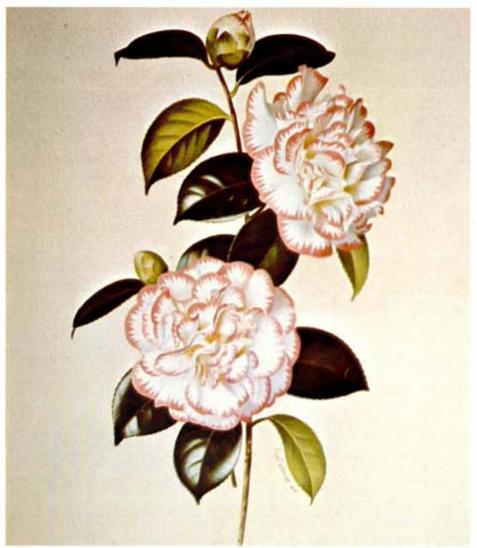
# Carolina Camellias



'Margaret Davis' awarded the prestigious Sewell Mutant Award of the American Camellia Society in 1976 was originated by Arthur Davis and named for his wife. Photo was submitted to ACS and was made by Mr. Davis of the watercolor of 'Margaret Davis' by the noted Australian painter, Paul Jones. Color pictures through the courtesy of the American Camellia Society.

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# Carolina Tamellias

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

Mrs. Rosemary Elliott, Editor, 1108 Peachtree Place, Wilson, N. C. 27893.Phone: (919) 291-5345.

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### SOUTH CAROLINA CAMELLIA SOCIETY

# President's Message



DAVID G. ELLIOTT

DEAR FRIENDS,

We've reached the dormant time of the year for many of our camellia social activities, although our plants will keep us busy preparing for the next blooming season. I'm always a little sad to think that many months will pass before I see all of the familiar faces again on a regular basis. That's why I look forward to the SCCS spring meeting. I hope you will too.

The Mid Carolina Society has invited the SCCS to join them at their annual barbecue on May 7, near Columbia. This will be our spring meeting, so please reserve this date on your calendar and make every effort to be there. You will get further details by letter as the date draws near.

The American Camellia Society has asked us and all local societies to contribute to the fund for the elimination of petal blight. I know that many local societies won't meet again until next fall. However, keep this worthy project in mind and give it your support. For those of you who haven't seen petal blight, believe me, you don't want to. Let's help stop this destroyer of our beautiful blooms before it spreads any further.

Remember the date of our spring meeting, May 7th, Rosemary and I will look forward to seeing you there.

Sincerely,

DAVE

## NORTH CAROLINA CAMELLIA SOCIETY

# President's Message



CLYDE H. DORBITY

#### DEAR MEMBERS:

We are still in a deep freeze as I write this in the early part of February for the Spring issue. The weather forecasters state this past January was the coldest ever recorded and that we can expect colder Winters in the future.

Agriculturally speaking, they claim that this extremely cold weather will do more good than harm because it will kill a lot of aphids, nematodes and other insects. This may be true, but I prefer warmer Winters in the future. I can control the aphids with two light applications of 5% chlordane granules around my plants each year.

We need to generate interest and increase the membership of our clubs and societies. I think this could be accomplished if each member of each camellia club would help at least one person in the proper care of his or her plants—someone who is not a member of a club. Show him or her how to gib buds to have nice blooms before cold weather, or show him or her how to enter blooms in a camellia show. Have we forgotten the pleasure we experienced when we won our first blue ribbon or was lucky enough to get a flower on the head table? I plan to try this in our area and I hope that you will join in this endeavor to help some camellia grower in your area.

Perhaps we should concentrate our efforts on having more Fall shows. This would encourage the people who have only a few plants. Perhaps with the guidance mentioned above we can interest others in entering blooms in shows and maybe even joining our individual clubs.

Sincerely,

CLYDE H. DORRITY

### VIRGINIA CAMELLIA SOCIETY

# President's Message



WILLIAM G. REDWOOD

#### Dear Fellow Members:

As the little guy in the old H. T. Webster cartoons used to say, "Dern such weather!" Have you ever seen anything like it? In my memory only the winter of 1918 and possibly 1934 could hold a candle to this year! The old groundhog didn't exactly elate us with his prediction, but there's one thing certain; there's not a great deal we can do about it but hope and pray that Spring may be hiding around that proverbial corner.

At our last Director's meeting, it was decided to continue plans for our Spring show on March 19 and 20. As I write this, we are in the process of polling our membership on what we might expect in the way of blooms in order to have a quality show. The results of the poll will go a long way in determining, as you read this, whether we had a successful show or were forced to cancel!

We have been saddened by the recent passing of two valued and active members of our Society, Mrs. Mildred M. Robinson, and one of our past presidents. Dr. Anne Lee. Memorial donations have been made to the American Camellia Society in their honor. We will indeed miss them.

In closing, I leave you with a little food for thought,-

The weather has been horrible, It's been a frightful year! I look upon my damaged plants, And wipe away a tear.

But don't despair, just say a prayer When Spring is finally here; And tears give way to smiles again, As those opening blooms appear!

WILLIAM G. REDWOOD

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# NCCS Spring Meeting

### Whiteville, 1977

The talk at Whiteville, Saturday February 19, was as much about the heavy fog as it was about the flowers at the camellia show. It was as dense a fog as this writer has ever had the nerve to drive in, and it did not lift until about ten o'clock. But it did not keep the people away. They came from all over the camellia growing parts of the state.

The occasion of the "gathering of the clan" was the Spring meeting of North Carolina Camellia Society held in conjunction with the Whiteville Camellia Show.

The Board of Directors of N. C. C. S. met Saturday morning at the Waccamaw Academy, the site of the camellia show. The president, Mr. Clyde Dorrity, presided, A decision was reached to recommend that the society donate \$200.00 toward the ACS campaign against die back. This recommendation was subsequently voted on and passed by the membership. A location for the Fall meeting was discussed and Wilson was tentatively selected as the location. This will probably hinge on a successful attempt to establish a camellia club in Wilson prior to that time.

Joe Shulken and his group may have been disorganized, as he said they were, but they put on a fine show. They even came up with an innovation, or at least it's not standard practice. They staged the show, and judged the show prior to the judges' luncheon. This permitted the judges to enjoy a leisurely luncheon and stay for The NCCS program. Good planning, Joe.

The luncheon was held at the Whiteville Methodist Church with the church ladies catering. The food was good and the service was outstanding.

After the luncheon, a short business meeting was held and then the speaker was introduced. Dr. Clifford Parks, professor of botany at the University of North Carolina at Chapel Hill, presented a slide show and talk on his work with camellias at Chapel Hill and at the Los Angeles Arboretum prior to his coming to North Carolina. We saw slides of his two hybirds, 'Ann McCulloch Hill' and 'Dorothy Spengler', growing under a canopy of pines. They were ten feet tall and covered from tip to toe with blooms. Dr. Parks says that these two hybirds seem to be as cold tolerant as 'Berenice Boddy'.

Just prior to adjourning to see the show, Mr. Dorrity conducted a drawing for door prizes. Mr. Ed. Liebers won the big prize—a color TV set. Many others happily hauled away smaller prizes.

The show was a beautiful one. Despite the hard freezes, there were a respectable number of outside blooms, mostly from the Charleston area. Some of the blooms which particularly deserve mentioning were Graem Yates exquisite 'Elsie Jury', best non-retic hybrid. Fred Hahn's Valentine's Day was a bloom to turn anyone's head too. Congratulations, Charlotte, but move over. Fayette-ville is in there too. Ernest Aycock's Park Hill Tomorrow was one of those blooms which are just too beautiful to be real. It was best japonica, and a

good choice, judges. Lewis and Annabelle Fetterman won best miniature with a 'Man Size'.

There were so many extremely good blooms there till I can't mention them all. Whiteville, you surely did it! But then, so did Columbia the week before. We fully expect that Wilmington, Charlotte, Fayetteville and Greensboro will stage outstanding shows also.

-CAROLINA CAMELLIAS-

# From the Richmond News Leader

"Funny things about flowers: they have personalities all their own. Chrysanthemums were made to be executive vice-presidents; roses at their best are royalty; most of the dahlias we have known were strictly madam chairman types. Marigolds are little girls, all in uniform, marching home from private school; lilies are the bride's attendants; azaleas are gypsies dancing.

"But camellias? Well, you might elect a dahlia to be head of the DAR, but you never will elect a camellia to anything. Camellias are a man's flower, which is to say, they are all woman. Feminine. Female. Camellias are debutantes, sweethearts, center-fold playmates; they are Miss Teen-Age America, Hedy Lemarr and Helen of Troy. They are, as Mr. Keats observed in another context, their own excuse for being. Their loveliness increases.

"But Alas, they do not have much sense (one cannot ask for everything). Given a week of soft rain and lingerie sun, the silly things lift up their heads—they look around, like the girl who wants a Tiparillo. It's not even Christmas, but they somehow imagine it's spring. A 'Pink Perfection' couldn't stand it any longer. She blossomed! On Dec. 10! Did you ever hear of such a thing?

"There Is, we suppose, no possible good purpose to be served by worrying about all this. There are some things, mainly women, beyond a man's control anyhow. The camellias will flirt with the winter sun, tease with the shadows, show a tantalizing slip of color—anything to get attention. In other words, they will do as they durn well please!

"Every morning, as we walk through the garden, heading for the office, we see the buds whispering and giggling in each other's ears. Camellias know when they have a man hooked, and poor miserable creatures that we amateur growers are, how we love it!"

# Show Results

CHARLESTON, S. C.-November 27-28, 1976

Best Bloom (Protected)—Betty Sheffield Sup.'-Mr. and Mrs. L. M. Fetterman, Clinton, N. C.

Runnerup—'Carter's Sunburst pink', Var.—Mr. M. S. McKinnon, Camden, S. C.

Best Bloom (Unprotected)—'Miss Ch Var.—Mr. J. M. Jones, Savannah, Ga. Charleston'.

Runnerup-Helen Bowers', Var,-Mr. and Mrs. C. A. Sanders, Mt. Pleasant, S. C.

Best Retic--'Mandalay Queen'-Mr. and Mrs. Oliver Mizzell, Elloree, S. C.

Hannerup—'Arch of Triumph'—Mr. and D. G. Elliott, Wilson, N. C. Mrs.

Best Seedling-Mr. A. R. Parler, Elloree, S. C.

Gold Sweepstakes (Protected)—Mr. and L. M. Fetterman, Clinton, N. C.

Gold Sweepstakes (Unprotected)-Mr. and Mrs. G. R. Dubus, Jr., Savannah, Ga.

W. Teague, Columbia, S. C.

Silver Sweepstakes (Unprotected)—Mr. and Mrs. J. H. Graham, Mt. Pleasant, S. C.

Court of Honor (Protected):

Tomorrow Park Hill—Mr. and Mrs. T. C. Evans, Aiken, S. C. Helen Bower—varigated—Mr. and Mrs. Jack

Helen Bower—varigated—Mr. and Mrs. Jack Teagne, Columbia, S. C. Tick Tock Red —Mr. and Mrs. L. M. Fetter-man, Clinton, N. C. Mary Alice Cox—Mr. and Mrs. L. M. Fetter-man, Clinton, N. C. Tomorrow Park Hill Pink—Mr. M. S. Me-Kinton, Camden, S. C. Fashionata —Mr. C. T. Freeman, New Ellen-ton, S. C.

'Sawada's Dream'—Mr. and Mrs. L. M. Fetter-man, Clinton, N. C. Pink Pagoda'—Mr. and Mrs. W. C. Robertson, Atken, S. C. 'Easter Morn'—Mr. Marshall H. Rhyne, Bel-

\*Allie

mont, N. C.

the Habel — Mr. and Mrs. Jack Teague,
Columbia, S. C.

liss Charleston — varigated — Mr. and Mrs.

F. N. Bush, Columbia, S. C.

Lagie City — Mr. and Mrs. W. C. Robertson, Miss N.

'Magic City'-! Aiken, S. C.

Court of Honor (Grown in Open):

'Mathotiana'—Mr. and Mrs. W. T. Sheperd, North Charleston, S. C. 'Gus Menard'—Mr. and Mrs. G. R. Dubus,

Gus Menard'—Mr. and Mrs. G. R. Dubus, Savannah, Ga.

Magnodiaeflora'—Mr. and Mrs. W. T. Sheperd, North Charleston, S. C.

Charlotte Bradford'—Mr. and Mrs. J. H. Graham, Mt. Pleasant, S. C.

Tyory Tower'—Mr. J. H. Jones, Savannah, Ga. Ville de Nantes'—Mr. and Mrs. G. R. Dubus, Savannah, Ga.

Romerup

'Don Mac'-Mr. M. S. Edwards, Jacksonville, Fla.

'K. Sawada'—Mr. and Mrs. Sanders, Mt. Pleasant, S. C. 'Sawada's Dream'—Mr. George Bullwinkel, Mt.

Pleasant, S. C. 'Elegans'—Mr. a and Mrs. G. R. Dubus, Jr., Savannah, Ga.

'Emmett Barnes'—Mr. and Mrs. J. H. Graham, Mt. Pleasant, S. C. 'Rena Swick'—Mr. M. S. Edwards, Jacksonville,

SAVANNAH, GA.—February 5-6, 1977

Best Bloom (Protected):

Yates, Charlotte, N. C.
Under 4½"—'Sea Foam'—G. M. Serpas, Summerville, S. C.
White—'Bea Rogers'—Mrs. Wm. K. Laughlin, Aiken, S. C.

White—Bea Rogers'—Mrs. Wm. K. Laughlin,
Aiken, S. C.
Hybrid or Retic. over 4½"—'Dr. Clifford Parks'
Mr. and Mrs. Fred Hahn, Jr., Matthews,
N. C.
Hybrid or Retic under 4½"—'Waltz Time'—
Hunter M. Robertson, Statesboro, Ga.
Under 2½" not local—'Sugar Babe'—Mr. and
Mrs. Tom Evans

Best Bloom (Unprotected): Nantes'-Stephen K.

Over 4½"—'Ville De Nantes'—Stephen Myers, Savannah, Ga. Under 4½"—'Otome'—Arthur Solomon, Savannah, Ga.

White—'Snow Baby'—Mrs. Alfred Bissell, Aiken, S. C.

Best Bloom Grown in Savannah—'Woody Estes'— Mr. and Mrs. G. R. DuBus

Best Seedling-Mr. and Mrs. M. F. Miller

Court of Honor:

Betty Sheffield', 'Blush' and 'Charlotte Brad-ford'—Jeanette and John Graham, Mt.

Pleasant, S. C. 'Valentine Day'—Harry D. Watson, Charlotte, N. C.

"Tomorrow's Dawn' and 'Crimson Robe'—Dottie and Tom Evans, Aiken, S. C. 'Mary Alice Cox'—Mrs. Wm. K. Laughlin, Aiken, S. C.

Aiken, S. C. 'Grand Slam' and 'Guilio Nuccio', Var.—M. S.

Edwards, Jacksonville, Fla. uest Star—Sadie and Ernest Aycock, Smith-field, N. C.

'Elegans Splendor'—Mr. and Mrs. Chas. Hen-drix, Greer, S. C. 'Jessie Burgess', Var.—Donna and Bill Shepherd,

No. Charleston, S. C.
Rosea Supherba', Var.—Mr. and Mrs. W. H.
Rish, Winnsboro, S. C.
Mike Witman', Var.—Mrs. Wm. V. Tyson,

Savannah, Ga.

'Cornelian' and 'Evelyn Poe', 'Blish' and 'Tomorrow', Var.—C. T. Freeman, New Ellenton, S. C.

COLUMBIA, S. C.—February 12-13, 1977

Best Bloom (Protected):

and over-'Silver Chalice'-Mr. and Mrs. Robert Edge

Runnerup—'Elegans Champagne'—Joe Sprott Under 5"—'Diddy Mealing'—Mr. and M F. N. Bush

Runnerup-Pink Diddy'-Mr. and Mrs. Harry D. Watson

White—'Lucy Stewart'—R. J. Fowler Miniature—'Man Size'—Mr. and Mrs. Charles

Hendrix

Reticulata Hybrid—'Francie L'

Runnerup-'Dr. Clifford Parks'-Mr. and Mrs. Charles Hendrix Non Retic Hybrid—'El Dorado'—Mr. and Mrs. Oliver Mizell

ACS Gold Certificate-Mr. and Mrs. Jack W. Teague

ACS Silver Certificate-Mrs. W. K. Laughlin

Mid Carolina Camellia Society Member—'Valen-tine Day'—Mr. and Mrs. T. P. Knox

Best Seedling-'WKO'-Graem Yates

Best Bloom (Unprotected)-'Miss Charleston', Var. -Jeanette and John Graham

Gold Certificate-Jeanette and John Graham

NORFOLK, VA.

Best Bloom (Protected):

'Mary Agnes Patin', Var.-Mr. and Mrs. A. J. Parsons

Runnerup-'Susan Stone'-Mr. and Mrs. A. J. Parsons

Honor Court--'Julia France' and 'Pink Pagoda' -Mr. and Mrs. Lewis Fetterman

Best Bloom (Unprotected):

'Christmas Beauty'—Mr. and Mrs. C. C. Mason Runnerup—'Sound of Music'—Mr. and Mrs.

Runnerup—Sound of Music'—Mr. and Mrs. C. C. Mison Runnerup—Sound of Music'—Mr. and Mrs. C. C. Mason Honor Court—Tomorrow's Dawn'—Mr. and Mrs. C. C. Mason; 'Mathotiana Supreme', Var.—Mr. and Mrs. A. J. Parsons

Seedling-the 'Lucy L'-Grover C. Miller

ATLANTA, GA.—February 19-20, 1977

Best Bloom:

'Tomorrow Park Hill'-Mr. F. N. Bush, Colum-

bia, S. C.
White—'Silver Chalice'—Mr. and Mrs. Fred
Han, Matthews, N. C.
Miniature—'Frances Councill'—Dr. Harry T.
Moore, Jr., Nashville, Tenn.

Sweepstakes (Protected)-George Garrison, Birmingham, Ala.

Sweepstakes (Unprotected)-J. R. Comber, Pensacola, Fla.

BEAUFORT, S. C.-January 15, 1977

Best Japonica:

Unprotected (treated)-'Miss Charleston', Var. —Jeanette and John Graham Unprotected—'Mathonaina Supreme'—Mrs. W. K. Laughlin

Protected (treated)—'Tomorrow's Dawn'—Mrs.
W. K. Laughlin

Beticulata—Protected (treated)—'Pharoah'—Mr, and Mrs. Oliver Mizzell Hybrid—Protected (treated)—'Elsie Jury'—Mr, and Mrs. Oliver Mizzell

Court of Honor:

'Granada'—Mr. and Mrs. Oliver Mizzell 'Massee Lane'—Mr. and Mrs. Oliver Mizzell 'Mathoniana' (treated)—Mr. C. R. Grace, Mrs. J. C. Bickley

'Elegans Splendor'—Mr. C. T. Freeman 'Sea Foam'—Mr. and Mrs. C. H. Hendrix 'Tiffany'—Mr. G. M. Serpas 'Charlean'—Mr. G. M. Serpas

ACS Gold Certificate—Unprotected—Mrs. Juanita Finley

Unprotected-Mr. C. R. Grace

Japonica-Protected-Mrs. W. K. Laughlin

Japonica-Unprotected (treated)-Jeannette and John Graham

Reticulata-Mr. and Mrs. Oliver Mizzell

Hybrid-Mrs. J. C. Bickley

Overall Sweepstakes-Mrs. W. K. Laughlin

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WRITE FOR SCION LIST

# Charlie and His Camellias and Sunshine

By TITA HEINS

Since that early Spring Day that Charlie and I visited the Nursery and returned home with a car full of Camellia shrubs, our household has not been the same. The shrubs have put on a few inches of growth and are flourishing under the loving care of their keeper. The neighbors, our children and I have noticed that Charlie has developed a temperament of resiliency while working with his Camellias.

Nell, our next door neighbor, often comes over to examine his flowers and shrubs and to give him a multitude of advice on their care, which he now merely accepts with, "Maybe you are right." Heretofore, Nell had never been "right" on anything that she and Charlie discussed. In all the years they have known each other they have never carried on conversations but arguments. They have tried to "out-do" one another on their knowledge of architecture, insurance. weather predictions, football, geography, horticulture or whatever subject that happened to be at hand. Right or wrong, Nell would take the advantage of Charlie's being a Southern Gentleman and always had the last word. Thus, he would yield and begin gathering artillery for their next verbal battle.

Nell has been unable to adjust to this new characteristic of Charlie's amiable compliancy, but our children know a good thing when they see it. They seek him in the Camellia Garden when they have serious matters to discuss which he considers and answers with compassion.

"Dad, what do you think of Joe?"

"Dad, I have a special date tonight. May I borrow your car?"

"Dad, what do you think of my going away to college in the fall?"

"Dad, about this "F" I made in Spanish . . . . . "

"Dad, can I keep this puppy for a friend of mine for a few days?" Susan asked one day. "Mama says it's all right with her if you approve. Isn't she cute, Dad. See how she is looking at you? Her name is Sunshine. Her mother is Golden Retriever. We don't know what else she is."

That evening Sunshine slept under Charlie's chair during supper. A few days later both Susan and Jean, her younger sister, approached him in the Camellia Garden.

"Dad, my friend's mother won't let her have a dog. Please, may I keep Sunshine? I just love her so and I have never had a dog for my very own before."

"Susan you will be going off to college in the fall. What do you plan to do with Sunshine then? Your mother has enough to do without looking after a dog."

Jean, whom Susan had brought along for reinforcement, assured him that it had all been worked out. She would take care of Sunshine while Susan was away at college and when Susan finished college, and had an apartment of her own, Sunshine could go live with her. Susan was entering her freshman year in the fall.

She was as meticulous in the care of Sunshine as Charlie was with his Camellias. She and Jean pooled their funds and had Sunshine "fixed", "shot", vitamined and de-wormed. Charlie's Camellias grew by inches. Sunshine grew by pounds. She outgrew her place under Charlie's chair and claimed her territory under our dining table. We guessed that the "what else" of her geneology was Collie . . . large Collie.

One evening during supper Charlie asked, "Has anybody seen my 'Fimbriata'?"

"I don't know, dear," I replied.
"What does it look like? Did it come
off the car or the lawn mower?"

"It's a Camellia. I planted it a couple of days ago. Now it's gone." After we finished eating, the children, Charlie and I searched the yard for the 'Fimbriata' with no results.

Several weeks later I was helping Susan get her clothes ready for college when Nell rapped on the door and stuck her head in. "Hey, anybody home?"

"Yeah, Nell, come on in. I'll be with you as soon as I finish pinning this hem for Susan."

"I found this in the ditch on the way over. The tag on it says 'Fimbriata'." She held up an emaciated stick with dried roots at one end and a few curled leaves at the other.

"Mama," cried Susan, "That's the bush Dad's been hunting for these past few weeks." Her eyes have a way of becoming wide when she is frightened or worried. "I bet Sunshine did it. Are there teeth marks on it, Miss Nell?"

"Yep, right there on the tag."

"Mama, what are we going to do?"

Nell held the stiff 'Fimbriata' at arms length and examined it. "You got anything that covers this in any of Charlie's Camellia journals? What would you look up? Crisp root? Bruised branches? Or twisted leaves?"

"Mama, Miss Nell, Daddy's going to be furious. He'll make me give Sunshine away. What'll we do?" Susan's voice cracked with desperation and her eyes filled with tears.

Nell, our standby in any crisis, always ready to help the underdog, looked at the shrub more closely.

"Now, don't worry Susan. We'll figure out something. You didn't know I was the president of a garden club once, did you? Stop crying now. Look, it still has some life in it. The roots are just a little stiff and the leaves are a little brittle. We can fix it. How about if we soak it overnight and pot it. I can keep it at my house and nurse it back to health. Then we can bring it back as good as new. Maybe we can even gib it a bit." Nell examined the shrub again trying to reassure herself. "Hum, maybe I'd better call my friend that knows all about Camellias."

"I'm h—ome," The front door slamed and our bodies stiffened.

"Oh, boy, I forgot, Charlie got off from work early today," I said. Nell quickly hid the shrub behind her. Charlie walked into the room.

"Hi, Hon, I'll fix you some coffee when I finish pinning this hem for Susan." I didn't look up, Nell and Susan nodded to him and glanced at each other.

"Hey, Sunshine wants in, Come on, girl," he said opening the door. Sunshine bounded in and danced around his feet. She jumped up, licked his hand and demanded a game of romp.

"Well, at least someone is glad I'm home."

Sunshine bounced behind Nell's chair and stopped to investigate the hidden shrub.

"Nell, what are you hiding?"

Nell slowly brought the shrub from behind her.

"Why, that's my 'Fimbriata'! What have you done with it? I know you don't know much about growing camellias but this is ridiculous." He took the shrub from her, looked at it and roared with laughter. For the first time in the twenty-five years that we have known her, Nell was at a loss for words.

Now that Susan is away at college, she and Sunshine keep up a lively correspondence.

DEAR SUSAN,

Yes, indeed, I am taking good care of your family. Especially your dad. He has thought up a new game for us to play. He spends all afternoon in his Camellia Garden putting little sticks and bags on bushes while I watch. Then he goes into the house, Then I get a long way from the bush, wiggle my back end and run as fast as I can and without stopping I snatch the bag and stick off the bush. Sometimes I miss the stick and have to go back for it, but I have improved with practice. Then your dad comes out of the house, jumps up and down waving his arms in the air velling "Grafts" and "dog pound." Then your mother comes out of the house, puts her arms about him and says, "there, there".

Susan, I know that "grafts" means putting-sticks-on-bushes and "there, means come-in-the-house-mama-will -put-a-cold-rag-on-your-head-and-give -you-a-cup-of-coffee, but what does "dog pound" mean?

This is a fine game to play but your dad gets all the attention when it is over. I'd much prefer romping on the beach with you.

With a wag of the tail and a big slurp your one and only dog,

SUNSHINE

# Survival of Spores of the Fungal Pathogen Glomerella Cingulata, The Cause of Camellia Dieback and Canker

LUTHER W. BAXTER, JR., and SUSAN G. FAGAN

Spores (seed) of the fungus Glomerella cingulata, which causes camellia dieback and canker, typically are spread by splashing raindrops coupled with wind. Generally it has been assumed that these spores survive for only brief periods of time, certainly no more than a few days. This hypothesis was investigated in this work and is herein reported.

#### MATERIALS AND METHODS

A suspension of spores of Glomerella was obtained by scraping Petri plates in which the fungus was growing (one carrot juice agar, CJA). The spore suspension was diluted to a standard concentration (100 Klett units). Filter paper discs 1 cm in diameter were wetted with one drop of the spore suspension and then dried. The dry spores (on the dried filter paper discs) were stored at either 0° C (32 F) (freezing), 20 C (68 F) or 30 C (86 F). Some of the discs were removed weekly and grown out on carrot juice agar for 7 days.

#### RESULTS AND DISCUSSION

Each filter disc had viable spores even after 10 weeks of storage and regardless of the storage condition (i. e., temperature) (Fig. 1). The implications of this are that spores could live in branch crotches, leaf axils, or grafts and on cuttings for at least 10 weeks. Since the study was terminated after 10 weeks, it is not known how long the spores may have been able to survive. Also, it is possible that alternate freezing and thawing or wetting and drying may prevent the survival of the fungal spores for this time period.

It is also possible that natural contaminants on the leaf or stem surface may interfere with spore survival in nature.

Another implication of these studies is that a combination of fungicides may be better than one single fungicide. It is known, for example, that benomyl (Benlate) prevents growth spores rather than killing the spores. Since the spores can survive longer than this fungicide can persist, it would be advantageous to use a second fungicide such as Captan in the spray with benomyl (Benlate) to insure that the spores would be killed. This procedure would also help to prevent the appearance of resistant strains of the fungus. The fungicidal suspension should be used during grafting and during the preparation of cuttings. It would be desirable to use these two materials in the soil where plants are being propagated either by seed or by cuttings. A tablespoonful of each per gallon of water

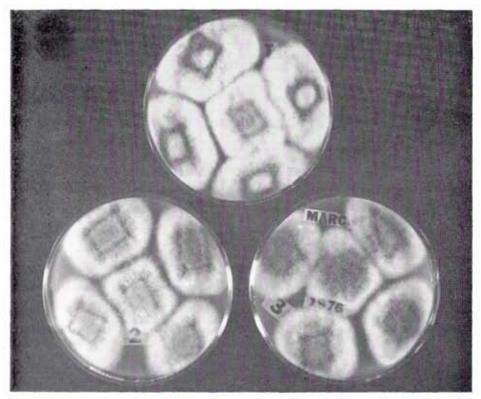


FIGURE 1. Growth of Glomerella cingulata on carrot juice after 10 weeks storage on dry filter paper at room temperature.

should be used. Either soak the cuttings in the suspension or use the fungicidal suspension as a drench to the soil to protect the seed against seedling blights and rots.

The results of this experiment are presented in Table 1.

#### SUMMARY

Spores of Glomerella cingulata, pathogenic to camellias, can survive in a dried state for at least ten weeks. A fungicide combination of benomyl and Captan should be used to protect grafts and cuttings.

TABLE 1. The survival of spores of Glomerella cingulata dried on filter paper and stored under controlled conditions.

| Storage   | Weeks after storage |       |       |       |       |       |       |       |       |       |
|-----------|---------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| condition | 1                   | 2     | 3     | 4     | 5     | 6     | 7     | 8     | 9     | 10    |
| 0 C       | 15/15°              | 15/15 | 15/15 | 15/15 | 15/15 | 15/15 | 15/15 | 15/15 | 15/15 | 15/15 |
| 20 C      | 15/15               | 15/15 | 15/15 | 15/15 | 15/15 | 15/15 | 15/15 | 15/15 | 15/15 | 15/15 |
| 30 C      | 15/15               | 15/15 | 15/15 | 15/15 | 15/15 | 15/15 | 15/15 | 15/15 | 15/15 | 15/15 |

<sup>\*</sup> Numerator indicates successful survival; denominator represents total attempts.

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## COMPANIONS FOR CAMELLIAS

By Mrs. William P. Kemp Goldsboro, N. C.

Most camellia growers are primarily interested in the bloom and fine, individual flowers are the goal usually sought. We feel the beauty of the plant itself is not stressed sufficiently, for the glossly, green leaves and stately habit of growth make a plant of year round interest. This fine specimen put in its proper setting, with a good background and interesting companion plants, soon becomes a garden.

In first planning a garden, the proper scale, largely controls the type of material to be used and the ultimate size of the plants must be considered. A relatively small garden seems larger when the plants are in proper scale.

On the other hand, a large garden is more interesting when the space is subdivided by heavy group planting and individual features are developed, This is so skillfully done at Pierates Cruz, near Charleston.

#### Trees

Trees usually set the note as well as supply shade protection for proper camellia care. Live oaks and pines can be used with dogwood or flowering trees to give a beautiful setting. Blooming with camellias are the early flowering magnolias, magnolia stellata, M. Goulangeana, M. liliflora, etc. Then there are flowering crabs, cherries, peaches, and judas, of which we especially like the new white variety.

For the background plants the best group seems to be the broad leaved evergreens, a source rich in material and interest for us in the south. The hollies include both trees and shrubs and are of infinite variety and form. High on our list of favorites are pittosporum and cleyera also loquat, which has a fragrant white blossom in the fall. There are many varieties of viburnums, also of varying heights but the viburnum tinus seems especially good, for it produces clusters of tiny white flowers just as the camellias come into bloom.

There is also the tall, stately plant of V. japonicum (or macrophyllum) whose dark, glossy leaves make a good background. Both species of Photinia are especially good, since the redish brown leaves of the new growth so beautifully compliment the blooming camellias. Podocarpus, Pyracantha, Raphiolepis (India Hawthorne) Primus Carolina, (cherry laurel) Yucca, osmanthus, illicium, Danal (or poets laurel) ligustrum, and many others are useful.

### Background Plants

The aspect of using background plants which add to the garden thru fragrance is most important. This is effectively done at Magnolia and Bellingrath for instance, and adds subtle charm. Osmanthus fragrans (Sweet olive) is delightful and makes a good background plant. Most fragrant of all perhaps is Daphne Odora, a bit temperamental but well worth special care. The deciduous viburnums, Carlesii, and Burkwoodii, etc., also add fragrance during the camellia season.

Of the auxiliary plants, that are used with camellias to give contrast in color, habit of growth or texture of leaves, there are many from which to choose Azaleas are probably the most popular and most effective plants used with camellias, for their fine foliage is a nice contrast to the heavier camellia leaves, even without the flower effect.

#### Nandinas For Contrast

We especially like nandina as the fern-like foliage makes an interesting contrast and the bright red berries are an added interest. This is so effectively done at the Diamond Garden at Savannah, and the plants seem to set berries even in the shade. We like these best planted in groups, which applies also to aucuba, mahonia pieris japonica (Audromenda) whose showers of tiny white bell like flowers are so lovely. We like to experiment with tender plants too and have been quite successful with some things which usually grow much farther south. Groups of flowering quince (Cydonia) either light pink or white, make an excellent foil. We have pointed out only a few kinds. The fun is in finding new ones to try.

The new hybrid rhododendrons are most interesting. They require almost the same care and soil as camellias and, bloom soon afterwards extending the color in the garden.

We have found the free use of aspidistra elatior in our garden adds a note of grace and motion, for the broad leaves catch each breeze. They are the ballet dancers of the garden.

The low growing hollies, like rotundefoilia, convexa, and Helleri crenata stokes, cotoneaster, and dwarf Cape Jasmine are effective planted in front of camellias.

#### Border Plants

For border plants we use Liriope muscari (snakes beard) which grows about eighteen inches high and has lavender-blue flowers in summer, and the smaller L. spicata which grows eight to twelve inches high. Our favorite edging plant is Ophiopogon japonicus (monkey grass) which also makes a fine carpet under trees. Box is beautiful but not hardy in our climate, and the dwarf variety of euonymus makes a good substitute but is subject to scale. However, it grows fast and is easily rooted from cuttings. We feel that borders along paths add greatly to the general effect and are well worth the effort involved.

#### Spring Bulbs

To augment the spring bloom and add color to the garden there is nothing like spring bulbs. We have snowdrops, crocuses, scillas, and grape hyacinths for early bloom. We like the pale, procelain blue, of Queen of the Blues, best of the larg hyacinths. As we do not like bright yellow with the range of camellia colors, we prefer white daffodils and use them freely in our borders, our favorites being Beersheba, Mount Hood, Thalia, etc. We also use blue and white scillas and blue and white violas. Last come the pink and white tulips for a grand finale.

We believe camellias are more effective when used with other plants and these greatly increase the interest, as well as the beauty of a garden.

# Seasonable Reminders

Now is the time to spray. Do it before it gets too hot.

Tea scale is probably the most prevalent and persistent pest camellia growers encounter. No matter how careful we are in examining plants to be purchased, scions to be grafted, or cuttings to be rooted, tea scale will eventually put in its appearance. Fortunately, it is not too difficult to control, and is easily recognized so that timely control measures can be taken.

Unless camellia foliage is closely examined it is likely that we will first notice the symptoms of tea scale as vellowish blotches on the upper surfaces of the leaves. Upon turning these leaves over, we find the underside covered with a white, cottony mass. Under the white, web-like mass are tiny brown scales which are actually half shells attached to the leaves and under which are the female insects. Scales are sucking insects, and it is the withdrawal of chlorophyll which produces the yellow splotching. Heavy infestation cause premature leaf-dropping and generally unhealthy-appearing plants.

Tea scale rarely appears on the upper sides of leaves except in a particularly dense area of a compact plant where there is little light and ventilation.

For the average grower the most practical control method is the use of a contact spray of an emulsified petroleum oil. There are several reliable brands on the market. Perhaps the most commonly used is Florida Volck. Used in concentrations recommended by the manufacturer, these sprays are generally effective. The addition of nicotine sulphate provides an effective spray for lace flies on azaleas.

The diluted oil can be applied by the use of a 1-3 gallon hand-pumped pressure sprayer. Pressure should be kept reasonably high and the nozzle adjusted so that the solution is emitted in a fine spray. Care should be exercised to ensure covering of entire plant surface, particularly the underside of the foliage. The effectiveness is dependent upon a film of the spray covering all scales so that complete penetration and suffocation can ensure a complete kill.

Oil sprays should not be applied during extreme cold or hot periods (when it is likely to freeze or when the temperature is likely to exceed 90 degrees). It has been my experience that a spring application, April or May, in a concentration of 16 tablespoons of oil to 3 gallons of water, provides adequate control. In heavy infestations, a repeat spring spraying and a fall (September) application may be necessary to bring about initial control. Thereafter, a spring application should be sufficient. As a

rule, oil sprays should not be applied more often than twice a year.

Replace your mulch. Winter weather has probably been hard on the mulch around your camellias. Perhaps you can now see the ground under some of your plants. If so add some mulch for the shallow roots need this protection from the summer sun.

Don't forget to disbud. Although there will be no new buds on your plants at the time you receive this Bulletin it will be time to disbud long before you receive the Fall issue of the Bulletin. Therefore we want to remind you that you should disbud all summer long as the buds develop. Some varieties set buds early in the season while other varieties do not set buds until late in the summer therefore disbudding cannot be done all at one time. It is a continuing job. but one that will pay big dividends during the blooming season in the form of larger and better blooms.

Build that greenhouse. If you are going to have that greenhouse ready for your plants this fall now is the time to begin work on it. We know too many people who started theirs late in the summer or early fall and then didn't have it finished before the first freeze. This is true whether you build it yourself or have some one else build it. It takes time and its better to be early than late.

Paint and repair greenhouse. If you already have a greenhouse now is the time to do that little touch up and repair work that always needs to be done at the end of the season. Re-

member you can't do it after you get the plants back in the greenhouse.

Take inventory. Decide which plants aren't worth keeping. Decide what new plants you want to get this fall. Think back over the mistakes you made with your plants this season. Decide how you are going to take care of them this year.

Mix potting mixture. If you are going to repot or plant camellias this fall now is the time to get your soil mixture ready. It is better if it has been mixed for a while before used and then when the time to plant comes you won't have to mix the soil and do all the other things that you want to do. This is one camellia job that you can get out of the way during the summer.

Fertilize. Remember a little twice is better than a lot once. Don't fertilize after June since this may help start a new cycle of growth.

Last call for pruning. Although you can prune almost any time do not prune in the late summer since this will also help start a new cycle of growth which may not have time to harden off before cold weather. Shape your plants before a lot of wasted energy goes into limbs that are growing in the wrong direction.

-CAROLINA CAMELLIAS-

### To Make Geraniums Bloom Indoors:

I water every 3 weeks with:

1 Tab. Epsom salts

1 Tab. baking soda

1 ounce ammonia

mixed thoroughly with 1 gal. water

# **Rooting Camellias**

There are many ways of propagating camellias but more are propagated by use of cuttings than by all the other methods combined. The details of this simple and inexpensive method of adding to your camellia collection is given below.

#### Material Needed:

- A simple box or flat of some kind at least six or seven inches deep. The other dimensions would be determined by the box available or the number of cuttings you want to place in it.
- A rooting medium. There are a number of these but a very satisfactory one consists of ½ sharp sand and ½ screened German or similar peat moss.
- A covering material. A plastic film such as polyethylene is probably most satisfactory although you can use glass or an old window frame.

The flat on box should have sufficient holes or cracks in the bottom to allow easy drainage of water. A piece of burlap or sphagnum moss can be used over the cracks to keep the propagating medium from washing out.

A frame made of wood or bent coat hangers should be used to support the polyethylene so it will not touch the cuttings. If a deep box is used the sides of the box will serve as a support. The flat or box should be placed in filtered sunlight such as under a pine or slat house. If a greenhouse is available this would be ideal especially in the colder areas of the camellia belt.

#### Selection of Cuttings:

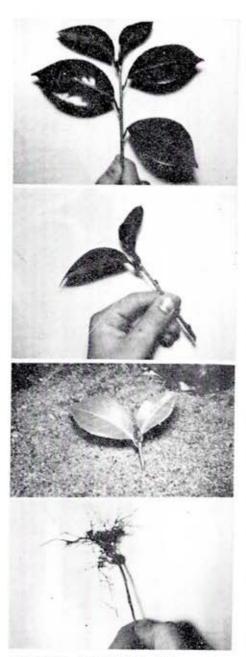
Good healthy tip growth is by far the best type of wood for cuttings. The best cuttings are those taken in June or July or when the new growth has hardened off. This is usually when the new stem turns brown in color. If the stem snaps like a match stick when it is bent it has hardened off. If it just bends or breaks without snapping it is still too green to use.

### Preparation of Cuttings:

When the cutting is first cut use a ball point pen to write on a tip leaf the name of the variety. This makes it simple to keep track of the various varieties you are rooting. Try to keep the cutting moist until they are placed in the rooting flats but do not put them in a pail of water since excessive moisture may prevent quick healing and delay rooting.

If possible the cutting should be at least 3 to 4 inches in length. Remove all except the two top leaves. If space in your rooting box is limited you may cut the remaining leaves in half but if you have plenty of room in your box leave the leaves whole.

Make a cut on a slant below or near a leaf node with a clean, sharp knife or razor blade.



ROOTING CAMELLIAS—Photos above show four important steps in the rooting of Camellia cuttings. *Top*—Selecting the cutting. *Next*—preparing cutting. *Third*—placing rooting medium. *Bottom*—rooting ready for transplanting.

### Placement of Cutting:

The rooting medium should be watered thoroughly and then lightly tamped with a brick just enough to firm it. Then open a row for the cuttings with a knife blade or make individual holes for the cuttings with a nail or small stick.

Many people use a rooting substance such as Hormodin No. 2, Rootone or some similar rooting substance on the tip of the cutting but this is not necessary although some of them may help.

Insert the cutting into the rooting medium at a very slight angle and firm the medium around it. A 3 inch cutting would be inserted into the medium about 1½ inches. Cuttings should be spaced far enough apart so that the leaves do not touch. Water after all your cuttings are in place.

Now cover your rooting box with your cover material. If this is polyethylene be sure to tuck it under the edges of the flat to retain high humidity during the rooting period. Maintaining high humidity is very important in all rooting.

### Care of Cuttings:

After watering the cuttings initially, additional thorough watering will be needed periodically as the medium dies. If the flat is kept tightly covered it will not be necessary to water very often. However, be sure to water thoroughly prior to drying, but do not keep in a waterlogged condition. You may syringe the cuttings lightly as the leaves dry during sunny days. If the flat is get-

ting too much sun it may be necessary to give it a protective covering of burlap or muslin that can be removed or spread out as needed.

As soon as roots begin to form, the cuttings should be aerated in increasing amounts each day. With increased aeration increased syringing may be needed.

### Transplanting Cuttings:

When the cuttings have developed a good root system with roots about 1 to 2 inches long they will be ready for transplanting. Not all cutting, even of the same variety, will be ready to transplant at the same time so you may be doing some transplanting over a long period of time.

The potting or planting soil should be an organic, well drained soil which at the beginning should require little or no extra fertilizer.

The rooted cuttings can be placed in 3 or 4 inch pots or they may be put out in beds. Watering is very important at this stage especially if they are placed in the small clay pots. On sunny days syringing will be helpful.

#### General:

Should leaf spots or stem rot become apparent at any time either in the propagation medium or in the planted areas, a fungicide such as Captain or Ferbam should be used according to directions. Azaleas and other type plants may be propagated by this same method. So if you want to add to your collection of plants quickly and cheaply try rooting some cuttings.

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# How I Fertilize

By ERNEST AYCOCK

First, let me tell you that I've read a lot about camellia fertilization. I have listened to a lot of talk about it and have heard many tales about different "potent kick-a-poo juices". I've found that there are as many different fertilization programs as there are "Camellia Nuts".

Fertilization probably gives amateur camellia growers more anxiety than any other phase of their culture. I never know whether I am applying too much or too little fertilizer as my soil has never been tested. I never apply fertilizer without "fear and trembling" and visions of a nice 'Nuccio' or "Tomorrow Park Hill' or even a whole greenhouse full of plants defoliating from over fertilization. So far, I've been extremely lucky.

Fertilization of any plant depends on the soil mixture in which it is planted. The mixture which I have been using is made up of approximately 45% coarse sand, 35% cow manure and 20% peat. Water flows through this mixture immediately and there is enough peat to retain sufficient moisture to keep the roots from drying out.

My fertilization program as outlined below is for plants grown in containers in greenhouses. There will not be any quantities given since it is impossible to have a set amount that will take care of all plants in many different soil mixtures. I fertilize like my mother cooked, "a pinch of this and a dash of that".



Ernest and Sadie Aycock at the Fayetteville, N. C. Show,

After the blooming season or about the middle of March, I use 4-8-8 Azalea-Camellia fertilizer in powder form (any good commercial brand). On or about May 15th and July 15th, a mixture of 1 tablespoonful of Ortho 10-8-7 liquid camellia fertilizer to a gallon of water is applied as a foliage spray. I use very little fertilizer in the summer months in an attempt to cut down on the second growth of the foliage. About the middle of September I use 2-12-12 fertilizer in powder form and in approximately 30 days add a small amount of 16-4-8 V. C. nurseryman fertilizer in pellet form. This is one fertilizer that really makes me tremble and see visions. On December 1st I start fertilizing every two weeks with 16-5-5 Ortho liquid fertilizer, I tablespoonful to a gallon of water as a foliage spray until the blossoms start opening in quantity, This liquid mixture is then applied directly to the soil at the same intervals and is continued until February 15th.

My wife says I've had fool's luck growing camellias and I guess she is right.

I am experimenting with a new soil mixture this year, one which a local nurseryman formulated and I don't know the exact formula. He is using ground pine bark and his own "kicka-poo juice" in this mixture instead of peat and cow manure. It is very porous and water flows through very freely, so much so that it will be necessary to feed the plants often. For this reason I recently purchased a soil testing outfit, but I have not vet used it. Here I go trying to get scientific and I probably will kill all of the plants trying to feed them exactly what they need. This will be on an experimental basis only on a very few plants because my old program has given me excellent results.

You can grow prize-winning blooms if you will give your plants regular tender loving care. Whatever program you decide on stick with it, don't change every time you hear someone tell what he is doing.

You will never win a show if you do not take your blooms to one. Don't be bashful, you can never tell which bloom the judges will select as the winner. They'll surprise you one day and select your bloom even though you don't think you can grow a winner. Bring your blooms to the 1977 fall and 1978 winter shows. You'll get to know a lot of the nicest people you'll find anywhere. Hope to see you at the shows.

## In Memorium

LEWIS H. KNOCK Salemburg, N. C.

HARRY S. PEARSALL Rocky Mt., N. C.

MRS. CHARLES SANDERS Charleston, S. C.

MARSHALL RHYNE, JR.
Son of Mrs. & Mrs. Marshall Rhyne, Sr.

WILLIAM G. SHANNON Brother of Mrs. Herbert Racoff

> MRS. MILLIE TYLER Mother of John Tyler

# L. Caston Wannamaker, 'Mr. Democrat', Dies

L. Caston Wannamaker, 83, a former member of the S. C. House of Representatives and a Cheraw attorney, died in Chesterfield County Memorial Hospital.

A native of Cheraw, he was a son of the late Dr. and Mrs. T. E. Wannamaker.

He was past president of the Chesterfield County Bar Association and received an AB degree from Wofford College in 1912 and a law degree three years later from the University of South Carolina Law School.

In 1970, the University of South Carolina Law School conferred on him the degree of Juris Doctor.

He established his law practice in Cheraw in 1915, and organized the First Federal Saving and Loan Association of Cheraw in 1929, serving as president or chairman of the board until his death.

He served as president of the South Carolina Camellia Society and the American Camellia Society in 1959.

He was a judge in the American Camellia Society, and the 1961 American Camellia Society yearbook was dedicated to him. He was a charter member and past president of the Cheraw Kiwanis Club and past presi-



L. CASTON WANNAMAKER

dent of the South Carolina Saving and Loan League.

He was a past state commander of the American Legion, past district deputy Grand Master of Masons and past member of the State Forestry Commission.

He was a leader in the establishment of the first state park in Cheraw and assisted in the organization of the Cheraw Golf Club, serving as it first secretary and treasurer.

He helped secure the site for the Chesterfield County Memorial Hospital and was one of the original members of the area commissioners of the Chesterfield-Marlboro Technical Education College.

His business interests have included farming, and he was well-known for his large herd of Hereford cattle. He served for many years as superintendent of the Sunday school of the First United Methodist Church, as well as chairman of the board of trustees.

Mr. Wannamaker also served several terms as a member of the South Carolina House of Representatives and held the unofficial title of "Mr. Democrat" in Chesterfield County during his years of active participation in local and statewide politics.

During World War I he volunteered for service and was with the 81st Division of the U. S. Army and commanded Company B of the 317th Machine Gun Battalion in action during the Muese-Argonne offensive.

His widow, the former Gladys Moore of Marlboro County resides at 407 Green St. Services were held in the First United Methodist Church,

In recognition of Mr. Wannamaker's military service in World War I and his leadership in local and state American Legion Units, his casket was covered with an American flag which was removed before committal services at the church yard by state commander Edwin Malloy and D. E. Stoudenmire, local Legion officer.

Active pallbearers were nephews and grand-nephews. They were Theodore Gage, George Gage, Elliot Wannamaker, Howard Duvall, J. H. Wannamaker III, Herbert Watts, H. P. Duvall III, Paul Hemphill and Milton Moore Jr.

Honorary pallbearers were members of the Chesterfield and Marlboro County Bar Association, officers and directors of First Federal Savings and Loan Association and Dr. J. K. Newsom.

The family suggest that those wishing to make memorial gifts direct them to the First United Methodist Church Organ Fund.

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# Camellias — An Endangered Species

Reprinted from Gulf Coast Camellias Winter, 1977

The following is a watered-down version of the talk given by Judge Paul Harkey of Dallas at the banquet at the fall meeting of the Texas Camellia Society held in Nacogdoches.

Tonight I want to talk to you about an endangered species. We are all familiar with the efforts to save the whooping crane, the golden eagle, the redwoods, etc. The endangered species of which I am seriously concerned is us and our first love, the camellia. From Nacogdoches north and west we grow them under adverse conditions and to have a beautiful, flowering camellia, japonica or sasanqua, we must expend a labor of love. Those of us who do this are becoming endangered.

The American Camellia Society is the finest of all national horticultural societies and its publications are far superior to those of others and written in a language all of us usually can understand. The 1975 roster of ACS members in Texas lists only 230 and there are just 109 members in the Texas Society. Last year the 11 organized societies in Texas joined in a camellia-planting dedication in this hotel courtyard. At this time some of our societies have so few members that assistance is required from outside exhibitors to have enough physical labor to set up and take down the show facilities.

In Texas cities such as Waco, Austin, San Antonio, Corpus Christi, Galveston and Victoria, where camellia growing conditions are very favorable, there are no organized camellia societies. Near Victoria are two magnificent nurseries whose combined camellia stock consisted of one "Mathotiana Supreme" in a two gallon can.

#### WHERE HAVE ALL THE FLOW-ERS GONE?

There is no doubt that our beloved camellia is suffering from the heetic, harum-searum, hurried-up computer world in our disposable, plastic society where the old-fashioned virtues of work, foresight, vigilence, manners, elegance, decorum and graciousness have disappeared, Hody Wilson blames the lack of camellias in the vards of good citizens on the developers of the suburban towns of little look-alike box houses with a few plantings of euvonomous and mimosa. When the young couple moves in, they are so thrilled with their new castle that they have no conceupt of what it would be like five years later if they would plant some worthwhile flowering bushes.

An eminent psychiatrist says that there is an endemic relationship between man and the soil which causes him to be incomplete when this relationship to the ground and its products is severed. The current resurgence of man's affinity for plants is both symbolic and real. Last year in the U. S, tens of millions of dollars

more of plants were sold in the form of hanging baskets than in rose bushes. For the price of one hanging basket one can buy a sound camellia in a five-gallon container. That container can be clothed in an attractive cover and placed on the patio or balcony and brought inside on the few Texas nights when it might get cold enough to make the buds drop. All of us know that the glossy, waxy leaves of the lovely japonica outshine any basket filled with baby tears, spider plant or wandering Jew. Then there is that October to March bonus of beautiful blooms. Its fertilizer costs less per year that one can of cat food and it will thrive better if neglected than if it receives too much attention.

The young people throughout Texas and the Southland are crying out for us to give them the message. How do we reach them? How do we convert this back-to-plants movement that we see all about us. It challenges our greatest effort and our finest ingenuity. In 1600 years the 12 apostles Jesus left behind spread the Christian religion across the Atlantic Ocean and beyond. With 109 of us in the Texas Society, we should be able to spread the camellia message across the southeast half of the Lone Star State during the lifetime of those of us here tonight.

What do we do? First we must extend our antennae so that when a receptive eye or ear is present, we broadcast the word. We take blooms to the office, the store and elsewhere so that others, many of whom have never seen a camellia, can see this glory of Nature. You can tell them about the family Sasanqua, gorgeous for borders, hedges and early-blooming. You can tell them about how the camellia is triple propagated—from seeds, rooted from cuttings and from grafting. Nothing in botanical science is more predictable than the accuracy with which the grafted plant mimics the parent of the growth bud.

If they appear interested in further exploration of the camellia, get their name and number and invite them (better yet take them) to the next meeting. All this may force you to help them find some plants and you as an organized group may have to stick out your neck with local nurserymen to stock camellias. Walk that extra mile and help dig that hole. Give that young couple a plant and charge it up to love of beauty and your fellow man. When it dies, they will strongly feel the obligation to replace it themselves.

When we have shows, the focal point of the traffic should be the table where members are seated to answer questions about camellia culture—make the traffic pass by this table on its way to view the wonders of the Queen's table and pass it again on the way back. Your ideas about how to do this missionary work will all be superior to these—I have only given you a few of the elementary kicks and starters.

We do not have to remain an endangered species. Together and separately we can spread the word. We can set the southeast half of Texas ablaze during the fall and winter months. We can mount a crusade which will be a material contribution to a gentle, worthwhile and enduring society. Let us resolve to do just a thousandeth for the camellia what Johnny Appleseed is credited with doing for that fruit. With a little imagination and a lot of dedication, we can leave this life from a world more beautiful than it was when each of us planted our first camellia.

EDITOR'S NOTE: Hurrah for Paul Harkey!! Let's all take heed and set the southeast ablaze with camellia blossoms.

-CAROLINA CAMELLIAS-

# Camellias at Shiloh

Reprinted from Gulf Coast Camellias Winter, 1977

Those of you who attended the ACS meeting in Nashville last March may remember meeting Frank L. Teuton of Washington, D. C. who came so that he could go back to Lynchburg, Tenn. where he once taught school and where he found the lady who ran his boarding house and who remembered him after nearly 60 years.

Now Mr. Teuton, retired USDA Research Information Officer, has a second love to camellias and that is steamboating and is the author of three little books on steamboating on the Tennessee River. This past April at age 85 he shipped with a group serving as crew on the Julia Belle Swain at Chattanooga bound for Louisville for the Kentucky Derby and the steamboat race in which the Julia Belle won over the Delta Queen and the Belle of Louisville.

On this trip Mr. Teuton stopped off at Savannah, Tenn. close by Shiloh Battlefield where his maternal grandfather was killed in the first day's fighting. The National Military Park, located on the southern border of Tennessee where Alabama and Mississippi come together, also is close by Mr. Teuton's boyhood home in Hardin County, Tenn. At the Park Mr. Teuton talked with the new superintendent who came from the camelliagrowing region of North Carolina and was enthusiastic over the prospect of having plantings of camellia there.

The upshot of all this is that Mr. and Mrs. Teuton obtained plants at Laurel Lake Nursery in Salemburg, N. C. and drove to Shiloh in October. Ground preparations already had been made and on Friday morning, Oct. 15, two sasanquas and 11 japonicas were set into the ground in front of the administration building on each side of the entrance. An appropriate ceremony followed involving personnel from TVA, the USDA, the military park, state and local officials and seven camellia growers from Nashville.

The Teutons feel that with the many tourists at the park who asked questions plus the newspaper publicity that several thousand people, many for the first time, heard about camellias from the Shiloh plantings.

# Plants of Presidents

Reprinted from Plants Alive, August, 1976

By PENNY GIRARD

"This is a typical home with typical problems," says the chief horticulturist at the White House,

To Irv Williams, who's been gardening at the White House since 1949, many of the problems he and his fulltime staff of 6 now face may seem ordinary.

But for the majority of the 1,500,000 people—who see the mansion and its grounds annually as tourists or invited guests, it is far from typical.

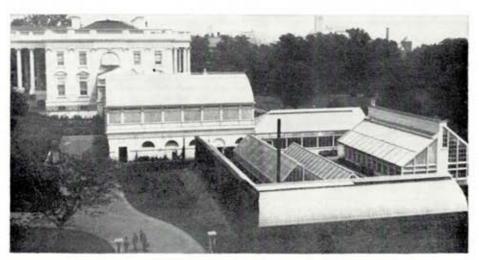
Houseplants, Flowers, Greenhouses

Records show that a number of past Presidents, and their families, had an avid interest in the appearance of the White House, and particularly in dressing it up with indoor plants and flowers.

Browsing through historical data uncovers some interesting footnotes:

—Thomas Jefferson (1801-1809) used to crowd windowsills with rare plants, some of which were his very own botanical experiments.

—Prior to the Civil War, James Buchanan (1857-1861) was persuaded by his niece and official hostess, Harriet Lane, to construct a large greenhouse on the White House lawn. As one newspaper of the time comment-



William McKinley was President when this White House photo was taken in about 1898. The whole complex of greenhouses is now gone; the squared-off area in the lower portion of the picture is now the West Wing where the President's Oval Office is situated. The middle section, with the doomed roof, was a swimming pool in later years until former President Nixon had it covered up and turned into a press briefing room.

ed, "the President's niece walked here among her camellias to escape the constant whirl of fashion." In later years, other greenhouses were built, covering several acres, and became very popular for parties and concerts.

—The wife of Abraham Lincoln (1861-1865) banned all flowers from the White House after her son Willie, who loved flowers, died there of typhoid fever.

—Chester A. Arthur (1881-1885) loved flower arrangements as decorations around the mansion, and often supplemented household allowances for flowers from his own wallet. For one state dinner, he is reported to have paid out \$1,500 for additional flowers. The greenhouses during his administration were kept filled with orchids and roses.

—The wife of Benjamin Harrison (1889-1893) was largely responsible for popularizing orchids, and kept them in bloom throughout the mansion and filled the greenhouse with myriad new varieties. She used to have them shipped to Washington in heated vans from New York and Philadelphia.

She also used other flowers lavishly. At one party in the East Room of the White House, her decorations included some 5,000 plants including 2,000 azaleas, 800 carnations, 300 roses, 300 tulips, 900 hyacinths, 400 lilies-of-the valley, 200 bouvardias, 100 sprays of asparagus ferns, 40 poinsettia plants and 200 small ferns.

—The greenhouses stood essentially as they were until the wife of Theodore Roosevelt (1901-1909), noting that they had fallen into disrepair, had them torn down and cleared away.

#### White House Gardening Today

There is still a small lean-to-type greenhouse on the roof of the mansion, where a small number of flowers and hot-house plants are grown, including scented geraniums whose leaves are floated in finger bowls after formal dinners. Irv Williams likes to refer to the greenhouse as "our little nursery."

Maintenance of all the gardens of the White House today comes under the jurisdiction of the National Park Service, which took over these duties officially in 1962.

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# An End to Aphids

Reprinted from Plants Alive, August, 1976

By GAYLE M. FANKHAUSER

Aphids, or plant lice, are among the most common and universally hated of all plant pests. Their attacks are heralded by waning plant vigor, stunted or deformed new growth, including buds and flowers, and the puckering and curling of leaves. But that's only the damage they do by piercing foliage or roots, and sucking out plant juices. There's more.

In their voraciousness they extract more food energy than their tiny bodies can utilize. The excess is excreted as a sticky honeydew which compounds the damage they have already wrought. It is a choice breeding medium for unsightly black molds which interfere with lifesustaining photosynthesis. It is also the basis of a unique conspiracy between aphids and ants.

Ants have what amounts to a "sweet tooth" which is supremely satisfied by aphid honeydew. This substance is to them so delicious that they follow aphids in their travels over a plant and milk them of their honeydew much the way humans milk cows. In return for this service, ants shelter aphids in their nests during bad weather and promote the aphid life cycle by carrying fertilized aphid eggs



Little green aphids are making a strong attack on this rosebush. By the time the aphid population reaches this size, the plant's growth has probably been stunted, but the rose can still be saved if quick action to exterminate the aphids is taken.

into their nests to winter over. When the eggs hatch in spring, the ants carry the newborn back to a plant host for feeding. Worst of all, ants willingly transport aphids from one plant host to the next.

Obviously this insect conspiracy is more common outdoors than indoors. Yet while it is true that ants are not likely to *initiate* an attack on houseplants, it is quite possible that during warm months when windows are opened they will be attracted indoors by aphid honeydew. Once they set up housekeeping in a pot, they'll not only dig tunnels that disturb plant roots, they'll also transport aphids to new feeding grounds.

It is this movement from host to host, either by winging it or via their pals the ants, that aphids inflict still a third form of plant damage: disease. Aphids are the infamous vectors of many viral and bacterial diseases which can be even more harmful to plants than the aphids themselves.

The scores of aphid species fall into three broad categories: those which feed on foiliage, especially at tender growth tips; those which produce galls on leaves, stems, or flower parts; those which feed underground on roots and bulbs. Ranging in size from 1/10 to 1/16 inch long, aphids are generally quite visible to the naked eve, though you may have to knock out potted plants or pry open the soil around bed plantings to get a good look at underground varieties. Look for soft, pearshaped bugs. They are usually green but can also be brown, black, red, pink, yellow, lavender or grapish. Some are covered with white, cottony threads; some adults have wings,

### Menu for aphids

Indoors the aphid's diet may inelude: avocados, citrus, cyclamen, begonias, chrysanthemnums, dieffenbachias, gardenias, fatshederas, sea grape, palms, summer annuals potted up for winter bloom and violets. Gallproducing species tend to favor asparagus ferns, begonias, ficus, fuchsias, gardenias, gesneriads, and even poinsettias. In outdoor containers and flowerbeds more of their favorites are asters, calendulas, carnations, dahlias, irises, lilies, roses, snapdragons, sweet pea and tulips. The list is almost endless.

#### Organic and chemical cures

Despite their discouragingly varied diet, their rapid rate of reproduction, and their conspiracy with ants, the prognosis for aphid-infested plants is relatively bright if you act quickly and efficiently.

Isolate potted plants immediately. Cut off and destroy galls and badly damaged foliage. If the infestation is mild and localized on the foliage, the aphids can be hand-picked with cotton soaked with hydrogen peroxide or isopropyl alcohol.

More widespread infestations can be halted with a bubble bath. Slip the pot into a plastic bag, wrapping the open end snugly around the stem of the plant to keep the soil from spilling and to prevent bugs and eggs from washing down into the pot. Swish the plant in a gallon of warm water to which you have added 2 teaspoons of soap or detergent,

If the plant is too big for dipping, cover the soil with aluminum foil and put it in the shower. Spray the soap solution on with a mister, being certain to thoroughly wet the undersides of the leaves. Leave the solution on for a few minutes and then rinse it off with clean water. When administering this treatment in the shower, it is a good idea to lay the plant on its side part of the rinsing time to wash away adults and eggs on the under-

sides of the leaves. Any of these treatments must be repeated every few days to totally eradicate the pests.

If after 3 or 4 of these treatments the aphids persist, chemical warfare will be in order. Since aphids are sucking insects, there are 2 ways to kill them: by dousing them with a contact poison or by poisoning their food supply with a systemic insecticide.

Malathion and Cythion are among the safest, most readily-available of the many contact poisons on the market. Mixed with water, they can be sprayed on the foliage, used in a bucket as a dip, or poured on the soil (called a "drench") to kill underground aphids-and ants, if they are present-on contact. Chlordane, lindane, and nicotine sulfate are other common water-mixing insecticides. Aerosol sprays containing pyrethrum or rotenone or both are available at almost every dime store and supermarket that carries plant supplies. These are handly to use and effective against aphids on foilage, but the propellents they contain and the fumes they create can be very dangerous to you.

Systemic insecticides, such as Systemic and Isotox, kill aphids on contact but also offer the indoor gardener 2 bonuses. First, they circulate in the plant juices so that every aphid feeding on the plant, including those you might miss with a spray or a dip, is poisoned. Second, they offer much longer residual action than simple contact poisons. The granulated formulas, which are scratched into the

soil before it is watered, work on a time-release principle; hence, the follow-up program is built in. Each time you water the plant a little more poison is released.

Whether you choose one of these chemicals or another one recommended by your plant retailer, read the label carefully. Apply chemicals as directed and heed all precautions. If possible, try to take plants outdoors to spray.

### Open air methods

Outdoors nature may aid you in your efforts against aphids. Wind and rain may help reduce the population on your plants before much damage is done. Bracnoid wasps, ladybugs, lacewing flies, syrphid flies and praying mantises are all natural enemies of the aphid. So if you notice a small infestation on a rose bush, for example, the handpicking and bubble bath techniques recommended for houseplants might give these natural controls all the help they need to keep the aphid population in check. The effectiveness of the bubble bath can be enhanced with the addition of a quart of chopped green onions or a crushed bulb of garlic to the warm water. The onion spray can be used immediately, but the garlic should be soaked in the water for a few hours. Strain off the onions or garlic before spraying and bury them around the base of the plant.

The same chemical controls described for houseplants can be applied to ornamentals outdoors in containers and in flowerbeds. Imprudent use of

them, however, can kill the good guvs along with the aphids. Pyrethrum, rotenone, and nicotine sulfate are 3 contact poisons which will kill aphids while leaving the balance of nature relatively undisturbed. Malathion is considered safe for humans and pets but may kill bees and other beneficial insects. The addition of a sticker to these solutions will help keep them from washing away in the rain, Soilapplied systemics are also highly effective and easier to control in use than contact sprays and dusts. If ants are present, chlordane powder dusted in their hills and the soil where they are running will sabotage the aphids' mode of transportation to other plants.

#### Prevention

How can you spare your plants an attack of aphids?

Aphids are usually introduced to houseplant collections when they are brought in on hands, clothing, tools and especially on new plants and in unsterilized soil. New acquisitions and outdoor containers to be wintered indoors should get a thorough inspection before entering the house. Then, to be on the safe side, it is wise to give them a bath and a week or more in isolation before they join your other houseplants. But the use of *only* sterilized potting materials including drainage materials—cannot be overemphasized.

Suspicious-looking bulbs and corms should not be brought home either. Healthy-looking ones that you plan to force in containers or put out should be dusted with lindane or another commercial bulb dust before storing, and again at planting time to prevent any aphid eggs they might contain from developing.

In outdoor containers and flowerbeds, wherever there are ants there will soon be aphids. Therefore, it is important to keep ant populations under control to stave off aphid attacks. Mixed planting is also one of the more effective measures you can take. Onions, chives and garlic can help ward off aphids while making a tasty contribution to your dinner table. So can strong-smelling herbs like anise, coriander, savory and thyme. Coreopsis. cosmos, feverfew, marigols, nasturtiums and petunias are just a few of the flowering plants that can protect other, more aphid-vulnerable ones from infestations of these troublesome pests.

# PLEASE PATRONIZE OUR ADVERTISERS

# His Presidents Breathe

From the Charlotte Observer, Feb. 12, 1976

By BILL BANCROFT Observer Staff Writer

What Graem Yates of Charlotte calls the "monument I have built for myself" went on display in the lobby of the Wachovia Center Wednesday.

The monument is 34 paintings of the presidents of the United States that Yates has been painting since 1972 when the first monument he tried to build for himself failed.

Yates, 51, a government buff, lost to Rep. Jim Martin in the GOP congressional primary and turned to painting "to keep my ego from going 10 feet under."

The paintings, he said, give him a chance to say something about government, particularly the characters of the former presidents, and he has been painting ever since.

Yates, a marketing consultant, was the guest of honor at a noon reception at the Wachovia Center Wednesday.

Employes from the bank, Mayor John Belk and Grant Whitney, bicentennial committee head, were some of the people who dropped by to talk, drink Bloody Marys and eat sandwiches.

Yates said he didn't like most traditional portraits of presidents. "The paintings are almost identical," he



Artist Yates and one of his subjects.

said. "Now where in the world would you find a group of people with more different personalities than presidents?" Yates asked.

Yates said it is the personalities he tries to capture. In his portrait of President Dwight Eisenhower he said, "I made him a tough, red-faced general who looks like he just chewed someone out."

He said he threw away his first rendering of President Franklin Roosevelt because "I picked the governor's image and decided his big thing was manipulation of people." He said he thinks the second portrait better illustrates the point.

Yates said his underlying statement is an "advocate for a strong leader. Management's job is to motivate."

Yates first showed some of his presidential portraits at a Cotswold Shopping Center gallery in 1972. He said he uses five colors to paint the portraits, some of which took three weeks and some only a few days.

Before he left, Mayor Belk complimented the work but said he was disappointed he did not see the next president's portrait in the series. "I thought he was a soothsayer," Belk said.

-CAROLINA CAMELLIAS-

# A Note on Camellia Dieback Control by Pruning

By L. W. Baxter, Jr., and S. G. Fagan

This note is in response to the excellent article by R. A. Sansing, Jr., entitled "Pruning" (1). This is an attempt to supplement a phase of his article dealing with the relation of pruning to dieback control.

Most camellia growers, especially those who have grown many camellia varieties in greenhouses, are familiar with some phase of the camellia disease called dieback; i. e., the twigblight, the canker phase at the base of the blighted twig, or the death of the entire stem distal to the twigblight and canker phase. Dieback is a contagious disease that is caused by a fungus, the spores of which are spread from plant to plant by splashing rains or insects, such as ants, and by man during propagation by cuttings and/ or grafting. The causal fungus (Glomerella cingulata) survivies on the above-ground woody parts of the eamellia plant, particularly in cankers. The spores of the fungas are produced in large numbers on these cankers. After the twigblight phase develops on susceptible varieties, such as Camellia sasanqua varieties (cultivars) Cleopatra, Rosea, Narumi-Gata (Oleifera), and Texas Star, the next phase is the canker phase. The twigblight is easily detectable in the spring, but the canker phase which follows the twigblight phase sometimes is difficult to see.

It should be recognized that the fungus, in nature, usually enters the plant through freshly produced leaf scars where old leaves have fallen, usually in May and early June in the Clemson area, which is just after new growth occurs. The spores of the fungus are spread by splashing water or by ants from the cankers to the leaf scars. The fungus enters the stem

through the leaf scar, girdles and kills the young twig that has just arisen from the bud above the leaf scar and grows into the stem producing the canker. Plants grown in the other parts of South Carolina and greenhouse-grown plants may shed their old leaves sooner.

One of the primary ways by which camellia dieback can be arrested or controlled is to prune out the dead wood resulting from infection by the causal fungus. Removing the cankers eliminates the source of the spores and prevents further spread. This dieback-control practice necessitates removing of all discolored wood. It has been determined in the laboratory that the fungus is restricted to discolored wood. Healthy wood is light greenish in color, whereas dead wood invaded by the fungus is a chocolate to rust brown color. The dead wood invaded by this fungus may be confined to 1 or 2 inches of the stem; the dead stem distal to the fungus-invaded wood may represent a few inches to several feet. The fungus cannot be recovered from the dead wood which was not invaded by the fungas. Therefore pruning must remove the source of infection (the twigblight and canker phases) to be effective. If the twigblight and canker phases are detected, then control by pruning represents one of the most effective means available. If there are two or more twigs dying or two or more cankers on a limb or trunk, then it is necessary to cut off tissue so the lowest canker (source of infection)

is removed. Be sure that all discolored wood is cut out.

We do not know how long the causal fungus will survive in the canker after the canker is pruned out and thrown on the ground. For this reason it is advisable to burn the prunings or remove them from the vicinity of the camellia plants.

After pruning out the dead tissue, paint the cut area on the plant with a good fungicidal slurry, such as benomyl or captan. A slurry is a rather thick paste of the fungicide in water.

If a canker is found on a large stem (greater than 1/2 inch in diameter), it is frequently possible to prune out all of the discolored wood without cutting off the entire stem. If enough tissue is removed so that the stem is weakened, splints can hold the distal stem portion securely in place while the pruning area heals. This has been done successfully on such varieties (cultivars) as Adolphe Audusson, Ville de Nantes, Tiffany, and other susceptible C. japonica varieties (cultivars). A coating of the cut surface with a fungicidal protectant is advisable. It may not be necessary to use a fungicidal slurry if the wounded place is first washed thoroughly with a 10% solution of Clorox or Purex followed by the application of a commercial tree coat preparation. This prevents the fungus from re-entering wounded tissue.

Literature Cited

 Sansing, R. A., Jr. 1976. Pruning. Amer. Cam. Yearbook 1976; 42-46.

# Breeding New Camellias

By William L. Ackerman

As presented at the NCCS Fall meeting, Nov. 13, 1976

When Mr. Edward Tolson asked me to speak here at Whispering Pines, North Carolina, I assumed I would be coming south into warmer weather. Needless to say, I had a rather surprised awakening this morning when I looked out at Ed's thermometer and saw that it was only 23°F. This does, however, point up the continuing need in our search for greater cold hardiness in Camellias.

At the National Arboretum, our Camellia research objectives include (a) cold hardiness, (b) floral fragrance, (c) unusual flower colors, and (d) unique leaf and plant forms. I have a series of slides which I hope will illustrate some of our activities, starting out with a snow scene at Glenn Dale, Maryland, where most of my outdoor testing is done. In our tests, C. oleifera has shown itself to be of equal or superior hardiness to that of C. sasangua and C. japonica Slides were shown of C, oleifera and one of its hybrids with C. sasanqua. 'Frost Queen' is the product of a cold hardiness investigation involving seed introductions collected in the northern sections of Japan.

Breeding for floral fragrance has resulted in a number of hybrids involving C. lutchuensis as one parent including 'Fragrant Pink' and the improved polyploid form, 'Cinnamon Cindy' and several as yet unnamed promising hybrids, including one (A-500) which is not only fragrant, but has good potential for cold hardiness.

Unique floral colors, another objective, were illustrated with five hybrid selections showing lavender petals and two with distinctly orange hues.

Everblooming camellias would be highly desirable, and this characteristic is closely approached by a Camellia japonica introduction (PI 276119) from Japan. Slides were shown of how this introduction, under greenhouse conditions at Glenn Dale, Md., produces successive flowers by a process of repetitive flowering. As a result, the plants bloom sporadically over ten months of the year.

Variations in flower form were shown in a number of interspecific hybrids, *C. granthamiana* flowers have large crinkled petals as do also many of its colored hybrid forms. *C. miyagii* has long narrow flower petals and is being used in attempts to develop spider-form camellias. *C. fraterna* is extremely floriferous, frequently bearing 6 to 8 flower buds

at each node along its slender branches. Hybrids with this character and large flower size appear to have considerable potential for attractive landscape plants. C. hong-kongensis has large peach leaf shape foliage and the young growth develops a brilliant red-purple for several weeks before turning green. A hybrid C. hongkongensis x C. rusticana has the foliage of the former and rose pink peony form flowers 3% inches across.

Leaf variegations are frequently attractive in camellias and a green and white variegated form of *C. japonica* was shown. Hybrids with slender pendulous branches have been developed which make excellent subjects for hanging baskets.

Intergeneric hybridization between Camellia and Franklinia has resulted in some promising possibilities, such as increasing cold hardiness, extending the blooming season throughout mid-to-late summer, incorporating new floral fragrance, and production of deciduous forms. Preliminary results have indicated the successful use of immunosuppressants in conjunction with controlled crosses between Franklinia and Camellia with the production of viable seeds.

### Notes From the Editor:

For all those inquiries concerning our camellia cross word puzzle that appeared in the spring 1976 issue, the credit goes to Jeannette (Mrs. John) Graham of Mt. Pleasant, S. C.

Have I received all the show results?

Have articles and show dates to me by August 1, 1977, if its to be included in the October issue.

Yes, we've moved again (only seven blocks from the other address)! Can you believe someone wanted to know if our camellias were on wheels!?! Our new address is 1108 Peachtree Place, Wilson, 27893. Write me.

ROSEMARY

### ADVERTISING IS PROFITABLE IN CAROLINA CAMELLIAS

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