THE Camellia REVIEW

A Publication of the Southern California Camellia Society

'Astronaut'
Courtesy Select Camellias, Inc.

Vol. 26 *January 1965* *No. 3*

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.

THE CAMELLIA REVIEW

HAROLD E. DRYDEN, Editor, 820 Winston Ave., San Marino, Phone 793-4214

Advisory Committee:

CAREY BLISS, BETTY ROBINSON, DOUGLAS G. THOMPSON

PUBLISHED BY THE SOUTHERN CALIFORNIA CAMELLIA SOCIETY, INC.

Six issues per volume—October, November, January, February, March and May.

All manuscript for publication and correspondence should be sent directly to the Editor.

CHANGE OF ADDRESS: Notify the Secretary at once. Magazines are not forwarded by the Post Office.

Printed by Pioneer Printing Co., Inc., Glendale

CONTENTS

VOL. 26 JANUARY 1965 NO. 3

THE COVER FLOWER

C. japonica 'Astronaut'

This month's cover flower is a 1964-1965 introduction of Select Camellias, Inc., located in Whittier, California. It is a medium red semi-double flower with a show of yellow stamens. It is a welcome addition to camellia varieties because it blooms early, starting to bloom in November and continuing through March. Plant growth is medium, compact and upright.

THOUGHTS *from the editor*

I refer all people who are interested in camellia shows to the reports of the Show which was held on November 7th at Nacogdoches, Texas. This includes Jack Holmes' report of the Show, "Hody" Wilson's observations in his article "A New Era", and Al Dekker's "Impressions". I ran these articles about this Texas show not to soften up the citizens of our second largest state as a prelude to a drive to annex them to California, but rather to show what gibberellin has done to make early camellia shows possible.

Some of us in Southern California have talked from time to time about an early show, say in December, to display the early varieties which are usually past good blooming time when our shows get under way in February. The January S. C. C. S. meeting several times has been built around the beautiful flower display we always have at that meeting. That is not the same as a competitive show, however. We have always dropped the idea of a December show because of doubts about having enough blooms in December to make a competitive show worth while.

Gibberellin has now eliminated this factor of doubt about having enough blooms, provided, of course, that the camellia growers endorse the idea and make plans for having blooms in December. A decision should be made during the present blooming season so that people could make such plans and develop "gibbing" schedules that would produce flowers for the time of the show. The schedules could provide only for "gibbed" flowers or more appropriately, I think, have the two sections as we now have so that we could display the December blooming varieties in what I call their natural state. A December show would also give us an opportunity for a full display of our sasanquas.

Use of gibberellin for producing flowers for early shows certainly does not conflict with the views held by some people against its use to obtain larger blooms. Some people like large flowers, and gibberellin satisfies these desires. Other people like the flowers as they grow naturally, and our climate and the general absence of freezing temperatures permit us to have them this way.

There is no necessary conflict between this view and the use of gibberellin to produce early blooms, or in fact, to bring in late blooming varieties before our warm weather strikes. Certainly, its use to lengthen the blooming season and to have early shows for greater enjoyment of camellias is consistent with a hobby that has for its purpose the pleasure of those who participate in it. The Los Angeles Camellia Council should take steps now to plan for a December camellia show in Descanso Gardens.

Harold E. Dryden

VIRUS IN CAMELLIA SPECIES

C. P. North and A. Wallace
Department of Agricultural Sciences, Plant Biochemistry
University of California, Los Angeles, California

Camellia owners have long wondered why some camellia flowers are mottled with white, why the leaves of some plants are mottled with yellow, and why scions of red flower varieties sometimes become mottled with white after being grafted onto other rootstocks. This paper will try to explain these phenomena. It is a progress report of investigations concerning the effects of some viruses in camellia. An attempt was made to find "indicator" varieties that can be intergrafted with a suspected viral plant to show the presence of the virus by resulting leaf and/or flower mottle.

Plakidas (5) has shown that some color breaking (mottle) in flowers of camellia is caused by a virus and that more than one virus or virus strains are present in some camellias. The writers have confirmed some of his findings and have found two camellia varieties, 'Finlandia' and 'Daikagura Red', that will indicate the presence of a virus. Transmission tests result in a leaf mottle on 'Finlandia' and leaf and flower mottle on 'Daikagura Red'. It is not certain that these two varieties will indicate all viruses that infect camellia species.

While white mottling on red or pink camellia flowers and yellow mottling on the leaves are caused by virus, not all flower variegations of camellia are due to virus infection. Camellia varieties with REGULAR or OCCASIONAL streaking of darker red or pink on a lighter background, or color zones (edges or centers) of flowers, are caused by mutation of, perhaps, a single plant cell. A mutation changes the normal genetic (chromosome) arrangement of the cell and it continues to produce abnormal cells, which in turn produces an abnormal flower color pattern, or, in the case of 'Ville de Nantes', an entirely different flower form. 'Ville de Nantes' is a mutation of 'Donckelarii'. Two of the authors' 'Ville de Nantes' have sported back to 'Donckelarii' on one branch each, and a 'C. M. Wilson' has sported on one branch to 'Shiro Chan'. Other examples of cell mutations are 'Daikagura' sports ('High Hat' and 'White Daikagura'), 'Anita', 'Bella Romana', 'Kickoff', 'Finlandia' sports, 'Eureka Var.', 'Herme' ('Jordan's Pride') sports, 'Fimbriata', and 'Tricolor'. Many camellias are stable and do not mutate, while others, such as 'Herme' and 'Tricolor', are rather unstable and produce many color variations and sometimes differences in flower form.

Viruses are not known to cause genetic variation in any plants although viruses that are seed borne may give this impression. Bawden (1) states, "An abnormal condition in a plant may be considered to be caused by a virus if this condition can be transmitted to another plant in the absence of a visible pathogen. The three main methods used for transmission are, first, by intergrafting healthy and diseased plants, second, by inoculation of healthy plants with sap from diseased ones, and third, by transfering insects to healthy plants after they have fed on a diseased one." In other words if no pathogen (bacteria or fungus) is present and an abnormality can be transmitted by grafting, it was caused by a virus. If no transmission occurs when the plants are intergrafted, the abnormality was caused by a mutation. Grafting appears to be the only method of

(Continued on next page)

virus transmission in camellias grown by the authors. In other parts of the world insect transmission may occur. Viral scions have transmitted virus in camellia although no apparent union was made with the rootstock. Bark from a viral 'Fimbriata' that was placed in contact with the cambium of a 'Finlandia' plant and then wrapped with vinyl tape, transmitted the virus even though the 'Fimbriata' bark did not appear to unite with 'Finlandia'. Sap (juice) squeezed from viral petals and leaves have not transmitted virus to wounds on 'Finlandia' leaves and stems.

Color breaking in 'Finlandia' occurs as regular, red streaking on 'Finlandia' variegated, and as irregular markings of red on the sports of 'Finlandia' known as 'King Lear' and 'Aurora Borealis'. The writers have been unable to transmit these variegations to 'Finlandia' by grafting and therefore assume them to be genetic and not viral.

Some garden plants do have streaking variegation caused by viruses. Examples are pansy, viola, tulip, and wallflower. In viral tulip, the flower character may be so altered that the bulbs from infected plants were often sold as new varieties, according to Bawden (1). Viral camellias are sometimes given separate names, i.e., 'Dr. John D. Bell' is variegated 'Beau Harp'. However, viral camellias are usually listed as "variegated" or as "Special", the last applied to a particular virus color breaking pattern, e.g., 'Adolphe Audusson Special'. 'Donckelarii' has a number of named varieties, i.e., 'Tea Garden', 'Middleton No. 15', 'Cantelou', 'English', 'Tallahassee', 'Mary Robertson', 'Winnie Davis', and 'Aileen'. The authors assume that these varieties arose from several different sports of 'Ville de Nantes', or as sports of 'Donckelarii' plants.

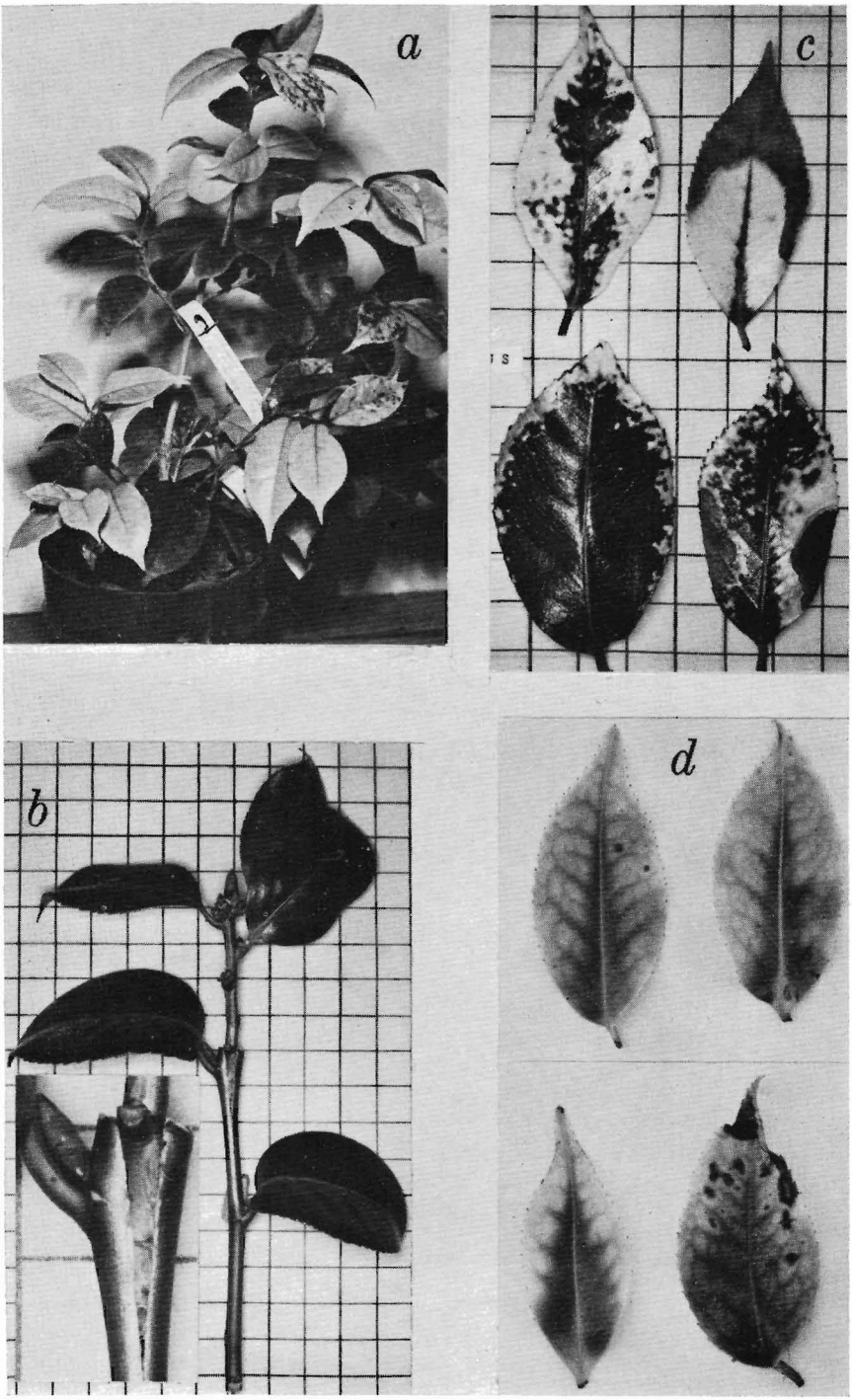
Different virus infections and different reactions of the plant to the viruses may also have contributed to these named varieties of 'Donckelarii'. The authors have not been able to obtain enough nonviral plants of 'Adolphe Audusson Red', 'Ville de Nantes Red', and 'Donckelarii Red' to supply identical scions for inoculation with viruses that cause the nearly white flowers typical of 'Adolphe Audusson Special' and 'Ville de Nantes Special'. 'Ville de Nantes' *Special* is the writers' designation of this variety with much variegation in contrast to the "regular" variegated flower with very little white variegation and in contrast to 'Ville de Nantes Red'. Until the Red form of these two varieties can be inoculated with the mild and severe viruses, genetic and virus difference must both be considered as possible causes in these two beautiful color patterns.

Grafting experiments by the writers and conversations with nurserymen have shown that not all virus-infected camellias exhibit leaf and/or flower mottle. Cross grafting experiments by Plakidas (5) and by the authors have shown that a single virus or perhaps a combination of viruses will cause extensive flower mottle on one variety but only slight mottling or spotting on another. The writers approach-grafted 'Adolphe Audusson Special' onto the top of a 'Mrs. Charles Cobb' branch of a combination 'Cobb'-'Blood of China'-'Reg Ragland' plant that had no previous viral symptoms. The results were excellent 'Audusson Special' flowers, light flecking and mottling on 'Mrs.

(Continued on page 6)

Figure 1. (Opposite page)

A. 'Ville de Nantes' "Special" virus on 'Daikagura Red' causes excessive chlorosis.
B. Cutting-graft. Note mature vegetative bud inset.
C. Viral leaves of 'Finlandia' and 'Daikagura'. Note nitrogen burn upper right.
D. Manganese deficiency pattern of chlorosis. Note wedge-shape green (dark) area along mid-vein and necrotic spots, lower right.


a
c
b
d

Charles Cobb' flowers, and moderate to extensive mottling on 'Reg Ragland' flowers. The leaves of all varieties show only slight mottlings on a very few leaves. 'Adolphe Audusson Special' grafted onto 'Imperator' has excellent white mottling on 'Audusson' flowers but only light flecking on 'Imperator' flowers.

Presumed nonviral 'Shishi-gashira' (C. hiemalis) grafted onto a C. japonica with extensive leaf mottle, but no flower mottle, resulted in only occasional flecks or dots of yellow on 'Shishi-gashira' leaves but no flower mottle over a period of 8 years. The same C. japonica scions caused mottle on leaves of 'Finlandia' and white flower mottle on 'Daikagura Red'.

Frolich et al. (3) working with virus-infected citrus species, found that some viruses in citrus are not completely systemic and that it is possible to obtain both viral and nonviral scions and buds from an infected plant. To investigate this possibility in camellia, ten scions, 5 viral (leaf mottle) and 5 apparently nonviral (no mottle), were taken from plants with leaf and/or flower mottle. These scions were cutting-grafted, fig. 1-B, to the non-viral 'Finlandia' rootstocks. The scion varieties were 'Monjisu', 'Ville de Nantes', 'Fimbriata', 'Tali Queen', 'Daikagura', 'King Lear' (viral leaves), 'Shishi-gashira' (on viral C. japonica) and viral C. japonica (rootstock for 'Shishi-gashira'). Ten scions of 'Daikagura Red' were used as virus-free control grafts. The results were that all scions from viral plants transmitted leaf mottle to 'Finlandia'. No visible virus symptoms were transmitted by 'Daikagura Red' scions.

Cutting-graft rootstocks, fig. 1-B, for virus indications, should have at least one mature vegetative bud that will grow soon after the cutting is well rooted. Evidence of virus transmission usually occurs with the first vegetative growth following inoculation. However, viral symptoms may not show for many months, perhaps

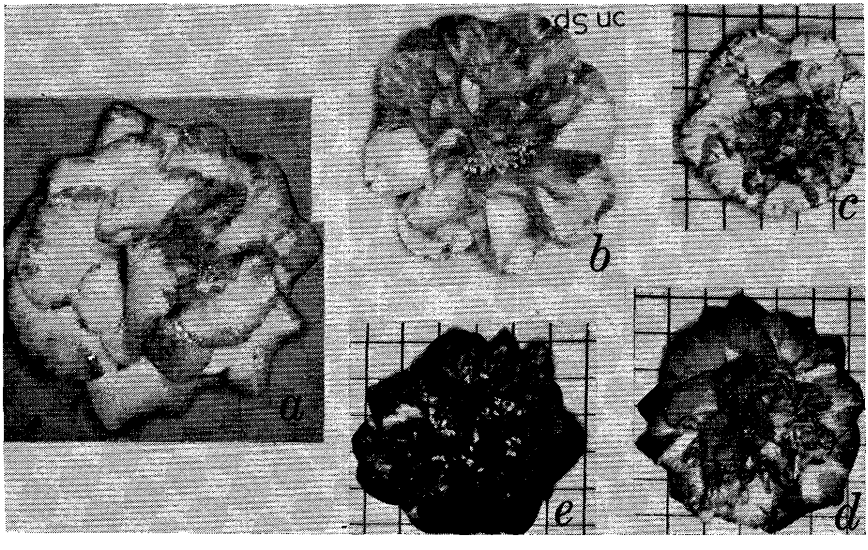


Figure 2.

A. 'Adolphe Audusson Special'.
B. 'Reg Ragland' infected with 'Audusson Special' virus.
C & D. 'Daikagura Red' infected with 'Adolphe Audusson Special' virus.
E. 'Mrs. Charles Cobb' infected with 'Audusson Special' virus.

due to nutrition level in the indicator plant, or to protection from physiological stress offered by shade, glasshouse, or mild temperatures. For instance, virus from 'Fragrant Jonquil' mottled leaves of 'Finlandia' only slightly and has since disappeared from the leaves of that 'Finlandia' rootstock although virus was transferred from it to 'Daikagura Red' where it produced flower mottle.

At least one virus causes excessive chlorosis on 'Daikagura' and its sports. Without proper care, these plants may die. A viral plant of white 'Daikagura' that was dying in 1959 has received chelated iron intermittently since then and, now in 1964, appears to be recovering although there is still much virus mottle on the leaves. Nitrogen applications have been made in small amounts to this plant but there has been marginal leaf burn on some of the yellow leaves after each application. North et al. (4) wrote, "Nitrogen should be applied to badly virus-infected plants in only small amounts, since the chlorotic leaves do not seem able to metabolize it fast enough to prevent leaf-burn. Green leaves on an infected plant will not burn after a given amount of nitrogen has been applied, but the yellow leaves may burn badly. A similar response has been noted in the case of lime-induced chlorosis." Lime-induced chlorosis in most plants is iron deficiency but in camellia it is usually expressed as manganese deficiency that appears first and probably masks later symptoms of iron deficiency, see fig. 1-D. Virus infection may look like iron or manganese deficiency on particular leaves of camellia but a virus usually appears on a few or many leaves and with many different patterns while a nutrient deficiency will show a uniform pattern of chlorosis between the leaf veins with various zones of green along the veins, fig. 1-D. It is assumed that the most damage caused by viruses in camellia is loss of chlorophyll and thereby loss of carbohydrate synthesis by the leaves.

Virus tolerance or even immunity to specific virus or virus strains is indicated by scions of 'C. M. Hovey' that were grafted onto a viral 'King Lear'-'Mary Charlotte' plant over 6 years ago. These have not shown any indication of virus and have not transferred virus to 'Finlandia'. One nurseryman said that he had not been able to keep virus mottle in flowers of 'C. M. Hovey'. Camellia Nomenclature 1964 lists two variegated forms of 'C M. Hovey', 'Bradford's Var.' and 'Scarlett O'Hara'. The authors will be very interested in knowing if these two varieties are viral 'C. M. Hovey' or if they are viral mutations of 'C. M. Hovey' that are susceptible to

(Continued on next page)

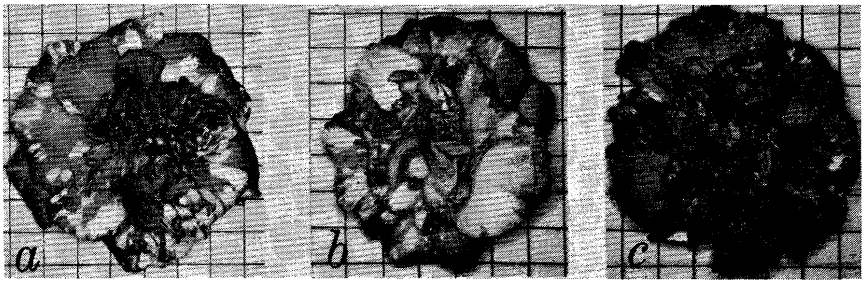


Figure 3.

A. 'Daikagura Red' infected with 'Fragrant Jonquil' virus.
B. 'Daikagura Red' infected with 'Adolphe Audusson Var' virus.
C. 'Daikagura Red' infected with 'Ville de Nantes' virus.

virus because of the mutation. The writers are attempting to infect and transmit virus infection through 'C. M. Hovey' scions to 'Finlandia' rootstocks. The viruses involved are from 'Fimbriata' and 'Ville de Nantes Special'. Both of these viruses produce leaf mottle in 'Finlandia'.

According to Bawden (1), "the strains of one virus are antagonistic toward one another and led to the first examples in plants of acquired resistance to disease. The ability of one virus strain to protect plants against the effects of another has now been demonstrated with so many viruses that it seems probable that it is a general phenomenon, and it is widely used to determine relationships between viruses that cause different symptoms." Plakidas (5) states, "scions from the mild and severe types of 'Ville de Nantes' were cross grafted on opposite branches of the same rootstock, to determine whether the severe type could be transmitted to the plant with the mild type of symptoms. Four such graft combinations remained sharply distinct. The part of the plant arising from the mild type produced the typical mild foliage and flower symptoms. This is

Table 1

Varieties that have transferred viral symptoms to 'Finlandia' and 'Daikagura Red' by grafting

Viral camellias	virus transmitted to		
	Finlandia leaves	Daikagura Red leaves	Daikagura Red flowers
Adolphe Audusson Var.	X	X	X
Adolphe Audusson Special	X	X	X
C. M. Wilson	X	NG	NG
C. japonica (unknown)	X	X	X
Crimson Robe	X	?	?
Daikagura variegated	X	X	X
Emperor of Russia Var.	X	X	X
Fimbriata	X	NG	NG
Fimbriata thru Finlandia	X	X	X
Fimbriata thru C. sasanqua	X	NG	NG
Fragrant Jonquil	X	NG	NG
Fragrant Jonquil thru Finlandia	X	X	X
High Hat	X	X	X
King Lear	X	NG	NG
King Lear thru Finlandia	X	X	X
Monjisu	X	NG	NG
Pink Star	X	NG	NG
Pink Star thru Finlandia	X	X	X
Tali Queen	X	NG	NG
Tali Queen thru Finlandia	X	X	X
Shishi-gashira from C. japonica	X	NG	NG
Ville de Nantes	X	NG	NG
Ville de Nantes thru Finlandia	X	X	X
Ville de Nantes "Special"	X		
Ville de Nantes "Special" thru Finlandia		X	X

X — visible infecion
NG — not grafted
? — no symptoms visible at present

interpreted as cross-protection and as a strong indication that the mild and severe symptoms are caused by strains of the same virus rather than different viruses." It must be immediately noted that, judging from his published photographs, Plakidas was using 'Donckelarii' and not 'Ville de Nantes'. A 'Donckelarii' sport on the authors' mild virus 'Ville de Nantes' appears more susceptible to leaf mottle than the rest of the plant. The 'Donckelarii' sport on the 'Ville de Nantes' with severe flower mottle does not appear very susceptible to leaf mottle nor does the rest of that plant. Differences in physiology of the two or more 'Donckelarii' sports and differences in nutrition of the plants may be involved. In the writers' experience, neither the severe nor mild form of virus in 'Ville de Nantes' has an appreciable effect on the leaves of 'Ville de Nantes', as described in Camellia Nomenclature 1964 (2). There is a great difference between the effects of the two viruses on leaf mottle of 'Finlandia' and 'Daikagura Red'. The mild virus causes little leaf mottle but the severe strain causes excess leaf mottle, at least, on the 'Finlandia' and 'Daikagura' plant inoculated thus far. The effects of the two viruses on 'Daikagura Red' flower is not yet apparent.

Susceptibility to virus leaf mottle appears to differ among the many varieties. Some, such as 'Daikagura' and its sports, are very sensitive to one or more virus to the extent of being killed, probably starved of carbohydrates. 'Finlandia' appears slightly less sensitive than 'Daikagura' but has been a faster indicator of virus than 'Daikagura Red'. Some varieties exhibit leaf mottle but no flower mottle and vice versa. 'C. M. Hovey' appears immune to at least one virus.

Camellia seedlings from viral plants are being grown for testing to determine seed transmission of virus. If virus is transmitted to seedlings through the seed, then growers may want to test seedling rootstocks before grafting solid red or pink varieties onto them.

Specific viral leaf mottle patterns are beginning to emerge but the results are not yet definite enough to publish.

It is hoped that this discussion will enable camellia growers to distinguish viral from genetic variegation and make it possible to infect a solid color variety with a particular virus or to keep a camellia variety free of virus by testing rootstocks for infection before using them.

Literature Cited

1. Bawden, F. C., Plant Viruses and Virus Diseases. Chronica Botanica Co. 1950.
2. Camellia Nomenclature. The Southern California Camellia Society, Inc., 1964.
3. Frolich, E. F., E. C. Calavan, J. B. Carpenter, D. W. Christiansen, and C. N.

(Continued on page 13)

CALIFORNIA CAMELLIA SHOW SCHEDULE -- 1965

Date	Society	Show Location
Feb. 6-7	San Diego Camellia Society	Conference Building Balboa Park, San Diego
Feb. 13-14	Pomona Valley Camellia Society	California Bank 321 E. Holt Ave., Pomona
Feb. 20-21*	Temple City Camellia Society	Lecture Hall, Los Angeles County Arboretum, Arcadia
Feb. 20-21	Peninsula Camellia Society	San Mateo High School Cafeteria, San Mateo*
Feb. 27-28	Los Angeles Camellia Council	Descanso Gardens La Canada
Feb. 27-28*	Delta Camellia Society	Antioch
Mar. 6-7	Camellia Society of Kern County	San Joaquin Tractor Bldg. Bakersfield
Mar. 6-7	Camellia Society of Sacramento	Memorial Auditorium 16th & J Streets, Sacramento
Mar. 13-14	Modesto Camellia Society	Modesto Junior College Modesto
Mar. 14	Central California Camellia Society	McLane High School 2727 N. Cedar, Fresno
Mar. 20-21*	Northern California Camellia Society	Diablo Valley College Student Center Building Golf Links Road Pleasant Hills

***Note changes in date or location from that shown in November 1964 issue of CAMELLIA REVIEW, page 26, as follows:**

Temple City Camellia Society, change in date from March 6-7 to February 20-21

Peninsula Camellia Society, change in location from Hillsdale Shopping Center to San Mateo High School

Delta Camellia Society, change in date from March 20-21 to February 27-28

Northern California Camellia Society, change in date from March 13-14 to March 20-21

TEXAS CAMELLIA SOCIETY HOLDS FALL CAMELLIA SHOW

Jack T. Holmes
Fort Worth, Texas

Approximately 550 blooms were exhibited at the first Fall camellia show ever staged by the Texas Camellia Society. The show dramatized results of the new gibbing process.

Mrs. E. L. Trice of Waco, TCS president, stated the show marked the first Fall camellia show ever held in the Southwest and among the first in the nation. The meeting was held November 6-8 in Nacogdoches.

Among gibbed blooms exhibited, the Best of Show award was won by Bob Waters of Kilgore for his 'Guilio Nuccio'. Mrs. Myrtle Ash of Carthage was runner-up for her 'Eugenia Howell'.

'Woodville Red', entered by Dr. John D. Marr of Houston, was judged Best of Show for untreated blooms. C. E. Nadeau, Houston, was named runner-up for his 'Joshua E. Youtz' blossom.

The Outstanding Sasanqua award was garnered by Mrs. Ash for her

(Continued on next page)

WINNER'S TABLE. Winners of various awards given at the Fall show of the Texas Camellia Society pose with TCS principals around the Queen's Table. Pictured are, left to right, Dr. John D. Marr; Mrs. Vance Burks, general chairman of the Fall show; Mrs. Myrtle Ash; Patrick Lester; Bob Waters; and TCS President, Mrs. E. L. Trice.

'Miss Ed' entry, and Outstanding Hybrid honors went to Patrick Lester of Longview for his 'Leonard Messel'.

Sweepstakes honors were accorded Mrs. Ash with 18 ribbons; Mr. Lester 13 ribbons; and Dr. Ray Carter of Marshall with 11 ribbons.

Judges for the show included Dr. and Mrs. R. K. Womack, and Mr. and Mrs. Roy C. Stringfellow, all of Shreveport, La., Mrs. J. Hinds Froussard, Tyler, Texas, and Albert H. Dekker, Glendale, California.

Highlighting the program was a panel discussion entitled "Gibbing Blooms — Pro and Con." Participants included Jerry Henderson, Tom Eagleson, and Drs. Glen Johnson and Carter Anderson.

Sid Johnson presented a lecture and grafting exhibit, and Mr. Dekker discussed "What Camellias Do For Me." He also showed slides of California introductions. Hody Wilson delivered the banquet address.

Other events during the meeting included slide presentations, executive board meeting, general assembly, and a breakfast session moderated by Dr. Chester Kitchens.

Chemically treated blooms did not compete with untreated blooms in the flower show. Awards were given for the following:

Outstanding Bloom Certificate — Japonica Bloom Untreated, Japonica Bloom Chemically Treated; Gold Certificate for Sweepstakes Winner — Blooms Untreated; Gold Certificate for Sweepstakes Winner — Blooms Chemically Treated.

A TCS Ribbon (with Rosette) was awarded for the Best Sasanqua. For individual blooms, ribbons were awarded Best of Variety, Next Best of Variety, Third Best, and for Honorable Mention in each variety.

Special awards were given for blooms judged Queen of the Show, Runner-Up, Court of Honor, Sweepstakes, Sweepstakes Runner-Up, and Best Sasanqua.

Other current TCS officers are: First Vice President, C. J. Shaughnessy, Groves; Second V. P., Jack T. Holmes, Fort Worth; Third V. P., Mrs. Horace Berry, Texarkana; Secretary, Mrs. G. A. Propst, Waco; and Treasurer, Mrs. J. A. Giles, Beaumont.

A NEW ERA

W. F. (Hody) Wilson, Jr.
Hammond, Louisiana

Earlier this year I put together a few notes on the what, how, and when for "Gibbing" with early Fall Shows as the objective for the Texas Camellia Society Bulletin.

This written material, along with several club programs, were designed to assist and stimulate the use of this material in an area in which only a few individuals had any experience with Gibberellic acid. A practice so new and novel was, of course, accepted eagerly, with caution, with reservations and outright repudiation or refusal. All of this is true to form, but even with the meager results secured in such a short time, the future for the use of "Gib" in this area is assured, and the subsequent stimulation and additions to the growing of camellias will be so great that I cannot yet visualize the ultimate changes.

Merely as a matter of reporting, I could enumerate a number of good growers that have had so many excellent flowers during the month of October and early November that they are already looking forward to the coming seasons when planning

will utilize for greater pleasure and interest this assured bonus to the growing of camellias.

Since detailed reports by others will be made of the Show at the Fall Meeting of the American Camellia Society in New Orleans, and the early shows in the Eastern part of the Southern States where the use of "Gib" is already established, they are omitted here. The Texas Camellia Society has never been able to have flowers for their Fall Meeting, which is usually in October. This year they met November 7 and held a show in conjunction wiht the meeting. As a beginning, all were well pleased as approximately 500 blooms of very good quality were exhibited. Already there are scheduled early shows in this area: November 29 — Shreveport, Louisiana; December 5 — Port Neches, Texas, and Bogalusa, Louisiana, and December 12 — Natchez, Mississippi. These are mentioned only to serve as illustrations of some of the convincing, worthwhile features of the use of "Gib" which are to be mentioned later.

Personally, I am for its use (you would have guessed anyway) not only in my personal enjoyment of growing camellias, but especially for what it will do for the camellia in this and similar areas.

There are areas probably less fortunate where it may not offer so much. Our only controversies will be the intriguing ones — of timing, concentrations, materials, methods, and varieties. To many of us these problems are stimulating and the source of much pleasure, whether we solve them or even agree among ourselves. This is true of so many areas of the growing of camellias.

The following are some of the advantages from the use of "Gib" we have already experienced or can visualize:

Early Flowers — This feature has many direct and indirect values:

1. Lengthens the season.
2. Flowers prior to freezes.
3. Flowers before the germination of Petal Blight (in infected areas).
4. Early shows and exhibitions which had not been possible before.
5. As a companion to the above, a supply of badly needed weekends for shows, however, I think we will be more crowded than ever now.
6. Stimulates and adds interest to the club meetings to have available flowers in the garden and at the meetings, as well as excellent subject matter for discussion.
7. Commercial and retail growers of camellia plants and flowers can increase sales — due to early flowers.
8. In many areas, the outdoor grower at this season of the year will have their greatest certainty of flowers, and on a basis at that time comparable with other growers.

Quickly, here are a few other features of this material: In many cases, increased size of blooms and greater petal retention.

It enhances the value of many varieties, thus increasing our list of *good ones.*

Proper timing and use will assure quality flowers for our regular shows to a greater degree than ever before.

VIRUS *(Continued)*

Roistacher. Differences in reactions of the different selections of Citron to Exocortis virus. Fruits 18(11): 530-531. Institut Francais de Recherches Fruitieres Outre Mer. 1963.

4. North, C. P., A. Wallace, G. F. Ryan, and R. T. Mueller. Iron-virus relations in camellia. The Camellia Review 21(1): 3-5, 23. 1959.
5. Plakidas, A. G., Am. Camellia Society Yearbook 124-133. 1953.

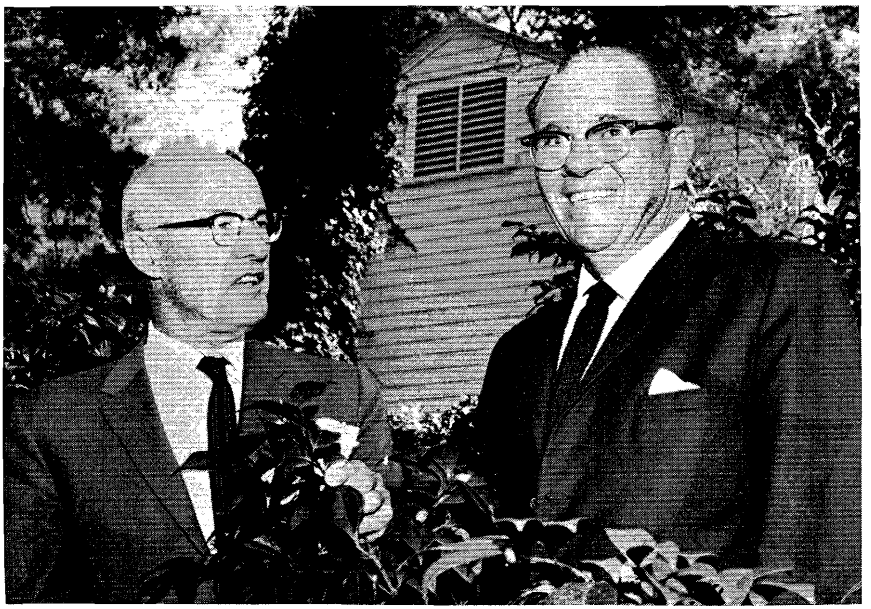
IMPRESSIONS

Albert H. Dekker
A.C.S. Director for Pacific Coast
Glendale, California

If only more people knew the nice things camellia people do, the memberships of our various societies would really grow by leaps and bounds. May I illustrate. Somehow folks in Shreveport, Louisiana learned I planned to attend the Fall Meeting of A.C.S. at New Orleans, whereupon I received from Bob Womack their kind invitation to attend and contribute to the program of their November meeting.

I had no sooner accepted than a phone call came through from Louis Squyres of the Texas Camellia Society to attend their meeting at Nacogdoches, Texas. I cannot recall when I have spent a more pleasant four or five days. I was met at the Shreveport airport by a delegation of camellia enthusiasts, whisked to the T.V. station for a ten minute taped interview after which Bob and Virginia Womack drove me 90 miles south and west to Nacogdoches where there was never a dull moment from dinner Friday evening until a goodby breakfast "Talkathon" meeting Sunday morning.

The Show on Saturday was a revelation of what gibberellic acid can do for camellia interest in areas subject to low temperatures. The Nacogdoches Show was held on Saturday, November 7. I was privileged to judge the Show along with the Womacks and the Springfellows. I wish I could remember the names of all the varieties we judged, but let it be enough for me to tell you we judged many of the varieties we have at our shows in late February. Such beautiful blossoms, such clean blossoms of good color and substance I have rarely seen. They had all this only because they now have available to them and have learned how to use gibberellic



Al Dekker and A.C.S. President Aubrey Harris in Harris garden at Shreveport, La.

acid.

At least 95% of the blooms were "gibbed." Those not "gibbed" were judged on their own. I must mention the outstanding non-competitive display of "gibbed" blooms brought up from Hammond, Louisiana by Hody Wilson. There were 100 blooms or more, every one a perfect bloom. A truly outstanding display!

After the hilarious Talkathon breakfast, toastmastered by Dr. C. E. Kitchens, we started back to Shreveport where we toured camellia gardens and the beautiful municipal rotunda type exhibition building, after which we enjoyed a pleasant social dinner with Shreveport friends.

After touring the city on Monday with Aubrey Harris we met with friends for lunch at their City Club, followed by garden visits. The Shreveport Men's Camellia Club meeting was held at the beautiful exhibit building and the blooms shown were equal in every respect to those described at the Nacogdoches Show. It is stimulating to walk around the tables displaying the beautiful gibbed blooms and noting the renewed enthusiasm and interest in camellia culture brought about in this area by the advent of gibbing.

The meeting was well attended and most interesting. I showed slides of California introductions and tried to tell them what camellias mean to me.

The Fall meeting of A.C.S. at New Orleans was well attended and as usual it was so nice to meet and visit with old friends. The business meeting went off smoothly and much was acomplished. It was most gratifying to note the prevailing feeling of comraderie and good-fellowship.

The Men's Camellia Club of New Orleans went all out to show all the visitors a good time. In addition to cocktail parties, dinners and garden tours, they arranged a breakfast at Brennans on Royal Street in the French Quarter. After the good time enjoyed by all the visitors, I am sure that the Annual A.C.S. Meeting in Tallahassee, Florida scheduled for January 1965 will be a big success.

Winnings Blooms at S. S. C. S. Meetings

NOVEMBER 10 MEETING

Non-gib group

Japonica —large and very large
'Sultana', 'Kramer's Supreme', 'Daikagura Var', 'King's Ruby'

Japonica — small and medium
'My Fair Lady', 'Ave Maria'

Sasanqua
'Dazzler', 'Nadine Usher', 'Interlude', 'Showa-no-sake' (Hiemalis), 'Momozono Nishiki'

Gib group

Japonica — large and very large
'Betty Sheffield Supreme', 'Reg Ragland', 'Moonlight Sonata'

Japonica — small and medihm
'Debutante', 'Flower Song', 'Fimbriata', 'My Fair Lady'

DECEMBER 8 MEETING

Non-gib group

Japonica — large and very large
'Joshua Youtz', 'Elizabeth LeBey', 'Royal Trumpeteer', 'Flora Hollingsworth', 'Kick Off'

Japonica — small and medium
'Ballet Dancer', 'Helen K', 'Debutante', 'My Fair Lady', 'Rosea Plena'

Japonica — miniature
'Tinker Bell', 'Sugar Babe', 'Wilamina'

Sasanqua —
'Mirandy' (Hiemalis), 'Yule Tide', 'Showa-no-Sakai' (Hiemalis), 'Hiryu', 'Little Gem'

Gib group

Japonica — large and very large
'Disneyland', 'Coral Pink Lotus', 'Eugenia Howell', 'Virginia Robinson', 'High Wide'n Handsome'

Japonica — small and medium
'Cover Girl', 'Carolyn Tuttle', 'Debutante', 'Ballet Dancer', 'Alba Plena'

What's Behind The Green Thumb

ALVIN L. GUNN

The shows are coming up, now to know how and when to pick the right flowers. Some of this knowledge comes with the study of shows and trying to see if you can determine why the judges picked that particular flower for the blue ribbon. The blue ribbon flower will be of normal form and color for the variety. It won't necessarily be the largest flower. If a good flower has a mark or bruise, don't leave it at home. The flower awarded best reticulata at Pomona a couple of years ago was almost left at home because of a bruise on it. The stamens are one of the best indications of freshness. If the stamens droop or the pollen is discolored the bloom is past its peak. An exception is the reticulata (it seems like the pollen will turn dark with the slightest moisture, such as someone sneezing within a block of the flower). The edges of the guard petals drooping or discoloring is an indication of a flower that is a little tired. Select the flower which still has its sparkle and sheen, and looks so fresh you almost hate to pick it. If you pick a leaf with the flower, rub it clean with a soft cloth. A little milk or cooking oil on the cloth will make the leaf shine. If the leaf is misshapen, poor color or bug eaten, cut it off as it will detract from a flower even though the foliage isn't supposed to be used in judging. Place the flower on the table to show it off to its best advantage. Don't spend a year babying a plant to get good flowers, and then not take enough time to show it to its best advantage.

Getting ready for a show starts months ahead of time. If you did a good job of watering, fertilizing, pruning and disbudding, the main part of the work is done by show time. A few of the minor things which must be done start with the bud starting to open. A few aphids on an opening bud will spoil the flower. Look for leaves which will rub against the flower, and pin them back with a clothespin, or tie a branch out of the way. If possible, pick your blooms in the early morning, or before bed at night. Flowers picked on a warm day will be soft, and won't hold their condition as well. If a flower is at its peak, and there is still a day or two before the show, pick it and place it in a plastic bag or box, and keep it in the refrigerator. Make out all of the entry cards before picking and alphabetize them within class and division. Next place an inch or so of shredded paper in your boxes and wet it down. A layer of paper toweling on the shredded paper will make it easier to remove the flowers.

Pick the flowers in the same order as your entry cards. As each flower is cut, examine it under a good light. If there is dust or pollen on the petals, blow it off or brush it off with cuticle scissors. Remember the judges are perfectionists, and fussier than an old maid aunt. Whenever possible take an extra bloom for each entry in case one gets damaged. If you fog spray the entries, don't spray a dusty flower, as it will spot. Most tap water will spot a flower, so use distilled water. If possible shield the stamens when fogging, particularly a reticulata. Punch a hole in the paper toweling for the stem to go through, and place the flower so it is sitting as flat as possible and not brushing against the sides of the box or another bloom.

(Continued on page 19)

FRANK GRIFFIN'S NEW BOOK "CAMELLIAN" IS REVIEWED

Harold E. Dryden

One of the toughest jobs that faces an editor is the selection of topics for coverage in his magazine. They all pirate ideas from other magazines. Last summer I reviewed the issues of Frank Griffin's magazine CAMELLIAN, starting way back. When a person reads a magazine issue by issue as it comes out, he is inclined to be influenced in his thinking pretty much by the most recent issues — some are good, some not so good, occasionally one is outstanding. As I went through all the isues, however, I was impressed by the wealth of subject matter and the breadth of coverage in relation to camellias and camellia culture during the fourteen years he published the magazine. I thought then what a wealth of experience he had as a background for publication of the book which he was then getting ready for the printer. I have received my copy of this new book CAMELLIAN and a careful review of it into the wee hours, including full reading of most of the articles in the book, confirms my expectations that it would add measurably to the library of camellia literature.

Let Frank Griffin tell what he has done. He states in his preface: "In the many issues of the CAMELLIAN during the 14 years it was published there is a record of camellia research and culture. This record was kept abreast of the times with changes and improvements as the years went by. The articles, for the most part, were written and prepared by more than 100 camellia scholars, camellia specialists, men of letters in horticultural and floracultural fields, or by those engaged in serious research pertaining to the camellia. The authors and their material for publication were never haphazardly chosen from what was voluntarily sent to us. All were carefully pre-chosen and selected to fill the need of the average camellia grower and to give them the basic knowledge of all the special fields of camellia culture. In the compilation of the material contained in this book we pursued the same course in both the selection of the authors and the subjects covered by them. The names of the authors were selected over a period of five years on the basis of what contributions they previously made to camellia culture and because of their proved ability in certain, or specified fields. More than a year was required to obtain and compile the many articles in their final form."

Thus the new book is a compendium of the writings of many people in 37 different articles. There are articles about the phases of camellia culture — planting, soil mix, pruning, fertilizing, treatment for diseases, etc. — all written by people who know whereof they write. Frederic Huette, Director of the Norfolk, Virginia Botanical Garden, has an excellent article about "Camellias in the Landscape." Dr. Walter E. Lammerts writes about "Problems Involved in Breeding of Camellias," a subject on which he is a recognized expert. There are articles that cover some of the history of the camellia and others about interesting phases of the camellia hobby.

An article that particularly interested me is "The Garden Camellias of Yunnan," 52 pages of reproduction of an original manuscript written by Dr. T. T. Yu of Kunming, Yunnan, China. This manuscript was written in the late 1940's by Dr. Yu, director of the Yunnan Botanical Garden at Kunming, while he was in the United States and tells us about the reticulatas in these Chinese Gardens.

Of interest to people who are

(Continued on page 26)

BEHIND THE SCENE ADVICE FOR THE SMALL GROWER

Mrs. Estelle M. Lindsley*
San Diego, California

I have a few suggestions for the "Small Grower" on how to compete more successfully in the shows. First of all, what you lack in number of plants you must make up for in cunning and this is very challenging. Secondly, you must have a commodious refrigerator.

You have all heard stories about the casual gardener going into his yard the morning of the show and finding a perfect bloom, taking it to the show where its beauty is immediately appreciated and it is proclaimed "Best of Show". Well, forget it! This seldom happens. There is a lot of know how that goes into winning blue ribbons and top honors.

What makes a successful exhibitor at the shows? Constant vigilance the week preceding the show and proper disbudding long before that. All show varieties should be disbudded one to the lateral end if you seek the thrill of winning. If you are "scotch" about buds you will get 2nd and 3rd awards. Such severe disbudding is not so important on some varieties, particularly corsage types which are not usually large anyway, but if a variety is listed as large or very large in our nomenclature, that's what the judges are going to look for. So if your 'Elizabeth LeBey' looks like a corsage flower use it for that, or filler on the tables, but don't expect a ribbon when the weather has been good preceding the show and the competition is keen.

A crafty personality is of immeasurably help in competition. Watch, watch, watch! Use clothes pins to hold back leaves from developing flowers. I am more subtle and prefer paper clips so my avarice will not be so readily apparent to those visiting my garden. When a bloom is at the peak of its perfection snatch it off (preferably in the early morning) and hustle it into a plastic container and the refrigerator where no Santa Ana doth blow. — a Bird in the Hand, you know. Blooms of good substance picked at their peak will refrigerate wonderfully for a week. There are a

*Estelle Lindsley is the gardener in the family. Her husband, Judge Byron F. Lindsley of the San Diego County Superior Court, gives her his solid support by keeping out of her way in the garden and accompanying her to the many shows and meetings she attends during the camellia season.—Ed.

few cases where some reds are affected adversely or stamens darken, but generally speaking it is successful, and it is the *only* way the small collector can accumulate enough blooms to make a representation in a show. Criticisms of refrigerated blooms are usually made by large collectors. Listen to the weather reports each morning and if a real Santa Ana is heading your way pick your mature blooms and refrigerate them. You and the other fellows who did the same thing may have the only crisp blooms in the show. If you are unfortunate enough to have a whole week of hot, dry weather preceding the show don't worry about all this solicitude because it won't do any good — you're dead! Pray for rain, but if it comes don't be dumb enough to let a "Best of Show" sit out in it. Carry it solicitously to a place under a plastic roof and laugh. Along this line of reasoning it becomes obvious that in disbudding you remove the top bud (facing up) which could blemish and leave the one facing down as it will be safer from the elements.

Ont thing is absolutely essential — you must be prepared to give up eating, or eat out, the week before the show because it stands to reason there won't be room for anything in your refrigerator except flowers. If your husband or wife is too heavy this is an ideal time for a crash diet. My husband's greeting upon arriving home the week before the show never varies. "Well, where do we eat tonight."

You will recognize a really superior bloom when your heart beats more rapidly as you gaze upon it, but I caution you not to get too close lest your hot, eager breath wilt it like a Santa Ana.

Remember, a good flower never comes off of an unhealthy plant so if you have any throw them away and start over. It is just taking time and space and giving you frustration instead of pleasure. I have been experimenting with gibberellic acid and I have come to a few conclusions regarding it. Flowers that would have been good anyway are very much better when treated, but poor or piddling plants still have mediocre flowers. A person who has a beautiful gibbed flower is a good grower who would have had a good bloom anyway. Gibbing is no panacea for poor plants. Superthrive would do more good!

Having fewer plants gives you the advantage of watching your promising buds more carefully the week or so preceding the show. Also you won't be working on an ulcer trying to get all those blooms in before entries close. Migod, those big collectors don't even have time for a cup of coffee to steady their nerves.

In answer to the question you probably have in your mind — Have I ever won a top award with a refrigerated bloom? YES, YES, YES. You'll never know till you try!

BEHIND THE GREEN *(Continued)*

I had a very pleasant trip to the Bakersfield November meeting. The question was asked how to transplant large container grown plants. Frank Anderson, who has had excellent results on removing large plants from the ground (CAMELLIA REVIEW, Vol. 25, 4.3) suggested tipping the container on its side and bare rooting the plant still in the container. The size of the support roots will dictate the need of a large container. Frank has found that many times the plant can stay in the same container with a fresh soil mix. Sounds like an easy way of handling a tough job.

Tips from the Experts

Turn your plants ¼ of a turn each month. The turning distributes the light to all sides of the plant, and it is amazing how many branches you will find which haven't been disbudded.

CAMELLIA PROPAGATION BY GRAFTING

PART I

There are, roughly, two methods for grafting camellia plants. Number 1, grafting by approach (inarch grafting), is the method by which union is effected by the approach of two stems of young, growing plants which are shaved through the bark and partly into the wood, then the shaved and matched portions securely tied together. Stock and scion in this method are sustained by their respective parents until the union is formed. As soon as a sound union has formed the stock above and the scion below are severed. This type of grafting can be established any time of the year. Approach grafting is used infrequently.

Method Number 2, grafting with detached scions, is in general use and is primarily of the cleft graft method, of which variations are used depending upon the type of plant in question. To a much lesser degree the bark graft is used, while in some localities the splice or whip graft is used on small caliper, container grown understock. Cleft grafting and whip grafting are usually practiced when stock is dormant, while bark grafting must take place during the season when the sap flows and the bark separates readily from the cambium layer.

The cleft graft has proved to be a most dependable and successful method for camellia propagation and in America is used to the practical exclusion of other types of grafts. The same technique of cleft grafting is suitable for all sections in which camellias are grown, although methods may vary somewhat because of difference in size of understocks commonly used in the various areas, and in the after-care of the grafts in humid, as contrasted to arid, climates. Experience has proved that grafts can successfully be made in any month of the year. The important consideration is that scion wood must be found in a dormant state or so maintained for use in grafting.

Generally speaking, the period including the months of December through mid-March is considered best in America, with January and February ideal. There is little to be gained by outdoor grafting in December. When, however, a glasshouse is available for container grafting December is an excellent month. During January and February scion wood is always dormant, that is, there has been no tendency on the part of the growth buds to expand. Although the camellia is considered dormant during that period, cell growth does continue in a limited sense, thus enabling callus formation. Grafts made in March are usually successful. In the warm and humid areas of the Southeast, however, these grafts are often endangered by the development of fungi which can attack the growth buds, thus rendering the graft valueless even though the scion has callused.

If there is a most important factor in grafting, it has to be the selection of the understock. No plant should be used for understock unless it is in vigorous, healthy condition. Rootbound stock in containers that has been around a long time and is being sold at discount to clear space will not give the results to be obtained from healthy, growing plants with evidence of growth during the previous growing season, and that have been planted in the container long enough for the roots to have become established in the new soil. Camellia growers with experience in grafting will testify that when they have examined their two- and three-year grafts that have not grown well, almost without exception they have found inadequate root systems. In

this connection, people who grow their own seedlings for understock will profit when they examine the roots a year before their intended use, discard those with imperfect root systems, and repot the good ones in new soil for subsequent use.

It has proved practical to use any species of camellia for rootstock, although there has not been sufficient experience in Southern California to conclude that reticulata stock is as good as japonica and sesanqua stock. Although there is some thought to the contrary it has not been determined that color, type of flower, or growth habit of the variety used as the understock plant will influence the flower of the finished graft or its habit of growth. The flower will be that of the scion-wood variety used, with the possible exception of introduction of variegation into a self-color variety. When this exception occurs it is believed to be due to a benign virus transmitted by grafting to the scion from the understock.

Grafts made in the open are generally on moderate to large-size understocks because the principal advantage to be gained is rapidity of growth. Plants intended for use as such understocks should be established and growing in the location in which they are to be used for at least one full season. Grafts are successful on container grown plants from tub size diameter down to what are sometimes called pencil-size stock. There is some evidence that the sesanqua is more satisfactory than the japonica for small diameter stock because of the tendency of the sasanqua to develop root systems at an earlier age.

Choice of scion wood is important. Mature growth of the past season is the best selection, and whenever possible it is wise to choose wood which retains its brown, shiny young bark rather than that which appears grayish and hardened. Terminal growth buds, which look so promising for quick growth and production of multiple-branched plants, are not always the wiser choice. They are particulraly suitable for use early in the season when thoroughly dormant, but lateral growth buds are always useful and are a safer choice when the season is more advanced. Terminal buds in the presence of moisture and warmth tend to start growth whether or not sufficient callus has formed to support them, whereas the lateral buds which are much slower in developing and expanding will necessarily be later in starting growth, and by that time will be able to receive moisture and nourishment from the root system through the joining of the understock to scion by ample callusing.

For the beginner, the chief deterrent to grafting is the uncertainty

(Continued on next page)

which so often accompanies the first step at something new. In principle, as well as in actuality, cleft grafting is a simple operation in five steps. Step 1, split the understock. Step 2, prepare and shape the scion for insertion into the split (cleft) just made. Step 3, insert the scion into the cleft, matching in so doing the cambium layer of the scion and the cambium layer of the understock. Step 4, except for large understock with sufficient spring to keep the scion firm in the cleft, tie the understock with a rubber band or string. Step 5, cover the graft with a clean glass jar, put it in a protected place and wait for the callus to take place.

There are articles on grafting that tell in detail how to proceed in these five steps. It is suggested to the beginner that rather than to study such instructions and attempt to follow them in his initial attempt at grafting, he ask someone who has had experience to help him over the first hill. There isn't a person in the camellia hobby who grafts for fun who would not feel honored to be asked for such assistance. After the break-through, the following suggestions are more meaningful.

In Step 1, the first action is to cut off the plant to the desired height for inserting the scion, having in mind that the graft will be covered by a jar. The beginner may be told to cut the plant a couple of inches above the soil. Some people, however, make the cut as high as four or five inches above the soil so that the plant may be used again for understock if desired; for example, the graft does not take or it is decided the variety grafted isn't so hot after all. By grafting high, it is easy to use the stock a second or even a third time. Small understock may be cut off with sharp pruning shears but larger stocks, say of 1-inch caliper or larger, should be cut with a sharp, small-toothed saw. The cut should be made at a slant. The cut-off or sawed-off surface should be smoothed off with the knife. Care should be exercised that the edges of the bark are left clean and not jagged.

For splitting the stock a flat-bladed knife which does not taper to a point will be found convenient. It should have a strong upper edge to allow gentle tapping with a hammer. A split should be made and the knife carefully withdrawn. The position of this cut should be determined by the size of the understock, in the center if the stock is 3/4 inch or less, and with larger stock as far to one side of center as necessary to leave a piece of not less than 1/4 inch. This reduces the pressure on the scion. Experience with the larger stock will help in determining the exact point at which there is sufficient tension to hold the scion securely without tying but not enough to crush or pinch it.

In preparing and shaping the scion for insertion (Step 2) it is essential to have a very sharp knife. It has been found convenient to use, instead of a conventional knife, a handle into which a single-edged razor blade can be inserted. One eye or growth bud on the scion is sufficient if wood is scarce, but it is desirable to use two. A long tapering, bilateral, wedge-shaped cut should be made at the lower end of the scion running at least 1/4 inch above the petiole (lateral growth bud and leaf axil). This cut should be thin on the inner side. As previously stated, this step can best be learned if it is done initially under the guidance of a person with experience in grafting.

The scion thus trimmed should be inserted into the split of the stock (Step 3) with the petiole placed at the point of juncture with the stock. The importance of matching the cambium of the scion with that of the understock must be thoroughly understood. This important cambium is the green line which may be clearly seen within the bark area of the stock

(Continued on next page)

and is exposed on either side of the scion when cuts are made along its two sides. These green lines must be brought into conjunction at some point, either by matching the two green lines of stock and scion, or by inserting the scion with the top leaning slightly toward the center of the stock and its lower end protruding from the split, thus crossing the layers.

Once the scion has been properly placed, the concluding steps are to prepare the graft for the interval before callus takes place and a union formed which will enable the scion to be sustained by the roots of the stock. When there is not sufficient tension in the understock to hold the scion in place, the graft should be tied with a rubber band or string. The binding should be left in place until the jar is raised. It is important to maintain the scion humidity in order to prevent evaporation of moisture from it. While some people advocate covering the juncture of scion and rootstock, experience has proved that healing takes place quickly and satisfactorily with only the protection of a wide-mouth jar placed over the graft, with its edges tightly sealed with damp earth or sand. Clear glass jars with adequate protection from the heat of the sun give excellent results. It is important that some light reach the graft. When grafting with container grown plants, protection against sun can be provided with a burlap or muslin covering.

Part II of this article on grafting will appear in the next (February) issue of CAMELLIA REVIEW and will cover the follow-up care of the grafts while waiting for the scions to callus, and the steps to take after the callus has formed.

PRESERVING SCIONS FOR GRAFTING LATER

S. L. Marbury
Wilmington, North Carolina

In years gone by many of us had the idea that scions should be grafted as quickly as possible after they were cut from camellia plants. In fact, for years I would always mail them to my friends via air mail so that they would reach them quickly.

After sending and receiving scions from New Zealand and other far away places, I found that even though it was a week or more before I received them that there was no problem in making very successful grafts from these scions.

Since I found that these scions were in good condition a week after being mailed, I started a series of tests to see just how long they would last for successful grafting. First I started with scions thirty days old, then sixty days old, and since, I have had successful grafts from scions one hundred and twenty days old.

In mailing scions as well as for retaining them for future grafting, I use altogether polyethylene bags with only a few drops of water in the bags, seal the bag with a rubber band, and place them in the bottom of a refrigerator.

There are many advantages in being able to store these scions for future use. For as we all know, a certain amount of grafts always fail to take, and by having a supply of scions on hand, you can always regraft in the Spring the plants that fail to take and in this way, gain nearly a year in growth.

When storing scions, be sure and use polyethylene bags and not cellophane, for there is a vast difference in the condition of scions when stored in cellophane bags as compared with polyethylene bags.

Betty's Barbs

By Betty Robinson

I am looking forward to seeing what the editor uses as a masthead on this. It used to be "Betty's Barbs" but believe me, after the election and the AAWU's selection of OSU for the Rose Bowl, I am battered, bruised and barb-less. Oh, well, "Onward and upward" as the saying goes.*

The first of the Camellia Season is always such fun. It is so nice to see everyone again and catch-up on all the news. In November we went up to the Sacramento Society meeting. Those people are so very hospitable and charming that I am sure no one will want to miss the Annual Meeting when it is held there. They are grand hosts and I know we'll all have a wonderful time.

On the way home we did another of our "do-it-yourself" wine tours. All of the foregoing isn't as rambling and disorganized as it sounds because it leads up to my brain-storm for the year. I have to have one a year and this is it for 1964-65.

All of the camellia wives I know are wonderful cooks and the men all enjoy good food. I think we should form pot-luck Gourmet Societies and meet during the summer. And of course, any such Society worth its salt (lousy pun!) also tries wines with the dinners. These dinners would give the men a chance to show off those June and July blooms (if we have to hang a carrot in front of them), and just think of the help it would give them in describing the color of flowers. Instead of "Well, it's kind of a rose red" they could say "It's exactly the color of that Rosé we had at X's." This would make much more interesting reading in the Nomenclature Book too. It might even give us a whole new range of names for new introductions. A bright, perky flower might become "Champagne Glow" or a droopy, shattering one could be "Morning After." Don't laugh, I think it would be fun and fattening.

We are going to be very grand this year and have a dinner dance at the La Canada Country Club after the Descanso Show. The Club is a beautiful place and has good food and we have been promised an orchestra that plays our kind of music — no rock 'n roll or even the Watusi. You will soon receive the information on it and I would appreciate getting your reservations early. The Hospitality Committee is also arranging to provide transportation to and from the Lake Street shopping area. This group of stores has just about everything in every price range and we will look forward to having you join us. End of "plug".

The first meeting of the year at Southern California had many sections and one was on corsage making. The resulting works of art were added to the plant sale drawing and I was fortunate enough to win two and be able to give them to young girls who were guests. Wouldn't it be nice if we could always have something like this for guests? The Pacific Society did this a few years ago and it seemed to work out very well and the guests

(Continued on page 26)

*Betty's "barbs" may be softened but never completely muzzled.—Ed.

NUCCIOS SEEK RESULTS FROM HAND POLLINATING WITH "ODD BALL" SPECIES

Julius Nuccio of Nuccio's Nurseries in Altadena told 150 people who attended the December 8th meeting of the Southern California Camellia Society that he and his brother Joe have embarked on a hybridizing program to deterimne what might be accomplished in hand-pollinating japonicas, sasanquas and reticulatas with pollen of camellia species that heretofore have not received much attention, such as granthamiana, cuspidata, fraterna and irrawadiensis.

Nuccio said that their results from planting some 10,000 open pollinated seeds a year have convinced them that the bees can do a better job than they can in producing good japonicas, sasanquas and reticulatas; or, to make a statement that would not be challenged, the possibility of improving on the work of the bees is sufficiently remote as to not justify the work involved in hand pollinating. Under their program of planting seeds in quantity, they have been able with regularity to come up with good new varieties. Howard Asper's work in interspecific crosses involving japonica, sasanqua and reticulata have established the results that can be obtained from that source. His 'Howard Asper', a C. japonica 'Coronation' X C. reticulata 'Lionhead' cross, and the C. sasanqua 'Narumi-gata' X reticulata crosses that he will introduce in 1966 have removed any doubt as to what can be obtained from such crosses. Pursuit of such a hybridizing program at Nuccio's would be only for end results in new varieties, which is not their present purpose.

They started five years ago to use the pollen of the "odd ball" species, as Nuccio called them, in hand pollinating with japonica, sasanqua and reticulata varieties as parents. They have been successful with crosses of all species except sasanqua. The hybrid seedlings are now blooming and so far there have been no flowers of startling success. He thinks they might have obtained better flowers if they had selected their varieties for parent plants from the point of view of quality of flower rather than using a random selection of good seed bearing varieties. They will do that this year, although he said that the idea is only a theory. While the first generation results have not been startling, the results have been satisfactory from the point of view of using them for second generation hybridizing.

Their most significant results have been with granthamiana, particularly in changing the blooming season. The hybrid flowers are of granthamiana form but in different color from the existing variety. They are blooming early, which of course is what is being sought, and by mid-January he expects they will have as many as 150 blooms. By using pollen from these first generation flowers with selected japonica varieties he hopes they can improve the plant and obtain high quality early blooms. The flowers now blooming seem to have more texture than the existing granthamiana blooms. The plants of the first generation have good foliage and Nuccio displayed specimens of foliage in illustration. He said, facetiously, that the beautiful foliage alone is an inducement to hand pollinate with granthamiana pollen because one can admire this foliage in the new seedlings for four or five years before knowing whether the flowers will be worth the effort of growing the plants.

He feels that they may be making a start in their use of the species

(Continued on next page)

irrawadiensis. The foliage is good and some of the plants are now budded.

So far they have kept the pollen separate by species. This year they will combine the pollen of these "odd ball" species to see if their results in point of "take" are any better. After all, he said, we are not so interested in the exact parentage of a hybrid as we are in the result in the way of plant and flower.

During discussion, Nuccio said that he hopes to see a new color in camellias before he gets out of the camellia picture. He told the audience that he has a 3-inch camellia seedling with more yellow than he has seen in another flower. The plant came from a batch of J. C. Williams seedlings. It blooms in February-March. He will use it for hybridizing with the hope of increasing the amount of yellow.

He reported that he has never set seed on a granthamiana plant. Two seed pods seem to be developing this year but he has his fingers crossed. Since granthamiana blooms so early, they collect the pollen and store it in refrigeration for later use.

A question was raised regarding use of the species saluenensis in hybridizing. Nuccio replied that its value has already been demonstrated, particularly by people in England, Australia and New Zealand who seek landscaping qualities in camellias to a greater extent than is the case in America. It has also been used extensively by some people in the United States. It has the advantage of budding on young plants. Since its results have been demonstrated, its use would not come within the objectives of the Nuccio program.

He closed his talk by again saying that good new camellias have come out of the chance of open pollinating by the bees. He thinks that hand pollinating will eventually produce big results, but it will take a long time and lots of patience.

GRIFFIN'S BOOKS *(Continued)*

scientifically interested in camellias will be the list and descriptions of camellia species, covering 42 pages that were compiled by C. W. Lattin "from scttered and various notes taken by Professor Walter E. Lammerts from manuscripts and horticultural publications while at the University of California in Los Angeles in 1944 and 1945." People who do not have such authoritative books as Sealey's will find that these pages will provide the information they seek regarding camellia species.

These are only a few of the subjects covered in the book which makes it one for reference to obtain answers to questions and not one for only one-time reading. There are twenty-eight full color reproductions. Articles requiring illustrations for clarity have them in desired numbers. And not the least interesting and rewarding are the final 16 pages which are composed of material and portions of articles written by Mr. Griffin and which appeared in his magazine CAMELLIAN over the 14 years of its publication. These pages are the connecting link between Griffin the publisher of the book and Griffin the editor of the magazine.

The book is published by Frank Griffin, Sr., P. O. Drawer 1850, Columbia, S. C. Price is $15.00. It is not obtainable through any other source. He tells me that he has 200 copies left and they will go on a first come, first serve basis. After that, there will be no more.

BETTY'S BARBS *(Continued)*

were always so appreciative.

Parting thought — Merle Gish is misleading in his advertising. After six boys, he should admit that he specializes in "scions". (For the information of the many friends of Merle and Rose Gish, twin sons were born in November. — Ed.)

RECOLLECTIONS

Lucien C. Atherton
San Diego, California

My interest in camellias, as stated in a previous article, dates back some twenty-seven years, to when I purchased my first plant, a 'Pink Perfection'. This was soon followed by two more, a 'Purity' and a 'Eureka'. Only a few of the larger San Diego nurseries handled camellias, all of which had been propagated in and brought in from the Los Angeles area.

What caused me to become attracted to camellias especially, over the other lovely plants available for a garden? The beauty of the blooms set on a background of glossy, dark green foliage. This proud plant had once been somewhat limited to the gardens of the wealthy. This semi-tropical plant needed special growing conditions. It challenged one's ego to keep it alive, healthy and blooming. It was adaptable to either formal or informal landscaping. This sturdy, slow growing plant was ideally suited to container culture and thus could be treated as a specimen subject.

My first consideration was and still it, for beauty of bloom. Brilliance, symmetry, balance, compactness and other factors focus my attention to a particular bloom. Size was and is secondary to beauty. Next I looked for a full upright, balanced plant with richly colored foliage. Then I inquired as to the name and price. My first selections included such varieties as 'Alba Plena', 'Daikagura', 'Colonel Firey', 'Ella Drayton', 'Stardust', 'Herme', 'Laurel Leaf', 'Prof. Sargent', 'Belle Romana', 'Vedrine', 'Aspacia', 'Fanny Bolis' and 'Chandleri Elegans'. These and a few others made up the camellia stock of many general nurseries until the specialized camellia nursery came into being.

In the above varieties and other "old timers" I found the complete range of color and form. I had good corsage and arrangement flowers. From specimen plants they could be adapted into excellent landscaping subjects. They gave me blooms from September to June, with some varieties blooming for eight or nine months. I preferred a garden color display rather than specimen show flowers. However, these "old timers" did and still do furnish me with enough show ribbons to satisfy my pride.

My interest in camellias soon became a collecting hobby, especially with the opening of A. P. Carleton's "Reynard Way Camellia Gardens." The search for new varieties led me into the Los Angeles area as well as visits to Harvey Short in Ramona. The close of World War II saw an increased interest in camellias, with more accurate information available in regard to propagation and culture. This increased demand was soon followed by an increase in the number of available varieties. The sudden interest in new introductions resulted in many unproven, mediocre varieties being introduced.

In spite of maintaining my personal standards, I soon found that I had some 250 varieties growing on a small city lot. I recognized most of the names in the November CAMELLIA REVIEW article "Older Ones Featured." I still have most of them! Small plants grow into big ones and space became an important factor. Most of my "old ones" had proven to be satisfactory. Fortunately, this and the space problem forced me to be more selective in choosing new introductions, often waiting to see how they performed for my many camellia friends. What I had looked

(Continued on next page)

for in the "old ones" I still look for in the "new ones."

The miniature offered me an escape from the bewildering avalanche of new introductions. In these little blooms I found all of the elements of beauty. But now even this group class is threatened by a flood of unproven and oversized new varieties. The camellia is a versatile plant, and new approaches will result in many interesting things, such as in the hybrids and a more careful selection in regard to color and form. In our efforts to get away from the old conventional formal bloom, we have neglected this form until there is a real shortage in new introductions in this class. The formal is still the ideal camellia to the flower admiring public.

During my early camellia years I kept a careful record for each plant, including the dates of the first and last blooms, number of blooms, color variations, performance and plant growth. I wanted to help others avoid the disappointment of poor performers for this region.

In 1950, the Research Committee of the San Diego Camellia Society compiled rating maps for thirty varieties. These maps showed the variations in the accepted blooming seasons that are due to location. They rated the performance of different varieties in the various areas of San Diego County. Most varieties were consistent in performance throughout the county. However a few were not recommended for certain areas due to climatic factors. In the same year, 1950, the San Diego Camellia Society members were asked to name twelve basic varieties which could be grown successfully by beginners in the San Diego area. They were 'Alba Plena', 'Daikagura', 'Chandleri Elegans Var', 'Debutante', 'Prof. C. S. Sargent', 'Aspacia', 'Lallarook', 'Paeoniaflora', 'Pope Pius IV', 'C. M. Hovey' and 'Stardust'. These were multi-purpose varieties rather than show flowers, the kinds that a flower lover would like to live with.

In the past fifteen years there have been many fine introductions that have surpassed the "old timers," and new ones and changes are necessary to maintain a progressive interest in this outstanding hobby. However, I am grateful that some years ago the "old timers" gave me a sound foundation by which I can judge the present trends. Those were the "good old days," but I prefer the present, and anticipate the future.

Temple City Camellia Society

The Society will hold its January meeting on Thursday evening, January 28, 1965, in the Lecture Hall of the Los Angeles County Arboretum, 301 North Baldwin Avenue, Arcadia.

The guest speaker will be Dr. Clifford R. Parks, Cytogeneticist, who is working in the joint employ of the Los Angeles State and County Arboretum and the Camellia Research Advisory Committee. His talk is entitled "Comments from a Camellia Breeding Project."

Dr. Parks' work in the science of chromatography is proving a valuable aid, not only in camellia species classification, but also in the detection and classification of hybrids. His article in the recently issued 1965 American Camellia Yearbook details an example of the use of chromatography in plant identification.

The Society cordially invites all Camellia Society members and their friends to this meeting. Please bring your blooms to help decorate the display tables.

PLEASE PAY YOUR
1965 S. C. C. S. DUES
PROMPTLY

Peninsula Society Moves 1965 Show

The Peninsula Camellia Society of San Mateo County has moved its 1965 Show to the cafefteria of the San Mateo High School — Poplar and N. Delaware Avenues, San Mateo, California. The date is the same — February 20-21, 1965.

This change will give the society over 4000 sq. ft. of floor space for Horticulture and Educational exhibits and almost 800 sq. ft. for flower arrangements. The cafeteria is on the ground floor and cars can be parked at the entrance to unload blooms.

The theme for the show will be "Camellia Splendor in San Mateo" and will revolve around the fine arrangement schedule prepared by Mrs. Donald R. George and Mrs. Howard E. Burnette. The general Show Chairmen will again be Howard E. Burnette and Everett P. Tenney.

This year the show will separate the special cultured blooms (Gibbed) from the regular grown blooms. There will be a class for both special culture and regular blooms.

The Sweepstakes will be awarded to the greatest number of blue ribbons regardless if "Gibbed" or not — also there is a trophy for a Judges contest. There will be a table for the Judges to display blooms. Each Judge will be allowed to exhibit up to 10 blooms. The blooms will be awarded ribbons just like any others — and a trophy will be awarded for the Judges competition. The blooms will be judged by a group of growers in the local area who are not judging the show and the decision of this group will be final.

Doors will be open for placing flowers — 7 A.M. to 10:30 A.M. on the 20th. Judging will start at 11 A.M. — doors open to public at 2 P.M.

'Mouchang' Is Name of New Asper Seedling

The Editor went to sleep while proof reading the article "Howard Asper Has More Hybrids Coming" in the November 1964 issue of CAMELLIA REVIEW (page 27) and let the following get by: "He is also building up stock on a new reticulata which he has named 'Moutancha'. A cross of 'Chang's Temple' X 'Moutancha', the flower is a 'Moutancha' pink with single to semi-double form". This new reticulata has been named 'Mouchang', obviously not 'Moutancha'.

W. P. Fulton of Dallas Attends New Zealand National Camellia Show

W. P. Fulton of Dallas, Texas had the pleasure of attending the New Zealand Camellia Society's National Show last summer, which was held in Whakatane, New Zealand. He gave the Ralph Peer Memorial Lecture as a part of the meeting of the Society in conjunction with the Show. Mr. Fulton writes as follows about the Show. "It was one of the best shows that I have ever attended. The Show was held in the War Memorial Auditorium which has a floor space of 14,000 square feet. It is divided into three large halls, which gives ample room for all of the displays and freedom of movement of the large attendance. I have never seen a show so beautifully arranged. They certainly enjoy their camellias."

"Gibbing" has produced uniformly fine flowers and early blooms. It has, in fact, put our whole camellia garden in the category of a vast greenhouse.

—T. S. Clower,
Gulfport, Miss.

THE HIGO CAMELLIA

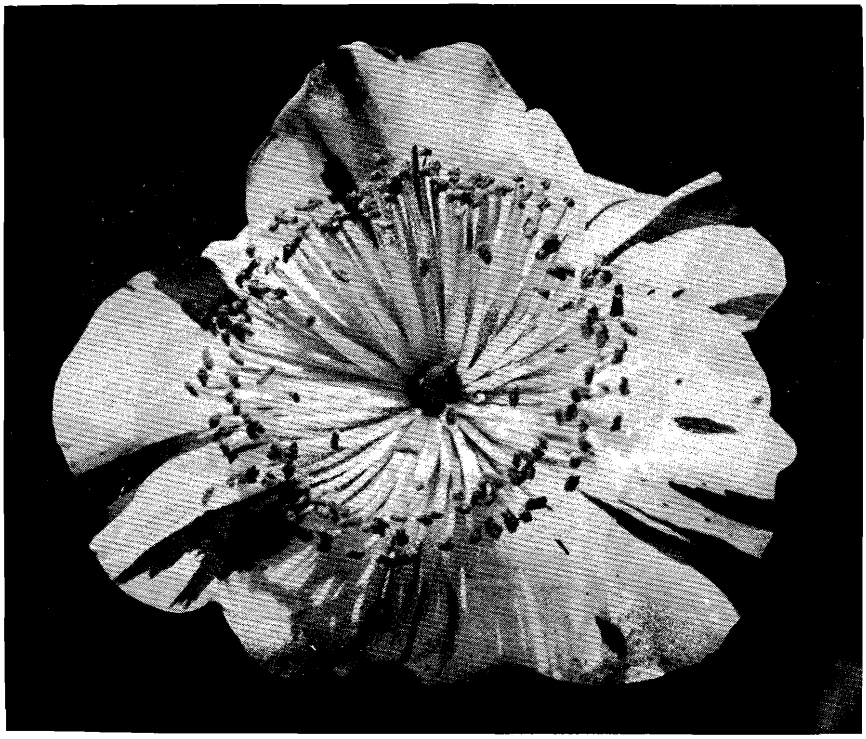
Taizo Hiratsuka
President, Higo Camellia Society
Kumamoto, Japan

The Japanese word for the camellia which has been cherished for centuries in Japan as a garden tree, is TSUBAKI. One can trace records of the Japanese appreciation of camellias back to the eighth century.

The camellia originated in the Far East. The tree has flourished not only on the Japanese islands, but also on the Korean peninsula and the Chinese continent. However the area where the camellia has been most intensely cherished and nurtured is undoubtedly Japan. Then in the nineteenth century was the camellia introduced to the European, American, and Australian continents.

In Kumamoto, the particular form cultivated is the Higo Camellia. Higo is the old name for the area which is now Kumamoto Prefecture.

In camellias of Japanese origin, there are two main historical family groups. One is called YABU TSUBAKI (Mountain Camellia), or Camellia Japonica L., which grows everywhere in Japan but in Hokkaido. The other is called YUKI TSUBAKI (Snow Camellia), or Camellia Rusticana Honda, which is produced in northern coast of Honshu where there is much snow.



YAMATO-NISHIKI (Japanese Name)
Colour of Flowers: Crimson streaks on white.

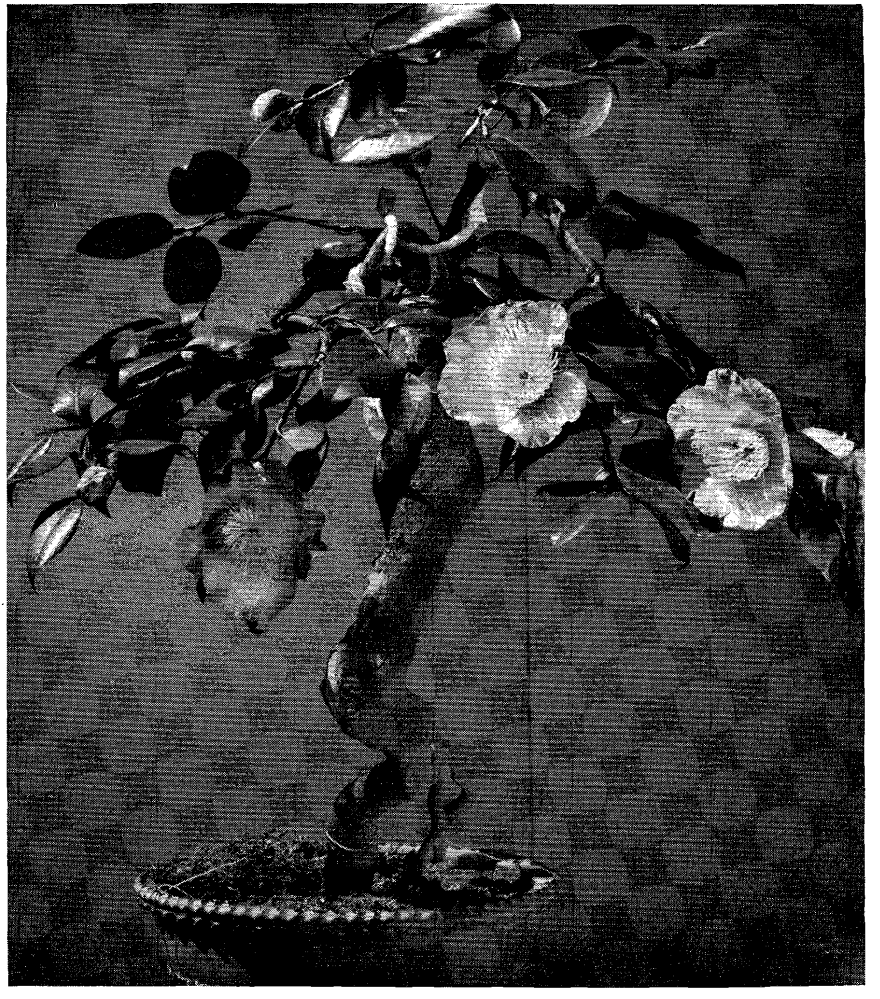
Recently many varieties of camellia have been developed by the cross-fertilization of these two main groups with other similar forms, and the Higo Camellia is one such product. Accordingly the forms which are known as the Higo Camellia are not a monotype, but can be considered as embracing one grouping of forms.

Special Features of the HIGO Camellia

The most noticeable feature of the Higo Camellia is the shape of its flower. It is a single-petalled flower. Its petals number five to nine, and properly open out in four directions. These petals are large, thick, strong, and have a strong luster. Once the flower has been seen, it can easily be distinguished from other camellias.

The center of the blossom is filled with stamens, and much like the apricot blossom (Japanese Ume), so called it as "Apricot-Stamen Form", or in Japanese "Ume-Jin". This aspect reinforces powerful beauty of the

(Continued on next page)



TAIHEI-RAKU (Japanese Name)
Colour of Flowers: Rose Pink

petals. The number of stamens varies accoring to the form, from 100 to 250. The pistil stands straight up in the center of the corolla.

The beauty of a Higo Camellia is determined in the first instance by the corolla and the formation of the petals, stamens, and pistil. There are various colours: white, pink, crimson, scarlet, and gold-patterned (NISHIKI or brocade). But whatever the colour, there is a demand for the flower of pure colour.

The special features of Higo Camellia are found not only in the shape of the flower, the colour of the leaves, the shape of the trunk and branches—these are included in the appreciation. This is especially true since the major portion of Higo Camellias are cultivated as BONSAI, or potted plants, and therefore the total effect of the flowers, leaves and trunk have become an object of esthetic attention.

The camellia is an evergreen tree, and it is important that its leaves maintain a brilliant green throughout the four seasons. The trunk, as the scaffold for powerful flowers, must be that much the more powerful than the ordinary. Moreover, among Japanese a powerful tree-trunk is thought to be sign of longevity and is therefore particularly welcomed. In the case of BONSAI, of course, value is on the age and wildness of the tree as suggested by its appearance.

There exist today about 71 forms of the Higo Camellia.

The White Flowers' Group
13 forms
The Pink Flowers' Group
19 forms
The Crimson Flowers' Group
16 forms
The Brocade (NISHIKI) Flowers' Group
23 forms

Minimum Order $5.00.
We Pay Postage.

SCIONS

Air Mail? Add $1.00
Green House Protected.

"BUY FROM THE ORIGINATOR OF THE SCION BUSINESS"

GROUP No. 1 - - - - - - $5.00 EACH

Alba Jean
Allie Blue
Amabel K. Lansdell
Astronaut
Beatrice Michael
Cajun Queen
Callie
Calling Card
Cecil Rogers
Charlean Var.
Cover Girl
Delta King
Drama Girl Dream
Dr. Burnside Var.
Dr. George A. Bunch
Easter Parade
Fashionata
Floradora Girl
Francis Hicks
Full House
Gorgeous
Georgia Rouse
Good News
Grandeur
Grand Slam Var.
Griffin's Pink Tomorrow Var.
Guilio Nuccio Fimbriated
Gunsmoke Var.
Helen Bower
Howard Asper
Judge Thomas Porter
Judge W. T. Ragland
Kathryn Marbury
Kings Ruby
Kubul Kain
Lellah Callison
Lillie S. Adams
Lily Brewster
Margaret Pond
Margaret Pond Var.
Marguerite Potts
Muriel Nathan
Margret Price
Park Hill Tomorrow
Pink Tomorrow Var.
Rebel Yell Pink
Rebel Yell Pink Var.
Rowena Hooks
Sherrie Hollis
Star Ruby
Susann
Skip
Tomorrow Park Hill
Tomorrow Pink Var.
Tom Cat
Twilight
Virginia Griffin

GROUP No. 2 - - - - - - $3.00 EACH

Alexander Hunter
Alyne Brothers
Anna Ray Var.
Aroma
Barbara Clark
Bernard Weiss
Betty Sheffield Dream
Betty Sheffield (Pink Heart)
Betty Sheffield Peony
Betty Sheffield Ruby Red
Betty Sheffield Baby
Bill Barnett
Breschini's Pride
Brian Doak
Brian
Can Can
Cara Mia Var.
Carl Tourje
Carry Back
Carter's Sunburst Pink
Carter's Sunburst Pink Var.
Charlean
Christian McSween
Christine Smith
Christine Smith Var.
Claire Renee Var.
Clark Hubbs Var.
Coed
Commander Mulroy
Coral Queen
Dan Graves
Deep South
Diamond Head
Diana Moon
Don-Mac (Peony)
Dorothy James
Dr. Burnside
Ed. Anderson Var.
Elegans Supreme
Ellen Sampson
El Matador
Emily Mathis
Erin Farmer
Felice Harris Var.
Firebird
Firebird Var.
Frances Wheaton
Frank Houser Var.
Fran Mathis Var.
Goldwater
Goldwater Var.
Grand Slam
Guilio Nuccio Special
Gunsmoke
Harry Johson
Hagler
Helen Christian
Hi-Jinx Var.
Hy-Ball
Inspiration
Jack Burson
Jeneli
Jessie Burness Var.
Julia Hamiter
Kay Truedale
Kramer's Supreme Var.
Lady Gowrie
Leading Lady Var.
Louisa Wilson
Lydia Adams
Mama Joe
*Marguerite Cannon
*Marguerite Cannon Var.
*(cut from blooming plants only)
Mary Agnes Patin
Mathotiana Supreme Pink
Mayflower
Maytime
Midnight
Miniature Elegans
Mona Monique
Moonlight
Mister John
Mrs. Mark Clark
Nancy's Fancy
O.K. Boman Var.
Our Julia
Party Dress
Pink Davis
Pink Fluff (Sas.)
Pink Superlative
Pink Velvet Var.
Pop Corn
Red Anniversary
Red Bugle
Red Elephant Var.
Roy Whitehead
Satellite
Satellite Var.
Red Imura
Red Rogue
Red Rogue Var.
Rena Swick Var.
Rosemary Elsom
Rose Mary Williams
Shocking Pink
Silver Chalice
Solomon #10 Var.
Stewart's White Supreme
Susie Q Var.
Tickled Pink Var.
Tom Herrin Red
Touchdown
Velma Grantham Blush
Ville de Nantes (Burris)
Virginia Parrish
Wart
W. H. Barnsley
Wheel of Fortune (Pink)
White Velvet
Wildfire
William Hertrich
Wrong
Wrong Var.
Yuletide (Sas.)

GROUP No. 3 - - - - - - $2.00 EACH

Ace of Hearts
Adele Clairmont
Agnes Rowell Var.
Alexis Smith
Annette Gehry
Arthur Weisner
Aubrey Harris
Bali Ha'l
Berta Hamilton
Betsy Boulware
Betty Sheffield (Charming)
Betty Sheffield Light Pink & Var.
Betty Sheffield Silver (No stripes)
Betty Sheffield Supreme
Blanche Graham
Blush Supreme (Betty)
Carter's Sunburst
Charlie Bettes
Clark Hubbs (Rowell #585)
Daisy Eagleson
Dixie Knight Supreme
Dr. Gehry Var.
Eighteen Scholars
Eleanor Grant S. & Var.
Elizabeth Dowd
Ellen Goff S. & Var.
Extravaganza Pink & Var.
Fortune Teller
Frances Garoni Supreme
Fran Mathis
Gold Tone
Guilio Nuccio S. & Var.
Jack's
Judge Marvin Mann S. & Var.
Julia France
Kick-Off
Lady in Red S. & Var.
Lady Velma S. & Var.
Marie Bracey S. & Var.
Mark Alan S. & Var.
Mark Culver S. & Var.
Maverick
Miss Charleston S. & Var.
Monticello
Mrs. Jimmie Davis Pink & Var.
Mrs. Marshall Fields
Mrs. R. L. Wheeler
Nez Smithwick
Native Dancer
One-a-Lone
Pink Diddy
Pink Velvet
Sarah R. S. & Var.
Richard Nixon Pink & Var.
Silver Anniversary
Silver Plume
Son Hackney
Tick Tock Blush Red & Var.
Tomorrow (65% White)
Tomorrow Supreme
Tomorrow's Dawn
Velma Grantham
Vulcan S. & Var.
Woodville Red Blush

Want Complete List?
Send Us A Card.

MARK S. CANNON

300 MONTEZUMA AVE.
DOTHAN, ALABAMA 36301

Hundreds More on
Our Complete List.
$1.00 & $2.00 Each

Bulk Rate
U. S. POSTAGE
PAID
Permit No. 1282
Pasadena, Calif.

SOUTHERN CALIFORNIA

CAMELLIA

Society, Inc.

820 WINSTON AVENUE
SAN MARINO, CALIFORNIA

Return Requested