Carolina Camellias



'ANNE JACKSON'

Vol. XXIV

WINTER, 1972

CAMELLIA JAPONICAS CAMELLIA SASANQUAS HOLLIES

BROADLEAF EVERGREENS

80,000 CAMELLIAS

AZALEAS

1,300 VARIETIES

Over 500,000 Azaleas, Hollies, Ornamental Shrubs and Trees. Container grown and balled and burlapped.

Open Daily 8 'til 5

Sunday 1 'til 5

Visitors always welcome. No admission charge to Gardens. See our 1¼ miles camellia trail—600 varieties. Each plant labeled with permanent markers.

WRITE FOR CATALOG

LAUREL LAKE GARDENS AND NURSERY, INC.

P. O. DRAWER 9

SALEMBURG, N. C. 28385

AREA CODE 919-PHONE 525-4257

22 Miles East of Fayetteville, N. C., 10 Miles West of Clinton.

One Mile East of Salemburg on Laurel Lake Road

Carolina 🐨 Camellias

Published three times annually—Winter, Spring and Fall—for the members of the North and South Carolina, Georgia and Virginia Camellia Societies by the South Carolina Camellia Society, Inc. Carroll T. Moon, Chairman of Publications Committee, 421 Arrowwood Rd., Columbia, S. C. 29210, H. L. Benson, Chairman of Advertising Committee, 2425 Heyward St., Columbia, S. C., P. L. Horne, Chairman of Articles Committee, 1722 Glenwood Rd., Columbia, S. C.

In This Issue

South Carolina Camellia Society	2
North Carolina Camellia Society	
Virginia Camellia Society	4
Show Dates	6
South Carolina Camellia Society Fall Meeting	7
A. C. S. Winter Meeting in Birmingham	9
New Uses for the Clemson Camellia Trial Garden-By Luther W. Baxter, Jr.	11
Atlanta Camellia Show—By Boynton Cole	16
Add One Foot to Your Grafts—By J. U. Smith	18
Betty Sheffield Reigns Supreme at Wedding—By Marguerite Smith	22
Camellia Symposium—By Paul Dahlen	23
North Carolina Camellia Society Fall Meeting	24
A New Leak—By Frank Key	26
Ironie, Isn't It—By J. K. Blanchard	
Foreign Plant Introduction of Improvement of Camellias-By W. L. Ackerman	33

About the Cover

'ANNE JACKSON'. Courtesy Shackleford Nursery.

SOUTH CAROLINA CAMELLIA SOCIETY

President's Message



T. C. EVANS.

DEAR MEMBERS OF THE SOUTH CAROLINA CAMELLIA SOCIETY:

I am deeply appreciative of the honor you bestowed upon me in Charleston by electing me to this office. I will attempt to uphold the traditions established by my predecessors, and will seek new ways to improve the services the Society provides its members. The officers and directors have agreed to meet with me at frequent intervals to formulate our program for the coming year. As we progress in this effort, your guidance and participation will be requested.

Dotty and I hope to have the opportunity to attend all of the camellia shows staged in South Carolina this year. If we can be of service in any activity involving camellias or camellia people, we will be extremely happy to comply with your requests.

I extend to all best wishes for a successful camellia growing season, and a happy and prosperous year.

Sincerely,

T. C. Evans, President.

NORTH CAROLINA CAMELLIA SOCIETY

President's Message

DEAR FELLOW MEMBERS:

The annual fall meeting held at Wilson, N. C. on November 6th was a success and we had good attendance.

The show held in connection with the meeting indicated that Show Chairman, J. O. (Jack) Jackson and Vice-Chairman Ernest Aycock are to be commended for the fine job they did. Such enthusiasm has not been seen in a long time. This was their first show and it took a lot of people working together to make it successful.

The spring meeting will be held in Whiteville, N. C., February 19th. Make your plans to attend our meeting and bring your blooms to help make their show even more successful. Our program will be presented by Dr. Luther W. Baxter, Jr. and will be on "Dieback". I know of no other problem which affects as many people as does dieback. This will be a wonderful opportunity to learn more about this most difficult problem.

I am sure you know of members who grow beautiful blooms, yet they never take them to shows. These people say, "its not good enough", "it can't win", etc. Please try to get everyone to send or take blooms to shows this season. Once you've started, you'll enjoy it and it's a great opportunity for fellowship with other exhibitors.

The Robert Holmes Award for having the best membership booth during the past year was won by Wilmington, N. C. Congratulations on a beautiful booth. So many of our clubs are guilty of just setting up a table with N. C. and American Camellia Society signs on it. This is not attractive and defeats the very purpose of having a booth—this being to help attract and obtain new members. Have an attractive booth this year and try to win the award.

See you at the shows.

Sincerely,

FRED G. HAHN, JR.

VIRGINIA CAMELLIA SOCIETY

President's Message



DR. ANNE LEE

DEAR MEMBERS:

We had an unusual fall with a great deal of rain, more than twelve inches in September, that no doubt influenced our camellia bloom. The fall show had more blue ribbons than ever before in comparison to the number of blooms displayed. The fall show is now an event everybody looks forward to, and more people become interested in the use of gibberelic acid. There is no petal blight, and the garden has few other flowers in bloom at this time. A beautiful camellia on your table on a dreary day can conjure visions of a not-too-distant springtime.

There is a constant worry how to increase our membership. An effort will be made to open several gardens on various dates to give new and old members a glimpse of those gardens whose owners carry away most of the blue ribbons at show time. We also will give the members, and particularly the novice camellia grower, an idea how the plant can be used in the landscaping of the garden.

Plans are under way to make our spring show, March 25 and 26, a real occasion, and I hope the weather will be kind. All activities will be concentrated at the Admiralty Motel. We are looking forward to seeing as many members of the VCS as possible.

The show and the meeting is a wonderful way to meet your fellow members, exchange ideas, and renew old friendships.

Sincerely,

DR. ANNE LEE.

SOUTH CAROLINA CAMELLIA SOCIETY

OFFICERS

THOMAS C. EVANS, President	S,	С,
T. NEAL COX, Vice President	S.	C.
B. E. STOCKMAN, Vice President	S.	C.,
PAUL A. DAHLEN, Vice President	S.	С.
P. D. RUSH, Secretary-Treasurer Box 177, Lexington,	S.	С,
R. F. BROWNLEE, Chairman of Test Garden	s.	С.
H. D. PREGNALL, Past President	S,	С,

DIRECTORS

M. F. MILLER, District No. 1	S.	С,
JACK TEAGUE, District No. 2	S.	С,
J. A. TIMMERMAN, District No. 3	S.	С.
STANLEY G. HOLTZCLAW, District No. 4	s.	С,
J. HOWARD KNOX, District No. 5	S,	С,
Dn. JOHN F. C. HUNTER, District No. 6	S.	C.

NORTH CAROLINA CAMELLIA SOCIETY

OFFICERS

J. K. BLANCHARD, Past President	Box 132, Wallace, N. C.
FRED G. HAHN, JR., President	39 Kilborne Dr., Charlotte, N. C.
Geonge Henndon, President-Elect	3 Holly Lane, Fayetteville, N. C.
MARSHALL H. RHYNE, Vice-President,	P. O. Box 352, Belmont, N. C.
M. G. SCHNIBBEN, Executive Secretary and Treasurer	ne Valley Dr., Wilmington, N. C.
MRS. FRED G. HAHN, JR., Recording Secretary	Charlotte, N. C.
MBS. CATHERINE ALLEN, Historian 1812 Live	Oak Parkway, Wilmington, N. C.

DIRECTORS

District 110. 1		
STEVE WALL	N.	C,
B. M. RICHARDSON	Ν.	С.
JOSEPH NORWOOD	Ν.	C,
District No. 2		
JAMES H. McCov	N.	C,
LEWIS KNOCK	Ν.	С,
ROBERT EAGLES	Ν.	С,
District No. 3		
RALPH MCVEY (M. H. Rhyne Term)	Ν.	С.
T. M. Louvenumy 1108 Inving St. Winston Salam	3.7	C

VIRGINIA CAMELLIA SOCIETY

OFFICERS

DR. ANNE L. LEE, President	Norfolk,	Va.
LYMAN S. CLARKE, JR., 1st Vice-President	Norfolk,	Va.
ROBERT O. MATTHEWS, 2nd Vice-President	Norfolk,	Va.
MRS. EUGENE WORRELL, Secretary-Treasurer	Norfolk.	Va.

DIRECTORS

Ly	MAN	S.	CL	AILKE
0.	C.	Dra	SCI	IER.
W.	C.	Go	INT	0
Dn	As	NE	L.,	LEE

GRAEM YATES

District No. 1

DR. S. F. THORNTON FREDERIC HEUTTE ALAN HOFTEIMER BERNHARD H. WOLTER Admiral Lester O. Wood Walter Rupp W. E. Cuvkendall Robert O. Matthews

SHOW DATES

Place, Location and Sponsor Date	Kî.
Thomasville, Ga., South Georgia Camellia Society and Men's Garden Club January 22-23	, 1972
Columbia, S. C., Mid-Carolina Camellia Society January 29-30	, 1972
Charleston, S. C., Coastal Carolina Camellia Society, Charles Town Landing January 29-30	, 1972
Aiken, S. C., The Aiken Camellia Club	, 1972
Savannah, Ga., Citizens & Southern Bank in the De-Soto- Hilton Complex, Liberty St., The Men's Garden Club of Savannah	, 1972
Beaufort, S. C	, 1972
Birmingham, Ala., Municipal Auditorium in connection with the ACS Annual Meeting, The Birmingham- Bessemer Men's Camellia Society	, 1972
Augusta, Ga., Georgia Railroad Bank & Trust Co., Broad and Seventh Streets, The Augusta Council of Garden Clubs and The Georgia Railroad Bank & Trust Co February 19-20	, 1972
Georgetown, S. C., The Council of Garden Clubs in Georgetown February 19-20	, 1972
Whiteville, N. C., Southeastern Community College, Whiteville Camellia Society	, 1972
Charlotte, N. C., Southpark Shopping Center, The Men's Camellia Club of Charlotte	, 1972
Wilmington, N. C., Men's Tidewater Camellia Society February 26-27	, 1972
Wallace, N. C., Wallace Council of Garden Clubs March 11-12	, 1972
Greensboro, N. C., Walter Page High School, The Men's Piedmont Camellia Club of Greensboro March 18-19	, 1972
Norfolk, Virginia March 25-26	, 1972

South Carolina Camellia Society Fall Meeting

The South Carolina Camellia Society Fall Meeting was held in Charleston in conjunction with the Coastal Carolina Camellia Society Fall Show on November 20th, 1971.

A luncheon enjoyed by a large number of members and guests, served with the elegance and style for which the Mills Hyatt House is famous, was the scene of the South Carolina Camellia Society fall meeting.

H. D. "Buddy" Pregnall, president, introduced the distinguished guest,



Dr. Luther Baxter of Clemson University. He gave a short talk on his experiments with camellia disease.

Judge Sherrill Halbert, president of the American Camellia Society, gave an interesting talk on the A.C.S. He urged everyone to work to get new members.

Joe Pyron, Secretary-Treasurer of the American Camellia Society, invited everyone to come to Massee Lane. He said with the new greenhouse visitors can see camellia blooms throughout the season.

S. H. "Son" Hackney talked about new varieties and showed slides.

CAROLINA CAMELLIAS wishes to compliment Buddy on arranging an interesting program.

Following the program officers and directors were elected for the coming year. Tom Evans of Aiken, S. C., was elected president.

After the business meeting the group went to the First Federal Savings and Loan Association to see a beautiful camellia show. The camellia show was staged by the Coastal Carolina Camellia Society.

To complete a well planned day all were invited to a real Charlestonstyle drop-in at the German Friendly Society Hall.

As the sun slowly sank in the west we reluctantly turned our steps homeward ever remindful of our beautiful camellias and the many friends they have made for us.

Tidewater Camellia Club's Winter Show In Wilmington, N. C.

The show will be held February 26 and 27, 1972 at the fabulous Timme Plaza Motor Inn located on the Cape Fear River in downtown Wilmington, N. C. across the river from the USS North Carolina Battleship.

This will be the twenty-third show staged by the club. Friends and Camellia lovers from North Carolina and our neighboring states, Georgia, South Carolina, and Virginia are cordially invited and urged to meet with us at TIMME—The welcome mat will be out. Bring your blooms and help us make this an enjoyable and outstanding show . . . "We might have some hanging baskets."

GEORGE W. Ross, Show Chairman.

-CAROLINA CAMELLIAS-

Coastal Carolina Camellia Show

Coastal Carolina Camellia Society will hold the Spring Camellia Show on January 29-30, 1972 at the Charles Towne Landing in Charleston, S. C.

Everyone is invited to attend and exhibit. Anyone desiring information may contact the show chairman, Mr. Edward Y. Ulmer, 25 Sussex Road, Sandhurst, Charleston, South Caro-Carolina 29407.



Schedule of Events—Winter Meeting, Birmingham

February 10, 11, 12, 1972

Headquarters: Parliament House Motor Hotel 420 South 20 Street, Birminghan, Alabama 35201

THURSDAY, FEBRUARY 10

Registration all day, lobby of the Parliament House.

2 P. M. Meeting of the GOVERNING BOARD.

6 P. M. Dinner with host members for those who have registered by 3 P. M.

FRIDAY, FEBRUARY 11

Registration all day, lobby of the Parliament House.

8:30 A. M. Tour of sites of interest.

Buses will pick you up at Motel entrance. We will visit Arlington, a beautiful mansion, built in 1822. A light luncheon will be served there, leaving room for a unique feast and social hour at 6 P. M. Also visiting Vulcan, Botanical and Japanese Gardens, scenic Shades Crest Road overlooking Birmingham, Samford University campus, and passing through the Red Mountain cut, 200 feet wide and 600 feet deep.

6 P. M. Buses will pick you up at the Motel entrance.

For this evening we have planned something out of the ordinary. We feel it will be an ACS informal get together you will long remember. A short thirty minute drive will bring you to the country home of one of our members, Frank M. Lynch. His home is one of several situated on a large tract of land and faces on a beautiful private lake. Here we will have our Social Hour and a feast of smoked turkey, Virginia ham, etc. in a relaxed atmosphere of open fires, rustic charm, and fellowship. Our sincere thanks to Frank for making his home available. BUT—one rule—dress comfortably and informally.

SATURDAY, FEBRUARY 12

- Registration desk open from 10 A. M. until 3 P. M., lobby of the Parliament House.
- Free time to shop, rest, enter your blooms in the show, until the buses pick you up to visit the show.

1:30 P. M. Shuttle busses will begin picking you up to attend the Camellia Show. The auditorium is so arranged that you may sit comfortably in the dress circle and observe the judging of the show. The last bus back to the Parliament House will leave the auditorium returning to the motel at 4:30 P. M.

2:30 P. M. Camellia Show, Birmingham Municipal Auditorium. Please be there for the opening ceremonies. Show hours: Saturday, 2:30 P. M. until 9 P. M. Sunday, 1:00 P. M. until

6 P. M.

7 P. M. to 8 P. M. Social Hour.

8:00 P. M. Annual banquet featuring a minimum of speeches and some very novel and enjoyable entertainment.

The registration fee has been held down to \$25.00 and should be sent to William C. Redd, P. O. Box 10462, Birmingham, Ala. 35202. Motel reservations should be sent direct to the Parliamet House, 420 So. 20 St. Birmingham, Ala. 35201. If not using the card insert in the *Journal*, be sure to specify for our meeting.



New Uses for the Clemson Camellia Trial Gardens

By LUTHER W. BAXTER, JR.

The original purpose for the establishment of the Camellia trial gardens was to evaluate the relative performance of *Camellia japonica* and *C. sasanqua* cultivars when grown in the Piedmont section of South Carolina. Concomitant with this central purpose was the establishment of a garden of beauty which affords relaxation to many.

Since the establishment of the garden the plants have grown beautifully and bloom profusely most years when the weather permits. *C. sasanqua* cultivars, such as Daydream, Setsugekka, Allens Compact, Showa-no-Sakae, Apple Blossom, and others perform beautifully each fall. In the absence of either sharp, early fall freezes or midwinter "deep freezes" the majority of the *C. japonicas* bloom satisfactorily during the spring.

Good management practices such as irrigation, providing adequate shade, fertilization, pruning, insect and weed control carried out by the personnel of the Horticulture Department have enhanced the beauty and effectiveness of these gardens. All in all, the garden has achieved its original objective extremely well.

The gardens, although maintained by the Horticulture Department and supervised by either Mr. Pat Fulmer or Mr. James Crawford, afford personnel in both Plant Pathology and Entomology the opportunity to conduct additional studies. For example, last year (1970) personnel in Plant Pathology made use of the camellia garden for the following research efforts.

- Selected crosses between Camellia sasanqua varities. About 500 individual crosses were made. The purpose was to develop superior varieties of camellia sasannqua resistant to dieback and canker.
- (2) Inoculations were made on many varieties of Camellia sasanqua and C. japonica with multiple isolates of the fungus responsible for dieback and canker.

The purposes of these studies were two-fold:

- (a) to identify any sources of resistance in either C. japonica or C. sasanqua and
- (b) to determine whether or not the camellia v a r i e t i e s reacted differently to the f u n g u s (the name of the fungus is *Glomerella cingulata*). Just as varieties of camellia differ, so too do isolates of many fungi. Fungus isolates from N. C., Ga., and many from S. C. including

isolates from *C. japonica*, *C. sasanqua*, *C. reticulata*, and the hybrid Donation were tested.

- (3) Hundreds of cuttings, scions, and thousands of seeds have been given for camellia discase studies.
- (4) Plants for spray studies for control attempts against Exobasidium leaf gall have been provided.
- (5) The garden has been used for class use in plant pathology for disease recognition (virus variegation, dieback and canker, Exobasidium leaf gall on *C. sasanqua*, and cold injury). A plant pathology session on photography makes use of *C. sasanqua* flowers in

the fall and again on *C. ja*ponica in the spring.

The garden serves as a focal spot of beauty for many people to walk through and enjoy. The fact that they do not see much of the above work only enhances the utility of the gardens. For to them, this garden is becoming a spot for peaceful and restful contemplation and relaxation. The pond used for irrigation now supports many ducks and many children enjoy feeding these ducks. Literally hundreds of people come by during the time that I and others working with me are in the garden.

No garden of course is perfect. Our camellia test garden at Clemson is no exception. For example, in my opinion, we need many more varieties of *Camellia sasanquas* for our

LITTLE RED BARN Nursery and Gift Shop

Proudly present Three outstanding new seedlings

'MRS. CHARLES JONAS'

Award winning, large loose peony deep rose red. Excellent form and texture. Prolific bloomer and responds well to gib. 2-year strong budded plants. We also have this one variegated in one-year grafts only.

'APOLLO 14'

Very large formal double rose-red with 50% to 75% white, blended and moire'd throughout most blooms. An excellent performer in every way, 1-, 2- and 3-year budded plants. We also have this one in solid red, in 2- and 3-year grafts.

'SNOWIE'

A truly beautiful miniature to small formal double white with rose-bud center. This is a perfect corsage type, Some blooms have shown a very delicate pink blush, 1- 2- and 3-year grafts.

We have a very good assortment in budded plants of both new and old standard varieties to choose from.

VISITORS ALWAYS WELCOME

Star Rt. 2, Box 2, Georgetown, S. C. 29440

12

gardens. Furthermore, we need a person (or persons) who know C, sasanqua varieties well to come to Clemson and properly identify those which we have. We know for example that we do not have representatives of any of the following C. sasanqua varieties: Jean May, Sparkling Burgunday, Hinode Gumo, Papaver, Pink Snow, Gulf Breeze, Texas Star, and hundreds of others. This group of plants perform beautifully at Clemson during October and much of November. For the northern part of S. C. let's not neglect this beautiful flowering shrub. Perhaps for outside plants in the upper Piedmont, this is the plant we should exploit more fully.

We now need a systematic growth in our trial garden. For example, perhaps a club would be willing to take on a project of contributing 50 C. sasangua plants, two of 25 varieties. If you don't have them now, this would provide an ideal opportunity to have a teaching and learning session on grafting. Why not graft C. sasangua varieties onto C. sasangua seedling understock? Also, take into consideration that most C. sasanqua cultivars are very susceptible to dieback and canker so use extreme caution! A gift of 50 2-year-old grafts of 25 new C. sasanqua cultivars would make a great project!

Suggested below are 25 such varieties that should be placed in our gardens:

1. Betsy Baker	5. Charmer
2. Betty Patricia	6. Cherie
3. Bonanza	7. Chiyo-Zuru
4. Cavalier's	8. Choji-Guruma
Lady	9. Cotton Candy

10. Covington	19. Navajo
11. Elfin	20. Papaver
12. Fukuzutsumi	21. Pink Snow
13. Gulf Breeze	22. Rosea
14. Hinode Gumo	23. Shichi-
15. Jean May	Fukujin
16. Lavender	24. Sparkling
Queen	Burgundy °
17. Leslie Ann	25. Splendor
18. Miss	26. Tanya
Penderlea	01004845000000000

Come to Clemson some year in October and enjoy our "sasanquas" they're beautiful.

* This is a patented variety and should not be propagated. An alternate, No. 26, is offered.

-CAROLINA CAMELLIAS-

Attention!

Members of the SOUTH CARO-LINA CAMELLIA SOCIETY please send your 1971 dues to:

> P. D. Rush, Secretary-Treasurer Box 177 Lexington, S. C. 29072

Members of the NORTH CARO-LINA CAMELLIA SOCIETY please send your 1971 dues to:

> M. G. Schnibben 617 Pine Valley Dr. Wilmington, N. C. 28401

Members of the VIRGINIA CA-MELLIA SOCIETY please send your 1972 dues to:

> Mrs. E. M. Worrell, Secretary-Treasurer 1341 Harmott Ave. Norfolk, Va. 23509



SPONSORED BY

Che Farmers and Merchants Bank

Offices Serving

AIKEN, SOUTH AIKEN, KALMIA PLAZA, GRANITEVILLE, CLEARWATER, NORTH AUGUSTA



Welcome to the 27th Annual Atlanta Camellia Show

The 27th annual and consecutive Atlanta Camellia Show will be held Saturday and Sunday, February 18th and 19th in the mall of Phipps Plaza, 3500 Peachtree Road across the street from Lenox Square. This will be the first free admission show ever held in Atlanta.

The show is sponsored by the Atlanta Camellia Society, North Georgia Camellia Society, and the Buckhead Lions Club with the net proceeds, which should be \$4000.00 or better going to Egleston Hospital for children with a smaller percentage to the American Camellia Society Foundation.

The merchants of Phipps Plaza are contributing to take the place of revenue from tickets. Shopping there would be a new experience for many at Sak's of Fifth Avenue, Lord and Taylor, Tiffany's, Sloan for furniture and many other stores.

The show has contributed an estimated one hundred thousand to charity since its beginning.

Mrs. Boynton Cole, 1843 Flagler Ave., N. E., Atlanta, Ga. 30309 is in charge of schedules and entry cards.

This 27th annual and consecutive Atlanta Camellia Show is one of the oldest camellia shows in the South, but its claim to uniqueness is not due to its age but due to its purpose. This show was founded with the idea that it should make money for a worthy charity and this purpose has held since the beginning. We know of no other camellia show with such record.

A little over twenty-seven years ago Mrs. Laurie Webster sought a way to pay for a garden to raise fresh vegetables for the Children at Egleston Hospital. Mrs. Laurie told some of us fifteen years ago that it started because she praved to the Almighty to find a way to raise money and he told her to have a camellia show. When this was repeated to Mrs. Samuel Porter, whose wonderful camellia greenhouse was a joy to behold, and who without a doubt was our best grower for many years, said the Lord had nothing to do with it because she herself told Mrs. Laurie to have a camellia show.

In any case, Mrs. Laurie did have her first show at the Academy of Medicine. It was quite successful, and this was followed by eight more shows under her very dedicated direction and personal work. So many people were of assistance that they are too numerous to mention. The work of Mr. Philip Shutze, one of our leading architects, must be mentioned for designing the very handsome stage setting at the end of the show room for a number of years. It was very beautiful and added a great deal of interest to the early shows. Some of these settings required dozens and dozens of hours to decorate after the basic structure was fabricated.

In 1955 due to illness in her family,

Mrs. Laurie could not continue to put on the camellia show. Since that time members of the two local camellia societies in cooperation with the Buckhead Lions Club continued the work she had done so long.

The beautiful stage setting at the end of the showroom was discontinued due to cost and greater emphasis was put on attracting leading growers and exhibitors from Georgia and adjacent states.

In the sixteen shows that the camellia societies and the Buckhead Lions Club have staged, Egleston Hospital for Children has remained as one of the charities but the fresh vegetable garden has been long since discontinued. The Atlanta Child's Home was a part beneficiary for a number of years until it lost its identity. The charity fund of the Buckhead Lions Club has been part beneficiary from the beginning of our partnership. The last three years part of the proceeds have been given to the Endowment Fund of the American Camellia Society which built its national headquarters building at Massee Lane between Fort Valley and Marshallville, Georgia.

The workers get extra pleasure from seeing superb blooms produced and exhibited by the efforts of the best growers in this and nearby states; and again seeing old and new friends; and judges who contribute their time and expenses, and the exhibitors whose only reward is an occasional trophy.

We hope you enjoy the show.

STEWART'S FLORIST AND NURSERY

2403 BONAVENTURE ROAD TELEPHONE 234-4411 SAVANNAH, GEORGIA 31404

First quality plants grown under sanitary nursery conditions, using two and three gallon Lerio cans.

We ship to all states in light weight corrugated cartons, and we may have just what you want, so drop us a line so we can send you our complete list and prices.

PARTIAL LIST OF BUDDED PLANTS

'Allie Habel' 'Fashionata' 'Mark Eleven' 'Charlean' 'Charlean, Var.' 'Sugar Daddy' 'Lila Naff' 'Suzy Wong' 'Snowman' 'Francie L' 'Rob Roy' 'Julia Hamiter' 'Marguerite Sears' 'Louise Hariston' 'Milo Rowell' 'Grand Prix' 'Vallee Knudsen' 'El Dorado' 'Doris Ellis' 'Luscious Lady' 'Head Table' 'Forty Niner' 'Tiffany'

Send for more complete list and prices

Add One Foot to Your Grafts

By J. U. SMITH Columbia, S. C.

The conventional way of grafting may be the best but I derive a great deal of pleasure from experimenting with my plants. In so doing I believe some worthwhile results have been shown. One of the few improvements noted, a method of grafting which has proven most satisfactory, is described as follows:

Figure I shows the understock cut approximately one foot above ground. The distance may vary depending upon the suitability of the trunk or branches for grafting and the location of one or two lateral branches which may be left on the understock. These branches should be so located as to not hamper your grafting procedure.

Figure I also shows the completion of the cleft graft. Following completion of this step I normally put a coating of Flintkoat (static asphalt) over the union and cleft. This is left 10 to 30 minutes while preparing another graft or two in order that it will harden to some extent and will make the next step less hazardous. It serves to stabilize the scion and lessen the danger of knocking it out. Grafting wax or any similar viscous substance may be used or the graft can be completed without this and I believe your success will be just as good.

Figure II shows a cross section of the next three steps. To complete the



graft sphaghum moss which has been soaked at least 30 minutes, a square of aluminum foil, a clear plastic bag the size used for packing broilers in freezer, a 16 lb. brown paper bag and some cotton wrapping twine will be needed. As shown by *Figure II* a good hand full of the wet moss (squeeze out excess water) is held up around the stock by the foil shaped as a funnel. It should be tied tightly at bottom end and loosely around bulk of moss to keep moss from falling out. The purpose of the wet moss is to provide humidity in the plastic bag. The corners of the aluminum foil is pulled up as much as possible to keep plastic bag from resting on scion. The plastic bag is then pulled down over the scion, foil and moss and the mouth of it tied securely below the moss. Try to have sufficient air in the bag to hold it erect when tied. Test for holes before using it. It is not necessary to use additional support to hold the bag up-the foil helps in this respect and no serious damage is done if it should collapse on the scion. Two holes are then torn in the fold of the paper bag near the bottom. It is then inverted over the plastic bag and in so doing insert the fingers through the holes on either side and catch the corners of the plastic bag to keep them pulled up as the paper bag is pulled down. The mouth of the paper bag is then tied securely below the plastic bag. This completes the procedure but if you like you can put a cane or stake up beside the paper bag and tie the corner of the bag to it so as to prevent wind or rain damage. From time to time in checking your grafts you can straighten up the bags, and you probably will need to untie them once or twice to let out water which collects in the plastic bag, weighting it down.

When your graft has put on two or three leaves remove the bags but put the paper bag back for a week or ten days and then remove it during cloudy weather or in late afternoon. No further shading should be neces-

19

sary unless graft is in full sun or weather is extremely hot.

There's more to the subject than meets the eye. The added height gained by the high level grafting is not the desired feature. However, there are advantages in that there is less danger of the young graft being broken off and less danger of damage from insects coming out of the ground. The primary advantage is gained in keeping the roots of the stock alive by leaving a branch or two intact to take off excess moisture and to service the normal function of the foilage. There is no shock and no loss of understock. When a large plant is cut down completely for grafting a large portion of the feeder roots die. This is prevented by the above method, thereby giving greater growing possibilities for the graft. The maximum growth attained on one graft in this manner was 5' 3" the first season. Don't expect that much but you can expect considerably more than in other methods of grafting. The branches left on the stock may be airlavered the first summer but if not they should be removed the following early spring, and the wounds painted over with static asphalt. The first year your graft may look awkward, but by the end of the second or third season it will shape up like a Christmas tree and will look like a 5-year graft.

Excess rain or drought during the spring months is not a problem in this type grafting. Controlled moisture exists in the plastic bag from the time the graft is completed until the bag is removed.

Annual Augusta

February



Mrs. Mamie Dowd Eisenhower honored us with her attendance at last year's Show. Welcoming Mrs. Eisenhower and her guest, Mrs. E. I. Hilson of New York City, are Mr. and Mrs. Sherman Drawdy.

Camellia Show

19th and 20th

Georgia Railroad Bank Building

Broad Street at 7th

(Free Parking in The Georgia's 7th Street Parking Garage)

SHOW TIMES: Saturday, February 19, 3:30 - 9:00 p.m. Sunday, February 20, 12:00 - 6:00 p.m.

LOCAL ENTRIES: Saturday, February 19, 8:30 - 10:00 a.m.

OUT OF TOWN ENTRIES: Saturday, February 19, 8:30 - 11:30 a.m.

You are cordially invited to attend and participate in The Augusta Camellia Show, co-sponsored by The Augusta Council of Garden Clubs, Inc. and The American Camellia Society.

Once again, Georgia Railroad Bank & Trust is pleased to host this beautiful show in the Main Banking Room of the Georgia Railroad Bank Building. Members of our staff work with the sponsors to make this an outstanding event in the area.

Information on entries may be obtained from Mrs. E. Woodbury Rinker, Chairman of the Show, 2821 Keeling Place, Augusta, Georgia 30904, or Mrs. W. L. Inglett, Jr., Co-Chairman, 1120 Glenwood Drive, Augusta, Georgia 30904.

Mrs. Rinker (Barbara) may be reached at (404) 736-7847. Mrs. Inglett (Bobbie) at (404) 733-0393.



Georgia Railroad Bank & Trust

Betty Sheffield Reigns Supreme at Wedding

(As told to Mrs. T. J. (Marguerite) Smith by her pastor and wife, Barbara and Bob Borom)

"Pardon us, but what kind of flowers are those? They are the most unbelievably beautiful things that we have ever seen." This interruption of a young couple carrying a large flower arrangement was at the entrance to a banquet room in Greely, Colorado. The entranced inquirers were an older couple-natives of the state of Colorado, who had never seen this flower before. They retraced their steps several times to bring others to see this magnificent arrangement. The young couple was soon flanked by people all asking the same question, "What are those flowers?"

They were camellias-an arrangement of 'BETTY SHEFFIELD SUPREME', to be specific-and the crowd had every right to be amazed by them. It was late January and in Colorado's cold winter weather no flowers were in bloom. Then, too, these camellias had traveled all the way from Charleston, South Carolina. The arrangement they had just seen was being used at a wedding rehearsal dinner. If they had been present at a nearby church the following afternoon, they would have seen enough dazzling blooms to make their eyes pop-all being used in the wedding of Barbara Phelps and Bob Borom.

Miss Phelps, a native of Colorado, had gone to Thomasville, Georgia, upon graduation from college as part of a short-term mission program of the United Methodist Church to teach in Vashti School. While there, she fell in love twice: one with the floral beauty of the Southland, and then with a young Methodist minister who served a small church not too many miles away. When Bob and Barbara's wedding plans began to take shape, one of her first requests was to use camellias, along with magnolia gandiflora leaves for church decorations.

The problem of obtaining camellia blooms seemed easy to solve. Bob's father, S. T. Borom, is superintendent of Yeamans Hall Club in Charleston, South Carolina, and is a camellia grower with an extensive collection of plants. He agreed to supply the blooms, weather permitting, for the January wedding. Magnolia leaves were no problem, either. In the yard of the church in Omega, Georgia, where Bob was pastor were several large trees. It was just a matter of cutting, packing into cardboard boxes, and trusting the U.S. Mail to get them through.

Meanwhile, S a m Borom began working on thhe problem of transporting camellia blossoms. He called the airlines and obtained information about the size of the area under the average commercial airliner s e a t. Then he discovered that two cartons used to hold cans of dogfood, when stacked one upon the other, were almost the exact size of the space to be filled. Local grocery stores were cooperative in rounding up enough containers. Mr. Borom devised a plan for taping the cut blooms to the bottom of the box, inserting the stem into a large grape to supply it with moisture, spraying the bloom itself with water, and, once filled, sealing the whole box with saran wrap. These packages could then be carried by the Borom family aboard the plan on their trip to Colorado.

Camillias were in abundant bloom the week before the wedding. Sam and Mildred Borom had planned to arise early on the morning of their flight to cut and pack ten dozen blooms, but a freeze warning sent them out the night before to cut by flashlight. A party of five people made the journey from Charleston to Denver, each carrying a container with two dozen blooms each. At every airport, travelers stared at this strange procession of people with identical, mysterious bundles.

The main camellia cargo was the gorgeous 'BETTY SHEFFIELD SUPREME,' but other varieties were included. The bridesmaid's dresses had been chosen to match the beautiful shades of pink in the camellias. Some of the blooms were fashioned into corsages and nosegays, others were used in arrangements for the reception hall, and others decorated the altar and candelabra inside the sanctuary. The Post Office had done its job, so the magnolia leaves from Georgia arrived in time enough to provide just the right greenery for a real southern wedding.

The wedding took place on January 27, 1968, in Eaton, Colorado, a town six miles north of Greeley. The Rev. Willis C. Phelps, father of the bride and Pastor of the United Methodist Church at Eaton, performed the ceremony.

It was one wedding the town has never forgotten, when a little bit of the South traveled West and 'BETTY SHEFFIELD' reigned SUPREME.

-CAROLINA CAMELLIAS-

Camellia Symposium

By PAUL DAHLEN

The Aiken Camellia Club sponsored a Camellia Symposium last October that had as its objective to provide information that would be useful to the novice grower and those who had recently moved into this part of the country and were interested in learning more about camellias. The symposium, which lasted about two and one-half hours, was presented by experienced growers in the Aiken Club and covered the following subjects:

- 1. Introduction and History of Camellias
- 2. Planting and Care
- 3. Selection of Varieties
- 4. Propagation Methods
- 5. Use of Gibberellic Acid
- 6. Present Research Efforts
- 7. Camellia Shows
- 8. Aiken Camellia Club—South Carolina Camellia Society— American Camellia Society

Those attending the symposium showed real interest in camellias and indicated that they believed that the information they received would be very helpful. The Aiken Club plans to repeat this symposium whenever a need for this information is indicated.

Enrron's Norre—This is something all camellia clubs could use to an advantage.

North Carolina Camellia Society Fall Meeting, Wilson, N. C.

The Directors met at 10:30 A.M., they received report of Exec. Sec. & Treas. The proposed Show Schedule for 1972-73 was tabled. Changes in several Articles of Constitution were approved and slate of Officers and Directors as presented by Nominating Committee was accepted and approved, subject to approval by The Society after their Luncheon. The following resolution presented by George Hampton, "In appreciation for

long years of loyal and dedicated service as Historian and active member of The North Carolina Camellia Society, the Board of Directors does unanimously move that The North Carolina Camellia Society do bestow upon and make Merle W. Rainey of Fayetteville, N. C. an Honorary Life Member," was unanimously approved to be presented to our Society for their approval.

At 12:00 Noon members including



At Wilson, N. C. Nov. 6-7, 1971 J. O. "Jack" Jackson (Show Chairman) congratulates R. R. McVey of McLeansville, N. C. for having the Best Bloom in Show with his 'BETTY SHEF-FIELD SUPREME' as J. K. Blanchard N. C. C. S. president looks on.



Enjoying the ribbon cutting ceremonies at the first Wilson, N. C. Camellia Show Nov. 6-7, 1971 reading left to right are Mrs. Lewis F. "Katie" Fulghum, J. O. "Jack" Jackson (Show Chairman), the very beautiful Coley Hunt who was the reigning queen (Miss Wilson) for 1971, and the Honorable H. P. "Red" Benton, Mayor of Wilson.

the Show Judges were served a Luncheon. After Luncheon we enjoyed a most imformative talk illustrated with slides by Mrs. Loletta K. Powell of Princeton, N. C. Her talk included lilies and shrubbery of all kinds as used by her in landscapping her garden. Her talk was enjoyed by all, especially the Ladies. The President then presented the business and slate of Officers and Directors as approved by the Board. Same was approved by the Society.

Bob Holmes Trophy (For best N. C. C. S. Booth at our shows) was awarded to Tidewater Camellia Club, Wilmington, N. C. George Ross this year's show Chairman was responsible for this, Meeting then adjourned to attend Camellia Show at Branch Banking and Trust Co. as presented by our members with the help of friends and Garden Clubs. Number of blooms displayed 773, Attendance 1375.

Silver awards for outstanding blooms as follows:

- Best Japonica—'BETTY SHEFFIELD SUP' R. R. McVey, McLeansville, N. C.
- Runner Up—'Fortune Teller' C. C. Mason, Norfolk, Va.
- Best Bloom under 4½ 'Mrs. R. R. WHEELER' R. R. McVey, McLeansville, N. C.
- Runner Up—Rosea Superba Var' Stuart Lee, Elizabeth City, N. C.

Best White Bloom-'CHARLIE BETTS'

Mrs. Lewis E. Fulgham, Wilson, N. C.

- Best Hybrid—MILO ROWELL' E. M. Todd, Graham, N. C.
- Best Seedling—E. O. Aycock, Smithfield, N. C.
- Sweepstakes—C. C. Mason, Norfolk, Va.
- Runner Up—Stuart Lee, Elizabeth City, N. C.
- Best Tray of 3 Same variety—J. O. Jackson, Wilson, N. C.
- Best Tray of 3 Same variety—J. O. Jackson, Wilson, N. C.
- Best Tray of 3 Different variety—C. H. Dorrity, Fayetteville, N. C.
- Best Sasanqua—"HIDOSHI" Nellie Saleeby, Wilson, N. C.
- Blooms on Court of Honor:
 - 'TIFFANY'—Edith Cavenaugh, Wallace, N. C.
 - 'MARGURITE CANNON'—Harry Vaughan, Wilson, N. C.
 - 'RENA SWICK'—Marshall Rhyne, Belmont, N. C.
 - 'MARTHA SUP. VAR'-Marshall Rhyne, Belmont, N. C.
 - 'Extravacnza'—Fred Hahn, Jr., Charlotte, N. C.

Our members and their friends at Wilson did a great job and put on a first class show. Jack Jackson and his committee did a great job and members like these and their friends is what makes Camellia people so great. Our meeting and show was a great success and we are looking forward to Whiteville in Feb. 1972.

A New Leak

By FRANK KEY

Well, here I go again with something different, but, this time, something everyone with a greenhouse can do with good results.

Everywhere you go among camellia "grafters" you hear the same old story, "I had a poor take". Marvin Rogerson and myself decided that the reason grafts didn't take under containers was on account of a fungus. Even when you remove the covering at intervals and spray with Phaltan, fungus still seem to prevail. We decided to graft in the greenhouse without using any covering whatsoever. Tree-cote was used on top and sides of understock to keep out any fungus. Marvin had a seventy-five percent take. I wasn't quite that lucky, however, I did better than when I used jars to cover. Then, I didn't have to go to the trouble of cleaning the jars, etc.

My theory of Marvin's advantage over mine was because he was able to keep his greenhouse more moist. He covers his greenhouse with Polyethelene and mine with fiberglass. Even with that, had I had sprays I believe I would have had better results.

In grafting, so much depends on the signs and understock, whether they are compatible. This is a must. I am confident this method will be the answer to all our troubles in grafting.

Ironic, Isn't It?

By J. K. BLANCHARD, Wallace, N. C.

It's ironical that we seem to be living in an age where that which is so beneficial to so many people seems to be the least appreciated. I have in mind the criticism being leveled at the use of pesticides.

It's ironic . . . because in the past, "America the Beautiful" has been almost synonomous with "America the Bountiful". This country's tradition is steeped in agriculture—dating back to the first Thanksgiving Feast of the Pilgrims. The United States grew strong because its agriculture was strong; a nation self-sufficient and confident.

But suddenly agriculture isn't "in" any more. Pesticides aren't winning any popularity contests, either. Those are being won by here-to-fore unknown politicians who found an exciting new local and national platform with a "purge-pesticides" campaign. And since only about 7% of our total population is directly involved in growing food and fiber, why not play for the other 93% who are looking for an issues-diverting bandwagon to jump onto?

Occasionally, a sincere editor looks at *all* of the facts. When he does, the story sounds like this one from this nationally-known journalist, Gordon Conklin: "That deafening silence you hear in some of the forests of New Jersey, Connecticut and Pennsylvania is because there are no leaves rustling on the trees. The gypsy moth has heavily defoliated 110,000 acres in New Jersey alone in 1970 . . . compared with 38,000 acres in 1969, and only 1,000 acres in 1967." The gypsy moth can defoliate camellia plants also along with the trees we plant them under.

You and I won't enjoy a region ravaged by gypsy moths . . . and we wont eat very well in a nation without pesticides. Yet, the self-appointed guardians of the populace, press ahead with their campaign against them.

"And, lo, the mosquito shall inherit the earth!" Yes, it's ironic that an industry which helps society as much as pesticide industry does, can be in trouble with that society.

Even *with* pesticides, insects, weeds and plant diseases cause about \$15 billion of damage annually.

With pesticides, yields go up dramatically. U. S. food quality is the best in the world—and the consumer takes it for granted. He cats no wormy apples, peaches, pears or plums. He has an abundance of fibers of good quality from which to choose. And he is healthy.

The farmer no longer suffers severe damage from cut worm, car worm, fruitworm, bollworm, rootworm, etc. Weeds are now easily controlled. And losses are 50% to 90% less than they would be if the farmer had no pesticides. Many reasonably safe chemicals are on their way out. Many are inexpensive and effective. Substitutes will cost the farmer more and, often, be less effective.

We're getting some view of the other side of things to come right now. DDT was banned in some New England and Northeast areas several years ago. As I mentioned previously, in banned areas, the gypsy moth has become an overwhelming pollutant. It is not only damaging the foliage and killing trees, but also infesting gardens, lawns, driveways and swimming pools.

Ceylon had about 3 million cases of malaria, annually, in the early '50's. With the aid of DDT, this was cut to just 31 cases in 1962. DDT use was terminated in Ceylon starting in 1965. and the malaria cases increased each year thereafter until they reached 1 million in 1968.

Ceylon learned the hard way. DDT is now being used again. Sweden got page 1 publicity when it banned DDT for use in its forests. Now, quietly, they've reinstated it—on a controlled basis—because the spruce budworm was ravaging the forests.

DDT has contributed to the control of about 28 dread diseases. And they are really grim ones which include bubonic plague, cholera, typhus, malaria, river blindness, yellow fever, Encephalitis, etc.

There is much more I could say to you to establish the point that pesticides exist for the good of the people. But I am sure you get the point.



Another thing that should be brought to your attention is the way certain pesticides are banned. If chemicals applied to foods and beverages can be shown to be carcinogenic or tumorigenic, or in other ways toxic to test animals, the product can be banned.

Usually, massive doses are used on the test animals, does which man would never receive unless murder on suicide was involved. Yet, if massive doses can cause the sought-for reaction, the product is banned or can be.

Not all products which qualify for these rules are banned. So the law and the laboratory testers are illogical and discriminatory. For example:

Coffee—If you could drink six gallons of coffee at one time, containing the usual amount of caffeine, you'd reach a toxic level.

If minute traces of 2-4-D are put into an otherwise harmless solution, in amounts equivalent to caffine in

An Invitation to Join SOUTH CAROLINA CAMELLIA SOCIETY

Membership which runs with the Calendar year, January 1 through December 31, entitles you to three issues of "CAROLINA CAMELLIAS", issued usually in January, March, and October, which has more regular features, authentic feature articles on Grafting, Planting, Feeding, Gardens, Sasanquas, Judging, Pruning, Arrangement, Disbudding, Diseases, Spraying, and Mulching, to mention a few. Also, there are photographs and other types of illustrations.

The South Carolina Camellia Society will welcome you as a member. For your convenience an application blank is printed below.

ANNUAL MEMBERSHIP-\$3.00

Please Make Payment to:

SOUTH CAROLINA CAMELLIA SOCIETY

Post Office Box 177

LEXINGTON, S. C. 29072

Please enroll the individual shown below and bill for $3.00 \square$ or enclosed herewith is $3.00 \square$.

Membership runs with the calendar year, January 1 through December 31. All issues of "CAROLINA CAMELLIAS" for the current year will be sent.

1.4.1.4			
- NI	10.00	1.00	
- 63	an	1C	_

(Please Print or Type)

Address.

(Street or Box)

(City)

(State and Zip Code)

coffee, you can drink 15 gallons of solution before reaching a toxic level.

Yet, 2-4-D may be removed from the market for no truly scientific reason.

Rutabaga, white turnips, cabbages, spinach, carrots, peaches and strawberries, ingested in massive doses, will cause goiter. Both the white and yolk of hen's eggs are carcinogenic when fed to mice in large doses.

Vitamins, in massive doses, cause acute poisoning or serious chronic effects.

These are a few examples of how products can be banned. If this line of reasoning is to prevail and is good policy, then all of these items I have just mentioned should be banned. Which would be ridiculous! It's not logical to arbitrarily select when the policy will be applied and when it will be overlooked. Test results using massive doses, yield the same and reactions from many items. We need a policy which recognizes the benefitrisk ratio.

Some people run so scared that they can't see the many benefits of numerous products available to them. I believe some would ban the milking cows because cows also produce manure!

There are 50,000 species of fungi attacking plants; there are 30,000 species of weeds; there are 15,000 species of nematodes; there are 10,000 species of pest insects. We need all the pesticides we have and more besides.

We can take a lot of credit for many outstanding accomplishments that we as a society have made, but if there



is one accomplishment that is the envy of the communist countries, it is our success in agriculture. I don't have to tell you the important role that pesticides have played in that success story.

The housewives complain about food prices, but they would have a lot more to complain about if it were not for pesticides. Increased yield of farm products from the use of pesticides helped to bridge the gap made by rural populations moving into urban areas. It is one of the reasons why today our farmers are so much more efficient in food production than their predecessors.

Those of us who were born about the turn of the century or shortly thereafter have probably witnessed the greatest amount of change that has ever happened in a lifetime in recorded history. In transportation, for instance, from the ox cart to going to the moon. No wonder we seem to be confused and tend to have misgivings about where we are headed. Our younger people seem to accept change more easily. In the pesticide dispute, like all major issues, the objective solution lies somewhere in the middle. Extremists only see one side of the problem, everything is either all right or all wrong. In the final analysis each side has some justification for their concern, each side is partially right.

There are always those who feel that something is going to happen that will wipe out our civilization. They quickly seized upon the pesticide episode to warn the population against the great danger lurking over us.

We need to develop a sense of evaluation that doesn't stampede us in one direction or the other. We need to react to a situation whereby, instead of becoming overwhelmed with the facts on one side, we respond with eagerness to find out what the pros and cons are on each side.

Work should continue to be done on the so-called biological methods of pest control such as, sterilization techniques, sex lures, parasite and predators. However, this requires much time and work. In the meantime, let's use all the tools that are available to improve our environment. We all have a stake in this. The makers of pesticides would remind you that it is their environment too.

Much has been said about the population explosion. Without an effective method of controlling pest, our population can outstrip our food supply.

The threat to public health is almost impossible to contemplate if we were to be deprived of the bactericidal pesticides which protect us as all times in the manufacture and processing of foods, and the sanitizing of eating and drinking dishes and utensils. Perhaps even more important is their use in hospitals, nursing somes, swimming pools and rest rooms. Outbreaks of water-borne diseases are a thing of the past because of the addition of these pesticide chemicals to our urban water supplies.

Mid-Carolina Camellia Show

The C o l u m b i a or Mid-Carolina Camellia Show will be held at the Busby Middle School, Dunbar Road, Cayce, South Carolina, on January 29-30, 1972. The place is just across the Congaree River from Columbia. The time is two weeks earlier than usual. This is being done so as to not conflict with the American Camellia Society meeting at Birmingham, Alabama, February 10th to 12, 1972.

The Mid-Carolina Club does not anticipate any problem with reference to the earlier date according to Mrs. Pearle Cooper, President, and Jack Teague, Show Chairman. The warm weather during December and the stepped-up program of gibbing gives promise of an excellent show. This presents an opportunity for many members of the club to attend the ACS meeting and the Birmingham show. We need to support The American Camellia Society in every way possible and to create a greater interest in it, as well as our local clubs. Some may want to exhibit at the Birmingham show; however, let's make ours a bigger show.

The Booster Club of the Busby Middle School is working hard toward this end. The Evergreen Garden Club of Columbia also promises a real show of interest in the artistic section which it is handling. Mrs. R. L. Stock, Club President, and Mrs. R. E. Braughman, Chairman of Artistic Section, gives assurance that this section of the show will catch the eye of everyone who attends the show. Schedules and show cards may be obtained from W. G. Duncan, Jr., 1738 Bannockburn Drive, Columbia, South Carolina 29206. Everyone is invited to exhibit in the horticulture section. Come one—come all—and bring all your blooms to be entered b e t w e e n 8:00 and 11:30 A. M., January 29th.

In Memoriam

Mrs. Archie Hamil, Goldsboro, N. C., August 10, 1971.

Mr. Emil F. Willer, Kannapolis, N. C., June, 1971.

Mr. J. F. McFadyn, Greensboro, N. C., September, 1970.

Alma Hale Weston, Charlotte, N. C., September, 1971.

Bernard H. Wolter, Norfolk, Va., August, 1971.

Spring Meeting N. C. C. S.

Whiteville invites North Carolina Camellia Society for Spring meeting February 19, 1972. Luncheon will be at the Heritage Inn at noon. Dr. Luther W. Baxter, Jr., of Clemson University has been secured for our speaker. He has been carrying on research in dieback and camellia flower blight. (See page 20, 1971 A. C. S. Yearbook.) Mark this date (February 19, 1972) on your calendar now. Come bring your blooms and plan to enjay a day of fellowship and viewing a Camellia Show at Southeastern College. Whiteville, N. C.

Foreign Plant Introduction and the Improvement of Camellias

By W. L. ACKERMAN¹

All aspects of American agriculture —grain, forage, vegetable, fruit, and ornamental (including camellias) are dependent upon plant introduction, past and present. The only commercial crop plants that can truly be c a l l e d indigenous to continental United States are the blueberry, cranberry, pecan, and sunflower. Even those that we frequently think of as "native," such as bean, corn, pumpkin, and squash, were brought from South and Central America.

Systematic programs of plant introduction by the Federal Government have developed slowly. It began in 1819 when the Secretary of the Treasury issued a circular to American Consuls to send home rare plants and seeds. In 1862, the Department of Agriculture was established and in 1898 a separate unit organized for plant exploration and introduction. The name of this unit has changed several times over the years but is now known as the New Crops Research Branch of the Plant Science Research Division.

New plant materials are secured from abroad by exploration, purchase, donation and exchange. More than 350,000 plant introductions have been inventoried under P.I. (Plant Introduction) numbers. Much of this material represents new germ plasm of most of the commercially grown crops already established in this country, but it also consists of new plants not presently grown here.

The New Crops Research Branch has under its direction four Federal plant introduction stations, located at Glenn Dale, Maryland; Miami, Florida; Savannah, Georgia; and Chico, California. Four regional plant introduction stations which have state cooperation are located at Geneva, New York; Experiment, Georgia; Ames, Iowa; and Pullman, Washington. The functions of all eight stations include:

- quarantine of introduced materials for a safe period to assure freedom from insects and diseases;
- (2) preliminary evaluation of these materials for potential use in agriculture; and
- (3) propagation and distribution to Federal and state experiment station workers, plant breeders, and specialists.

Plant introductions fall into two categories: (1) post-entry quarantine of permissible plant materials, and (2) quarantine of prohibited materials. Although most ornamental plants (including camellias) enter under the

³ Research Horticulturist, Plant Science Research Division, Agricultural Research Service, U. S. Department of Agriculture, Glenn Dale, Maryland 20769.

post-entry quarantine program, many species of conifer, barberry, mahonia, bamboo, maple, ash, and willow must pass through more intensive investigations. Other examples of prohibited materials include all drupaceous and pomaceous fruits, grapes and potatoes. All prohibited materials must first come to the Glenn Dale station; the other seven stations may receive postentry quarantine materials only. Most of the seed introductions of forage, grain, and vegetable crops are handled by the regional stations.

The Glenn Dale station serves as the center for quarantine activities undertaken by the New Crops Research Branch. The plant immigrants are established here, and are detained until they can be freed from quarantine restrictions and distributed to other areas. Plant introductions grown at Glenn Dale are divided into three main crop categories: (1) ornamentals; (2) fruit and vegetable (potato) crops; and (3) chemurgic (industrial) crops.

Let us take P.I. 324955 *Camellia* nokoensis Hayata as an example of the collection, introduction, quarantine retention, propagation, and distribution of a typical ornamental foreign immigrant under the post-entry system.

During a plant exploration trip² in Taiwan in 1968, Dr. J. L. Creech gathered cuttings of a wild camellia in an evergreen forest along the roadside en route to Mt. Hohuan. During this trip, Dr. Creech was interested in collecting any plants he might find growing in the wild, or under cultivation that might be of ornamental value either directly or for breeding with already established plants in the United States. Although his primary objective was to collect exotic forms of *Rhododendron*, he collected 150 accessions of 67 genera, including four collections of *Camellia*.

Upon return from the Taiwanian countryside to the nearest point of transportation to United States, the cuttings of *Camellia nokoensis* (along with other plant and seed specimens) were shipped by air express to the U. S. Plant Inspection Station, Washington, D. C.

The Plant Inspection Station is under the direction of the U.S. Plant Ouarantine Division, and serves as the initial port of entry for all foreign plant importations destined for the Department of Agriculture. Here the cuttings of C. nokoensis were inspected by quarantine officials for insects and disease and fumigated with methyl bromide. Data provided with the cuttings by Dr. Creech, the plant explorer, regarding taxonomic identity, parent plant description, where collected including elevation when possible, and other pertinent notes were tabulated and the plant material assigned a Plant Introduction number. After processing at the Plant Quarantine Station was completed, the material was transported directly to the Glenn Dale Plant Introduction Station.

At Glenn Dale the cuttings were

² A part of the joint Agricultural Research Service-Longwood Gardens (of Longwood Foundations, Inc., Kennett Square, Penn.) cooperative ornamental exploration program. This cooperative program has been responsible for 13 foreign plant explorations, including eight to the Orient since 1956.

immediately placed under intermitent mist for rooting. During the next two years these cuttings were observed weekly by a Plant Quarantine Inspector for possible signs of insect or disease contamination not controlled by the initial fumigation. During this period of quarantine retention, propagations were made from the plants developed from the original cuttings. Now released from quarantine, C. nokoensis along with 13 other camellia introductions will be distributed during the spring of 1971 to Federal and state experiment stations, arboretas, cooperating nurserymen, and camellia breeders.

The introduction of new varieties and species of *Camellia* are but one facet of our work here. However, the magnitude of even this small segment is illustrated in Table I which shows the number of camellias introduced since 1950, the species, and the foreign sources.

Although the primary function of this station is the propagation, quarantine, and distribution of plant introductions, preliminary evaluation is also an important aspect of the work. Research scientists at Glenn Dale have the unique opportunity of observing the many new plant introductions during the period of their initial establishment in the continental United States. Many of these plants, directly from the wilds of some foreign country, have never been tested for their potential value as ornamental or crop plants. The large number of introductions does not permit our limited professional staff to explore all avenues of research. Thus, we must specialize. At present, we pursue special projects involving Camellia, Canna, Ilex, Impatiens, Iris, Lycoris, and Rhododendron. Of these, the writer has found the project with Camellia to be the most satisfying and rewarding.

TABLE I.	Camellias Introduced	into the United	States by t	he Plant	Science Research
	Division from 1950	through 1970.			

Species	initial 1999 through 1976	No. of Introductions	Foreign Source
crappelli	ana Tutch.	1	Hong Kong
	a (Kochs) Wright		Hong Kong
fraterna			China
	niana Sealy		Hong Kons
	ylla Hu		England
hongkon	gensis Seem.	3	Hong Kong
		1	England
japonica	L	124	Japan
72		59	France
		24	Portugal
.**		7	England
	CONTRACTOR CONTRACTOR CONTRACTOR	6	Indonesia
		3	Korea
30	CONTRACTOR STRATE CONTRACTOR STRATEGY	2	Okinawa
		2	India
		0	Taiwan
**			
			Australia

pecies		lo. of ductions	Foreign Source
" var. hortensis (Makino) Makino	2252	2	Taiwan
ы н. н.	in an	1	Japan
" " hozanensis (Hay.) Yamamoto	1.1.1	2	Okinawa
" " macrocarpa Masamune		1	Okinawa
kissi Wall.		2	Nepal
lutchuensis T. Ito	10.00	1	Okinawa
miyagii (Koidz.) Makino & Nemoto	i esti	3	Okinawa
nokoensis Hayata		2	Taiwan
oleifera Abel		2	Japan
*		2	England
" var. confusa (Craib) Sealy	0.000	2	Thailand
pitardii var. yunnanica Sealy	1.000	1	England
reticulata Lindl.		10	England
		5	Taiwan
	1.1.1	4	Japan
(iii) Contract of the contr		2	Portugal
28.		1	China
rusticana Honda	11.23	39	Japan
salicifolia Champ. ex Benth.	666	1	Hong Kor
10		1	Taiwan
		1	England
saluenensis Stapf ex Bean		3	England
	:::::::	1	Japan
sasanqua Thunb.	and	43	Japan
		6	Portugal
······································		5	China
		2	Korea
	1.1.1	1	England
(W) CHORAGE AND CHORAGE AND CONTRACT AND CONTRACT OF A DESCRIPTION OF CHORAGE AND CHARACTER AND CONTRACT AND CONTRACT OF A DESCRIPTION OF CHORAGE AND CONTRACT AND CONTRACT CHORAGE AND CONTRACT AND	0.000	1	Brazil
sinensis (L.) Ktze.		21	Japan
		5	Peru
**		4	Ceylon
· · · · · · · · · · · · · · · · · · ·		3	India
		3	Brazil
*		2	China
		2	Yugoslavia
		1	Vietnam
4		1	Malaya
<i>u</i>		ĩ	Pakistan
P		î	England
		î	Mexico
taliensis (W. W. Sm.) Melchior	1115	3	
tanensis (W. W. Sm.) Melchior tenuiflora (Hayata) Cohen Stuart		2	England
tsaii Hu		2	England
		2	England
lybrids		10	12-1-1
X williamsii W. W. Smith cuspidata x saluenensis			England England

A substantial collection of Camellia varieties and species at Glenn Dale presented an opportunity for possible improvement of our commercial forms as well as providing plant breeders with basic information on compatibility relationships of various Camellia species and those of related genera. In 1960, a breeding program was begun to develop interspecific and intergeneric hybrids; to determine the chromosome numbers of species and hybrids; the chromosome morphology of Camellia species where possible; and the breeding potential of interspecific and intergeneric hybrids. A nucleus of 71 introductions comprising 20 species of Camellia and 4 species of related genera were used as parents. In recent years specimens of 6 additional species have been incorporated in the breeding project.

Over a period of 11 years, slightly less than 10,000 controlled pollinations were made representing 243 interspecific combinations, including reciprocal crosses. A total of 1,098 hybrid plants in 158 combinations were obtained.

Attempts were made to cross several Camellia species with those of closely related genera. These included Tutcheria spectabilis (Champ.) Dunn, T. virgata (Koidz.) Nakai, Franklinia alatamaha Bartr., and Stewartia ovata (Cav.) Weatherby, A total of 1,064 controlled pollinations were made, representing 24 intergencric combinations, including reciprocal crosses. Eleven plants judged to be valid hybrids were obtained from three combinations. These were Tutcheria virgata x C. granthamiana Sealy, T. virgata x C. miyagii (Koidz.) Makino & Nemoto and C. pitardii Cohen Stuart var. pitardii x T. spectabilis. Except for the last intergeneric cross, none of these have been reported before in the literature. A single seed producing capsule of Franklinia alatamaha x C. hongkongensis Seem. was formed following a large number of controlled pollinations. This resulted in 6 seedling plants. It is too early to ascertain the validity of these plants as hybrids.

Among interspecific crosses, species possessing strongly dominant characters can be extremely useful to the plant breeder when they are used as male parents, since similarities between progeny and the pollen parent help confirm hybridity. This may be illustrated by the dominance of hairy over smooth stems. In 108 hybrids derived from 8 different interspecific combinations involving female parents with smooth stems crossed with males having hairy stems, all were hairy stemmed. This also indicated homozygosity of the hairy stem character in the male parental species used. When the stems of both parents were smooth, all of the progency also had smooth stems.

Floral fragrance has been a popular subject in eamellia periodicals during the past ten years. Although rather rare in cultivated varieties of *C. japonica* L. and *C. sasanqua* Thunb. there are six species which are strongly scented—*C. fraterna*, *C. kissi* Wall. *C. lutchuensis* T. Ito, *C. miyagii*, *C. oleifera* Abel and *C. tsaii* Hu. Only *C. lutchuensis* and *C. tsaii* have a fragrance which is pleasant to most people. The scent of the other four species is described as being musky and unpleasant. Floral scent appears to be transmitted to a large percentage of the hybrid progeny. Among 89 C. lutchuensis hybrids, 62 have flowered and all of these except four were fragrant. However, the flowers of most are small like the fragrant parent. Only six C. lutchuensis hybrids have flowers of sufficient size and quality to make them of possible commercial interest. Flowers of a few of the more attractive scented hybrids are shown in Figures 1, 2, and 3. One hybrid selection, 'Fragrant Pink,' Figure 4, a cross between C. rusticana 'Yoshida' and C. lutchuensis was named by the Plant Science Research Division in 1966. 'Fragrant Pink' is a loose-peony form flower, 2% inches across by 1% inches deep, medium pink, with 10 petals and 12 petaloids. The fragrance of the flowers is similar to that of *C. lutchuensis* and it represents one improvement in flower size and form from that of *C. lutchuensis*, which is 1% inches across, white, and single.

The majority of the less-known species have not gained prominance because the overall ornamental quality of the plants and flowers is inferior to the varieties now in cultivation. However, it is among these less-known species that desirable traits exist which are now lacking in present garden cultivars. The problem is to transfer the best traits into new hybrids that are commercially acceptable.





FIGURE 1. Highly fragrant hybrid of C. japonica \times C. lutchuensis.



FIGURE 2. Mildly scented hybrid of C. rusticana × C. fraterna.

The potentialities of accumulating desirable characters through hybridization becomes increasingly evident as more interspecific and intergeneric hybrids reach maturity. This is merely the first step toward the ultimate goals. The interspecific F₁ hybrids are in most cases, only the raw materials from which future breeding projects may be developed. Selection among 2nd and 3rd generation hybrids probably will be necessary to sift out undesirable characteristics.

It is among these 2nd and 3rd generations that selection among large



FIGURE 3. Strongly scented hybrid of C. sasanqua \times C. miyagii.



FIGURE 4. Hybrid 'Fragrant Pink'; C. rusticana × C. lutchuensis.

populations may be necessary and it is here that the amateur camellia enthusiast can greatly assist in the breeding for new and unusual camellia forms. Scions of all except the most recent interspecific hybrids are available to camellia breeders by writing to the U. S. Plant Introduction Station, Glenn Dale, Maryland 20769. Crossing these hybrids with the more fertile of the commercial cultivars should provide a highly heterozygous seedling progeny. From among these may be discovered potentially valuable new types which could lead to an entirely new race of garden camellias.

AN INVITATION TO JOIN AMERICAN CAMELLIA SOCIETY 1971 DUES \$7.50 JOINT HUSBAND-WIFE \$12,00

The American Camellia Society is a worldwide scientific, horticultural and hobby organization of more than 7,500 members in 40 states and 15 foreign countries. The Society was founded as a non-profit organization in October, 1945.

Among other benefits, membership entitles you to four issues of THE CA-MELLIA JOURNAL issued in January, April, September and November. Each issue of 32 to 40 pages of interesting articles, news and photographs, has a fourcolor reproduction of a new variety on the cover.

Each December, members receive a handsome cloth bound Yearbook of some 300 pages, containing the latest information on both greenhouse and outdoor culture, breeding, disease control, history, arrangements, descriptions of gardens and other articles of interest. There are several full color plates of new varieties in addition to numerous photographs illustrating the articles. A roster of members is published in each Yearbook. All new varieties registered with the Society are described. Our 7 acre Camellia garden and headquarters building are open to visitors the year round.

The American Camellia Society will welcome you to its program of mutual pleasure and interest. For your convenience an application blank is printed below.

Annual Membership \$7.50

Please Make Payment To

AMERICAN CAMELLIA SOCIETY P. O. BOX 212 Fort Valley, Georgia 31030

Please enroll the undersigned as a member and bill for \$7.50 \Box or enclosed herewith is \$7.50 \Box .

Please send me the current Yearbook at \$4.00 . I understand that the \$7.50 covers the cost of the Yearbook to be issued in December.

Membership runs from January 1st to December 31. All journals for the current year will be sent and the Yearbook will be forwarded when published.

Print or Type Name ____

Address

STREET OR BOX

CITY

STATE

ZIP

40

BEA & NEAL ROGERS



RT. 3, BOX 546, THEODORE, ALABAMA 36582

PHONE (205) 973-2420

Presents

the girls of

'VEBNA HALBERT'—New for 1971. A beautiful large pink semi-double. Named for our lovely, FIRST LADY.

'BEA ROGERS'-An extra fine VL different white for 1972.

'DOBOTHY COPELAND'-A fine white for a gracious lady.

'ELIZ. H. HAYNE'-Never shown originally at its best. VL red and white,

'HELEN BOWER'-Unsurpassable at its best,

'HELEN VAN AIKEN'-Large light pink loose peony, Very nice,

'JUNIOR MISS.'-A very good sweet pea.

'LUCHLE J. HARRIS'—Large to VL semi-double to anomone form. White with blush pink on edge of petals.

'LUBLENE WALLACE'-Large rose pink formal.

'Miss Lu Ass'-A fine large var. pink and white flower.

and the things from,

'AQUARIUS'—A medium late blooming pink formal, new for 1971. 'BLACK LACE'—Extra fine—black red medium formal double. 'FASHIONATA'—A consistent Court of Honor pink. 'FEATHERY TOUCH'—An unusual crinkled white sport. 'JOHNNIE REB'—A fine VL white with red stripes. 'PHATES GOLD'—Can be best in show. VL black velvet red. 'VEHAED BEAUTY'—An overlooked JM Haynie VL pink formal.

SEE US FOR ALL THE NEWER VARIETIES-GRAFTS AND SCIONS

WE SELL GIB Wet, Dry, Otherwise

7cc—13.5 M—\$1.25 1 Gram—\$4.25

5 Gram-\$17.00

7cc-15. M-\$1.50 1 oz.-\$42.00

ALL GIB SENT FIRST CLASS MAIL

Address Correction Requested Return Postage Guaranteed

S. C. CAMELLIA SOCIETY P. O. Box 177 Lexington, S. C. 29072 BULK RATE U. S. Postage PAID Columbia, S. C. Permit No. 645



At Bryan's we sell communication, not just paper and ink.

At Bryan's printing goes beyond ink on paper. It's the business of communication Printed materials we've produced for South Carolina companies are helping them sell their products throughout the nation. Because the materials communicate. As a result, they're helping create new jobs, bigger psychecks, and a better way of life for South Carolinians in every corner of the state.

Ask a Bryan's specialist about communication. That's what printing is all about At Bryan's we self communication, not just paper and ink.



P. O. BOX 368 COLUMBIA, SOUTH CAROLINA 29202