Atlantic Coast Camellias



"The Grove" Tallahassee, FL

Winter, 1986

In My Camellia Garden

James H. McCoy

Fayetteville, NC

In my camellia garden I have heard The "Hello Spring!" song of a mockingbird. The wind molested, creaking pine tree boughs. The splat, splat, splat of rain on thirsty flowers. A symphony complete in song and word.

In my camellia garden I have felt The same warm breeze that made the snow flakes melt. The same cool mist that shrouded Bali-Hai, The suffocating heat of Gobi sky. But over all supreme contentment dwelt.

In my camellia garden I have known That no one laughs and no one weeps alone That when we cry, some one will dry our tear That all our pleasures double when we share. But no one reaps unless he first has sown.

In my camellia garden I have seen Fair nature both tempestous and serene. I've learned to love her every ploy and plan And through her learned to love my fellow man And the Maker of this intricate machine.

NOTICE

The Nomenclature Research Committee of the Southern California Camellia Society has set a target date of October 1, 1986 for the release of it's 19th Revised Edition of Camellia Nomenclature. Therefore, the cut-off date of June 1, 1986 has been established for the inclusion of any new registrations and/or for any changes in descriptions of camellia cultivars. Any registrations or changes in descriptions submitted after the date of June 1, 1986 will be held for inclusion in the 20th Revised Edition which is presently targeted for release in 1989.

Atlantic Coast Camellias

OFFICERS

PRESIDENT	Col. Elliott Brogden	3904 DuBose Dr., Columbia, SC 28204
1st VICE PRES.	Richard Waltz	5405 Pioneer Dr., Baltimore, MD 21214
2nd VICE PRES.	Leslie P. Cawthon, Jr.	2405 Howell Mill Rd. NW, Atlanta, GA 30318
SEC. & TREAS.	J.L. McClintock, Jr.	1325 E. Barden Rd., Charlotte, NC 28226
ASST. SEC. & TREAS.	James McCoy	3531 Scottywood Dr., Fayetteville, NC 28303
HISTORIAN	W.T. Shepherd	4724 Park Place E., N. Charleston, SC 29406
EDITOR	James McCoy	3531 Scottywood Dr., Fayetteville, NC 28303

The Atlantic Coast Camellia Society was organized September 13, 1980 at Myrtle Beach, South Carolina. The purpose was to extend the appreciation of camellias and to promote the science of camellia culture. Dues are \$6.00/year for a single membership and \$9.00 for a couple. Make payment to Atlantic Coast Camellia Society, 1325 E. Barden Rd., Charlotte, NC 28226.

In This Issue

Editors Page
President's Message
Grow Camellias in Iowa? - Jack Hatfield
C. chrysantha an Endangered Species
Getting C. chrysantha to Bloom Early - Bill Donnan
Questions and Answers about the Yellow Flowered
Camellia - Bill Donnan
Show Reports
Aloe-Vera, A Complete Dud - James H. McCoy
Reflections on Fertilizer - Boyd McRee
The Response of Asexual Spores (Conida) of the Camellia Dieback Fungus, Glomerella Cingulata,
to Captan - Luther W. Baxter, Jr. and Susan G. Fagan
Yes, We Grow Camellias - Charles A. Newman 20
Po' Mouthers - Rupie Drews
In and Around the Greenhouse - James H. McCoy
Grafting Stocks for Camellia Reticulata - Col. Tom Durrant
"Oldies," "Goodies," and "Sleepers" - Gus Dubus
Confirmation of Susceptibility of Camellia
Chrysantha to Dieback Caused by Glomerella
Cingulata - Luther W. Baxter, Jr. and Susan G. Fagan
In Search of Fimbriation - Hulyn Smith Inside Back Page

Editor's

w. Page



Our disappearing camellia gardens: this could easily be the title of an article in a camellia publication. I have read about our disappearing camellia nurseries often enough, but as another sign of the camellia times, or as a result of disappearing nurseries, there are fewer and fewer camellia gardens for camellia lovers to enjoy. We don't like to look at ugly things or to talk about unpleasant things or to think about sad things. But if my hometown, Fayetteville, NC, is an example of general conditions, then the camellia scene is dismal indeed.

Several years ago, perhaps 5 or 6, Mrs. Mae Shuler, a member of our club and the owner of a fine camellia garden. gave the club permission to come to her garden and to make as many air layers as the club wanted. This was a fund raising idea. The club responded and about 300 air lavers were made. Almost all of them were successful. These were "oldies but goodies." I remember making 6 air lavers in the top of one plant of 'Kumasaka'. Now this garden, which used to boast close to 100 varieties of fine carnellia plants, is a shambles. Mrs. Shuler recently invited some members to come around and advise her what to do; whether to prune and try to save some of these camellias or to get someone with a chain saw to cut them down.

Another Fayetteville camellia garden which has been decimated by the two "killer" winters is the one belonging to Mrs. E.G. Boggs, a member of ACS for more than 25 years. This garden also contained scores of the great old camellias such as 'Herme', 'Drama Girl', 'Yuki Botan', 'Alba Plena', et al. On one visit to her garden, she let me cut a box full, at least two dozen, blooms of 'Spring Sonnett' with long stems, like roses. She is also the originator of the camellia 'Rosa Panella', a very nice, large, anemone form camellia. She has other seedlings which are good, but which she has never registered. This garden is also a thing of the past. Though some of the plants are still there. Mrs. Boggs has given up on them. She says that she will not replace the dead ones, but will concentrate on rhododendrons from now on.

I received a letter in recent days from a camellia grower in Texas. He was bemoaning the fact that nurseries no longer stock camellias, that the membership of the camellia club to which he belonged had dropped from over 100 to less than 40, that one camellia show which used to show 13,000 blooms now feels lucky if it can exhibit 800 blooms. I know what he is talking about! I have seen a North Carolina version of this sad drama.

What can be done? I don't think

anybody has the answer, or I would quickly pass it on. But, for whatever "cheering up" this might bring on, let me say this:

- We are not supposed to get any more camellia killing winters for 100 years.
- 2. It's about time for the camellia popu-

larity pendulum to swing the other way.

 Just wait till the "baby boom" babies get to be grand parents, the camellia nurseries will not be able to keep up with the demand!

An Invitation to Join

ATLANTIC COAST CAMELLIA SOCIETY

Membership which runs with the Calendar year, January 1 through December 31, entitles you to three issues of "Atlantic Coast Camellias", issued usually in winter, springsummer and fall, 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.

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

Single Membership: \$6.00

Couple Membership: \$9.00

Please Make Payment to:

ATLANTIC COAST CAMELLIA SOCIETY

1325 E. Barden Road Charlotte, NC 28226

(Please Print or Type)

Name

Address

(Street or Box)

(City)

(State and Zip Code)

ABOUT THE COVER DRAWING

This is a drawing of "The Grove," a beautiful anti-bellum mansion built in Tallahassee in 1825 by the first Territorial Governor of Florida. A descendent of his was Mary Coll Collins, wife of Florida Governor, Leroy Collins. They lived in "The Grove" while the present governor's mansion was being built next door. "The Grove" was recently sold to the State of Florida and will be preserved as one of Tallahassee's landmarks.



Message from Our President

Dear Members and Friends of ACCS:

I have often wondered if anyone reads the message from our president. Now I know that some do, because I received quite a few letters from members and friends of ACCS concerning the message in the last issue of Atlantic Coast Camellias. In particular, my remarks about a few exhibitors who bring only four or five prize winners to a show when they could have brought a hundred blooms, caused ripples as far away as California. Apparently, this is a problem in all areas that have camellia shows.

Another remark that brought forth responses was the use of various colored entry cards at some shows that are different from colors at most camellia shows on the East Coast. There apparently is a need to standardize entry cards for the various categories or classes of blooms. If standardization is necessary, who should take the initiative or responsibility? At our next ACCS board meeting this item will be on the agenda. Even if the Board of Governors of ACCS should decide to standardize entry cards for various classes of blooms, the decision would not be binding on a club. ACCS does not have authority to mandate anything. All we can do is advise and encourage.

Now, on to more pleasant comments. I have been amazed at the quality of outside blooms at our fall shows. Even the quantity of blooms approaches previous years. After two winters of the coldest weather on record, many outside growers gave up and replaced camellias with other plants. Not all the camellias were dead, just defoliated. Many homeowners who were slow in removing their plants were pleasantly surprised when new growth appeared. These same plants set fewer buds than normal, but the resulting blooms were superior. Apparently the root systems were not too badly damaged and the heavy pruning coupled with excellent weather in the fall contributed to outstanding show blooms.

I give a lot of talks on camellias to garden clubs and novice growers in and around Columbia, SC. One thing I always tell these folks is that they should attend camellia shows, choose blooms that appeal to them and then talk to an experienced grower who is familiar with the weather, soil, and general growing conditions in his locality. By all means, I ask them to discuss with the expert growers whether the particular variety will perform satisfactorily in an outside environment. Generally, I enourage novice growers to plant camellia plants that bloom either early or late, and avoid mid-season bloomers. Plants that respond readily to Gibberillic acid in the early fall are acceptable, but the novice must understand that the plant would not bloom early

without its use. In mid-South Carolina, winter weather seldom cooperates to the extent that mid-season camellia plants bloom satisfactorily. Late bloomers are satisfactory if petal blight is not present in the neighborhood. Let's all hope that the past two winters has broken the petal blight cycle, and that it will not be a problem in future years.

The point I am trying to make is for experienced camellia growers to cooperate with garden club members and novice growers, and give them pertinent information that will insure a greater degree of success with camellias. Make your presentation include climatic conditions in the area, planting instructions, and guidance on plant selection.

And now, a final word about the Atlantic Coast Camellia Society: I have tried every gimmick I know to increase membership in ACCS. If any of our members has an idea he thinks will increase membership, please write to me immediately. I'm willing to try anything. If we could just get each of our members to

recruit one member, we could double membership. Surprisingly, some camellia clubs in the ACCS region do not have 30% of their members as members of ACCS. If someone would just take the time to explain to these camellia growers the advantage of belonging to ACCS. I feel that many or most of them would join. Most of you will agree with me that our publication is second to none, and I believe that our convention in Myrtle Beach is also second to none. I'm not asking you to try to recruit a person who is new in camellias, but I am asking you to get your local camellia club members to ioin ACCS. I have discovered in the past few months that the membership form must be in your hand at the time you ask a prospective member to join and it's best to get his name on the dotted line immediately, if possible. In this issue of Atlantic Coast Camellias you will find a blank form to be used to sign up a member for ACCS. Please use it. Every little bit helps us survive and prosper.

Elliott Brogden, President

GROW CAMELLIAS IN IOWA?

Jack Hatfield

Outside it is 5 degrees below zero, the wind is blowing, and the wind chill factor is 53 degrees below zero. But as I look out the door into the greenhouse, I see all the green plants and pretty flowers and yes, it is all worth the trouble.

I have been asked how I got started growing camellias in this frigid part of the country and sometimes, I too, have wondered why. But when I see the beautiful flowers unfold, I feel it all has been very worthwhile. I got hooked on camellias during my first visit to South Georgia when I went to visit my wife to be. Out by their front door was a very tall 'Pink Perfection' camellia bush and close

Sioux City, IA

by were many others. I couldn't get over all the various blossoms in all their many colors, and thought how nice it would be to grow them myself.

Then I spent the next three years in the service in places that did not have camellias, but I still remembered their beauty. Upon my release from the service, we moved back to lowa where I was born and where my father also was born. I had been raised by a flower loving family and I started growing flowers outside, mostly perennials that would withstand our long cold winters.

In reading a Better Homes and Gardens article on growing flowers indoors in a box under florescent lights, I decided to try it. At first, it was fine, but then the heat from the lights would burn the tender plants. I talked with the writer of the above named article, and she said that it had been merely an assignment and that her true love was growing flowers in a greenhouse. Well, this got me started thinking about a greenhouse, and I happened to see an advertisement for a Lord & Burnham greenhouse. I sent off for a brochure. Needless to say, I was then too far gone and involved to stop, so I ordered a 10 by 17 foot prefab lean-to greenhouse. I decided that it had to go on the south side of the house, with an entrance from the basement. I took out a small window, broke out brick to make way for the door into the greenhouse, and then started the erection of the greenhouse after having a cement block foundation put in. I put in a natural gas inthe-wall heater, thermostats to operate the heater at 55 degrees and the vents at 65 degrees.

After installing a watering system I was then ready to start growing flowers. So, what should I start with? I brought in some begonias, geraniums, impatiens and a few others. Then on a trip back to Georgia I brought back several potted camellias. This was quite a job, because at night it was below freezing so when we stopped for the night, I had to carry each plant into the motel room so they wouldn't freeze. I know that people thought I was crazy carrying all of them into my room, but knowing how they would develop, I knew it was worth it. These flourished in my greenhouse, so the next year, I brought back some more. I then discovered Nuccio's in California where I could order the size and variety I could best grow here.

I now have about 30 plants of various colors, but my growing them has not been perfected. Each year I lose a few, from what I do not know. But this makes me all the more determined to study more and eventually I hope to be successful.

My greatest pleasure in growing camellias is being able to take a flower, yes I meant one flower, to a friend, a shutin, a neighbor, or to float one in a bowl in our living room. Up here, they are a rarity and people treat them with loving care, putting them in the refrigerator at night so that they will last longer. This makes all the trouble of growing them worthwhile.

My membership in the American Camellia Society has been very happy and worthwhile, for I have gained most of my information about raising camellias from their publications. I also learn about growing camellias by visiting ACS headquarters. We go through Fort Valley each year and stop at Massee Lane. It has been our pleasure to know Milton Brown and Mrs. Teeter. We have seen their camellias at their best, at their worst (after last year's freeze), after their greenhouse burned down and after the erection of their new greenhouse. But with their faithful dedication and planning ahead. they always emerge victorious and the ACS will always be a guide to many camellia growers all over the country.

WHEN WAS THAT?

During the regular blooming season last fall and spring, many (camellia) growers were disappointed at the very limited number of blooms and the loss of many fine camellia plants – from the severe freeze.

Camellian, November, 1952, page 3.

C. CHRYSANTHA, AN ENDANGERED SPECIES

Tom Perkins, as regional director of International Camellia Society in America, received a copy of a publication which seemed to indicate that C. chrysantha had been placed on an endangered species list. In an attempt to clarify this regulation, we contacted The Department of Interior, Fish and Wildlife Service. The following explanation is part of the reply we received:

"-- Since this species (C. chrysantha) is now listed in Appendix II of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), import and export of whole specimens and of parts and derivatives other than seeds, pollen, tissue cultures and flasked seedling cutlures are regulated. Specimens that are artifically propagated are regulated as well as specimens of wild origin, in order to maintain better control on trade in wild specimens (which might otherwise be claimed as artificially propagated.)

This species was proposed for placement in Appendix II by the People's Republic of China. Placement in Appendix II does not always mean that the species is threatened, which is an exact classification for listing some species under the U.S. Endangered Species Act of 1973, as amended. Under CITES, listing in Appendix II means that this species, although not necessarily now threatened with extinction, may become so unless trade in its specimens is subject to strict regulation ---.

Should you wish to apply for a permit or certificate to allow international trade in this species, please contact the Fish and Wildlife Service's Federal Wildlife Permit Office, 1000 North Glebe Rd., 6th floor Broyhill Building, Arlington, VA 22201."

Plain English Interpretation:

- C. chrysantha is not an endangered species, but it might become so in the future (without protection).
- The contracting states, which include our country and the People's Republic of China will not allow trade in C. chrysantha except in accordance with certain rules.
- Trade in seed, spores, pollen, tissue culture and flasked seedling culture is not regulated.

Getting C. Chrysantha to Bloom Early

Bill Donnan

The name of the game in the camellia hobby is to get your plants to bloom early in the camellia season. There is nothing quite as pretty as the first bloom of the Fall season. Now, how would you like to have your C. chrysantha plant bloom in November instead of at the usual February or March period? Such was exactly what happened to Rudy Moore, Curator of Camellias at the Huntington Gardens in San Marino, California.

Rudy had grafted several scions from one of the C. chrysantha seedlings which were growing at the Huntington Gardens. These grafts were made in late August using C. sasanqua under-stock. They were kept in the green house with plastic "baggy" covers. About 6 weeks later Rudy noticed that one of the grafts was sprouting a flower bud where the leaf growth would ordinarily appear.

I volunteer as a helper in the greenhouse each Tuesday morning. Each time I was at the greenhouse Rudy and I would inspect this plant to observe the growth of the flower bud. Each week the bud would

swell a little more and get a little more vellow color. Finally, on the weekend of November 16th and 17th the bud opened. On Monday November 18th Rudy saw the flower in full bloom. He phoned me and said he was going to take the plant up to Nuccio's Nursery - so I drove up there to see the bloom. The bloom was beautiful, 2 inch in diameter, vellow flower with a burst of orange colored stamens. The pollen was "dabbed" onto some of the early blooming cultivars there at the Nurserv, And so, dear camellia hobbvist if you want your C. chrysantha plant to bloom early - all you have to do is graft in August and get lucky!



BUD ON CHRYSANTHA PLANT Grafted in August; Bloom opened Nov. 17

Questions & Answers About the Yellow Flowered Camellia

Bill Donnan

Ever since the yellow flowered camellia has been available to plant breeders, nurseries, camellia hobbyists and flowers lovers, there have been a thousand questions about propagating, growing and hybridizing these camellias. This article hopes to answer some of these questions.

- Q. How many yellow flowered camellia species are there?
- A. Chang Hung Ta in his recent book "CAMELLIAS" list 11 species as follows: C. flavae; C. aurea; C. chrysantha; C. flavida; C. impressinervis; C. euphlebia; C. chrysanthoides; C. tunghinensis; C. pingguoensis; C. pubipetala; and C. luteoflora.
- Q. What species do we have here in the United States?
- A. Many of the botanical gardens plant breeders and hobbyists were sent C. chrysantha seeds in the spring of 1980. In addition, some of the camellia nurseries have C. euphlebia.

- Q. If one owns a C. chrysantha plant and it blooms, what should he name it?
- A. If it is a true species if should not be named unless the seedling blooms differently from the true species. C. chrysantha plants purchased from the Southern California Camellia Society have already been given the name 'Olympic Gold' by the originator Meyer Piet.
- Q. Can a person graft a scion of C. chrysantha on any species of under-stock?
- A. Yes. The scion will grow on any understock and it thrives on C. sasangua.
- Q. Can C. chrysantha be propagated from cuttings?
- Yes, this species roots very easily as a cutting.
- Q. What is the climate tolerance of C. chrysantha?
- A. This species was found in the wild in

a sub-tropical location. It will withstand full sunlight but it thrives best in semi-shade (lath-house) locations. It appears to be able to withstand low temperatures down to at least 30 degrees F.

- Q. What is the yearly growth pattern of C. chrysantha?
- A. This species has many flushes of growth, being slow growing during the hot summer and during the cold portions of the winter. It has two or more flushes of growth during the cool periods of spring and two or more in the fall.
- Q. When do the buds form on C. chrysantha?
- A. Buds began to form in the late summer. However, bud drop or complete bud shedding may occur during the fall flush of leaf growth.
- Q. When does C. chrysantha bloom?
- A. This species blooms in February and March here in the United States.
- Q. Has the C. chrysantha bloomed here in the United States?
- A. Yes. The first blooms were observed on February 1, 1984.
- Q. What is the size of the C. chrysantha flower?
- The flower measured about 2 inches in diameter.
- Q. What is the color of the C. chrysantha bloom?
- A. The bloom has deep "butter-cup" yellow petals and orange colored stamens. Depending on the cultural practices this yellow may vary from

light to deep.

- Q. Have there been any "pink" C. chrysantha blooms?
- A. No! So far, all of the C. chrysantha blooms have been some shade of yellow. The "pink" blooms reported in 1983 were C. sasanqua understock suckers which bloomed on grafted C. chrysantha cultivars.
- Q. Will C. chrysantha species cross with other species of camellia?
- A. The experience in China, Japan, and here in the United States would seem to indicate that C. chrysantha can be crossed successfully into many other species. However, the viability of seeds has been very poor using C. japonica species. The greatest success in setting seed and in seed viability has been obtained when using a hybrid cultivar as the "mother" plant.
- Q. What does the future hold for creating a yellow, orange or apricot hybrid camellia bloom?
- A. The prospects for obtaining new yellow colored blooms would appear to be quite a few years in the future. The Chinese have been making crosses for ten years without success. The blooms have all been pink, red or white. Perhaps by using "bridge" plants or one of the other yellow flowered species such as C. euphlebia or C. luteoflora, the chances of obtaining good yellow colored blooms might be more promising.

Whenever I am worried or perplexed, or feel off colour, I take refuge among my camellias. Sure they are one of nature's greatest tonics. Charles A. Newman Western Australia

SHOW REPORTS AMERICAN CAMELLIA SOCIETY

Houston, TX November 14-16, 1985 Best blooms grown unprotected: Japonica, large to very large: 'Helen Bower', J.A. Penninger Runner-up: 'Woodville Red', Dudley Beaudreaux Japonica, medium: 'Magic City, Red', Eugene L. Seals Runner-up: 'Betty Sheffield Blush Supreme', Kermit Agee Japonica, small: 'Little Babe, Var', Mr. & Mrs. G.F. Abendroth Runner-up: 'Little Babe', R.A. Sansing Japonica, miniature: 'Tammia', John Geiser Runner-up: 'Man Size', Kermit Agee Reticulata or Retic-Hybird: 'Valentine Day, Var', Dudley Beaudreaux Runner-up: 'Harold Paige', Alvin Johnson Non-Retic Hybrid: 'Julie', Tommy Weeks Runner-up: 'Cinnamon Cindy', Greg Davis Collection of three, same variety: Dudley Beaudreaux Collection of five, different varieties: Mr. & Mrs. G.F. Abendroth Sasangua or Hiemalis: 'Our Linda', Tommy Weeks Sweepstakes: Emil Carroll Sweepstakes runner-up: Boyd McRee Best blooms grown protected: Japonicas, large to very large: 'Lucy Stewart', Lew & Annabelle Fetterman Runner-up: 'Tomorrow's Dawn', Lew & Annabelle Fetterman Japonica, medium: 'Magic City', Ed & June Atkins Runner-up: 'Harriet Bisbee', Emil Carroll Japonica, small: 'Buddy, Var', W.F. Mann Runner-up: 'Kitty', Dave Scheibert Japonica, miniature: 'Mansize', Mr. & Mrs. G.F. Abendroth Runner-up: 'Dryade, Var', George Griffin Reticulata or Retic-Hybrid: 'Harold Paige', David Rubin Runner-up: 'Jean Pursel', Mr. & Mrs. G.F. Abendroth Non-Retic Hybrid: 'Mona Jury, Var', Roy Stringfellow Runner-up: 'Julie, Var', Roy Stringfellow Collection of three, same variety: Ed & June Atkins Collection of five, different varieties; Emil Carroll Sweepstakes: Dave Scheibert Sweepstakes Runner-up: Alvin Johnson 873 Blooms shown Show Chairman: Greg Davis

COASTAL CAROLINA CAMELLIA SOCIETY

Magnolia Plantation & Gardens Best blooms grown in open: Best bloom: 'Mathotiana Supreme', Mrs. H.C. Scott Runner-up: 'Mary Agnes Patin', Rupert E. Drews November 3, 1985

Best 'Miss Charleston': R.D. Deadmond Best White bloom: 'Marie Shackleford', Parker E. Connor, Jr. Sweepstakes: Parker E. Connor, Jr. Runner-up: Mrs. H.C. Scott Best bloom originated by Magnolia Gardens: 'Mathotiana, Var', Parker E. Connor, Jr. Court of Honor - grown in open: 'Tomorrow', Rupert E, Drews 'Helen Bower, Var', Parker E, Connor, Jr. 'Rosea Superba', Donna & Bill Shepherd 'Mary Alice Cox', Donna & Bill Shepherd 'Sue Ann Mouton', Mrs. H.C. Scott 'Drama Girl, Var', Mrs. H.C. Scott Runner-up Court of Honor, grown in open: 'Erin Farmer', Rupert E. Drews 'Tomorrow, Var', Rupert E. Drews 'White Empress', Mrs. H.C. Scott 'Spring Sonnett', Dr. & Mrs. Herbert Racoff 'Betty Sheffield', Parker E. Connor, Jr. 'Woodville Red', Parker E, Connor, Jr. Best blooms arown protected: Best bloom: 'Tomorrow Park Hill Pink', Mr. & Mrs. Mack McKinnon Runner-up: 'Mary Alice Cox', Mr. & Mrs. F.N. Bush Best reticulata: 'Hulyn Smith, Var', Mr. & Mrs. Jack Teague Best non-retic hybrid: 'Elsie Jury, Var', Mr. & Mrs. Oliver Mizzell Best 'Miss Charleston', Mr. & Mrs. F.N. Bush Best White bloom: 'Charlie Bettes', Mr. & Mrs. Oliver Mizzell Sweepstakes: Lew & Annabelle Fetterman Runner-up: Mr. & Mrs. Jack Teague Court of Honor - protected: 'Easter Morn', Mr. & Mrs. Oliver Mizzell 'Guest Star', Lew & Annabelle Fetterman 'Helen Bower', Lew & Annabelle Fetterman 'Mathotiana', Mr. & Mrs. Mack McKinnon 'Vi Henderson', W. Gist Duncan, Jr. 'Swan Lake', Mr. & Mrs. Jack Teague Court of Honor Runner-up, protected: 'Carter's Sunburst Pink, Var', Mr. & Mrs. F.N. Bush 'Mathotiana Supreme', Mr. & Mrs. Jack Teague 'Arch of Triumph', Mr. & Mrs. William C. Robertson 'Tomorrow Park Hill', Mr. & Mrs. Oliver Mizzell 'Carter's Sunburst Supreme', Mr. & Mrs. F.N. Bush 'Fashionata', Lew & Annabelle Fetterman Best bloom by novice: 'Rose Dawn', Mrs. Emily Gibbons Blooms shown: 549 Show Chairman: Geary Serpas

COASTAL CAROLINA CAMELLIA SOCIETY

Charleston, SC November 16-17, 1985 Grown in open: Best bloom: 'Mary Alice Cox', Parker E. Connor, Jr. Runner-up: 'Clark Hubbs, Var', Mr. & Mrs. F.N. Bush Best 'Miss Charleston': Parker E. Connor, Jr. Best retic or retic-hybrid: 'Dr. Clifford Parks', Parker E. Connor, Jr. Best non-retic hybrid: 'Tamsin Coull', Mrs. Marla Holland Sweepstakes: Parker E. Connor, Jr. Runner-up: Mrs. H.C. Scott Grown under protection: Best bloom: 'Tomorrow, Var', Mrs. J.C. Bickley Runner-up: 'Ruffian', Fred Hahn Best 'Miss Charleston': Mrs. J.C. Bickley Best retic or retic-hybrid: 'Cameron Cooper', William C. Robertson Best non-retic hybrid: 'Mona Jury', R.F. Steubenrauch Sweepstakes: Jack Teague Runner-up: William C. Robertson Best Seedling: Joe Austin Best novice bloom: Bloom exhibited by Meryl B. Jones Court of Honor: 'Mathotiana Supreme Var', Fred Hahn 'Clark Hubbs Var', Mr. & Mrs. Oliver Mizzell 'Tomorrow Park Hill Pink', Mr. & Mrs. Oliver Mizzell 'Harriett Bisbee', Mr. & Mrs. Stanley Holtzclaw 'Woodford Harrison', William C. Robertson 'Margaret Davis', Mr. & Mrs. Stanley Holtzclaw 'Tiffany', Parker E. Connor, Jr. 'Helen Bower', Parker E. Connor, Jr. 'Valentine Day Var', Parker E, Connor, Jr. 'Dixie Knight Supreme', Mrs. Marla Holland 'Ville de Nantes', Elliott Brogden 'Carter's Sunburst', Mr. & Mrs. F.N. Bush Runner-up Court of Honor: 'Lady Kay', Albert V. Ewan 'Mathotiana Supreme Var', Parker E. Connor, Jr. 'Betty Sheffield Supreme', Parker E. Connor, Jr. 'Imperator', Parker E. Connor, Jr. 'Donckelaari', Mrs. H.C. Scott 'Sue Ann Mouton', Mrs. H.C. Scott 'Valentine Day', William C. Robertson 'Easter Morn', Ann & Mack McKinnor 'Betty Sheffield Blush Supreme', Joe Austin 'Dr. Clifford Parks Var', Mr. & Mrs. Oliver Mizzell 'Pink Frost', Mr. & Mrs. Stanley Holtzclaw 'Arch of Triumph', William C. Robertson Blooms shown: 750 Show Chairman: Charles H. Heins

MID CAROLINA CAMELLIA SOCIETY

October 26-27, 1985 Columbia, SC Grown in open: Best bloom large-very large: 'Drama Girl', Mrs. H.C. Scott Runner-up: 'Elegans Supreme', Gus Dubus Best bloom medium-small: 'Betty Sheffield Silver', Parker E. Connor, Jr. Runner-up: 'Veiled Beauty', Parker E. Connor, Jr. Best white: 'Feathery Touch', Donna & Bill Shepherd Sweepstakes: Parker E. Connor, Jr. Runner-up: Mrs. H.C. Scott Grown protected: Best bloom large-very large: 'Ivory Tower', Fred Hahn Runner-up: 'Helen Bower', Oliver Mizzell Best bloom medium-small: 'Mary Alice Cox', F.N. Bush Runner-up: 'Compari', Lew & Annabelle Fetterman Sweepstakes: Lew & Annabelle Fetterman Runner-up: Oliver Mizzell Best white: 'Snowman', Oliver Mizzell Best Retic or Retic-Hybrid: 'China Lady', Gist Duncan Runner-up: 'Harold Paige', Oliver Mizzell Best non-retic hybrid: 'Galaxie', Oliver Mizzell Runner-up: 'Anticipation', Jack Teague Best miniature: 'Mansize', Ken Blanchard Best seedling: Lew & Annabelle Fetterman Court of Honor: 'Little Slam', Lew & Annabelle Fetterman 'Debbie', Mr. & Mrs. W.C. Robertson 'Gus Menard', Mrs. H.C. Scott 'Compari', Gus Dubus 'Tomorrow Park Hill', Oliver Mizzell 'Gus Menard', Oliver Mizzell 'Betty Sheffield Supreme', Fred Hahn 'Miss Charleston, Var', Geary Serpas 'Valentine Day', Mr. & Mrs. F.N. Bush 'Shiro Chan', Mrs. H.C. Scott 'Tomorrow Park Hill', Rupert E. Drews 'Mathotiana Supreme', Rupert E, Drews Blooms shown: 762 Show Chairman: Elliott Brogden

WEST CAROLINA CAMELLIA SOCIETY

Greenwood, SC

October 19-20, 1985

Best bloom in show: 'Carter's Sunburst', Mrs. H.C. Scott Best japonica protected: 'Charlie Bettes', Mr. & Mrs. Oliver Mizzell Best japonica grown in open: 'Melinda Hackett', Parker E. Connor, Jr. Best retic or retic-hybrid: 'Dr. Clifford Parks', Mr. & Mrs. Oliver Mizzell Best non-retic hybrid: 'Mona Jury', Mr. & Mrs. Oliver Mizzell

Best sasangua: 'Sparkling Burgundy', W.A. Gardner Best miniature: 'Little Slam, Var', Mr. & Mrs. Stanley Holtzclaw Best collection of three, same variety: Mrs. H.C. Scott Best collection of five, different varieties: Mrs. H.C. Scott Court of Honor, grown in open: 'Lady Kay', Mrs. H.C. Scott 'Guilio Nuccio', Mrs. H.C. Scott 'Helen Bower', Parker E. Connor, Jr. 'Kick Off', W.A. Gardner Court of Hoor, arown protected: 'Sea Foam', Mr. & Mrs. Charles Hendrix 'Gus Menard', Mr. & Mrs. Charles Hendrix 'Lady Kay', Mr. & Mrs. Stanley Holtzclaw 'Clark Hubbs Var', Mr. & Mrs. F.N. Bush Best novice bloom: 'Rena Swick', Mr. Broadus Davis Runner-up: 'Mathotiana', Mr. Broadus Davis Best seedling: Number 70, Mrs. R.W. Hart Sweepstakes, grown protected: William C. Robertson Runner-up: Mr. & Mrs. Oliver Mizzell Sweepstakes, grown in open: Parker E. Connor, Jr. Runner-up: Mrs. H.C. Scott Blooms shown: 486

Show Chairman: Mrs. Linda Foxworth

ALOE-VERA, A COMPLETE DUD?

James H. McCoy

Aloe-vera never caught my interest until the summer of 1984. At a meeting of Atlantic Coast Camellia Society officers and directors in Atlanta, several camellia growers were discussing the use of Aloevera sap as an aid to callusing in camellia grafting. It was also mentioned that it was good for treating burns. I made a mental note of this conversation and later reported it in the winter issue of this publication.

Dr. Luther Baxter, I found out later, had heard about this use of Aloe-vera and had made some tests in February 1984. It was a relatively small test, only 24 grafts involved; 12 using Aloe-vera, and 12 controls. He got no takes on the grafts using Aloe-vera, but 10 out of the 12 controls were successful. (See 1984 ACS Yearbook, page 52). Fayetteville, NC

After reading this article, I bought an Aloe-vera plant specificially to test it on camellia grafts. I thought that even if it were not helpful in grafting, I could use it when and if I ever got burned.

I do not have an abundance of grafting stock to use on a test like this, but I did make a small test. Year before last, a friend gave me scions from a camellia plant that was growing at his ancestral home in central Georgia. He wanted me to graft it for him. From the description of the bloom, I decided that it must be 'Professor Charles S. Sargent'. I proceded to make 4 grafts using my best stock in the seedling patch. They all took. Since it was a japonica and probably cold hardy at that, I did not pot up these grafts in the fall, but left them outside so they could put on some more growth during the next growing season. Everybody knows what happened. The Alberta Clipper came, or was it the Siberian Express, and all young camellia grafts were killed or badly damaged. These four grafts were killed.

Last grafting season, this same determined friend brought me more scions from that camellia bush in Georgia. This time I had Aloe-vera, so I decided to make a test. I used Aloe-vera sap on the top of the stock and the scion on two grafts, and made two more grafts without using Aloevera. Everything was the same; same scions, same stock, same grafting procedure. I expected to wind up with two vigorous, fast healing and fast growing grafts, and two ordinary grafts. What I wound up with was two ordinary grafts and two failures. Aloe-vera did not work for me. But at least I had a plant which the Pilorims used to treat burns, or the pioneers, or somebody. I would keep it in case I got burned.

It wasn't long before I got a chance to use it to treat burns. I was frying bacon one morning about a month ago. I poured the hot grease into an empty frozen orange juice container. I picked up the container to move it to the back of the stove and it slipped out of my hand. The hot grease splashed up on my left hand. It burned it from the lower knuckle of the thumb down and across the back of the hand about half way. I said "Ouch", or something like that, and quickly ran cold water on the burned hand. I remembered Aloe-vera in the basement under its grolux light. I ran down the steps, sliced off a spike of Aloe-vera and smeared the thick slimy sap all over the thumb and back of the hand. I expected the pain to go away immediately and stay away. It didn't! The hand continued to throb with pain. After a while the pain subsided and I forgot about the burn. The next day there were several big clear blisters on the back of the hand.

I thought to myself, "Well, Aloe-vera works for burns. As soon as these blisters go away, I'll never know I was burned." Wrong again! In a couple of days, the blisters did go away, but the evidence of the burn was still there; red seared skin! Now, after a month, the back of this hand still shows the scars of that I-thoughtsimple burn.

I just read the other day that Aloevera is good to take away the itching when you get poison oak or poison ivy. Am I going to test this use of Aloe-vera? You had better believe that I am not. As far as I am concerned, Aloe-vera is a complete dud!

REFLECTIONS ON FERTILIZER

Boyd McRee

Fertilizer has contributed more both to head table blossoms and to anemic or dead camellia shrubs than any other cause. A recent advertisement by our federal government read - "WANTED -Man to work on nuclear fissionable isotypes, molecular reactive counters and three phased cyclotronic uranium photosynthesizers - no experience necessary."

Most camellia growers take this literally and enthusiastically adopt recipes for their fertilizer programs without conConroe, TX

sidering companion requirements or soil, protected or unprotected, container or in ground, Ph, when, amount, how, etc. Experience is required in the making of almost anything except mistakes.

The ACS Fall Convention in Houston in November, 1985, attempted to address this subject with the main thrust of a nearly 2-hour education seminar on fertilizer. The panel consisted of renowed persons in the area of fertilizer and horticulture in general.

Anyone of these persons could have

elaborated on the subject for the entire session. Further they represented areas across the country from Florida to California. The audience was largely of the top echelon of Camellia growers as noted by their attendance at the national meeting. Several present or past presidents of the ACS were present. Winners of headtable blooms were also present.

As moderator, I had prepared for the audience and panel, an outline for a wellbalanced discussion including preparation and care of the patient relative to the application of a proper fertilizer program.

The first two points of discussion, soil consideration and planting area (protected, unprotected, container, ground) were passed over almost unnoticed.

Then the panelists found a fertilizer subject that they could get their teeth into. Highly technical in nature, the subject evoked considerable response on whys and whats and hows. The panel could not agree either on the proper Ph or reasons for it being so important. This subject held the audience spellbound for nearly an hour.

Finally each element of most fertilizers were reviewed with their effect on plants or blossoms. Some poor soul asked why, if the air contains 80% nitrogen, does a plant require more nitrogen which seemed to be the most needed ingredient. The answer, of course, was that the roots needed a catalyst and under proper conditions of Ph, the plant roots could assimilate the nitrogen.

A prepared Table listing moisture retention, Ph, organic matter %, ash, nitrogen, phosphoric acid and potassium oxide for various manures as published by Gene Snooks was furnished the audience. No one asked what the potassium oxide does or how to find and apply it. It was noted that although elephant manure was not analyzed, it was very high in each constituent.

A small amount of time was left to talk about trace elements. Dire results could result either from over or under use and yellow leaves would likely appear. I'm either over or under. I don't know which. Someone wanted to know where you could buy them. The reply was, "Well, one source is Micromax Micronutrients from some factory in Georgia." This was a big help to us that shop at local nurseries and feed stores.

As we were leaving the seminar, I asked one knowledgeable camellia grower what he thought about the seminar. He said it was full of sound and fury signifying nothing. Now, I don't agree with that but to the very large majority of growers we need to come to earth and provide practical help. One of the handouts at the seminar was a typical fertilizer program by three outstanding exhibitors. These are excellent but lacking soil consideration, watering technqiue, when, how, and how much, they could very well signify nothing.

At the close of the seminar, I pleaded with the editors of Camellia journals to address this matter. Instead of growing, our ACS membership has dropped nearly 50% in the last 20 years. Many local societies have vanished. The same exhibitors, perhaps 20, were winning the shows 20 years ago and they still are.

We are greatly indebted to these 20 and to the PHD's. But, what we need is not piled higher and deeper but fertilizer spreaders. A little knowledge is a dangerous thing, less knowledge even worse.



Luther Baxter



Susan Fagan

THE RESPONSE OF ASEXUAL SPORES (CONIDIA) OF THE CAMELLIA DIEBACK FUNGUS, GLOMERELLA CINGULATA, TO CAPTAN

Luther W. Baxter, Jr. and Susan G. Fagan

Abstract

Captan at the rate of 600, 1200 or 2400 parts per million, active ingredient (ppmai) killed within 30 min, but not within 5, 10 or 15 min, all asexual spores (conidia) of **Glomerella cingulata**, the camellia dieback fungus. Camellia dieback, as herein used, includes canker, graft failure, and leaf and pod spot as well as death of stems distal to cankers, the "camellia dieback" of camellia literature. Captan at 600, 1200 or 2400 ppmai is equivalent to 1, 2 or 4 pounds (50% wettable powder - 50WP) per 100 gallons, or approximately 1, 2 or 4 tablespoonsful per gallon, respectively.

Background

Captan is an organic agricultural chemical compound used as a protective, eradicating fungicide. Its origin dates back to 1949 with the Chevron Chemical Company and Stauffer Chemical Company. It is manufactured in the form of a dust, as a flowable liquid and as a wettable powder. Although it may cause skin irritation, its LD₅₀ (lethal dose for 50 % of a population of test animals) is 9,000 mg/kg (milligrams per kilogram of body weight). The higher the LD₅₀, the safer the material. Thus, captan at 9,000 mg/kg

Technical Contribution No. 2502 of the South Carolina Agricultural Experiment Station, Clemson University. is a very safe material. It is also considered safe to most plants on which it is recommended. It is recommended on at least 75 crop plants plus the large group of plants collectively called ornamentals. It is recommended as a protective fungicide against many diseaseproducing fungal pathogens including bitter rot of apple and various other anthracnose diseases caused by fungi of the genus Glomerella, or by the form genera Colletotrichum and/or, Gloeosporium which are fungal names designated for the conidial (asexual) stage of Glomerella.

Camellia dieback, canker, leaf spot, pod spot, and graft failure are names given to different phases of a disease complex caused by a strain of the ascomycetous fungus, **Glomerella** cingulata. The entire lot of names, in my judgement, should be collectively housed under the inclusive name of camellia anthracnose. However, since the term "camellia dieback" is so widely used throughout camellia literature, it will be retained for all of these manifestations of camellias infected by **G**, cingulata.

Camellia dieback occurs on Camellia japonica, C. sasanqua, C. reticulata, C. oleifera, C. chrysantha, C. saluenensis and various C. hybrids, but not on C. sinensis (tea). C. cingulata can probably attack most other Camellia species. The pathogen, or the cause of the disease, is a strain of Glomerella cingulata. Bitter rot of apple, anthracnose of bean, and anthracnose of watermelon are diseases caused by very closely related fungi.

Studies of this camellia fungal pathogen through the years have revealed that it is commonly found in apparently healthy buds (Fig. 1) and in the crotches of twigs (Fig. 2). Studies have also shown that it is invariably found in diseased wood in cankers (Fig. 3) and in some camellia leaf spots. Because high humidity favors this camellia pathogen, dieback is seen on camellias grown in the Southeast, especially where they grow well outof-doors. This disease, however, is practically unknown out-of-doors in California where conditions are dry.

G. cingulata normally invades the plant through wounds; and, since wounds are created both on scion and stock, grafting affords an ideal opportunity for spores to infect either scion or stock. Disease, in the form of graft failure, occurs frequently. It has been shown experimentally that benomyl (Benlate) gives good control of this phase of camellia dieback. It is not very efficient in killing spores of G. cingulata, but is quite effective because it suppresses their germination.

Experimental

Asexual spores (conidia) of four isolates of the camellia dieback strain of **G. cingulata** were induced to form on carrot juice agar in the laboratory. Virulence (capacity to cause disease) of these isolates had previously been determined by wounding and inoculating stems of susceptible **C. sasanqua** seedlings with spores from each isolate. Inoculated plants were maintained in a greenhouse at 21 C (70 F). The spores caused infection, resulting in cankers on the inoculated stems of **C. sasanqua** seedlings. Wounded, non-inoculated stems of C. sasanqua healed.

Masses of spores of the four G. cingulata isolates were produced, collected, standardized, and exposed to captan at 21 C for 5, 10, 15, or 30 minutes at a concentration of 600, 1200, or 2400 parts per million, active ingredient (ppmai). After exposure, one milliliter of the captan-spore suspension (100 K* strength) was removed and added to 1 liter of sterile water at room temperature. After thoroughly shaking to randomly distribute the conidia in the water, 1 milliliter of the diluted suspension was added to each of eight (8) Petri dishes. The plates were poured with carrot juice agar amended with lactic acid and streptomycin sulfate to inhibit growth of any contaminating bacteria but which allowed growth of G. cingulata. The cultures were incubated at room temperature (21 C - 70 F) for 7 days, observed and results recorded. Each test was run twice, each at different times.

Data in Table 1 reveal that all conidia of these four camellia isolates of **G**. cingulata were killed after 30 minutes, but not after 5, 10 or 15 minutes when exposed to captan at 600, 1200 or 2400 ppmai.

As occurs in many tests involving biological subjects, there was considerable variability. The conidia (composite of four isolates) were produced and exposed to captan in two independent tests. The number of colonies that developed from surviving conidia varied from test to test and from Petri dish to Petri dish within a test at exposure times of 5, 10 and 15 minutes. However, when conidia were

*Standardized value using Klett-Summerson photoelectric colorimeter, model 800-3, with red filter. Three hundred milliliters of conidia (asexual spores) of **C. cingulata** (reading 100 K concentration) were added to 700 milliliters of a captan suspension. After the spores and the captan suspension were mixed, the resulting captan concentration was 600, 1200 or 2400 ppmai. exposed for 30 minutes, none survived, as revealed by no growth occurring in 48 Petri dishes.

Discussion

Since all spores of all four isolates of **G. cingulata** were killed, within 30 minutes, it is probable that most, if not all, isolates of **G. cingulata** are susceptible to the killing action of captan. Captan 50WP is currently recommended on ornamental plants at 2 lb per 100 gallons of water (1200 ppmai). It is suggested that this rate should be used for soaking camellia scions immediately prior to grafting.

Since benomyl is long lasting in its action, and is an excellent suppressant of the germination of conidia of **G**. **cingulata**, and since it has been established as being safe to camellia scions, it is recommended that captan and benomyl (Benlate*) be mixed together during the soaking of camellia scions immediately prior to grafting. The recommended use rate of benomyl as a scion soak is 300 ppmai (V_2 tablespoonful per gallon of water) and the recommended exposure time is 30 minutes.



Fig. 1 Apparently healthy vegetative camellia buds sometime harbor pathogenic strain Glomerella cingulata.



Fig. 2 Crotches of C. japonica or C. sasanqua sometimes harbor strains of Glomerella cingulata.



Fig. 3 Diseased wood in camellia cankers harbor mycelium of Glomerella cingulata.

Thus, the recommended captan-benomyl suspension rate is 1200 and 300 ppmai, respectively, and the recommended exposure time is 30 minutes. In practice,

Benlate is du Pont's proprietary name for benomyl.
It is commonly sold as a 50% wettable powder;
typically, Benlate 50WP.

scions are soaked for 30 minutes at which time grafting is begun. The scions should be submerged in the captan or the captan-benomyl suspension during the soaking period. The remaining scions are left in the captan-benomyl suspension until grafted even though some scions may soak for 60 minutes or longer. No injury to scions has been noted even though dozens of camellia cultivars have been studied under these conditions. Also, the scions graft successfully and grow off well when compared with scions soaked in water only.

Since there are hundreds of camellia cultivars it is possible that a few may be injured by this treatment but no injury has been observed to date. It is possible that exposure of conidia of **G. cingulata** exposed to captan at temperatures of 11 C or 31 C, 10 C below and 10 C above normal room temperature, for 30 minutes could give different results. Therefore, we recommend that the water temperature be carefully monitored throughout the scion-soaking period.

ACKNOWLEDGEMENT

Thanks are extended to Drs. W.M. Epps and O.J. Dickerson for critiquing the manuscript, and to James Martin and Dave Lewis of the Clemson University Communication Center for the photographs.

Table 1. The response of conidia, composited from four isolates of the camellia strain of **Glomerella cingulata**, to captan at various concentrations for various exposure periods.

Captan concentration			Exposure time (in minutes) of conidia to captan		
(ppmai)	Control	5	10	15	30
600	50*	25-50	0-25	0-6	0
1200	50	0-50	0-25	0-25	0
2400	50	0-25	0-25	0-20	0
Total Petri dishes	48	48	48	48	48

*Each value is the range in number of colonies of G. cingulata growing per Petri dish (16 Petri dishes per time-concentration combination). When the number of colonies exceeded 50 per plate, they could not be counted accurately.

YES, WE GROW CAMELLIAS

Charles A. Newman Western Australia

I am always pleased to meet or hear from anyone interested in growing or promoting camellias anywhere in the world. We all have our problems. Many of us find ourselves facing the vagaries of the weather and the vastly different kinds of good earth which we find in our possession. Maybe now, having fallen in love with their immaculate forms, their richness of colour, their rich shiny foliage, I have reached the point of no return and so must meet the camellia challenge of the hour, Lucky me? I came to Bayswater, a suburb of Perth, the capital city of Western Australia, four miles to the east. I was then ten years old. It was 1915. The soil (if you could call it such) is a fairly course grey sand. On my way to school, I watched my present home being built. Little did I think that I would become the proud owner in 1942. This sand had little virtues, but by the same rule, few vices. Good drainage and aeration are the two most important features in successful camellia culture. They have a surface fibrous and

rather fleshy root system which are the feeder roots, and hence require good drainage and aeration. Also, they must never suffer from lack of water. I found in my experience that it was most important to add much humus matter in preparation, to a depth of at least 15 inches, and at least 30 inches in diameter. Humus material could consist of animal manures well matured at 3 months old, rotted leaf mold, lawn clippings or any vegetation that has rotted to the stage where it no longer engenders heat. Preparation is a forward planning operation. Equal parts of sand and humus matter will be adequate. Stamp it down firmly to allow for settling. Open planting hole a few inches wider than the plant's root ball when it comes to planting. I always have a good stake handv. of durable material, either wood or metal, about four feet in length which I drive in before placing the plant in position, to avoid damaging the roots in the ball of soil. Now the most important point of all, NEVER plant deeper than your camellia grew in the container it came to you in. I always plant an inch or two above the soil level to allow for settling. stamp soil firmly, and place a good mulch to bring plant level about twelve inches out form the main stem. I usually dunk the root ball in a bucket of water before planting out, to ensure the root ball is thoroughly wet. I also water well to make sure the surrounding soil is wet. Camellias often die or fail to progress if planted out deeper. Secure plant to the stake. I use plastic twine as it will stretch a little and not cut into the bark. Examine ties from time to time to make sure this does not occur. I emphasize these points. remembering that mum took me by the hand and made me comfortable until I was able to meet all the challenges and stand firmly on my own two feet.

Watering correctly and when necessary is also important. They who

can master the art of watering are sure to succeed. The type of soil and its holding capacity must be considered. It should never be made wet and soggy, but kept always moist. Your weather pattern and whether exposed to strong winds or draughts should also be considered. Protecting your plants will test your ingenuity. All this may seem a laborious task, but having purchased a good plant, growing it to maturity is like rearing a family with all the joys and pleasures that come with it.

If your budget allows you to only purchase a small or immature plant. I would advise growing it in a container for a season or two to acclimatise it to location. The big advantage is that you can move it to a favorable spot in hot or stormy weather. Do not overpot. Move up two sizes only at each repotting. Do not overwater, and make sure of good drainage or root rot will do irrepairable damage. Soil should be rich in humus and drain well. Be patient and do not try to force your plant with solid fertilizers. I found that liquid feeding in early stages is best. Apply fertilizer strictly as is recommended. Measure the amounts advised carefully. Mix well in a watering can and apply over the foliage as well as to the soil. Camellias absorb through the foliage as well as through the roots. Remember, a little and often is safer and surer. Many plants are lost through over-feeding. Thinking that if a little is good, a lot is a whole lot better can result in disaster!

Yes, we grow camellias in Western Australia, particularly in the coastal strip, and also in the Darling Ranges where there are many pockets of good loamy soil. The ranges consist of outcrops of quartz, grey in colour, and also a near white quartzite. There is also plenty of conglomerate iron stone and gravel. Ours is a temperate climate with prevailing south-westerly and easterly winds off the vast inlands. Our rain bearing winds sweep in from the west and north-west Indian Ocean. Our rainfall amounts to an average of 34 inches, falling mainly in the winter months of June, July and August. We have by comparison a long dry summer with the hottest days well over the 100 degree F. mark. We are fortunate that abundant available water can be obtained from underground water bores in most suburbs, and with heavy mulching of the surface, we grow plenty of beautiful flowers, including camellias.

PO'-MOUTHERS

Rupie Drews

Having coached high school football for fifteen years and growing camellias for twice that length of time I'm often amused at the similarity of the coach and the camellia grower. The wonderful characteristics of the two groups are too numerous to mention, but one characteristic they have in common is that they're the worst *''po-mouthers'' in the world. *(Gullah for understated).

Typical coaching "po-mouthing" run along these lines:

"I won't have a thing this year. We graduated twenty-five seniors." (Actually he has twenty-two 19 year-old freshmen returning who weigh over 220 lbs. each and shave daily.)

"My quarterback broke his right arm in a water skiing accident this summer and last year he could throw the ball over fifty-five yards." (In reality that QB is ambidextrous and can throw the football eighty yards with his left arm).

"The best field goal kicker this school has ever had recently moved. Last year he was consistant at 40 yards." (A Nigerian exchange student recently enrolled and can kick the ball over fifty yards with either foot.)

"I sure hate to open the season with Lee High School this year. They have an outstanding program and their coach has done a remarkable job." (Last year they beat Lee 72-0, the game was called at half-time, and the coach was fired.)

"Ten of my most outstanding players may fail and become ineligible this year." Charleston, SC

(These ten players scored over 1400 on the SAT and were merit scholars.)

"I don't think we'll win a game this year - all of my assistant coaches recently resigned." (He just hired Tom Landry, Don Schuler and Mike Ditka as assistants.)

"Po-mouthing" among camellia growers goes something along this vein.

"Blooms sure look bad this year. We haven't had any rain in three months." (In reality he has nine automatically controlled Sears pumps on constantly and doesn't care if it doesn't rain in the next three years.)

"Boy the freeze sure wiped me out -Don't think I'll be going to a show this year." (Actually he has over four hundred different varieties planted on nine acres and the only plant that he lost was a sasanqua that had terminal die-back.)

"The rats are eating the roots of my plants. I put some poison down three years ago and it nearly killed all of my camellias." (This grower has seven hungry cats patrolling the yard and won "Best in Show" in ten shows that he entered last year.)

"It's been raining for six days and all of my blooms are conpletely ruined." (Look out for this grower - he picked his blooms seven days in advance and owns a walk-in cooler.)

"Last year I fertilized my camellias with something new and they really look terrible." (His plants grew 41/2 feet in one year.) "Don't think I'll have a flower for the first show." (He'll bring twenty-eight coolers and win the Gold Sweepstakes.) Between the tea scale and petal blight I don't think I'm going to grow camellias any longer." (This grower has so many blooms that he brings the blooms to the show in a Hertz Rental truck.)

Have to run - Hertz is on the phone!

IN AND AROUND THE GREENHOUSE

James H. McCoy

A visitor to my camellia greenhouse mentioned to me that he had seen a quantity of red substance on top of the soil in some plant containers at North Carolina Botanical Gardens in Chapel Hill. He told me that it was ground red pepper. placed there by one of the gardners to keep the plants free of scale insects. This called for an immediate investigation! An enquiry brought a reply from Charlotte Jones-Roe, curator of the garden. She would not confirm that the red pepper treatment kept the Botanical Garden free of scale, or even that it was used for that purpose. She says that dormant oil spray is probably still our best bet. She did say that a horticulturist there made some tests using red pepper several years ago in an attempt to find less toxic controls of insects. This horticulturist. Ms. Kendal Brown, said that she did not believe that red pepper will keep down scale insects, but she had good luck using it to discourage ants from carrying aphids on the plants.

Let me put in my two cents on the subject of Ridomil, AKA Subdue. At the annual meeting of ACCS at Myrtle Beach, I made a concerted effort to find out how prevalent was the use of Ridomil among camellia growers. I was surprised to find very few who had ever used it. Maybe they're like I was the first couple of years after it had been brought to my attention. I think I priced it, and immediately lost interest. I finally got around to buying a pint of Ridomil and applying it as a soil drench to all my containers. I was pleased at the Fayetteville, NC

appearance of the roots after only a few months. They seemed healthier than they had ever appeared before. I do not know how often this material should be used. I have been told every 3 months, every 5 months, and every 6 months. After reading Martin F. Stoner's article on root rot in volume 46 of the Camellia Review. I have become convinced that it is a potent material to use in our efforts to protect our plants from root rot, but should not be overused. So I have decided to apply it every 4 months at a concentration of 1 tablespoon per 30 gallons of water. Ridomil is not supposed to cure a plant that has root rot, but to protect it from getting the disease or to slow the development of the disease. But it certainly gives the impression that it cures the plant!

Want a new method of getting rid of moles? I have not tried this, so don't blame me if you find more moles than ever after trying it. Here goes! Wrigley's Juicy Fruit gum is deadly to moles according to the Illinois State Nurseryman's Association Newsletter. Moles are supposed to be attracted to the Juicy Fruit scent. They eat the gum and it sticks in their digestive system. This condition proves fatal within one or two days. To use Juicy Fruit against moles successfully, it is necessary to use plastic gloves. Any human scent on the gum will alert the mole. Roll up the unwrapped stick of gum like a carpet. Make a slit in a fresh mole run, drop in the gum and close the hole to eliminate light inside. One who has tried this remedy reports that two days after dropping in the Juicy Fruit, "The mole runs looked as if they had been bombed, probably from machinations of struggling moles. No new tunnels have appeared. I presume that the moles are dead, though I did not dig through my flower beds to see."

We have all been told that new grafts should be kept on the dry side because the "plant" has no leaves to transpire, or get rid of the moisture. Therefore, we do not water our grafts until they have taken and started growing. But is there danger in using potted up grafting stock which is saturated with water at the time the graft is made? I think that there is. I think that I lost 4 very precious, almost irreplacable grafts for this reason last year. The leaves fell off after a few days. Because they were so special, I used 4 seedlings that had been grown in containers and were outside with the other camellias. They were big, beautiful and the soil in the containers was soaking wet. I believe that these scions lost their leaves for this reason. Though they looked naked without any leaves, I did not immediately give up on them. I disposed of them one by one as the scion turned brown and died.

For two years now, we in the East have not been able to harvest sasanqua seed due to the freezing weather. It used to be that we could gather sasanqua seed by the buckets full in almost any garden. This year, I decided to order seed from Southern California. I felt like I was bringing coal to Newcastle. I was also concerned that the seed might have dried out too much to be viable. My concern was unnecessary. I received 250 seed around the first of December. Cracked them and put them into Captan-soaked, moist peat in a wide mouth gallon jar in the basement. After about a month, I took out 112, snipped off the root tips and set them into half peat, half perlite in a plastic foot tub. They are in a well-lighted window doing well. The remainder were returned to the gallon jar with the little radicles pointing down around the edges of the jar. I am looking at the jar now (10 Jan '86) and it seems that they may all be taken out and potted on. I will probably get close to 100% to sprout and grow off. They may go into the seedling patch when warm weather arrives.

In an article in the September 1985 issue of Camellia News, a publication of The Australian Camellia Research Society, Mr. Tom Savige called attention of camellia growers to a problem he was having with C. chrysantha plants. He had reached the conclusion that they are "extremely susceptible to some strains of the dieback fungus." (See response to this article by Luther W. Baxter, Jr. and Susan G. Fagan on page 28.)

Have you ever heard of root grafting? Actually, it is a camellia propagation method by which a large sturdy plant may be obtained in a relatively short time. I have never tried this propagation method and don't know whether it has any practical application either for commercial or home garden operation. I have heard that it works. Take a piece of camellia root, at least a couple inches long and at least as big as the scion or cutting. Any time you move a camellia, you generate a lot of unused root. Split one end of the root like you would for a cleft graft. Insert in the root a long scion or cutting which has a tapering cut on both sides. Insert the root with the scion attached into rooting medium past the juncture of root and scion. Treat it from this point on as you would any cutting. Roots generally form quickly on the piece of root or the scion or both.

Grafting Stocks for Camellia Reticulata

Col. Tom Durrant Rotorua, New Zealand

As one of the pioneer introducers of C. reticulata from China, I am interested in what my friend, Len Hobbs, said about grafting stocks for that species, in his recent article published in 'Atlantic Coast Camellias.' The twenty-eight or so plants we obtained from Kunming in 1964 had all been approach grafted on stocks of C. japonica, and it has been claimed in Chinese writing that this was the only possible way to propagate these cultivars successfully. When the first shipments from Yunnan arrived in the USA, they were cleft grafted in the normal manner on stocks of C. japonica without much difficulty, though it was reported that 'Purple Gown', 'Moutancha' and 'Chrysanthemum Petal' were difficult, and gave low percentages of success. In the mid 1950s we already had all the varieties which were available from America, and were fortunate to obtain a plant of C. reticulata (Wild Form) from England. This was extra-ordinarily vigorous, grew very quickly into a large dense bush which flowered freely, and set large quantities of seed. In 1959 our daughter, now Dr. Jane Crisp, carried out a controlled breeding programme, using the Wild Form as the seed parent, and pollen from all the then available Yunnan reticulatas.

This programme produced a substantial number of seedlings, which were grown on to flowering and, when selections had been made, for the first time we had surplus reticulata seedlings which could be used as grafting stock. They were all growing in the ground and by 1966, many were large plants, with stems up to 7 or 8 centimetres thick at ground level. Large scale commercial propagators can select a preferred stock, and do all their grafting on that. Amateurs, like ourselves, normally use anything available in the garden or from the local nursery, regardless of species. While the degree of success may have varied, it is fair to say that over many years, we have no definite evidence of incompatibility between species.

In 1964 we received a large shipment of plants from China, which included a number not seen before in the West, and it was when endeavouring to increase these that we first used seedling reticulatas as understock. The grafts calloused very quickly, and grew away with great rapidity. One double graft on an eight centimetre thick stock, was already a dense shrub 1.3 metres high within 6 months, so remarkable that I gave it a full page illustration in the March 1967 issue of the New Zealand Camellia Bulletin. Results with the difficult 'Purple Gown' and 'Moutancha' were much more successful, and all the Yunnan varieties took readily and grew away with vigour.

At about this time, we were visiting a very well known camellia nursery in Australia, and were told that there was a very strong demand for 'Purple Gown'. but that they had been unable to obtain a commercially viable percentage of success when grafting this variety onto their usual C. sasangua, so had dropped it from their catalogue. (It is possible that some of the difficulty arose from the fact that most of the scion material then available was not of very high quality.) The nursery had no reticulata seedlings available, but an enterprising propagator made a substantial number of 'Purple Gown' grafts, using as stock, plants of C. reticulata, 'Captain Rawes', of which they had a substantial number. These were, of course, already grafted on to sasangua stock. They were cut back to a point about 12 cm above the original

graft, and another cleft graft made. The nursery reported a 90% success rate, but we never heard how the resulting plants fared, or if any of them reached maturity in garden cultivation.

By 1966, our original Yunnan retics from the United States were over ten years old, and most had become very large plants. About two-thirds of them were then showing various degrees of the inverted bottleneck effect, which occurs when the diameter of the stock plant does not keep pace with the development of the variety it is carrying. It is always dangerous to arrive at conclusions on limited evidence, but in making comparisons between the relative merits of various species in the role of understock. many things must be taken into account. A root system must be able to provide adequate moisture and nutrients to enable the leaves to carry out their vital function of photo-synthesis; it must provide a firm anchorage in the ground against very considerable wind pressure: and its growth must keep pace with the developing size of the plant it supports, if it is to continue to fulfill both of these functions. J.R. Sealy, in "A Revision of the Genus Camellia," London, R.H.S., 1958, describes C. reticulata as sometimes reaching 15.5 metres (50 ft.). So it is clear that we are talking about a small tree, and the "reticulata forest" in Yunnan provides ample confirmation of that. Not many of us are likely to have retics of this size, but grown under New Zealand conditions, we have some which have reached 6 metres in 15 years, and have trunks of over 40 centimetres circumference at just above ground level. It follows that C. reticulata seedlings, if properly grown in the first place, should be able to meet all the requirements of the most vigorously growing variety that they are required to support.

When considering the suitability of other species, varieties of C. japonica have a very large range of vigour and growth habit; some are strong and vigorous, others slow and almost dwarf, and the same is true of varieties of C. sasangua. Since, in our experience, somewhere about one third of retics grafted on C. japonica, do not show bottleneck effects, it can be presumed that some very vigorous varieties or plants, can compete with the retic rate of growth: but the majority cannot. If reticulatas are to be grown in containers. or kept pruned down to small size for the production of show blooms, it may well be that the type of understock used is not critical. When, however, plants are to be allowed to achieve their full size and natural beauty, the strength and vigour of the understock is of vital importance. We have never seen a case of "bottleneck" on any plant grafted on C. reticulata seedling stock.

And does "bottleneck" really matter, anyway? I think it does, for two reasons. Firstly, its existence does indicate that you have a root system unable to keep pace with the plant it is supporting, and the restricting effects of this will become more apparent as the plant ages. Secondly, as size increases, so does the amount of wind pressure during stormy weather, and we have suffered the distressing experience of a valued plant. which we had carefully nurtured over many years, snapping off at ground level, during a not very severe storm. Since the break occurred just below the grafting point, the plant was a total loss. We have a number of reports of similar disasters occurring in other gardens.

Two more grafting problems are worth mentioning. Camellia plants grown and held for long periods in containers (this can be true of a large proportion of those obtained in garden centres, especially when they are in the bargain bin!) frequently have tangled and twisted root systems. While this article has been on my desk, a fine, 3 metre high plant of 'Manderlay Queen' in full flower in a neighbour's garden, was found flat on its face after a windy night. It had snapped off just below ground level, at a point where two main roots were twisted together. Disasters of this kind are not an infrequent occurrence, but they can be avoided if the root systems of all container grown stocks, are examined BEFORE grafting on them.

It has been claimed in some nursery practise, that the root systems of C. sasanqua are much more resistant to Phytopthora Cinnamomi than are those of C. reticulata or C. japonica. In the deep, free draining soils of volcanic origin, which we mostly enjoy in New Zealand, root rot is rarely, if ever, a problem. But in container culture, it can definitely be so. If the claim is substantiated by controlled experiments to ascertain the relative susceptibility of various species to this disease, it will have to be taken into account when selecting grafting stocks. This subject is included in a list of those which we are hopeful can be investigated in due course, under our recently published Camellia Memorial Scholarship Trust.

"OLDIES," "GOODIES," AND "SLEEPERS"

Gus Dubus

During the 1950s and 60s, when we were first becoming interested in camellias, Gus Roberts was considered by many in our area to be the dean of camellia nurserymen. We would wander through his greenhouses and outside nursery yard and hang on to his every word as he explained to us the particular good or bad qualities of each camellia.

He was the first one to bring to our attention those camellias that he considered to be "sleepers." We thought at the time that this was just one of his coined phrases, of which he had many. We later found that every "camelliaite" has his own list of sleepers.

One of Gus Roberts particular sleepers was 'Mrs. Hooper Connell'. At first we thought of it as just another white, one of the thousands such. But with the advent of gib and with its early blooming qualities, it has become one of our favorites among the whites. Thus, many years later, we realized what Gus Roberts had meant by his "sleepers." Another white sleeper was 'Stella Sewell', which can be interestingly different. Until gib, we had very little success with 'Gus Menard',

Savannah, GA

but it has since won more awards for us than any other white we have ever shown. Many friends say that they cannot grow 'Gus Menard' outside, but that is because they do not gib it early enough for our section of the country. 'Gus Menard' is good only when it is made to bloom early. It is not at all successful here after real cold weather sets in. Of course, we are speaking as outside growers exclusively. This does not hold true for greenhouse growers.

We have found that one of the biggest surprises in our yard for showing in early shows is 'Elegans Supreme'. This one is a big winner for us, but a real sleeper for outside growers late in the season.

Oh yes, another mostly local flower, but one with unusual color and formation is 'Dr. Geechee'. This plant sleeps for many years before putting on some spectacular blooms.

The past two drastic winters have made almost all camellias in our section "sleepers," permanent "sleepers." However, we are continually surprised to Continued on Back Cover

CONFIRMATION OF SUSCEPTIBILITY OF CAMELLIA CHRYSANTHA TO DIEBACK CAUSED BY GLOMERELLA CINGULATA

Luther W. Baxter, Jr. and Susan G. Fagan1

This is written in response to the article by Tom Savige (Australia) published in the September 1985 edition of Camellia News entitled "Camellia chrysantha: A Warning."

Mr. Savige refers to a visit by Colonel Tom Durrant of New Zealand, and he (Col. Durrant) concluded that C. chrysantha plants that had leaf drop (young, developing leaves) were affected by dieback, caused by Glomerella cingulata.

In our experience over the past 35 years with camellias affected by **G**. **cingulata**, young, developing leaves can fall as he described when infection occurs through fresh leaf scars. Typically, some old leaves fall at, or about the time of, the beginning of new growth in the Spring - that is, from the development of mature vegetative buds, usually in the axils of leaves from last year's growth.

We have used known virulent cultures of **G**. cingulata to inoculate fresh leaf-scar wounds of **C**. japonica and **C**. sasanqua, usually during early May here at Clemson, SC. Depending on temperature and camellia variety, infection results, and young twigs that develop from these inoculated lateral vegetative buds wilt within 5 to 15 days. Then young leaves drop off. When older twigs become infected and are killed, the leaves turn brown and remain attached to the dead stem.

We inoculated wounded stems of C. chrysantha with a known virulent isolate of the camellia strain of G. cingulata (G484). Infection resulted and large cankers formed within three months. Wounds were made with a knife on mature stems at the time of inoculation. However, we have not, as yet, inoculated plants through leaf scars at the time of new growth development.

Mr. Savige writes: "However, this growth began to wither, the leaves of the new growth falling while still green." I did not pick up on this in the first reading, but Mr. Savige is saying that the young leaves on new twigs that become infected fall before twigs and leaves mature. It is after maturation of stems and leaves that leaves dry up, turn brown and remain attached after being killed by the dieback fungus, G. cingulata.

Mr. Savige's observation, along with those of Colonel Tom Durrant of New Zealand, are compatible with experimental results that we have gotten when susceptible C. japonica and C. sasanqua cultivars were inoculated with this fungus.

We agree with the use of the captan (2 tablespoonsful per gallon of water) benomyl (Benlate - one-half tablespoonful per gallon of water) mix. However, our results using griseofulvin were negative. The captan-benomyl mix should be used at the time just before and during leaf fall since infection takes place through wounds left by fresh leaf scars. Once the fungus is inside the camellia tissue, neither captan nor benomyl will kill the fungus. Captan is not a systemic fungicide, and benomyl is not adequately systemic to kill **G. cingulata** inside diseased camellia tissue.

¹Professor and AG Science Asst., Department of Plant Pathology and Physiology, Clemson University, Clemson, SC 29631.

In Search of Fimbriation

Hulyn Smith

I have had an infatuation with fimbriation since I came to know Ivan Mitchell of Lake Santa Fe, Florida. Ivan is one of the very best sources of camellia history and overall knowledge of the specie I have ever known. In fact, Marion Edwards claims that Ivan has given me a severe case of a disease known as "camellia fimbritis."

Have you ever seen John Newsome's 'Ville' in late January when the rabbit ears are standing tall and fimbriation is very heavy? Think back a few years, how about those beautiful fimbriated 'Lady Kays' that Buster Bush brought to the shows. If you have ever seen either of these flowers, you will know what fimbriation is, and what more fimbriation could mean to camellias.

About five years ago, I became interested in hybridizing. I have now built my second greenhouse (24 x 100) and intend to use it completely for hybridizing.

There are several areas I want to delve into; fimbriation, early bloomers and you guessed it, those big red retics! I have been gathering fimbriated varieties, and some are very hard to locate.

I hope to graft the following fimbriated varieties this season: 'Fred Sander', 'Dainty (California)', 'Billy McCaskill', 'Cinderella', 'Barbara McBride', 'Camille Bradford', (trying to find this one), 'Hawaii', 'Flame (fimbriated)', 'Dr. Balthazar de Melo', 'Raspberry Ice', 'Fimbriata', 'Rainy Snow', and 'Dr. Knapp'. Of course, I already have 'Ville', 'Lady Kay', 'Clark Hubbs' and 'Flowerwood'.

Two years ago, Ivan Mitchell sent me a scion of the Rothfus 'Mathotiana' sport which is a 'Mathotiana Supreme' sport that fimbriated. I bloomed this one for the first time this season and it bloomed true. This is going to be quite a flower. Each and every petal was heavily fimbriated.

Valdosta, GA

Just wait till I put some of Joe Austin's 'King Lear' into it!

As you look at the flowers this season, keep an eye out for fimbriation. Be especially watchful of the petaloids, which usually is the first place you will find any indication of a plant's capability of throwing a fimbriated bloom. An example of this theory is 'Dixie Knight Supreme'. It will occasionally bloom completely fimbriated. Others which show this tendency to fimbriate are 'Massee Lane', the 'Tomorrows' and 'Mrs. D.W. Davis Special'.

I hope that every who reads this article will be watchful and notify me of varieties I have missed. I understand next year that Julius Nuccio will release a seedling of Bill Goertz, a fimbriated red reticulata hybrid. Its parentage is 'William Hertrich' x 'Clark Hubbs'. Sergio Bracci tells me it is a great flower. I am sure it will be quite an exciting addition to those we already have since it is the only retic hybrid we have with fimbriation.

My ultimate goal in hybridizing is a dark red, early blooming reticulata with form similar to 'Dr. Clifford Parks', heavily fimbriated and with the fragrance of a tea olive. Dream on, dream on! Any results in my program will be a long time materializing. I have to search for breeding material, then attempt to hybridize the new material and then grow off any seed I might produce. One definition of the word patience is long suffering. I won't be exactly suffering, but I am sure I am in for a lot of disappointment. However, I do believe patience pays off eventually.

Try growing a few camellias for your own pleasure. Who knows, maybe you will catch "camellia fimbritis" and join me in my new venture.

SOUTH CAROLINA CAMELLIA SOCIETY, INC. James H. McCoy 3531 Scottywood Dr. Fayetteville, NC 28303 Editor

BULK RATE U. S. Postage PAID Fayetteville, NC Permit No. 282

M/M Geary M. Serpas 104 Tyvola Drive Summerville, S. C. 29483

OLDIES (Continued from Page 27)

find what beautiful camellias we can grow outside up until about the middle of December. We can say, when asked, that we have our season made and enjoyed up until that time. Whatever else Mother Nature lets us have is just pure lagniappe.

We are including here a list of camellias which are "oldies" but "goodies." For years, until the advent of gib, we just looked at these camellias and passed them by. These respond well for us: the rubra family, particularly variegated 'Mathotiana' and 'Mathotiana Supreme'; 'Hakurakuten', which we used to grow for grafting stock only but now has become a favorite for cutting to use in arrangements; 'Compari', one of the best and most interesting of the flowers to have found new life with gib; 'Spring Sonnett'; 'Morris Moughon' and rosea family; 'Charlotte Bradford'; 'Don Mac'; 'Allie Habel'; 'Mike Witman'; and 'Woodville Red' one of the most consistent head table winners for us.

Right now, the whole camellia yard is "sleeping" from the aforementioned two record-setting winters. So many beautiful plants were lost or mutilated, but I guess we will never give up on our children. We'll just prune them, tend them and hope that they will reward us by surviving and performing even better for having gone through trying times. At least this is what we tell ourselves as we toss another dead camellia bush on the throw-away pile.