Carolina Camellias

'Elsie Jury'

A Hybrid (*C. saluenensis* x *C. japonica* 'Pukekura White') originated by L. E. Jury, New Zealand. Picture Courtesy of American Camellia Society.

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Carolina Camellias

Published three times annually—Winter, Spring, Fall—for the members of the South Carolina, North Carolina and the Virginia Camellia Societies.

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In This Issue

SOUTH CAROLINA CAMELLIA SOCIETY

President's Message

P. A. Dahlen

Dear Members:

Our camellia season has gotten off to a wonderful start—the fall shows have been very successful with large entries of excellent quality flowers. If you have not renewed your membership in the South Carolina Society for 1976, be sure to do this at once. We need the continued support of each member and hope that most of our members will be able to enroll new members to our Society. Membership is very worthwhile, is a big bargain, and you will be doing a camellia friend or acquaintance a big favor by having them fill out a membership application form appearing elsewhere in this issue.

This publication, *Carolina Camellias*, is a vital means of communicating with our members. Our Editor is anxious to receive articles or news items about camellias or camellia people. One does not need to qualify as a writer to supply this information. Send your thoughts and ideas to Rosemary Elliott and she will fit the information into the publication.

Make a resolution to attend as many camellia shows and exhibit as many blooms as possible this season. I promise that you will be a winner because of the fine people you will meet.

Paul A. Dahlen

NORTH CAROLINA CAMELLIA SOCIETY

President's Message

Bill Howell

Dear Members:

The Tidewater Camellia Club of Wilmington, N. C. and the North Carolina Camellia Society held a special fall Camellia Show in Loving Memory of Martin G. Schnibben, in Wilmington, November 15 and 16, 1975. The show was held in conjunction with the 26th Annual Fall Meeting of the American Camellia Society. Camellia fanciers from far away as California and Washington took time out from their busy schedules to attend this meeting. Many brought blooms to enter into the show, even though the unseasonably warm weather for the past several weeks in the southeast caused blooms to peak before show time.

Much credit for the beautiful show must go to the exotic hanging baskets and artistic arrangements.

I wish to remind members of the N. C. Camellia Society that the Spring Meeting will be held in Fayetteville, N. C. on February 14 and 15, 1976 with the Fayetteville Club serving as host.

Hope to see as many of you as possible at this meeting and bring lots of blooms.

Bill Howell

VIRGINIA CAMELLIA SOCIETY

President's Message

ERNEST E. WOODEN, JR.

DEAR MEMBERS:

Our September membership meeting (which was arranged by Mrs. M. K. Crockett Sr.) was really enjoyed by all:

1st. Mr. & Mrs. Alison J. Parsons, charter members of the Virginia Camellia Society, gave a very interesting history of the Virginia Camellia Society. They showed pictures, trophys, programs, etc.

2nd. Mr. Eugene M. Worrell demonstrated how to use gibberellic acid and how to prepare blooms for shows. The "Gib" has become of growing interest in this area.

3rd. Nice door prizes were given.

On November 1 and 2 our Fall Show was held at Coleman Nursery Gardentown in Portsmouth, Va. Members placed their blooms (nearly 200) on Saturday afternoon—A social hour and dinner followed. The winners were:

Best in show: Variety—'NELLIE MCGRATH'. Entered by Mr. & Mrs. Samuel F. Thornton.

Runner up: Variety—'IMPERATOR FRENCH'. Entered by Mr. & Mrs. Eugene M. Worrell.

Honor Court: Variety—'WHITE EMPRESS'. Entered by Mr. Grover C. Miller.

Honor Court: Variety—'PINK PERFECTION'. Entered by Mrs. M. K. Crockett, Sr.

Honor Court: Variety—'THELMA DALE'. Entered by Mr. Grover C. Miller.

Honor Court: Variety—'SIEUR DE BIENVILLE'. Entered by Mrs. M. K. Crockett Sr.

This show was a great success under the Chairmanship of Admiral Lester O. Wood.

Our next membership meeting will be held Thursday, February 12, 1976 in the Norfolk Botanical Garden auditorium and Mrs. Crockett has been busy planning a program you will not want to miss.

Our Spring Show will be held March 20-21, 1976, also at the Norfolk Botanical Garden auditorium. We urge all Camellia lovers, especially our new members, to "Gib" their Camellias on a regular schedule, in order that we will have a large participation of members and so we will have an outstanding display of blooms.

Best wishes to all for good health and plenty of beautiful blooms all through 1976.

Sincerely,
ERNEST E. WOODEN, JR.

SOUTH CAROLINA CAMELLIA SOCIETY

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Mr. Wm. G. Redwood	L. O. Wood	Eugene M. Worrell

Ex Officio:

Dr. J. M. Habel — Alison J. Parsons

Camellia Show Time Is Here

From now on there will be one or more camellia shows each week-end until spring. Make your plans now to attend as many shows as you can. You will experience a wonderful fellowship as you meet other camellia growers. This is also a time when you will have an opportunity to see many of the newest cultivars for the first time.

Camellia show time is also a time to exhibit your blooms. Regardless of whether you have one plant or several hundred, plan to exhibit your blooms at shows. Remember, it doesn't take but one bloom to win best in show. It has been done.

Keep in mind that the biggest blooms are not always the best. When selecting blooms for a show, select the fresh, perfect blooms. Do not select blooms with damaged petals or brown stamens.

There is an article in this issue on holding blooms that reach perfection days before show time and on grooming blooms before entering.

The article is expert advice on maximum protection through the use of chemicals and humidity. If you don't have the chemicals, however, blooms can be cut and quickly placed in water for a few hours, then refrigerated. Many varieties will stay in good condition for several days. Grooming is important. A perfect bloom is not very presentable if dirty and dusted with pollen. Above all, don't be bashful about entering.

EDITOR

Carolinians Join Gulf Coast Group

A fun place to be was Mobile in mid-August at the annual Gulf Coast Society meeting where the ball started rolling Friday evening at a cocktail party at the headquarters motel; Rodeway Inn on Government. Then more than 100 folks moved half way down Dauphin Island Parkway to Belle Fontaine Nursery where Bea and Neal Rogers with Elaine and Jim Smelly hosted a fish fry in the greenhouse. Sumptuous indeed was the fare including Creole shrimp dispensed by Bea and mountains of delicious fried fish cooked by Jim.

Greenhouse visiting was the order of Saturday morning with the business meeting called to order by Dr. Berridge at 1:30. Following reports by officers and committee chairmen and plans announced for the joint meeting in November of the Texas and GCCS Societies in Nacogdoches, a panel of experts discussed program planning for local societies and organization of camellia shows. Panel members were: Son Hackney, Bea Rogers, A. B. Cooper, John Geiser, Hody Wilson, Gladys Menard, T. E. Lundy, Marshall Rhyne, Charles Malone and Bill LaRose.

The group voted again to give $100 to ACS and 1975-76 dues are needed to fulfill this.

South Carolina, now having eight members, was admitted to membership which makes "serving the South and Southeastern states" a reality. David Elliott of Clinton was named S. C. vice president at the election

Carolinians Tom Evans and Carroll Moon at Gulf Coast meeting.

of new officers, who are: Dr. H. L. Berridge, president; Charles B. Malone, Jr., vice president-at-large; Mrs. John Comber, secretary; John Terry, treasurer. Vice presidents for the other states are: Carlos Deupree, Alabama; Robert A. Hill, Florida; Mrs. Boynton Cole, Georgia; Lloyd Heurkamp, Louisiana; Tom Clower, Mississippi; S. H. Hackney, North Carolina; Dr. Harry T. Moore, Jr. Tennessee; and W. T. Adkisson, Texas.

Chairmen of committees and other appointments are: R. A. Sansing, Jr., liaison; Dr. Alvin Johnson, research; W. E. Sellers, historian; Mrs. James L. Smelly, parliamentarian; and Mrs. A. B. Cooper, editor.

A happy hour and banquet Saturday evening at Constantine's concluded

(Continued on page 11)

The Urge to Kill and Love at the Same Time

By J. O. "Jack" Jackson, Wilson, N. C.

I've had right good results each spring by painting three inches of the trunks of my camellias with Cygon. At the lunch table one Friday back in March, I said, "Oh well, I'm off tomorrow, I guess I'll paint my camellias with Cygon but I dread it. When I put my mask on and breathe, it fogs up my glasses so badly that I can't see the plants, much less to mark off three inches."

I had bought a full quart of Cygon and had put it out in the greenhouse. When I came home that night my wife Irene (Bless her dear heart) said at the supper table, "Well, you don't have to worry about painting your plants tomorrow! I knew you would be tired so I did it for you." I was afraid to go out to the greenhouse! (One thing my wife is not and that is a Horticulturist) I got up and went to the greenhouse and opened the door. The odor knocked me down! I noticed that the full quart of Cygon was gone and there by the empty bottle was a three inch paint brush Irene had used to put it on with. She had started at the bottom and gone all the way to the top. If the plant was five feet tall, that's how far she went up. No kidding, on some of the plants I could see where the Cygon had run down the trunk and formed a puddle. I knew they were gone!!

The first thing that came to my mind was to come in the house and cut her head off! I stopped at the door and said a little prayer. Then it came to me that she was only trying to help me out—she does all right out of the camellia business! Each day one or two would die—every leaf fell off. She would go out just before I came home and pick the dead leaves up and put them in the garbage can. For the next two months the city had to put on an extra trash truck to keep the dead camellias picked up in front of my house!!!

So listen fellows, don't come in at night telling your wife how tired you are, cause if you have a wife that loves you—and is as considerate as mine—she just might go out there and help you out!!! (*CLEAN OUT-THAT IS*) See you at the show. . . .

ACS Meets in Wilmington

Officers and members of the ACS held their annual meeting in Wilmington, N. C., on November 13, 14, 15, 1975. The meeting was held in conjunction with the Fall Show of the Tidewater Camellia Club. Approximately 200 members were registered at the Wilmington Hilton, headquarters for the three day events.

Following a directors meeting on Wednesday, the general program was begun on Thursday with a talk on prevention of plant diseases by R. K. Jones of North Carolina State University. The members then boarded buses for a tour of Airlie Gardens, then proceeded to beautiful and ancient Orton Plantation for an outdoor barbecue.

Mr. & Mrs. C. H. Hendrix of Greer, S. C. admire their winning bloom at Wilmington.

Saturday morning was spent entering blooms and touring old Wilmington. At 3:30 p. m. the show opened to a beautiful display of quality blooms. The general meeting and banquet Saturday evening was highlighted by awards and recognitions. Jay Ellis was commended for his work in securing over 800 new members for ACS. Son Hackney was given an appropriate gift for his work as ACS Social Director and received official recognition as such. A drawing was held for a beautiful Boehm limited edition, Ernest Barnes porcelain camellia, which was won by Mrs. Clyde X. Copeland. Les Marbury was commended for his tireless contributions to the world of camellias in recognition of which he was appointed a Fellow.

They Think It Can't Be Done, but-Prizewinning Blooms Are Easy-Tell A Neighbor How

All of us who grow Camellias for competitive showing or who take the hobby seriously only for our own visual pleasure have experienced the awe and admiration of neighbors, friends and observers who see the fruits (or should I say blossoms) of our efforts. Many of these admirers have plants of their own that they put in as landscape shrubbery or that was already on their property when they bought it, or maybe they planted camellias and lost them for a variety of reasons, and then became discouraged.

Most of these people believe that there's a secret to the growing of quality blooms and that only those "in the know" or those willing to invest considerable time and effort and money could possibly win a blue ribbon, much less the coveted "best" awards.

It's time we exploded this myth and as a result gain many more "Camelliaphyles" and members of our most enjoyable camellia societies. I don't mean to imply that the frequent show winners are not a result of invested time and effort. Certainly you don't reach the head table consistently without careful and studied cultural practices. What I am saying is that it's not as hard as the uninitiated may think. Certainly, Camellias do not require as much attention as, for instance, roses. Pests can be controlled with a couple of sprayings a year, a simple fertilization program will give favorable bloom production and dis-budding, leaving only one bud to a terminal will increase blossom size. Cautions against planting too deeply (set it a little higher than it was growing when you bought it) and precautions against over-fertilization will result in potential winning flowers. Introduce your friends and neighbors to gibberellic acid by sharing your own. Gib some buds for him and then visit his garden before a local show. Select some of his better blooms and then take him, along with his blooms to the show with you. If he wins some ribbons, and he probably will, he may be hooked and one or more of our societies has grown by another member.

As mentioned earlier, many people already have plants and many of these plants are healthy, only awaiting the drop of gibberellic acid to reveal their potential to a delighted owner. It's surprising how many people are unaware of gib and how fascinated they are to discover that blooms may be enjoyed in the Fall before winter freezes destroy the buds. We gibbed for some neighbors this Fall and took some of their blooms to the Greenwood show. They won some ribbons and told their

friends and neighbors about it. As a result we're still getting requests for information on the availability and use of gibberellic acid. We expect some new subscribers to "Carolina Camellias" this year and more next year as those who were too late to try gib this year discover the pleasure of Fall blooms in 1976.

New members are essential to the life of our society. New members come only from those people who become interested enough in our hobby to want to know more about it. All of us can contribute to this interest by making more people aware of the joys and fellowship of growing camellias. Try it, and watch our societies grow.

EDITOR

—CAROLINA CAMELLIAS—

"Old Timers" Meet at Ocean Isle Beach

The Old Timers North and South Carolinas Camellia Club held their Fall meeting at the beach home of Marshall and Ethel Rhyne—"Rhyne's Den" at Ocean Isle Beach, North Carolina.

Electing new officers was a complete turmoil! After two hours of debate and downright arguing it was decided that in honor of Mr. Carroll Moon's 70th birthday, he was to be the first elected president of the "Old Timers".

In conclusion this was decided unanimous by all members present Ethel and Marshall Rhyne, Pearle and Carroll Moon, Mrs. Vanetta Phillips, Anne and Son Hackney. Absent members, Dottie and Tom Evans voted in proxy which the secretary held.

After Moon Wine and a delicious dinner by Ethel the meeting was adjourned until 1976—same time, same place.

—CAROLINA CAMELLIAS—

Carolina Joins Gulf Coastal Group

(Continued from page 7)

ed the meeting. Joe Pyron spoke in behalf of ACS and Kay (Mrs. H. L.) Berridge gave memorial tributes to Dr. Lee Turlington, Lila (Mrs. Holden) Naff, Minta (Mrs. Harold Cawood and Dr. C. C. Young. The traditional silver wine cooler was presented Dr. Berridge. Special recognition was given Mrs. A. B. Cooper, editor of *Gulf Coast Camellias*. She was presented a beautiful silver chafing dish. Dr. Berridge showed slides and Mrs. Berridge gave the commentary on 10 shows that they attended during the year. Lucky winners of new varieties of camellia plants given by Dunn's Nursery and arranged by John Terry were Frank Huebscher, Charles Malone, June (Mrs. Harry) Moore, Elvige (Mrs. Oscar) Elmer and Charlene Lee of Little Rock, who with husband, Dr. Fred, are the first Arkansas members.

Anyone Can Graft—

The late Judge Arthur Solomon of Savannah, one of our founders and a president of ACS liked to tell that he was a member of the Board of County Commissioners for 30 years and grafted most of that time. Judge loved a joke, even one at his own expense.

Almost anyone can learn to graft even if he wears bifocals. A steady hand and not too much abdomen are necessities. One easy demonstration should be sufficient, or follow these simple instructions. Beginners often get excellent takes, sometimes better than experienced grafters. Maybe you have received a rare scion from a friend or from across the country or even Australia, New Zealand or Japan. Graft it yourself. There are a few basic principles to be observed then you may improve your technique as you learn how.

For some unknown reason people confuse grafting with hybridizing. We hybridize to produce something new; we graft to propagate what we would like to perpetuate.

What are the advantages of grafting over other methods of propagation such as rooting? We can produce a large blooming size plant of a rare variety in two years time by grafting; whereas growing a flowering size plant from a cutting takes several years. We often have old or unsatisfactory varieties which may be grafted to a more desirable variety. Some varieties grow very slowly on their own root system but produce a vigorous plant when grafted on fast growing understock.

What understock should I use? Never use a sick plant as understock. Healthy *C. japonicas* or *C. sasanquas* should be used. *C. japonica* 'HALIFOLIA' is highly recommended. Seedlings not worth propagating make excellent understock but root prune if you plan to move the plant later on. 'PROFESSOR SARGENT', 'DEBUTANTE' or other vigorous growing, fibrous rooted varieties make good understock. *C. sasanquas*, especially the variety 'DAY DREAM', are very satisfactory. While we now know that Sasanquas are not as cold hardy as Japonicas, Sasanqua roots have greater tolerance to waterlogged or poorly drained soil.

When should I graft? Grafts may be made at any season of the year; however, the best time seems to be shortly before new growth begins in early spring. Late January to early March seems to be preferred. Others graft in December. Summer grafts are often made on understock on which the earlier graft failed to take. It is more difficult to graft when the bark slips, that is, when the cambium layer is very active in growing.

Most growers prefer to graft on rootstock established in the ground for a year or more, or at least one winter. Others report good results

with bare r o o t e d understock just planted. Some prefer finger-size diameter stocks, others the size of a quarter or half dollar. L a r g e old plants may be grafted using a slightly different technique of sawing a cleft or making the cleft to the side rather than through the center. Saw or otherwise cut the stem a few inches above ground. Trim with sharp knife to insure a smooth surface. A heavy knife or grafting tool is used to make the cut or cleft through the center of the cut. Do not split much deeper than the scion end to be inserted. Open the cleft with a screwdriver or wedge so as to insert the scion.

Scions of the desired variety may be secured some weeks ahead of grafting and stored in a polyethylene or freezer bag in the hydrator of your refrigerator. They are easily mailed across country or overseas. Most prefer scions with only one or two "eyes" or growth buds. The lateral buds work as well or better than the terminal bud. Take scion or "wood" from the most recent year's growth. Trim with sharp knife or razor blade to a tapering wedge shape. The front side should be slightly wider than the side to be inserted toward the center. Cut tip half of leaves off.

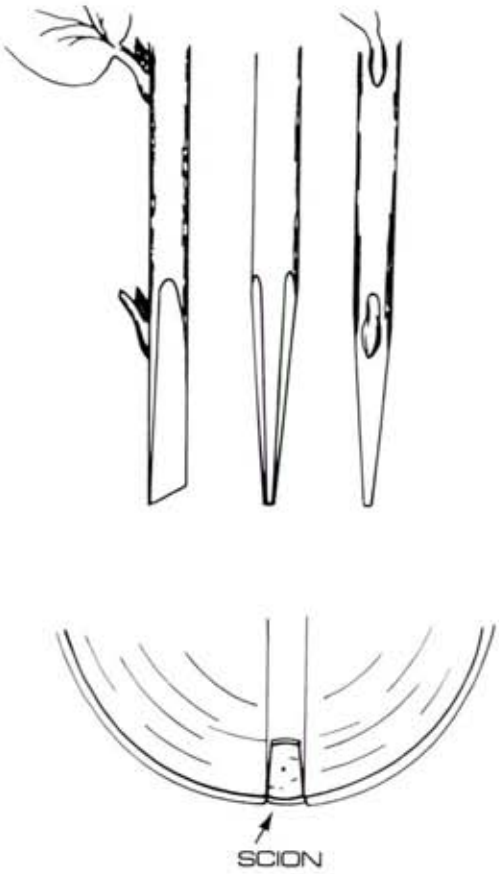
At this point it is well to use a solution of captan to prevent infection. Dip tools, scion and paint stump with the solution. Next dip the end of the scion in a hormone rooting powder and tap off excess powder.

Carefully insert scion so as to match cambium layers (the narrow green layer between bark and wood). Some grafters place the scion at a slight angle leaning toward the center with the lower tip protruding. This insures crossing of the cambium layers. Remove screwdriver or wedge. If the understock is 1/2 inch or more in diameter the stem will hold the scion tightly in place. If a larger stem it may be necessary to leave a wedge of wood inserted to relieve pressure. Smaller understock may require a string or rubber band to hold scion in place.

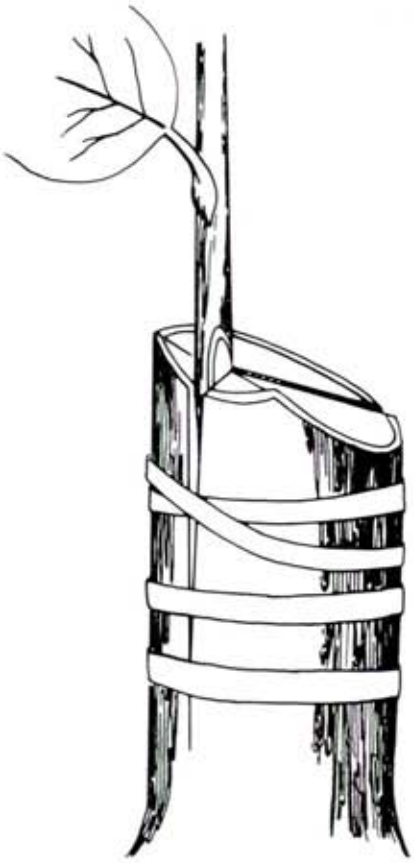
Most prefer to paint the cut surfaces with *water soluble* asphalt such as "Tree Kote." Do not use an oily tree paint as this retards healing. Others heap sand or soil over the juncture. Grafting wax or cloth isn't necessary.

A cloche made by removing the bottom from a gallon glass jug. An old battery jar or large paper or plastic cups are equally effective. Cover the cloche with a paper bag or piece of burlap. Protect with stakes or a bean hamper.

After 10 days or two or three weeks examine to see whether scion is taking. After the scion begins to grow, raise the cloche slightly to admit air and light. Finally remove cloche entirely but provide shade with a square of burlap suspended on stakes or use a beam hamper. In dry hot weather it may be necessary to replace the cloche until the new growth hardens a bit.



Upper drawings show scions shaped for insertion in stump. Lower—scion in cleft, cambium layers matched.



Scion inserted and bound in place by rubber band. Note slightly slanting surfaces of stump.

Examine during summer to prevent shoots from growing up from understock.

On large understock it is well to insert two or more scions to insure success. It is best not to use scions of different varieties on same understock. Differences in growth habit and time of blooming make this undesirable. A sport of the same variety may well be used. The various 'Betty Sheffield' sports are often grafted on same understock.

Some prefer to remove all but one scion after a good take is assured.

There are many fine points which grafters use with great success. Only the basic steps are covered here. We would welcome additional fine points you have found successful.

Top Working Grafts

This method uses a polyethylene bag to cover the scion and union of the graft. Polyethylene refrigerator bags are transparent to light and permeable to oxygen and carbon dioxide but not permeable to water vapor. These properties allow photosynthesis to continue in the leaves of

the scion but do not allow water loss from the atmosphere surrounding the scion.

This method has been used successfully in winter (January, February), spring (April), and fall (September to December) but it has not been tried at other times of the year. The procedure is as follows:

1. Make a cleft graft at the junction of a lateral branch or just above a prominent bud (leaf foliage on the stock). The graft may be made 1 to 3 feet or more above the base of the plant.

2. Cover all cut surfaces with a grafting compound (e.g., Tree Seal or Tree Heal) to prevent drying and damage by molds or bacteria.

3. Dust or spray the scion and union with fungicide.

4. Fit a small (approximately pint size) polyethylene bag over the scion and tie it securely around the union to maintain humidity surrounding the scion.

5. Take a paper bag, about No. 6 size, and cut a window, 2-3 inches square in one side to let in light for photosynthesis. Fit the bag down over the polyethylene bag with the window facing north. This is to keep out the direct rays of the sun that may cause the temperature around the scion to rise too high.

6. Thumbtack the paper bag to a stake to keep it from collapsing onto the scion.

7. When the scion starts growth or in about two months' time, loosen the bottom of the polyethylene bag to let in air from the bottom and allow the scion to slowly adjust to lower humidity. After a few days the bag may be removed, but leave the paper bag over the graft until you are sure that the scion has hardened.

8. Leave the scion foliage on the plant until the scion is growing rapidly and then cut it off.

The above described grafting method is not of commercial value but it will allow the home propagator to graft plants in the garden.

Show Results

COLUMBIA, S. C., October 18-19, 1975

Best Japonica over 5"–'Tiffany, Var.'–Mr. & Mrs. Chas. H. Hendrix
Runner up–'Gus Menard'–Mr. & Mrs. D. G. Elliott
Best Japonica under 5"–'Betty Sheffield Sup.'–Mr. & Mrs. F. N. Bush
Runner up–'Glenwood, Var.'–Mr. & Mrs. D. G. Elliott
Best White Japonica–'Charlie Bettes'–Mr. & Mrs. D. G. Elliott
Best Hybrid-Retic Parentage–'Howard Asper, Var.'–Mr. & Mrs. D. G. Elliott
Best Hybrid-Non Reticulata–'Anticipation, Var.'–Mr. & Mrs. D. G. Elliott
Best Miniature–'Little Man'–Mr. & Mrs. F. N. Bush
Best Seedling–Dr. & Mrs. H. Racoff
ACS Gold Certificate–Mr. & Mrs. D. G. Elliott
ACS Silver Certificate–Mr. & Mrs. Jack Teague

COURT OF HONOR:

Mr. & Mrs. W. C. Robertson–'Mary Alice Cox', 'Carter's Sunburst, Pink', 'Helen Bower', 'Rena Swick, Var.', 'Mathotiana Supreme, Var.'
Mr. & Mrs. D. G. Elliott–'Fashionata', 'Arch of Triumph', 'Alta Gavin', 'Valentine Day, Var.'
Mr. & Mrs. F. N. Bush–'Miss Charleston, Var.', 'Bart Colbert, Var.'
Mr. C. T. Freeman–'Snowman'
Mr. & Mrs. Jack Teague–'Dr. Burnside, Var.'
Dr. & Mrs. H. Racoff–'Wildwood Sport'
Mr. W. T. Sheperd–'Mathotiana'
Dottie & Tom Evans–'Adolph Audusson'

GREENWOOD, S. C., October 25-26, 1975

Best Japonica in Show–'Clark Hubbs, Var.'–Mr. & Mrs. F. N. Bush
Best Very Large Japonica–'Mathotiana Supreme, Var.'–Mr. Jack Hendrix
Best Large Japonica–'Ville De Nantes'–Dottie & Tom Evans
Best Medium Japonica–'Junior Miss'–Mr. Jack Hendrix
Best Small to Miniature–'Fircone, Var.'–Mr. & Mrs. F. N. Bush
Best White Japonica–'Charlie Bettes'–C. T. Freeman
Best Very Large Hybrid–'Dr. Clifford Parks'–Mr. & Mrs. D. G. Elliott
Best Large Hybrid–'Forty-niner, Var.'–Mr. & & Mrs. W. C. Robertson
Best Medium Hybrid–'Gay Time'–Mr. & Mrs. D. G. Elliott
Best Seedling–Mr. Jack Hendrix
Best Sasanqua–'Oleifera'–Mrs. R. W. Hart
Best Bloom from Greenwood County–'Mr. Sam'–Mrs. Tommie Wingard
ACS Gold Certificate–Mr. J. A. Timmerman
ACS Silver Certificate–Mr. & Mrs. Jack Teague

COURT OF HONOR:

Mrs. & Mrs. W. C. Robertson–'Francie L',–'Mandalay Queen', 'Marie Bracey, Var.', 'Fashionata'
Mr. C. T. Freeman–'Lady Kay', 'Tiffany'
Mr. & Mrs. F. N. Bush–'Carter's Sunburst, Pink, Var.', 'Saudade De Martins Branco'
Mr. J. A. Timmerman–'Betty Sheffield, Supreme'
Mr. & Mrs. D. G. Elliott–'Prelude'
Mr. & Mrs. Haywood Curlee–'Sieur de Bienville'
Mr. & Mrs. S. G. Holtzclaw–'Valentine Day, Var.'

SAVANNAH, GA., November 1-2, 1975

Protected

Best Japonica over 4½"–'Guilio Nuccio, Var.'–Mr. & Mrs. D. G. Elliott
Best Japonica under 4½"–'Sawada's Dream'–Mr. & Mrs. D. G. Elliott

Unprotected

Best Japonica over 4½"–'Mary Alice Cox'–Mr. Cheves Oliver
Best Japonica under 4½"–'Sieur de Bienville'–Mr. Jack Thigpen
Best White Japonica over 4½"–'Gus Menard'–Mr. & Mrs. Gus Dubus
Best White Japonica under 4½"–'Il Cigno'–Mrs. G. Weigh
Best Hybrid over 4½"–'Francie L'–Mr. & Mrs. D. G. Elliott
Runner up–'Otto Hopfer'–Mr. & Mrs. D. G. Elliott
Best Miniature–'Fircone, Var.'–Mr. & Mrs. D. G. Elliott
Best Seedling–'MB-1'–R. E. Dodd

COURT OF HONOR–*Protected:*

Mr. & Mrs. D. G. Elliott–'Helen Carlin', 'Tomorrow Park Hill', 'Mark 11, Var.', 'Mathotiana Supreme'
Mr. C. T. Freeman–'Snowman', 'Clark Hubbs, Var.'
Dr. & Mrs. H. Racoff–'Lucy Stewart'

COURT OF HONOR–*Unprotected:*

Mr. J. M. Jones–'Miss Lyla', 'Lady Kay'
Mr. & Mrs. G. R. Dubus–'Morris Moughan', 'Ville de Nantes'
Mrs. W. V. Tyson–'Ella Ward Parsons' 'Cover Girl'
Jeanette & John Graham–'Tiffany, Var.'
Jack Thigpin–'Betty Sheffield, Blush'
Mr. W. T. Sheperd–'Governor Mouton'

MASSEE LANE, GA., November 8-9, 1975

Best Bloom in Show–'Clark Hubbs, Var.'–Mr. & Mrs. D. G. Elliott
Runner up–'Pink Diddy'–Mr. & Mrs. Chas. H. Hendrix
Best Large Japonica–'Mathotiana Supreme'–Mr. M. H. Rhyne
Best Medium Japonica–'Magic City'–Mr. Robert Alexander
Best Small Japonica–'Grace Albritton'–Mr. M. H. Rhyne
Best Miniature Japonica–'Man Size'–Mr. Frank M. Houser
Best White Japonica–'Helen Christian'–Mr. & Mrs. D. G. Elliott
Best Reticulata Hybrid–'Francie L'–Mr. & Mrs. D. G. Elliott
Best Non-Retic Hybrid–'Elsie Jury'–Mr. & Mrs. D. G. Elliott
Best Tray of Three–'Betty Sheffield Special'–Mr. J. V. Jackson
Best Tray of Five–Mr. & Mrs. W. C. Robertson
Best Sasanqua–'Shishi Gashira'–Mr. Eugene Ussery
David Coleman Strother Award for Best 'Ville de Nantes'–Drs. Suarez & Swilling
Peoples Choice Award for Best 'Snowman' Bloom –Mr. & Mrs. D. G. Elliott
Best Bloom by Member of Middle Ga. Camellia Society–'Aztec'–Mr. Frank D. Jamison
Best Mutant–'Sport of Tomorrow Tropic Dawn' –Mr. Fred A. Martin
Best Japonica Seedling–'MS-1-3-2, Var.'–Mr. R. E. Dodd
Best Hybrid Seedling–'Hyb. 1-1-30'–Mr. R. E. Dodd

Best Sasanqua Seedling–Mr. & Mrs. Walter Morris
ACS Gold Certificate–Mr. & Mrs. D. G. Elliott
ACS Silver Certificate–Mr. Frank M. Houser

WILMINGTON, N. C.–November 15-16, 1975

Best Japonica Protected–'Carter's Sunburst Pink, Var.'–Mr. & Mrs. C. H. Hendrix
Best Japonica Unprotected–'Mary Agnes Patin, Var.'–Bill & Molly Howell
Best White Japonica–'Gus Menard'–Mr. & Mrs. D. G. Elliott
Best Miniature–'Pink Smoke'–Mr. H. T. Moore
Best Retic or Retic Hybrid–'Francie L'–Mr. & Mrs. D. G. Elliott
Best Non-Retic Hybrid–'Elsie Jury'–Mr. & Mrs. D. G. Elliott
Best Tray of Three-Protected–'Clark Hubbs, Var.' –Mr. & Mrs. J. K. Blanchard
Best Tray of Five-Protected–Mr. & Mrs. Jack Teague
Best Tray of Three-Unprotected–'Pink Perfection' –Col. & Mrs. J. W. Hollstein
Best Tray of Five-Unprotected–Bill & Molly Howell
ACS Gold Certificate–Mr. & Mrs. Jack Teague
ACS Silver Certificate–Bill & Molly Howell
Best Seedling–Mrs. Eleanor Grant

CHARLESTON, S. C., November 22-23, 1975

Best Bloom, Protected–'Gus Menard'–Dave & Rosemary Elliott
Best Bloom, Protected–Runner-up–'Carter's Sunburst, Pink Var.'–Dave & Rosemary Elliott
Best Hybrid–'Valentine Day'–Mr. & Mrs. Bill Watson
Best Hybrid, Runner-up–'Aztec'–Dave & Rosemary Elliott
Best Japonica, Unprotected–'Funny Face Betty' –Bill & Molly Howell
Best Japonica, Runner-up–'Tiffany'–Bill & Molly Howell
ACS Gold Certificate, Protected–Mr. & Mrs. Jack Teague
ACS Gold Certificate, Unprotected–Bill & Molly Howell
ACS Silver Certificate, Protected–Dave & Rosemary Elliott
ACS Silver Certificate, Unprotected–Mr. & Mrs. Gus Dubus, Jr.

—CAROLINA CAMELLIAS—

"Aiken Mini-Show Stimulates Novices"

By G. R. Caskey, Jr.

The Aiken Camellia Club staged its fall Mini-Show on Saturday, October 11, 1975 in the lobby of the Farmers and Merchants Bank in downtown Aiken. Featuring both Camellia Japonica and Sasanqua, the show attracted well over 100 viewers during the four hours it was open to the public.

This show was initiated in 1971 as a means to introduce novice growers in Aiken County to exhibiting their blooms. Entrants are restricted to those who have not won silver awards in accredited Camellia shows. By providing a forum where novices compete with one another, the show introduces new comers to Camellia horticulture to the technique of caring for and of showing their blooms and helps to generate interest in the upcoming shows during the fall and winter months.

The bloom judged Best-in-Show was a white, 'Purity', exhibited by B. G. Beier of N. Augusta, S. C., the current President of the Aiken Camellia Club. Other winners and their blooms were: Best Red, 'Mathotiana', Mrs. G. W. Stewart of Aiken; Best White, 'White Empress', Vivion de Witt of Aiken; Best Pink, 'Lady Clare', Bertie Bates of Aiken; and Best Variegated, 'Mathotiana Rubra', Geneva Maddox of N. Augusta, S. C.

Judging of the Mini-Show was very ably and efficiently handled by Betty and Buddy Pregnell of Charleston, S. C. and Florence Estabrook of Augusta, Ga. Our many thanks to them for their time and efforts.

We are grateful to our sponsor, The Farmers and Merchants Bank of Aiken, for their support and wish to acknowledge Mrs. Henrietta Rast for her efforts in helping to stage and publicize the show.

Backyard Hybridizing

By Dr. Robert K. Cutter, Berkeley, California
(Reprinted from ACS Yearbook 1964)

This is written to help pollen dabbers do their dabbing in a way that will give them greater satisfaction and greater possibility of achieving worthwhile results.

It is not written for those experienced in plant breeding. If the subject seems oversimplified, it is exactly what is intended. Most of what is written on this subject is overcomplicated for the amateur.

Most people become interested in the subject of producing new camellia varieties by finding seeds on their plants. In this case the seed parent is known but of course the pollen parent is unknown. They plant these seeds and only rarely are the results worthwhile. Furthermore, it takes them a number of years to find the futility and frustration of their creative efforts.

In the meantime, they may have taken to dabbing the pollen of one flower on the stigma of an open flower. Again disappointment and frustration follow because the pollen from the open flower itself or the bee from another flower usually beats them to it. By this time, they may become completely discouraged and quit, particularly if they look into the professional literature and find the suggested methods beyond them.

Furthermore, through these years it is rare that there has been any true and sustained objective. It is a shame that so much energy is wasted when there are so many worthwhile objectives and where the mechanics of striving for these objectives are relatively simple and well within the capabilities of the average camellia fan.

Species and Objectives

Most pollen dabbers will work exclusively with *Camellia japonica*. While it is unfortunately true that a superfluous number of camellias have been named and introduced simply because the flower form was slightly different from existing flower forms, there still remains a great deal of worthwhile improvement and refinement with the *C. japonicas* themselves.

To give a few examples of these worthwhile lines of endeavor, certain japonicas are far more cold hardy than others, and the range of blossom form and color among the cold hardy varieties is comparatively limited. Earliness of bloom is another desirable feature. This also ties in with cold hardiness in that the blossoms which come before a freeze are saved. Likewise, the very late bloomers may avoid the freeze.

However, any who are seriously interested in making contributions in this field should consider inter-specific crosses. An example of this would be *C. japonica* X *C. reticulata*. The Williamsii hybrids, for example, are

crosses between *C. japonica* and *C. saluenensis*.

And why is this so much more promising than simply crossing *C. japonica*? It opens up entirely new avenues. For instance, certain of the *C. reticulata*, such as 'Crimson Robe' and 'Chang's Temple', have large flowers of beautiful form and color and petal substance. These flowers are borne on a miserable, scraggly bush which does not do well in many places where *C. japonica* thrives. If a 'Chang's Temple' flower grew on an excellent *C. japonica* bush which would do well any place where japonicas are well grown, it would be a real advance. (Warning: *C. reticulata* 'Captain Rawes' pollen is usually sterile and it sets seed only extremely rarely. *C. reticulata* 'Crimson Robe', on the other hand, sets seed under favorable circumstances. Its pollen and 'Chang's Temple' pollen are fertile.)

Emasculating bud. Final cut made toward finger.

Emasculating the flower bud. The bud is supported with the left hand and the top is cut with right hand.

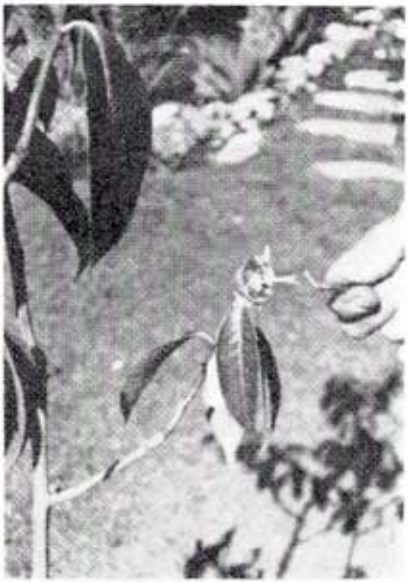
How wonderful it would be if we had a flower and bush of the *C. japonica* characteristics with a truly fragrant flower. There are fragrant camellia species such as *C. sasanqua* and *C. lutchuensis*. *C. lutchuensis* has been reported to cross more easily with *C. japonica* than does *C. sasanqua*.

Whatever you do and whatever you use, work toward some objective or objectives. Your success is likely to be greater if you have one or two, or at the most three objectives that you are working on at the same time rather than to have so many objectives that there is little chance of reaching any of them.

Undoubtedly you have heard of chromosomes and the difficulty of

crossing two species where the chromosome counts clash. However, one advantage you as a pollen dabber have over the hybridist—you don't know the things which are "almost impossible" and some of the best breaks can come from just this type of cross. If, later, you do get interested in chromosomes, you can study them (4).

If one goes back through the previous issues of the *Yearbook* of the American Camellia Society, one will find many descriptions of genera closely related to *Camellias*, such as *Gordonia*, *Franklinia* and *Tutcheria* (3). Probably hundreds or thousands of crosses would have to be made before one hybrid seed would set (if ever one did). But the mere difficulty of the task makes it a project which would not likely be attempted by a professional and makes it intriguing for an amateur or group of them, to whom time need not be equated with dollars.



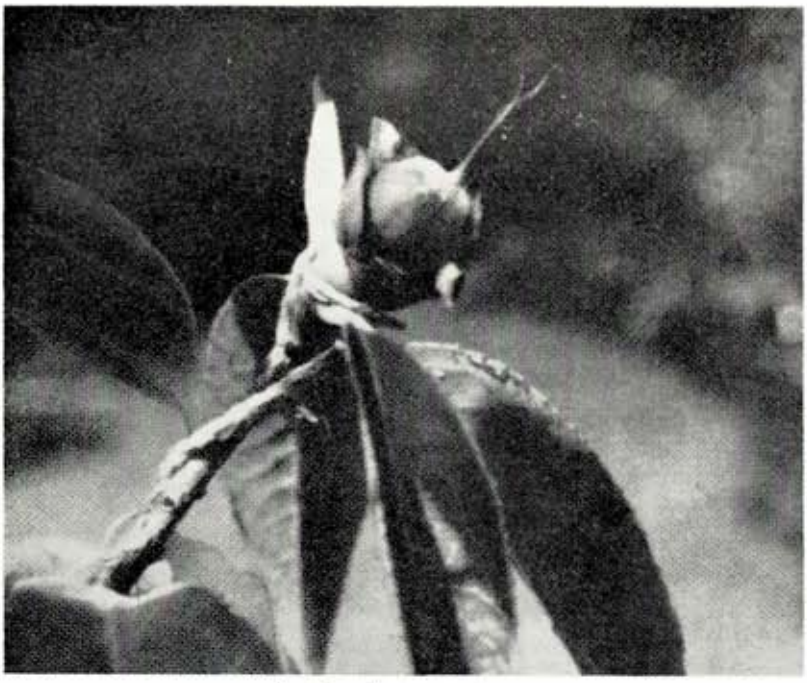
Applying pollen to emasculated bud.

Emasculated bud with label

Mechanics

The camellia flower is so built that results may be achieved without bagging as used by many professional hybridists.

If one is righthanded, an unopened bud is held in the left hand while the right hand holds a sharp knife or razor blade and makes a circular cut around the base of the bud, removing all of the sepals and petals above the cut and all the stamens but being careful not to cut the style (see illustration). If you have done this correctly, this leaves the style protruding from the base sufficiently so that there is little danger of insect transmission of foreign pollen to the stigma. This is spoken of as emasculating the flower.



Seed pod starts to form

To pollinate the stigma, apply the pollen directly from the anther if it is available. If the flowers bloom at different times, pollen may be kept by wrapping it in small pieces of tissue paper and placing the packets on cotton in a small ointment jar—the cotton overlaying dehydrated calcium chloride. (Most pharmacies have these materials.) Closely tightly the pollen storage bottle and keep it at food refrigeration temperature (40°±.)

It is usually best to choose as the female flower a mature plant having many good features and known to produce seed. It has been observed that pollen of a small flowered species on the stigma of a large flowered species is more likely to result in successful seed set than in the reverse (10). Pollen may often be obtained from quite double flowers in which anthers are not apparent unless one seeks for them diligently. Sometimes it is necessary to search many flowers before one another is found.

In choosing a bud for emasculating, be sure it is not so mature that its anthers may have already fertilized its own stigma. Visual examination of the anthers on buds in different stages of maturity will show clearly which buds should and which should not be used. Also rub the finger tip over the anthers and look for pollen rubbed off. If there is any doubt, *don't use the bud.*

For the very reason that immature buds are used, it is well to apply pollen on several succeeding days to

be sure that the stigma is in a receptive state, which is indicated when it becomes sticky.

Don't be parsimonious with pollen. Dab it on copiously.

If one is using the anther from an open flower which has been exposed to contamination by bees, then copious use of the pollen reduces the possibility of one of these foreign pollen grains fertilizing the ovum.

This danger may be entirely obviated if buds whose anthers are to be used for pollen are brought into an insect free closed room or closed case just before they open. Then when they do open one may be sure that the anthers are not contaminated. The same result may be achieved by placing a paper bag or plastic bag around the bud before it opens.

If one wishes to be doubly sure that his emasculated flowers are not accidentally contaminated by insects, he may "bag" the flower. I do not bag because my early experience showed that I did not get nearly as good seed set. However, some who bag do not cut any of the sepals and they injure the petals to the least degree possible, and feel that they have better seed set because of this lack of injury.

One should use a bag just large enough to comfortably cover the flower and be capable of having the opening of the bag closed by a twisting wire, pins, staples, clothespin, string, or rubber band. Wax paper "sandwich bags" can be used to good advantage. *Do not* use transparent plastic bags.

Records and Harvesting

When pollen is applied to the stigma, a label should immediately be applied. The best I have found for this is a small cardboard tag with a string on it which is applied to the base of the bud with a slip knot. Don't just hang it on, or the wind may blow it off. These tags are obtainable in different sizes and colors at any stationery store.

Since, unfortunately, many of these pollinations will not "take," and since one knows the name of the seed parent, it is customary to mark on the bottom of the tag with a wax pencil (regular pencil or ink can disappear), the name, number or code for the pollen parent. If a "take" results, the name of the female parent is written on top of the tag with an "x" between it and the name of the pollen parent. (By custom, the name of the female parent always appears before or above the name of the pollen parent.) If no "take" results, the tag falls on the ground as the bud shrivels and drops off.

In late summer and autumn the seeds should be watched closely and at the first indication of a split pod on any one seed, all pods should be harvested. Take great care in keeping labels straight from the moment the seed is harvested. Nothing is more exasperating than to have a label mixup or loss somewhere along the line and have a plant with a promising blossom and not know its parentage.

It may seem like over-pessimism, but a very good method when the plant is tiny is to have two pot labels,

preferably of different kinds, and when it is older two attached metal labels in different parts of the plant. Stainless steel wire can be substituted for ordinary steel wire, which rusts, or for aluminum wire, which breaks when it is constantly bent at the same point by the wind. At the time of harvesting, or earlier, a record should be made in a bound book (not loose leaf) and at this time the seed may be given a code number or name and its parentage recorded.

Through this record book one should be able to trace back the parentage of any of his plants.

Those more meticulous in record keeping often keep the date of pollination, the time, the temperature and the exact plant used as the pollen and seed parents, date of harvest, and any other observations which they consider pertinent.

Results

Pollination results will vary all the way from almost 100% success to almost 100% failure. So it is best that one count on large scale failure and pollinate as many buds as he has time for. Furthermore, some years due to weather or what-have-you all plants set seed to a much lesser extent than they do in more usual years. Plants which have set seed very heavily one year may set few if any seeds the next year and plants of the same variety growing alongside with identical conditions of growth and weather will vary in amount of seed set.

To the greatest possible extent, emulate the bees and do most of your pollinating during warm days. 60° F. is the minimum. If a greenhouse or a warm porch is available, a potted plant placed there may set seed better than in a less warm place.

Suggestions For Achieving Objectives

Suppose the backyard hybridist has one camellia which has miserable, dull leaves, sprawling growth habits, small flowers and petals of poor substance which fall off when one looks at them—and yet he has observed that these same petals are not affected by the camellia flower blight, whereas, another of his camellias has large, shiny leaves, good growth habits, and large flowers with petals of good substance which seem to be glued into the flower and yet which are ruined by the blight. So he decides that he would like to try to develop a plant which has large, shiny leaves, good growth habits, and large flowers with petals of good substance which seem to be glued on, but whose petals will be resistant to the camellia blight.

So he crosses these two plants and in all probability the progeny (called F_1) will be seemingly worthless "dogs." Should he throw them away? No. He should observe the resistance of the petals to blight. If this characteristic is dominant, he will probably find it in some of the progeny. If it is a recessive quality, he will not find it.

If he finds progeny which are resistant, those which have the most desirable qualities should be crossed back with the parent plant having all of the good qualities except resistance. From this he would expect

to achieve his objective of a plant (called F_2) having all of the desirable qualities of both plants including resistance to blight. If not, he would cross back the best of this latter batch of progeny (of course one resistant to blight) to the original good quality parent.

If from the original cross he finds no progeny (F_1) exhibiting petals which are resistant, he should "self" the progeny; that is, he should select the progeny plant exhibiting the greatest number of desirable qualities and take the pollen from a flower of this plant and apply it to the stigma of flowers on the same plant (or on a plant with exactly the same heredity.)

If Lady Luck smiles, this selfing should produce some plants (F_2) having petals resistant to blight. Probably, though, Lady Luck won't smile sufficiently to have all of the good qualities of the "good guy" parent. So now back cross the blight resistant progeny to the good parent. One could at least hope that some of the issue of this union (F_3) would have all of the good qualities and none of the bad qualities of both of the original parents. If not, self (F_4) and then back cross again (F_5).

"Selfing" a plant is a tool used by hybridists to sort and analyze the hereditary characteristics of a plant. It brings out characteristics which are recessive and therefore will be hidden if one uses only back crosses to a parent plant having the dominant characteristics. Selfing is preferred to back crossing where both parents have the desired qualities about equally divided between them.

Back crossing is a short cut tool used when one parent has most of the good qualities.

How Many Seeds Necessary To Achieve Results

Everything in hybridizing is based on chance. Toss a coin a thousand times and *about* 500 times it will fall "tails" and *about* 500 times it will fall "heads." Take a coin from your pocket and toss it ten times. Do it again. Once more. It will be very unlikely that each time it will fall heads five times or tails five times, or even that any one of the three tosses will be the same as either of the others. Hence, the more seed one can plant the more chance he has of achieving his objective. But no one, not even the professional, has unlimited capacity to grow plants.

The amateur should take some comfort in the fact that if one is working with just two characteristics (*i.e.*, genes), and he can back cross the progeny of the original cross (F_1) to one of the parents, he has a 9 to 1 chance of success if he plants only eight seeds. If it is necessary to self (the F_1), he must plant 35 seeds to have a 9 to 1 chance of success. In each case, more seeds will enhance the success probabilities, but even with fewer seeds, chances of success are still fairly good.

It is not true, then, to say that only those who have unlimited facilities for handling seeds and plants can

(Continued on page 39)

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 in 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.

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We regret that the following members of the Virginia Camellia Society were erroneously omitted from the Fall 1975 list of members:

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1920 Ames Circle West 23321

Mrs. Marietta C. Sawyer
1419 Myrtle Ave. 23325

Mr. Melvin C. Stallings
633 Norcova Dr. 23320

Norfolk:

Mr. C. G. Brown
3900 Gosnold Ave. 23508

Mrs. J. R. Bull
3625 Utah Ave. 23502

Mrs. Handford T. Cruser III
8563 Hammett Ave. 23503

Mr. L. O. Earnest
7801 Sea Wolf Dr. 23518

Mrs. D. E. Hopkins
3573 Westminister Ave. 23502

Mr. Harrison Hubard
1329 Cloncurry Rd. 23505

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526 Fishermans Rd. 23503

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2070 Holland Rd. 23456

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Mr. Jas. N. Shaver, Jr.
4644 John Alden Rd. 23455

Mrs. Maclin Simmons
207 53rd St. 23451

Studies on Control of Camellia Canker With Benomyl[1]

By L. W. Baxter, Jr., Susan G. Fagan, *and* Mary G. Owen[2]

Cankers of camellias, caused by *Glomerella cingulata*, are particularly destructive on *Camellia sasanqua* seedlings and cultivars, on *C. reticulata* cultivars, on many camellia hybrids, and on some cultivars of *C. japonica*. Efforts to control the disease on camellias in the past have been mainly directed at prevention rather than cure. Efforts to control the disease on camellias at present are directed mainly toward sanitation and use of protective fungicides rather than toward curing the diseased plants. Spraying with protective fungicides is essential because once infection has occurred the pathogen is not vulnerable to eradication by applying presently available fungicides. Sanitation to control camellia canker and dieback involves the surgical removal of all discolored wood in and around dead twigs and cankers. It has been demonstrated repeatedly at Clemson by isolation techniques that only the discolored wood harbors the fungus causing the disease.

With the advent of systemic fungicides, a method became available to camellia enthusiasts by which various chemicals could be added to plants, either through the roots with some chemicals or, in a few cases, to the leaves, with subsequent translocation to other plant parts in both cases. This report deals with the application of varying rates of benomyl [methyl 1 - (butylcarbamoyl) - 2-benzimidazole carbamate], sold by du Pont as Benlate, to the soil and the subsequent effect on infection of above-ground parts of *C. japonica* and *C. sasanqua* by *Glomerella cingulata*. Preliminary work has indicated that benomyl, when added to the soil, may be taken up by the roots of many plants and transported to all parts of the plants.

Materials and Methods

Three-year-old seedlings of *Camellia japonica* and *C. sasanqua* were bare-rooted and transplanted into 2-gallon Lerio containers filled with a potting mixture of soil, sand, peat, and bark in a 1-1-1-1 ratio by volume. Fertilizer, superphosphate, and lime were added to the mixture at the rate of 500, 1000, and 2000 pounds per 2,000,000 pounds of soil, respectively. Benomyl was thoroughly mixed into the soil at the time of transplanting at rates of 1000, 2000, or 4000 parts per million active ingredient. The controls received the fertilizer ingredients and lime but no benomyl. After 6 months of growth in benomyl-amended soil, all plants were inocu-

[1] Published with permission of the Director, South Carolina Agricultural Experiment Station, Clemson, South Carolina 29631.

[2] Professor and lab technicians, respectively.

lated with a virulent culture of *Glomerella* originally isolated from the *C. sasanqua* cultivar Cleopatra. Inoculations were made through wounds created by scraping off about ½ to 1 inch of the bark on one side of the stem. The plants were grown for one year under greenhouse conditions (minimum temperature 70F) and then evaluated by a standard tissue-culture isolation technique widely employed by plant pothologists. Isolations were made on carrot juice agar amended with the two antibiotics Achromycin and Penicillin G, each added at the rate of 100 ppmai to prevent bacterial contamination.

Results and Discussion

Cankers were found on and *Glomerella* was recovered from all *C. japonica* seedlings grown in non-amended soil or in soil amended with benomyl at 1000 ppmai when inoculated tissue was transplanted onto carrott juice agar amended with antibiotics (Table 1). None of the *Camellia sasanqua* seedlings grown in soil amended with benomyl at 1000 ppmai yielded *Glomerella* and no cankers were noted on any of these plants. Seedlings of both *C. japonica* and *C. sasanqua* grown in soil containing benomyl at either 2000 or 4000 ppmai were free of cankers, and *Glomerella* was not recovered from the healed areas except in one pot containing plants at 4000 ppmai. Benomyl is therefore a systemic fungicide in camellias that is active against the fungus-causing dieback and canker. All control plants had active cankers and yielded *Glomerella* when cultured. It is probable that the one pot of *C. sasanqua* plants containing benomyl at 4000 ppmai actually did not have benomyl but was either improperly labeled or else the benomyl was inadvertently left out. The healed wounds were nice and clean (Figures 1 and 2).

From these results it is suggested that one could add benomyl to the soil mixture at the rate of 1000 ppmai and prevent infection in *C. sasanqua* plants at or 2000 ppmai to soil in which *C. japonica* were growing and either prevent or cure infection. In the average 2-gallon Lerio can, there is about 4000 grams (454 grams equals one pound) of the air-dry soil mixture. Since Benlate contains 50% active ingredient as benomyl, 8 grams per pot would provide 1000 ppmai, or 16 grams per pot would give 2000 ppmai. The soil mixture was light since it had equal parts of sand, soil, peat, and bark by volume and the 4000 grams was added as air-dry soil. The cost of benomyl is about 1.5 cents per gram. The cost per pot for benomyl at 1000 ppmai would be 12¢ (8 x 1.5). In studies in our laboratory, benomyl stays in an active form both in the camellia plant and in soil for at least one year under greenhouse conditions. Therefore maintenance of understock of highly susceptible plants of *C. sasanqua*, such as 'Cleopatra', 'Rosea', 'Hinode-Gumo' and 'Texas Star', would cost only 12¢ per year per plant in a 2-gallon container. In smaller containers, the cost would be proportionally lower. It does take at least 2 to 3 months to get adequate

quantities up into camellias to be detectable.

We recommend the use of *C. sasanqua* plants as understock for grafting because root rot (caused by *Phytophthora cinnamomi*) attacks many *C. japonica* cultivars. We hope eventually to be able to recommend that cuttings of these cultivars, and any other camellias prone to dieback and canker, be grown for grafting purpose in a soil mixture amended with benomyl. This is possible since some of our other research indicates that benomyl added to the rooting bench does not hinder the rooting of *C. sasanqua* cuttings. However, it does adversely affect the rooting of cuttings of cultivars of *C. japonica* when it is added to the rooting mixture at the rate of 1000 ppmai.

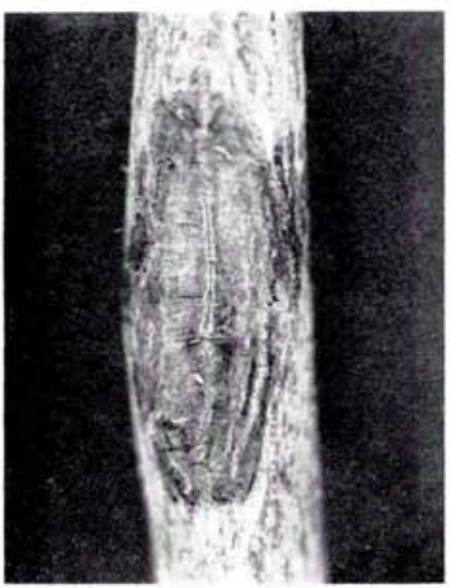


FIGURE 1. A stem of a *Camellia sasanqua* seedling which was inoculated with *Glomerella cingulata*, the cause of camellia dieback and canker. Note that the canker has completely healed. This plant was grown in soil to which benomyl was added at the rate of 1000 ppmai.

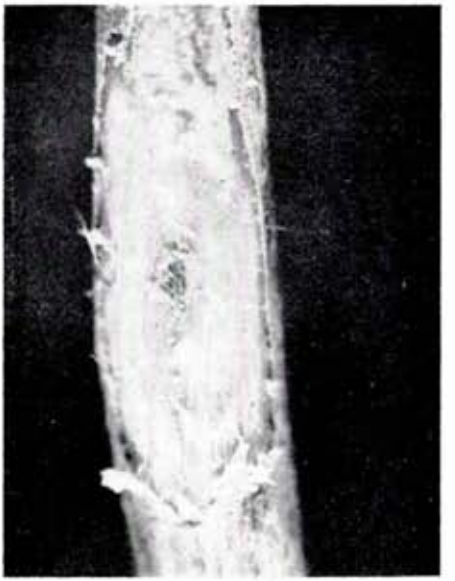


FIGURE 2. The same plant as that shown in Figure 1 except the outside new tissue has been scraped away to show the healthy wood underneath.

Also, research revealed that seedlings of *C. sasanqua* germinated and grew well in benomyl-amended soil and that they were not harmed either during germination or subsequent growth compared with controls either without chemicals or those grown in a soil mixture amended with chemicals other than benomyl or close relatives of benomyl. *WE CANNOT AT THE PRESENT TIME RECOMMEND THE USE OF BENOMYL IN THIS CAPACITY SINCE IT IS NOT CLEARED FOR USE ON THIS PLANT AT THIS RATE AND FOR THIS PURPOSE.* We have shown, however, that it will work and that it causes no harm to the plant when used at the rates as herein studied.

Conclusions

Benomyl is a systemic fungicide which can be absorbed from the soil through the roots by both *Camellia japonica* and *C. sasanqua* seedlings. It is active against the fungus *Glomerella cingulata*, which causes dieback and canker. When camellia plants of either species are grown in a soil medium amended with 2000 or 4000 ppmai or when *C. sasanqua* seedlings are grown in a soil medium amended with 1000 ppmai of benomyl, all cankers resulting from inoculations heal and the fungus cannot be recovered after 6 months. Benomyl cannot be recommended at this time since it is not cleared by EPA for use on camellias as a soil amendment. It is nontoxic to camellias at the levels studied.

Table 1. The response of seedlings of *Camellia japonica* and *C. sasanqua* to *Glomerella cingulata* (Isolate Cleo 1 *) when the camellias were grown in soil amended with varying rates of benomyl.**

Benomyl in soil (ppm)	*C. japonica*		*C. sasanqua*	
	Inoculated	*Glomerella isolated*	*Inoculated*	*Glomerella isolated*
0	20	20	20	20
1000	15	15	15	0
2000	25	0	20	0
4000	10	0	25	5

* Inoculated with *Glomerella* 3/20/75.
** Benomyl added to soil 9/26/74.

Beginner's Corner

(Reprinted from *Carolina Camellias*, Winter, 1963)

This edition of BEGINNER'S CORNER should be entitled "The Observations of a Beginner."

A little over six years ago, the writer built a new home and had the yard landscaped in early fall. Among the plants used in the landscaping were three Camellia plants. They all bloomed in the late winter.

That started the fever. The blooms were breath-taking and the yard was the envy of neighbors and passerbys.

Then, one Saturday afternoon a friend drove by and stopped. He took one look at my Camellias and broke my heart.

"They are pretty now, but you are going to lose them in another year, maybe sooner," he said.

At first I was downright crushed. Then the rebel blood raced through my brain. What did he know about it? After all, the leading nurseryman in the town had selected the plants and location and planted them with his own hands.

Old Favorites

But before my Irish temper flared, my wife eased the situation by observing that the varieties were all listed as old favorites with a cold-hardy reputation.

"That is correct," observed our visitor. "They are planted on the Northern side of the house with protection and filtered light from tall pines," the wife continued.

"That is true, and in my opinion these conditions are ideal," replied the visitor.

"Then, why do you think we will lose them within the year" I asked belligerently.

"They are planted too deep" came the reply.

Our visitor failed to point out how the situation could be corrected or that the proper thing to do was dig them up and replant them or raise them. So, we did nothing.

Leaves Dropped

By summer the plant began to drop leaves. It also began to put on buds. By fall nearly all the leaves had dropped and the buds were not developed.

About this time the Carolina Camellia Bulletin was published. In it we read "Beginner's Corner" which was devoted to proper planting practices. We later learned it was written by Mansfield Latimer of Rock Hill. Needless to say, we dug up the camellia plants, but too late. They were goners.

But we had learned one very important lesson—the proper planting of a Camellia has more to do with successful growing and production of blooms than any other single factor.

In fact, during these last five years we have learned that the Camellia is really a very hardy plant and will tolerate a lot of abuses if planted correctly.

At this particular point, we will venture to say that more Camellia plants are lost from planting too deep than all other causes combined.

Started Over

Instead of quitting we visited a reputable nurseryman in the area. We purchased six varieties recommended by the nurseryman who added that each one was being grown outside successfully in the area.

The plants were young and vigorous and a little on the small side. Each was growing in a gallon can.

"This is a late fall," the nurseryman said, "and you will give your plants a chance to get set and established by spring if you plant them right away."

We thanked him for his advice and left.

That night we read "Beginner's Corner" again, this time line by line.

The next day we secured peat moss, a load of loamy top soil, some creek bed sand, and a load of well rotted manure. Then we mixed equal parts (by volume) of each and screened, just like the article said.

To test our soil mix, we wet a small quantity and pressed in our hand to see if it would fall apart when we opened our hand or packed too tight. When we were satisfied with the mix, we took a wheelbarrow and dug a hole for planting.

Remove Soil

The hole was twice the size of root ball and sometimes a little larger. We put the clay dirt removed from the hole in the wheelbarrow and used it elsewhere in the yard for fill.

Then we filled the hole with the prepared soil mix and packed it down. Then added soil mix until the hole was filled within three inches of the top.

The next step was to cut away the can without disturbing the root system. Then we set the root ball in the hole with only about three inches below the ground level, leaving about four or five inches above the ground level. Then we added more soil mix, forming a mound with a gentle slope from the ground level to the top of the root ball. We were very careful not to pile additional soil on top of the root ball, even if it meant leaving the first lateral root exposed.

We packed firmly and then watered with a fine spray for hours.

When this was completed, we mulched with a generous pile of pine needles.

For the next two weeks, we kept a close watch and watered about every fourth day.

Pruned Plant

Later my friend came by and observed my handiwork. Together we pruned the plant and shaped it up, cutting off the lower limbs to give it a clean look near the ground. We also cut out some limbs higher up to open it up.

Then while I muttered to myself, in several unknown t o n g u e s, he pinched or twisted off some of the buds.

"Forget the fertilizer for the first year," he said accusingly as if reading my mind. "However, you might try a little spray next spring."

The winter came and was almost gone when I saw my first bloom. It was hardly average by present day standards, but at the time it was about the most beautiful thing I had ever seen.

A Most Memorable Day

By J. O. "Jack" Jackson, Wilson, N. C.

JUST ONE BIG HAPPY FAMILY. That's my description of the Fayetteville Camellia Society. You walk in a very beautiful building with your boxes full of blooms and right away everybody greets you with a warm and friendly smile. And most of the time, if you have been there before, they call you by your name. If you are there for the first time, a friendly hand will be extended to you in less than five minutes and before you know it, you feel as though you are a part of the family. "Here's a vacant spot," someone will say, or "Can I help you in any way with getting your flowers out?" I have even seen them at times leave *their* flowers to see if you were getting the help you needed to get yours out and on display.

Fred and Louise Mayo are walking around looking for some way to help you. The Fowlers are always there and you usually see their names at the head table if He can find a vacant spot that the McVeys didn't fill before they got there. It's a good thing they

AT THE WILMINGTON SHOW FEB. 22, 1975

Reading from left to right—J. O. "Jack" Jackson—winner of the show in the Protected Category—Bill Kemp, President of the A.C.S. and Bill Howell, incoming President of the N.C.S.S., outside sweepstake winner along with several other outstanding awards.

serve delicious ham biscuits there, because nobody could get up early in the morning and cut as many blooms as Jack Hendricks has to cut and cook breakfast, too. Ernest Aycock is the official table-arranger. He knows just where they belong, and nobody could shuffle a deck of cards and pick out the right one any better than his good wife, Sadie, who's a school teacher, and certainly familiar with doing things fast such as that. Also, making out new ones.

Then of course I've watched the McCoys come from the bottom to the top along with the Clyde Dorritys and it just wouldn't be a show without David and Virginia Oates. They are professionals when it comes to entertaining the out-of-town guests. Once you've met them you never forget them. The Worrells and the Masons have been to so many shows in N. C. that they have about lost their Virginia brogue. They speak real good English *now*. Guess they learned it from Clay and Earlene Foreman. (Just kidding Gene.)

Col. Holstein made my day when he took my picture, (thank you, Jean); and when I think of camellias, I always associate them with Joe and Mable Austin. They are the all-time greats in my opinion. Those I have failed to mention are just as valuable to me as any of the rest. But thanks again for making the 2nd of March, 1975, one of my most memorable days.

Preparing and Holding Blooms for a Show

By Bill and Mildred Robertson

There are probably as many different methods of holding flowers as there are exhibitors. Perhaps each of us has something to offer that might be of benefit to someone else. With this thought in mind we are outlining our procedure for you, and hope that you can learn something from it that will be useful to you.

The most important requirement for having an outstanding flower in a show is to first grow a good bloom. The next most important thing is getting it to its destination in good condition. The ideal solution to this, of course, would be to have the bloom open up the morning of a show so that it could be cut fresh and taken directly to the receiving area. Since our blooms have a habit of opening on Sunday or Monday following a show, it has become necessary for us to try to preserve and hold blooms for the next week's show. We have talked with many people about the various methods they use and have tried everything that we have been told. Finally, after much experimentation, trial and error, we have adopted a procedure which seems to work well for us.

Both of us work and leave home early in the morning so we usually cut our blooms at night. Each evening we check the greenhouse to see if there are blooms that will need to be cut and if there are, we usually wait until around 8:00 P. M. to start cutting them. At least ten minutes and not more than thirty minutes before cutting, we spray each bloom with a solution of Benzylaminopurine. Just a regular Windex bottle with a spray top or any other type bottle which produces a fine mist can be used for this. The entire bloom is sprayed—front, back, and into the stamens. We have never had any damage to result from spraying into the stamens even though we have read that it should not be done. The Benzylaminopurine seems to prevent the blooms from falling off the stems and in fact we can not remember losing a bloom in this manner since adopting this procedure.

We cut the blooms with a very sharp pair of pruning shears and lay them on a large tray which we have covered with orchid grass. The blooms are then taken to the work area where they are groomed. A slightly moistened Q-Tip is used to remove any traces of pollen or specks of trash. A pair of eyebrow tweezers is used to remove any old or discolored stamens and then the leaves are wiped with a cotton ball which has been dipped in milk. This cleans the leaves and helps to give them a healthy sheen. The stem of each bloom is then cut on an angle and the bloom placed in a styrofoam cup of water to which

potato whitener has been added. It is our feeling that this potato whitener acts rather like a starch and adds substance to the bloom and helps to prevent its drooping as quickly as it might otherwise. The length of time the bloom remains in this potato whitener mixture depends on the color of the bloom. Whites are usually left three to five minutes. Pinks, reds, and variegateds are left anywhere from five to eight minutes. The pale or blush pinks are usually left only about three minutes.

While these blooms are waiting, we prepare individual tupperware or similar type plastic containers to receive the blooms. To do this we place a wet paper towel in the bottom of each container. This helps to keep the humidity up in the container. Over the paper towel we place a fairly thick layer of orchid grass. A small well is made in the center of the orchid grass and a plastic milk bottle top placed in this. We then soak cotton balls in a solution of Napthalene acetic acid and put two of these soaked cotton balls in each of these milk caps. When the blooms are removed from the whitener solution, they are placed in the plastic containers with the stems resting in the milk bottle top of Napthalene acetic acid. We check to make sure that the bloom is well supported by orchid grass, adding or removing as necessary. A cotton ball is placed between the leaves and petals of the bloom to prevent bruising. The bloom is then sealed in its plastic container. An entry card is prepared in accordance with the show schedule, which has been obtained in advance. This card is taped to the top of the container and the container refrigerated.

The above procedure is the one we use when we are trying to hold blooms for several days. If blooms are being cut the night before a show, we follow the same method up to the point of placing them in containers. The night before a show the blooms which we cut are placed in styrofoam chests of the type which can usually be obtained from tropical fish stores. These chests are prepared by putting a tray of ice in the bottom and then covering this with a thick layer of orchid grass. When the blooms are cut, the stems are put in water pics filled with Napthalene acetic acid and then they are placed in the chests. Each chest will hold four to five flowers depending upon the size. The chests containing the blooms are left in the greenhouse overnight. Any blooms cut the morning of the show are sprayed with the Benzylaminopurine. They are then placed in water pics and laid in a large cardboard box on a bed of orchid grass. A top is then put on the box and the box placed in the backseat of the car for transporting to the show. Upon reaching the receiving area of the show, blooms are checked again and any necessary grooming done at that time. All that remains then is to wait, however impatiently, until judging is completed.

We have found that some blooms seem to hold very well while others do not hold at all. One of the best holding blooms for us has been our 'Rena Swick Variegated'. We won

(Continued on page 42)

Questions and Answers

Do you have a question about camellias you want answered? If so, send your question to the editor, *Carolina Camellias*, Rt. 3, Box 361-A, Clinton, S. C. 29325. We will try to answer all questions. However, space limitations may sometimes necessitate limiting those published to matters of general interest.

Q. What are the "fine points" to successfully air layering camellias? I have followed all of the rules according to the published articles and have very poor results. My air layers are made on older plants using branches from ½ inch to 1½ inches in diameter.

A. When you have followed all the rules and still get poor results, we think you should request a demonstration from an accomplished propagator and observe his methods carefully. We have sent you the name of a grower near you and have advised him of your interest. Our own experience shows us that we get good results on branches less than ½ inch in diameter. We were unsuccessful on larger branches.

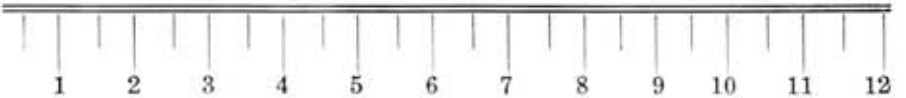
Q. I am building a greenhouse and wonder if I can use kerosene heat or if this type of heat would hurt the camellias in any way?

A. Many people who grow camellias in greenhouses use kerosene heat and have found it to be entirely satisfactory. However there is some possibility of harm in a tight greenhouse, especially if the oxygen for combustion is drawn from within the house. To be on the safe side it is best to have the heater vented to the outside and draw its air for combustion from outside the greenhouse and thus eliminate any possibilities of danger to your camellias or to yourself.

Q. My plants do not set many buds and yet they seem to be healthy as they look good and put on a lot of new growth. What causes this?

A. To answer this would be like a doctor in South Carolina trying to diagnose a patient in Virginia without ever seeing him. However there are two or three things that might cause a healthy plant not to set many buds. These are:

1. The variety. Some varieties never set many buds.
2. The age. Some plants have to get some size on them before they set many buds.
3. The location. Too much shade can cause a poor bud set.
4. Fertilizer. Lack of buds is often an indication of too much nitrogen, especially where there is much new growth, as you indicated in your case, or there may



CAMELLIA RULE
FOR MEASURING TWELVE-INCH SHOW BLOOMS

be insufficient potash and phosphorus.

Q. I hear people talk about using epsom salts as a fertilizer and want to know something about this.

A. Epsom salts is actually magnesium sulphate and is not considered a fertilizer in the usual sense. However it does have some value in acidifying the soil and adding magnesium, which is one of the essential minerals, to the soil and a small quantity will seldom do any harm and may prove to be beneficial.

Q. Should camellias be mulched?

A. There was a time when there was no question about this. However there seems to be a new school of thought that advises removal of the mulch in the wintertime. In the light of present information available to us we still mulch for both summer and winter and recommend it. There is no question that mulch keeps the roots cool and moist in the summer and prevents rain from washing away the soil from the roots in the rainy season and it still seems logical to us that this extra cover offers some protection from the winter cold.

Q. Do all camellias belong to the same species?

A. No. There are at least 80 different species, and it was believed that there are probably many more. However there are only a few of these generally grown in this country. The Japonica is of course the best known of all the camellias. The fall-blooming Sasanqua is second best known and the Reticulata is the third best known.

Q. Do camellias have to be planted in the shade?

A. No. However it must be pointed out that camellias do best in partial shade. If planted in a sunny location they will require more care until they are established. Also there will be more frost damage to blooms where there is no overhead protection. On the other hand it should be pointed out that most camellias do not do well in full shade. Unless they get some sun they will not be as vigorous or have as many blooms as when planted in a more ideal location.

Q. Is peat moss the best mulch to use?

A. No. Peat moss has a tendency to pack and dry out, and when it is in this condition, it is almost impossible for the water to penetrate to the roots of the plant. You can't beat pine straw as a mulch material.

Q. How long is it possible to grow camellias in containers?

A. There is no limit to how long a camellia can be grown in a container. That is, provided it has the proper care, which consists of fertilization, watering and repotting when the plant becomes rootbound. Proper pruning and root pruning of the plant can cut down on the need for frequent changes to larger containers. There are some container plants that are 25 years old and they are still in 15 inch containers. I understand that there are camellia plants in Europe that have been growing in containers of over 100 years.

Backyard Hybridizing

(Continued from page 24)

succeed. The lowliest amateur can succeed if he will carefully limit his objectives.

The professional is usually juggling many balls at the same time. The amateur with very limited facilities may be able to keep only one ball in the air, but he can watch this ball more carefully than the professional can watch any one of his.

You may read or hear of the necessity and difficulty of developing seeds which will breed true. Fortunately, we who work with camellias do not have to worry about this. If we can develop only one plant which achieves our objectives we do not have to go further—the reason being that we can exactly duplicate this plant over and over and over again by cuttings or grafts. It is only those who work with plants such as wheat, barley, and corn, which must be grown from seed and with which cuttings and grafts are not practical that it is necessary to make the seed breed true.

This in part makes up to the camellia hybridist for working with a plant which is so long from seed to flowering. This time can be shortened by artificial light and accelerated fertilization (1), but it is still long and requires love and patience.

Literature

For those wishing to go more deeply into the subject— but not too deeply—a small book entitled *Practical Plant Breeding* by W. J. C. Lawrence (Publisher, George Allen & Unwin Lt., 40 Museum Street, W. C. 1, London, 13/9d or $1.95 postpaid) is recommended. The best book I know of, dealing exclusively with reference to breeding and handling seeds and seedlings, is *Camellia Culture*, E. C. Tourje, Macmillan, 1958.

The references below are confined to the *American Camellia Yearbook* because the reader is reading this now and probably has access to back numbers.

For those wishing to go even more deeply, a look through their local library catalogue under "Plant Breeding," "Hybridizing" and "Genetics" should provide plenty of material.

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North Carolina Camellia Society Fall Meet In Wilmington

By Ernest Aycock

The luncheon and Fall Meeting of the North Carolina Camellia Society was held at Balantine's Buffet in Long Leaf Mall. The food was delicious and enjoyed by everyone. There were approximately 100 present. We had several guests from other states, who were in Wilmington Attending the American Camellia Society Fall meeting.

The program was superb. Mr. Henry J. Smith, Extension Landscape Horticulturist, N. C. State University, presented the program. He used color slides to show many ways to go about landscaping. I don't think I have ever seen better photography nor heard a program more interestingly presented. You missed a treat if you were not present to hear him, in fact, you miss a treat any time you miss a society meeting or a camelila show.

Officers for the new year were elected. William Howell, *President;* Graem Yates, *President-elect;* Clyde Dorrity, *Vice President;* Harris Newber was re-elected *Secretary-Treasurer;* Mrs. C. M. Allen, Jr., re-elected *Historian.* Erwin Nixon, Ed Tolson, and Johnny Lewis were elected as directors from districts 1, 2 & 3 respectively.

The Camellia Show was held at the Wilmington Hilton Hotel. There were hundreds of blooms of the finest quality. Our good camellia friends from South Carolina brought a large portion of the blooms and they certainly were good enough to win a very large portion of the awards. Our *Carolina Camellia* editor, Rosemary Elliott and Dave, her husband, from Clinton, S. C., had several award winners. Thanks to all the exhibitors for bringing blooms to our show.

The Fayetteville Camellia Club has invited the N.C.C.S. to meet in Fayetteville on March 14, 1976. The Camellia Show will be held on 14th and 15th. Make your plans to attend the 1976 Spring Meeting, you'll like it.

S. C. C. S. Annual Fall Meeting

By Marie W. Dahlen—*Secretary*, S.C.C.S.

Aiken's new Houndslake Country Club was the site for the annual fall meeting of the South Carolina Camellia Society on Saturday, October 11. Mr. Wm. C. Robertson was in charge of the luncheon-meeting. After the President Paul Dahlen introduced the guests at the head table, Mr. Robertson was called upon to introduce the speaker, Mr. W. F. (Wally) Freshwater, from Ft. Valley.

Mr. Freshwater's topic was "The Grafting Of Camellias On Very Large Understock". He used for his demonstration a 'Mini-No-Yuki' sasanqua plant having two trunks, each greater than two inches across. After drenching his cutting tools (a curved pruning saw and pocket knife), and the area to be grafted, with a Benlate-Captan solution, Mr. Freshwater proceeded to remove all of the upper growth down to two horizontal planes; paring their perimiters to the cambium layer. Around the rims he then made cuts with the saw 1 - 1½ inches apart, cleaning out these cuts with the back of the saw, and then, deftly inserting nine scions, after dipping them in rootone.

After allowing a few members to test their skill at this easy insertion, "Wally" put one drop of "gib" onto each juncture and then applied his "concoction" of clay and Captan which had the consistency of peanut-butter over the outsides of the grafted areas. There was a final drenching of the Benlate solution before he placed a large transluscent jug over the graft and bedded it firmly down into the soil. Mr. Freshwater does not advocate a "sealer" when grafting is done in "season", but does advise another drop of "gib" when there is no obvious growth to the bud in due time. He also prefers to use spagnum moss inside the container and cautions against the use of any grafting "wax".

Mrs. Charles Brown of Springfield won the drawing for the grafted plant. Mr. Freshwater stated that this method has resulted in a 90% take in greenhouse and an 85% take on outside grafts at Massee Lane. He urged that "new" scions be "shared" with Massee Lane to permit greater research benefits for all members.

The business was started with a report by the Treasurer, Paul Rush. Carolina Camellias Editor, Rosemary Elliott, was introduced, and made a plea for articles and ads to be submitted before an early deadline for the January issue.

T. Neal Cox, Chairman of the Nominating Committee, presented his committee's slate of officers which were duly elected. Mr. Dahlen will serve a second term as President; Mr. M. F. Miller—I Vice President, J. A. Timmerman—II Vice President, and Mr. D. G. Elliott—III Vice President.

Mr. Dahlen then issued the call for the election of new District Directors. Those elected were: J. J. Seelig—Dist. I; Wm. C. Robertson—Dist. III, and C. H. Hendrix—Dist. IV.

A letter was received from Mr. Frank Brownlee, requesting a replacement for the Clemson Test Garden responsibility he had filled. In his absence, the president announced that a certificate of appreciation for his many years of service in this regard had been made and would be sent to Mr. Brownlee.

Pearle Moon was also recognized for her serivces as past Editor of *Carolina Camellias*.

An invitation was extended to the guests to attend Aiken's fourth annual Mini-Show downtown and Hopeland Gardens. The meeting was then adjourned by the president.

—CAROLINA CAMELLIAS—

Preparing and Holding Blooms

(Continued from page 36)

Best in Show at Massee Lane several years ago with a bloom of this variety which had been cut on Tuesday prior to the show. When it was removed from its plastic container and put out for judging, it looked as fresh and lovely as when it was cut. We have had blooms off this same plant show up on the Court of Honor at the Fall Shows in Columbia when they had been refrigerated for several days.

The general feeling seems to be that white blooms are harder to hold and get to a show in good condition than any other bloom. This has not proven to be the case with us. It has been our experience that the pale or blush pinks are more difficult. Varieties such as 'Easter Morn', 'Moonlight Sonata' and 'Lila Naff' invariably seem to bruise for us if we have to transport them any distance. Perhaps some of you who have had good luck with this could give us some pointers.

No method of holding blooms seems completely foolproof. While the procedure we have outlined works better for us than anything we have tried, we still occasionally have to discard a bloom for which we had high hopes.

We hope in this article we have brought out some points which you may be able to use in preparing your blooms for a show. Since we are always on the lookout for new and better ways of preserving blooms for longer periods of time, we would appreciate hearing about any method that has been successful for you. Sharing of our knowledge will, hopefully, help to contribute to bigger and better Camellia Shows.

Editor's Note: Benzylaminopurine catalogue No. 200241, may be obtained from CALBIOCHEM, 10933 North Torry Pines Road, LaJolla, California 92037.

Mix 250mg of the powder with two ounces of grain alcohol (obtainable at the drug store). Keep in a brown bottle in a dark place. To prepare a solution for spraying, mix one tablespoon of the above stock with three cups of water.

Napthalene Acetic Acid is also obtainable at CALBIOCHEM. Minimum order is 25 grams, but it is inexpensive. To mix, place a volume approximately equal to a pencil eraser in one quart of hot water and shake.

Charlotte Club Hears Impressive Panel

The Men's Camellia Club of Charlotte, N. C. met on November 10, 1975. Their program for the night was a most impressive panel of camellia folks from many parts of the country. To begin with Son Hackney introduced Bea Rogers of Belle Fontaine, Alabama, who told the members they all had "flower power" which draws us all together. We should all share our blooms—not waste them. Blooms that are not taken to a show should be given to hospitals, nursing homes or to anyone who will take them. And remember when you cut those flowers you prune at the same time; most important for healthy plants.

Next on the panel was Dr. Reeves Wells of Florida who said that ACS membership was the best bargain in the world. For instance, you get a $10 book and 4 $5 journals a year for only $7.50 with valuable information such as how the other fellow grows those big flowers. He said no plant should be planted in your soil with soil around the roots that comes from somewhere else. The two are not compatible. If your soil is more porous than the soil around the roots, water will run away from the root ball and the plant will dry out. Bare root it and it will do better. Its better to plant small camellia plants than to try to transplant large ones.

Mel Gum of California spoke on hybridizing and seedlings on the west coast. He said the shows next year will have to make more room for retics and retic-hybrids. He gave the history of hybrids and progress up to date. He discussed interspecific crossings of Howard Asper and others. He spoke of the work on camellia fragrances being done by Dr. Ken Hallstone and Mrs. Barbara Butler. Let's all work together—hybridizing is not difficult.

Mark Cannon of Alabama discussed the scion business. He has been in the scion business for 21 years and doesn't know why he got into it. But it has introduced him to thousands of people in the U. S. and several foreign countries. He sells more to foreign countries in dollars and cents than in this country. He said he sells 100 scions of one variety and 50 or more of another variety to foreign countries. That's the way foreign countries are catching up. You would be surprised at how many people ask for the old—old varieties. These are varieties they can't find. He invited everyone to come to Dothan.

A question and answer period followed.

Show Dates

Place, Location and Sponsor	*Date*
Panama City, Florida, Camellia Society of Panama City	January 3-4, 1976
Orlando, Florida, American Federal Savings & Loan Association Building, Downtown Orlando, Camellia Society of Central Florida	January 10-11, 1976
Pensacola, Florida, Pensacola Men's Camellia Club, Inc.	January 10-11, 1976
Beaufort, South Carolina, Council of Beaufort Garden Clubs	January 17-18, 1976
Tallahassee, Florida, Tallahassee Federal Savings & Loan Association, 440 North Monroe Street, Tallahassee Camellia Club	January 17-18, 1976
Aiken, S. C., Camellia Club, Kennedy High School	January 24-25, 1976
Charleston, S. C., Northwoods Mall, Coastal Carolina Camellia Society	January 24-25, 1976
Augusta, Georgia, Augusta Garden Center, 598 Telfair Street, Augusta Camellia Society & Augusta Council of Garden Clubs, Inc. and in cooperation with the Georgia Rairoad Bank & Trust	January 31-February 1, 1976
Georgetown, South Carolina, Council of Garden Clubs	February 7-8, 1976
Savannah, Georgia, Men's Garden Club of Savannah	February 7-8, 1976
Thomasville, Ga., Garden Center, Thomasville Garden Clubs, Inc.	February 7-8, 1976
Birmingham, Ala., Municipal Auditorium, Men's Camellia Society of Birmingham	February 14-15, 1976
Columbia, S. C., Mid-Carolina Camellia Society, Bankers Trust, corner Gervais and Sumter Streets	February 14-15, 1976
Fayetteville, North Carolina, Fayetteville Camellia Club	February 14-15, 1976
Atlanta, Georgia, Lenox Square, North Georgia Camellia Society, Atlanta Camellia Society & Buckhead Lions Club	February 21-22, 1976
Tidewater Camellia Club, The Blockade Runner Hotel, Wrightsville Beach, N. C.	February 21-22, 1976
Charlotte, North Carolina, Men's Camellia Club of Charlotte	February 28-29, 1976
Whiteville, North Carolina, Waccamaw Academy, Whiteville Camellia Society	February 28-29, 1976
Nashville, Tennessee, Middle Tennessee Camellia Society (In conjunction with the ACS 31st Annual Meeting)	March 6-7, 1976
Greensboro, N. C., Men's Piedmont Club, Four Seasons Mall	March 13-14, 1976
Washington, D. C., U. S. National Arboretum, Camellia Society of the Potomac Valley	April 17-18, 1976
Baltimore, Maryland, Cylburn Willflower Preserve & Garden Center, 4915 Green Spring Avenue, Pioneer Camellia Society	April 18, 1976
Washington, D. C., U. S. National Arboretum, Camellia Society of the Potomac Valley	October 30-31, 1976

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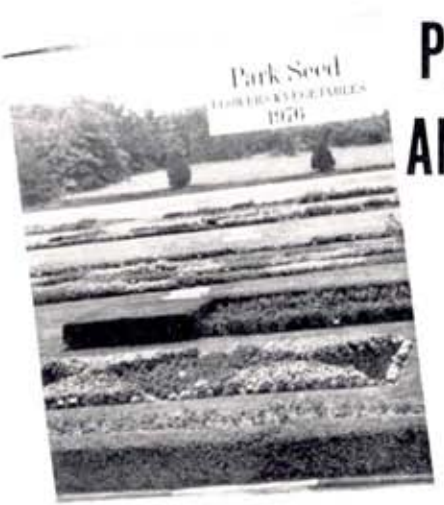

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