THE Camellia REVIEW

A Publication of the Southern California Camellia Society

'Tiffany'
Courtesy Select Camellias, Inc.

Vol. 26 *October 1964* *No. 1*

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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THE COVER FLOWER

C. japonica 'Tiffany'

This month's cover flower is the 1964 winner of the Margarete Hertrich Award for Best Japonica Seedling of the Southern California Camellia Society. The seedling was first propagated by Dr. John H. Urabec of La Canada, California. It was entered in the competition for All American Camellia and according to reports was high in contention for the Award when All America Selections, Inc. folded. Prior to 1962 when its registered name was bestowed on it, the flower was known as the "Urabec" seedling. It was introduced to the market in the fall of 1963. Color is light orchid pink running to deeper color towards the outer edge. Form is loose peony to anemone with flower size that betters 5" and a depth of over 3 inches.

THOUGHTS *from the editor*

We start the new volume of CAMELLIA REVIEW, Volume 26, with the hope that it will be instructive to people who are new in camellia culture and interesting to this group as well as the larger one of people who may have become somewhat sophisticated with regard to how to grow championship camellias. We recognize, of course, that some of the latter group can and do pick up morsals of information and ideas which they put to good use, so we are not apologetic with regard to the elementary information that we shall publish during the season. Alvin Gunn's page "What's Behind the Green Thumb" will be a regular part of the magazine and more specific articles will appear as the subjects are timely in camellia culture.

Dr. Clifford Parks of the Los Angeles County Arboretum staff will again be a contributor, with his articles built around the work he is doing for the Camellia Research Advisory Committee. As his article in this issue of CAMELLIA REVIEW indicates, he is building a solid foundation for hopeful prospects in connection with the search for color break-through, fragrance and cold hardiness in camellias. This is a long time project, and Dr. Parks believes that the best hope for success is in large quantities of the proper crosses. He has a good field for such crosses in Descanso Gardens and the Huntington Botanical Gardens and is making good use of these opportunities. The first generation of his work will soon be available. He cautions against optimism that this first generttion will be fruitful, always with the hope, of course, that he will be pleasantly surprised.

We had planned to run an article this month on "Virus" by Chandler North of the staff of U. C. L. A., but his work at the University prevented his meeting the deadline for this issue. It will appear in the November issue. We hope that we can encourtge Mr. North to write more for us, because he is actively engaged at the University in the subjects of which he writes and his articles will have in them the touch of authority as well as interest.

On another front, we start with this issue a series of articles about camellias in Australia by Alfred Stewart under the title "Camellias Down Under". Incidentally, he told me that from their point of view we are the ones who are "down under", but that is probably a matter of perspective. Mr. Stewart's writings are not new to camellia people in the United States, since he wrote from time to time for the CAMELLIAN.

I again ask that readers tell me of subjects they would like to have covered in CAMELLIA REVIEW. This request in the past has not been entirely without result because I have received suggestions, all of which made for a better magazine.

Harold E. Snyder

S. C. C. S. MEETING PROGRAM FOR 1964 - 1965 SEASON

Alvin L. Gunn
Program Chairman

Another camellia meeting time is about here, and what to have for programs to please everyone? A session on fertilizers wrinkles so many women's noses you would think it was a new cologne. Pruning, grafting, watering, etc. are old shoe to many of the experts in the society. Plant pests, diseases and soil mixes are generally covered so often they are like a TV commercial.

The new members of our group still have the yearning to learn more about camellia culture, and those of us who have been around for a few years will enjoy an opportunity to visit with friends we haven't seen for a while. So our November 10 meeting will be kind of a five ring circus. In one ring will be a couple of gals to individually teach how to make corsages. Ring number two will be instructions on how to graft. Another ring will show the steps necessary in making cuttings. How to propagate seedlings, and pollenizing will take up our last two rings. So come walk around, and see what you can learn and visit your friends.

I wonder how many times in the last two years I have heard someone say they went to Nuccio's the other day, and then spend the next ten or fifteen minutes telling of all the things Julius or Joe had to say. It is always fascinating to hear of the results of some of the species crosses or how such and such a variety is performing at their nursery. To get a preview of their future introductions has me out in my lath house looking at my seedlings in anticipation. Julius will talk to us on many of the odds and ends of fascinating goings on at Nuccio's. We are very fortunate in having Julius as our December 8 speaker, as his busy schedule will allow him to accept only one speaking engagement in the season. So mark your calendar, and don't forget December 8th.

The January meeting is primarily for the so called weaker sex. How can you gals arrange the flowers that hubby is raising, and what kind of branches do you want to snip off when his back is turned? Mrs. Marjorie Riley, a professional arranger, comes highly recommended for her talents as a flower arranger, and her sense of humor. She will spend a half hour showing how to beautify your home. Stand back fellows and let the women up front.

The excitement of something new, big, pink and beautiful had the people at the 1964 coast shows quivering when they looked at the new hybrid 'Howard Asper'. A 12" branch with a half dozen 5" flowers, a cross of sasanqua 'Narumi-Gata' X reticulata 'Lionhead' had the unbelievers believing. Those were a couple of the impossibles Howard Asper showed to tease us last year. What is he keeping under wraps down south, and what will bloom this year for the first time? Howard will talk to us about his hybrids, reticulatas and any of the '64 and '65 blooms we haven't seen or heard of. If we are lucky he will show us a flower of his next year's introduction at the February meeting.

March and April our pet flowers have some tough competition in the mass blooming of California wild flowers. For those of us who don't take the time to drive out to enjoy them each year, Frank Ford will bring them to you for our March program. Frank, a member of our

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SO YOU WANT TO GIB

Frank F. Reed
Pasadena, California

Of course it is most important to have some idea of how long it takes to get a bloom from a gibbed terminal. In my article in the May 1964 CAMELLIA REVIEW, there were some "shot gun" averages for several varieties to bloom in various parts of the camellia belt. Some estimates for other gibbing dates and other varieties will be given below. Several variables are involved, therefore you must take the values with a grain of salt.

Mixing and Procedures

The estimates will be based on using a 1% acqueous solution (10,000 parts per million) of gibberellic acid and the method of knocking off the growth bud at a terminal where there is also a bloom bud. One drop of the solution is put into the remaining cup or stump. The solution is made from an estimated ⅓ gram of gib powder and a fluid ounce of distilled water put in a 2-ounce bottle. The addition of 12 to 15 drops of household ammonia forces the gib into solution. Exact quantities are immaterial. Store your solution in the refrigerator so that it will not lose its strength for several weeks. The powder needs no special storage.

When a floral bud is left at the second left axil below the gibbed terminal there apparently is no effect on this bud from having put gib at the terminal of a japonica. Normally we cut off two leaves with every bloom. Under these procedures we have noted no significant difference in subsequent growth between gibbed and ungibbed terminals of japonicas.

It appears that when the usual procedure has been applied to reticulatas, you may get action on growth buds as far down as four inches below the terminal. North of UCLA has reported this type of increased growth and resultant bushiness of his 'Capt. Rawes'. . . . As to improved retic blooms, the deponent sayeth not. Luck to you if you wish to improve your blooms with gib!

Estimated Time to Bloom

For December 1st gibbing, it is possible that the Daik famliy, 'Debutante', 'Alba Plena', 'Daitairin', 'Arejishi' and 'Fimbriata' can be gibbed into bloom in less than thirty days. 'Mrs. Tingley', 'Adolph Audusson', 'White Empress', 'Carolyn Tuttle', 'Kickoff', 'Joshua Youtz', 'Indian Summer', 'Gigantea' and 'Emmett Barnes' should take 30 to 35 days. Here is another group estimated to come through in 35 to 40 days: 'Elegans' family, 'Finlandia', 'Nagasaki', 'Spring Sonnet', 'Kramer's Supreme', 'Ballet Dancer', 'Royal Trumpeteer', 'Disneyland', 'Ecclefield', 'Drama Girl' and 'Coronation'. 'Guilio Nuccio', 'Tiffany', 'Mrs. D. W. Davis', 'Reg Ragland', 'Tomorrow', 'Betty Sheffield' assortment, 'R. L. Wheeler', 'White Nun', 'Miss Universe', 'Silver Anniversary', 'Jack McCaskill' and the retics (if you dare) will probably take 40 days or longer.

If you gib around New Year's, the first group above should bloom "quick like" and the others take ten days less than indicated for the December 1st operation.

If you want to get blooms on a certain date, use the Univac and some gobblegook to estimate an exact date to gib. Then gib two terminals a week ahead of, and two terminals a week after, as well as two terminals on, your calculated date.

If you are curious, you will find that the marking of terminals, keeping records, observing and analyzing results will take about five times as

much effort as the simple job of gibbing. I believe that Doug Thompson's scheme of recording the camellias alphabetically is better than listing according to geography in your yard or by blooming seasons

Suggested Don'ts

Don't gib before September. No alcohol solution because it is worse for camellias than for you. Even the acqueous solution will burn the small growth buds when it is sprayed or spilled on them. Don't inject gib into the woody part of branches except on the advice of Plant Biochemistry counsel. Gibbing at other than the terminal can give unwanted results. Several have reported poor results when they used solutions materially below 10,000 ppm (parts per million). However, there have been no bad results from going much higher, — even to 100,000 ppm. Better lay off those trick chemicals which the author has used and encourage him in the fool idea of testing the 2,4D weed killer on *his* camellias.

On the other hand, volunteers are wanted to check my results on various ratios of gib and indoleacetic acid (IA). Both substances are hormones and are assumed to be natural growth regulators for camellias. Last year and this, there are indications that a mixture of 5,000ppm gib and 1,000 ppm IA gives equal or better results than 10,000ppm gib. We will continue this mix and test it against a mixture of 8,000ppm gib and 400ppm IA. The proposal is to treat two terminals with each solution on 10 bushes in your back yard during the weekend of October 24th. I will furnish the solutions and do the jabbing for local volunteers. As straw boss and time keeper, you will mark the terminals and keep the records.

Don't get the idea that gib is a substitute for nutrients and other culture because these are still required. My latest experiment has been to use 3 or 4 times as much fertilizer in 1964 as in previous years. Results are most gratifying with the best ever foliage and buds.

Merry Christmas

Plan now for blooming camellia bushes on either side of your front door during Christmas week. Do not disbud the plants. Our plan is to use plants with dark green foliage and reddish blooms: 'Dr. J. V. Knapp' (midseason) and 'Romany' which has been consistently Early for us. Both have clusters of buds at their terminals and have approximately 400 buds per plant.

The one or two growth buds in each cluster will be removed and a drop of gib will be put in each cup remaining. One half of the terminals of 'Dr. Knapp' will be gibbed on November 14th and the other half will be treated on November 28th. Due to my confidence in the faithful 'Romany', we will shoot the works on it on November 28th. If you are going to gib an early camellia for Christmas, it is suggested that you do half of the terminals on November 23rd and the other half on December 2nd.

Famous Last Words

Before you accept all of my ex cathedra and pious pronouncements as the gospel, remember that injunction about the grain of salt: — read Harvey Short's experience with 50 ppm gib in the CAMELLIA REVIEW of last May. You can also check to see if I tell a consistent story in the upcoming ACS Yearbook.

Nuccio's Nurseries of Altadena, California have acquired some plants of a 'Buddha' X saluenensis 'Appleblossom' cross that will be attracting attention after they have "looked at it" for a year or so and built up some stock. All the blooms on the plants, which had not been disbudded, looked like five-inchers.

EFFECT OF GIBBERELLIC ACID ON CAMELLIA PLANTS

Caryll W. Pitkin
San Marino, California

There is a great deal of discussion among camellia growers as to what effect, if any, the use of gibberellic acid has on the growth habits, vigor and appearance of the plant. This short article is intended to record the writer's observations of his own plants which were treated with gibberellic and those of others in this area who have used the substance in the past year or two.

To begin with it seems that invariably when a growth bud is removed and the resulting cup treated with gibberellic in the 10,000 ppm solution which is commonly used here, that branch tip—and tip only—will make no further growth. The stub will be very slightly enlarged and will callous over. However, from one-half inch to three or four inches back the plant will branch and grow normally. In a few instances it seemed that the lateral branching was extra vigorous but this is hard to determine and I couldn't be sure.

Col. Frank Reed has been using gibberellic acid in various strengths and ways for several years so it seemed logical to start with his garden for enlightenment. A large plant of 'Sun-Up' in a redwood tub caught my eye because it was so obviously healthy and vigorous. This year's growth was heavy, dark green and lush. Frank assured me that it had been heavily gibbed but I couldn't find any of the characteristic gibberellic stubs because they had either been removed when the blooms were picked or had later been cut off when the plant was pruned. On a plant of 'Morning Glow' which was gibbed July 7, 1963 I found two calloused stubs but growth below was normal. The whole plant was vigorous and healthy looking. 'Special Tribute' had been gibbed more than any other plant in the garden, at one time with ten times the normal 1% solution, yet it showed no ill effects. On the contrary it was strikingly dark green and healthy. On the reticulata 'Captain Rawes' which was treated Sept. 9, 1963 there was a one inch stub and three new growth branches, each about six inches long growing from one to three inches below where the gib was applied.

Some of the nicest looking camellias you will find anywhere are in the garden of Bill Goertz who has been using some gibberellic for the past two years. I couldn't find any of the usual "gib stubs" anywhere in the yard because they were usually removed when the flowers were picked, or if not they were cut off at a later pruning. Bill has a large bush of 'Purity' along the walk leading to the front door and he told me that last fall he treated every bud on the plant that he could find. First he wanted to see if that amount of gib would harm the plant and then too he wanted a lot of good blooms. He got the beautiful blooms alright as those of us who saw them will testify and to me it seems that the plant is as vigorous as ever — perhaps more so. The plant of 'Laura Walker' is near 'Purity' and with the aid of gib produced some spectacular blooms. I could find no evidence of any effect of the use of gib on the plant. All of the camellias in the garden are as nice as any I have seen and the Goertzs invite anyone who might be dubious about the use of gib to stop in and look them over.

The San Lorenzo Nursery, operated by Mr. James Shinoda, specializes in

growing blooms and foliage for the commercial florists and have several thousand (Mr. Shinoda doesn't know for sure how many) camellias planted in the ground. His nursery is in the foothills above Monrovia and is shaded by acres of saran. From the Shinoda Nursery came the approximately 10,000 'Debutante' blooms which covered one of the large floats in last year's Tournament of Roses Parade in Pasadena. To be sure he had enough blooms when he had to have them, he treated several hundred plants — 'Debutante', 'Alba Plena' and others — with the 10,000 ppm solution of gibberellic acid. On many of the 'Debutante' plants he treated only the buds on one side of the plant and when I saw the nursery about Sept. 1, 1964 it was impossible to tell which side had been gibbed. The nursery is heavily pruned both because the foliage is solid and to keep the plants from getting too large. Mr. Shinoda told me that he had concluded that the use of gib did not adversely effect the growth of the camellia plants but did definitely enable him to produce better blooms and to produce them at the peak of his season which is around Christmas. He was particularly pleased with the result of gib on 'Alba Plena' — it made blooms larger, earlier and gave them a slight but noticeable shading of blush pink.

On the camellias in the gardens of Mr. and Mrs. Al Gunn and Mr. and Mrs. Wilber Foss and on my own plants I found the results the same as above related.

If I were to be permitted to draw any conclusion from the visits to the gardens and the talks with the growers which I have made in the past few months it would be that gibberellic when applied in an acqueous solution of 10,000 ppm doesn't adversely effect the vigor of the plant and when the resultant stub is removed doesn't effect the appearance of the bush.

Correction in Parks' May Article

An unfortunate placement of charts in connection with the Clifford R. Parks article "The Fingerprint in a Case of Disputed Paternity" in the May 1964 issue of CAMELLIA REVIEW (page 31) would confuse the reader of the article unless he read the article carefully and so would detect the error. The chart at the top of page 33 should be removed to the bottom of the page and associated with the caption "Figure 3". The chart at the bottom of the page should be moved to the top of the page and associated with the caption "Figure 1". It might be well for those who would make future reference to this article to make these changes in their copy of the magazine.

While making this change, the "F2" in the middle of the second paragraph of the second column of page 32 should be deleted. After the deletion the sentence should read "Note that the *C. japonica* pigments F8, F9 and F11 all occur . . . "

SAN DIEGO SOCIETY HAS SUMMER GET-TOGETHER

The San Diego Camellia Society held its fourth annual summer get-together on Sunday, August 9th, with an excellent meal, plenty of time for talking, and swimming for those who came prepared for it. As usual, it was held at the Spring Valley home of Ray Greer, Ted Calloway and Rene Prince. This "patio party" is one of the highlights of the year, equally popular with members of the San Diego Society and members of other Societies in Southern California. The distinction of traveling the greatest distance went to Fred and Agnes Hamilton of Santa Maria who drove 300 miles (each way) to attend.

The San Diego Society was organized in November 1945 by an enthusiastic group of camellia fans, 24 in all, for the purpose of pooling their knowledge of camellias, enjoying the company of others equally interested in growing camellias and undertaking educational projects. Of the original group, four — the Harvey Shorts, the Stanley Millers, the "Doc" Millers and Lucian Atherton — are still active members of the Society.

The first camellia show was held in The American Legion Hall in East San Diego in 1948 with a one-day show and a 25 cents admission fee. This year was also the inception of the camellia garden in Balboa Park,

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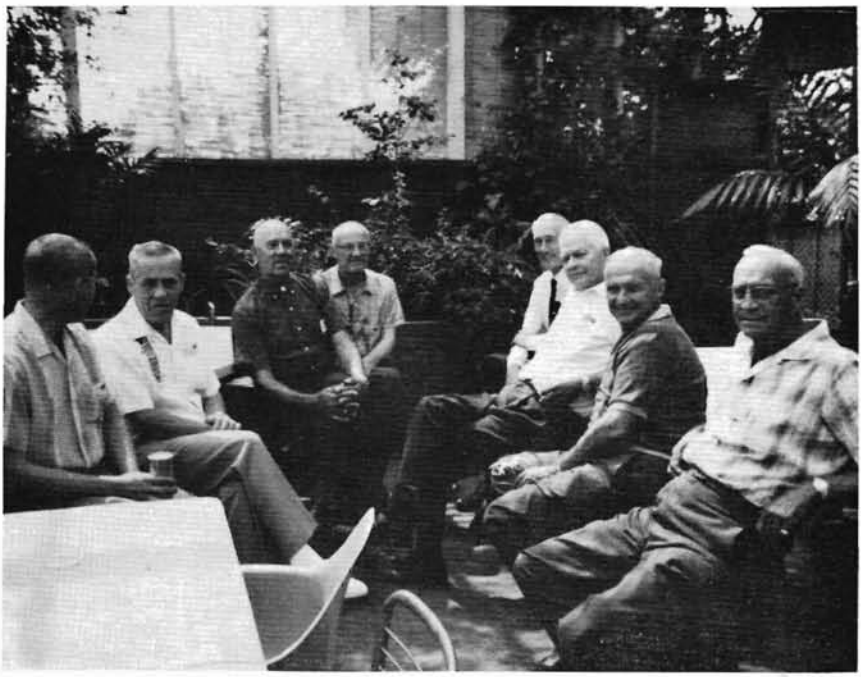
ABOVE:
Officers of the San Diego Society: Left to right Ray Greer, Vice President; Althea Hebert, President; Carol Bradford, Secretary; David Pratt, Treasurer; Charles Mathis, Director. Not present for the picture, Ferris Jones and Clyde Higgins, Directors.

OPPOSITE PAGE:
Above: Dick Bradford, J. V. George, Harvey Short, Al Dekker, Fred Hamilton, Ray Noyes, Erni Pieri, Clarence Irvine. Below: Swimming was enjoyed by the more ambitious people.



What's Behind The Green Thumb

ALVIN L. GUNN

Another Camellia Season is almost here, and the months of pruning, watering and fertilizing with no flowers to reward us are over. The plants need their final grooming to win those ribbons or maybe some silver.

If the summer growth has made some of your plants so dense with foliage that no air or light can get to the center of the plant, don't be afraid to do a little pruning. Cut out any weak spindly growth in the center. Cut off branches crossing through the plant. Opening the plant makes it less susceptible to aphids and scale. You have also taken out flower buds which wouldn't have had a chance to open right for flower competition.

Now let's do some disbudding. Each year you are in this hobby, more buds are flicked off with the green thumb. Most top exhibitors don't leave more than one bud per branch. A flower which opens face down will not gather dust in its face, and will shed rain, so this means the bud facing down should be left. If there is a choice, leave the bud which will not open into a leaf. On a large bushy plant, you will have branches which have two or three 8 to 12" stems at the end. Take off every other bud, or leave only one flower bud. Some varieties will re-form buds about as fast as they are disbudded. These varieties are less of a problem if they aren't disbudded until November or December. If you are disbudding a plant like 'Audusson', which has a tendency to drop its flowers shortly after opening, I think it is best to suffer through the dust and rain and leave the bud which will open face up. It will stay on the bush longer and isn't as inclined to break away from the pistil at show time. Reticulatas should be disbudded as soon as it can be determined which are the flower buds. If the buds get over the size of a pea, a leaf is broken off each time a bud is taken off. If the buds get large enough to create a problem, try cutting them in half with clippers. The buds will dry up and fall off. This is quite a tedious time consuming job. So much for today's lesson on disbudding, grit your teeth and go on out and try it, and see if your flowers aren't better this year.

A few more lines of things to be done, and I'll chop this off until next month.

Keep the aphids washed off with a course spray from the hose. If a number of your plants are not as green as they should be, give them an application of stabilized iron (also excellent for azaleas and gardenias).

It is that time of the year if you are going to use gibberellic acid. Don't waste your time on Reticulatas, as it does nothing special for most of them.

If you have a Camellia culture problem you would like to have discussed, drop me a line.

Next month the main subject will be transplanting.

Couplet cut in stone over the door of the Children's Garden House in Brooklyn, N. Y. Botanic Garden:

"He is happiest who hath power
To gather wisdom from a flower."

Growing Seeds This Year?

The camellia crop is bountiful and the harvest is good. If you have not heretofore tried your hand at camellia seedling culture, this will be the year to start. If you have tried it before, you know it's like chain smoking or any other habit. It is difficult to break and why should we want to break it? It is one of the most interesting of all hobbies. We don't know what we are going to get or even when we are going to get it. Nuccio's Nurseries in Altadena, California plant about 10,000 seeds a year and out of this number are pleased to come up with half a dozen or less per year that they think worthy of being offered to the trade. On the other hand, the beautiful new 'Tiffany' came from a handful of seeds that Dr. John H. Urabec of La Canada, California planted in peat moss in the manner described in this article. And, as has been stated so often, the seedling plants that do not produce flowers worthy of keeping are always good for rootstock for grafting; in fact, many people provide all their grafting stock in this manner.

Back in the 1940's, E. C. Tourje, then of La Canada and now of Camarillo, California, did some experimenting toward simplifying and improving camellia seed culture. The general practice then was to plant the seeds in a seed box containing the planter's favorite germinating mixture, approximately an inch under the surface. When the planter emptied out his seed box, he would find tap roots which reached to the bottom of the box. Mr. Tourje asked himself, "why waste the strength and vigor in growing a valueless tap root?" So he conceived the idea of germinating the seeds in peat moss, then transplanting them after germination to a mixture in which they could develop their root

(Continued on next page)

systems. Not until after the root system was fully developed would the new seedling plants be put into their permanent soil mixture. He experimented along this line and in 1950 stated his findings and recommendations in an article in the book CAMELLIA RESEARCH that was published by the Research Committee of the Southern California Camellia Society. His findings of 1950 are still good and his proposed steps in camellia seed culture are those now recommended by the Southern California Camellia Society to people who purchase seeds from the Society. Following are the significant points in Mr. Tourje's article in the 1950 CAMELLIA RESEARCH.

Camellia seeds like all other seeds require the collective combination of certain factors for successful germination: namely, moisture, favorable temperature and oxygen. Moisture is perhaps the most important of these factors. It softens the hard shell of the seed coat and enables the embryo through moisture absorption to swell and burst this tough seed coat. Moreover, moisture aids in the transmission of oxygen to the living cells thus assisting essential respiration, digestion and assimilation during the germination process. Regarding temperature, Mr. Tourje stated that on the basis of his experimentation the optimum temperature would be on the order of 65 to 70 degrees Fahrenheit. The third essential is oxygen, and the seed which during dormancy requires very little oxygen, requires adequate quantities of the element during the germinating period in order that the process of respiration may take place.

He concluded that the method of planting in boxes was not fully effective for several reasons. The cold weather of the winter and early spring was not conducive to prompt and complete germination. All too frequently the moisture in the containers was unregulated and was too little; or was too much, in which event the seeds would become waterlogged, and if the moisture was excessive it would act as a deterrent to oxygen access. He discovered that with a light and porous germinating medium, such as peat, thoroughly moistened but not soggy, and maintained at a temperature of between 65 and 70 degrees Fahrenheit, camellia seeds would germinate in days instead of months. He placed the seeds surrounded by damp peat in a gallon glass jar and kept the jar in a warm, light location. He emptied the jar every few days after the tenth day. This enabled him to segregate the germinated seeds from those not germinated, and second, it insured a constant and fresh supply of oxygen. The ungerminated seeds were returned to the peat to await germination.

He experimented in pinching off the tap root, not with a pre-conceived idea that the tap root was useless but to see what would happen. He began the simple experiment of pinching off the radicle at various lengths and soon found that regardless of whether the remaining length was a quarter inch, a half inch, or four inches, the point at which the root was pinched off callused in much the manner of a camellia cutting. If the pinched off root calluses like a cutting, he said, why not treat it as one would a cutting? He placed the pinched off seedlings in flats of coarse sand to which had been added just enough finely sifted peat to insure moisture retention. He got best results by punching holes in the damp sand in rows (he used a nail) and inserting the stub end of the radical in each hole leaving the seed proper resting on top of the sand. He sprinkled enough loose sand over the seeds to hold them firmly in place. They received the best root development by placing the flat in strong light, but not full sunlight.

The callused end of the radicle de-

velops numerous lateral or secondary roots, much the same if not identical to that which develops at the end of a rooted cutting. These roots very quickly develop feeder roots and within sixty days from the time the radicle is pinched these seedlings have a very complete root system. The reason for this is quite simple. All the force and energy with which nature has endowed the food rich cotyledons goes directly into the manufacture of these secondary and feeder roots instead of being wasted in the creation of a great but useless tap root.

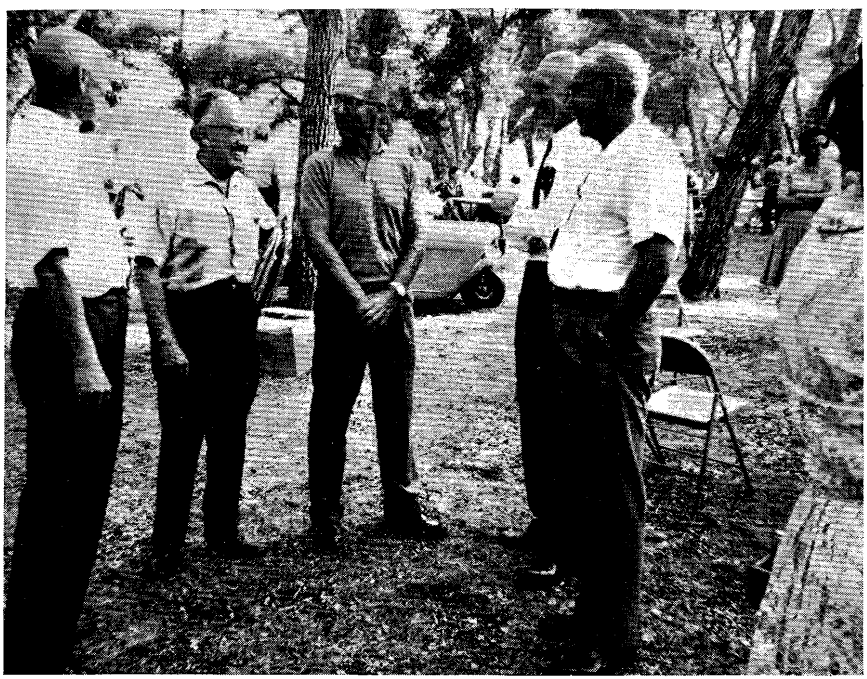
There may be an urge to get the seedlings out of the flat and into a regular potting mix. They should not be potted until they have a good root system and best longtime results will be obtained in most cases by leaving them in the flat at least through the summer. By this time the root system will consist of perhaps a dozen lateral roots stemming from the point at which the tap root was pinched off. If there is doubt about the time for removing the seedlings from the flat, they may be taken out and examined. They do not resent being handled. Despite the seeming lack of nourishment in the rooting mixture of sand and peat, most of the seedlings in a flat at the end of six months after germination will be found to have developed beyond those which have been potted earlier.

There is a reason for leaving the germinated seeds on the surface of the flat with the pinched off radicle inserted in the sand. It is briefly this: As soon as the secondary roots begin to form at the callused end of the radicle the plumule with minute foliage leaves develops at the point where the radicle of rudimentary root breaks from the seed shell and quickly forms a green stem with foliage. This plumule rises to reach the light

and as it does so the process of photosynthesis begins the manufacture of food, thus aiding and assisting the cotyledons in further developing the root system.

Outline of Camellia Seed Culture

1. Place seeds in damp *(not wet)* peat, preferably in wide mouth jar.
2. Container should be covered but not air tight.
3. Put in shade or moderate light.
4. If possible, maintain temperature of 65°F to 70°F. (Top of hot water heater is good place)
5. After two weeks remove contents.
6. Return ungerminated seeds and those just starting.
7. Repeat each week.
8. Pinch off tap root of germinated seeds at about one inch.
9. Put germinated seeds, root end down, in flat of sand mixed with small quantity of peat. Leave seeds resting on surface. Sprinkle sand to half cover seeds and hold firm. Keep moist. A screen will protect from rodents and birds.
10. Place in strong light, preferably filtered or somewhat shaded sunlight. If possible, maintain temperature at approximately 70°F.
11. When stems and leaves reach three to five inches remove from sand and examine. A half dozen roots should be at least three inches long. If this be true, remove and pot, otherwise let remain in sand.
12. If seeds cannot be used immediately, keep cold and moist.



The Pacific Camellia Society picnic in Descanso Gardens on July 25th, found the usual groups talking about their camellias. Left to right: Mark Anthony, Judge Bayard Rhone, Cecil Eshelman, Fred Hamilton and Harold Rowe.

CAMELLIAS "DOWN UNDER"

Alfred L. Stewart
North Melbourne, Australia

Editor's note: *This is the first of a series of articles that Mr. Stewart will write on Camellias "Down Under." He is a member of the Southern California Camellia Society.*

The Editor in asking for information about camellias in Australia is presuming that Australia is down under, whereas it is up on top. This may be Australian ego, which is known to almost equal that of our friends in the U.S.A.

Let us not quibble about titles, but get down to business, and one must assume readers want to know how, when, and where camellias are grown and why. It all sounds simple, so we must be simple in our approach to the subject, and try not to bore readers with a mass of statistics and technical jargon as practiced by so many with what seems to be an effort to show the extent of their knowledge.

Camellias are reputed to have first arrived in Australia in the early part of the nineteenth century, about 1830 to 1840 is near enough for our purpose, and were introduced to a property some distance from Sydney which at that time was the hub of Australia. Please note that the writer has used the past tense, and of course is of Melbourne domicile. Perhaps one may need to be an Australian to understand just how important these matters of location can be.*

The worthy gentleman who introduced the camellia to Australia was named Macarthur, the second "a" not being a capital as one may expect, and today we have a variety which is credited to this gentleman named 'Aspasia (Macarthur)', this variety being obtained in the U.S.A. from New Zealand and renamed 'Paeoniaeflora'. This injustice has now been rectified and the S. C. C. S. nomenclature book shows the correct name. Macarthur grew many camellias from seed and was responsible for some worthwhile varieties. These seedlings were listed about 1850 and today we can trace only about half of the original listing. There may be others still in circulation, but not named as originals, as we have evidence of many old varieties being renamed by nurserymen at a later date.

Camellias spread out from the Macarthur estate, which rejoices in the name of "Camden Park" and today there are still many old trees of the original planting at the estate. It is interesting to note that today many of the varieties listed at Camden Park in the early days of camellias in Australia are still in existence in old nurseries in South Australia. Perhaps South Australia can show more of these early camellias than any other State in the Commonwealth of Australia. For the benefit of those who are interested, the area of Australia is somewhere near that of the U.S.A., and South Australia is almost in the middle of the continent, by longitude.

The climate range of Australia is most varied, not only as regards latitude but also in fertility of the soil and air conditions. Latitudes vary from 20 to 45 degrees, and so approximate those of the U.S.A. New Zealand is the same latitude as the U.S.A. but the climatic conditions are much different. It is considered that the climate is superior to the U.S.A. for camellia growing in general, and this is one point readers must consider in any cultural discussions between the two continents. Varieties that are world beaters in one country can be

(Continued on next page)

*This is understandable to Californians, who experience the rivalry between San Francisco and Los Angeles. —Ed.

almost useless in another even though the latitude may be the same.

This also applies to fertilizers and pest sprays, and these differences have caused many people headaches when they have tried to obtain certain results by methods used in other parts. Australian growers have not been slow to copy the spraying technique of their American friends and in some cases with the same tragic results, but growers are now becoming more specific in their attitude to sprays, and use only those felt to be absolutely necessary. If the correct circumstances of climate, soil, food and moisture are available no sprays are needed, and this has been proved in many localities. It is anticipated that many people will rise in wrath to prove this statement wrong, then let those people see camellias growing in their natural habitat without any modern treatment. We have been lucky not to have introduced the dreaded petal blight, and there is no certainty that it would survive in Australia if introduced, but we will not experiment with it. The main pests we have to contend with are aphids which attack the new growth, also a few caterpillars are found eating the growth bud before the leaves have opened out. The scale is another pest which attaches itself under leaf and on young stem growth, but these three can be kept in check with white oil spray. It is not generally accepted that white oil is affective for aphids and caterpillars, but the writer has had success with a one in forty mixture. There is one qualifying point to consider, and the writer is not sure that any white oil will do the job, but the oil used is known in the engineering trade as "soluble cutting oil" and is used on machine tools in factory production of metal parts. It is not known whether the particular brand has anything to do with the effective control of pests, so that we must leave that to others to find out. The writer has used this oil in manufacture for over thirty years and for the last fifteen years on camellias with excellent results. The commercial white oils as sold by seedsmen and nursery suppliers has not shown such satisfactory results and is more expensive and more troublesome to use. To sum up on pests, it is obvious that if good conditions exist for the growing of camellias, no pests will give trouble, except one type, and that is the two legged variety. Try white oil at a one to one mixture for this one!

It has been apparent for a long time that because a variety has received rave notices in the U.S.A. that "it's performance in Australia cannot be taken for granted" and we suspect the reverse could be true of Australian varieties sent to the U.S.A. There have been many excellent varieties raised in Australia, especially during the last twenty years, and we see some new ones each year, but not all will

(Continued on page 24)

S. C. C. S. MAKES AWARDS FOR BEST CAMELLIAS

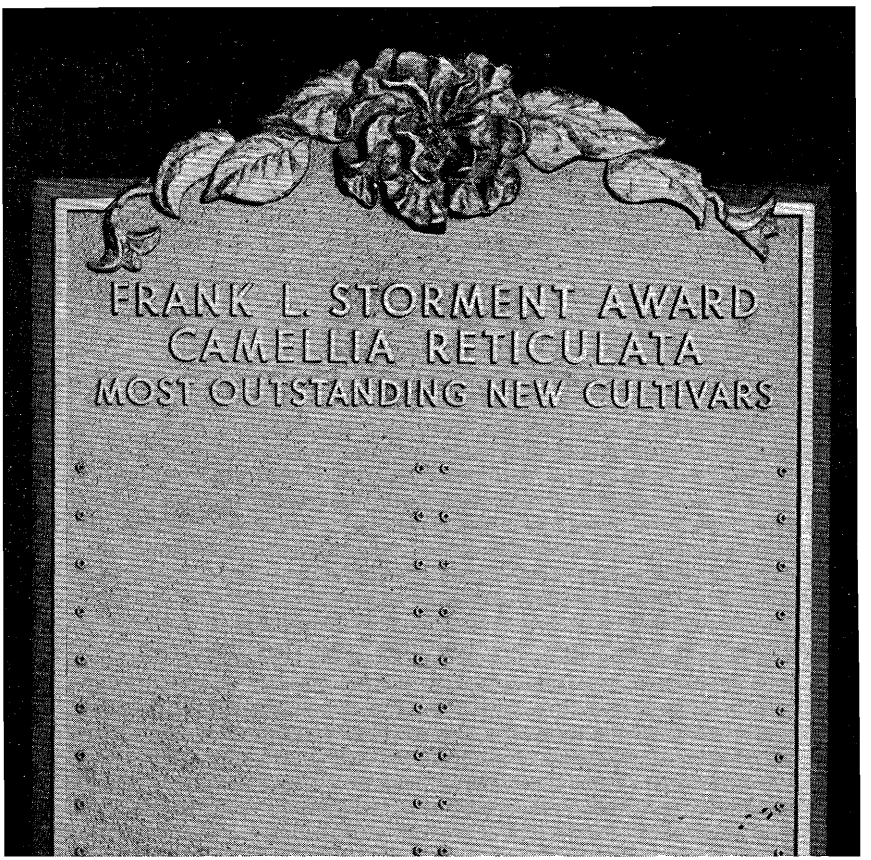
The Awards Committee of the Southern California Camellia Society has announced the following Awards for the 1963-1964 camellia season:

MARGARETE HERTRICH AWARD, for the japonica seedling that merited it, awarded to 'Tiffany', a large to very large pink of loose peony to anemone form that originated in the garden of Dr. J. H. Urabec of La Canada, California. It was introduced to the trade in 1963.

WILLIAM HERTRICH AWARD, for the japonica sport that merited it, awarded to 'Tomorrow's Dawn', a sport of 'Tomorrow'. This deep soft pink to light pink shading to white sport was discovered simultaneously in their gardens in 1960 by L. W. Ruffin, Jr. and R. E. Allums of Ellisville, Mississippi.

EDWARDS METCALF HYBRID AWARD, for the hybrid seedling that merited it, to 'Howard Asper', originated by Howard Asper of Escondido, California and introduced by him to the trade in 1964.

The Awards Committee concluded that under the conditions that govern the granting of Awards, namely, that a candidate must merit an award, there were not candidates of sufficient merit for the **WILLIAM WYLAM AWARD** for miniatures and the **FRANK L. STORMENT AWARD** for reticulatas.



REPORT TO S. C. C. S. MEMBERS

Harold E. Dryden
Secretary-Treasurer of S. C. C. S.
Editor of CAMELLIA REVIEW

I don't recall having seen a report from a camellia society to its members. That is probably due to the fact that nearly all camellia societies are local in operation, and the reports are made at the society meetings. The Southern California Camellia Society of course operates as a local camellia society and has good attendance at the six monthly meetings that are held during the camellia season. We are probably the only camellia society, however, that has more members outside its meeting area than within normal traveling distance to the meetings. It occured to me that a "Report to S. C. C. S. Members" might be newsworthy, particularly to the members whose only contact with the Society is through CAMELLIA REVIEW, CAMELLIA NOMENCLATURE and possibly in the yearly purchase of camellia seeds.

We have about 1000 members, widely scattered over what we call the camellia belt of the world — Australia, New Zealand, England, Island of Madeira, South Africa, Belgium, Japan and, of course, all the camellia growing states of the United States plus a few states that are usually not so thought of. We have lost some members from our peak, but are pleased that we gained members in our year that ended June 30, 1964.

The nature of the Society is such that it is desirable that we have a Secretary-Treasurer who can devote a reasonable amount of his time to the work. The Secretary's home is the official address of the Society. We have been fortunate, I believe, that we have had only three people in this position since 1948. Col. C. M. Gale, a retired army man, held the position from 1948 to 1958. Mrs. Mildred Pitkin held it from 1958 to 1962 when I took over.

The dues of $6.00 a year goes for the following services. CAMELLIA REVIEW takes the biggest part, a net of about $4,800 after crediting income from advertising. Meetings cost about $900 a year, which includes the cost of plants that are purchased for the plant raffle. These plants produced over $600, however, making the net expense of the meetings about $275. Office expenses are about $1,200 to $1,500. It is our objective that sales of CAMELLIA NOMENCLATURE will pay for the nomenclature books that go to S. C. C. S. members. We have not yet met this objective, consequently some of the income from dues is used for this purpose.

We have six affiliate Societies that pay us part of their members' dues, in return for which their members receive CAMELLIA REVIEW and CAMELLIA NOMENCLATURE. The affiliate societies are the San Diego, Orange County, Pomona, Temple City, Kern County and Central California Societies. The income from these affiliates is about $1,000 a year. Members of these societies who are close enough to attend S. C. C. S. meetings receive meeting notices and many of them attend quite regularly.

Total income in the year ending June 30, 1964 was $12,777 offset by disbursements of $13,091, creating a deficit of $314. This was to be expected, since the year's disbursements included the cost of the 1964 edition of CAMELLIA NOMENCLATURE. We expect that income will exceed disbursements for the year ending June 30, 1965, and that income will slightly exceed disbursements during the two-year period.

In this connection, we are fortunate that in 1947 and 1948, the era of glorious camellia shows when the public was glad to pay $1 to see a camellia show, we accumulated a savings account that makes it possible for our Society to do things that require immediate cash. CAMELLIA NOMENCLATURE has been mentioned, wherein we are required to pay promptly after receipt of the two years' supply of the books. It also made it possible for the Society to finance and publish Tourje's CAMELLIA CULTURE, which could not have been done without our savings account.

A word about camellia seeds. We receive these seeds from the Huntington Botanical Gardens in San Marino and the net proceeds from the sales are spent entirely on behalf of the Gardens. Last year's profit from this activity was $575, not large in comparison with the total budget of the Huntington Gardens but an item that provides things for the Garden that might not be included in a budget. This year, for example, we are providing teak wood benches for use by the tired person who wanders through the camellia garden. Our Garden Committee also works closely with the Huntington Gardens people in supplying plants and scions of the worthwhile new varieties. In 1963 we purchased plants of the then new reticulata 'William Hertrich' for the Gardens' use in a tribute to William Hertrich near the tea house in the Oriental Garden.

The Directors of the Southern California Camellia Society recognize that our Society can continue to function as it now functions only so long as the membership continues at a size sufficient to support the expense of these activities. This means good meetings for those who can attend them and good literature, both interesting and helpful, for those whose benefits from membership come largely from this source.

HONORED GUEST

Marjorie Washburne
Port Arthur, Texas

My 'Guest of Honor' has an honored guest!

Not long ago I noticed that a lady redbird was spending her spare time near our lathhouse, usually with a bit of straw in her beak. I told her that mid-July is rather late for redbirds to set up housekeeping and thought no more about it. A few days later I saw a completed but rather clumsy nest near the top of the 'Guest of Honor' (not that I am critical of her lack of neatness — I could not have done so well). The lathhouse is 8 feet high, and this camellia plant extends through the lath and out at the top, being a strong grower and the tallest plant in the enclosure. The back and north side of the lathhouse are covered with Mylar, the front has roll-ups of Saran plastic, and the top is covered with 3″ lath with 3″ spacing, except for a 4′ x 4′ opening through which a teenage pine tree reaches for the sky. On several occasions birds have found their way in and been unable to find their way out without help.

For several days I saw no more of Mrs. Bird, and concluded that she thought the traffic too heavy near the new homesite, and settled elsewhere. She was more persistent than I realized, however, for a few days ago I distinguished her flamingo-pink bill and reddish brown tail feathers, barely visible above the nest. From then on, when I enter the lathhouse to water seedlings and grafts in containers I do so quietly, pretending that I do not know of Mrs. Bird's presence. She has learned to enter through the opening for the pine tree, after first giving me a few warning chirps not to watch. After the eggs hatch and the young birds are ready to learn flying, I hope the mother has

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ANOTHER YEAR UNDER LIGHTS

Clifford R. Parks
Geneticist, Los Angeles State and County Arboretum
Arcadia, California

Just a year ago, Longley and I pointed out (*Camellia Review*, Oct. 1963) that with the combination of continuous light (see Bonner and Lammerts, *1948 American Camellia Yearbook*) and grafting it might be possible to bloom camellias in twelve months from the time of germination. Last January, February and March, grafts were made from scions taken from about 1400 one-year seedlings, and presently about 150 of these have well-developed flower buds. Figure 1 shows three very vigorous grafts of scions from *C. reticulata* hybrids that were made last February. A thirty-nine inch meter stick is added to the photograph for comparison. These three are not the tallest, but they are among a group of very vigorous grafts that are composed of various *C. reticulata* hybrids grafted onto 'Kramer's Supreme' understock. Figure 2 shows a group of about one-hundred, grafted last winter and a few own-root seedlings, that are all well budded. It might be noted that this latter photograph is taken in a lath-house. Since camellia flowers do not open properly in a warm greenhouse, the grafts are moved to a lath-house as soon as the flower buds develop.

The author would like to take this opportunity to thank those people who grafted on their own time the 1400 plants mentioned above. Mr. Reg Ragland made the various arrangements, and the grafting was carried out quite efficiently. The following is a list of the volunteers who helped in this project.

Al Dekker	Howard Faust
Bob Dickson	Wilber Foss
Harold Dryden	Wilkins Garner
Cecil Eshelman	Merle Gish
Edwards Metcalf	Caryll Pitkin
Basil Neptune	Reg Ragland
Pat Novac	John Robinson
Ray Noyes	Doug Thompson
Berkeley Pace	Bill Woodroof
Ernie Pieri	

Figure 3 is a general view of the greenhouse planting. One can see the very large *C. reticulata* hybrids (grafted last February) to the left of the picture. The plants to the right are seedlings. It is being observed that a few grafts are now setting flower buds which were from scions of seedlings a few months old. This year a large number of the seedlings, resulting from the seed now being collected, will be grafted as soon as they are big enough to product a scion — in the attempt to bloom camellias one year from seed.

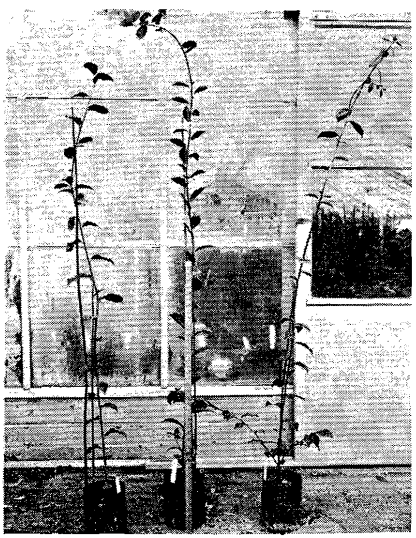

Figure 1

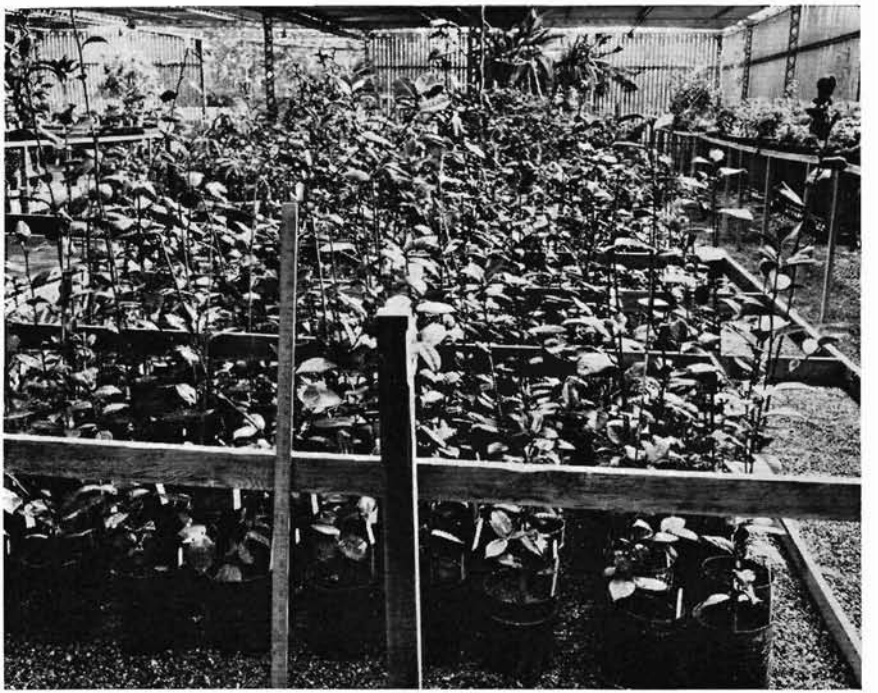

Figure 2

Figure 3
Photography by Bobby M. Vargas of Descanso Gardens Staff

NEW BOOKS ABOUT CAMELLIAS

Harold E. Dryden

The Camellia Treasury

Hearthside Press, Inc., 118 E. 28th St., New York 16, N. Y. has announced publication of a new book on camellias — THE CAMELLIA TREASURY, by Mrs. Paul Kincaid of Gastonia, North Carolina. It is a 219 page easy-to-read book "for gardeners, flower arrangers and exhibitors" illustrated with 104 plates, 16 of which are in color. The announced price is $9.95.

While the book covers all phases of camellia culture and enjoyment, this reviewer, after reading the book, felt that it is addressed particularly to people whose love for camellias is primarily in their gardens and in their homes. At least, in this respect it is a down-to-earth book about the use of camellias in the garden landscape and in flower arrangements. It is not a book for the person who grows camellias for camellia shows and therefore seeks knowledge and ideas primarily with respect to care and culture. This is not to say that the book is not complete with regard to camellia culture, because it is. It has this information plus that which is missing in so many books about camellias.

The illustrations are effective in describing and explaining use of camellias in flower arrangements. 82 of the 106 plates, 11 in color, fall in this group and dispel the idea, advanced by some flower arrangement "experts", that camellias are not adaptable to use in arrangements. This book is the best I have seen from this point of view. It will be a welcome addition to camellia libraries.

The Lore of Living Plants

This 153 page pocket size paper back book is the doctor's answer for people who want to know what makes plants grow; not what and when to fertilize or how often to water camellias but rather the story of plant physiology. It follows the energy of the sun throughout the plant, from its capture by the leaves to its final appearance in fruit and seed at harvest time. It is one of the Vistas of Science Series, conceived and developed by the National Science Teachers Association to provide scientific background for those who would be well-informed citizens.

Chapter titles are indicative of the subject material: Energy From the Sun, Warmth and Water, Mineral Nutrition, Transport, Growth. We read about how the leaves convert the light energy that is received from the sun into chemical energy — the proc-

ess of photosynthesis. Plants need, for proper growth, light, water and a favorable temperature. These items are covered in the first two chapters. Minerals are also needed for proper growth of the plant and they are literally "mined" from the soil by the roots, as told in Chapter 3.

An effective transport system is necessary inside the plant to distribute food, water and minerals. For example, the majestic sequoia of the Sierra Nevada sends down to the tip of its roots sugar made in scalelike leaves hundreds of feet up in the air. And the roots may be a hundred feet away from the base of the tree. As told in Chapter 4, plants have 3 systems that make possible a rapid interchange of substances among various parts of the plant body — the food transport system, a water transport system and an air transport system. Food is transmitted through the bark, water through the wood. The air transport system is simply an interconnecting array of spaces between cells.

Chapter 5 tells about plant growth. We are told about hormones, of which three classes are now recognized by plant physiologists; namely, auxins, gibberellins and kinins. Subtitles in the chapter include "Growth Hormones", "Growth Responses", "A Hormone Does Many Things", "Hormones and Root Formation", "Hormones and Flower Formation", "Gibberellins" — all subjects that excite the imagination of a person who is curious about plant growth. The reader may get bogged down a little as he reads the first four chapters. Not so, however, in Chapter 5. In fact, it might be a good idea to read this chapter first, then go through the book. A re-read of Chapter 5 is rewarding. This chapter also includes the subject of inducing flowering by varying the daylength.

Nowhere in the little book is the word "camellia" found. In fact, it is written by an educator who lives in the San Joaquin Valley of California and who uses such products as grapes to illustrate and explain his subject-matter. The principles that govern the growing of grapes also affect camellias, however, so that the camellia grower who wants to know what makes camellia growth tick can read this book with profit to himself.

The book is not available in book stores. Those who have obtained it have done so from Scholastic Book Services, 904 Sylvan Ave., Englewood Cliffs, N. J. Single copy price is fifty cents, with quantity prices available on request.

S C C S MEETINGS *(Continued)*

society for years and a past member of the Board of Directors of Southern California, is also an expert on wildflowers. His interest in wildflowers started in 1924 as a subject for his hobby of color photography. Over the years the vast fields have been displaced by farms and subdivisions, and it is now a search to find the flowers to photograph. This program will be a showing of selected wildflower slides taken on the deserts, the coast, interior valleys and mountains, many of them from seldom seen spots.

The April meeting will end our season. The shows will be over, and the peak blooming period of camellias will be through. So to end the year in grand style, who would like an all expense paid tour of some of the more exotic countries in the world, including Russia and India? Dr. William Stewart, Director of the Los Angeles County Arboretum, will have completed a six month tour of the above mentioned countries. He will show us slides of his trip, and tell us of his exciting past six months.

We are fortunate in obtaining such top talent for our meetings this year. Plan to attend every meeting, and bring some prospective new members with you.

SOUTHERN CALIFORNIA INTRODUCTIONS -- 1964

1964 introductions in Southern California of new varieties are the fewest in many years. Only Nuccio's Nurseries with four, Howard Asper with one and Select Camellias, Inc. with one enter the charmed circle.

Nuccio's four introductions are as follows:

GRANDUER. A very large semi-double rose pink with unusual tulip shaped petals. It is a vigorous, open-growth plant that blooms from mid-season to late.

COVER GIRL. A clear pink irregular formal flower that is medium to large in size. It blooms from early to late. The plant has a compact, upright growth. Nuccio's think this is a flower that the ladies will like.

TWILIGHT. A large blush pink formal double that blooms in early mid-season. Growth is bushy, compact, upright.

YULE TIDE. A sasanqua that Nuccios think will be popular for landscaping. It is a brilliant orange-red single with bright yellow stamens, that blooms on a very bushy upright plant. Foliage is dark green. They say that the blooms hold as well as those of the best sasanquas. Blooming time is October through December (mid-season for sasanquas).

Howard Asper's introduction is the fine new hybrid **HOWARD ASPER,** a cross between japonica CORONATION and reticulata LIONHEAD. This camellia was awarded the Southern California Camellia Society's Edwards H. Metcalf Award for best hybrid in 1964. The flower is very large, having reached 6" to 7" in size during the 1963-1964 blooming season. Color is salmon-rose, with a loose peony form. The plant is extremely vigorous, with large glossy foliage.

Select Camellias, Inc., wholesale nursery of Whittier, California, are introducing C. japonica ASTRANAUT, a medium red semi-double with a show of yellow stamens. Pictures show it to be a very beautiful three dimensional flower form. Blooming period is November through March. Growth habit: medium, compact, upright with excellent foliage. This nursery is the wholesale distributor for TIFFANY.

CAMELLIAS "DOWN UNDER" *(Continued)*

survive the public opinion poll. Some very nice hybrids have shown promise, with saluenensis as the seed parent, but a cross between granthamiana and a japonica gave a fine flower, better than the parents. Reticulata seedlings are showing up now, but to date there has been nothing better than the parents, perhaps one has shown itself to be an equal.

L. A. Camellia Council For 1964-65

The Los Angeles Camellia Council has selected the week-end of February 27-28 as the date for the 1965 Camellia Show in Descanso Gardens. Show Chairman will be Robert F. Dickson, Jr., who is also president of the Southern California Camellia Society. Officers and directors of the Camellia Council for the year are as follows:

President: Judge Bayard Rhone of the Los Angeles Camellia Society

Vice President: Al Dekker of the Southern California Camellia Society

Secretary: Tom Hughes of the Pacific Camellia Society

Treasurer: Dan Roberts of the Pacific Camellia Society

Director Representatives of Member Societies:

- Los Angeles Society
  - Ed Franklin, Judge Bayard Rhone
- Orange Society
  - Paul M. McClelland
  - Reg Ragland
- Pacific Society
  - Robert H. Briggs
  - Edward O. Morgan
- Pomona Society
  - E. J. Alvarado
  - I. John Movich
- Southern California Society
  - Wilkins Garner
  - Alvin L. Gunn
- Temple City Society
  - Harry S. Putnam, Jr.
  - Laurence R. Shuey

Directors Elected at Large

Al H. Dekker, Raymond R. Noyes, William E. Woodroof

Directors Ex-Officio

- Past President: Edwards H. Metcalf
- Past Show Chairman: Ernie Pieri
- Current Year Show Chairman: Robert F. Dickson, Jr.
- Editor CAMELLIA REVIEW: Harold E. Dryden

Temple City Breakfast

The Temple City Camellia Society will hold its traditional annual breakfast on Sunday morning, October 25, 1964, at the home of Leslie and Elsie Marshall, 6742 North Sultana Ave., San Gabriel. Breakfast will be served between 8:30 and 11:00 A.M.

An appetizing menu of fried eggs, ham, potatoes, hot biscuits, orange juice and coffee will be served by the Society's chefs.

This breakfast has been one of the kickoff events of each camellia season in the California southland for many years and has been well attended by Camellia Society members from San Diego to Fresno.

The Temple City Society extends a cordial invitation to all camellia enthusiasts to breakfast with them this year. Breakfast hours are particularly conducive to discussions on the progress of new grafts, new introductions, whether to "gib" or not "gib", and show dates, rules and regulations.

HONORED GUEST *(Continued)*

no difficulty teaching them to go in and out the 4-foot opening. But, as my own mother used to say, "birds have bird sense", and I shall have to trust the bird mother to show her children how to reach the outside bird world.

It hadn't occurred to me previously that camellias would make a contribution to the bird kingdom by furnishing suitable housing facilities. I hope this first visit is a happy and successful one, and that the honored guest nesting in the 'Guest of Honor' will return again and again. She will always be welcome.

Experiment With Planting in Fir Bark

Dr. J. Holtzman of Crows Landing, California is experimenting in the use of 100% fir bark for his camellias. He uses the coarser ground bark with some of the particles as much as ½ or ¾ inch in diameter. He started to use straight bark three years ago with three camellia plants. He now has 65 plants in 100% bark, about one-third of his collection. He has some plants in 100% oak leaf mulch, others in 3 parts oak leaf mulch and one part silt and sand, still others in 6 parts oak leaf mulch and one part silt and sand. He says that if the containers were not identified he could not tell which is in what. This being the case, he says, why not go to the lightest mix with the most perfect drainage; i.e., bark? He reserves final judgment until he has acquired more experience.

He is very thorough in bare rooting the plant before putting it in the bark. After the container has been removed the camellia is put into a large pot of water where it is "soaked and swished and dunked and twirled and probed" until all the dirt comes away from the root system. It is surprising how few roots are lost even with the roughest treatment. Then the sprinkler comes into play, to wash off any spores that might be adhering to the trunk or roots.

The bare rooted camellia is then placed in straight bark with nothing more "than a little blessing and a lot of water". The container should not be too full because there will be no further settling once the air pockets are filled. He says this may not be true when finer bark is used.

The Los Angeles Camellia Society held its annual summer picnic on August 2nd at Judge Bayard Rhone's home in Los Angeles.

Light Speeds Growth Of New Grafts

The picture below illustrates the effect of light and green house growing of grafts in comparison with outdoors growing as experienced by Edwards H. Metcalf of San Marino, California. There are two each of 'China Doll', 'Bon Bon', and 'Susann' from left to right. For each pair, the plant on the left was grown in the greenhouse and the one on the right outdoors. Mr. Metcalf uses the Gro-Lux florescent lamp by Sylvania. Lights were turned on between 5:30 P.M. and 7 A.M. with the following schedule: For the first 3 hours, 45 minutes on and 15 minutes off; thereafter, 30 minutes on and 30 minutes off until 7 A.M. Natural light in the greenhouse was used between 7 A.M. and 5:30 P.M. Metcalf reports that he also received better "takes" under the lamps with the same treatment. The pictures were taken several weeks ago before they had attained their season's growth.

SAN DIEGO SOCIETY *(Cont'd.)*

a joint venture of the Society and the San Diego Park Department. 53 camellias were donated and planted during the first year in the space behind the House of Hospitality. In 1949 the second show was held in Balboa Park and it has been held continuously in the Park ever since, moving progressively to larger quarters as exhibitor and public interest increased.

In 1958 The Society introduced in its Show the Super-Sweepstakes Division for exhibitors who had won Sweepstakes in any previous show, not only of the San Diego Society but also of any society elsewhere. The Amateur Division was established for exhibitors who had not previously won Sweepstakes. This plan has become an important part of the San Diego Show. The San Diego Society is unique in this respect, as it is the only society, at least in the West, to have such separate Divisions.

FOUR NEW CHEMICALS

Reprinted from the regular feature "What's New" in the Winter 1964 issue of CAROLINA CAMELLIAS

Gibberellic acid has opened up a whole new world of camellia culture to growers. Rapid progress is being made in this field and we have learned that there are now at least seventeen (17) other acids that can produce effects similar to gibberellic and some of them are rumored to be even more amazing in their effect.

All of the above are used to encourage early blooming and increased size of blooms. Now there are new chemicals on the market that produce just the opposite results. Instead of the tall and elongated growth obtained by treatment with gibberellic acid these new chemicals cause short stocky plant growth—yet in many cases the blooms are as large or larger than when the plants are not treated.

Boom to Grower

Wouldn't this be a boon to the greenhouse grower. Could this be the mythical "plant shrinker" that we have all joked about? Can you imagine a greenhouse full of small plants and large blooms?

Experiments are being continued at the government's experimental station at Beltsville, Md. and we expect additional information as the results of these experiments are released. To date most of these experiments have been on plants other than camellias but if you would like to experiment some on your own we will give you some of the information already available.

Bloom Azaleas

These chemicals are called Phosfon, CCC, Amo-1618 and cardavan. So far they have been used to dwarf more than 50 different varieties of potted and garden plants. In addition, Phosfon has proven capable of getting azaleas to bud out of season, and it has initiated blooming of camellias.

The first of these four growth retardents to reach the market is Phosfon. It is manufactured by the Virginia-Carolina Chemical Corp., and like the others, it was developed through work at the research stations of the Department of Agriculture. It is available, at present, in three formulations; two for commercial use; the other for home gardeners is a one per cent powder which sells for about a dollar for 1½ ounces.

The treated plants have stronger stems, resist breaking down due to bloom load and do not sprawl as do untreated plants, This feature would be of great advantage to many types of plants that tend to have long weak stems with heavy blooms.

The manufacturer says that the chemical does not produce phototoxicity or affect the size or quality of blooms when used at the recommended rate. Some varieties show a slight delay in blooming.

Add to Soil

This chemical can be used by adding to the soil or as a drench. Since most of the work to date has been with plants other than camellias we are not in a position to give you details as to the best way to use these chemicals.

As researchers continue to study plant physiology and the effects of these chemicals on various plants we can look for many new developments. Eventually it may be possible for plant "inventors" to add chemicals to the soil or to the plants themselves in such a way that un-dreamed of results will be obtained. Someday we may be able to produce plants and flowers the size we can best use growing them at the time most desirable for us to use or enjoy.

In the meantime if you are the adventurous type go ahead and do a little experimenting on your own.

Directory of Affiliated Societies

Camellia Society of Kern County.....Bakersfield
President: Melvin G. Canfield: Secretary: Mrs. Charlotte Johnson, 1902 Niles St., Bakersfield.
Meetings held 2nd Monday of the month, October through April, in Police Building, 1620 Truxton Ave., Bakersfield.

Camellia Society of Orange County.....Santa Ana
President: Warren Woody; Secretary: Mrs. George T. Butler, 1121 Orange, Santa Ana.
Meetings held first Thursday of month, October through April, in Orange County Farm Bureau Building, 1916 W. Chapman, Orange.

Central California Camellia Society.....Fresno
President: Mert Weymouth; Secretary: Mrs. Glen S. Wise, 5493 E. Liberty, Fresno.
Meetings held at Heaton School, Del Mar Ave., Fresno on Nov. 18, Dec. 16, Jan. 27, Feb. 24, Mar. 24.

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

Pomona Valley Camellia Society .....Pomona
President: I. John Movich, 932 N. Park Ave., Pomona; Secretary: Alvin E. Anderson, 743 Calspar St., Claremont
Meetings held 2nd Thursday of each month, November through April, in the Pomona First Federal Savings & Loan Assn. Bldg., Garey Ave. & Center St., Pomona (1 block South of Holt).

San Diego Camellia Society.....San Diego
President: Mrs. Althea T. Hebert; Secretary: Mrs. Carol Bradford, 5707 Jackson Dr., La Mesa.
Meetings held 2nd Friday of the month, November through May, in Floral Association Building, Balboa Park, San Diego.

Southern California Camellia Society.....San Marino
President: Robert F. Dickson; Secretary: Harold E. Dryden, 820 Winston Ave., San Marino.
Meetings held Second Tuesday of every month, November to April, inclusive at the San Marino Women's Club House, 1800 Huntington Drive, San Marino.

Temple City Camellia Society.....Temple City
President: Harry S. Putnam; Secretary: Mrs. Violet Shuey, 5813 N. Golden West Ave., Temple City.
Meetings held on 3rd Friday of November and December and 4th Friday January through March.

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