their roots cramped into a tub. They seem, if anything, happier for this discomfort than not. Therefore, it is the wise gardner (and I hope it is you) who chooses a durable container for his camellia, figuring that he won't have to move it up to a larger size for a long time. There are even reports that 100 year old camellias are still thriving in two foot square planters. However, to get large blooms I find it wise every two or three years to trim some of the roots. This is easily done if you have the right kind of a container. My tubs being square, all have removable bottoms, and some of them have removable sides. All I have to do is remove two pins, and the sides are easily removed from the root ball.

First, let me touch on the soil mix. I have been using "Forest Humus" nearly four years. Some gardeners prefer to call it red wood. The soil mix that I use is a sandy loam with about 20% coarse sand added. This soil will give P.H. of .059. I take \frac{1}{3}

of this soil mix and two parts of "Forest Humus," mix well, and make sure it is damp. Sometimes I dampen the "Forest Humus" a day ahead and then mix it with the soil. This gives a very light weight soil mix that will drain well. With this kind of soil my root trimming is very easily done.

I set my tub on top a 4 by 4 or large cement block, take a hammer and tap gently around all sides of the tub so the root ball will slide down easily. I prefer to use a large sharp scissors. Never trim a plant when dry. For example in a 16 inch tub, I trim an inch or two from all sides of the roots, then take a screwdriver handle, or your fingers if you prefer, and loosen the roots if they are compact, next hose with a very light spray and wash real well. Bring the tub back up into position and pack the regular soil mix around, making sure it fills in around the roots. Now trim the top of the plant in accordance to the roots.

There have been times when I have found root systems so tight that I could scarcely work with them. When this is the condition, I place the plant in a tub of water with a few drops of vitamin B added, and let it remain

(Continued on next page)

FEATURING

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Elsie Jury Gav Chieftan Berenice Perfection Mister Sam Silver Ruffles **Twilight**

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2831 Emerald Drive Walnut Creek, Calif. 94598 at least thirty minutes or until it is soaked thoroughly. With this type of root system, I prefer to do the root trimming job in stages of a six month interval to prevent heavy shock. Within a year you will never know that the plant was once root bound.

For my reticulatas, I use three parts "Forest Humus" and one part soil mix. All my reticulatas are in tubs. The reason for using more "Forest Humus" is to pull the P.H. down to about .05, thus there are no brown leaves and the plants thrive well. I am selecting six from my collection and hope to plant them in 100% "Forest Humus" in March, an experiment which I am looking forward to with anxiety.

I am very fortunate as the soil here is sand approximately twenty feet down. I still mix "Forest Humus" with the soil about half and half for my plants in the ground. "Forest Humus" builds up the holding power of dry sandy soil. Moisture and fertilizer that would normally through will stay near the surface. It also supplies vital organic matter usually lacking in sandy soil. I also use it as a mulch. To those of you who have a hard soil. I suggest you use "Forest Humus." It helps to keep soil open so that air and moisture can penetrate to the root area. Its porosity holds fertilizers and moisture around roots and natural acidity combats harsh alkaline conditions so common in hard soils.

Show time is nearly here and at this writing Southern California has been quite fortunate this year with perfect weather, plenty of rain and cool nights.

To you beginners, don't be afraid to enter your flowers in shows. Remember it takes only one bloom to win "Best of Show", and it need not be a large one.

Don't make the mistake that I made (although I purposely did it). I

bought plants that I was told would not bloom in this locality, but with good care and the aid of "gib" I have succeeded in blooming them all with the exception of one, and I still haven't given up on it. Thank goodness for gibberellic acid and the challenge and pleasure it presents.

When you pick varieties for your collection, record the names, then visit your fellow collectors and the nurseries and discuss their possibilities for your area. We will always be happy and ready to assist you and to show you our gardens and collections.

The "Welcome Mat" is always out at "The Gums."

Los Angeles Camellia Society

The Los Angeles Camellia Society will hold its March meeting on Tuesday, March 1, 1966, at the Women's Club of Hollywood at 1749 North LaBrea Avenue, just north of Hollywood Boulevard in Hollywood. Placement of flowers and floral arrangements will start at 7:30 P.M. and the meeting at 8:00 o'clock.

The guest speaker will be Mr. David L. Feathers, retired Editor of the Camellia Bulletin of the Northern California Camellia Society, who will present a program entitled "Camellia Travels". Mr. Feathers is one of the world's most highly recognized hybridists, and has traveled quite extensively. This will be an exceptional opportunity for new camellia people to meet this outstanding authority on camellias, and for his friends to meet and visit with him once again. His program will be of great interest to all camellia people and friends.

The Society extends a cordial invitation to all Camellia Society members and friends to this meeting.

THE K. O. HESTER CAMELLIA GARDEN

Located in the Micke Grove Garden at Lodi, California, which is approximately ten miles north of Stockton and thirty-eight miles south of Sacramento, a new camellia garden has been born. Micke Grove is a beautiful regional park operated by San Joaquin County under the direct supervision of Mr. James E. Fahey, Park Superintendent, Located adjacent to an authentic Japanese Garden, constructed and donated to San Joaquin County by the Japanese-American citizens of that County, the camellias are planted along winding paths under giant deciduous black oaks and California live oaks. The camellia garden was designed by Mark J. Anthony, Superintendent of Descanso Gardens in La Canada, California, who also laid out the Lucy Hester Memorial Garden in Descanso Gardens.

Mr. Hester, upon moving from

Glendale, California to Stockton, again started to collect and propagate camellias until his lath house was full to overflowing. Wanting to further the interest in camellias in the area of his new home, he donated 340 of his choicest varieties to the County of San Joaquin so that they can be enjoyed by all the park visitors. As new camellias of merit are introduced to the camellia world, Mr. Hester intends to procure them and plant them in this new show garden.

Dedication ceremonies for the new garden will take place at Micke Grove on Friday, March 4, 1966 at 2:30 P.M. The dedicatory address will be made by Dr. William S. Stewart, Director of the Department of Arboreta and Botanic Gardens of Los Angeles County. Members of all camellia societies in California are invited to the ceremonies.



The K. O. Hester Camellia Garden in Micke Grove.

CALIFORNIA'S TOP SHOW BLOOMS: 1961-1965

Warren Addicott

Portola Valley, California

Which blooms catch the judge's eye, or fancy, and make it up to the honor table? Are they sold on the "big, big red" as some would have us believe or do they go for the softer hues and delicately variegated or marked forms? How well have Pacific Coast introductions fared in our shows? Are the highly regarded new introductions making early inroads on the older varieties? These are but a few of the questions that revolve around the results from our competitive shows. They are usually good for lively discussion and probably will elicit as many answers as there are serious camellia exhibitors. In any event, a statistical resume becomes a necessary starting point from which interpretation or speculation can proceed.

Analyses that have appeared in past issues of CAMELLIA REVIEW such as Frank Reed's (1963; v. 24, no. 6; v. 25, no. 1) have included results from the Southern California Camellia Society meeting night competition and shows from San Diego to Bakersfield. To get a broader based picture of camellia interest, this review includes results from central and northern California, an area of rapidly proliferating interest in competitive exhibition of camellias. During the initial year of the half decade 1961-1965, for example, only two competitive shows were held north of Fresno the Sacramento and Northern California Society shows. By 1965, however, the number had swollen to five and at least one more show is on the horizon for 1966. Because most of the shows held in the northern part of the state are relative newcomers to the California scene, their results were tabulated separately so as to permit comparison of varietal preferences from one part of the state to the other.

In tabulating results point scores were awarded on this basis: 6 for best japonica, 5 for runner-up, 3 each for court of honor blooms and best multiples, and 1 each for multiple runner-up and court of honor blooms. As in any rating scheme the weighting of categories is arbitrary. In this system recognition of a meritorious bloom in singles competition is considered more significant than similar selection of a multiple entry because the latter is predicated, in part, on attributes other than the intrinsic beauty of the flower. Show results are from issues of CAMELLIA REVIEW and CAMELLIA BULLETIN. Blooms are arranged by combined northern and southern California scores in the accompanying table. Where two or more blooms have identical point scores, they are ranked according to the greatest number of best or runnerup awards received. For example, 'Guilio Nuccio' and 'Clarise Carleton' both won two best japonica trophies but 'Nuccio' held the edge in runnerup awards: 3 to 1.

Examination of the results shows that 'Carter's Sunburst' clearly merits recognition as California's most outstanding show flower of recent years. Its superiority is confirmed by the added facts that it has won more best japonica trophies and has been on the Court of Honor table more than any of the other leading contenders. It is closely followed in each of these three categories by 'Mrs. D. W. Davis', the undisputed second best japonica of the period 1961-1965.

Overall ratings are strongly influenced by the southern California show winners, there having been many more shows in the southern part of the state during the last five years. The top 10 include varieties that ranked no lower than 12th in the southern California

poll whereas four of the 10 best varieties — 'Angel', 'Ballet Dancer', 'To-morrow', and 'Clarise Carleton' were less consistent winners at the northern shows. Some of the striking regional differences are the relatively low position of two southern California favorites, 'Clarise Carleton' (2) and 'Drama Girl' (5), in northern California. On the other hand two of the top five in northern California —

'C. M. Wilson' (4) and 'Spring Sonnet' (5) — attracted little recognition in southern California during the period 1961-1965. It is clear that local growing conditions are at least partly responsible for these differences, particularly in the case of 'Clarise Carleton' - a certain winner when the incomparable Bakersfield-grown blooms are exhibited in the February shows (Continued on next page)

BEST JAPONICAS IN CALIFORNIA: 1961-1965 Based on Total Points

	Variety	Total Points		if. shows go-Fresno) (rank)		if. shows o-north) (rank)
1	Carter's Sunburst	91	51	(4)	40	(1)
2	Mrs. D. W. Davis	82	5 3	(3)	29	(3)
3	Betty Sheffield Supreme	70	38	(11)	₋ 32	(2)
4	Ballet Dancer	69	57	(1)	12	(15)
5	Guilio Nuccio Var.	61	45	(8)	16	(10)
6	Angel	60	48	(7)	12	(16)
7	Tomorrow	59	50	(6)	9	
8	Reg Ragland Var.	57	41	(9)	16	(8)
9	Giulio Nuccio	57	38	(12)	19	(6)
10	Clarise Carleton	57	54	(2)	3	
11	Drama Girl	57	51	(5)	6	
12	Kramer's Supreme	57	38	(13)	19	(7)
13	R. L. Wheeler	5 3	37	(14)	16	(9)
14	White Nun	46	39	(10)	7	
15	Reg Ragland	43	28	(16)	15	(11)
16	Spring Sonnet	39	17		22	(5)
17	Dr. Tinsley	36	33	(15)	3	
18	C. M. Wilson	29	6		2 3	(4)
19	Lady in Red	28	23	(17)	5	
20	Coronation	25	18		7	
21	Ville de Nantes	2 3	14		9	
22	Magnoliaeflora	22	12		10	(19)
23	Mathotiana Supreme	21	21	(18)		
24	Glen 40	21	18		3	
25	Destiny	21*	12		9	
26	Vulcan	21*	15		6	
27	Sawada's Dream	20	14		6	
28	Betty Robinson	19	19	(19)		
29	Iwane	19	19	(20)		
30	Charlotte Bradford	19	17		2	
31	Shiro Chan	19	6		13	(13)
32	Elegans	18*	15		3	
33	Marie Bracey	18*	18			
34	New Horizons	18*	3		15	(11)
35	Onetia Holland	18	15		· · ·3	

^{*} tie, other varieties with equal points are ranked on the basis of greatest number of best in show awards.

in southern California — and 'C. M. Wilson' — a regular winner for Sacramento growers at northern California shows.

Judges' preference clearly swings toward the lighter colored solid and variegated blooms as evidenced by the four most popular varieties: 'Carter's Sunburst', 'Mrs. D. W. Davis', 'Betty Sheffield Supreme', and 'Ballet Dancer'. Solid colored and mottled reds such as 'Guilio Nuccio', 'Reg Ragland', 'Tomorrow', 'Clarise Carleton', and 'Kramer's Supreme' are not far behind. The lighter colored blooms are more highly favored in northern California shows where 12 out of the top 20 blooms are on the light side whereas the southern California list includes only 8.

The sometimes voiced opinion "the bigger and redder the better", if not entirely true, is born out in part by the relatively few smaller blooms in the top 20. 'Ballet Dancer' (4th), 'Spring Sonnet' (16th), and 'Dr. Tinsley' (17th) are the only varieties not in the large or very large categories.

Seventy percent of the 20 best blooms are California introductions, seven each in the first and second group of 10. McCaskill's Gardens claims the greatest number of introductions to make this select group, four ('White Nun', 'Spring Sonnet', 'Lady in Red', and 'Coronation'), although none is among the top 10.

Varieties that most frequently made

it to the winner's circle or Court of Honor, in order of the greatest number of appearances, are: 'Carter's Sunburst' (26), 'Mrs. D. W. Davis' (24), 'Kramer's Supreme' (21), 'Betty Sheffield Supreme', 'Drama Girl', and 'Guilio Nuccio var.' (19), 'R. L. Wheeler' (18), 'Angel', 'Ballet Dancer', and 'Tomorrow' (18), 'Guilio Nuccio' (16), 'Reg Ragland var.' (15), 'Clarise Carleton', 'Reg Ragland', 'Spring Sonnet', and 'White Nun' (13). Neither the high ranking 'Kramer's Supreme' nor 'R. L. Wĥeeler' has won a best japonica award. Kramer's, however, is a consistent court of honor bloom and 'R. L. Wheeler' is the most winning variety in multiple competition with seven bests, followed by 'White Nun' (5), 'Tomorrow' (4), and host of others

BEST JAPONICAS IN CALIFORNIA: 1965 28 1 Ballet Dancer 2 Guilio Nuccio Var. 22 3 18 Carter's Sunburst 17 4 Kramer's Supreme 5 15 Angel White Nun 15 6 Guilio Nuccio 15 Clarise Carleton 12 Mrs. D. W. Davis Peony Reg Ragland Var. 9 Lady Kay 12 10 Tiffany 12 11 Betty Sheffield Supreme 10 12 Mrs. D. W. Davis 10

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The 14 best blooms in 1965 California shows are not greatly changed from the five year 1961-1965 group. They were determined by the same scoring system as the 1961-1965 group. Besides some realignment, three of the relatively older varieties, 'Drama Girl', 'R. L. Wheeler', and 'Tomorrow', seem to have fallen from favor. Their replacements were 'Mrs. D. W. Davis Peony', 'Lady Kay', and 'Tiffany'. In all probability single year results are not as significant as averages over a period of two or more years.

Similar analysis of reticulata awards finds 'Buddha' and 'Crimson Robe' well ahead of other varieties. 'Buddha' has scored most frequently in multiple competition whereas 'Crimson Robe' enjoys a slight edge in the single bloom category. Other retics have been less than half as successful as these two in winning trophy awards.

Rating miniatures presents a number of problems not the least of which have been the changing size classification and variable show rules. After the transfer of many blooms once classed as miniature into the small category in the 1964 CAMELLIA NOMENCLATURE, many show chairmen permitted a relaxation of rules to allow a variety classified as small, such as

BEST "MINIATURES" IN CALIFORNIA: 1961-1965

	Variety	Points
1	Pearl's Pet	52
2	Fircone	42
3	Fircone Var.	34
4	Kitty	34
5	Hopkin's Pink	33
6	Memento	18
7	Miss Muffet	13
8	Tinker Bell	12
	Tinsie	12
9	Johnny's Folly	12
0.	Little Bit	11

'Kitty', to compete in the miniature class if a bloom less than 21/2 inches in diameter was entered. There is also a growing trend of including both smalls and miniatures in a combined boutonniere class. With this in mind it is not surprising that four of the "miniatures" in the following list are classified as small in the 1964 Nomenclature: 'Kitty', 'Tinker Bell', 'Johnny's Folly', and 'Little Bit'. The miniature that clearly stands out above all others is 'Pearl's Pet', perhaps to no one's surprise. Additional varieties of about equal, but lesser, popularity are: 'Fircone', 'Fircone Var.', 'Hopkin's Pink', and 'Kitty'.

It will be interesting indeed to see to what extent the ever increasing number of highly publicized new japonica introductions makes inroads on

(Continued on page 32)

BEST RETICULATAS IN CALIFORNIA: 1961-1965

Variety	Points	Best single awards	Best multiple awards
Buddha	161	12	15
Crimson Robe	147	13	11
Moutancha	73	7	4
Noble Pearl	69	6	4.
Purple Gown	63	4	6
Tali Queen	46	4,	1
Chang's Temple	44	1	4
Lionhead	41	2	2
Willow Wand	21	3	1
Captain Rawes	19	1	_ 2
	19	1	· n ī
Confucius	18	2	1
	Buddha Crimson Robe Moutancha Noble Pearl Purple Gown Tali Queen Chang's Temple Lionhead Willow Wand Captain Rawes Butterfly Wings	Buddha 161 Crimson Robe 147 Moutancha 73 Noble Pearl 69 Purple Gown 63 Tali Queen 46 Chang's Temple 44 Lionhead 41 Willow Wand 21 Captain Rawes 19 Butterfly Wings 19	Buddha 161 12 Crimson Robe 147 13 Moutancha 73 7 Noble Pearl 69 6 Purple Gown 63 4 Tali Queen 46 4 Chang's Temple 44 1 Lionhead 41 2 Willow Wand 21 3 Captain Rawes 19 1 Butterfly Wings 19 1

THE RETICULATA STORY

Alvin L. Gunn Lynwood, California

Editor's note: This article was written by Mr. Gunn from his notes for a talk to the members of the Temple City Camellia Society.

Many articles have been written on the culture, blooms, growth habits and the exciting purchase of the Yunnan Reticulatas. Unfortunately, many of the fine articles and publications are no longer available to the newcomer in the camellia hobby. This article will attempt to cover a little of the history and the writer's experiences in growing these prized varieties.

One of the most exciting parts of the Reticulata Story must have been the contacting of Prof. Tsai in China and the arrangements made to purchase 20 varieties at a cost of \$15 each for fourteen of the varieties and \$30 each for the other six. There were two groups who made the contact at approximately the same time. One of the groups was headed by Manchester Boddy and his associate Walter Lammerts and the other headed by the late Ralph Peer. The fumigating of the plants on arrival by the U.S. Department of Agriculture took its toll on a number of varieties which of course, are impossible to obtain now from Red China. With the exception of the varieties 'Prof. Tsai', 'Confucius' and 'Buddha', which were the results of crosses made by Prof. Tsai, the other varieties have been known as far back as 900 A.D. Chinese records listed as many as 72 varieties, one of these being white. The flowers were used in some of their religious activities and the plants prized as specimens in the wealthy Chinese gardens. In the fifteen years these plants have been available to the public it seems strange that only a few good seedlings have been shown. It isn't so strange if you consider the per cent of good japonicas introduced against the number of seedlings grown. Probably less than

1 to 1000. Retick seed take about a month longer to ripen than a japonica. Occasionally a pod will split early showing the white seed inside. Don't pick it, let it fully ripen and form the hard brown cover. Three or four years ago my plants had a good seed crop. As the japonica seed ripened and split open I couldn't stand it any longer so I proceeded to pick all of the seed pods. The next hour was spent in cutting away the tough outer seed pod to expose one to fifteen nice white seed inside of each pod, some sixty in total. The seed were planted in onehalf peat moss and one-half sand and placed in a heated cold frame. Guess what, they all mildewed and died a horrible death.

This season there were only three pods on about thirty plants and the birds ate half of the seed in one of those pods before it was ripe enough to pick, so Harold Dryden received \$3 for sixty more. These were planted in a new material called Con Rock mixed with equal parts of peat moss. This material is said to be an excellent rooting medium for seed or cuttings. In a month, forty of the seed had sprouted long enough tap roots to pinch, these were dipped in a rooting hormone and replanted. Retick seedlings generally have a stronger root system than a japonica and will bloom anywhere from three years up.

There was an article in the Review some time back stating that one of the methods of Propagating Reticks in England was by cutting. Being a believer in anything I read or that is told me as a big secret, the heated cold frame received a number of cuttings. Most of them dropped their leaves with no sign of callusing. A couple of 'Crimson Robe', 'Chang's Temple' and 'Buddha' did callus and form a white knot with a number of

wart-like protrusions on the ends. They never did form roots.

A method which looked like it might be successful is taking a Japonica and a Retick cutting with the ends cut as you would a scion for bark grafting, then placing the cut ends together they are tied. The two callus and bond together with the Japonica growing the roots. This is the slow, but cheap way to propagate Reticks.

The Chinese told us the only way to propagate was by the approach graft. We, of course, have found that the bark or cleft graft gives us reasonable results on most varieties. Best results are obtained in mid-March and mid-July. I have had the best results using the bark cleft. If you graft some of the slower growing varieties such as 'Moutancha', you should use good sized vigorous understock or be young enough to be able to wait for a good sized plant.

A number of the varieties can make attractive bushes if they are in a good soil mix, they are not over fertilized or over watered, they are pruned enough to cut out the dead wood and the long leggy branches are kept cut back to side branches and last but not least, if you live a good clean life.

A little discussion on watering. Most of us have too many plants to water as we should, which would be to water only when the individual plant needs it. So we set up a schedule to water on such and such days, or when a few are dry we water a block of them whether they need it or not. Japonicas generally will hold up on this kind of abuse. So what is the solution? I'm not sure that anyone knows, but try this on for a little logic. Most of us use anywhere from 30 to 75% peat moss in our soil mixes which holds umpteen times its weight in water. Then we put in one or more parts of sand (generally more for Reticks) so the water will wash out the accumulated salts. Now what would be a good replacement for peat moss? Something which holds moisture though not as much moisture. Something which won't break down too rapidly robbing the plant of nitrogen and leaving the roots in a gummy sour mess. There are probably a number of materials which would fill the requirements. One of them is rice hulls. They are light, cheap and don't hold near the moisture that peat moss does, I started replacing half of the peat with rice hulls several years ago and it seems to work out very well. The disadvantage is pulling rice plants out of the containers after first transplanting. Another material which looks as if it may solve the problem is Redwood Bark. A number of the hobbyists are using it with good results. Nuccio started using the bark a couple of years ago and after bare rooting a couple of them and seeing the white feeder roots felt this could solve the Retick wet foot problem. Their mix consists of one part sand, two parts sandy loam and three parts bark. Mine is 1½ parts sand, 1 part loam, $1\frac{1}{2}$ rice hulls and $1\frac{1}{2}$ part peat moss. There are a few sad plants in my lath house which will be planted in bark with probably a little more sand added because I'm kind of a nut on watering.

A pretty universal schedule for fertilizing is two or three times a year, six weeks apart starting in March. Cotton seed meal is probably used more than any other fertilizer. I use a liquid in the middle of March and then to cotton seed about six weeks apart through October, if I get around to it. A good way to feed iron is mix one part iron to five part cotton seed. Water your plants the day before fertilizing and wet the cotton seed down lightly after applying. Normally we feed Reticks a little lighter than the Japonicas because of the sparce foliage. There is surely no reason to cut down on fertilizer on a healthy vigorous full foliaged Retick, A word of caution on soil mixes and fertilizing. If you have good Reticks don't

(Continued on next page)

change to the Nuccio system or the Gunn system or any other system; what works well for them may not work worth a toot for you. Each of us water and fertilize a little differently and we have different climates.

One phase of Retick culture which is pretty well agreed upon is to keep them in the warmest part of the shade house. If you have good soil they do quite well planted in the ground in full sun. There is no doubt that a Retick planted in the ground will be a better plant, produce better flowers and be less of a problem in watering and fertilizing.

Now to the touchy subject, pruning. I wonder how many times in the last few years we have heard, "I'm not going to ruin my plants by pruning. I cut a branch back once and it died". Sure if you cut one or two straggly branches back they may die. If you have a healthy plant and you do a thorough job of pruning, cutting back those long leggy branches to some inside branches, you will be amazed at the growth buds which will push out that you couldn't even see.

No!!! Don't like it? Ok, so you have a four foot branch with a flower on it. The flower isn't as good as the flower which was on the same branch last year, but it's probably better than the one which will be 4 to 6" further out on it next year. So when you lovingly cut the flower for the show with a couple of leaves attached, "which by the way has probably eliminated 25% of the leaves on the branch". you have already cut off the terminal growth bud, why not right then cut it back a foot or two to some inside branches. If you have a seed forming on the end of a branch and you want to force the back growth, flick off the growth bud next to the seed. Often new growth will break off the seed pod the same as some of the late bloomers lose their flower buds with new growth.

Off to another phase of the Retick Story. Who would like to buy some stupid pills guaranteed to teach you some of the best ways to ruin good plants. I've probably ruined more good Reticks than the average grower ever owned. There are or were a dozen nice plants in the ground in my lath house planted next to the property line. The neighbors have a 10' Pyracantha, a 10' Eugenia and miscellaneous plants also planted next to the property line. When these Reticks were tenderly planted it seemed easy to occasionally cut the roots between the two sets of plants. Root pruning is like branch pruning, one root cut branches from three to a zillion roots. Result, three dead plants and three to go if they aren't removed. The same thing happened in planting under some Modesto Ash which have more surface roots than leaves. If you want the protection of trees, leave the plants in containers unless the trees are a deep rooted variety. A Retick seems to suffer more from the competition than a Japonica.

The Review carried an article by a gent who claimed he could tell a Retick or a Hybrid from the smell of the bark. I'm a believer. On arriving home from work one evening the wife greeted me with, "Honey you're going to hate me." The reason was a four or five month old Boxer pup, not house broken. This beautiful pup would rather dig or chew on branches than eat and she loved to eat. I'd keep finding her either playing with, or chewing on branches from my plants, always Reticks. We should have kept her to help Dr. Parks with his specie tests.

Reticks should be disbudded the same as our other Camellias. They are best taken off when they are about the size of a pea. If they are allowed to grow much larger, a leaf will break off with the bud. Now we are down to the "Proof of the Poodin". When to pick a flower. A flower like 'Crimson Robe" will probably grow ½" to 1" in size if you leave it a couple of days after it has fully opened. So you

have size and what you gained in size you have more than lost in the condition of the flower and the looks of the stamens. So let the flower open fully and then pick it the next morning and put it in a plastic box in the refrigerator. Don't spray water on it; if you do, shield the stamens or they will turn black. In fact, once the flower starts to open don't even walk by it with a garden hose or the stamens will turn dark.

As to my experience with the various varieties, 'Crimson Robe' rates number one. The flowers are generally good size and color. A good per cent of them rabbit ear to give the desired form for a robe. The plant grafts easily and is a good strong heavily foliaged plant for a Retick.

'Noble Pearl' or 'Tali Queen' are certainly two of the top show flowers of the group. It is generally a higher built flower and not as red as a Robe, but there are times it is impossible to tell the difference between them.

I'm sure most of you know there is some confusion in nomenclature between 'Noble Pearl' and 'Tali Queen', the three varieties 'Chang's Temple', 'Lion Head' and 'Cornelian' and between 'Willow Wand' and 'Takeiyeh'. My understanding is that some of the Chinese names were unacceptable because of the difficulty in pronunciation. When Descanso applied their set of names (which by the way, I doubt if Harvey Short could have done better) these varieties then had four names, the Chinese, Prof. Tsai, Dr. Yu and Descanso.

The 'Chang's Temple' group doesn't win as many shows, but is certainly among the top flowers of the species. The full peony type flower with its variegated red and white lacks only size to be a top show winner. The plants have small foliage and can be attractive bushy plants.

'Buddha' is a beautifully styled flower, the color and sheen are outstanding. They will attain good size but not in my garden. The foliage is long, thin and a light green. It is a strong vigorous grower.

'Purple Gown' is the favorite of many. The color is a purple to black red. It attains good size and is one of the more attractive plants. It is difficult to graft.

'Shot Silk' is a good flower and a better than average plant. It lacks size and style to be in the show winner class. I have seen a number of them pruned into a tree rose shape and they are a show piece when they bloom.

'Moutancha' is a beautiful flower but usually blooms too late for the shows. It is a poor one to graft. The growth is very slow and spreading.

'Butterfly Wings' can be an excellent flower but has the poorest keeping qualities of them all.

'Confucius' is probably the most attractive shrub. The center of the flower spoils it for me.

'Pagoda', a loose formal, is liked by some. It doesn't have the size or condition to excite me.

This pretty well covers the ones worth mentioning. Some of the new ones coming along will take their place among the top flowers and shrubs. 'Wm. Hertrich' appears to be an excellent shrub and a good flower. I don't know it well enough yet to evaluate it.

There is one more part of the Retick story not covered, hybridizing. From the time these plants first arrived their pollen has been daubed on everything available, Results, much.

Finally Howard Asper took 'Coronation' pollen to 'Lion Head', results Boy!!, the variety 'Howard Asper'. Since that time some good ones are starting to show up. The plants are a big improvement on the Reticks. A little at a time we get a break in color and form, but for styling, color and beauty of the individual flower to me 'Crimson Robe' remains the King of the Camellias.

A FERTILIZING PROGRAM

Melvin L. Gum

Long Beach, California

Every time fertilizer is mentioned I can't help but think of Harriet H. Houser of Perry, Georgia and her article "A Wiser Fertilizer" in the American Camellia Society Year Book of 1962-63. What an exasperating experience she had, topped by the pleasure she has given to readers. It brings a laugh to me as I read and re-read it.

By being both a wheat farmer and a merchant, I felt by the results that we were getting in fertilizing wheat with different chemicals that there must be something new in fertilizers for flowers. So I began my search. For the past 100 years most of us have thought of the word fertilizer as nitrogen. We must not forget that plants are like the human body, they cannot thrive on one thing and one thing alone. A good balanced diet is necessary for a real healthy plant.

After deciding upon my soil mix, I had both the water and soil tested to determine its content so it could be supplemented with fertilizer. If you don't have a way to determine this in your county, contact your local agriculture department or county agent as they are known in some places. They will be glad to assist you.

In watering the plants I leach them; by doing this, most of the food will be washed away. I fertilize every four to six weeks, preferring to stay on a forty-five day schedule. Let us begin with the first of March, I feed with a water soluble 6-10-8 formula, fortified with chelated iron and zinc and rich fish concentrate, that contains no chloride or salts, a plus value camellias will thrive on. This helps give the plant a quick take off. Within thirty days, I feed heavily with cotton seed meal. I prefer to cake it on; by this I mean, after applying it take a fog nozzle or fine spray and dampen it enough to cake. This makes what I call a cotton seed cake. Do not rub it in. After several waterings you will note that most of the cotton seed has disappeared. Now it is time to start the forty-five day schedule, continuing with the 6-10-8 formula until September. Each time I use the liquid fertilizer, I wash the foliage with it too. You may then feed light cotton seed again, or do as I have this year, change to a 2-10-10 formula. Note that practically all the nitrogen has been omitted. Now, I have only one thing in mind — the crop to be harvested, "blooms."

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The plants are healthy and strong, because 2-10-10 formula contains a small amount of nitrogen, more phosphoric acid, potash and other tracer elements. Remember I said in a previous article that the bloom is 90% water, therefore it is only logical that some of these food particles and tracer elements go directly to the bloom resulting in a better flower. The plant will have needed strength for the branches and will develop buds and true color in the bloom. As spring approaches the plants do not look tired and worn out, thus you have a good plant to work with throughout the summer months.

I also feed this to my seedlings and new grafts after they are hardened. The two formulas that I mentioned are made up special for camellias. The man who developed these for the camellia growers made a thorough study of the camellia plant, its habits and performance, before he developed these formulas.

Liquid fertilizers seem to be gaining in favor each year, and to me seem to be the safest and surest for use by the casual gardener. The correct dilution may be applied by either the hose end applicator method, or by (Continued on page 32)

CALIFORNIA CAMELLIA SHOW SCHEDULE 1965-1966 SEASON

Date	Sponsor	Location
Feb. 12-13, 1966	Pomona Valley Camellia Society	Pomona First Federal Savings & Loan Assn. 399 N. Garey Ave., Pomona
Feb. 12-13, 1966	San Diego Camellia Society	Conference Bldg., Balboa Park, San Diego
Feb. 19-20, 1966	Temple City Camellia Society	L. A. County Arboretum Lecture Hall, Arcadia
Feb. 19-20, 1966	Peninsula Camellia Society	Veterans' Memorial Bldg., Redwood City
Feb. 26-27, 1966	L. A. Camellia Council	Descanso Gardens, La Canada
Feb. 26-27, 1966	Delta Camellia Society	Park Junior High School, Antioch
Mar. 5-6, 1966	Camellia Society of Sacramento	Memorial Auditorium, 15th & J Sts., Sacramento
Mar. 12-13, 1966	Camellia Society of Kern County	San Joaquin Tractor Bldg., Bakersfield
Mar. 12-13, 1966	Northern California Camellia Society	Diablo Valley College, Pleasant Hills, Concord
Mar. 13, 1966	Central California Camellia Society	McLane High School, 2727 N. Cedar Ave., Fresno
Mar. 19-20, 1966	Camellia Society of Modesto	Student Center of Modesto Junior College, Modesto

QUESTIONS and ANSWERS

A. Wilkins Garner

Q. What can I do to control flower blight? Explain what to apply, how and when.

A. Housekeeping around your plants should be continued by removing all old blossoms and picking up every petal that falls. This will help only with future control of the blight. There is a product which can be used for limited control for a period up to thirty days, called "Terraclor". It is available in powder form for use in a dust gun, as a wettable powder, and in liquid form. The powder form is very effective, however it is the most dangerous form to apply of any. Most people are allergic to this material and one should protect himself by wearing mask and gloves, being sure to change clothes and washing himself thoroughly afterwards. Apply the material liberally to the soil around the plant and for container plants apply also to the ground around the container.

The wettable powder type will give adequate control if a sufficient amount is applied. As in the case of any wettable material, agitation is needed in order to keep the material suspended in the solution. This can be done by using a Hayes sprayer of the type designed to handle wettable material. You can provide adequate agitation

simply by shaking the sprayer throughout the application. Many people prefer to use the wettable type.

The liquid material is the easiest type to apply. It works easily in any

regular sprayer.

Apply the material around the plant the same regardless of the type of "Terraclor" you use. Be careful to avoid getting the material on open or partially open blossoms. It will spot the flowers and ruin a good show entry. There is still time to apply "Terraclor" and get effective control for the shows. It is better, however, to make first application about January 20th and again two or three weeks later.

Q. What can I do for the remainder of the blooming season to get the best quality flowers from the buds already set on my plants?

A. Inspect your plants to see if you are doing a good job of grooming for show flowers. Examine for and remove any dead wood. At the same time remove any weak and spindly branches. You do not want your plant to waste any power trying to open a bud on a spindly branch.

If you haven't already done a thor-(Continued on page 28)

JUST RELEASED

BELLE OF THE BALL • BLAZE OF GLORY • DOVE OF PEACE

KIMI YAMAMOTO • COTTONTAIL (Miniature)

LITTLE RED RIDINGHOOD (Miniature) • SNOW BABY (Miniature)

BLACK KNIGHT (Hybrid) • LITTLE LAVENDAR (Hybrid Miniature)

McCASKILL GARDENS

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PASADENA, CALIFORNIA

CAMELLIA NURSERYMEN'S "BREAD & BUTTER" VARIETIES

Camellia nurservmen would go broke if they based their inventories of camellia varieties on the purchasing habits of camellia society members or on the varieties that reach the Court of Honor in camellia shows. The camellia hobbyists set the pattern for future popular preferences by showing the newer varieties and whetting the public appetite. Most of the people who buy camellias, however, do not regularly visit the camellia shows and the process through which a variety goes until it becomes a popular favorite is a long one. It has been stated that it takes at least ten vears after it is released before a variety becomes what the nurserymen call a "bread and butter" variety. 'Drama Girl' (introduced in 1950), 'Guilio Nuccio' (1956), 'Mrs. D. W. Davis' (1955), 'Reg Ragland' (1954), 'Spring Sonnet' (1952) and 'Tomorrow' (1953) are just now entering this group.

Camellia nurservmen define "bread and butter" variety as one which can be grown and sold wholesale in quantity at a price which will provide a profit for the nurserymen and will be sufficiently attractive to the public to cause a purchaser "who doesn't know camellias" to buy it. Many of these prospective buyers still go to their neighborhood nurserymen to buy a red or white or pink camellia. \$2.50 or \$3.00 for a gallon size plant is often about as much as they want to pay. While the amount of an average purchase is not high, the number of such purchasers is high and creates the volume of plants sold.

The source of the plants that are sold by the hundreds of these neighborhood nurserymen is the wholesale nurseryman. He may sell at retail as well as wholesale, as Nuccio's Nurseries in Altadena, California and Kramer Bros, Nursery in Upland,

California do. More likely, however, the plants have been propagated by a wholesale nurservman who deals in a wide assortment of plants. Monrovia Nursery Company of Azusa, California (the originators of the new pink formal 'Pink Pagoda') is one of the largest, if not the largest, propagators of potted plants in the United States and carries camellias as only one of their cataloged items. Select Camellias, Inc. of Whittier, California (who have introduced 'Tiffany' and the new reticulata 'Fire Chief') is the camellia producing subsidiary of broader operating Tomlinson's Nurseries in the same city. While the volume of wholesale sales of such nurseries as Nuccio's and Kramer's is substantial, it is a small part of the wholesale camellia business. They must compete, however, with the strictly wholesale companies whose salesmen carry a catalog that includes most of the retail nurseryman's needs.

What are the ingredients of a bread and butter variety. First, the price must be low since most of the sales are to people who are seeking only a good looking plant with flowers on it. They are often happy with flowers that a good camellia show committee would not accept for a show. Second. it should be popularly known, 'Pink Perfection' is in this group, despite the fact that it is in the collection of few camellia hobbyists. Third, it must grow easily on its own route because this is the only way in which the nurseryman can hold his costs down and thereby meet the requirement for low price.

Contrast this with what must be faced with the varieties that camellia hobbyists seek. In the first place, they are seeking new varieties. It takes several years from the time that a potential new introduction is first seen

(Continued on next page)

on a new seedling plant until it can be introduced. Time must be allowed for reasonable self-assurance that the seedling will be a winner. This may be the first year, but more often it will be two or three years. At this point grafts are made to see how the plant propagates, only a few grafts at this time. This builds up wood for the next year's grafts. The inventory is built up as there is increased assurance that the flower will be good and as wood grows for more grafts. The final step, a year before the new variety's release, is to make a couple of thousand gallon grafts. The earlier grafts will then be available for sale in egg can size. And then after these years of looking and waiting and making grafts of these collectors' items, the nurseryman has only a year, or two years at the most, to make a "killing". In this year of introduction of the new variety, the grafts of new seedlings that looked so hopeful at first but did not pass the successive tests are being used for understock for a new seedling that looks as though it might be a future champion.

After the first year or two, the new variety becomes only one of the newer varieties which the nurseryman must keep in stock. This also involves the more expensive method of grafting because there would not be time for growing the plants to marketable size on their own roots.

It is understandable why the large wholesale camellia nurseryman such as Monrovia Nursery Company asks, "Why look for a new variety that will replace 'Debutante'? It takes years to build up a trade in a variety. Members of camellia societies owe their gratitude to the nurserymen who grow for the pleasures of camellia hobbyists while they also go after the "bread and butter" business.

What are these "bread and butter" varieties? Here is a partial list for Southern California: 'Alba Plena' (even though it is hard to propagate),

'Blood of China', 'C. M. Hovey' ('Jordan's Pride'), 'Covina', the Daik family, 'Debutante', 'Elegans', 'Finlandia', 'Glen 40', 'Herme', 'Kumasaka', 'Lallarook', 'Magnoliaeflora', 'Mathotiana', 'Mrs. Tingley', 'Pink Perfection', 'Prince Eugene Napolian' ('Pope Pius IX'). A wholesale nurseryman may not carry all these varieties but they collectively represent the group that keep these people in business. As was stated earlier, varieties introduced since World War II are now edging into this group.

QUESTIONS (Continued)

ough job of disbudding, you should immediately disbud to only one bud on a terminal. Even though the plant has used up a lot of vigor in bringing these excess buds to this development, by removing surplus buds the plant will bloom out a much better quality flower from the remaining buds. Do not do a heavy pruning job now as you are likely to throw the plant into new growth.

If you have done an adequate job of spraying for the leaf eating worms, fine; but if not, you should spray with one of the materials containing lindane and/or malathion. A half-eaten leaf does nothing for a show flower.

Your flowers are about 90% water. This means the plants require a good supply of moisture to bloom those large flowers. With adequate drainage, you are not likely to over water. If you do not have adequate drainage, you will want to do something about that after blooming season.

Have a happy time with your flowers at the shows!

SOIL MIX (Continued)

seen a drop in our foliage at all with fir bark. We thought we would have to feed more is what I am driving at, and I don't believe you have to step up your fertilizer program at all.

THE HYBRID — ITS ADOLESCENCE AND ITS MATURITY*

J. Carroll Reiners
Sacramento, California

The Camellia Hybrid has reached its adolescent age without a chaperon. And, as in childhood, the youngster has developed an understanding by its trials and errors in this formative

stage.

Maturity is around the corner but it will take considerable parental guidance to steer it from its past delinquent ways. The hybrid blooms which we see in our shows bear testimony to lack of uniform programming for goals of achievement. During the past four years the number of blooms entered in the hybrid classes in the Sacramento show has been static and not too encouraging. Total flowers for each year from 1961 through 1965 has never been greater than 78 or less than 72. This might seem discouraging when one considers that this show displays between eight and nine thousand flowers. The hybrid has received enthusiastic publicity but moderate acceptance. Why? Let's review the development of this fascinating pic-

The smoldering genes of camellia hybriditis exploded loud and clear about 1950. All of the temperate areas of the free world became growing grounds for camellia hybrids, the seed progeny from the cross-pollination of two camellia species. The original ground work, which began in 1940 in England, had been quietly appraised for ten years. Beginning in the late 1940's the Kunming Reticulatas, in 1948, and other camellia species had been long overdue for exploitation. The all too sudden interest in interspecific breeding was slightly analagous to the 1849 gold rush to California. Perhaps it happened too quickly and with too much glowing publicity — too much was expected too quickly. The means for hybridizing were complicated by the unclear camellia genealogy, scrambled in the gardens of oriental antiquity. Many imported species, first thought to be purely aboriginal have indicated possible previous hybridity. This, added to the addled inheritance traits of *C. japonica*, left the hybridizers with unpredictable result probabilities.

The pioneering of the camellia hybrid was about completed in 1960 with its child of twelve years, unguided, but eager and willing to learn. It gave us many new camellia growing forms in plant, leaf, flower and fruit. The primary fault in many of the flowers in this uninhibited period were poor substance, little lasting quality, shattering, darkening of stamens, poor color saturation, a limited color range and, frequently, poor bush character. The forms were interesting, but generally the flowers of this period must be classed as novelties, few will become old favorites. This formative twelve-year period of hybrids produced too few exhibition type flowers for those people psychologically conditioned to show flowers. The primary value of some of these early plants was in their suitability for landscape use because of their floriferousness, but this fact was seldom exploited. The pioneer period was one of productivity, with enthusiasm often overriding good judgment.

By 1960 the storehouse of camellia species and allied genera were grouped for genetic compatibility. A treasure-trove of heredity had been unearthed in camelliana. Significant information was accumulating for a

(Continued on next page)

^{*} Reprinted with Mr. Reiner's permission from August 1965 CAMELLIA BULLETIN, publication of Northern California Camellia Society.

new era of camellia development the building blocks were formed. The need for an architect to create a master plan for future development was needed and supplied by the "Camellia Research Advisory Committee." Possibly the turning point in camellia hybrid research was established in 1960 by the formation of this extremely important Research Committee. The eminent members of this committee fostered only a thorough, organized and planned approach to its primary projects to extend the color range, obtain hardier varieties and fragrance. The surge of interest has swept many growers along in a flood of experiments which seems to show no sign of having crested. Hap-hazard, or scientific in the most acute sense either approach or any grade in between has brought great new interests to the top of the wave.

The first objective has always been the search for unusual flower forms. Plant vigor and cold hardiness continue to be prime objectives. Improved resistance to disease has been noted by many authorities and there has been work on lengthening the blooming season from both ends. It has been found that possibly two blooming periods can be produced. Inquiry into the use of C. saluenensis has produced great improvement in self-grooming habit, along with the hardiness aforementioned. And an unpredicted search into improving the growth habits of certain reticulatas began in 1961.

With the entry of true scientific process, experiments with new specific and generic material opened wide the doors to further search for a yellow camellia and it has lately been suggested that a more blue could be another phase. The strong tendency toward fragrance has been tested with encouraging results, helped greatly by the introduction of *C. lutchuensis*. And there is the need for new miniatures which will stay small,

Knowledge produces the search for more knowledge. Consequently, the necessity of technicality, such as chromosome counts, has led to hybridization for the purpose of further hybridization. Inter-specific successes lead us to inter-generic trials for the purpose of changing chromosome counts and other genetic factors in order to produce parents for further crosses. And with F2 and future generations ever showing more promise, we now watch for prolific seed bearers, as well.

We need camellia plants with fewer weaknessess such as poor scaffolding, dull leaves, flowers facing down and sensitivity to balling, sun and cold. With so many objectives, we must keep foremost the plan to produce a better garden plant. As Lammerts has said, it is "all for the purpose of developing the consciousness that the camellia has innumerable functions as a superb garden plant to fill the otherwise barren winter season."

Since 1930 there have been thousands of hybrid progeny grown and thousands discarded but are we sure that all of the discards were not worthwhile? Would some of these throwouts have made an outstanding garden plant such as groundcover, a bonsai, etc.? Should there not be a complete detailed camellia classification for descriptive groups so that new hybrids and cultivars on trial may be rated uniformly in the class to which they are most typical? To best illustrate this, reference is made to the classifications which include Floribunda, Polyantha, Sweetheart, Grandiflora, Pillar, Climber, Miniature, Shrub, etc. All the foregoing are hybrids which are classed separately because their growth and flowering characteristics differ. Each class is more or less descriptive in itself and the name is easily understood by the Rose-buying public.

With the prospect of many hundred of new inter-specific hybrids, we can expect a continued listing of new camellia groups referred to (usually) by hybridizer's name, such as in the case of the Camellia williamsii hybrids, Sylvia May seedlings or the Doak types. These, botanically and taxonomically speaking, may be desirable for future reference in the scientific field, but to the layman they offer only confusion.

A study is urgently needed for camellia classification which is not specifically guided by botanical rules, but by descriptive grouping of hybrids and cultivars by plant habit and bloom characteristics. A general classification might consist of Grandiflora, Fragrantiflora, Floribunda, Miniatureflora, Hardiflora, Groundflora, Hangingflora, Landscapeflora, Azaleaflora, Exhibitionflora, Sunflora, and so. The above names are intended to be illustrative only.

Among other fine contributions which certainly will help in "Maturing the Hybrid" is a fine American Camellia Society rating system for the camellia. This procedure should be thoroughly exploited, used and adapted to the variables of the hybrids. There has been, very definitely, insufficient screening of many new progeny by a rated schedule of regulatory rules covering all aspects of the camellia plant.

Score cards are suggested for each class, using an evaluation scale patterned after the A.C.S. Rating System. A different schedule would be needed for each class because, in each case, different characteristics typical to the classification would prevail. For instance, flowers that hang face down would be a desirable trait for a Hangingflora, but a definite demerit in classifications. other Decumbency would be desirable for the Groundiflora and Hangingflora but not others. Exhibition flowers would not be of premium concern for Floribunda, Miniatureflora, Azaleaflora, and Groundflora but profusion of flowers would be of prime concern. Plant scale must be considered in relation to flower size, such as small leaves

with Miniatureflora and large leaves with Grandiflora, etc. Grandiflora might encompass the new race of giants, removing them from competition with the Pink Perfection and Magnoliaeflora types.

hybridizers are Most rightfully working toward definite goals of achievement. A unity of judgment (the score card) is needed relative to placing the various plant and flower forms into their proper classification for practical garden use. As an illustration, not all fragrant flowering hybrid plants are going to be upright with large leaves and large flowers, some may be decumbent or some may be miniature flowering. The camellia needs more diverse classification than it now enjoys. A camellia scoring system will encourage diversification and proper classification.

SUMMARY—The Camellia Hybrid is on the threshold of maturity. Monumental accomplishments have been made in research, hybridizing and growing in the last fifteen years, particularly amazing when we consider that the camellia generation requires three to seven years from seed to flower. Most of the building tools for guidance have been formulated. Additional plant categories are suggested. Our hybrid child is developing in many hands in many lands. Our optimism is reflected in the fine results reported from those who devote their time to this amazing program.

SOME THOUGHTS (Continued)

With this limited outlook it was still very exciting to get up early in the morning and look around the lath house for new blooms which had opened for the first time, during the night. Remember, the hybridizer is the one who sees them first. However, with a record of both parents, the pleasure and excitement are more than doubled. There is an exhilarating feeling of participation.

Descanso Gardens Camellia Show February 26-27

The annual camellia show in beautiful Descanso Gardens will be held on the week-end of February 26 and 27, as usual on the week-end closest to the first day of March, Classifications will be the same as for the 1965 show with Divisions for single blooms, 3's and 5's of a variety for japonicas and reticulatas; single bloom entries for hybrids, miniatures and miscellaneous species; and single bloom entries for seedlings and sports. As in the past, there will be a separate Division for specially treated blooms.

Judge Bayard Rhone, last year's President of the Los Angeles Camellia Council, is Chairman for the 1966 show. Full information will be sent to all who have entered recent Descanso Gardens shows. Information regarding entries can be obtained from the Registration Chairman Ernie Pieri, 601 Elm St., San Gabriel, California 91775, Telephone 287-5977 (area code 213).

Last year's dinner dance on the Saturday night of the show was so successful that it will be held again this year at the La Canada Country Club.

FERTILIZING (Continued)

a bucket or sprinkling can. The main objective is to get the liquid into the rooting media of your tubs and beds. Never feed in excess of what the manufacturer recommends on the label.

Holding to one's belief is the mark of a strong character. In this modern world science gives us new information and reasons for the things that happen in our garden. The wise man will be willing to change his beliefs, as the facts are made clear.

Gardening involves many contradictions due to area and climatic conditions. Supplemental plant nutrients by fertilizing is only part of the gar-

Temple City Camellia Society

The next meeting of the Society will be held on Thursday evening, February 24th in the Lecture Hall of the Los Angeles County Arboretum, 301 North Baldwin Avenue, Arcadia. Blooms may be placed on the display tables between 7:30 and 8:00 P.M.

The speaker for the evening will be Mr. J. J. Littlefield, well known Garden Consultant and Lecturer, whose topic will be "Random Camellia Culture Thoughts." Mr. Littlefield is a prominent horticultural columnist for many Southern California newspapers and has more than 40 years of experience in the gardening and horticultural field.

The Society extends a cordial invitation to all of its friends and those interested in camellia culture to be present at this meeting.

SPOTLIGHT (Continued)

this lovely fluted petal red semidouble to peony flower. The plant inherited the better characteristics of its parents and is very vigorous with medium green leaves.

David L. Feathers of Lafayette, Calif, is the originator. He has been growing it for eight years but only recently registered it and gave propagation rights to Alton Parker of the Redwood Empire Nursery, Sebastapol, California.

TOP BLOOMS (Continued)

the top 20 show flowers of the last half decade. If anything, one might expect that it will take several years to unseat the present crop, half of which have been around for 10 years or more and were still on the list of top award winners in 1965. It is perfectly clear that the process will be highly selective.

dening program. When a garden delights the eye and refreshes the spirit, it reflects the activities of its master.

Directory of Affiliated Societies

Camellia Society of Kern County	Bakersfield
President: Walter Stiern.	
Secretary: Melvin G. Canfield, 2709 Scott Dr., Bakersfield.	
Meetings held 2nd Monday of the month, October througing, 1620 Truxton Ave., Bakersfield.	
Camellia Society of Orange County.	Santa Ana
President: Paul M. McClelland.	
Secretary: Mrs. George T. Butler, 1121 Orange, Santa Ana 9 Meetings held first Thursday of month, October through	
Farm Bureau Building, 1916 W. Chapman, Orange.	
Central California Camellia Society	Fresno
President: Kenneth E. Thompson.	
Secretary: Mrs. Glenn S. Wise, 5493 E. Liberty, Fresno.	N 17 D 15 I 96
Meetings held at Heaton School, Del Mar Ave., Fresno on Feb. 23, Mar. 23.	Nov. 17, Dec. 15, Jan. 20,
Huntington Camellia Garden	
Henry E. Huntington Library and Art Gallery, Oxford Road	
Pomona Valley Camellia Society	Pomona
President: I. John Movich, 932 N. Park Ave., Pomona.	
Secretary: Nelson R. Gatov, 552 N. Park Ave., Pomona, 91767 Meetings held 2nd Thursday of each month, November	
Pomona First Federal Savings & Loan Assn. Bldg., (
Pomona (1 block South of Holt),	,
San Diego Camellia Society	San Diego
President: Ray Greer.	2
Secretary: Lewis Greenleaf, 4389 Copeland Ave., San Diego	5, Calif.
Meetings held in Floral Association Building, Balboa P Dec. 10, Jan. 14, Feb. 4, Mar. 11, April 8, May 13 (din	ark, San Diego, Nov. 12, ner).
Southern California Camellia Society	San Marino
President: Alvin L. Gunn.	
Secretary: Harold E. Dryden, 820 Winston Ave., San Marin	
Meetings held Second Tuesday of every month, November	
San Marino Women's Club House, 1800 Huntington Dri	•
Temple City Camellia Society	Temple City
President: Basil J. Neptune. Secretary: Mrs. Violet Shuey, 5813 N. Golden West Ave., T	omnla City
Meetings held on 3rd Friday of November and December a	
through March in Lecture Hall of Los Angeles County A	
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