THE Camellia Review

A Publication of the Southern California Camellia Society

Vol. 22 May, 1961 No. 6

One Dollar

Southern California Camellia Society Inc.

An organization devoted to the advancement of the Camellia for the benefit of mankind—physically, 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 CAMELLIA REVIEW

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PRESIDENT'S MESSAGE

As incoming president I should greet you but this issue of the CAMELLIA REVIEW is really a farewell until next fall. I am not going to say farewell, however, as I hope I will be seeing my many good camellia friends all through the summer.

The 1961 board members and I are enthusiastic about next year and are making plans for another interesting season, hoping to bring you the best in programs and friendship.

This next year will not find us having the pleasure of greeting our many out-of-state camellia friends at an ACS westcoast convention but our energies will be concentrated in participating in a bigger and better show at Descanso and bringing to you a new Nomenclature Book of merit.

Southern California Camellia Society is your society; it is an outstanding society because through your efforts you have made it strong. We encourage you to bring your friends to our meetings and ideas to your board members so that together we can progress in this most fruitful hobby that specializes in friends and flowers.

WILBER W. FOSS

THOUGHTS *from the editor*

It's probably presumptous of me to comment on judging at shows. I'm told, however, that editors should be presumptous at times, even though they may not be expert on the subject. Furthermore, editors do talk with people and their comments are often the parroting of statements they have heard. So with trembling in my heart I make the following observations on the basis of shows I have seen this past season (I judged at 2 of these shows).

— *On condition of blooms.*

Judging rules do not allow many points for condition of the flower at the time of judging and make no allowance for what the condition might be later in the day of judging or the next day. Result — people viewing the show asking one another "How did that flower get a ribbon?" At one show the "best flower of the show" had to be replaced before the end of the first day. The increasing practice of picking early and refrigerating the blooms has added to this problem. It might be appropriate for rules committees to consider whether the show management and through them the judges have responsibility to the public (often paying guests) or whether the function of judges is to determine who should receive ribbons on the basis of condition of the blooms at the moment they are judged. Some people believe that blue ribbons should not be associated with so many "beat" blooms on the second day of the show.

— *On importance of size.*

Sometimes size outweighs form and texture in the opinion of judges, where the form and texture leave little to be desired. Should it?

— *On "typical" flowers*

Some pretty good blooms have been by-passed because of the opinion of the judges that the blooms were not "typical". Should this adherence to typical be eased a little? Certainly a sport should not be entered in the name of the plant from which it was picked. But have the judges gone a little far in some case in deciding what is typical and what is not?

— *On rose-bud centers*

Rose-bud centers were a dime a dozen on Mathotiana this past season in Southern California. And few were the ribbons won in this variety that did not have rose-buds. More adherence to the rules of judging which call for consideration of all the factors which make for a ribbon-winning bloom, and less leaning on personal preference would change this. There are many, many cases where the winner, and often the second and third place choices, "stand out and hit you." Somtimes, however, there appears to have been more need for counting the points to avoid the pitfall of personal preference.

Harold E. Gieger

SUMMER CARE OF CAMELLIAS

R. Flinn Dickson, Sr.

You will or will not have nice flowers next season depending largely on the care you give your camellias during the summer. Before going into the several aspects of care, let's go back a step and consider environment. Have you had a complete clean-up? Just one fallen bloom can bring you petal blight if it happened to fall off "just so" and was overlooked. The best "ounce of prevention" is good housekeeping.

If you are growing under lath and had a few blown off, better repair now. It does not take much hot sun to do real damage to some varieties. And too, how about ground mulch? A few inches of shavings over the ground and between containers, if plants are not in the ground, can be a big help. During hot dry spells this mulch when wet down will do a lot to humidify the area. Also, it helps to keep down weeds and grass.

The first and foremost of all camellia care, whether it be summer or not, is WATER. Neglect your watering and your plants "have had it." Ever since I became interested in camellia culture I have been reading all that I could get on the subject of watering and I am sure that there is still more to be said about it. There is no set of rules to follow. Reason — too many variables. Almost no two areas during a given period of time will have identical humidity, wind velocity, brightness of sun, dew deposit, etc. Since all of these bear on the quantity of water a plant needs from the soil, watering has to be done accordingly.

I try to always water when the soil starts to look dry, rather than to wait 'till the plants show that they need water. In doing this I pay especial attention to the reticulatas as it is generally felt that they do not tolerate overwatering. I have heard of a nursery that lost several retics because a boy hired to do watering was over-ambitious. After the plants died it was discovered he had been watering them daily. For a more detailed report on the actual experience of a substantial retic grower please see Caryll Pitkin's summary on page 10 of the March 1961 CAMELLIA REVIEW. After talking with several on that subject I am going to follow that procedure.

Next to water your most important factor is plant food or fertilizer. This is so fully covered by Ray Noyes in his article on page 15 of the March 1961 CAMELLIA REVIEW that I shall mention only fertilization of root stock. One light feeding in May is all you should give. My observation is that scions start off better when root stock has not been fed for 8 or 9 months prior to grafting. A residue of fertilizer going to the scion will often burn it.

Another very important summer time chore is pruning. Get out your March 1961 CAMELLIA REVIEW and read again Harold Paige's article starting on page 9. Pruning is most important and should not be neglected.

How much disbudding are you going to do this season? I shall never forget an answer given to me when I invited a camellia friend to take a Saturday trip with me. His answer was brief and pointed: "Can't — got to stay home to bust off buds." And this he meant to do. Hundreds of our readers know this person and his very fine blooms. To me my disbudding is a little like playing bridge. One can read all of the books about it but will never know how much has been learned until he gives it a try. And like your bridge game, you improve with your experience. And again a hundred plants will be no

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SHOW RESULTS

CENTRAL CALIFORNIA CAMELLIA SOCIETY

Fresno, California, March 5, 1961

Sweepstakes — Mr. and Mrs. Maynard Munger
Sweepstakes Runner-up — Mr. and Mrs. H. H. Collier
Outstanding Bloom — 'Drama Girl', A. L. Jessen
Best Japonica — 'Tick Tock', Dr. Leland Chow
Japonicas in Court of Honor — 'Monjisu', 'Nagasaki', 'Lotus', 'Destiny', 'Betty Sheffield Pink', 'Kramer's Supreme', 'Daitarin', 'J. J. Pringle Smith', 'Lady Clare', 'Charlotte Bradford'.
Best 3 Japonicas — 'Lotus', Glen Harnish
Best Reticulata — 'Capt. Rawes', Kenneth Thompson
Best Miniature — 'Pearl's Pet', John Robinson
Best Hybrid — 'Donation', A. J. Jessen
Best Seedling — 'Fire Bird', Mr. and Mrs. Milo Rowell
Best Table of 25 Blooms — Mr. and Mrs. Milo Rowell

CAMELLIA SOCIETY OF KERN COUNTY

Bakersfield, California, March 4-5, 1961

Sweepstakes — Dr. Leland E. Chow, Bakersfield
Sweepstakes Runner-up — John C. Robinson, La Canada
Best Japonica — 'Guilio Nuccio', Mrs. W. B. Camp, Jr., Bakersfield
Best Japonica Runner-up — 'Lady in Red', Dr. Leland E. Chow, Bakersfield
Japonicas in Court of Honor — 'Angel', 'Billie McCaskill', 'Carter's Sunburst', 'Clarise Carlton', 'Drama Girl', 'Flowerwood', 'Glen 40', 'Reg Ragland', 'Tomorrow', 'Viva'.
Best Reticulata — 'Moutancha', George Priest, Bakersfield
Best Reticulata Runner-up — 'Tali Queen', George Priest, Bakersfield
Best 3 Japonicas — 'Ville de Nantes Var.', Mrs. Aram C. Adams, Bakersfield
Best 5 Japonicas — 'Flame', Frank B. Anderson, Bakersfield
Best 3 Reticulatas — 'Purple Gown', Fred V. Hamilton, Santa Maria
Best Miniature — 'Fircone', Mrs. Dale Smith, Bakersfield
Best Miniature Runner-up — 'Judith', Edwards H. Metcalf, San Marino
Best Seedling — Amos Kleinsasser, Bakersfield
Best Blossoming Plant — 'White Empress', Mrs. Robert Johnson, Bakersfield
Best Commercial Bloom — 'Kramer's Supreme', Kramer Bros. Nurseries, Upland

CAMELLIA SOCIETY OF SACRAMENTO

Sacramento, California, March 4-5, 1961

Sweepstakes — Thomas J. Sertich, Sacramento
Best Japonica — 'Sunburst', Mrs. William R. Breuner, Sacramento
Best Japonica Runner-up — 'R. L. Wheeler', Mr. and Mrs. O. L. Davis, Orinda
Best Reticulata — 'Noble Pearl', Mrs. Philip L. Daube, Sacramento
Best Reticulata Runner-up — 'Willow Wand', Dr. John E. Kennedy, Sacramento
Best 3 Japonicas — 'Magnoliaflora', Fred E. Carnie, Carmichael
Best 6 Japonicas — 'C. M. Wilson', Fred E. Carnie, Carmichael
Best 3 Reticulatas — 'Buddha', Horace B. Wulff, Sacramento
Best Hybrid — 'Donation Var.', Clark Viegas, Sacramento
Best Miniature — 'Hopkin's Pink', Newton Pratt, Sacramento

Best Seedling — David L. Feathers, Lafayette
Best Collection of Exactly Named Varieties — Harold F. Clark, Sacramento
Best Collection of from 25 to 40 Named Varieties — Newton Pratt, Sacramento

LOS ANGELES CAMELLIA COUNCIL
Descanso Gardens, La Canada, California
March 11-12, 1961

Sweepstakes — Dr. Leland Chow, Bakersfield
Best Japonica — 'Tomorrow', Dr. Leland Chow, Bakersfield
Best 3 Japonicas — 'Tomorrow', Dr. Leland Chow, Bakersfield
Best 5 Japonicas — 'Adolphe Audusson', Charlotte Johnson, Bakersfield
Best Reticulata — 'Crimson Robe', Mr. and Mrs. Wm. B. Johnson, Fresno
Best 3 Reticulatas — 'Moutancha', Mr. and Mrs. Carl Keyes, Burbank
Best 5 Reticulatas — 'Purple Gown', Fred V. Hamilton, Santa Maria
Best Miniature — 'Still Hope', Edwards H. Metcalf, San Marino
Best Hybrid — 'Creation', McCaskill Gardens, Pasadena
Best Species — 'Dawn', Mr. and Mrs. B. M. Pace, Upland
Best Seedling — Nuccio's Nurseries, Altadena
Best Sport — 'Hawaii', Hamilton & Clark Nursery, Upland
Collector's Table, Japonicas — Dr. C. H. Eshelman, Sherman Oaks
Collector's Table, Reticulatas — Edwards H. Metcalf, San Marino
Professional, Japonica — 'Colonial Dame', Merle and Rose Gish, Colton
Professional, Reticulata — 'Crimson Robe', Nuccio's Nursery, Altadena

LOS ANGELES CAMELLIA COUNCIL
Disneyland, Anaheim, California
February 25-26, 1961

Sweepstakes — Clifton W. Lattin, Los Gatos
Best Japonica — 'Mrs. D. W. Davis', Dr. Cecil Eshelman, Sherman Oaks
Best Reticulata — 'Buddha', Dr. Leland Chow, Bakersfield
Court of Honor — 'New Horizons', 'Captain Rawes', 'Spring Sonnet', 'Moutancha', 'Crimson Robe', 'Reg Ragland', 'Angel', 'Drama Girl', 'Reg Ragland Var.', 'Carter's Sunburst'
Best 3 Japonicas — 'White Nun', Dr. Cecil Eshelman, Sherman Oaks
Best 5 Japonicas — 'Flowerwood Var.', F. B. Anderson, Bakersfield
Best 3 Reticulatas — 'Purple Gown', Fred V. Hamilton, Santa Maria
Best 5 Reticulatas — 'Captain Rawes', Fred V. Hamilton, Santa Maria
Best Miniature — 'Tinker Bell', Art and Leta Krumm, Altadena
Best Species — 'Wabisuke', Clifton W. Lattin, Los Gatos
Best Hybrid — 'Fairy Wings', Milo Rowell, Fresno
Best Seedling — #5914, Nuccio's Nurseries, Altadena
Professional, Japonica — 'Alpine Glow', Merle Gish
Professional, Reticulata — 'Cornelian', Marshall's Camellia Nursery, San Gabriel
Best Collector's Table — Dr. Cecil Eshelman, Sherman Oaks

NORTHERN CALIFORNIA CAMELLIA SOCIETY
Walnut Creek, California
March 18-19, 1961

Sweepstakes — Newton Pratt, Sacramento
Sweepstakes Runner-up — Clifton W. Lattin, Los Gatos

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NEWS OF SOCIETIES

POMONA SOCIETY

Speaker at the April 14th meeting was Mr. Charles Manoogian, soil chemist of Red Star Fertilizer Company. Discussion following the talk centered around culture of camellias and use of the products discussed by Mr. Manoogian.

Point winners for blooms displayed at meetings in the 1960-61 season were Mr. and Mrs. Harold Rowe, 25 points; Mr. and Mrs. Walter Harmson, 20 points; and Mr. and Mrs. C. D. Cothran, 17 points. All three received camellia plants as awards.

E. J. Alvarado has been elected President and Frank Hoffman, Jr., Vice-President for the coming year.

TEMPLE CITY SOCIETY

Officers elected for next season are Laurance S. Shuey, president; Pat Novak, vice-president; and Mrs. Peter Folino, secretary. Everybody should remember that the 1961-1962 camellia season will open with the Temple City Society breakfast in October.

ORANGE COUNTY SOCIETY

The following officers have been chosen: F. E. Kahen, president; Lyle Lewis, vice-president; Mrs. George T. Butler, secretary; and Warren Woody, Treasurer.

LOS ANGELES SOCIETY

The program at the April 4th meeting was a panel discussion with the panel consisting of growers Vern McCaskill and Earl Hudson and amateurs Karl Blank and Harold Payne. Discussion centered around feeding programs and potting mix for container grown camellias. The Arthur Freed award for most points won at the flower exhibitions at meetings during the year went to Pat Novak, with Karl Blank second. The arrangements cup went to Mrs. Lucy Olshausen with Mrs. Karl Blank second.

SHOW RESULTS *(Continued)*

Best Japonica — 'Mrs. D. W. Davis', Mr. and Mrs. O. L. Davis, Orinda
Best 3 Japonicas — 'Drama Girl', Mrs. C. C. Viegas, Sacramento
Best 7 Japonicas — 'Reg Ragland', Amos Kleinsasser, Bakersfield
Best 12 Japonicas — 'R. L. Wheeler', Amos Kleinsasser, Bakersfield
Best Reticulata — 'Noble Pearl', Miss Annabelle Little, San Jose
Best Seedling — Harold L. Paige, Lafayette
Best Group of 12 Different — Newton Pratt, Sacramento
Best Container Grown — 'Shiro Chan', A. M. Patterson, Concord
Best Container Grown, Small Plant — 'C. M. Wilson', Lloyd F. Smith, Martinez

CAMELLIAS IN OREGON

Mrs. Al E. (Mary) Johnson
Beaverton, Oregon

Oregon has long been considered to be a nearly perfect area in which to grow camellias. However, upon thoughtful consideration, one might wonder just how many truly perfect places exist throughout the world. Oregon, unhappily, is not one of them, though we do feel fortunate in being able to produce among the world's most beautiful camellias. There are a number of reasons for this, such as rainfall, temperature, humidity, etc. It would be helpful for you to know something of our growing conditions, weather-wise, in order to understand why we do not personally feel that this is a perfect section in which to grow camellias, but why on the other hand we do grow flowers of exceptional color, size, texture and rather long blooming season.

To begin with, our average annual rainfall over the past several years has been 39.91 inches. The temperature has risen to as high as 107 degrees on occasion during the summer and as low as an official 3 degrees below zero in the winter of 1950. At that particular time there were unofficial recordings of as low as 10 to 20 degrees below zero within a radius of 30 miles from Portland. The average daily humidity during the winter months in this area is 80 per cent and the average humidity during the naturally drier summer months is 47 per cent. The average daily maximum temperature for the year as a whole is 62.3 degrees while the minimum is 46.8 degrees, thus an annual average temperature of 54.6 degrees year-round.

Air currents over the entire area are predominantly from the west and are conditioned by the close proximity to the Pacific Ocean, which moderates both the colder temperatures of winter and the heat of summer. We do occasionally experience extremes, more often in the winter temperatures, and it has been these extremely low temperatures, particularly those coming on quite suddenly, that have caused some damage to or loss of camellias. Most growers in this area have come to rely upon mulches of one type or another, being sure that it is put on generously to a depth of at least four inches. Some prefer to put sand directly around the trunk of the plants as this provides better drainage around the base of the plants. The bark of the camellia plants remains tough and is thought better able to withstand the more severe winters. The mulch material is placed about the plants in the entire planting area, with the exception of the small amount of sand encircling each individual shrub.

We have learned, as have a good many others, to give our camellias the added protection of sheltered locations, as well as the deep mulching. It is *not* considered wise or safe to grow camellias, or other plants for that matter, in containers above the ground during the winter in the Northwest. For this reason, many camellias are afforded the protection of glass. Some are grown entirely in containers under glass, while others are planted in the ground of the greenhouse, just as one would plant them in the ground out of doors. Some grow many of their camellias in the ground outdoors and have others growing indoors in containers, which arrangement seems to strike a very happy medium.

The overall performance of camellias seems to indicate that they thrive, and in fact out do themselves

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in areas where they receive ample rainfall, warmer days and cooler nights. In fact, if we had any choice in the matter of weather, which of course we do not, we would wish to leave the Fall, Spring and Summer as they are, generally. But the Winters we would love to be able to modify considerably. Some frosts we would not mind at all, but the extreme cold weather we would be glad to give up entirely, if we had our "druthers."

It would not seem necessary to go into a long list of familiar camellia cultivars which perform well in Oregon, particularly here in the Portland area, for such a listing would for the most part be a duplication of well known favorites of nearly all other camellia growing sections. However, *Lady Clare* should unquestionably head such a list, and would be followed by such other well-known fine performers as *Finlandia* and its entire family group—*Finlandia Var., Monte Carlo, Monte Carlo Supreme,* and all of the other fine members of this family group. It must also include *Elegans (Chandler)* and particularly *C. M. Wilson* of this family group. *Mrs. Bertha A. Harms, Kumasaka, Berenice Boddy, Adolphe Audusson, Gosho-Guruma, Flame, Amabilis, Gigantea, Hana-Fuki, St. Andre,' Monjisu, Donckelarii* and the many fine offspring of this variety, including particularly *Ville de Nantes, Tri-Color (Siebold)* with an even longer list of famous relatives. Such a list of fine performers for this area must certainly include the first three of the *Williamsii* hybrids to become widely distributed in Oregon, *Mary Christian, J. C. Williams* and *Donation.* These varieties have been grown here long enough to have earned a place among the all time greats.

Due perhaps to our colder climate, far fewer seedlings are grown here than are developed in warmer sections of the country, hence fewer new varieties make their way into the trade from Oregon. However, we do have some that have taken their place among the greats, some older, a few newer varieties still earning their way into the column of favorites. Some will be familiar names, others not, and still others as yet unnamed, but we feel a few will be of sufficient interest to warrant a discussion. We should like, also, to tell you something about a number of sports originating locally, even of a few still in the test stage.

Monte Carlo: This soft luminous pink, irregular semi-double has been taking its place among the favorites in many sections of the Country for some time. It was developed by the late Barney Goletto, who had worked with and developed camellias in Oregon for over half a century. *Monte Carlo Supreme*: It is not known with certainty, but it is presumed that this lovely flower was variegated through grafting. It has quite a large percent of white, and the variegation is moired rather than spotted. The shade of pink is slightly lighter than that of *Monte Carlo.* The original plant of this variety was presented to the writer as a gift by the originator, and for this reason, and because it was never distributed commercially, has been sent as scion to nearly every section where camellias are grown. (See color cover of July, 1958 Camellia Review).

Mrs. Bertha A. Harms: This very large but graceful wavy semi-double, with a faint pink cast, has not only become a favorite in our own Country, but in other camellia growing countries as well. Mr. H. H. Harms, its originator, did justice to his lovely wife, Bertha, in naming this variety for her.

Sweet Bonair, a creamy white medium large semi-double, which has a pleasing sweet fragrance; *Napoleon Bonaparte,* a large rose-pink semi-double with high center; *Pres. Lin-*

coln, a medium to large red of anemone form; and *Lily Pons,* a medium to large water-lily-like white single to semi-double having long golden stamens, are all four varieties originated by Mr. Goletto.

Barney's *No. 1 Red,* his last seedling to bloom before his death some three years ago, will bloom on two separate grafted plants this season. We saw only one flower of this variety three years ago, and remember it as being similar in form to *Debutante,* but a fine dark red. The foliage is quite handsome, rather heavily veined and sharply serrated. Plant habit is upright and quite dense.

Serenade, a large creamy white japonica anemone to peony formed flower, is also a local seedling of *Finlandia.* It is very fragrant here in the Portland area and it is hoped that fragrance will hold in other areas.

Wicke is an interesting miniature, with small blooms ranging from pink to pink with red stripes, to solid red flowers. It is a delightful variety for floral arrangements, though it is not as long lasting as some varieties. *Tiney Bud,* another miniature, is one developed by the Charles Grishows of Portland. The variety has flowers of a clear pink which sometimes open from a rose bud center. It has not been propagated commercially. *A Miniature Seedling,* still another miniature, is white, grown by Al and Mary Johnson, but as yet not available commercially. It is a seedling of *Amabilis* but not at all similar to the seed parent. It is a perky little flower with many wavy petals, a number of which are rabbit-eared and stand erect around the edge of a very thick mass of deep golden stamen in the center of the flower. The texture of this variety is superior.

From Southwestern Oregon, we know that Don Stryker, Langlois, Oregon, has ever so many fine new and unusual seedlings, practically all hybrids. We have not visited Don's recently, so are not able to tell which of his seedlings, if any, are available commercially. Don wrote of some of his hybrid seedlings a short time ago, so will quote from his letter . . ."One of my new hybrids has flowers simi-

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lar to *Retic 'Butterfly Wings,'* but with more petals and similar foliage, more like that of a *saluenensis.* The color is close to *'Butterfly Wings,'* but more 'electric.' I think this one rather fabulous! After having grown nearly all of the English hybrids, I feel that some of mine are even better, more substance and finer texture. One, a fabulous pink, is a lovely single with flowers up to five inches and the entire plant is a 'hanging basket' type, with all branches tending to 'weep' and all are literally loaded with buds. Then there is another whole group of hybrid seedlings that have very tiny leaves. Some of these have big flowers, others smaller. But the exciting deal is that all of them tend to have as many as six to a dozen buds at each tip and each leaf axil has two to four more buds, only one opening at a time, however. I have single, double, peonyform and semi-doubles, but most of these are in shades of pink. In the *reticulata* hybrids, though, I have a number of fine reds, as large as *Buddha."*

In the past year or so a number of most interesting sports have appeared in the Portland area and having seen some of them personally, we feel that they are of sufficient interest to mention here. *Ville de Nantes* sport: This lovely flower has become quite well known though not too widely distributed. It is solid red with extremely full center, having ever so many more petals than the original variety. It is quite variable, in that some flowers show a thick mass of fanned out stamen in the center, while other blooms are completely 'spherical,' much the same form as *Debutante* but bright red. This variety has typical *Ville de Nantes* habit and foliage, and flowers are fimbriated. *Ville de Nantes* sport: The variety is newer and quite different from the above as well as different than the original *Ville de Nantes.* It has rather a flatter flower, similar in form to *Adolphe Audusson.* This sport has a thick fanned out stamen formation and has no rabbit ears, however, it is quite a large and lovely flower and is fringed as is the original.

Cinderella sport: We were thrilled last season when shown this lovely sport. Though we are aware that members of the *Fred Sander* family group do not do well in many sections of the country, their performance in this section is splendid, especially when given a northern exposure. It was entirely pink, and such a soft clear pink, very full flower and deeply fringed. The wood was immediately grafted, and only time will tell whether or not it will hold true. We have no knowledge of this sport appearing elsewhere, though perhaps it may have, in which case we would be interested in hearing about it.

Adolphe Audusson sport: This sport appeared on a four year old rooted cutting, the whole plant bearing the same flower. They are still blooming during the present season. Each flower has a high percent of white and every petal is extremely moired, no spots or blotches of white. Instead of the usual central cluster of stamen, these are in very definite groups between many erect central petals. An altogether lovely and unusual flower. Several grafts have been made in an effort to maintain this flower variant.

R. L. Wheeler—a light pink sport. Russel Gainer of Newberg was given a rooted cutting of *R. L. Wheeler.* When this cutting eventually produced a bloom, the flower was a beautiful pink, about the shade of *Magnoliaflora.* Russ took a slide of this sport and the writer has only seen the colored slide, but from this it would seem to be a real beauty. If it can be stabilized, it will be made available by the originator.

These have been but a few of the varieties of camellias that are grown

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New Officers Take Over at S.C.C.S.

Wilber Foss of San Marino took over as President of Southern California Camellia Society at the April 11th meeting. W. F. (Bill) Goertz of San Marino was elected Vice-president and Mrs. Mildred Pitkin retains her position of Secretary-Treasurer. Directors for the year in addition to the President and Vice-president are A. H. Dekker, Alvin L. Gunn, Frank Storment, Mark Anthony, Walter Harmson, Basil Neptune, Frank Ford, Wilkins Garner and R. F. (Bob) Dickson, Jr.

Winners were announced and presentations of silverware made for the season's competition of blooms on the display tables. Frank Reed walked off with the competition in the Japonicas and Reticulatas group with 60 points. Caryll Pitkin was second with 25 points and Fred Hamilton of Santa Maria was third with 18 points. Mr. and Mrs. Arthur Krumm won the competition in the group for hybrids, species, miniatures and sasanquas with 21 points.

Speaker of the evening was Howard Asper, Superintendent of the Huntington Botanical Gardens, who talked about camellia hybridizing. Mr. Asper won his birthright in camellias long before he took over his present position. He was employed at Descanso Gardens when the first group of reticulatas was brought in from China. He made many of the first grafts from these plants and nursed them through. In the succeeding years he has planted many seeds from reticulatas and has done much hand pollinating to see how much better man can do than bees in bringing in new varieties, including hybrids. His talk was so interesting and full of information that it is printed in full in this issue of CAMELLIA REVIEW.

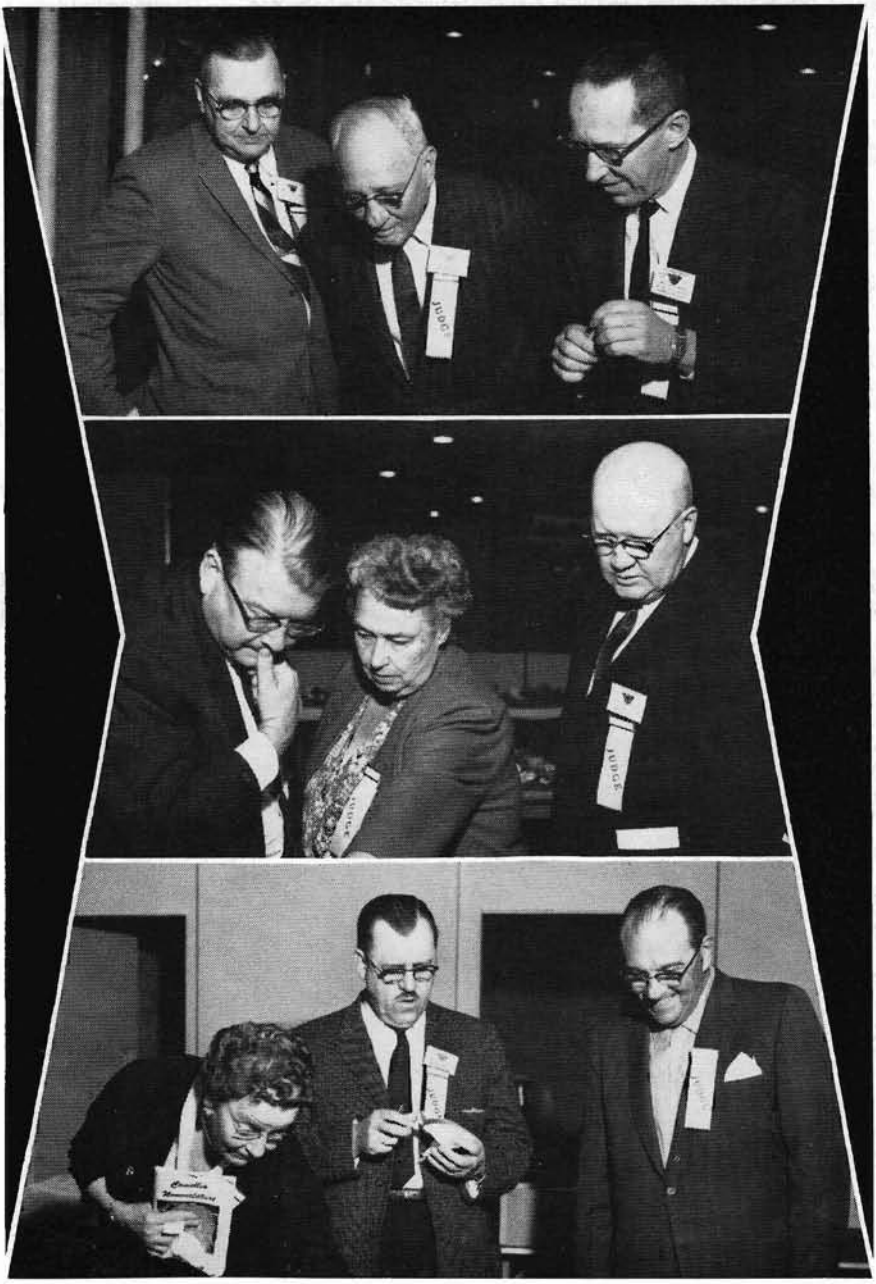
Best of Show Roundup for 1961

Following are the "Best Flowers" of the 1960-1961 camellia show season as reported to the office of the American Camellia Society on March 15th. It is seen that while four or five varieties lead the list, none had a monopoly on the preferences of the show judges.

7 Ville de Nantes
Tomorrow, var.
6 Guilio Nuccio
5 Drama Girl
4 R. L. Wheeler
3 Mathotiana Supreme
Mrs. D. W. Davis
2 Mary Ann Houser
Letitia Schrader
Julia France
1 Blood of China
Eugenia Howell
Coral Pink Lotus
Ethel Davis
Lady Kay
Reg Ragland
Faith
Donckelarii
Nell Ashby
Diddy Mealing Pink
White Empress
Indian Summer
Daikagura Red
Marie Bracey
Don Mac
Rev. John Bennett
Laura Walker
Nina Avery
Rosea Superba
Sweetheart
Dautel Supreme
Pink Perfection

OREGON *(Continued)*

and loved in Oregon. There are, of course, many other fine varieties grown here. We have tried only to tell you of a few that we hope might be of interest.



Candid shots of judges during the judging of the Disneyland Camellia Show on February 25, 1961 indicate how seriously the judges accepted their responsibilities. UPPER: Ernest A. Judice, New Orelans, La.; S. L. Marbury, Wilmington, N. C.; Dr. Cecil Eshelman, Sherman Oaks, Calif. CENTER: Joseph H. Pyron, Executive Secretary of A. C. S., Tifton, Ga.; Mrs. Rose-Marie Dekker, Glendale, Calif.; Hoyt W. Lee, Mobile, Ala. LOWER: Mrs. J. W. Bradford, San Diego, Calif.; Alison J. Parsons, Norfolk, Va.; Aubrey C. Harris, Shreveport, La.

UPPER: Milo Rowell, Fresno, Calif.; Wilkins Garner, Glendale, Calif.; Charles W. Farmer, president of A. C. S., Macon, Ga. **CENTER:** Mrs. Jessie Katz, Covington, La.; Mrs. Ralph Peer, Los Angeles. **LOWER:** David L. Feathers, Lafayette, Calif.; Mrs. C. W. Farmer, Macon, Ga.; T. J. Smith, Treasurer of A. C. S., McRae, Ga.

when? why? how?

R. FLINN DICKSON SR.

Now that what we think of as our normal grafting season is over, let's take a look at summer grafting. I did not take it seriously until I began to exchange some scions with camellia friends in Australia and New Zealand; which meant the wood was from their summer growth. Flowers from two of the plants produced by this grafting were awarded blue ribbons this past season.

To further make the point that one can get good results from grafting during our summer, I have a 'Barbara Woodroof' which as this is written (April 6, 1961) is 25 inches from union to tips and with 15 laterals; and it was grafted July 5, 1959. Every terminal is growing well and at present it appears I have a better plant coming on than the parent from which I took the scion.

My experience seems to indicate that there are two very vital factors to consider. First of all, you must have a fairly cool and quite shaded location in which to care for the grafted plant. Secondly, you must not use scion wood that has not completely hardened off, nor can you use root stock until the spring growth cycle is over and the wood hard. A warning — if you do some summer grafts do not, when you pick out that shaded cool spot, place the grafts where, for instance, your lawn sprinklers might keep them too wet. For dampness, treat them like other grafts.

Root Stock

There are some things people learn the hard way, but often it takes too long. A few years ago I was one of the misguided who thought that you could use just about anything for root stock. This is not true if you want good results. Nothing but good root stock will give you a good grafted plant. Should you have something not growing well, it is suggested that you bare-root it, recan it in good soil mix now, and if it does not come back and start healthy growth, discard it. You will waste your time and a good scion trying to salvage it. Here is something else that for me might be called standard operating procedure. If root stock is in cans that will not last for two more seasons, recan it at once and be sure that you have the plant centered in your container. If off-center you may have trouble as you graft, and in some instances there will be big trouble when you come to place a jar over the graft.

'Till We Meet Again

Doing this page for the past season was a challenge to me. It would not have been possible without help from many friends and to these one and all, THANK YOU. It is our hope that in some way we may have helped your hobby to grow and to become more interesting.

"A REPORT ON INTERGENERIC CROSSES WITH CAMELLIAS"

John L. Threlkeld
Superintendent, Descanso Gardens

I feel that one of the greatest challenges in camellia development lies in intergeneric crossing. This appears to be a ready means to widen the color range, increase hardiness and develop certain desirable growth habits. It is obvious that interspecific crossing is effective only in creating slightly different flower forms and changes which may or may not be better than standard varieties.

We at Descanso Gardens have been interested in intergeneric crossing for several years since the coming of our yellow blooming Tutcheria species. To start it off I made a botanical comparison of the Tutcheria with species of camellias and determined that it seemed to be closest to C. japonica, both of which are diploid. I wasted two years' time by trying to cross those two only to discover that apparently they are not compatible. Next we used Tutcheria pollen on as many species of camellia as possible and to our great joy, discovered apparent compatibility with C. pitardii. At the present time we have some young seedlings growing from this cross.

In order to insure as wide a range as possible for success we made Tutcheria pollen available to the Camellia Research Advisory Committee, Chairman, Mr. Carl Tourje, and cooperated with Mr. Chandler North, Horticulturist at U. C. L. A. to use for intergeneric breeding. With this pollen successful crosses were made by Mr. Howard Asper, Superintendent of Huntington Botanical Gardens and by Mr. North. Mr. Asper's success was with C. pitardii and Mr. North set seeds on C. sasanqua, C. vernalis and C. pitardii.

It was necessary to successfully store pollen because the Tutcheria blooms in July. The conventional storage method was used which is: place the pollen in gelatin capsules which are placed in test tubes containing chlorinated lime covered by cotton. Refrigerate at approximately 40°F until the pollenizing season. Conventional cross-pollination methods were used including emasculation and protection of the pollinated flower for from one to three weeks.

Mr. North employed controlled light and temperatures and Giberellic acid to bring camellias in bloom in July so that fresh pollen could be used. The seed capsules on Mr. North's plants have not yet ripened.

(Continued on page 29)

SOME COMMON MISTAKES IN GROWING CAMELLIAS

Who among camellia growers has not had someone say, after learning that he "grows camellias": "Oh, I'm so glad to meet you. I have a camellia that doesn't look good and I wonder if you can tell me what I should do to it to make it grow."

Even the best of them stutter in reply. While there might be one, and only one, reason for the camellia not "looking good," the probabilities are more than even that more than one condition has contributed to the sick plant. When one sees a camellia grower who consistently enters good blooms in camellia shows or brings good blooms to society meetings, he sees a person who does all the things that should be done and avoids all the mistakes that should be avoided in growing good camellias.

The things that should be done embrace all the elements of proper camellia culture — planting, watering, fertilizing, pruning, disbudding, etc. Most people who grow camellias make an effort, and usually a good one, to do these things properly. Many of these same people, however, make mistakes in the beginning that cannot be overcome by all the mothering or babying (call it what you will) that is so adequately covered in all the books on camellia growing. Here are some of these mistakes.

Planting Too Deep

Here is one mistake that may be the single reason why the plant "doesn't look good." The roots should be on the surface after the plant has settled to its growing position. This factor is particularly important when the camellia is planted in a newly made soil mix, and settles in this new mix after it has been watered several times. If there is any suspicion that it will settle, even after tamping the soil, plant it a little high. There will be no harm done even if it doesn't settle quite enough. Just a little more attention to watering. Then, after the settling is done, check to see that the level is right. It's easy to raise the plant a little by the judicious use of a shovel without removing the plant from the ground.

But this trouble doesn't always occur at planting time. Sometimes one forgets this point as months and years roll by. Maybe the plants are mulched and the mulch is not removed. Or there may be other reasons why the roots get farther and farther below the surface. This can happen whether the camellia is planted in the ground or in a container. One might be surprised if he checks all his container plants to see where the roots start.

Buying Weak or Diseased Plants

Everyone loves a bargain, and that includes some camellia growers. This writer went after camellia "bargains" once, and learned his lesson. Camellia plants are like any other commodity — you get what you pay for. Reputable nurseries cannot afford to sell "bargain" lots of plants. True, such nurseries may close out a group of plants, or they may have some standby varieties in abundance on which they may give a discount. Also, a reputable nursery sometimes goes out of business and has very attractive prices for number one plants. As a rule, however, when prices get too far out of line, one should be cautious in his quest of camellia "bargains." At least, he should not go after bargains a second time.

Grafting onto a Weak Understock

Rule number one here is, if the plant will not produce good blossoms, it will not produce a strong plant from a graft. In fact, it may not produce a plant at all; but if the graft does come through, it will be a disappointment.

The big point here, though, is not in avoiding obviously weak understock but in selecting obviously strong understock. When one buys it, he should buy only plants that by their appearance show a strong understructure. And when one grows his own understock, he should give the same attention to its growth that he gives to his finest named variety. Regular feedings, watering, transplanting, opportunities for root expansion.

Buying a Poor Root System

This point can be a part of the mistake of buying "bargains." It is worthy of particular mention, however, because it is possible to obtain a poor root system at full price. When one buys a new plant, he should accept nothing but a plant that shows full vigor. Even then he may make a mistake, but the odds are in his favor when he buys such a plant.

Setting Out a Pot Bound Plant

This can be a common mistake, particularly if one is slow in moving plants to larger containers or in planting them in the ground. It is possible also, of course, in connection with plants bought at nurseries. The rule here: take steps to see that the roots are loose and have a chance to grow. Loosen the roots with the hands, or if they are too compact, wash off the soil and plant bare root.

Buying a Plant Grown in Incompatible Soil

A newly planted camellia should be made to feel at home. If it has been growing in soil that is incompatible with the mix into which it has been placed, this may not occur. The safe thing is to wash off the old soil and to plant it bare root in the new mix.

Using Too Much Chemical Fertilizer

It's always safe to follow the rule, "if you have to err with regard to amount of fertilizer, err on the short side rather than on the long side." Raymond Noyes' article "What About Fertilization?" in this issue of CAMELLIA REVIEW covers this subject.

Improper Shading of Newly Set-Out Plants

This needs only to be mentioned. Newly set out plants of all kinds must be protected until they are set to grow. For camellias, this means they should not have full sun unless they are moved from a container under conditions that makes them unaware that they have been moved.

Planting Mix

If your plant is not growing in suitable soil you are asking for trouble and more trouble as time goes on. It might pay you to re-read the article "Soil Mix for Camellias" on page 7 of the November 1960 issue of CAMELLIA REVIEW.

DEVELOPING COLD RESISTANT CAMELLIAS*

by Francis de Vos
Assistant Director, U.S. National Arboretum,
U.S. Department of Agriculture, Washington, D.C.

Twenty years ago the area around Norfolk, Virginia was on the northern fringe of the camellia belt on the east coast. Today this distinction belongs to Washington, D.C. The optomists say that the scattered small plantings northward along the coast to Long Island are good evidence that some day there will be extensive plantings on Cape Cod. The pessimists are waiting for a test winter to prove their contention that camellias have no place in northern gardens. With the issue in doubt gardeners continue to try camellias in still more hostile climates.

Why is it that we are able to grow camellias successfully today in areas that were thought to be much too cold for camellia culture twenty years ago? Have our winters become milder? Are we growing hardier varieties? Certainly our winters are not becoming any milder on the east coast. Our present winter should dispell any doubts about this. The varieties that have proven to be most cold hardy include such old standbys as 'Elegans (Chandler)' and 'Rev. John Drayton' as well as the more recent 'Berenice Boddy', 'Dr. Tinsley' and 'Kumasaka'. The resurgence of interest in camellia growing in the last twenty years, the gradual awareness that camellias were more cold hardy than anyone had previously expected and modifications in cultural practices are the principal reasons why we are growing camellias in Washington, D.C. today.

The major approach to spreading camellia culture northward has been to select the hardiest varieties growing in the southeastern states for trial in successively colder areas. Although this is a basically sound and practical approach, the results reported have at times been misleading. Some of the possible reasons for this are: (1) differences in characteristics of the cold period; (2) differences in evaluating performance; (3) over-optimism; (4) failure to modify cultural practices.

It is not unusual to find conflicting reports on the hardiness of the same variety growing in different areas. A recent report from Sumter, South Carolina, 500 miles south of Washington, indicated that a number of sasanqua and japonica varieties that are dependably hardy in Washington are only satisfactory in mild winters at Sumter. This report and others suggests that factors other than the lowest temperature may be equally important in determining whether a variety may be satisfactory for any given area. Areas which experience climatic conditions that delay hardening in the fall or accelerate dehardening in the spring or in which there are sudden drops in temperature to below freezing may be undesirable for some varieties. The rate of flower bud development and opening in relation to fall and spring frosts may also determine the desirability of a variety for a given area. Observations to date indicate that hardiness ratings are helpful in selecting varieties to grow in colder areas but are no substitute for field trials in the areas where a variety is to be grown.

There have been two outstanding cases of over-optimism in the past ten years that have hurt the cause of camellia culture in colder areas. Overzealous people interested in promoting the culture of sasanqua camellias

* Presented at the annual meeting of the American Camellia Society held at Anaheim, California, February 21-25, 1961.

somehow managed to convince many people that sasanquas were hardier than the japonicas. Our observations at the National Arboretum indicate that they are neither as bush or flower bud hardy. Flower buds are regularly killed at about 18° and winter burning of the foliage is common with us. The failures with sasanquas north of Washington are many and have probably discouraged further camellia trials of any kind. Another case of over-optimism involved the Snow Camellia *(Camellia rusticana)*. Luckily this camellia has not been widely available for the results undoubtedly would have been disastrous. The fact that this species lies buried in the snow all winter in its native habitat somehow has been interpreted to mean that it had great hardiness and could be grown as far north as upstate New York. Less than one-third of the two-three year old plants of this species survived three winters out-of-doors in the Washington area even though the lowest temperature recorded was only +2° F. Observations to date indicate that the Snow Camellia is equally hardy to most japonicas but no more.

Some of the early trials with varieties that are now considered satisfactory for the Washington area were disappointing until a pattern of cultural practices was evolved that would make the most of a variety's inherent hardiness. Spring planting replaced fall planting. The sunny planting sites were abandoned for ones on the north side of dwellings to take advantage of winter shade. Concessions were made to the drying effects of winter winds by the erection of windbreaks. The adoption of these and other practices have brought successes in areas where failures were previously reported.

As the outdoor culture of camellias spreads northward one frequently hears about the phenomenon of acclimatization and its effectiveness in enabling plants to become established in a climate colder than that in which they had been growing. A common inference is that after a camellia is grown out-of-doors on a more northerly site for two or three years, it will acquire the ability to withstand greater cold than plants of the same variety that have not been exposed to such conditions. This idea may also be expanded to include the recommendation that camellias for northern gardens be purchased from the most northerly source possible since they are already acclimated and are therefore more cold hardy. Observations to date indicate that acclimatization does not involve anything more than re-establishing and developing the plant's root system and that there is no change in a variety's inherent hardiness. The only possible advantage in purchasing northern grown stock is that such stock is more likely to be at the best stage of hardening in relation to the time of planting.

As already indicated, the origin and source of cold hardy varieties has been from chance seedlings and sports which have arisen in the gardens of the southeast and Pacific coast states. The task of conducting field trials for hardiness for both old and new varieties is beyond the facilities now available. For best economy in space and time, we need to be more selective in the varieties that are given field trials even at the risk that we may occasionally overlook hardy forms. Planned breeding programs for cold hardiness are also needed.

Japonicas selected for hardiness tests should come from the medium and late blooming kinds. With the possible exception of the variety 'Arejishi' no satisfactory early flowering kinds have been uncovered. The single and semi-double flowering kinds are consistently more flower bud hardy than the doubles of vari-

(Continued on next page)

ous kinds. Preference in the testing of seedlings resulting from open pollination should be given to those in which the female parent is known to be hardy such as 'Donckelarii' and 'Leucantha'. The testing of thousands of seedlings in which both parents are unknown is wasteful of time and space.

A program for developing camellias for colder climates through breeding should be made along the following lines: (1) increasing flower bud hardiness; and (2) developing forms that will bloom during the relatively frost-free periods of early fall and late spring.

Observations in the greater Washington area indicate that the flower buds of camellias are much less hardy than the rest of the plant. The approximate temperature ranges for bush hardiness and flower bud hardiness, respectfully, of the major camellia species grown out-of-doors in the north are as follows: *Camellia japonica,* bush hardy —15° to +10° F and flower bud hardy —5° to +15°; *Camellia sasanqua,* 0° to 15° and 15° to 18;° *Camellia oleifera,* —5° to +5° and 15° to 18°. The hardiness required for gardens north of Washington must come from among such outstanding hardy japonicas as 'Berenice Boddy', 'Elegans (Chandler)', 'Donckelarii', 'Dr. Tinsley', 'Kumasaka', 'Leucantha', 'Marjorie Magnificent', 'Rev. John Drayton', 'Tricolor (Siebold)', and Zimmerman's variety 'Z'. Even these varieties are not hardy enough so our only hope lies in uncovering transgressive combinations that are hardier than either parent. Breeding trials are necessary to determine what our chances are along this line.

The development of a race of camellias having the flower quality of *Camellia japonica* and flowering during the relatively frost-free month of October would greatly promote the cause of Camellia culture in the coastal areas of the upper south and northeast. This would require combining the bush hardiness and flower quality of the japonicas with the early flowering habit of *Camellia sasanqua* and *Camellia oleifera* and would eliminate the concern over flower bud hardiness.

Seemingly, the possibilities are good for developing varieties that will come into bloom throughout the month of April when the frequency and severity of frosts are decreasing. The introduction of the Kominato strain of *Camellia japonica* by Dr. John L. Creech of the New Crops Branch may give impetus to the development of a late flowering race of camellias. Field trials suggest that the lateness with which this strain breaks dormancy in the spring may be more important to camellia breeding than its alledged hardiness.

Over the last eleven years the National Arboretum has assembled a collection of approximately 150 varieties of *Camellia japonica* and 90 varieties of *Camellia sasanqua* plus a few miscellaneous species. Within the last two years we have set up a line project entitled "Breeding, testing and evaluation of Camellias." Although our primary emphasis continues to be on field trials along the lines indicated in this paper, we are ready to start a limited breeding program for hardiness. Since making crosses out-of-doors is not practical with us and greenhouse space at a premium, we welcomed the offer of assistance by the Camellia Research Advisory Committee. Whatever cooperative arrangements are finally worked out with such institutions as the Los Angeles State and County Arboretum, Descanso Gardens, Huntington Gardens, and others to do much of the actual breeding work on the west coast will, I am sure, be of mutual benefit to all concerned.

I do not look for any spectacular

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GROWING AND EXHIBITING PRIZE WINNING RETICULATA BLOOMS

By Art and Lela Krumm
Altadena, California

Your editor asked us if we could tell CAMELLIA REVIEW readers the reasons we have had such good luck in winning show trophies whenever we have exhibited blooms of the Reticulata 'BUDDHA'.

For those who are interested in the number of trophies won by us on 'BUDDHA' (we're not ashamed to brag a little) they are as follows:

1959—Descanso—Single Bloom—Court of Honor
1959—Descanso—3 Blooms—Runner-Up Trophy
1960—San Diego—Best Flower of Show
1960—Temple City—Single Bloom—Court of Honor
1961—Pomona—Best Riticulata
1961—San Diego—Best Reticulata
1961—Descanso—5 Blooms—Runner-Up

Our camellia collection is located on an ordinary sized city lot in space available after eliminating space occupied by 2 houses and 2 garages. We both work at and on our hobby and share and share alike.

The particular plant from which we have had so many fine blooms was grafted in February 1957 on a 10 year old plant of 'Caprice' that had a 3 inch stock. Due to the "push" of this large understock the scion grew 6 feet in the first 6 months. From this time on we kept the plant well staked and kept the 4 or 5 main stocks tied in toward the center in order to keep the plant well shaped, not letting it get floppy or unsymmetrical. The plant is located in a bed on the northeast corner of the house with an eastern exposure. During the years 1959-1960-1961 due to the rapid growth we have had to prune from 2 to 3 feet from the top growth to keep it from hitting the eaves of the house about 10 feet above ground. Side branches are kept cut back to maintain a good shaped plant. Inside cross branches are kept clear. Pruning cuts are made at growth buds the same as is done on Japonicas. This does not seem to cause die-back as it sometimes does on other reticulatas. This plant is watered along with japonicas in the same bed.

A mulch of about 2 inches of pine needles has been maintained around this and our other camellia plants for about the last 6 years. All our coffee grounds and tea leaves are spread over the beds for soil aereation. We feed the 'Buddha' the same as the japonicas, using a monthly feeding of

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'TINY PRINCESS'
Another Step Forward in Inter-Specific Hybridizing

Mrs. M. J. (Lilette) Whitman
Macon, Ga.

This is March and signs of Spring are seen everywhere in the South. The camellias have finally opened in all their splendor, and it is a treat to have them together with spring flowers. This past winter has been hard on them. We had successively icy storms, severe freezes and torrential rains. But as the saying goes: "All is well that ends well," and indeed we could not have dreamt of finer blooms than those we are enjoying at this late date.

March is also the favorite month of hybridizers. To be convinced of it one has only to watch the many bees as they busily go about from flower to flower. Recently, armed with a pair of tiny tweezers, I was reaching for a camellia bloom, ready to snatch some of its fat pollen-laden anthers, when suddenly I noticed a bee backing up from the center of the corolla. For an instant he circled angrily around my head. At first my fear of being stung was paramount. Then the humor of the situation dawned upon me: —there was a tiny competitor of mine who perhaps did not like me to invade his territory. However I soon discovered that the little industrious fellow was not in the least concerned with my purpose. He had a task much more vital than cross-pollination to perform, that of hunting for food way into the heart of flowers. Perchance, during his frantic search for nectar, a grain of ripe pollen would stick to his wing, later to be brushed against a sticky stigma, and fertilization would ensue. All this would happen without the slightest awareness on his part, but according to Mother Nature's plan, as is the case with everything that occurs in this great world of ours. So it seems that the expression: "Leave it to the bees" is most erroneous. It is really to Nature to which we are leaving "IT." But why should we take such a fatalistic attitude? Nature has always been most co-operative in helping men improve their lot, and she has proven to be extremely generous in revealing her precious secrets to those who are seeking them. Think of all that we would miss had man left everything just as he found it in the Past! Think of the marvelous accomplisments attained through human efforts in the horticultural field as well as in other fields! You may then come to the conclusion that there is no doubt that Nature's secrets were intended for men to discover and use in their endeavors towards reaching perfection. It is why plant explorers go to the most remote parts of the world in search of new material, so that through controlled cross-pollination with these new imports the plants we already have may be improved. Hybridization of camellia species among themselves, including the interesting new ones which explorers have recently managed to bring into the Western world, is still in its infancy. No telling what attractive new breeds of camellias may come out of these crosses, judging by the fine hybrids obtained to date.

Besides intelligent planning hybridizing requires infinite patience and perseverance, as well as an unwavering faith in ultimate success. Such must have been the lifetime philosophy of a man who is known and revered throughout the camellia world as one of the pioneers of controlled cross-pollination in this country —

Mr. K. Sawada. Recently Mr. K. told me that he has always been convinced that the many desirable qualities of C. FRATERNA, which is cold hardy, has dainty foliage, graceful growth habit, is a prolific seeder and blooms at an early age, when combined with those of C. japonica would produce very valuable and charming garden cultivars. "I worked towards this end ever since I can remember" he added. Being an unusually discriminating person Mr. K. was never satisfied with any of the results he obtained from this cross over the years. Finally success came his way when the TINY PRINCESS was born. This exquisitely beautiful hybrid may be the first representative of a new "royal lineage" in the camellia world — that of the SAWADII hybrids.

The TINY PRINCESS is the result of a cross between camellia japonica AKEBONO and C. FRATERNA, AKEBONO being the seed bearer. According to Mr. Sawada the seed was collected in 1953 and the seedling bloomed in 1955. Besides great cold hardiness, this hybrid has inherited from C. FRATERNA the graceful bowerlike habit of growth of its branches, the elongated shape of its leaves, which, although larger, are distributed in the same manner along the stems. One of the most charming features of the TINY PRINCESS is that, like in the case of C. FRATERNA, the small oval flower buds appear in every leaf axis. The bloom is from two to two and a half inches in diameter. The heart shaped petals are silky, almost transparent. Their color is a pale blush pink turning to white as the blooms open, but the edges and underside remain at all times delicately brushed with shadings of deeper orchid pink. The daintiness of this flower is accentuated by the orchid pink shade of the filaments which reflects itself deep into the throat of the corolla. The blooms come sometime single and bell shape, but most of the time semi-double or even peony-form. When fully open they cascade in profusion from the bowers, hanging gracefully from them in the same manner as do fuschia blossoms.

Mr. K. says that he has had 95 per cent success in grafting the TINY PRINCESS, and also in rooting cuttings from it. Although the japonica X fraterna cross has been attempted before Mr. K. Sawada says that, to his knowledge, the TINY PRINCESS represents the first satisfactory result of this cross. No other cross, he believes, has resulted in seedlings with attractive blooms, or seedlings that could be propagated by any known method.

So the gracious TINY PRINCESS may indeed be recognized to be the head of a new line of hybrids — the C. SAWADII that will soon adorn our gardens, side by side with the C. WILLIAMSII and the C. LAMMERTSII.

SHADE HOUSES

By Walter G. Hazlewood
Epping, New South Wales, Australia

In California, these are referred to as Lath Houses, this name being applied because the roof is composed of laths, spaced a certain distance apart. You occasionally see one of this type in Australia, but the usual one is known as a Bush House. These have wooden uprights to support the roof, sometimes 10 feet apart each way, but in the large nursery houses, they are often 10 feet one way and 20 feet the other. The roof timbers are sometimes saplings from the bush or 4 x 3 sawn timber. Where the space between uprights is 20 feet, a smaller upright, resting on a brick, is used to prevent sagging. For the roof, thick fencing wire is strung about three feet apart. This acts as a support for the six feet poultry wire netting which forms the main base for the roof. The shade is provided by Tea Tree (Leptospermum flavescens), so called because in the early days of the Settlement, an infusion was made from the leaves to serve as tea, which often was not procurable.

Tea tree grows into a straight, narrow stem with very twiggy branches. This is spread over the wire netting and tied down with rows of thin wire, spaced about three feet apart. At every intersection of these wires with the thicker ones supporting the netting, they are clipped together with a piece of wire. This is to prevent the wind blowing the brush into heaps and leaving exposed areas which would let in too much sunlight. The brush was found superior to laths as there was no drip from rain and the sunlight was more diffused. The sides of the house were wire netting with fine twigs of tea tree laced through it. This made a better wall than palings as the wind was sifted through the twigs and not concentrated into the cracks as with palings. Being upright, the walls would last for many years, but the life of the roof was 10 to 15 years when it would need replacement.

This was all right when tea tree was plentiful and handy, but with the tremendous growth of the city, it is now practically non-existant. Also with increased labour costs, some other alternative had to be found. The solution was aluminum strips, as used by venetian blind makers. This comes in rolls of 2,000 feet or more and is two inches wide. The framework of the building is 1¼ inch galvanised water pipe. The uprights, 10 feet apart, are set in 4-inch agricultural drain pipes which are 12 inches long. These are sunk into the ground leaving about one inch above the surface. The uprights are placed in and a sand and cement concrete is poured round. This is done to provide a better foot hold than if the uprights were set straight into the ground.

The cross bars of the roof are also 1¼ galvanised pipe held together by special clips which are in two pieces, shaped to fit round the pipe and with a flange on each so that they can be bolted together. The clips vary to suit the different conditions, sockets for straight out connection tee joints where there is one right angled line and squares where there are two right angled lines. As the uprights are firmly fixed in the ground there is no need to worry about a screw joint, but ordinary sockets can be used where necessary, such as between cross joints. After the main cross bars are fixed, strong wires are set three feet apart at right angles to the run of the aluminum strips. These are tied down to each cross bar. The aluminum is then run the complete length of the building. At each end it is looped round the waterpipe and fas-

tened with a staple. It is also stapled to each wire as it passes over it. This is to prevent the aluminum flapping about in the wind. There is a special stapling machine which makes it very easy to put the staples in. The strips are set two inches apart, but this can be altered to suit local conditions. In the early morning, the bars of sunlight might be four inches wide, but as the sun gets overhead this is reduced to two.

The walls present the biggest problem as it is not possible to nail wood direct on to the metal uprights. Sections of wooden material or fibrocement could be tied to the uprights, but I use the fronds of the Canary Island Date Palm (Phoenix canariensis). This makes a very effective screen and lasts for many years. Wire netting is placed round the walls and the fronds are fastened to it in several places by fine tie wire. The fronds are placed in an upright position with the base towards the ground. The result is a shade house that will last indefinitely, with the exception of the palms. Fibre glass could be used for the walls and this would be better than the palm fronds.

SUMMER CARE *(Continued)*

more alike than a hundred bridge hands. With but a few exceptions the fundamental rules apply and it is up to you to get the most out of what is before you.

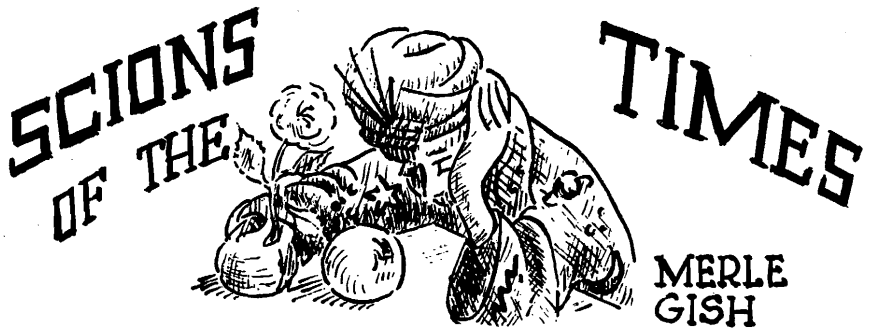
At our place camellias fall into two groups; one that we have strictly for ornamental effect and the others that we have for flowers. The first get no disbudding. We like the sight of blooms and never bother about disbudding now and looks almost like a red Christmas tree. The plants from which we hope to get flowers that make me proud to cut, get the disbudding.

There are a few basic rules we try to follow. These start back at the time of pruning. With the older and larger plants, keep them to a size and shape that you can get at to disbud. And before starting to disbud try to picture the sizes of buds to leave on in order to spread out the plant's blooming period. And here let's stop and consider why we are doing it? And, do we disbud all plants?

We are doing it to get higher quality blooms on those varieties that have a tendency to set too many buds. You are not going to disbud everything. Location and conditions have a definite bearing on bud set regardless of the varietal characteristics. So like some bridge hands, you must decide to bid or pass, to disbud or not.

When you do disbud it is suggested that you leave buds spaced so that they may open without touching other flowers or a branch. You can not always avoid leaves, but that is not too serious for with a light weight clothes pin leaves can be held away from the bloom as it opens up. From experience I have learned that it is fairly easy to twist a bud off of most japonicas but not so with my retics. The risk of damage to the tip or remaining bud seems to be serious if one attempts to remove the buds in any manner other than using strong pointed clippers.

The time that you will spend on your pruning and later in the season on disbudding will be most rewarding. Here in Southern California our bloom displays increase in numbers every season and the quality of flowers constantly improves. A very substantial factor in this rising standard is in proper summer care and good housekeeping. Keep it up!



'Wonderland'

About three years ago when we were walking about the seedling patch of Mr. Harvey Short I spotted a very large rose red semi-peony flower. This flower made such an impression that I still can see the bloom but it was late in the season and as I recall it was the last flower on the plant for that season. It was big and it was red, a very lovely rose red.

For the past couple of years I have kidded and prodded Harvey to release this hidden treasure and actually sort of lost track of the seedling. I now learn that he has released it under the name and registration of 'Wonderland'.

A seedling of 'Princess Baciocchi' it undoubtedly shows its cross to be 'Lotus' as the plant has very large, heavy veined leaves. The rich glowing red blossoms will average from five to six inch flowers. The flower may be semi-double but most of the blooms we saw were semi-peony in form. A vigorous open bush that moderate pruning shapes very nicely. Flowers midseason to late.

'Wonderland' is definitely in the class of show flowers and we will be seeing it on the table of honor with many of the other Harvey Short show winners.

'Valerie'

Many a camellia fan is still looking for the deep red or even metalic red that will flower during our holiday season rounding Christmas. We learn that Dr. Wells of Panama City, Florida has registered a seedling which is semi-double in form with 14 to 16 very heavy textured petals and prominent stamens that occasionally show petaloids.

It is said to be a prolific bloomer during December and January which would make it ideal for a holiday flower.

A seedling of 'Lindsay Neill' the foliage is large, slightly pointed, heavy textured, serrated leaves. With the vigorour growth and very showy flowers while it is in bloom we may find this a variety with a purpose of landscape.

COLD RESISTANT *(Continued)*

gains in the near future in advancing camellia culture northward along the coast or in completely solving the cold problem wherever camellias are grown, but rather a steady progress over a long period of time. Those of us that are trying to extend the range of camellias need to free ourselves of the sense of urgency forced on us by well-meaning enthusiasts. Progeny tests for hardiness take time, and test winters are not at our bidding. Even a modest gain, however, along the heavily populated east coast would extend the range of camellia culture to hundreds of thousands of people.

THE CASE OF THE CHLOROTIC CAMELLIA

Marjorie Washburn
Port Arthur, Texas

A friend of mine has several large camellias of the older varieties, including 'Purple Dawn', 'Alba Plena', 'Cameo Pink', and a few unknowns. In recent years he has added 'Tomorrow', 'Lindsay Neill', 'Mathotiana Supreme', and others. The soil in his section is deep loam, well drained, and as a consequence, his plants normally are in better condition than in some other sections and he has few problems. However, last spring his plant of 'Cameo Pink', which is perhaps 10 to 12 feet tall, began to show signs of a deficiency of some kind. Because of some mysterious illness, the foliage was no longer its deep, lush green, growth was abnormally short, and the plant was not happy. The owner used a little fertilizer, watered the plant during hot, dry weather, and generally gave the camellia a reasonable amount of care.

Last fall the plant had produced a number of buds, but during the flowering season, not one opened into a flower. An 'Alba Plena' plant growing nearby appeared to be in good condition and unaffected, which only added to the mystery. The 'Cameo Pink' became progressively worse, more and more chlorotic, and leaves began to turn brown. Definitely the plant was dying, and for no discernible reason. When spring came and other plants were putting out the first flush of growth, leaves of this plant withered and fell, growth tips died, and large branches dried up. Unless something could be done quickly, it would surely be too late!

My advice was requested, and an inspection of the plant was made. It was obvious that whatever was wrong, it was serious. The inside leaves were in worse condition than the outside leaves, to eliminate the possibility of the plant having been sprayed by mistake with a household or other poisonous insecticide. Upon inquiry, I learned from the owner that a natural gas service line passes within about two feet of the plant's roots. I suggested that the possibility of a leak in the gas line be investigated, and recommended that the plant be pruned of all dying twigs and branches, that it be kept moist, and that fertilizer be withheld.

By pouring some very soapy water on the ground above the gas line, my friend determined from the many bubbles rising to the surface that a substantial leak existed. The line has now been repaired and the plant has been pruned. We believe that this plant has been subjected for more than a year to contamination of the soil by gas, and that all symptoms of chlorosis were caused by this condition. Whether or not the diagnosis and correction were in time to save the plant, we do not yet know. Although the mystery of the chlorotic camellia is solved, the story is not finished and the patient may die.

Some time ago one of my own camellias was affected by a leak in the gas service line, which was discovered before the damage became severe. My plant will soon be fully recovered.

Because most of us who have camellia planting use natural gas, I think this matter should be reported. If plants are growing near a gas line, any symptoms of an unusual or chlorotic nature should be sufficient justification for an immediate investigation of the condition of the gas service line before serious damage to a fine camellia can result.

THE SHOW MUST GO ON

Jerry Olrich
State Gardener, Sacramento, California

The highlight of any camellia season is the show. The grandeur, the pageantry, the Queens, the music and the happy look on the faces of the winners. The look of disappointment of the losers. This is the show. Nothing can compare with its beauty or pageantry.

The main purpose of a show is not only to show our flowers so we can win an award, but to show this beauty to everyone so they, too, will join with us in growing and showing their flowers.

Viewing a few of the shows around the country you often wonder if there is any room left for improvement — then you start looking and thinking what is there left to do. You ask judges, exhibitors and the people putting on the show. You always come up with some problems.

One that is always confusing is the definition of "What is an amateur?" I know of quite a number of cases where people who do maintenance work, such as taking care of yards for a living, are considered professionals. On the other hand, one can hire professional gardeners to take care of his garden and his camellias and he is considered an amateur. How anyone can go along with this is beyond me. Why not put a stop to all this bickering?

I would recommend that all camellia shows be thrown wide open — let anyone compete that wants to regardless of whether he is an amateur or a so-called professional. If this is done it will, I believe, improve our shows. Then when we say the best or most outstanding flower of the show it will be just that.

Many may complain that this won't work, but it will if given a chance. Just recently we put on a small community camellia show and we let all the bars down. We let everyone exhibit and compete against each other. To be exact, there were six amateurs and two professionals competing against each other, though they didn't know it. Can you imagine who won? The amateurs took all the prizes and had much superior flowers. After viewing this I feel that all bars and restrictions should be dropped. Being a professional, I hate to admit the amateur is so much better. Usually what happens is the amateur has much more time to devote to growing show flowers and does such a good job with them.

There are many who will say the professional has so many more plants to choose from. This shouldn't make too much difference as there are so many amateurs who have many more varieties than some of the pros. A few years ago the professionals had all the varieties, but with the advent of grafting the amateurs took the pro by surprise and now do as good a job grafting, if not better, as the pro thereby collecting many more newer varieties than the pro could get. I know of one amateur who has about four hundred varieties and nearly all are exceptionally good varieties. Many are show stoppers and winners. Where you may find one pro who wins at some of the shows you will find twenty others who never win. I doubt if the professional would try very hard to compete for prizes. You will find that his main reason for displaying his flowers is usually to advertise his product and to promote more sales of camellia plants.

At one of our large shows a few years ago the members were discussing their own show and what to do to get more local people to show their flowers. It seemed to them that by prohibiting the outside grower it

would enhance their own chances for ribbons and trophies. After discussing the pro and cons it was decided to help their own people grow better flowers with educational meetings of their society. It wasn't long before the local participants were taking ninety percent of the prizes. Now members of this same society go to the other shows and come away with more than their share of prizes. You can imagine what would have happened if this group would have reverted to their original thinking — their show would never have reached the proportion that it has, it would have reverted to just a small community show with so very few exhibitors.

What a show this has turned out to be — 10,000 blooms on exhibition with 55,000 visitors. This is really worth while for if each visitor went out and bought one camellia plant for his yard you can visualize what the future of this show is going to be. There won't be only 10,000 blooms — there will be 15,000, then 20,000. What a sight this will be!

So my advice to the various camellia societies would be open up your shows. Eliminate as many of the restrictions as possible as this will eliminate so many petty bickerings. A camellia is a camellia, no matter who grows it, and it is worthy of any and all considerations. No hurdles should be put in its path — of being shown either by an amateur or a professional.

The lovely camellia that grows
in my yard
Which gives me blooms that can
win any prize;
It's my pride and joy and how
unhappy I would be
If I couldn't ever show it for
everyone to see.

A REPORT *(Continued)*

The desirable characteristics sought after in such an intergeneric cross are obvious. First, the introduction of yellow color in the camellia line and second the extension of the bloom season. The Tutcheria has arborescent characteristics which could also benefit the camellia line.

Other possibilities exist in intergeneric crossing in the camellia line such as improved hardiness which could come from union with the Stuartia genus and extension of individual variety bloom time by causing buds to form over a longer period of time which could come from crosses with Schima and possibly other genera.

Roses, cymbidium orchids and rhododendron will be in bloom at Descanso Gardens during the month of May.

A COUPLE OF CALIFORNIANS VISIT THE SOUTH IN AZALEA TIME

Harold E. Dryden

Elsie and I are both "native sons" of California and, as such, are able to hold our own in discussions on where a person should live in order to obtain maximum pleasure and contentment. We have recognized, however, that there must be good reasons why so many people elect to live elsewhere than in California; in fact, some return to their former homes after having given California a try. So, within the limits of our time and money, we have visited different parts of the United States to see for ourselves. Needless to say, we have tried to make these visits when we could expect to see the most in the way of beauty. We think we hit the "jack pot" this year and are telling about it in CAMELLIA REVIEW because we think that many of our readers, particularly in California, would get as much pleasure out of such a trip as we did.

We toured the South in Azalea time. People afflicted with camelliaitis can argue from now to the end of time about the relative merits of the camellia vs. other flowers, and can hold their own in such arguments. But when it comes to color and garden beauty, particularly in mass planting, the azalea is in a class by itself. And while it grows wild in some parts of the country, only in the South have people deliberately set out to take advantage of its beauty in gardens. So to the South we went in the latter part of March and early April. People told us we were a little late. Maybe we were, but we were satisfied with what we saw.

We flew to New Orleans and after a few days of sight-seeing rented an automobile for our touring. We were late for the azaleas in New Orleans. We first went to Natchez, Miss. for their annual Pilgrimage. In antibellum days, Natchez was a center of activity in agriculture and in shipping products down the Mississippi to New Orleans for trans-shipment to the markets. In this thriving area many beautiful homes were built. Fortunately for us of succeeding eras, Natchez did not suffer from the Civil War. Every year in March, the two garden clubs of Natchez hold their Pilgrimage, during which thirty antibellum homes and their gardens are opened to the public. These homes are not museum pieces. They are homes, now lived in, normal in every respect except that their furnishings all have the anti-bellum flavor. And their gardens all have the azaleas and dog wood that one would expect to find. Elsie and I stayed, while there, in a beautiful home, with a beautiful garden, that was built in 1845. Furnishings were of that period. The owner, a delightful woman of 82, has lived in this home since going there as a bride. One wonders after being in this atmosphere whether all the modern ideas and conveniences have really added to the beauty of the home.

From Natchez we drove to Mobile, Alabama. We had known of the Azalea Trail in Mobile. We did not know, however, until we saw it, that this Trail is a route of some 35 miles in Mobile, clearly marked so that all can follow it, over streets where azaleas have been planted in their homes by home owners. Mobile earns our first prize as a city that has formulated and carried out a plan of city beautification built around a particular season.

We visited two beautiful gardens in and around Mobile. Long Gardens, which is on the Azalea Trail, is a

man-made garden of some ten acres, beautiful in design and color. We enjoyed it very much. We think Bellingrath Gardens, a few miles out of Mobile, is almost in a class by itself. The site of these Gardens was originally a semi-tropical jungle on the Isle-Aux-Oise (Fowl) River. In 1917 the property was acquired for a private fishing lodge by Walter and Bessie Morse Bellingrath. In 1927 they began the transformation of these woodlands into what has become one of the truly great gardens of the world. Only with color pictures can one describe the beauty of these gardens in azalea time.

Our next destination was Charleston, South Carolina. We routed ourselves through Thomasville, Georgia, the birthplace of the 'Betty Sheffields', 'Tomorrow', 'Tick Tock', and others of today's most popular camellias. We thought we would stop there for a couple of hours and say "hello" to some of the camellia people. We reckoned, however, without knowledge of the hospitality of the Powells and the Hayes. We were told that people, particularly from as far away as California, just don't stop at Thomasville for a couple of hours. So after spending the rest of the day and the night in one of the prettiest areas of our journey, we resumed our trip to Charlston.

Charlston has its history and the homes and furnishings that go with the history, and three beautiful gardens — Magnolia, Middleton and Cypress. Magnolia and Middleton are both rich in history and beauty. Both were developed in Colonial times. Succeeding owners, all descendents of the founders, have added to the original beauty that the founders discovered on the banks of the Ashley River. Our visit to Magnolia Gardens was particularly delightful because we were personally guided around the Gardens by C. Norwood Hastie, one of the present owners and, incidentally, the man who introduced 'King's Ransom' to the camellia world as a 1961 All-America selection. Cypress Gardens are relatively new, different from Magnolia and Middleton, and beautiful to see.

We ended our tour at Miami and flew home from there. Excepting for Cypress Gardens at Winter Haven, Florida, our garden tour ended at Charlston. The thing that took us on the trip to begin with was a business meeting at Jacksonville, Florida. I'm sure people would have charged us with being narrow-minded if we had not taken this opportunity to see some of the state that news and magazine writers have selected as California's competitor. And we would have been because we enjoyed every mile of our four-day leisurely trip from Jacksonville to the Miami airport.

John Ilges Award

It was announced at the annual meeting of the American Camellia Society that there will be no John Ilges Award this year. This medal is awarded by A. C. S. only when in the opinion of a panel of judges, a new variety possesses such great merit that it deserves wide-spread recognition and approbation. Seven awards of this medal have been made, as follows: 'Beau Harp' (1949), 'Joseph Pfingstl' (1950), 'R. L. Wheeler' (1953), 'Mrs. D. W. Davis' (1955), 'Reg Ragland' (1956), 'Tomorrow' (1957), 'Guilio Nuccio' (1958).

Put September 24th to October 9th inclusive on your calendar for the Festival of Garden Lights at Descanso Gardens. This has become an annual affair and all who have attended acclaim it.

HYBRIDIZING CAMELLIAS

Howard Asper
Supt., Huntington Botanical Gardens
San Marino, California

Our REVIEW Editor, Harold Dryden, made a statement to this audience a few months back to the effect that camellia hybridizing is fast becoming one of our national pastimes. He further stated that he too intends to take it up some one of these days when he reaches an age where he can no longer work regularly. He neglected to announce any definite date but when that time arrives we will welcome him into the fold.

Seriously this brings up the question of why should anyone spend time hybridizing camellias for any reason than self amusement! The past decade has witnessed the origination of many fine camellias by open pollination. When the bees are able to bring forth such glamorous results as 'Guilio Nuccio', 'Reg Ragland', 'Coronation', or 'Ballet Dancer', why shouldn't we all be completely satisfied? Certainly results of hand pollinations to date fail to compare favorably with the results of open pollinations .

Perhaps it was the introduction of new species that started us to think of combining certain desirable factors possessed by the different species in the hope of creating new and exciting flowers and plants. Or perhaps it was the results of the work of J. C. Williams which made us dissatisfied with the endless variations of Camellia japonica seedlings. In all events we are on the move — amateurs and professionals alike are making crosses of every imaginable combination. And I heartily approve for I am sure some good new hybrid camellias will be the result. In fact, exciting new hybrids have already been created.

I believe it was in 1924 that George Forest, an English plant explorer, discovered the saluenensis species growing in a rocky canyon in the mountains of Yunnan Province in Western China. He sent seed back to England to his friend, J. C. Williams, who succeeded in growing some of the plants in his Gardens. Eventually he decided to do some hybridizing and crossed saluenensis x japonica. From this effort came some very fine varieties now termed the Williamsii hybrids; best known are 'J. C. Williams', 'Donation' and the Waterhouse group. One of the outstanding characteristics of the Williamsii hybrids is the vigor and the bushiness of the plants. And, surprisingly enough, they are more cold-hardy than either of the parents. The flowers are single to semi-double and somewhat lacking in substance. However, the second and third generation crosses seem to produce much better flowers.

With the importation of the eighteen varieties of reticulatas in 1948, came a great deal of conjecture as to what they might add if crossed with other species. Prof. Tsai, the kindly Chinese gentleman who shipped the reticulatas to us, wrote in a letter that seedlings grown from reticulata seed would result only in small, single flowers. This, of course, did not prove to be the case. Each year more of the open pollinated reticulata seedlings are being brought into bloom and a high percentage of the flowers are indeed beautiful — often rivaling their maternal parent in size and loveliness.

Allow me to give an example: On February 12, 1960 an open pollinated seedling of 'Lion's Head' opened a flower of singular beauty. It was blood-red in color, of 'Debutante' form and over six inches in diameter. The plant appears to be bushy and the leaves are dark green with heavy

texture. It does seem worthy of propagation and you will be seeing it in a few years.

Several others are also quite outstanding but I will not pause to describe them. It is interesting to note that with me the best open pollinated seedling flowers have come from 'Lion's Head'. 'Noble Pearl' seedlings have been very disappointing — in fact, several have been singles about two inches across. And, so far, all 'Willow Wand' seedlings have been very bushy plants. This, coupled with the orchid color of the flowers, might indicate that there is saluenensis or pitardii blood in the parentage. In fact, it might well be that 'Willow Wand' may itself be a hybrid, as is true of 'Buddha' and 'Confucius'.

If such results can be obtained from open pollinated seedlings, what might be expected from hand pollinated crosses. Immediately following the arrival of the Yunnan reticulata plants at Descanso, Dr. Walter Lammerts began a fairly extensive program of crossing japonica x reticulata; i.e., putting reticulata pollen on japonica flowers. He used 'Donckelarii' quite extensively, although a number of other japonica varieties were also used. While the seed pods seemed to set quite readily, many dried up and fell off before reaching maturity. Of the seed that he was finally able to harvest, only a small percentage germinated. The seedlings bore foliage seemingly identical to japonica and were so lacking in any reticulata characteristics that Dr. Lammerts concluded that they must have been caused by that strange phenomenon of nature known as apomixis in which a seedling is developed without true fertilization and that the wide difference in the chromosome counts made it impractical.

You can read a full account of his work in his article published in the 1954 American Camellia Society Yearbook. So far as I know, no worthwhile flowers came from these crosses.

About that same time I made a number of crosses of 'Donckelarii' x 'Cornelian' in my back-yard at La Canada. I was able to come up with three seedlings one of which promptly died. The other two were grafted onto japonica understock and grew on to maturity. Since the foliage so closely resembled japonica, I also assumed that I had failed to obtain a hybrid. But I kept the plants and later blooming they both set seed and I was not only delighted but astonished by the appearance of the seed pods. They were not green, shiny and smooth as japonica seed pods but brown and pubescent as reticulata seed pods. The seeds themselves have the dull, black look of the reticulata seeds. Since I evidently have hybrids, I am using them extensively in my present breeding program but have not gone far enough as yet to report any results. I can only say that seedlings from those parents seem to be unusually vigorous.

I mentioned grafting the little seedlings onto japonica understock and I would like to take a few minutes to explain how and why. I find a certain mortality rate among seedlings, especially among hybrid seedlings, and grafting seems to be the answer. I am well acquainted with the technique of so-called seed grafting and have successfully performed it many times. However, I have discarded it in favor of grafting the growth tips of the little seedlings. When they have reached a height of about two or three inches, I cut off about an inch and graft it as one would graft any scion. Sometimes the stem is no larger than the shank of an ordinary pin and I simply scrape off the bark and do not try to cut it. The percentages of "take" have been so high as to be unbelievable and therefore I will refrain from quoting the exact figure.

(Continued on next page)

But I do think that I lose fewer seedlings by grafting in the manner mentioned than I would by trying to grow them on their own roots.

The grafted seedlings grow at a fast rate and in some cases I have had a first bloom two years after the seed was harvested. This occurred under ordinary growing conditions and without the aid of artificial heat, light or high nutrient. Of course, flowers bloomed under natural conditions give a much better basis for proper evaluation.

Now back to hybridizing and a discussion of crossing reticulata varieties. Three years ago I made a sizable number of such crosses at my ranch near Escondido. Since I had had such outstanding flowers bloom on open-pollinated reticulata seedlings, I was curious to see if certain pairs of good reticulata varieties might produce even better results. I was able to come up with about 200 grafted reticulata x reticulata seedlings and quite a number bloomed this past winter. I had used 'Buddha' quite freely as a seed parent, perhaps because it sets seed so readily. 'Buddha' x 'Lion's Head', a cross I thought might be good, proved to be very disappointing. The plants are very tall and are lacking in bushiness and those that bloomed bore very indifferent flowers. Of course, not all of that cross have bloomed but I now have little hope for any good flowers from it.

At that same time, I used 'Purple Gown' pollen on 'Buddha' and succeeded in getting about twenty seedlings. While 'Purple Gown' has never set seed, to the best of my knowledge, it does occasionally bear viable pollen. This I used and I am glad that I did, since it seems to always impart its color and heavy foliage to its seedlings. One of these 'Buddha' x 'Purple Gown' seedlings was most outstanding. The plant is extremely vigorous and quite bushy with very heavy dark green leaves. The flower had the exact form and size of 'Buddha', heavily textured petals and the 'Purple Gown' color. Just one new flower per year such as that one is reward enough for all the time and effort involved in my hybridizing program.

In that age class of reticulata x reticulata seedlings, I have several interesting plants, although they have not yet bloomed. About ten of the plants have 'Noble Pearl' as their seed parent and every one is very bushy in growth habit. In fact, I have seen few, if any, japonicas to equal them in bushiness and they show every indication of remaining so. Yet, when I remember the small, single flowers on the open-pollinated seedlings of the 'Noble Pearl', I can entertain little hope for good flowers. I can, however, use them in making F2 crosses . . . . and perhaps then will succeed in putting a beautiful reticulata flower on a vigorous, bushy plant. Perhaps I can come up with a reticulata that even the experts will be able to grow successfully.

And now a moment for discussion of reticulata x japonica. Three years ago a number of such crosses were made but not many seed pods matured. Of those that did, I found a good many that contained no seed. Those that had seed invariably had many empty chambers and some had only tiny black specks instead of full, mature seeds. This was probably due to the wide difference in the chromosome numbers of the parents — 90 for reticulatas and 30 for japonicas. Some apparently normal seeds turned out to be empty — just a black shell with no cotyledons.

However, a number of seeds which did germinate were grafted and several bloomed. One, 'Buddha' x 'Jack of Hearts', started to show color in the buds in September only to keep me in suspense until it finally bloomed in January. The flower was not large

but of good color and of excellent texture. We will see what it does next year. 'Buddha' x 'Ville de Nantes' bore a small semi-double flower of a warm pink color. Pleasing, yes, but certainly not worthy of introduction. In fact, that must be fairly said of all the reticulata x japonica seedlings that have bloomed thus far.

One seedling which I do wish to mention has not bloomed as yet. It resulted from a 'Lion's Head' x 'Coronation' cross and has leaves that rival 'Masterpiece' in size and texture. Despite the fact that it came from a seed off 'Lion's Head', it shows absolutely no reticulata influence. Hybridity has, however, been definitely established by Dr. Albert E. Longley through scientific study of the cells. I do hope that it will bloom next year for I find the waiting period difficult.

Before closing, I want to say that I was most reluctant to talk about my hybrids and hybridizing — not that I have any secrets to withhold — but because I feel that I have not as yet gone far enough to arrive at any definite conclusion. My present crop of seedlings includes some very interesting crosses but, in many instances, it will be years before they will even bloom. Consequently deciding what further crosses to make is like taking a shot in the dark. But, as time passes, we will learn what plants make good parents — which factors are dominant and which are recessive. We do believe that the best results will be obtained in the F2 and F3 crosses.

Now one statement of policy in regard to new seedlings and hybrids — I have resolved never to introduce any of them to the trade unless they are truly outstanding, completely different and obviously superior to all existing named varieties. Anything less than that is a detriment to the cause that lies so close to my heart — hybridizing camellias!

GROWING & EXHIBITING RETICULATAS *(Continued)*

about 1½ quarts per month of a liquid fish emulsion from April through August, plus about 2 feedings per season of Nuccio's Stabilized Iron.

'Buddha' has its first blooms during the last week of January and is available for the first shows in February before the other reticulatas have bloomed. Our blooms have been outstanding because they have maintained about 4 very upright trumpet shaped petals in the center while attaining a 5″ to 5½″ diameter. There are generally enough blooms during show time so that we can enter a single and a multiple entry.

We pick our blooms before dawn on the morning of the show and can cut them with a stem without hampering the growth of that branch.

We carry our blooms in wooden boxes that stack on top of each other. Caps off cans that 35mm color film comes in are glued to bottom of the boxes and filled with wet sphagnum moss. Bottoms of the boxes are filled with shredded paper around and to the top of the cups and then moistened. The flowers are placed so they rest in the cups and are supported and cushioned by the damp shredded paper.

We believe the high quality of the blooms we have exhibited is due to the "push" of the understock, to the severe pruning program and to the fact that the blooms are picked before dawn when they are at their freshest. It also appears that this variety likes a little warmer location than japonicas.

All in all we are real proud and pleased with our 'Buddha' and recommend it as the best performing, best foliage, and appearance as a shrub of any reticulata.

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Camellia Society of Kern County.....Bakersfield
President: Tom Stull; Secretary: Mrs. Frank B. Anderson, P.O. Box 183, Bakersfield.
Meetings held 2nd Wednesday of the month, October through April, at Cunningham Memorial Art Gallery, 1930 R St., Bakersfield.

Camellia Society of Orange County.....Santa Ana
President: F. E. Kahen; Secretary: Mrs. George T. Butler, 1121 Orange, Santa Ana.
Meetings held second Thursday of the month, October through April, in Spurgeon Memorial Room of New Santa Ana Public Library.

Central California Camellia Society.....Fresno
President: Rey Merino; Secretary: Mrs. Karen Lee Aherns, 1144-E Saginaw Way, Fresno.
Meetings held 2nd Wednesday of each month, November through March, except March meeting which is held on 4th Wednesday, at Heaton School, Del Mar Ave., Fresno.

Huntington Camellia Garden.....San Marino
Henry E. Huntington Library and Art Gallery, Oxford Road, San Marino.

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President: Laurence S. Shuey; Secretary: Mrs. Peter Folino, 708 W. Pepper Dr., Arcadia.
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