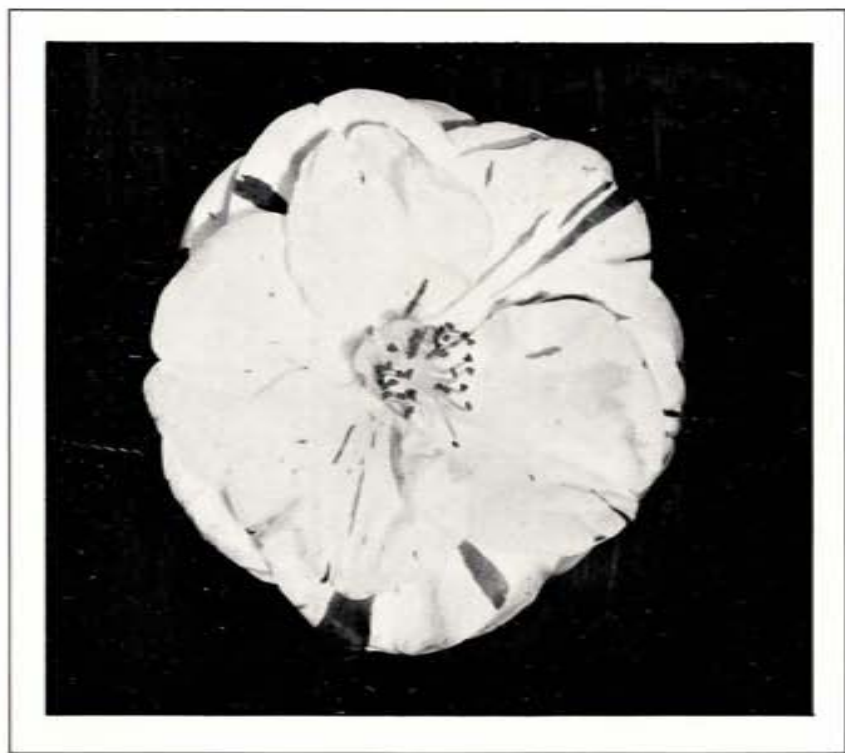


Atlantic Coast Camellias

JOURNAL OF THE ATLANTIC COAST CAMELLIA SOCIETY



TRICOLOR

Grown by
Ed and Lu Powers

ATLANTIC COAST CAMELLIA SOCIETY

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COVER GRAPHIC

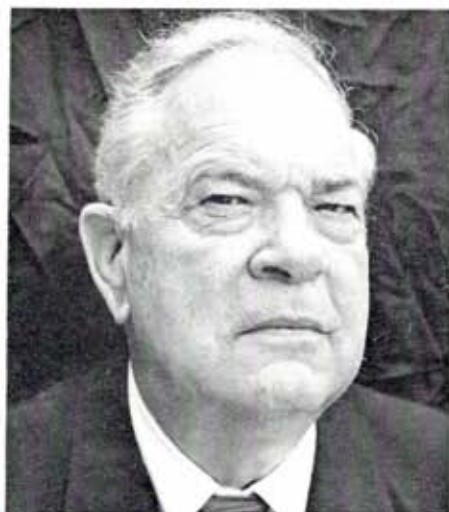
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TRICOLOR is a great old semi-double Camellia which was brought from Japan to Germany in 1832 by Franz Von Siebold. The bloom is medium in size, and is waxy white streaked with carmine red. The plant is vigorous, compact, and upright in growth form. It blooms in mid-season. This bloom was grown by Ed and Lu Powers in Wilmington, N. C. (photo by Jim Darden)

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A MESSAGE FROM OUR PRESIDENT

MARION EDWARDS
JACKSONVILLE, FLORIDA

Dear Members:

Our 10th Anniversary Convention was held at Myrtle Beach, SC on October 5 and 6. A grand time was had by all, the weather was perfect, nothing but sunshine and mild temperatures.

A total of 110 members were present including several who were there for the first time. Some members who usually attend could not make it this year and I say to them they were missed and everyone hopes they will be back next year. For those members who have never been to the gathering of the clan, it is a weekend of great fun and fellowship. Come join with us in 1991.

Roscoe and Beth Dean were in the parking lot with a very big truck full of fine grafted camellias including most if not all of the newest and rarest varieties. Some were so new and rare that only a few of our members knew what they were. Roscoe has promised to come back in '91 and if it's new and rare, he will have it for sale.

William F. Howell of the Wilmington Fertilizer Co. was the guest speaker at the Saturday morning business meeting. Bill is a fine camellia grower and has won more than his share of trophies in the Carolinas for a number of years. His subject was the various types of fertilizer and his talk along with a slide presentation was very informative.

Latimer and Gloria McClintock have been our Secretary and Treasurer since

the organization of the A.C.C.S. in 1980 and have asked to be replaced. Fred and Clara Hahn have been appointed Secretary and Treasurer and the McClintocks as Assistant Secretary and Treasurer.

President Cawthorn presented Latimer and Gloria with a Boehm Porcelain "Pat Dixon" as a token of appreciation from the A.C.C.S. for ten years of faithful and dedicated service.

Mrs. Sadie Aycock Lyons donated two of her great camellia paintings, one for 1989 and one for 1990. The paintings were won by John Newsome and Elliott Brogden and raised \$1,020.00 for the Atlantic Coast Camellia Society.

Bill Robertson and Buck Mizzell have been our auctioneers in the past; however, Buck could not be present this year and three substitutes tried to fill in for him. In spite of this handicap, the auction of plants, art crafts, jellies, fertilizer, etc. raised \$713.50 for our treasury.

Our membership has declined considerably during the past year. Dues have been raised to \$12.50 per year but we must obtain new members before we can resume having Camellias in color on the front of our journal. Please try to obtain one new member for 1991. You might consider Elliott Brogden's suggestion and give a membership as a Christmas present.

ROMANCING THE CAMELLIA

by Phyllis Austin,

Over the last 40 years in North Carolina, my father has spent three-quarters of his waking moments growing and fussing over one particular genus of flowers — the elegant Camellia. Every morning when I wake up in Maine, I know that he has already been to his greenhouses, checking on the many japonicas and reticulatas as attentively as a mother would a newborn.

Today, my father is regarded as one of the most eminent camellia growers in the country. His flawless “blossoms from heaven,” carrying such exotic names as “Tomorrow’s Dawn,” “Elegans Splendor,” and “Silver Cloud,” have made American Camellia Society history and showered him with trophies. Joe Austin is the man to beat in camellia competition.

Joe and Mabel Austin
attend a Camellia show
in Charlotte, N.C.

(photo by Shepherd)



As the show season came to a close this spring, he celebrated his 74th birthday, and I thought about how flowers have shaped my father's life and yet how little I know about his relationship with them.

I've never known whether flowers' brief lifecycles raise issues of mortality for him — or why he has never immortalized himself by naming one of his new seedlings for himself. Naturally taciturn, he has never offered to share his feelings, and I have never probed. "It's hard for a man to talk about his flowers," says my brother-in-law, who's also a camellia gardener.

But I can see clearly that romancing camellias is my father's life's joy. I imagine that if he could get down to the heart of the matter, he would tell me that growing camellias is his way of affirming life's continuity and that it soothes his fear of death. At the same time I think camellias are a means by which he is able to express nurturing instincts that he's never been able to easily show his children.

I was 10 years old and he 36 when he bought his first camellia plants. He was looking for roses to landscape our yard in Four Oaks. When the nurseryman showed him a camellia, he was captivated, recalls my mother. "In less than two weeks, we were on a two-ton truck going to Gus Gerbing's greenhouses in Fernandino Beach, Fla." (Gerbing was a well-known camellia expert in the 1950s.)

They returned home with over 140 camellia varieties. As soon as the plants were in the ground, he wanted a greenhouse to grow show-quality blooms. "He wanted perfect flowers," my mother says. A self-made businessman, he proceeded to learn about camellias the way he did about the stock market — by reading and taking risks. He tried new and un-

proven (for the area) varieties and experimented with grafting and hybridizing. He was one of the first to try gibberellic acid to produce early blooms.



Joe gives freely of his camellia expertise. Here he talks with editor Jim Darden at a Fayetteville Camellia Club gathering at Annabelle Fetterman's home in Clinton.

(photo by Shepherd)

Soon he was producing impeccable flowers that made jaws drop. It seemed as if he had a language all his own to coax his flowers into growing larger and more exquisite. It was classic of him to walk into the house with a grin on his face and a new bloom in his hand. "That's the prettiest baby you'll ever see," he would announce to us. "It will knock the judges cold."

His blooms, eventually reaching up to eight inches wide and five inches deep, raised the standards for camellia show winners. Flower enthusiasts from far and wide telephoned or dropped by the house for advice. As private a man as he is, he wasn't stingy with information. He enjoyed exciting others to grow camellias and gave away hundreds of cuttings.

His plants were in such demand that he was "forced" temporarily into the commercial nursery business in the mid-60s. He moved his plants from town and expanded at a family farm a few miles down the road. He planted six acres of camellias, rhododendrons, and azaleas, built 19 greenhouses, and made a handsome profit.

As much as he loved a dollar, though, camellias and business just didn't mix, and he didn't like having crowds of customers around him every day. He preferred to go about grafting, pruning, and rooting in solitude. So he sold the business and started from scratch, closer to town, and again only as a hobby. But it wasn't long before he had planted 1,500 varieties, some from as far away as China and New Zealand. Almost singlehandedly, he constructed three greenhouses.

Because he so easily dominated camellia contests, his strong sense of fair play caused him to drop out of competition for a number of years. Still, he exhibited and attended shows because they were his primary

social outlet. In a flower show setting, he becomes uncharacteristically convivial, humorous, and carefree; he can stand up before a crowd and give a speech. "It's like he's an entirely different person," says my mother, who wholeheartedly supports his camellia involvement.

In the past several years, many of my father's camellia friends have died. Not long ago I learned that when he's told of a passing, he goes out to his flowers to feel his grief. Suddenly, I saw the relationship between him and his camellias in a new light: his flower garden is a refuge where he can express emotions that he doesn't feel safe to show around his family in normal life. I saw his vulnerability and felt a great wave of connection with him that seemed to have been waiting to happen for years.

This past season, I was visiting my parents when the first camellias were opening, and I was struck at how renewed my father acted. His blue eyes sparkled, his senses were aroused, and he was too energized to sleep for long. He was in his greenhouses by dawn, watching the buds unfold. He has seen thousands of his flowers bloom, and yet it was as if he was discovering the wonder of creation for the first time. His sense of satisfaction was palpable.

When the shows began, he and my mother arose in the wee hours of the morning, cutting 100-150 blooms, carefully packing them in ice and cotton, and traveling hours to the weekend competitions. His pace reminds me of how naturally I come by my sense of drive. "Your father's going like he's 16 again," my mother tells me.

I worry about them being on crowded highways and the fatigue that eventually hits both of them hard by the end of March. But I don't worry that my

father's spirit is weakening. As long as he grows camellias, he will be vibrant despite the inevitable aging that he curses. And as his daughter, I cherish his legacy.

Editor's Note: Romancing The Camellia was written by Phyllis Austin, who is at Stanford University on a John S. Knight Fellowship. The article appeared in the May 18, 1990 edition of the Maine Times. The illustration is by Jon Luoma.



AN INVITATION TO JOIN

We hope that you will join the Atlantic Coast Camellia Society. Let's enjoy Camellias together.

The Atlantic Coast Camellia Society was organized September 13, 1980 at Myrtle Beach, South Carolina. The purpose of our organization is to extend the appreciation of Camellias and to promote the science of Camellia culture. Through our Camellia shows and programs, and by exchanging knowledge and ideas with the Camellia specialists within our membership, we feel that everyone in the ACCS benefits from being a member of this organization. Whether you are a beginning Camellia fancier or a veteran Camellia competitor, the ACCS is dedicated to providing information, shows, and social events that you will find helpful, entertaining, and enjoyable.

Annual dues for membership in the ACCS are \$12.50 for singles or couples. The membership year runs from September to September. A membership entitles you to three issues of Atlantic Coast Camellias, the journal of the Atlantic Coast Camellia Society. These are issued January 1 (spring), May 1 (summer), and September 1 (fall). In addition, your membership provides an invitation to our annual meeting in October in Myrtle Beach, S. C. This event has been especially successful in recent years, with over 100 participants in 1986, and with such keynote speakers as Julius Nuccio and Sergio Bracchi.

A variety of Camellia topics are addressed in articles published in Atlantic Coast Camellias. In addition to regular features concerning Camellia culture in the landscape and in the greenhouse, articles cover such topics as Camellia planting, grafting, rooting, judging, pruning, gibbing, disease control, insect control, new and old varieties, show preparations and results, liming, fertilization, spraying, mulching, disbudding, and nursery production. Numerous photographs and illustrations are provided.

We invite you to join, and welcome you as a member. Please make your check payable to the Atlantic Coast Camellia Society. Fill out the convenient application blank below, and mail it to:

Atlantic Coast Camellia Society
4437 McKee Road
Charlotte, N.C. 28270

NAME _____

STREET ADDRESS _____

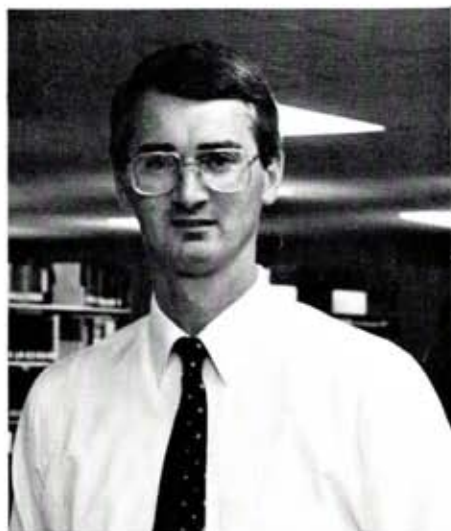
CITY _____ STATE _____ ZIP _____

PHONE () _____

Check if you want a membership card.

Editor's Column

by Jim Darden



Many thanks are in order for three special people. First, our outgoing President, Mr. Buddie Cawthon, deserves a big hand for his dedication and hard work for our society over the past two years. Buddie has served well, and I appreciate his help in preparing your Journal for the past six issues.

Thanks are also in order for Latimer and Gloria McClintock. They have worked tirelessly for many years for your society. We hate to see them go. So much is done in preparing this publication that no one ever sees. Latimer has corresponded with me sometimes almost weekly in updating the mailing list, reporting pertinent information, etc. My sincere thanks go to both Latimer and Gloria.

The meeting at Myrtle Beach was a big success. I was sorry to hear that many of you had not received your September journal. I understand that by mid-October most had arrived. I always mail the journal by the first of the appropriate month, but bulk mailing rarely serves us well. I have been assured that bulk mail goes to

Greensboro or Charlotte, where it should not sit on a shelf for over two days. Obviously, the mail sat somewhere for quite a long while. The mailing rate is 16.7¢ bulk, and 65¢ first class. We can't afford to mail nearly 300 pieces at a rate 48.3% higher than the bulk rate, and I'm afraid that we will have to continue to use the bulk services. We all regret the problems that occasionally happen.

The past two months have really been exciting and interesting for me. During that time Mary Nell and I have been building a new house, and I have published a new book which is a biography of my Father. My Dad was captured on Wake Island fifteen days after Pearl Harbor by the Japanese, and endured forty-five months in Japanese prison camps. His story is really amazing, and I thoroughly enjoyed the travel, research, the interviews that I have been a part of for the past five years in researching the book. I have certainly learned a great deal about how little my generation of "war babies" knows about the contributions of our parents' during the war.

The book is entitled *Guests of the Emperor*, and it is 320 pages in length. It has well over 200 photographs, maps, battle sketches, and woodcuts, many of which have never been published before. If you are interested in seeing a copy, just give me a call or drop me a line.

I hope everyone has a great Camellia season, and I look forward to seeing many of you at the shows. Best wishes for blue ribbons in 1990-1991.

Jim Darden

Camellia Flower or Petal Blight

By Luther W. Baxter, Jr.
Clemson University

Camellia flower or petal blight affects only the open flowers of camellias. It does not affect leaves, stems, roots, non-opened buds or fruit (seed pods). The cause of the disease is a fungus, *Sclerotinia camelliae*, which affects only camellias. It does affect several species of camellia but the fungus is usually active from January 1 through April, coinciding with the normal flowering period of *C. japonica*. Since *C. sasanqua* blooms in the fall, it escapes infection. Buds of *C. japonica*, which are gibbed and thus bloom in the fall, also escape infection.

Most *Camellia japonica* cultivars bloom naturally from January 1 to April 1, depending on location. Along the Gulf Coast they might bloom even earlier than January 1, while in the Piedmont section of the Carolinas they bloom later. Regardless of the time when camellias bloom at their peak (March at Clemson), the fungus *S. camelliae* is active and its growth and spore production is synchronized with this peak blooming period. Activity for the fungus begins with the germination of the fungal survival structure (the sclerotium) which is black, hard body



Jack Kohler, from Stevenson, Maryland, and President of the Pioneer Camellia Society in Baltimore, makes Annabelle happy by giving her one of his floral arrangements at the Fayetteville Show in March. Jack conducted a workshop on floral design with camellias.

(photo by Shepherd)



Latimer and Gloria McClintock are awarded a Boehm Porcelain Camellia in recognition of their many years of service to the ACCS.

(photo by Shepherd)

that generally takes on the shape of the lower part of the old camellia petals. During germination, a structure called a stipe, grows upward until it comes in contact with light at which time the tip expands to form a saucer-shaped structure called an apothecium. The apothecia are about the color of pine straw and they are usually about one-fourth to one-half inch in diameter. Regardless of the size of the apothecium, (ium, singular — ia, plural) mature ascospores are produced in the upper surface of this structure and are forcefully ejected into the air currents which distribute them downwind at random. Millions of ascospores are released periodically from these apothecia over a period of several days. There may be from one to a dozen apothecia that arise as the old ones are expended. The

ascospores are microscopic in size and are vulnerable to various environmental effects which usually restrict their spread to a few hundred yards, but they can be viable up to a mile. The pathogen *can* spread from camellia to camellia only by wind-borne ascospores released from apothecia.

The fungus responsible for azalea petal blight, *Ovulinia azaleae* is a close relative of the camellia flower blight organism. However, the azalea petal blight fungus produces thousands of asexual spores (non-sexual spores called conidia) which are produced on the diseased flowers and can be spread to other azalea flowers. It is this mass of asexual spores which, during favorable environmental conditions (warm, cloudy, moist weather) cause the almost complete, simultaneous

collapse of all the flowers on a particular azalea plant.

Two other fungi need to be mentioned, *Sclerotinia sclerotiorum* and *Botrytis cinerea*. Both of these fungi can attack camellia flowers but neither cause the formation of the characteristic sclerotia at the base of the flower. *Botrytis* is a widespread fungus that survives as sclerotia in or on the soil. Its asexual spores, the conidia, are wind-borne and infect the leaves, stems, flowers and fruits of many plants, such as flowers of marigold, stems of snapdragons, leaves of dogwood, as well as strawberry fruit. *Sclerotinia sclerotiorum*

is also active during cool weather (such as March around Clemson) and it also has a wide host range including the camellia flower. It can be locally serious, but it is rarely seen in South Carolina. It does not produce a sclerotium at the base of diseased camellia flowers and it does not have an asexual (or conidial) stage which means that it *does not* spread from flower to flower. *Botrytis* can spread from flower to flower because of the nature of its asexual spores. *Ovulinia* from azalea petals does not affect camellia flowers, and the camellia flower blight pathogen (*S. camelliae*) does not affect other plants.



Bonnie Serpas' watermelon creations get better each year at the ACCS summer gathering at Santee, S.C.

(photo by Shepherd)

When ascospores of *S. camelliae* are blown to petals of open camellia flowers, they typically germinate and the developing vegetative growth from the fungus penetrates the flower and then grows throughout the petal tissue. The affected tissue turns light brown in color, particularly noticeable on the white and pink cultivars. The disease is equally damaging on the red camellia cultivars but it is not as noticeable on these flowers.

Brown spots are formed within 1 to 2 days after infection when temperatures are in the 60s. When the temperature is in either the 40s or 50s the rate of fungal growth in infected camellia petals is greatly reduced so that it may take 3 to 5 days for symptom expression to develop. After a few days, the lower part of the flower is invaded and a ring of mousy gray fungal tissue forms where the flower base was attached to the plant. This represents an important diagnostic feature. After 2 to 3 weeks have elapsed, the base of the affected flowers begins to harden and develops into a sclerotium which either will germinate the following year or remain dormant for several years and then germinate.

The disease affects all cultivars of winter and spring flowering camellias. If one has difficulty diagnosing the problem, then place several flowers suspected of having flower blight in a plastic bag (*without additional moisture*), close the bag and leave it for a couple of weeks. The presence of a hard dark mass at the base of the flower will confirm the problem as being flower blight caused by *Sclerotinia camelliae*. This disease can be distinguished from frost injury and mechanical injury by the brown color of diseased tissue compared with a whitish to light tan color resulting from frost injury. Severe freeze injury causes about the same color as flower blighted tissue, but all flowers in an area are affected by a freeze whereas some flowers almost always escape flower blight infection.

Certain cultivars, such as Betty Sheffield (all types) spot severely with water which looks very much like the beginning stages of petal blight, but these lesions from water spotting do not continue to enlarge and no sclerotia form. However, this cultivar can be affected by petal blight so observe the flower carefully.

No control program for this camellia disease is 100 percent effective. If the individual flower is infected by an ascospore, it has the same effect as if it were infected by 100 spores.

The best program for control is to keep the fungus out of the nursery. However, ascospores can be blown in from a neighbor's yard if they have this camellia disease. Unless two nurseries are close to each other (within a mile) there is no danger of wind-borne ascospores being blown from nursery to nursery.

Picking up and destroying the old flowers is still the best control program for flower blight. On plants too small to sell, all flower buds could be removed at one time before they begin to open. However, this program needs to be very thoroughly done, or else a few apothecia can discharge enough ascospores to infect flowers over the entire nursery. Removal of old flowers from container-grown camellia plants is adequate but if a diseased flower falls into a nearby container of other plant species, such as nandina, ligustrum or azalea, then the sclerotia can be taken into a camellia garden unexpectedly. Keep all weeds and other plants that furnish any ground cover out from under camellia plants.

Occasionally ground covers are recommended for growth under camellia plants, such as ajuga, periwinkle, various ivies, *Hypericum* and many other ground cover plants. However, when infected flowers fall to the ground, these plants act as a moist chamber that enhances sclerotia development. If you have camellia flower blight in your nursery, use pine straw as a mulch. Prune the lower

branches so air can circulate freely beneath the plants. This practice permits easy pick-up of the flowers. Otherwise, the flowers will dry up quickly so that sclerotia may not be produced.

Another control procedure is to use chemicals that prevent the completion of the fungal life cycle. These chemicals are applied to the ground surface to prevent the development of the apothecia and the ascospores. These chemicals affect only the apothecium but have no effect on the survival of dormant sclerotia. Sclerotia are resistant to chemicals and also to weather factors such as rain, drought, heat and cold and alternate wetting and drying. Several chemicals have been tested for the control of apothecia by applying them to the soil surface. Two points should be remembered when using any of these materials: (1) a single apothecium can produce millions of spores and so the amount of control achieved by these materials is governed entirely by the thoroughness and effectiveness of the application; and (2) the use of successive applications result in better control because of the good

probability of applying the chemicals on spaces missed during the first application. Also, it doesn't matter how well you do the job if your neighbors do not also control the pathogen.

Another approach to flower blight control is to cover the soil with some material such as black plastic which physically deters the development of the apothecia (and thus the ascospores) because light is needed to induce apothecial development. This approach is useful for small areas, particularly greenhouses. The material must cover all areas where the old diseased flowers may have landed.

Still another approach to camellia petal blight control is to spray the flowers and provide some protection during the flowering period. This requires numerous, frequent sprays during the winter and spring and is probably not economical.

Sanitation, exclusion and fall gibbing represent the best control methods yet available. There is a great need for a systemic fungicide that can be applied either to the ground or to the foliage which will control this problem for camellia growers.

New ACCS President and Mrs. Marion Edwards enjoy the scrumptious picnics at the Coastal Carolina Camellia Society's May cookout at Parker and Amy Connor's Oak Island Plantation.

(photo by Amy Connor)



FAYETTEVILLE CAMELLIA SHOW

Fayetteville, N. C.

March 3 & 4, 1990

C. japonica (In Open)

Very Large	<i>Helen Bower</i>	Parker Connor, Edisto Island, SC
Runner-up	<i>Donckelarii</i>	W.G. Duncan, Columbia, SC
Large	<i>Guilio Nuccio</i>	Lib Scott, Aiken, SC
Runner-up	<i>Rosea Superba</i>	Parker Connor, Edisto Island, SC
Medium	<i>Betty Sheffield Supreme</i>	Lib Scott, Aiken, SC
Small	<i>Allison Woodruff</i>	Parker Connor, Edisto Island, SC

C. japonica (Protected)

Very Large	<i>Guilio Nuccio</i>	Harry Watson, Charlotte, NC
Large	<i>Elegans Splendor</i>	Ray & Josie Bond, Raleigh, NC
Runner-up	<i>J. M. Haynie</i>	Joe Austin, Four Oaks, NC
Medium	<i>Harriett Bisbee</i>	Jim Pinkerton, Lugoff, SC
Runner-up	<i>Sawada's Dream</i>	Harry Watson, Charlotte, NC
Small	<i>Black Tie</i>	Lester Allen, Greensboro, NC
Miniature	<i>Tammia</i>	Harry Watson, Charlotte, NC
Runner-up	<i>Ann Clayton</i>	Harry Watson, Charlotte, NC

C. reticulata (Includes hybrids with reticulata parentage)

Protected	<i>Our Kerry</i>	Joe Austin, Four Oaks, NC
Runner-up	<i>Miss Houston</i>	Joe Austin, Four Oaks, NC

C. hybrid (With other than reticulata parentage)

Protected	<i>Pink Dahlia</i>	Joe Austin, Four Oaks, NC
Runner-up	<i>Mona Jury</i>	Joe Austin, Four Oaks, NC

Gold Certificates:

In open, won by Parker Connor, Edisto Island, SC

Protected, won by Lester Allen, Greensboro, NC

Best Collection of 3 Alike (Protected)

Dr. Clifford Parks, Bill Anderson, Fayetteville, NC

Best Collection of 3 Alike (Not Protected)

Dixie Knight Var, Parker Connor, Edisto Island, SC

Best Collection of 5 Different

Joe Austin, Four Oaks, NC

Harold Paige, Our Kerry

Jean Pursel, Valentine Day, Var.

Dr. Emil Carroll

Jim Darden, Show Chairman

Annabelle Fetterman, Chairman of Judges

Container Media

by Willard T. Witte, Associate Professor
University of Tennessee

A number of growers have asked about the recipe for the container medium (soil mix) we use in the research nursery at UT. Visitors have been impressed with the growth and quality of plants in our experiments. The container medium is the strong foundation for our successful container plant production but is only one factor in our success. Fertilization, irrigation, spacing, weed control, sanitation and timely operations all combine to produce exceptionally good plant growth.

When I took over the research nursery about six years ago, our standard container medium was three parts pine bark, one part peat moss, and one part coarse sand. Our first research on container media showed that particular recipe consistently resulted in the poorest growth of a dozen different kinds of commonly grown nursery plants, compared to other media we were developing.

The sand added unnecessary weight and plugged up the pore space. The peat moss was an unnecessary expense. It didn't add as much in water holding capacity as we expected compared to straight ground pine bark. We have shifted to 100% ground pine bark. Only when we pot up seedlings in small containers do we add peat-moss, and then we use at least one part peat for every three parts bark.

Our current "standard" soil mix is not really a mix, it is straight pine bark. We purchase the bark from a supplier in North Georgia in 50 or 60 yard loads. It is dumped on a sheet of waste plastic (recycled greenhouse cover) and we use it as needed. We keep the weeds down around the pile, of course.

UT Nursery Container Medium Amendments - Our recipe for amendments in every cubic yard of pine bark medium is:

- A. 7 pounds dolomitic limestone. This should meet state standards for fineness of grind, but does not have to be superfine (400 mesh). Nor should it be too coarse. We had to struggle to find dolomite locally with more than 10% magnesium but that's what we try to get. We use less lime than we did five years ago since our water (city water) is pH 7.5 to 8.1 depending on time of year. The calcium content is about 25ppm every time we irrigate. Yours may be more or less. It pays to get a water test.
- B. 2 pounds 0-45-0 (treble superphosphate). We use this instead of regular superphosphate (0-20-0) which is almost impossible to find these days. Some current research shows the phosphorus isn't that important in the medium but we still like it to be there. It doesn't hurt and might help. I prefer the powdered to the coarse granule formulation.
- C. 2 pounds 4 ounces of gypsum (calcium sulfate). We add gypsum because we are missing out on the sulfur that used to get carried along for the ride in regular superphosphate. Also since we are using less lime than we used to, we don't mind the calcium that goes along for the ride here. Gypsum does not affect pH.
- D. 2 pounds 10-10-10. The only reason we put in a small amount of fertilizer is to provide some instant NPK nutrition for our plants

until the Osmocote kicks in. We have also used up to 3 pounds of potassium nitrate, but this is cheaper and gets the job done. The danger in adding fertilizer to container media arises when you stockpile large quantities out in the open and fertilizer salts leach to the bottom, where they can accumulate in large enough amounts to cause soluble salt burn to roots. We mix our media as needed so leaching is no problem.

- E. 3 pounds Esmigran. This is a minor element formulation from Mallin-krodt. I like it because there is enough volume to be sure to get some minors in every pot, even when we do quarts. It mixes evenly because the particles on

which the minors are absorbed are about the same bulk density as the mix and are all the same size. Esmigran isn't always readily available locally. Then we substitute 1½ pounds Micromax, a Sierra Chemical product, when we run out of Esmigran. There are a lot of local chemical companies peddling local brands of minor element formulations, usually at a cheaper price, but we don't use them. We are buying quality control and consistency along with the product from the larger companies. It doesn't take much of a mistake to mess up a container crop with minors.

At one time we used to add 2 pounds of epsom salt (magnesium sulfate) to

Can you guess the identities of these two feline party-goers at the Myrtle Beach ACCS meeting? (Answer on p. 23)

(photo by Edwards)



provide magnesium when we couldn't get it through dolomite, for example when we had to use calcitic limestone.

We use our current standard mix for every plant we grow except for dogwoods, azaleas and other ericaceous plants. For those and other acid loving plants we cut the dolomitic limestone in half, to 3½ pounds per cubic yard. If your water is pure and low pH (low calcium) you may want to add more dolomite.

The only container medium we have developed that is significantly better than straight pine bark is a composed 50:50 blend of pine bark and hardwood bark. We are still refining the composing amendment recipe, but the 50:50 blend has consistently grown our best (largest) plants. The smallest azaleas and junipers in our most recent media experiments were grown in nursery mix from a commercial soil mix operation. Media containing sewage sludge also produced small plants. We may have used too much. The largest heaviest plants were in various versions of our composted 50:50 blend. Most of the small plants looked all right but they simply grew slower than those in our media. Unless you had plants growing in better

media, under identical conditions for comparison, you wouldn't know the growth you were missing because your media wasn't up to par.

We use a Bouldin & Lawson soil mixer of one cubic yard capacity and run it five minutes per batch. Many small growers do not have a mixer or any good way to mix amendments into the medium. I have suggested to some that they simply lay out a windrow of the medium on the driveway (concrete or asphalt surface). Determine how many cubic yards are in the pile. Don't guess. Weigh out the amendments and sprinkle evenly over the pile. Make several passes with a tiller. Turn the pile and till again. By the time the pile is turned again it should be mixed uniformly and evenly enough to be ready for potting. It is much easier and faster to handle media in large batches than in small ones.

We are experimenting with Sierra's 17-6-10 with minors (Sierrablen) as a topdress on straight unamended pine bark. This has a lot of appeal as it would eliminate the need for mixing amendments into the media. We will report the results at future short courses and in this newsletter.

Camellia artist Saddle Lyon congratulates Lawanda and Elliott Brogden as the winners of one of her 1990 works.

(photo by Shepherd)



MID-CAROLINA CAMELLIA SHOW

South Carolina State Fair

Columbia, S.C.

October 20-21, 1990

Show classification is Large - Very Large

C. japonica (In Open)

Very Large	<i>Elizabeth Weaver</i>	Parker E. Connor, Jr.
Runner-up	<i>Carter's Sunburst Pink</i>	Parker E. Connor, Jr.
Medium	<i>Betty Sheffield Supreme</i>	Parker E. Connor, Jr.
Runner-up	<i>Lady Kay</i>	Lib Scott
Small	<i>KikuToji</i>	Elizabeth L. Brown
Miniature	<i>Fircone Var.</i>	Marvin & Ruth Jernigan
Runner-up	Only one class for miniature Open & Protected judged together	

Show classification is Large - Very Large

J. japonica (Protected)

Large	<i>Miss Charleston Var.</i>	Ann & Mack McKinnon
Runner-up	<i>Show Time</i>	Ann & Mack McKinnon
Medium	<i>Feathery Touch</i>	Clara and Fred Hahn
Runner-up	<i>Betty's Beauty</i>	Jim Pinkerton
Small	<i>Ave Maria</i>	Dr. C. David Scheibert

C. reticulata (Includes hybrids with reticulata parentage)

Protected	<i>Dr. Clifford Parks Var.</i>	Clara and Fred Hahn
Runner-up	<i>Emma Gaeta Var.</i>	Jim Pinkerton

C. hybrid (With other than reticulata parentage)

Protected	<i>Mona Jury Var.</i>	Annabelle L. Fetterman
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C. sasanqua (And related species)

Best Bloom	<i>Bonanza Var.</i>	Mr. & Mrs. Jack W. Teague
In Open	<i>Mary Alice Cox</i>	Parker E. Connor, Jr.
Protected	<i>Mary Alice Cox</i>	Annabelle L. Fetterman

Best Bloom by Novice	<i>Mathotiana Supreme</i>	Emily Wheeler
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Gold Certificates:

In open, won by Parker E. Connor, Jr.
Protected, won by Annabelle L. Fetterman

Silver Certificates:

In open, won by Elizabeth L. Brown
Protected, won by Jim Pinkerton

Best Seedling	<i>Mikel Kikel Exhib.</i>	Elizabeth L. Brown Chem Treated-No Cert. Grown in Open
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**Court of Honor
Protected**

*Julia
Campari
Nuccio's Jewel
Nuccio's Pink Lace
Woodville Red
Trophy*

Jim Pinkerton
Annabelle Fetterman
W. H. Rish
Jim Pinkerton
Mr. & Mrs. Jack W. Teague
Jim Pinkerton

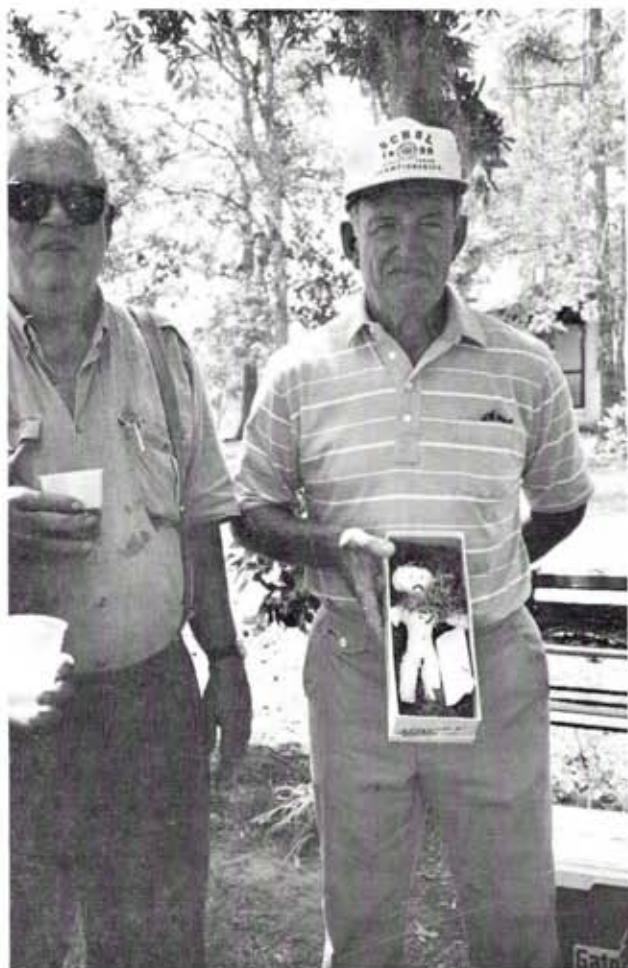
Grown in Open

*Mathotiana
Tomorrow Var.
Betty Sheffield Var.
Grand Prix
Rosea Superba Var.
Kiku-Togi*

Parker E. Connor, Jr.
Parker E. Connor, Jr.
Lib Scott
Parker E. Connor, Jr.
Rev. Lauren E. Brubaker
Elizabeth L. Brown

We aren't trying to wish you any bad luck, BUT !! Camellia "friends" present Jim Pinkerton with a voodoo doll in hopes of quelling his winning ways at camellia shows this year.

(photo by Shepherd)



MICROFOAM USES AND LIMITATIONS FOR CAMELLIA PROTECTION

by William J. Sette
Camellia Society of the Potomac Valley

Microfoam is a 1/4-inch thick plastic foam blanket that is used as packing and insulation material, due to the thousands of air bubbles in the foam that hold heat, keep out cold, and cushion against crushing.

Protecting Potted Plants with Microfoam

Members of the Camellia Society of the Potomac Valley used Microfoam for the first time about 10 years ago. This was after they had heard a lecture by Dr. Francis Gouin, of the University of Maryland, who gave the results of tests made at the University for protecting potted plants over the winter. This research freed the nursery trade from having to discard thousands of plants that had died by the end of the season, as had been the case up to this discovery.

The protective procedure was generally this: In late November, before the ground freezes, the nursery plants were placed on their sides overlapping each other in tight rows, on Macadam, concrete, or bare ground. They were first covered with clear plastic (to protect the Microfoam from tears), then with Microfoam, and finally with opaque, white plastic if the plants had been placed in a sunny location, or clear plastic if they were in a shady location. The Microfoam and its plastic protectors are extended at least 12"-18" beyond the plants all the way around. This extension is mulched thickly with pine needles, chips, etc., to keep the frost from migrating under the blanket. It was

found that plants of many species could be safely wintered over in areas where the temperature dropped briefly to as low as -10 degrees F during the winter.

In March, depending on the weather, the plants were gradually exposed, taking care not to let them be exposed to drying winds during the first two weeks.

This method was adopted by our Society with good success. The principal means by which Microfoam protects the potted plants is that the warmth of the ground is held around the plants. Since the plants are no more than 12" or 18" above the ground and packed tightly, this warmth will continue (above 34 degrees F usually) for the entire winter.

This method of protecting camellias has been used only as far North as the Maryland area where winters are mild and not overly long. How this method would work in colder regions of the country is not known. However, what is known is that camellias do not like an overly long winter as they usually begin to bloom under the Microfoam in late February and early March. Many of us have opened the blanket to find perfect blooms on some of the plants.

Protecting Plants in the Ground with Microfoam

Members of our Society have also experienced with protecting camellias in the ground by using Microfoam. The method used was to surround the plants with wire cages or stakes as a

support, and then wrapping Microfoam and plastic sheeting around the cage (the cage should be as close to the plants as possible without pressing against the branches) and tying with a string or strings. The Microfoam should be enough higher than the plant so that it can be folded over and sealed tightly with clothespins to keep out any air loss. The Microfoam must be anchored securely or it may be blown off by high winter winds. The outside base of the cage should be mulched thickly — out to a distance of at least 12" to 18" from the cage and 12" deep.

It was found that in mild winters the plants were fully protected but that they might have some bud damage. In a more severe winter there would be complete bud loss and various amounts of plant damage from slight to complete, depending upon the camellia variety. It is conjectured that the reason why this method is not so successful as the potted plants system is that the entire structure is more exposed and therefore suffers more loss of heat from the ground.



How dare you cut down a Camellia bush?, Lawanda Brogden appears to be asking at last year's Fayetteville Camellia Show.

(photo by Shepherd)

AIKEN CAMELLIA SHOW

Aiken, SC

January 20 & 21, 1990

Sponsoring Organization: Aiken Camellia Club
No. Blooms Displayed: 819 Attendance: 3,000

Most Outstanding Bloom In Show:	<i>'Tomorrow Parkhill'</i>	M/M Oliver Mizzell
C. japonica: (In Open) Very Large	<i>'Betty Sheffield Supr.'</i>	Parker Connor
Runner-up	<i>'Dolly Parler Var.'</i>	A. R. Parler, Jr.
C. japonica: (Protected) Very Large	<i>'Helen Bower'</i>	Joe Austin
Medium	<i>'Margaret Davis'</i>	Clara & Fred Hahn
Small	<i>'Purple Swirl'</i>	Mrs. Alfred Bissell
Miniature	<i>'Mansize'</i>	John Newsome
C. reticulata: (Includes hybrids with reticulata parentage.) Protected	<i>'Harold L. Paige'</i>	Marie & Paul Dahlen
C. hybrid: (With other than reticulata parentage.) Protected	<i>'Mona Jury'</i>	M/M Oliver Mizzell
Best White Bloom	<i>'Elegans Champagne'</i>	Jim Pinkerton
Best Bloom by Novice	<i>'Gov. Mouton'</i>	John Klett

Gold Certificates

In open, won by	Parker Connor, Jr.
Protected, won by	Jim Pinkerton

Silver Certificates

In open, won by	Grace Woodhead
Protected, won by	Joe Austin

Outstanding Arrangement Certificates

Tri-Color Certificate, won by	Mrs. H. C. Scott
Creativity Certificate, won by	Ida Mae Holley

Judges:	M/M Jack Teague	M/M Geary Serpas
	M/M Joe Austin	Jim Pinkerton
	M/M Fred Hahn	L. Cawthon
	M/M Elliott Brogden	M/M Oliver Mizzell

Show Chairman: William C. Robertson

Reporting Official and Title : Paul Dahlen, Show Coordinator

MIDDLE GEORGIA CAMELLIA SHOW

Perry, Georgia

October 12, 1990

Unprotected	<i>Julia Var.</i>	Bob Grambling
Protected	<i>Tomorrow</i> <i>Tropic Dawn</i>	Jim Pinkerton

C. japonica (In Open)

Very Large	<i>Mathotiana</i>	Bill Sheppard
Medium	<i>5th Avenue</i>	Dan Nathan
Small	<i>Brooke</i>	Ed Atkin
Miniature	<i>Lip Stick</i>	Bob Grambling

C. japonica (Protected)

Very Large	<i>Show Time</i>	Jim Pinkerton
Medium	<i>Magic City Var.</i>	Ed Atkin
Small	<i>Maroon & Gold</i>	Dave Scheibert

C. reticulata (Includes hybrids with reticulata parentage)

In Open	<i>Trophy</i>	Jim Pinkerton
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C. hybrid (With other than reticulata parentage)

In Open	<i>Mona Jury Var.</i>	Jim Pinkerton
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C. sasanqua (And related species)

Best Bloom	<i>Navajo</i>	Dave Scheibert
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Gold Certificates

In open, won by Parker Connor

Silver Certificates:

In open, won by Bob Grambling

Tray of Three	<i>Woodville Red Blush</i>	Mary Wilson
Tray of Five		Ed Atkins

Marvin Jernigan, Show Chairman

Answer: Annabelle Fetterman and Kyle Held.

The Well-Bred Flower

By Steve Krauss

Printed in the March 1989 issue of
Yankee Magazine

Each February, the Massachusetts Camellia Society puts on the oldest annual camellia show in the world. The first one was held the year Andrew Jackson was sworn in as the seventh president of the United States in 1829, and there's been a show nearly every year since then.

Camellias were already quite the rage in this country 160 years ago. Newly introduced from China, Japan, and other Asian regions, the shrubs' breathtaking blossoms and glossy leaves enticed growers wealthy enough to own cold greenhouses. (A cold greenhouse is one that is heated just enough to keep the temperature a little above freezing at night — too cold for tropical plants, but ideal for camellias.) In the 1830s a man named Marshall Wilder had amassed over a thousand camellia plants in his Boston greenhouse. By 1835 hobbyists had their own show, separate from the parent Massachusetts Horticultural Society's general exhibition.

The scene at this year's show, in the Visitors Building of Boston's Arnold Arboretum, is quiet, almost hushed — no pushing, no noisy vendors, just reserved murmurs of pleasure from a diversely dressed crowd. Old friends, long time growers, and the latest converts mingle and drink coffee in the anteroom while visitors admire the blossoms in the main room.

If you're like me, you probably expected to see a lot of plants. Then, when you see tables covered with nothing but pink, red, and white blossoms floating in saucers, you have to kick yourself and say, "Stupid! You know these things are trees, sometimes 60 years old — people can't very well drag entire trees here in their huge pots." There are a few smaller plants in pots and even some hanging plants. An endearing quality

of camellias is that even small plants can produce big blossoms.

Walter Wheeler is there, and so is Nathaniel Dexter, who typify the diversity of camellia enthusiasts. Despite their common Anglo-Saxon ancestry, Wheeler and Dexter are about as different as they could be. Dexter, the quintessential Yankee with a New England pedigree going back to the 18th century, is laconic, preferring to let his camellias speak for him. Wheeler, not a bludblood but a transplant from Texas, is laquacious, full of stories not just about camellias and their owners but also about dogs, dog owners, music, Southerners, and any number of other topics.

While Dexter is not known to have any avocations outside of growing camellias (and a few orchids), Wheeler, in addition to being a camellia guru, teaches a variety of subjects at the best-known private elementary school in the nation, plays cello in the professional Arioso Trio, and is the preminent breeder of a slender, silky dog known as the long-haired whippet.

To lead an informal Sunday tour of his classic 1903 Lord & Burnham greenhouse, Dexter wears a tweed sportcoat, white shirt, striped tie, slacks, and loafers. Interrupted from the Saturday feeding ritual for his whippets, Wheeler comes outside in a well-worn blue work shirt, a grungy pair of jeans, and sneakers.

On the whole, Dexter better represents the genteel traditions of New England camellia fanciers. His grandmother began greenhouse gardening at the turn of the century. She put up seven greenhouses and grew grapes, peaches, camellias, and "all sorts of things," according to Dexter. Or rather, the gardeners, at her direction, grew them: the head gardener, the second-in-command,



"A Bouquet of Pink Camellias and Primula on a Marble Ledge"
by Johan Laurentz Jensen



Anemone

- Paul Jones painting,
courtesy Prints Charming

and perhaps half a dozen helpers. One of the many head gardeners she employed over her long life was a gifted hybridizer of camellias. Thus, in the fashion of camellia breeders, he named a hybrid after each of his patroness's daughters, Dexter's mother and aunts.

All this came to an end in the great hurricane of 1938. Six of the seven greenhouses were destroyed. Three years later Dexter's grandmother died, and his mother took over the last greenhouse. As long as the caretaker was willing to get up at midnight and trudge from his house to the

greenhouse to bank the coal furnace, then get up early the next morning to tend it, the grand old tradition could continue. But the caretaker was growing old himself, and in 1950 he retired. It was time for a change, so Dexter's mother decided, rather than give it up, to have the remaining greenhouse picked up and moved to a more convenient location. Workers took it apart pane by pane and reconstructed it nearer the house on a brand-new cement block foundation. There Mrs. Dexter began to concentrate on camellias in earnest, a love she passed on to her son, along with many of her favorite varieties.

Dexter's mother died in 1976, and Nathaniel finally became a horticulturist, more by default than anything else. His fondest memories of childhood do not concern the greenhouses or their upkeep. About as close as he ever came to gardening was eating his grandmother's peaches. ("The only place I ever found a peach that good was at Fortnum & Mason in London," he says wistfully.) All Dexter will say about his conversion to camellia growing is, "You fall into something like this, that's all you can say."

But Dexter fell into something neither his mother nor his grandmother had ever done: exhibiting camellias. Competitive camellia exhibiting is a lot like any other kind of exhibiting — dog shows, duck-decoy shows, antique-car shows, or any of the myriad specialty flower shows. They're worlds unto themselves, highly specialized, with esoteric standards upheld by a priesthood of experts who take great care in passing down to the acolytes the accumulated wisdom of centuries of growing, carving, collecting, or what have you.

In camellia growing, the terminology is arcane and confusing to outsiders. There are six classes of camellia flower forms: the single, the semi-double, the anemone, the peony, the rose-form double, and the formal double.

Blossoms in each of the six forms are rated, and there is a separate

ribbon for blossoms in each color: white, pink, red, or variations on these, including variegated (more than one color). A three-by-five file card next to a blue ribbon and a saucer containing a perfect pale roselike flower bears the letters "RDLP." Translation: Rose Form Double Light Pink. There are Anemone Red, Semidouble White, and many others. And you can double the number of ribbons — and happy camellia growers — because there's also a competition for groups of three camellia blossoms. There's a class for miniatures and even a small class for fragrant blooms (not many camellias are).

"The differences between the forms cause problems," says Wheeler, in an understatement a novice can appreciate. "According to the official *Camellia Nomenclature*, the single blossom has one row of five no more than eight petals; there are many semidoubles that have maybe ten petals, but they're big blossoms and they're so arranged that they look perfectly single. And there's also room for argument between the semidouble and the double." (Note to the uninitiated: whatever the plant, when gardeners talk about singles and doubles, they refer to the rows of petals: if the petals overlap and there are lots of them, it's probably a double; if not so many or so overlapping, it's semidouble. Singles are uncomplicated, almost flat flowers — think of old roses.)

Warming to his topic, Wheeler continues: "Now, the peony double is a loose double, it's fluffy and the stamens show. But there are many semidoubles that have two rows of very ruffled petals that look almost as full as a peony double, and yet if you look at them carefully they do have just the two rows of petals."

You've gathered by now that camellia judging is not an exact science. There are numbers, but they take one only so far. One is then left — and rightfully so — to esthetics and to the kinds of judgmental adjectives the *Nomenclature* calls "irregular

characteristics." Petals can be "ruffled, crinkled, creped, swirled, waved, twisted, crimped, folded, fluted, upright, notched or fimbriated or fringed, incurved or downcurved," as well as "thick, broad, round, narrow, or long." What the judges are trying to say is that camellia blossoms are so darned beautiful that almost any well-grown, well-exhibited specimen has a chance to win a ribbon.

What do the judges look for? Things like symmetry, size, and freshness of the blossom; absence of bruises; how well formed the petaloids are (*petaloid*: a messy but lovely combination of petals and stamens); how much differentiation there is between the petaloids and the "guard" petals (the ones around the perimeter of the blossom). Perhaps also that *je ne sais quoi* that might be called the Wow Factor.

What matters more than the judging is that people have gotten together and shared something that they love. And, yes, competed, too. Wheeler is firm on his point. "They're not an egocentric group like the dog-show people, but they do compete. They're healthy Americans; they like to win."

Wheeler sips tea and explains. "This is very different from dog shows," he says, speaking from 50 years of experience. "Most dog-show judges, for instance, usually judge

negatively: 'I don't like this,' 'I don't like that,' 'This has this fault.' Well, they all have faults. Even Miss America, if you look at her carefully — this one is slightly pigeon-toed or she's slightly cross-eyed, or her ears are too long, or something. But in our case, we have so few exhibitors. We want to encourage people to grow camellias and enjoy them and bring them in so we can enjoy them.

"You see," he goes on, "the camellia people are quite fascinating to compare to the dog people. The dog-show people see a lovely animal coming in and they immediately say, 'Umm, the judges are going to like that better than mine; I hate it,' and they start tearing it apart behind the owner's back. But the camellia people don't take any credit, even those who do their own hybridization. If they see something beautiful, they ooh and ahh and enjoy it, and they don't really care who brought it in."

And they love their camellias. "Many of the people I've helped start out," confides Wheeler, "when they have their first, they'll call up and say, 'I've got my first camellia blossom, Walter,' in hushed tones, almost as if they'd just had their first child or their first really religious experience."



Incoming ACCS President Marion Edwards (left, standing) awards a plaque to outgoing president Budding Cawthon at the Myrtle Beach meeting.

(photo by Shepherd)



Congratulations to

Marion Edwards

**Camellia grower and photographer from Jacksonville, Florida,
as our new ACCS President.**

QUIZ: How many un-named ACCS members can you see in the background of the photos in this issue. I see thirteen. Can you find them?

ATLANTIC COAST CAMELLIA SOCIETY

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