THE Camellia REVIEW

A Publication of the Southern California Camellia Society

'K. O. Hester' *Nuccio's Nurseries*

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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 to the Secretary. Annual dues: $6.50.

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CONTENTS

VOL. 34 JANUARY 1973 NO. 3

THE COVER FLOWER

'K. O. Hester' is a chance seedling with C. reticulata 'Tali Queen' the seed parent. It is a large to very large rich pink semi-double. It was developed by and named by Nuccio's Nursery for K. O. Hester who donated the camellia plants for the Camellia Garden in Mikke Grove Park near Lodi, California. It has been progated and released by Nuccio's Nursery.

THOUGHTS *from the editor*

On another page of this issue of CAMELLIA REVIEW is an announcement of two meetings of the International Camellia Society in 1973, one in Great Britain and the other in Australia and New Zealand. I am writing here of the meeting in Australia and New England because back in 1967 I spent nearly two months during their camellia season in visiting with these delightful people and in seeing their beautiful countries.

My friend Eric Craig of Australia, who will be Chairman of affairs in Australia, has sent me a detailed itinerary of the 15 days that will be spent in Australia, from the time of being met at Sydney's International Airport on the first day to departure for New Zealand on the fifteenth day from Melbourne Airport. For people who are interested mostly in seeing the country, it provides for sightseeing to satisfy the most discriminating traveler. Not only the cities and their environs will be visited, but also some of the "outback" areas. For people who are interested in camellias and camellia people, it opens the gates to what must be one of the most gracious group of camellia people anywhere. Every person in Australia acts as though he personally were entrusted with the responsibility to represent his country at its best to visitors.

I do not have the schedule for the days that will be spent in New Zealand. I really do not need a schedule, because I must have followed pretty much the same route that this tour will follow. I was met at the airport. I attended a Conference of the New Zealand Camellia Society and met camellia people from all parts of New Zealand. I visited the different areas of New Zealand and visited with camellia people in their homes. My memories of the beauties of New Zealand are with my memories of Norway and of Bavaria, Austria and Switzerland in the Spring as beauty spots of the world. My recollections of the people and their graciousness will always be with me.

People have asked me about the quality of the camellias in Australia and New Zealand. I would say that the japonicas are just as good as ours and the reticulates are probably better. But to me, the big thing about camellias in both countries is that the people "down under" enjoy them as part of their gardens, although "American ways" are taking hold and more and more people are growing them for the flowers.

If a person has ever wanted to see these countries, I would say that this International Camellia Society sponsored tour is the best buy, both in dollar cost and in value received, that will come across for a long time.

Harold E. Snyder

INTERNATIONAL CAMELLIA SOCIETY WILL HOLD TWO MEETINGS IN 1973 — IN GREAT BRITAIN AND AUSTRALIA - NEW ZEALAND

The International Camellia Society will hold two meetings in 1973 that will be of interest to camellia people who like to travel to other countries.

On March 29th to April 4th will be held the Guernsey and Jersey Conference in Great Britain. Special arrangements will be made for people from the United States to leave London by air for Guernsey on March 29th, then on to Jersey on April 1st, returning to London on April 4th. Visits will be paid to the outstanding gardens and nurseries and there will be lectures, etc., in the evenings. If weather permits, there will be a visit to Sark. Full details will be supplied by Mr. Charles Puddle, Bodnant Gardens, Tal-y-cafn, Colwyn Bay, Denbighshire, North Wales.

The Australia-New Zealand Conference will be held in the period July 26th to September 1st. There will be a meeting in Sydney, New South Wales, Australia during which time (July 30th) the delegates will attend the Annual Camellia Festival at Farmer's Blaxland Gallery. I. C. S. President Professor E. G. Waterhouse, who will be 92 next August, will be honored at the Sydney meeting. Meetings will also be held in New Zealand in conjunction with the New Zealand Camellia Society in New Plymouth and other cities.

In conjunction with the Australian and New Zealand societies, there will be tours of these countries at the heights of the camellia season in the southern hemisphere. The tour will leave San Francisco on July 26th and will arrive at Sydney on July 28th (one day is lost on the westward flight). Six days will be spent in the Sydney area. Following Sydney, there will be two days driving to and in Canberra, the nation's capital, two days in the mountain area of northwestern Victoria, and five days in the Melbourne area. Departure from Melbourne Airport will be on August 11.

Details of the tours in New Zealand are not available to CAMELLIA REVIEW at this time.

The Australia Camellia Research Society has supplied the following information with regard to the Australia part of the tour. The American representatives for the tour are as follows:

Spacific Tours, Inc.
1501 Westcliff Drive
Newport Beach, Calif. 92660
Hoyt Tours
1019 First National Building
1 Burnet Plaza
Fort Worth, Texas
Atlantic Pacific Travel
136 East 57th St.
New York, N.Y.

Spacific Tours, Inc. of Newport Beach, Calif., has informed CAMELLIA REVIEW that retails of the tour are not yet available. However, the Australian Camellia Research Society has supplied the following information to CAMELLIA REVIEW. North American Economy-class excursion fare from Los Angeles or San Francisco will be A$699.50 (This should be checked with a bank to determine the amount in U.S. dollars). Validity is 14 to 28 days, with no restriction on number of stop-overs. Inclusive cost for the 15-day tour of Australia, July 28 to August 11, will be A$408 each. This will include accommodation, travel, porterages, and all meals and functions except 3 lunches and 5 dinners, with twin or double-room accommodation. Single-room accommodation will be A$518 each. For people not wishing the entire Australian tour, there are prices for different sections of Australia.

(Continued on page 24)

CAMELLIA HYBRIDIZATION GUIDELINES

David L. Feathers
Lafayette, California

As the above title suggests, it shall be the purpose of this article to deal with this subject primarily from the standpoint of the beginner rather than from a technical approach. Camellia hybridizing is a fascinating pursuit but it should be noted at the outset that, even more so than in the mere growing of seedlings, probably the most basic demand upon the would-be hybridizer is—patience. In fact, this reminds me of the answer purportedly given by the late Bernard M. Baruch to the question as to the secret of his phenomenal success in investing: Baruch said he had three rules: "patience, patience and more patience." If you do not possess a fairly large backlog of patience, my advice would be to forget the whole thing, for it normally requires not less than five years to find out where you went wrong.

The first thing we learn about camellia hybridization after mastering the rather simple fundamentals is that the outcome of a cross is often unpredictable. My first attempt at producing a formal double light pink, by crossing a semi-double white with DEBUTANTE, resulted in four seedlings—two singles, a semi-double and a formal double (JULIA STAFFORD)—all white. *C. saluenensis* crossed with *DEBUTANTE* did produce a number of pink singles, semi-doubles and formal doubles but it also produced a rose-form *white* hybrid. I have concluded from these experiences that DEBUTANTE must have white in its parentage. In camellias white is said by some geneticists to be a dominant character. Where one parent has a dominant character it introduces another unkown factor into camellia hybridization and there is so little available information on the subject that one cannot very well evaluate this factor in attempting to achieve a certain objective.

HISTORICAL PRECEDENTS

In the 1860's, Charles M. Hovey, an outstanding camellia authority in the Deep South, in a little booklet written on the subject of his experiences with camellias, reported on his attempts to develop a fine double red camellia. After seven years, his first attempt flowered, but he did not obtain what he sought. So he made another attempt, choosing his seed parent on the basis that "any good seed-setting semi-double" would be suitable crossed with a double form which yielded pollen. He chose as the pollen parent WARRATAH, a small, dark-red anemoneform camellia of good habit. From this combination he got what he was after—several fine, formal double reds among which were C. M. HOVEY and MRS. ANNE MARIE HOVEY. All this required fourteen years, patience and persistence. While it is true that with our modern facilities we can cut several years off this time element, nevertheless even with the best of luck it is still a matter of at least four or five years for the average person.. The cross that produced JULIA STAFFORD (86 petals) was suggested by Hovey's experience and the result would tend to substantiate his contention that a good seed-setting semi-double, when crossed with a multi-petaled flower (peonyform, anemoneform or rose-form) should produce some formal doubles.

ENVIRONMENT

In Les Jury's splendid article on hybridization in the November, 1972, issue of *The Camellia Review* he mentions the fact that the New Zealand climate is too equable for the natural production of camellia seed. On the other hand, I recall that Dr. Walter

E. Lammerts made the statement years ago that the Southern California climate was ideal for camellia seed production. In general, I would say that the California climate is conducive to camellia seed development wherever camellias can be grown, varying according to the immediate environment. Here at Lafayette we normally get about triple the rainfall of the Los Angeles area but our home is surrounded on all sides except the south (warmest in winter) by high hills and we have a great many wild bees which nest on the hillsides back of us, and which are active in our garden throughout the year, as well as humming birds, ants, etc., constantly present. Thus a sheltered area open to the warmth is the most conducive to camellia seed formation. One year, when we were not careful enough in picking off the spent flowers, I estimated our total seed harvest at 14,000. Of course, we have many of the older varieties which are now large plants up to 8 or 10 inches in diameter that are excellent seeders but no longer on the market. A greenhouse is just about ideal and if one has container plants that can be moved in for seed development the climatic or physical disadvantages can thus be overcome. We seldom bag our crosses although all flowers are carefully emasculated and only those buds which are still tightly closed are used. Waterproof bags are not thought to be satisfactory, while paper bags often become a soggy mass in the rain and, considering these disadvantages, for some time now I have followed Howard Asper's lead based upon the principle that the pollen that gets there first is what counts, while the time spent in bagging can better be used in making that many more crosses. Sharp-pointed, slender surgical scissors are used for removing the stamens and every one of the pollen sacs. Of course, each pollination is carefully tagged, showing date and both parents.

PARENTS - FERTILITY

Further on the discussion of fundamentals: I would suggest that, when selecting seed parents considerable weight be given to the fertility factor, especially in the case of beginners where the avoidance of failure (and thus discouragement) is most desirable. Over and above the matter of flower creation, consideration should also be given to the growth habit and vigor of the parent plants. Such magnificent plants as the LADY VANSITTART family, MRS. BERTHA A. HARMS, DUCHESS OF SUTHERLAND group, REGINA DEI GIGANTI, DR. TINSLEY, REG RAGLAND and others are desirable seed parents because they are not only good seeders and good plants but some are also among the most cold hardy. Where one is attempting a difficult cross, and especially in the case of inter-specific and intergeneric hybridization, the matter of using a prolific mother plant is especially important. DONCKELARII, TRIPHOSA, DEAR JENNY and ROSARY also belong in the good-seeder, good plant group. Among the old but lesser known reds I would include WM. DOWNING and H. A. DOWNING. One year I harvested over 200 seed *pods* from a 4-ft. high plant of WM. DOWNING, all natural pollinations. At some future date I hope to be able to publish a complete list of recommended seed parent camellias now being compiled by our Northern California society's Camellia Research Committee.

OBJECTIVES

No discussion of samellia hybridization would be complete without some consideration of the matter of objectives. A great deal of time and effort can be wasted in floundering around unless the would-be hybridizer (meaning any person who hand-pollinates camellias) first gives serious consideration to what he or she wishes to accomplish.

A study of the coded inventory

(Continued on next page)

submitted with the plants from Dr. Clifford's Parks' crosses, covering the 3,100 hybrids turned over to our local Camellia Research Committee about 5 years ago, discloses the following different objectives and purposes in making the crosses:

(1) fragrance
(2) cold resistance
(3) yellow color
(4) blue color
(5) improvement of *C. williamsii*
(6) inheritance of red color
(7) effects of self-pollination
(8) inheritance of flower color
(9) study variation in *C. reticulata*
(10) improve *C. saluenensis*
(11) interspecific studies
(12) inheritance of *C. williamsii* color
(13) study *C. williamsii* variation
(14) earliness
(15) outstanding flowers
(16) improve *C. sasanqua*

and various combinations of the foregoing. While many of these objectives may be classified as technical studies of perhaps more interest to the laboratory than to the commercially oriented person, nevertheless the information that will be developed will be of great interest to the hybridizer who is operating pretty much in the dark at present. These objectives also will be found to fairly well run the gamut of the more serious purposes of all contemporary camellia hybridization and are therefore worthy of careful consideration by the would-be hybridizer. After deciding upon a certain objective, one should endeavor to bring together in the male and female as many of the characters as possible that harmonize with the lines of development sought. That is to say, should your objective be a brilliantly colored formal double red with an early blooming habit (a type that is sorely needed) then you should use parents which have these particular attributes. On a long-term program, one should also keep in mind the Luther Burbank principle of breeding out or breeding in undesirable or desirable characteristics through the process of selection covering several generations (thus the spineless cactus, etc.).

EXAMPLES

By way of example, in the past two years I have centered my efforts on crosses in which the Lady Vansittart seedling SATAN'S SATIN has been used extensively as the seed parent. This seedling has several unusual characteristics, including brilliance of color, sheen and is one of our heaviest seeders. It is a bushy, compact garden plant that has proven to be quite popular in Australia, taking the sun well. In order to improve this red semi-double and perhaps obtain a good formal of fine color, I have used the pollen of the following well-known reds, evaluating the potentialities of these crosses as indicated below:

VEDRINE: a very fine camellia that has been neglected—anemone form deep red, holds color well, early to late season, good in sun or shade, excellent foliage and vigor, fine growth habit, could impart doubleness

ST. ANDRE: very heavy large flower, fine leathery foilage, vigorous but compact grower, semi-double with height, outstanding except that form and color need improvement

KRAMER'S SUPREME: very large, very vigorous, some fragrance, color could be more vivid and hold better, almost certain to impart doubleness in combination with semi-double as it is peonyform (new hybrid, DR. CLIFFORD PARKS, indicates potentialities)

LADY CLARE: very early, very large, magnificent foliage, vigorous and spreading habit—could be very striking in vivid red or double form as rose color rather prosaic—never known to seed (this cross experimental as well as for improvement)

That SATAN'S SATIN is receptive to a wide variety of pollen is indicated by the following statement of pollinations made over the past two years, using this variety as the seed parent:

	POLLEN PARENT—PURPOSE OF CROSS	% SUCCESSFUL
1971:	China Doll: cold hardiness, experimental for color	33⅓
	Donation: cold hardiness, improvement	33⅓
	Eden Roc (retic.): brighter color, more retic., plant	(50) *
	Lady Clare (see remarks above)	66⅔
	Drama Girl: improve color, better foilage, vigor	50
	Guilio Nuccio: color brilliance, better plant, foliage	25
	Arch of Triumph: color brilliance, better plant, flower size	75
	Kramer's Supreme: (see remarks above)	100
	* 9 seed obtained but none germinated	
1972:	Frank Gibson: experimental, pink potential, unusual form	33⅓
	Vedrine: (see remarks above)	100
	St. Andre: (see remarks above)	50
	Innovation: emphasize Rectic., improve plant, color	20
	Lady Clare: (see remarks above)	50
	Red Reony Hybrid: doubleness, brighter color, compactness	25

FAILURES: Satan's Satin vs. Buddha, Lindsay Neill, Flame, Eden Roc, Noble Pearl, Dr. Clifford Parks, VSCR #9 (10 attempts), Francie L, Milo Rowell, Ecclefield, Drama Girl (1972)

MOTIVATION

It will be noted that the motivation behind the majority of the crosses listed above has been improvement rather than outright innovation—betterment rather than novelty. Believing this approach to be quite worthwhile, particularly in view of the fact that we have some 5,000 named varieties listed in the Nomenclature Book with thousands that are not, of recent date my efforts have been concentrated in this direction. In making this statement I must acknowledge a certain sensitivity and perhaps bias in this direction due to my several years of work on Camellia Rating, which may have developed an above-average consciousness of camellia faults. Nevertheless, what an important contribution it would be to improve the magnificently beautiful camellia JESSIE KATZ so that it would hold up its head and grow as a sturdy plant of good habit, or develop a LADY IN RED so that it would stay alive and bloom vigorously for everybody, or upgrade ALBA PLENA so that it would not shatter, or create a reticulata-type flower that would bloom early and stand the severe cold! How many of the 5,000 named varieties does the discriminating person want in his own garden?

CONCLUSIONS

In growing seedlings, too much emphasis is being placed upon quantity and the unusual at the expense of quality and the dependable. There is insufficient importance attached to the progressive development (improvement) of camellias in the judging of seedlings in the American Camellia Society's regulations and rules relating to granting of awards as compared with the inducement to create something new and different. This tends to turn the interest of the hybridizer away from betterment and the upgrading into the frantic search for something "different", resulting in an exaggeration of the problem. Just as the old original singles and semidoubles were superceded by the

(Continued on page 22)

CAMILLIA HEADACHES

Marilyn A. Batt
Santa Rosa, California

Editor's note: Marilyn and Douglas Batt operate Batt's Tip-Top Landscaping Service in Santa Rosa. Doug is the landscape gardener and Marilyn the scientific mind, having a degree in horticulture. They are active members of the Sonoma County Camellia Society.

Among the hardest problems for all camellia growers to solve are those attributed to fungus diseases. There are several reasons for this. First, fungi are not something that are readily visible, as frequently, the plant does not show any sign of disease until it is too late to correct the condition. Secondly, although there are many fungicides on the market, most of these are of little value because they are preventitive measures, not treatments for already infected plants.

Camellia Flower Blight

Many consider the most serious disease affecting Camellias is Camellia Flower Blight, caused by the fungus Sclerotinia Camelliae Hara, because it is a yearly nuisance and very difficult to control. This disease, first reported in California in 1938, was apparently imported from Japan in soil on infected plants. It was described in Japanese literature in 1919. The disease first appears as small brown spots usually near the center or base of the petals. These quickly enlarge, especially running along the veins. When the diseased petals are rubbed the infected portions disintegrate; whereas, bruises caused by freeze or wind damage remain intact. Within a few days the fungus completely covers the flower. When the flowers or petals drop to the soil the infected tissue enlarges and hardens, being dark colored and of varying sizes. In this stage the fungas is known as a mummy, it resists treatment by chemical and often is inconspicuous becoming embedded in the soil. The tiny fruiting bodies of this fungus are shaped like a golf tee and produce spores by the millions which can be blown in the air for miles and affect camellias great distances away. The fungus can only be transmitted by spores; it cannot be spread from flower to flower. Sanitation helps prevent Flower Blight to a certain extent, keeping every possible flower picked up, and burned at the end of the season.

Chemical control must be consistently done but now can be very effective. In mid-November a soil application of Terraclor or PCNB and a foliar application of Benlate (a systemic fungicide which is effective against many fungus caused diseases) should take place. Additional applications in mid-January and mid-February are also advisable. This combination has proved extremely effective. Since this disease only affects the flowers and will not kill the plant I do not consider it of great importance.

Oak Root Fungus

Another disease that causes serious damage to camellias and most other plants is Oak Root Fungus caused by an organism named Armillaria Mellia. This organism spreads from stump and roots of dead infected plants to infect other plants. This organism lives symbiotically on the roots of native oaks and other native trees giving calcium and magnesium to the host and taking starches and other carbohydrates, decomposing cellulose and using this also.

At this stage the organism developes a nodule on the wood and from this emerges a rootlike structure called a rhizomorph which can move 25 feet or more from the plant of

origin. If this rhizomorph comes to the surface of the soil the characteristic clump of mushroom fruiting bodies will betray its presence.

If, however, the rhizomorph comes to a root it will penetrate it and the fungus will spread along the cambium layer of the host plant eventually devouring it. There is no treatment. If the bark is peeled back the telltale white fungus will be present. If a plant is attacked it is wise to dig out every visible root and have the hole treated with Chloropicrin or Carbon bisulfide, both of which are very dangerous to handle so it is unwise to attempt without professional help. If you are planting on land previously cleared of native oaks, treatment will probably do no good as infection could come from many sources.

The late Dr. Harold Hume noted this disease as the greatest killer of Camellias and other woody plants in the United States.

Root Rot

There are several fungi which cause root rot. These fungi include Phytophthera, Pythium, Rhizoctonia, and Fusarium. These infect many woody ornamentals, are present in most soils and thrive in wet poorly drained soil. Rhizoctonia and Pythium can be eliminated from infected plants by the use of Benlate if caught in time, but as yet there is no effective treatment for Phytophthera or Fusarium. (I am not including definite species of these fungi as there are so many and they mutate so quickly any number of which may attack Camellias). The best prevention includes well aerated soil, occasional applications of lime—in acid soil areas; or soil sulfur or gypsum—in alkaline soil areas to improve drainage. Use caution during fertilization to prevent root burning which leaves an opening for soil fungi to enter. This secondary infection ultimately causes the death of the plant. However, these fungi are not usually the primary cause of disease. Phytophthera cinnomoni is commonly blamed for all Camellia Root Rot problems but this is not necessarily so.

Dieback

Dieback may attack any above ground part of the plant. The cause of collapse and death of young shoots is caused by Molybdenum deficiency, caused by over acidity making the element unavailable to the plant. After the young shoots have died the dieback organism Glomerella cingulata attacks the dead tissue and gradually spreads down the stem, and eventually if left untreated can kill the entire plant.

Many writers stress that overfeeding renders the plant more liable to dieback especially with an overdose of nitrogen. Stronger growths which are typical of more nitrogen are more susceptible than shorter ones because they need more Molybdenum. Plants grown in tubs seem more suseptable to dieback possibly due to the greater amount of watering rendering the soil more acid. Walter Hazlewood said that there are 43 strains of Glomerella in Australia and only one of these is known to attack live tissue.* So if you are in acid soil area or growing camellias in containers the best control consists of an application yearly of lime if needed to raise the pH to above 5.5 or a feeding with chelated Molybdenum and removal of any limbs with dieback to keep it from spreading any further in the plant. Bordeaux has long been recommended for control of dieback. The reason this has been so effective is because the lime contained therein raises the pH enough to make the necessary Molybdenum available to the plant. After removing any dead shoot, foliar treatment with Benlate will insure killing any of the dieback organism left in the plant.

(Continued on page 24)

CAMELLIA REMINISCENCES—III

Carey & Amelia Bliss

We want first of all to apologize for and to correct a serious error in our November article. In placing roof lath on a lath house, they should run north and south, *not* east and west as we inadvertently wrote. This error escaped both of us as well as our usually eagle-eyed editor. However, we were pleased in a way since many people pointed out our mistake showing, at least, that the articles are being read.

For the last two years, we have acted as membership and information chairmen at several camellia shows and, if the questions asked of us are any criteria, many interested and/or potentional hobbyists are very much in the dark regarding how they are run, the rules to be followed, how to enter blooms, etc. So, we will wait until the next issue to continue our saga of re-doing our camellia garden for the third time and turn our attention to the shows which will be coming along in the next few weeks.

When we first entered blooms, we knew almost nothing about the competitions. As we wrote earlier, in those days we did not—as yet—belong to any society, so did not have the benefit of reading *Camellia Nomenclature* or the "Camellia Review" nor of talking with and getting advice from more experienced camellia growers. We entered blooms and were proud if we won a ribbon, unhappy when what we considered a fine flower was passed over, looked longingly at the court of honor. We learned the hard way. We acted as clerks and runners and placement helpers—and, above all, studied the blooms; those that lost as well as those that won. Slowly, we came to recognize truly outstanding blossoms.

The question we have had asked most frequently at all the shows is, "How are the 'best blooms' and those on the court of honor selected?" Primarily, each flower is judged in its own category and size classification—i.e., large, medium, small and miniature japonicas, reticulatta and non-reticulata hybrids, species, seedlings, mutants, etc. Usually, flowers treated with gibberillic acid are entered in a separate section than non-treated blossoms, although some shows may have open classifications where all flowers are judged together. Blooms are placed in alphabetical order on the tables according to varietal name in their proper categories. Teams of three judges work on different sections and the first judging is done within a variety—that is, for example, to determine the first place 'Alba Plena' or 'Wildfire' or 'Howard Asper.' When in the opinion of the judges a bloom is particularly fine, it will be sent to the head table for consideration for the court of honor. Each show has a pre-determined allotment of awards, so there are always more excellent flowers than can be given prizes. When the preliminary selections have been made, the entire corps of judges ballots to pick the best bloom of its size and class. Those gaining the most votes are considered "best" flowers of their categories, those with the fewest votes are returned to the tables. The blooms that withstand this final balloting are truly the *creme de la creme.*

Judges will not handle blossoms nor change entry cards on the tables. It is, therefore, extremely important that the flowers are correctly labelled and entered in the proper classes or they may not be judged. When in doubt, check *Camellia Nomenclature* which is used as the standard authority. It is, incidentally, a good idea to look up entries in the nomenclature book even if you are certain of their correct varieties. Changes may have been made, particularly in size, that affect placement and classification.

Two other questions often asked are, "How do you manage to have such lovely blooms when the weather has been so bad?" or, "Why have some of the blooms drooped so badly?" The answer is often the same for both queries—they have been picked early and held for the show. Ideally, of course, we all hope for blooms to open fully and reach their peak of perfection the evening before or the very morning of a show. They will then be beautifully fresh for the judging and will hold up well for the duration of the show. Unfortunately, the plants and/or the weather do not always cooperate with exhibitors, so it is often necessary or desirable to pick blossoms ahead of time. If blossoms can be kept moist and cool, they will usually stay in good condition for several days. However, some will not tolerate the lights and heat of an exhibtion hall and will consequently droop and lose their freshness.

Since there are still several weeks before the shows get under way, you might want to experiment with picking and storing flowers. One of the best and simplest methods is refrigeration. Any air-tight container can be used, one of the most practical being a plastic refrigerator storage tray. I (Amelia) pick the flower with several leaves—it can be trimmed later—then dampen the underside and wash off the leaves, being careful not to get water on the stamens as it tends to darken them. It is then placed in a small water-filled cup, put in its plastic dish, and the top pressed down *very carefully*. You must make sure the container is both wide and tall enough so that the petals are not touched and possibly bruised. It now goes in the refrigerator where, hopefully, it will stay fresh for some time. We have found by trial and error that certain varieties respond very well to this treatment while others fail completely. As a generalization, deeper colors do better than light ones and blossoms with many, heavy-textured petals hold up better than fragile-textured semi-doubles. Many exhibitors use a solution of napthalene acetic acid to help preserve flowers. A full report on this has been written by Frank Reed in an earlier "Camellia Review." There are also several commercial products, such as Floralife and Stay Bloom, which help prolong the life of the cut bloom.

Finally, a comment we frequently encountered is, "I belong to such-and-such a society, but I wouldn't dare enter a show. I don't have these fancy, new varieties." Certainly, many court of honor blooms are new introductions primarily because growers and hobbyists have been producing outstanding camellias in the past few years. Yet, for example, at the early show held at the Los Angeles Arboretum December 9-10 this year, there were several winners that are not really new. 'Guilio Nuccio' was introduced in 1956; 'Glen 40' appeared in 1942; and 'Pink Perfection' has been around since 1875! Whether new or old, a fine bloom can hold its own in competition. But what makes a fine camellia bloom? It should, of course, be the right shape and size and color; it should have texture and substance and freshness; above all, it will usually have an undefinable something which makes it stand apart from other blooms, which makes it appealing to the eye and distinctive. It is interesting to go down the rows of flowers before they have been judged to try to pick out those you believe will be chosen for the head table. After you have carefully studied the blossoms at several shows, you may be surprised how often you will make the right choices. The happiest day will, of course, be when you dispassionately feel that one of your own blooms is truly outstanding—and the judges agree with you!

A TRIBUTE TO CAMELLIA FELLOW DAVID L. FEATHERS TESTIMONIAL DINNER

Helen Augis
Secretary, Camellia Society of Santa Clara County

Despite the stormy weather on Friday, November 10th, many Camellia enthusiasts met in San Jose to participate in "This Is Your Camellia Life, David L. Feathers". This long over due tribute to one of the great names in the Camellia World was highlighted by testimonials and messages from celebrities who too share this devotion to camellias.

Some thirty years ago, Mr. Louis Macchia of San Carlos started Dave down the "Camellia Path". Besides attracting Dave to camellias, these two men along with twelve others organized the Northern California Camellia Society. In this Society Dave served as president, vice president, secretary, director and chairman of the Research Committee. He also was Editor of the Society's "Camellia Bulletin" for eleven years.

Mr. and Mrs. Harold Paige, friends and neighbors of Dave and Lauretta Feathers, have shared many camellia activities. When Dave was made a Fellow of the American Camellia Society Harold wrote the tribute for the 1971 ACS Yearbook. This testimonial was read by Harvey L. Morton of the Northern California Society, representing Harold Paige.

A very close and enduring friendship came into being when Dave and Lauretta met the late Ralph S. Peer. Mrs. Monique Peer was unable to attend due to illness and sent a telegram expressing regret. In 1959 the ACS Yearbook was dedicated to Ralph S. Peer by his friend David L. Feathers.

A court assignment prevented ACS President Sherrill Halbert from being present. His letter of congratulations was read as were messages from many camellia notables in the Deep South. They included Mrs. Lilette Witman, Macon, Ga.; Dr. Clifford Parks, Chapel Hill,N .C., and Jos. Pyron, Fort Valley, Ga. It was during Dave's two different terms as Vice President and one term as Director ACS that these friendships were made.

Mr. Milo Rowell of Fresno, one of the best known and informed camellia personages in the world, gave some very interesting sidelights on the trips shared by the Rowells and the Feathers through the South Seas, Australia, and New Zealand. It was during one of these trips that Milo and Agnes, Dave and Lauretta met Prof. E. G. Waterhouse and his wife of Sidney, Australia. Milo presented Lauretta with a beautiful bloom of 'Massee Lane,' Milo's new seedling.

"Certainly no one of the Camellia fraternity in California is more worthy of this honor than Dave Feathers", quote Harold Dryden, Editor of the Camellia Review. He and his wife, Elsie drove from San Marino to personally pay tribute to Dave.

Messages from Dave's friends Neville McMinn, Jim Fisher, Prof. E. G. Waterhouse and Keith Brushfield of Australia were read by Pres. John M. Augis of the Santa Clara County Camellia Society.

Among those of Northern California paying honor to their longtime friend were Jack Mandarich, ACS Director. Vera Parker, President of Sonoma Society, Herb Martin, Pres. Sacramento Society, Don Bergamini, Delta Society, Marge O'Malley, President Peninsula Society, Virginia Rankin representing Modesto Society. Alton Parker, nurseryman and culturist, Sebastopol, and from Northern California Society, Barlow Hollingshead and Woodford Harrison.

(Continued on page 24)

PACIFIC CAMELLIA SOCIETY PANEL

L. R. SHUEY

The Pacific Camellia Society's initial meeting of the 1972-72 season on November 2 featured a very knowledgeable panel consisting of Mr. Earle Blake of the San Lorenzo Nursery, Mr. Thane Haniford of the Monrovia Nursery and Mrs. Violet (Larry) Shuey of the Temple City Camellia Society. Dr. Fred Mowery was moderator for the panel.

The panel discussions for the most part related to various camellia cultural and marketing practices of the Monrovia and San Lorenzo nurseries. Dr. Mowery directed his first questions to Mr. Haniford, who has been in charge of Monrovia's camellia nursery for almost 20 years. The questions were (1) how many varieties do you grow, (2) has Monrovia introduced many new varieties, and (3) what is its fertilization program.

Mr. Haniford stated that Monrovia grows and markets approximately 30 varieties of japonica, a few sasanquas, reticulatas and hybrids and to give some idea of volume, it may grow 10,000 of a particuuar variety; whereas, other commercial growers may raise only 200-300 of a variety. All of its "bread and butter" japonicas are raised from cuttings. Only the reticulatas and newer varieties of japonica are grafted. Mr. Haniford mentioned that approximately 45,000 'Glen 40' cuttings are grown each year. In one year, its cuttings approximate 700,000 and it usually sells all of its one gallon size camellia plants in a single season. Most of the time, it cannot meet the demand for plants of this size. In addition to one gallon size plants, Monrovia grows a considerable volume of five gallon and some seven gallon size camellias. It introduces some new varieties, but they are few in number.

In commenting upon Monrovia's fertilizing program, Mr. Haniford advised that it utilizes a system where liquid fertilizer is injected into the water line and, therefore, each time that its camellias are watered, the plants are also fertilized. This procedure has considerable merit, although it has its derogatory features: for example, on occasions, some valve will fail to close and, when this occurs, there will be an unusually high and damaging concentration of fertilizer released during irrigation. This mechanical defect is immediately brought to their attention by the presence of a vivid blue dye in the water, which is an indicator of trouble. This necessitates draining all water pipes by going to the lowest point in the water lines, opening the pipes and thoroughly draining them.

Mr. Earle Blake of the San Lorenzo Nursery stated that this nursery is primarily a cut flower and foliage nursery. The principal varieties of camellias being grown are 'Debutante', 'Glen 40' and 'Alba Plena'; 'Debutante' is, however, the best of the three as it holds its bloom longer than the other two. He declared that they can pick Debutantes in the early morning, ship them by air, and have them ready for sale the following day in Chicago and New York. The blooms are refrigerated at the nursery immediately after picking, but are not refrigerated when shipped. The flowers are picked in the morning when they are fresh and crisp, rather than later in the day when they are soft and unsuitable for shipping. Furthermore, if they were picked in the afternoon, they could not be shipped until the following day, which would amount to a considerable loss of time before being offered for sale.

Dr. Mowery asked Mr. Blake whether San Lorenzo had encount-

(Continued on next page)

ered any trouble with petal blight, to which he replied "yes we do." They are working on the problem and all growers in this area have suffered from this camellia malady. No chemical company is attempting to develop a cure or deterrent to petal blight, which, in reality, is a petal rot. Mr. Blake estimated that a sum ranging from $50,000.00 to $100,00.00 would be required to perfect and obtain a preventative chemical. "Terrachlor" is a dust product that has helped combat petal blight, but has not been successful in eradicating it. Sanitation appears to be the only answer. All camellias which have fallen to the ground should be picked up and leaves and other debris removed from their vicinity. Such sanitation measures seem to arrest and prevent the spread of petal blight; however, if your neighbor does not take like precautionary measures, your work will be in vain.

They have also experimented with a water soluable terrachlor and hope that it performs better than terrachlor powder. Their experiments, however, are not conclusive. Some people believe that petal blight is more prevalent when we have periods of abundant rainfall and plants, consequently, receive rain water in lieu of commercial irrigation water. Mr. Blake is inclined to agree with them. What does commercial irrigation water have that rainfall does not? Chlorine. Chlorine is a known deterrent to petal blight and other forms of fungus. Therefore, they are currently irrigating their plants with a solution consisting of five parts per willion of chlorine in our irrigation water. Treating promptly begins after a warm rain, which increases humidity, and, Mr. Blake believes, often causes an epidemic of petal blight.

Dr. Mowery next broached the subject of camellia plant mix and inquired of Mrs. Shuey what she and Larry use. She stated that they have recently deviated somewhat from previous mixes and are now using a mixture consisting of 50% composted loam, 40% redwood bark and the remaining 10% made up of string or shredded bark, vermiculite or sponge rock. These ingredients create a very loose and porous mixture and keep it from becoming compacted.

In answer to Dr. Mowrey's question concerning her use of so much bark she replied that it keeps the soil loose and is conducive to promoting the growth of new roots. A member of the audience inquired as to whether the use of so much bark did not unduly raise the acid content of the soil mix. She said that they had not found this percentage of bark detrimental, since only a well-aged bark had been used and not the blood red bark which had recently been peeled from the tree.

A question concerning the use of Devil's Gate Dam silt was raised. She remarked that she and Larry do not use it since their yard contains a sandy and porous soil, which they deem to be equally as good as the silt. Many of the plants growing in the ground were planted in a mixture containing this soil. No peat moss is used because it fails to keep the mixture as porous as redwood bark. Mr. Blake mentioned that peat moss eventually rots and becomes a gooey, viscid mess, as does any bark other than redwood. He emphatically stated that redwood does not rot and lasts for 1,000 years.

Mr. Haniford then commented on fir bark and advised that if it is used in a camellia soil mixture, it should be well-aged. He was then requested by Dr. Mowery to inform the audience concerning the ingredients used by Monrovia in its camellia potting mix. He astonished some of us when he remarked, "Six parts of peat, one of sand and only one of soil" and that Monrovia was currently mixing a considerable amount at the present time and was using 2,000 bales of peat. Monrovia's plants grow very rapidly

in this mix, but they require proper care and water control. This is not always possible when plants are sold to retailers who do not have adequate help to properly water and fertilize them. He asked that we keep in mind that Monrovia fertilizes each time that its plants are watered.

Mr. Haniford, in answer to a question concerning the kind of fertilizer used by Monrovia, said that he didn't know what it is, but that it is injected into Monrovia's general irrigation lines, which irrigate many plants other than camellias. He said that he has finally received permission from Monrovia to install a separate irrigation system for the purpose of feeding camellias with the fertilizer of his choice and at whatever time or times he deems sufficient.

Mr. Blake was then queried about San Lorenzo's fertilizing program. He stated that his employer hires an expert who comes to the nursery every three months. This expert procures camellia leaf samples from different areas. The samples are then analyzed to determine the fertilizing requirements of the plants. He then instructs as to the particular fertilizers to be used and they have an injector system that is fool proof. If something goes wrong, the mechanism automatically ceases to function; therefore, making it impossible to over fertilize.

Dr. Mowery then inquired of Mrs. Shuey what fertilizers she uses and how often she uses them. She stated that cottonseed meal is used as a basic dry fertilizer on container grown plants and a 50-50 mixture of cottonseed meal and blood meal on plants growing in the ground. This basic fertilizer is augmented from time to time with applications of "High Green" (liquid fish), "High Bloom," Vitamin B-1 and iron chelate.

One of the last subjects discussed by the panel was the use of gibberellic acid on camellias. Mr. Blake reported that San Lorenzo uses it in the same manner as do most camellia "gib" enthusiasts. He was asked whether San Lorenzo uses a "gib" spray similar to that used in the grape industry and he replied that it does not. He does not believe it would be effective because the camellia leaf is too tough and gibberellic acid, in his opinion, would not be absorbed by or penetrate the plant.

In conclusion, Mr. Blake reported that camellia 'Debutante' is a good, early, cut flower. Its rich pink color and peony form are pleasing to the eye and its substance is better than that of most camellias. San Lorenzo commences to pick natural (ungibbed) 'Debutante' blooms in October and November and has an abundance of blooms through the holiday seasons. It picks between 4,000-6,000 dozen 'Debutante' blooms each year.

HOW I GOT HOOKED

Bill Donnan
Pasadena, California

Why is it that nearly every camellia enthusiast has an over-riding desire to tell every one how he got started in his hobby? Not only how he got started but every other facet of his hobby—to the utter boredom—or fascination of the reader. Well, I'm no exception and this is the story of how I got "hooked".

I say "hooked" because the camellia hobby is a lot like the drug habit. It sneaks up on you and before you know it, you're hooked. You might own one plant or two plants and tell yourself that you can "handle this thing" and then, before you realize it, you are really hooked.

Back in Iowa where we were born and raised we didn't know a camellia from a gardenia! I was working there as a civil engineer in conservation research for the U. S. Department of Agriculture. In 1939 we had a chance to transfer to California and we landed in Glendora. After subsequent moves to Riverside and Santa Maria we finally ended up in El Centro. It was there that I first saw a camellia. A fellow-worker had one growing in a tub on his glassed-in patio.

I said, "What's this you have here?" He says, "It's a camellia. They are awfully hard to grow and they seldom ever bloom but Virginia likes the foliage."

In 1946 we were transferred to Los Angeles and we bought a home in San Gabriel. In the backyard on the north side of the house was a small green bush about 2½ feet high. One day one of the neighbors came over and I asked him if he could identify the shrub. He said that he thought it was a camellia. We got to looking around and sure enough there was a nursery tag on it: "Camellia Japonica —Rosita".

"Some one told me that they are very hard to grow," I said. "Yeh," said the neighbor, "They take lots of water and should be planted in peat moss. I never had any luck with them". This convinced me that I should remove the shrub and plant something which would grow without much care. However, other tasks intervened and I neglected to replace the "shrub".

Several months passed. Then one day I chanced to look at the little green "shrub" again and low and behold! There were three buds on it! The admonition ran through my head; "They are awful hard to grow and they seldom ever bloom"! Little did I know but at that very instant the bait was on the hook and I was about to be hooked ! You see, I am no horticulturist. I like to see plants grow, but I am far from being much of a gardener! And yet, right here in front of me was a camellia with three buds on it! You know—and I know, now—that given half a chance, a camellia will thrive and bloom any where in San Gabriel. But back there in 1946 I thought that I had a miracle on my hands!

Boy, did I ever give that "shrub" the old tender, loving, care; and sure enough, along in January there were three of the reddest blooms on the darkest green plant I had ever seen. Right then and there my ego had been fed. I could grow camellias! I didn't realize it then but I was hooked.

Subsequently we brought a lot in the Sunnyslope area above Duarte Road and built a new home. Naturally, camellias become a part of the landscaping plan. An incident took place there that indicated to me just how rugged and hardy the camellia plant is. I had purchased six camellias at the local nursery and planted them in large peat-lined holes. Then,

not knowing anything about fertilization, I purchased several bottles of "fish meal" liquid fertilizer and proceeded to pour it over my newly planted specimens. That night I went to sleep confident that I had given my camellias the equivalent of "a $2.00 hole for each $1.00 plant" and that I had added an extra measure of loving care by pouring a pint of liquid fertelizer on each plant! Little did I know that I had probably "burned up" my entire crop!

Well, the Lord helps little children and novice camellia growers, but his ways are devious. We happened to be the owners of a 10-month old English Sheep-Dog. (Or rather, he owned us.) That night our pup smelled the fish oil and he went investigating. He soon located the camellias and as pups are wont to do (What won't they do?) he proceeded to dig, chew and pull. By day-break he had managed to drag five of the camellias out of the ground and worry them all over the front yard! One camellia was chewed on the main stem until only shreds of bark remained. I planted those beat-up specimens and every one of them recovered. The camellia in the worst trouble was the one the dog missed. I think that the process of dragging the plants around over the yard and the subsequent necessity to replant shook off or counter-acted the possible damage from the fish oil fertilizer bath! Even the plant with the broken stem survived. I taped the stem with electricians tape and the last time I saw that camellia, it was 18 feet tall!

In 1954 I was transferred to Colorado and we sold out "lock, stock and barrel". After one year in Ft. Collins, I was transferred back to Southern California. Mrs. Donnan got her old job back teaching third grade in San Marino, but my office was in Riverside at the U. S. Salinity Laboratory. We compromised and bought a home in West Covina. It was a rambling ranch style home, one year old, with very little landscaping. (The subdivision had been an orange grove and there were 11 orange trees scattered around the yard.)

My love for camellias had not diminished and so we purchased 12 plants as part of our "house beautiful" project. Alas! The soil on our lot was the heaviest textured Altamount Clay-Adobe in all of Los Angeles County. Camellias just didn't thrive very well there even though I put up a valorous five year battle with that soil. Along comes 1960 and the family makes another decision. We sell our house in West Covina and buy a home in Chapman Woods.

The place we bought had nine mature camellias growing on the north and west sides of the house. There were the following: Pink Perfection, Purity, Prof. Sargent, Finlandia, Elgans (Chandler), Herme, Debutante, Daikagura, and Bella Romona. Not a bad collection for a start; and start I did! I purchased a Sunset Camellia Book and started reading up on the care and feeding of my plants. I was determined to make camellias my hobby. Soon, I was digging up all the existing roses and hibiscus and replacing them with camellias.

One of the mature camellias, the Pink Perfection, would not bloom. It would set hundreds of buds but we would get only one or two blooms from it. The next-door neighbor was a landscape architect and I asked him for advice. He suggested that I try some grafts and even offered to show me how to do it. This plant had a main trunk about 3 inches in diameter with many branches. It had attained a height of about six feet. We started in, one Saturday morning in February, by pruning off every single twig and leaf until the plant stood there stark naked, with 12 pencil-sized stems sticking out about six inches from the main branches. Then,

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getting scions from the San Gabriel Nursery, we cleft-grafted the entire plant. Out of the 12 grafts, five of them "took". This plant now has: Alice Wood, Grand Slam, Crimson Robe, Bernice Boddy, and Gigantea growing on it in addition to the Pink Perfection.

To me, a novice sod-buster from the tall-corn country, those grafts were the most successful single horticultural triumph in the 17 Western States! And yep! You guessed it—I was really "hooked" now. I was forever bragging about my grafts and every time someone came to the house I would manage to steer him past my Pink Perfection with the five grafts growing on it. One day, somebody asked me if I had ever entered any of my blooms in the camellia shows? So help me! I hadn't known that there were any shows! But I soon found out that there was to be a Camellia Show the very next weekend at the Los Angeles County Arboretum.

We visited the show on Sunday and I was caught up in the splender of the many flowers. There, I met Mr. Art Krumm and found out that any one could enter blooms in the shows. He also told me about the Southern California Camellia Society and I joined up. We attended several of the monthly meetings and the year-end pot-luck dinner and made some new friends. The next winter I was determined that I would enter some of my flowers in the 1968 Temple City Camellia Society Show.

I asked for the entry blanks and was given the usual pocket of identity cards and show rules. On Saturday morning, bright and early, I picked one each of Purity, Prof. Sargent, Grand Slam, Elegans, Finlandia, and Herme. I put them in one of those flat Oly Beer cartons that you get when you buy a case of six-packs, and drove to the Arboretum. My hopes were high as I strode into the show hall, but they sank down to the soles of my shoes as I looked around me! Here was Bill Donnan (that famous grafting specialist) with his six blooms in an Oly Beer carton and he is surrounded by tray after tray after tray of blooms, all carefully packed in cotton or shredded tissue. I recall, to this day, one exhibitor with his chauffeur and two boy-scouts carrying a mahogany, brass-bound, casket with four sliding trays. That guy must have had 50 blooms in there from which to choose. All at once I realized just how "bush league" I really was! However, I did place my blooms, the beer carton not withstanding, and then drove home.

The next day, Mrs. Donnan was puzzled about my reluctance to visit the show, but I gritted my teeth and finally consented to go. Well, much to my great surprise and wonderous joy, I had managed to garner three second-place awards!! The blind squirrel had found an acorn! And you better believe it, I was forever wedded to my beloved camellias. In 1969 I won a pair of candle sticks for a Runner-Up Best Three Reticulata Tray. (My first hardware.) I was all set to "bomb" the 1970 shows and then I was detailed back to Washington, D.C., during most of the winter. My job has made big inroads on my hobby in the past but now that I am retired I have high hopes of becoming really active.

I keep adding to my collection and now have 78 different species and varieties in my yard and in pots. Last spring after all the plants had stopped blooming an E. G. Waterhouse set three blooms on the calix of former blossoms. Then I chanced to read an article by Dr. Wm. Ackerman on repetitive blooming in the American Camellia Society's Yearbook. So I took a picture of the flower with my polaroid camera, and sent it to Dr. Ackerman. He responded by sending me two of his plant hybrids, 'Fragrant Pink.' This fall he sent me

(Continued on page 23)

PRESERVATION OF CAMELLIA BLOOMS

Mrs. Laurence (Vi) Shuey
Temple City, California

Reprinted from January 1969 Issue of Camellia Review

To grow fine camellias is a very rewarding accomplishment; however, as cut flowers, they seldom last for more than one of two days. This is particularly disappointing to the florist, the flower arranger and show exhibitor.

We, who endeavor to grow high quality blooms, are interested, of course, in prolonging the life of such blooms for as long as possible. I have tried for several years to obtain data that would enable me to extend the life of my cut flowers and now I have a formula that is quite acceptable.

I scarely know where or how to begin my remarks concerning the preservation and refrigeration of camellias, when there are so many others more qualified, who have been collecting data and researching this matter for a considerable period of time. From personal demonstrations and articles which have been written, I was able to commerce this all-important work with our camellia blooms. All of you who are interested in preserving your camellia blooms for show, festive occasions and for floral use in the home are again reminded to read the following articles: Quote from the CAMELLIA REVIEW:

March 1955, Page 20 — Treatments for increasing the life of cut camellia flowers. By James Bonner and Shigeru Honda.

Jan. 1966, Page 16 — Treating for increasing life of cut blooms. By Frank F. Reed.

Nov. 1966, Page 24 — Increasing the life of cut camellia blooms. By Frank F. Reed.

Jan. 1967, Pag 22 — More about refrigeration of Camellia show flowers. By Harold E. Dryden.

I am indeed grateful to several of my friends, who so generously gave me the knowledge and tools with which to work. Most of us try to add just a little bit more to what we have already learned from the pioneers in this field. and I am no exception.

It is a well kown fact that the life of the cut camellia flower can be extended by low temperature treatment. The greatest extension of life for the camellia flower has been obtained when flowers were stored in a saturated water atmosphere of a refrigerator, also the life span can be increased by the application of Napthaleneacetic Acid.

My method is outlined below:

FIRST — *The refrigerator* — I believe that the refrigerator should be kept, if possible, at a uniform temperature of 38 to 40 degrees F. The refrigerator must be a wet type box.

SECOND*—*Napthaleneacetic Acid* (NAA)—10 grams may be purchased at a cost of $2.00, which is enough to last for about 10 years. Send your check to Secretary, Southern California Camellia Society, 8421 California Avenue, Whittier, Calif. 90605.

Formula: To a quart of warmed distilled water, add one tablespoon of High Bloom, one tablespoon of Vitamin B1, and one scant fourth of a teaspoon of NAA (size of a pencil eraser). Shake this solution well, after which place in the ice box for future use.

THIRD — *Plastic Boxes* — size 10"x14"x4". Place a layer of cotton (or any absorbent material) in the bottom, lightly dampened with water, then a layer of shredded cellophane, and last, place small containers filled with cotton and saturated with the above mentioned NAA solution. These containers will accommodate the number of blooms to be placed

* This is a change from 1969 article.
—Ed.

(Continued on next page)

in the plastic box. I might mention that I use aluminum jelly containers, as well as small tart tins from Van De Camps. The jelly containers measure 2" x 3/8" and tart tins measure 3" x 5/8".

I prefer shredded callophane because it does not mash down and in time become soggy; also the cellophane can be washed in warm sudzy water and will retain its usefullness.

FOURTH — *Picking Camellia Blooms.* As I have stressed before, I believe that every phase of picking and storing camellias should be a condition of coolness and dampness; therefore, the time for picking blooms should be very early in the morning. I prefer the hours of 7:30 a.m. to 8:30 a.m. Each bloom, as it is carepully picked from the plant, is immediately placed in a container filled with cotton and cold *NAA solution.* As soon as there are enough blooms to fill a plastic box, the lid is tightly secured and the box of blooms is stored in the refrigerator. Make *very sure* that the stem of the bloom is in contact with the wet, saturated cotton in the container.

When it is time to exhibit the blooms, whether it be at a monthly meeting or a show, these blooms are then transferred to much larger boxes. This is done after the sun is down, sometimes late in the evening. But at least when the *temperature is cool.*

I use larger boxes which were originally wax-coated meat boxes. To prepare each large box, aluminum foil is placed in the bottom of the box, then a dampered piece of cotton or absorbent material, and finally an inch layer of shredded callophane. After this process is completed the blooms, while still in their containers, are transferred from the plastic boxes in the refrigerator to my larger boxes. These boxes are allowed to remain open to the air until time for storing in the car to be transported to their final destination. And I might add here, PLEASE do not make the mistake of having your very best show bloom *packed on the bottom of the pile.* ALWAYS place your very best blooms on the show table first.

There have been many articles written about refrigeration of camellia blooms for show and monthly meetings. In my opinion, there are many reasons why refrigeration, plus the use of NAA should not be overlooked by the exhibitors. A few of these are listed below:

1. Many times camellia blooms reach their best stage of blooming too early for exhibition. I believe that these particular blooms should be picked at their peak of blooming and promptly refrigerated.

2. By following this procedure, we will have more and better blooms for our show tables.

3. Flowers picked at peak condition and refrigerated will be strengthened by the use of NAA, and therefore, will be better flowers than if they were left on the plants and picked after the optimum blooming period.

4. Many blooms would never be exhibited unless they were preserved by NAA and refrigerated.

This is my final bit of advice and recommendation to all of my camellia friends:

a. Apply NAA solution to the floral axis of camellia blooms. The purpose of the NAA is to strengthen the bonds between the petals and the stem and delay the petals dropping off.

b. Maintain fairly high relative humidity in the plastic boxes while stored in the refrigerator.

c. Keep the stems of the blooms in the NAA solution with saturated balls of cotton.

Over the past few years, much of this information has been presented to you in various articles in the CAMELLIA REVIEW and other Camellia magazines. *Take Heed,* my friends,

(Continued on page 24)

SHOW RESULTS
SOUTHERN CALIFORNIA CAMELLIA COUNCIL

Los Angeles County Arboretum — December 9 - 10, 1972

Award of Honor—Mr. and Mrs. W. F. Goertz, San Marino
Award of Honor Runner-up—I. John Movich, La Verne
Best Treated Large Japonica—'Elegans Splendor', Mr. and Mrs. Sergio Bracci, San Gabriel
Best Treated Large Japonica Runner-up—'Miss Charleston Var', John Movich
Best Treated Medium Japonica—'Cover Girl', John Movich
Best Treated Medium Japonica Runner-up—'China Doll', Mr. and Mrs. Robert McNeil, San Diego
Best Treated Small Japonica—'Tom Thumb', John Movich
Best Treated Small Japonica Runner-up—'Kitty', Harold Dryden, San Marino
Best Treated Miniature Japonica—'Black Heart', Carey and Amelia Bliss, San Gabriel
Best Treated Miniature Japonica Runner-up—'Pearl's Pet', Sam Ward, Tarzana
Best 3 Treated Japonicas—'Kramer's Supreme', John Movich
Best 3 Treated Japonicas Runner-up—'Clark Hubbs', Mr. and Mrs. W. F. Goertz
Best Non-treated Large Japonica—"Carter's Sunburst', Carey and Amelia Bliss
Best Non-treated Large Japonica Runner-up—"Tomorrow Park Hill', Mel Gum, San Gabriel
Best Non-treated Small Japonica—'Allison Leigh Woodroof', Mr. and Mrs. Lee Gaeta, El Monte
Best Non-treated Small Japonica Runner-up—'Splash O'White', Mr. and Mrs. Harry Novich. Woodland Hills
Best Non-treated Miniature Japonica—"Little Red Ridinghood', A.W. Garner, Glendale
Best Non-treated Miniature Japonica Runner-up—'Pink Smoke', A.W. Garner
Best 3 Non-treated Japonicas—'Guilio Nuccio', H. S. Putnam, Long Beach
Best 3 Non-treated Japonicas Runner-up—'Reg Ragland', Mr. and Mrs. Stanley Miller, El Cajon
Best 3 Boutonniere Japonicas—'Ava Maria', Mr. and Mrs. Larry E. Shuey
Best Treated Japonica Seedling—Mr. and Mrs. Harry Novich
Best Treated Reticulata Seedling—Mr. and Mrs. W. F. Goertz

AWARDS OF SOUTHERN CALIFORNIA CAMELLIA SOCIETY

The Southern California Camellia Society has established the following Awards for outstanding camellias.

Margaret Hertrich Award, established in 1950, offered annually for the outstanding japonic seedling.

William Hertrich Award, established in 1950, offered annually for the outstanding Camellia mutant (sport) which has been established by propagation.

William E. Wylam Award, established in 1962, offered annually for the outstanding boutonniere (under three inches) camellia seedling.

Frank L. Storment Award, established in 1963, offered annually for the outstanding hybrid seedling of Camellia reticula parentage.

Dr. John Taylor Award, established in 1972, offered annually for the outstanding Camellia hybrid with other than reticulata parentage.

Rules and regulations governing the above Awards were adopted at the time the Awards were established. These rules and regulations, adopted independent of one another, were difficult to administer. The Board of Directors of the Southern California Camellia Society has canceled the prior rules and regulations and has adopted the following which will be applicable to all five Awards.

RULES and REGULATIONS
Adopted 1972

Awards are offered but not necessarily made each year, depending on the merits of the candidates. Award shall not be made except to an outstanding camellia, as to both flower and plant, which in the opinion of the committee will continue to hold its popularity over the years.

To receive an award, the variety must have been commercially and generally available for at least three blooming sasons, and not more than twelve blooming seasons.

Candidates will be judged on the basis of outdoor grown, in the Pacific Coast area, without the use of glass or similar covering, and without the use of special treatment.

The Award, if any, shall in each case go to the originator, except where all rights thereto have been transferred to another grower prior to the naming and registration of the variety.

No Award can be made to a variety over the objection of two members of the committee.

The Southern California Camellia Society Board of Directors shall appoint an Awards Committee of not less than five members, naming one of such members as Chairman. It is recommended that the names of the committee members not be published.

This Committee shall meet in the month of January each year for consideration of candidates, and again on or about April 1st for the selection of award winners, if any.

Southern California Camellia Society will evidence any award made with a suitable emblem, appropriately engraved, which shall be the property of the winner.

These rules and regulations shall be subject to revision by the Board of Directors of the Southern California Camellia Society.

HYBRIDIZATION (Continued)

formals, which were then displaced to a great extent by the peonyforms and more open flowers, so it would seem that we should work to relegate to the background, through merely improving the existing types, many of those possessing fatal faults. The length of this presentation precludes discussion of pollination techniques in detail. However, this information is readily available elsewhere. Perhaps this subject and some thoughts will be covered by others or in a further article.

FLOWER BLIGHT IN CAMELLIA

P. C. Cheo

Research Division, Los Angeles State and County Arboretum

Extracted from article "Some Common Diseases of Ornamental Plants in the Los Angeles Area" in June 1971 issue of LASCA LEAVES, published by California Arboretum Foundation, Inc.

Flower blight caused by the fungus *Sclerotinia camelliae* is the most common disease of camellias in California. It was first reported in California in the San Francisco Bay area in 1938, where it was apparently introduced from Japan. This disease has since spread to most southern states. This blight is confined to the flowers, causing an unsightly look in the blooming season. Infection takes place any time after the petals begin to show color. Small tan and brown spots appear singly or in groups on the petals. These spots gradually enlarge until the whole flower may become brown. As the tissue changes color, the veins tend to become darker, giving a netted effect to the diseased flowers. This distinguishes flower blight from wind injury or frost damage which usually appears at the tips of the petals. The disease does not produce a rot; the petals merely turn brown and at a later stage the blossoms fall off.

The small micro-conidia develop under moist conditions on fallen flowesr and give them a glistening appearance. Later, dark brown to black resting bodies, called sclerotia, develop. The sclerotia lie dormant on the ground or buried in the soil or mulching materials during the summer. As the blooming period approaches, sclerotia become germinate, producing a small cup-shaped structure (apothecium) on a stalk about the size of a dime. Large numbers of spores are ejected from the apothecium and carried by wind current. Spores landing on flowers will germinate and produce infection if condensed moisture, such as dew, is present.

All infected flowers should be collected and destroyed; these infected flowers are the major sources of infection for the coming blooming seasons. The same lot of sclerotia may produce apothecia for at least five years. Pentachloronitrobenzene (PCNB) can be used as a ground spray to inhibit the development of apothecia. The ground spray should be applied before the blooming season. PCNB (75% wettable) at the rate of 3 lbs. per 1,000 square feet plus 1 to 4 ounces of detergent gives good control. Ground spray is effective but it has to be thoroughly done. Air-borne spores can be carried from one back yard to another. It is not practical to spray the flowers before or after opening with a protectant fungicide since petal tissue unfolds rapidly and is diffiicult to keep covered with spray material.

HOOKED (Continued)

two of his japonica cross 'Frost Queen' which has been developed for winter-hardiness. I'm going to see how it survives in our hot summer climate of Southern California.

Well, there you have it. There is the story of how Bill Donnan got hooked on camellias. I'm looking forward to the new season. I am hoping to make lots of new friends this year since I am retired and will have a lot of time to fuss around. So, if you see some old codger with an Oly Beer carton, placing his blooms in the winter shows, you can point him out to your friends and say, "There goes a guy who is *really* hooked on Camellias."

Huntington Gardens Show January 13-14

The first camellia show to be held in the Huntington Botannical Gardens will be January 13 and 14, 1973. Since the show will be held in an unusual setting, the show itself will be unusual in that strong emphasis will be placed on the artistry of the tables and on educational features. Myron Kimnach, Curator of the Gardens, said that he would be willing to endorse a show at Huntington provided that the viewers, mostly people who will be there because of the Gardens rather than primarily to view a camellia show, are educated in camellias and camellia culture; for example, the use of gibberellic acid to produce early and larger flowers. The show will be sponsored by the Southern California Camellia Society which has cooperated with the Huntington in the development of the camellia garden since it was started in the 1940's.

Full details of the show may be obtained from Ernie Pieri, President of the Southern California Camellia Society, whose address and telephone number are given on the inside front cover of CAMELLIA REVIEW.

INTERNATIONAL (Continued)

CAMELLIA REVIEW recognizes that the above information regarding costs in incomplete. It should suffice, however, for preliminary consideration of the trip. Full details can be obtained by writing one of the three agencies that have been designated to represent the tour in the United States.

PRESERVATION (Continued)

apply this knowledge. You will have much more fun with your "hobby of camellias", and we will have finer shows by being able to see "THE BIG ONE THAT ALWAYS GOT AWAY."

TRIBUTE (Continued)

Albert Buckholz of the host Society of Santa Clara County presented a plaque to Dave to commemorate the occasion.

The honors the Camellia World has bestowed on Dave for his contributions are many. He is a true gentleman and a modest one, saying, "I never really hit the jackpot in a big way. I have 25 or 30 commercially propagated and more on the way." Dave has planted over 7,000 seedlings with approximately 6,000 germinating. His latest contributions to our enjoyment of camellias are Arch of Triumph, a hybrid and the outstanding seedling, Dr. Clifford Parks that was developed by Dr. Parks but has been propagated by Dave.

A judge, a professional writer for Sunset and Horticulture magazines, lecturer, culturist, and that everlasting interest in camellias keep Dave's life busy and rewarding.

It is a real joy to honor one who has given so much of himself to the Camellia World. How fortunate for us to have crossed paths with this man! A note of appreciation and gratitude to Lauretta Feathers whose understanding and inspiration helped make Dave Feathers' camellia life the wonderful experience it is and one of which we all share a part.

Dave, we salute you! God bless you and Lauretta always.

HEADACHES (Continued)

This has been a very basic summery of some of the major fungi that affect Camellias, how the plants are affected and best course of treatment. Maybe now you can figure out why that plant died, and you may be able to save yourself some camellia headaches in the future.

* Hazlewood, Walter G. "An answer to let's not dither about dieback". *Camellia News*, #40, December 1 1970, Australian Camellia Research Society.

Directory of California Camellia Societies

Societies with asterisk (*) are Affiliates of Southern California Camellia Society

*CAMELLIA SOCIETY OF KERN COUNTY
President: Bob Krause; Secretary: Lemuel Freeman, 209 S. Garnsey Ave., Bakersfield 93309
Meetings: 2nd Monday Oct. through Apr. at Franklin School, Truxton and A St., Bakersfield

*CAMELLIA SOCIETY OF ORANGE COUNTY
President: Thomas Scanlin; Secretary: Mrs. George T. Butler, 1813 Windsor Lane, Santa Ana 97205
Meetings: 1st Thursday Oct. through April at Great Western S/L cor. 15th St. and N. Main, Santa Ana

CAMELLIA SOCIETY OF SACRAMENTO
President: Herbert Martin; Secretary: Mrs. Frank P. Mack, 2222 G. St., Sacramento 95816
Meetings: 4th Wednesday, Oct. through April in Garden & Art Center, McKinley Park, Sacramento

*CENTRAL CALIFORNIA CAMELLIA SOCIETY
President: Donald Martin; Secretary: Mrs. Jack Evans, P.O. Box 108, Ivanhoe 93235
Meetings: Nov. 15, Dec. 13, Jan. 17, Feb. 21 at Mayfair School, Mar. 21 at Fresno State College

DELTA CAMELLIA SOCIETY
President: Donald R. Bergamini; Secretary: Mary A. Bergamini, 451 Dale Rd., Martinez 94553
Meetings: 2nd Wednesday, Nov. through March at Sumitomo Bank, 620 Contra Costa Blvd., Pleasant Hill

JOAQUIN CAMELLIA SOCIETY
President: Karn Hoertling; Secretary: Mrs. Ethel S. Willits, 502 N. Pleasant Ave., Lodi 95240
Meetings: 1st Tuesday October through April in Micke Grove Memorial Bldg., Lodi

LOS ANGELES CAMELLIA SOCIETY
President: Thomas Hughes; Secretary, Mrs. Haidee Steward, 130 S. Citrus, L.A. 90036
Meetings: 1st Tues., Dec. through April, Hollywood Women's Club, 1749 N. La Brea, Hollywood

MODESTO CAMELLIA SOCIETY
President: Harlan Smith; Secretary: Dale Nagel, 3005 Deanna Way, Modesto 95350
Meetings: 2nd Monday October through May in "Ag" Bldg. of Modesto Junior College

NORTHERN CALIFORNIA CAMELLIA SOCIETY
President: Edward A. Hays; Secretary: Ralph E. Bernhardt, 1112 Blandford Blvd., Redwood City 94062
Meetings: 1st Mon. Nov. through May in Claremont Jr. High School, 5750 College Ave., Oakland

PACIFIC CAMELLIA SOCIETY
President: Dr. John Urabec; Secretary: Mrs. A. L. Summerson, 1370 San Luis Rey Dr.,
Meetings: 1st Thursday November through April in Tuesday Afternoon Club House, 400 N. Central Ave., Glendale

PENINSULA CAMELLIA SOCIETY
President: Mrs. Charles F. O'Malley; Secretary: Mrs. Rex W. Peterson, 27 Walnut Ave., Atherton 94025
Meetings: 4th Tuesday September through April in First Federal Savings & Loan Bldg., 700 El Camino Real, Redwood City, Calif. 94061

*POMONA VALLEY CAMELLIA SOCIETY
President: Frank Burris; Secretary: Walter Harmsen, 3016 N. Mountain Ave., Claremont 91711
Meetings: 2nd Thursday November through April in First Federal Savings & Loan Bldg., 399 N. Garey Ave., Pomona

*SAN DIEGO CAMELLIA SOCIETY
President: Harry Humphrey; Secretary: Mrs. Mabel Higgins, 2152 Clematis St., San Diego 92105
Meetings: 2nd Friday (except February which is 1st Friday) November through May in Floral Assn. Bldg., Balboa Park, San Diego

SANTA CLARA COUNTY CAMELLIA SOCIETY
President :John M. Augis; Secretary: Mrs. Helen Augis, 2254 Fairvalley Court, San Jose 95215
Meetings: 2nd Thursday Sept. through April.

SONOMA COUNTY CAMELLIA SOCIETY
President: Mrs. Alton B. Parker; Secretary: Mrs. Marylin Batt, 10047 Old Redwood Hwy., Windsor 95492
Meetings: 4th Thurs. Nov. through April, except Nov. and Dec. in Multipurpose room, Steel Lane School, Santa Rosa

SOUTHERN CALIFORNIA CAMELLIA SOCIETY
See inside front cover of this issue of CAMELLIA REVIEW

*TEMPLE CITY CAMELLIA SOCIETY
President: Sergio Bracci; Secretary: Mrs. Elsie Bracci, 5567 N. Burton, San Gabriel 91776
Meetings: Nov. 14 (Fri.), Dec. 17 (Fri.), Jan. through Apr. is 4th Thurs. in Lecture Hall of Los Angeles County Arboretum

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