

Carolina Camellias



BRIDGE OVER UNTRoubLED WATERS
Magnolia Gardens, Charleston, SC

In Memoriam

Charles C. Mason



C.C. "Charlie" Mason is no longer with us. Charlie died in June, 1982 in Norfolk, VA.

A quiet man who enjoyed most of all sharing with others. A man so interested and dedicated in having others find the peace, joy, and beauty in planting and raising camellias of all varieties, that he air layered his own outstanding varieties until they were low stumps.

His private home, so much enjoyed by flower and plant lovers, has been open every spring and fall as camellia buds open in all their splendor. With a twinkle in his eye, Charlie would say, "People love to see the plants but the blooming season always gets 'em personally involved."

Many people wonder why Charlie's blooms were always at the head table. Show after show he and Edith would come home with trophies. One answer, I'm sure, was his constant giving away of his plants from the mother stock. Many growers believed he was destroying his plants, but Charlie would smile and say, "We get so much more by giving than by keeping for ourselves."

Well, Camellia Lovers, you are not finished with competition from Charlie Mason, for his outstanding air-layered plants are producing all over Eastern America, including the National Arboretum in Washington, DC, the famous Longwood Gardens in Wilmington, Delaware, and by the end of 1982, in the famous Busch Gardens of Williamsburg, VA.

You see, the good man does live after him. A true example of this is the 'C.C. Mason' camellia thriving well in the special exhibit of "Camellias Grown and Developed in Virginia" nestling among the pines of Norfolk Botanical Gardens.

Sure Charlie will be missed! But a warm feeling comes over camellia lovers everywhere when they see the beauty, through God's help, of what Charlie produced and distributed over a good portion of this great land.

Carolina Camellias

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Editor's Page



In the 60s, a popular song asked the question: "Where have all the flowers gone?" A similar question comes to me: "Where have some camellias gone," and for that matter: "From where did some camellias come?"

Several years ago, a friend asked me to help him find a plant or a scion of 'Palm Sunday'. I looked it up in the nomenclature book and found that it was registered in 1967 by Mr. W.B. Brown of Wilmington, NC. I thought surely that I could find a scion of it in Wilmington. So far, efforts have not been successful. No one seemed to have it. Finally I was told that the original plant was lost, and it's possible that no plants now exist.

I remember an enormous retic that used to appear at shows on the East Coast by the name of 'King Tut'. It was shown as a seedling and I don't remember any of the exhibitors or the originator. It was usually so big till it would just put all other retics to shame. It has ceased to appear and has never been registered to my knowledge. Too bad! It would seem that this one would have made an excellent parent in somebody's hybridizing program.

Another beautiful camellia that I can't find and can't find out anything about is an unregistered cultivar exhibited several years ago

under the name 'Joan Castle'. It is a white japonica with the form and size of 'Tomorrow'. It may even be a white sport of 'Tomorrow'. If it is, it should be registered as I don't know of any registered 'Tomorrow' sport that is all white. I have not seen it in several years and don't know anyone who has it.

In 1978 a friend sent me a scion of an unregistered retic which he called 'Gladys Parks'. I was elated to get it and grafted it on the best piece of grafting stock that I had, which wasn't very big. It took and grew satisfactorily. But before it bloomed, this friend told me to forget 'Gladys Parks'. That it was a "dog" and would not be registered. I kept my plant anyway. Last year it bloomed, and I can't understand why the originator would not want to register it. I like it very much. It is different from most other newly registered retics, a denser peony form, something like 'Mandalay Queen'. So I guess I'll just keep it and enjoy it myself, but what a pity it can't be registered, propagated and distributed.

In 1972, at the ACS convention in Columbia, SC, a lady from Texas told me about a new miniature camellia that was causing a small sensation in her area. She said it was called 'Mini-Pep' because it was a miniature camellia exactly like 'La Peppermint' in form and color. She

promised to send me a scion and she did. It has been blooming for me for several years, but since it has never been registered, I do not exhibit it. I enjoy it though, and would like to exhibit it at shows. This one may be the same cultivar that Ray Gentry was advertising for several years under the name 'Mini-Putt'. But it has not been registered either.

Why am I discussing unregistered camellias? Well, it is to emphasize the importance, the need, for originators to register their camellias. I am not urging that un-

worthy camellias be registered. But in all the cases mentioned above, these camellias did merit registration. They were distinctive and interesting. Any time you have a camellia lovely enough, distinctive enough, different enough, to interest your friends to the point where they would want to grow it, then you probably have a camellia worth registering and offering to the public. If you don't do it, you contribute to the confusion that the Nomenclature Research Committee is trying to eliminate.

SHOW DATES

Columbia, SC — State Fair Grounds	Oct. 23-24, 1982
Greenwood, SC — Cross Creek Mall	Nov. 6-7, 1982
Washington, DC — Ramada Inn, Old Town, Alexandria, VA	Oct. 27-28, 1982
Norfolk, VA — Greenbriar Mall	Nov. 5-6, 1982
Charleston, SC — First Fed S & L, 34 Broad St.	Nov. 20-21, 1982
Aiken, SC — Kennedy Jr. High School	Jan. 22-23, 1983
Charleston, SC — Citadel Mall	Jan. 29, 1983
Charlotte, NC — Eastland Mall	Feb. 5-6, 1983
Columbia, SC — Columbia Mall	Feb. 12-13, 1983
Wilmington, NC — Independence Mall	Feb. 19, 1983
Fayetteville, NC — Cross Creek Mall	March 5-6, 1983
Greensboro, NC — Four Seasons Mall	March 12-13, 1983
Norfolk, VA — Norfolk Botanical Gardens	April 1-2, 1983

NEW CAMELLIA CLUB FORMED

In June of this year, a new camellia club was formed in Charlotte, NC. It is called the Charlotte Camellia Society. The nucleus of this new club is a group of camellia growers from the Men's Camellia Club of Charlotte with their wives. The president is Graem Yates, Vice-president is Ann Hackney, Show Chairman is Fred Hahn and Secretary-Treasurer is Latimer McClintock. They meet the last Monday of the month at Mutual S & L, across from Eastland Mall on Albemarle Rd. Their first show is scheduled for February 5 and 6 at Eastland Mall.

ABOUT THE COVER DRAWING

This is a drawing of the beautiful and much photographed bridge in Magnolia Gardens. This estate, located near Charleston, SC, has been owned for almost three centuries by the Drayton family. Though azaleas make the biggest splash and impress visitors more, the camellia collection is "vastly superior to that of the azaleas" in the words of C. Norwood Hastie, Jr., present owner. Some of our best known and loved camellias originated there, for example: 'Debutante', 'Rev. John Bennett', 'Professor Charles C. Sergeant', and 'Duchess of Sutherland'.

Presidents' Messages

SOUTH CAROLINA CAMELLIA SOCIETY



Well it is almost that time of the year again. We will all see the fruits of our summer labors. Our fall and winter blooms reflect the care that we gave our plants during the months before blooming season. One thing for certain, I did not have to water my plants very often this year. At times I was concerned about the plants remaining too wet.

The annual fall meeting of the South Carolina Camellia Society will be held in conjunction with the Atlantic Coast Camellia Society convention in Myrtle beach, Saturday October 2, 1982 at 9:00 a.m. Please make plans to attend this meeting as well as all of the ACCS activities.

This camellia season I would urge each of you to take visitors to your local club meetings and to shows. Let them enjoy the fun, fellowship and enthusiasm of Camellia People, and perhaps the "bug" will bite some of these visitors.

Bonnie and I look forward to seeing you during the 82-83 season.

Geary Serpas, President

NORTH CAROLINA CAMELLIA SOCIETY



Well, here we are well into another camellia season. My plants seem to have more buds than leaves. I debut a lot, but it never seems to be enough.

Gib seems to be more available now. I think that it would be a good idea to give some to your neighbors and friends. They might become more interested in camellias. Or you might even gib a few buds for them.

By the time you read this, I will have seen most of you at Myrtle Beach. I hope so anyway.

This will be my last letter as president of our fine society. I have enjoyed these last two years to the fullest.

I hope that the '83 season will be better than ever, and that everyone is a winner. I know that I am, just by meeting so many fine people.

Well, enough of this jibbering. Hope to see all of you soon. So until then, may God bless you.

Ed Liebers, President

PS: Please try to attend all four of the North Carolina camellia shows this year.

VIRGINIA CAMELLIA SOCIETY



Our Virginia camellias are making up for the very cold winter and spring with new growth like we have not seen in years. Compared to the drought of last year, we are receiving adequate moisture, in fact, almost too much.

Due to the death of C.C. "Charlie" Mason, whom we all knew and respected, we called a special Board meeting of the Virginia Camellia Society. The Board unanimously and without hesitation approved the following in memory of Charlie Mason:

1. \$1000 donation to the American Camellia Society
2. Life membership for Edith Mason in the American Camellia Society,
3. \$600 to the "Fred Heutte Foundation" of Norfolk Botanical Gardens.
4. \$400 to Norfolk Botanical Gardens Arboretum for benches and a tree planted in memory of C.C. Mason which will be marked with a bronze marker. The benches will overlook the Camellia Garden of all Virginia grown and developed camellias.

We feel the loss of Charlie, but we still see the results of his efforts.

There are approximately 800 air-layered plants now coming out of his yard. Some 80 plants will go to Washington, DC for planting at the National Arboretum. 20 plants are going to Busch Gardens in Williamsburg, VA. Many are going to Maryland and other areas of Virginia and North Carolina.

Our fall show has moved to the new Greenbriar Mall Shopping Center and will be held on November 5 & 6, 1982.

We expect to place approximately 200 air-layered plants along the east coast this fall.

Hope to see many of you folks at the ACS meetings in Washington, DC and the ACCS meetings at Myrtle Beach in early October.

Cecil E. Sears, President

CAMELLIA JAPONICAS

CAMELLIA SASANQUAS

LAUREL LAKE GARDENS AND NURSERY, INC.

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ME AND MY CAMELLIAS

Marjorie O'Malley, Woodside, CA

My camellia introductions started quite accidentally when I moved 'William Hertrich' near a newly planted 'Buddah' tree on our patio in 1967 after we had finished the landscaping of our home here in Woodside. 'William Hertrich' had three other homes prior to our move to Woodside, two in Southern California and one temporary home in Atherton, CA. 'William Hertrich' was a true "travellin' man" because he moved in style, having been transported by Bekin's Van and Storage to each new home.

October 1968: Enter . . . Alton B. Parker, an old camellia friend from the 1950s when we both lived in Southern California and whom I hadn't seen in 15 years. He was delivering a few plants to me. As he passed by mama 'Buddah', he noticed the huge seeds on her and drawled slowly, "Why don't you pick these seeds and plant them?"

I retorted, "Al, because you're so tall and I just happen to have a 6 foot ladder in the stable, you can reach the top of the tree and gather the crop!"

We ended up with a full bucket of seeds which I planted that afternoon.

The seeds were planted in my special orchid mix, grown under Gro-Lux lights for 20 hours a day and 15 inches from the source of lights. In 6 months the seedlings were 2 feet tall.

By 1972 I had 35-37 different handsome outstanding blooms which looked like something very special. After three seasons of blooming, 10 of them looked particularly good.

The first one that I registered, I named 'Notre Dame' because of my affiliation with the University. When it first bloomed, I left the bloom on

the plant for a week to check out its long-lasting qualities and to take a picture for registration with A.C.S. Our overly neat gardener removed the flower and placed it in the trash bin with millions of other blooms from our garden. There was no picture or proof of 'Notre Dame' that year.

'Notre Dame' and the nine other seedlings we moved to another location for 3 years and they were in "limbo" until 1976. In 1977 Notre Dame won the National Football Championship and the camellia 'Notre Dame' was introduced by Nuccio's Nurseries that year.

My family's connection with Notre Dame began in 1902-1904. Grandfather, my mother's family, my father and mother, I and all of my grandchildren are avid Notre Dame supporters and rabid fans. All of us have sustained and will continue to sustain the University in many ways.

My brother breeds and races standard-bred horses and he names the horses after Notre Dame affiliates, i.e.: "Notre Dame", "George Gipp", "Knute Rockne" and "Dr. James W. Frick".

Our family also has been growing camellias for 3 generations. Grandfather grew his in the north end of a greenhouse in the 1920s near Detroit, Michigan. My father grew the later varieties in the 1940s in Grosse Pointe, Michigan, in a later model greenhouse. When father moved to Pacific Palisades, California, he truly was in a camellia lover's heaven. He had camellias in tubs, in pots under lath, and on tables and chairs. He used them as background plants surrounding the house and garden. With this background camellias have been a way of life for me.

Because it was so fascinating to have grown such beautiful flowers in my first attempt, every year thereafter, I picked seeds in our garden each fall. I now have a large collection of seedlings. It seems that these seeds multiply geometrically! I usually plant an average of 3 flats a season, and I now have seedlings under 20 hour lights in the greenhouse, baby plants on the greenhouse benches, bigger plants in the lathhouses, and much understock by the stable.

My latest crop of 1981 seeds are now being grown and cared for by my friends Jack Mandarich and Bob Ehrhart. In 1977, I sent 100 seeds to Rev. Robert Austgen, C.S.C. director of the summer sessions at Notre Dame and a botanist by avocation. He is experimenting by growing them in the greenhouse at Notre Dame and uses the facilities at their Lobund Laboratory to irradiate them. After the results of the experiment, he will write a paper on his findings.

From my crops of seedlings so far, in addition to 'Notre Dame', I have introduced 'Golden Dome', 'Dr. James W. Frick', and 'Irish Mist'. Next year I plan to introduce 'Rev. T.

M. Hesburgh' and 'Rev. Edmund P. Joyce'. In future years I will introduce 'George Gipp' or 'The Gipper', 'Knut Rockne', 'Irish Lace', ad infinitum. C reticulata hybrid 'Dr. James W. Frick' is named after the Vice President of Public Relations, Alumni Affairs and Development at Notre Dame, who is also a national leader in the field of education and philanthropy. He actively participates in the overall institutional policy at Notre Dame. Above all, he is a native North Carolinian, born in New Bern in 1924.

C. reticulata hybrid 'Rev. Edmund P. Joyce C.S.C.' is named after the Executive Vice-President of Notre Dame who is also head of the Faculty Control of Athletes and a C.P.A. by avocation. He is a native of Spartanburg, S.C.

This is a brief history of my experience with camellia reticulata hybrids and reticulatas, and I expect to continue breeding and growing them for many years with more selective introductions in the future. Because the names of the future introductions are already selected, I will try to produce more startling new cultivars to be propagated in future years.

A Camellia Show is . . .



Waiting for the judges to finish

AIR LAYERS FOR GRAFTING STOCK — CAUTION!

Records kept during grafting season 1981-82 reveal some surprising data relative to grafting camellias, and grafting stock to be used for camellias.

Though I grafted a large number of seedlings still in the seedling patch and a couple dozen high grafts on plants in the yard, I will not consider them in this report. I will describe the results I got on grafts made on potted-up stock in the greenhouse.

Scions came from various places, quite a few from California and even further away. No scion was used which did not appear suitable. All were soaked for a few minutes in Captan solution, and the cut-off stock drenched with Captan. The juncture of scion and stock was covered with aluminum foil. They were placed after grafting under a table in the greenhouse with no paper bag or other shade. The grafts were made whenever scions became available, from 15 December to end of March. Cloches were gallon glass jars.

There were 50 grafts made in the greenhouse on four classes of grafting stock:

1. 33 grafts made on finger size seedlings potted up from the seedling patch in August 1981.

2. 8 grafts made on large, well rooted seedlings repotted into 5 gallon containers in April 1981.

3. 8 grafts made on well rooted and healthy looking air layers made in May 1980 and removed from the mother plant in August and September. The roots were inspected prior to grafting by slipping the plants out of the containers. The roots were found to be healthy looking and copious. They were already curling around inside the pots.

4. 2 grafts were made on vigorous healthy greenhouse plants which grew and bloomed well but were uninteresting flowers.

The results were as follows:

1. On the 33 finger size seedlings, I got 32 takes. The 33rd callused over well, but the scion lost its growth bud. It's still sitting there.

2. Of the 8 large seedlings, I got 8 takes.

3. On the 2 greenhouse plants, I got 2 takes.

4. On the 8 pieces of air-layer stock I did not get even one take! Eight beautiful scions lost! Guess who's not going to use air-layer stock any more!

Fortunately, I made multiple grafts on almost all scions, one on air-layer stock, one on potted up seedling stock and one out in the seedling patch. I got at least one take on every cultivar I grafted, except the one which lost its growth bud. The graft made in the seedling patch also lost its growth bud.

Carolina Camellias

DISASTER!

Information received from friends in the Pioneer Camellia Society of Maryland reveals that the severe winter of 1981-82 almost wiped out camellias in the Maryland area except for those which were greenhouse protected. Those camellia people are hardy though! They went ahead with a competitive show of protected blooms on April 9th, and their 24th annual camellia exhibit on April 18th. That's the spirit, Maryland!

IN AND AROUND THE GREENHOUSE

James H. McCoy Fayetteville, NC

Something like a rite of spring for greenhouse growers of camellias is the spraying of all plants for scale as soon as they're removed from the greenhouse. I will not say that this is not good, but I will say that it might not be necessary. A greenhouse grower and a free spirit, told me that he didn't spray for scale unless he had scale. It sounded reasonable to me, so I tried not spraying for scale this year. It is now mid-August and I have yet to find any scale on any of my greenhouse plants. They have never been sprayed or treated with Cygon, so there is not a residue of systemic scale protection there. Scale may yet show up, of course, and if it does, I will spray the individual plant.

What is the best cloche to use in grafting? The answer would depend on your requirements, how many grafts you plan to make, etc. For the camellia hobbyist who doesn't make more than 100 grafts a year, I would suggest 2 liter plastic soft drink bottles, with the bottom cut out. I have used wide mouth gallon glass jars, quart mayonnaise jars, clorox bottles, plastic milk cartons and even a 5 gallon plastic paint can for grafting in the yard. But of all the cloches I have used, I would pick the 2 liter soft drink bottle as the most satisfactory all-round cloche. Here are some of the advantages: They are readily available, the bottom is easily removed with a pair of tin snips they are unbreakable, they can be stacked, they are easier to wash than glass jars, they are easy to set into the ground by raking around them with a screw driver while gently pushing down, the progress of the graft can be observed without removing the cloche, the

graft can be given air by removing the cap, they are about as tall as a gallon jar with a wider mouth, they require a smaller kraft paper bag for shade, they are not as easily tipped over as some other cloches, and last (but not least) the sides are straight which would permit easy covering of a graft which was made on a stock growing close to the side of the container. Have I made my case?

Do you knock off your grafting at the end of March? Do you believe that any grafting done after that date is just too late? That the weather will be too hot, and if you do get any takes, they will not put on much growth before cold weather sets in? Forget it! You surely do not have to stop grafting in March unless you cannot find satisfactory scions of varieties you want. Hot weather actually accelerates the formation of callus, hence a shorter period under the cloche, often less than a month. This year, I received a group of 4 scions on 21 June. Eight grafts were made on 22 June, 6 on potted stock in the greenhouse and 2 in the seedling patch. On 20 July, less than a month later, 5 of those in the greenhouse were uncovered, on 25 July one more in the greenhouse and one in the seedling patch were uncovered. The 8th one died. At this date, 25 August, some of these grafts are more than a foot tall and still reaching for the sky.

Since grafting season is almost upon us, would you like to know how Mr. Edgar Sebire of Victoria, Australia, does it? It might be well to know, as he grafts from 1000 to 1600 every year. He says that he loses one every now and then but his percentage of takes, though he has never figured it, must be about 99 percent. He grafts in June, July

and August, which would correspond with our months of December, January and February. He grows his own grafting stock in containers which measure 6 inches in diameter by 7 inches high. He grafts when the stock is $\frac{1}{4}$ to $\frac{1}{2}$ inch thick. He uses the cleft graft system and does not normally use a fungicide. He does bind the graft with $\frac{1}{2}$ inch budding tape, wrapped 3 or 4 times around the stock before tying off. He does not seal with grafting wax or anything else. Before covering graft, he places a thin coat of washed river sand on top of soil for cleanliness. He covers his grafts with wine bottles with the bottom removed, but states that any glass jar would be just as good. He places his grafts in the greenhouse and covers the cloche with one thickness of "Hessian" (I believe that this is what we call "burlap"). He admits air after new growth starts by placing 3 little blocks of wood under the edges of the jar, or in the case of wine bottles, removes the caps. He says to keep soil **just moist**, not wet until the grafts are uncovered. After the grafts are uncovered, water them as necessary. As the stock had been fertilized up to 9 months before grafting, he does not fertilize his new grafts until they are repotted in April or May (October or November here). Mr. Sebire says that when he removes the tape in mid-summer (read "mid-winter"), he does apply wax to the cut surfaces.

In the spring issue, I described the use of willow twigs for rooting hard-to-root or impossible-to-root plant material? I promised to test the use of willow twigs and let you know how many willow twigs to

use. Well, I made a test, but I'm afraid I'm not able to tell you how many twigs to use. I also fear that I am an utter failure as a plant "scientist". I'm going to leave all "testing" to others who are better trained and qualified to do so. In my tests, I got much better rooting on my controls! This is what I did: In each of the tests and the control, I used 10 cuttings each of pink dogwood, red maple, 'Dream Girl' and 'Pharaoh'. In test #1, I used 1 pound of willow twigs, about pencil size without leaves in a gallon of water. In test #2 I used 1 pound of willow twigs a little bigger than a match stick with attached leaves in 1 gallon of water. Test #3 was a half pound of the smaller twigs with leaves in a gallon of water. I soaked these twigs for 48 hours, removed them and soaked the cuttings in the resulting potion for 24 hours. I dipped the ends in Rootone before setting into a rooting mix of half and half sand and peat. The controls got only the Rootone treatment. I placed the container in the greenhouse and covered it with plastic. The results: After two months, a large percentage of the cuttings were dead. After three months, I terminated the tests. The results, indicated by number of rooted cuttings were as follows:

Test #1: 2 red maples.

Test #2: 6 dogwoods and 2 red maples.

Test #3: 6 dogwoods and 4 red maples.

Control: 8 dogwoods and 4 red maples.

In none of the tests nor in the control did I get any takes on 'Pharaoh' or on 'Dream Girl'.

One benefit of growing camellias which will be noted immediately by beginners is the human good will which seems to be generated among camellia people. In many years of associating with these people, I have often noted the remarkable generosity and friendship among them, and can heartily recommend to the uncommitted that they become involved with growing camellias.

REMINISCENCES AND RECOMMENDATIONS

Dr. Raymond Jenkins Salisbury, N.C.

About forty years ago my affair with camellias started; it has lasted beyond my eightieth birthday. Around Easter for several years, my wife and I used to go to Charleston, SC to see the world famous Magnolia, Cypress, and Middleton Gardens. We would usually stop at Squirrel Inn in Summerville. It was there that I first acquired an active interest in camellias. Mr. Sutter, the gracious owner of the Inn, greatly enjoyed showing his guests about the spacious garden and commenting on his best bloomers. He was the most active promoter of the annual show at Summerville. I recall his once winning with a very large 'Donckelarii'. The Inn was also made more attractive to all guests, for Mrs. Sutter always saw to it that every bureau in the bedrooms and every table in the dining room was graced with one or more camellias. In the garden around Squirrel Inn several varieties were usually in bloom. But I recall one year, when Easter was late, only the 'Laura Walkers', 'Lawrence Walkers' and a 'White Queen' were still in bloom.

Another attraction of Summerville was the nursery of Moultrie Ball. Moultrie had consulted with Dave Strother regarding the best camellias to plant outdoors. From him I bought a few plants. Among them were 'Shiro Chan', 'Eleanor McDowell', and 'Dr. Tinsley'. Named after his wife, 'Eleanor McDowell' was his seedling, and it once received a Best-in-Show award.

During the last quarter of a century, I have planted more than fifty camellias out-of-doors. Some have succumbed through sheer neglect. Others have not done well or have died from very cold winters. Among those that usually have some satisfactory blooms during a normal sea-

son are 'Daikagura', 'Debutante', 'Berenice Boddy', 'Sieur de Bienville', 'Margaret Radcliffe', 'Dr. Tinsley', 'Marjorie Magnificent', 'Virgin's Blush', 'Kumasaka', 'Magnoliaeflora', and 'Peach Blossom'.

Suppose a friend, taken by the beauty of camellias, blooming in winter, should ask you: "If you had to choose a dozen camellias, which you think would do well in the open in this locality, what varieties would you plant?" If you lived near Albemarle Sound and had seen the camellias chosen years ago by Mrs. William P. Kemp of Goldsboro for planting in the Elizabethan Garden, you might reply: "Any camellia that you especially like will thrive here." The same answer would generally apply to the coastal cities from Norfolk to Jacksonville. Yet I recall a trip to Charleston where the only camellias I saw that were blooming beautifully were in a garden along the bay called Pierates Cruz. If you live in Fayetteville, Columbia, or Macon, you would doubtless mention a few varieties which one can fully enjoy only in greenhouses in Danville, Greensboro, Salisbury and Greenville, SC.

Both before and after the second World War, the favorite camellias for planting in Salisbury, NC, were, I believe, 'Pink Perfection' and 'Debutante'. Both are excellent corsage flowers, and the plants are relatively hardy. In the best locations in the cities of the Piedmont, one will enjoy some good blooms during a normal winter. But they will not produce as many good blooms nor are they as hardy as 'Berenice Boddy', 'Margaret Radcliffe', 'Magnoliaeflora', 'Marjorie Magnificent' and 'Dr. Tinsley'.

For some years after the founding of ACS, 'Berenice Boddy' was

regarded as the hardiest of the C. japonicas. In the fifties, I bought at a nursery in Rock Hill, liners of 'Berenice Boddy' and 'Sieur de Bienville'. Both have withstood very severe winters, and in recent years 'Berenice Boddy' has had blooms pretty enough to warrant a picture in the local newspaper. Though the early blooms may be frozen two or three times in a hard winter, it usually, like Shakespeare's daffodils, "takes the winds of March with beauty." 'Berenice Boddy' is for me the hardiest of the mid-season varieties.

Though the blossom buds of 'Sieur de Bienville' as well as its better known sport, 'Florence Stratton' are occasionally blasted in winter, the plant is exceptionally hardy. It is named after the founder of New Orleans, Jean Baptiste Le Moyne. The most distinguished of the seven Le Moyne brothers, who are extolled in "High Towers", T.B. Costain's historical novel about the French settlement in Canada, was known to the world as Sieur de Bienville. As the name is also associated with the French settlement of New Orleans, the variety has probably been popular for more than two hundred years. A sturdy, thick-leaved plant, it is a very late bloomer.

Many years ago, on the way to Florida before Christmas, we sometimes stopped to see the early blooms in the garden of Dave Strother at Fort Valley. I recall one year in which virtually all the blooms in the garden had been killed by a hard freeze in December. Though the cold blast had descended less than a week before, I saw, as I walked through the garden, one perfect bloom about a foot above the ground. It was a 'Margaret Radcliffe'. Some years later, when Joe Pyron was Executive Secretary of the ACS, I inquired of him regarding this variety. From his observation of

the plant, he said that he would consider it almost as hardy as 'Berenice Boddy'. A shell pink like 'Berenice Boddy', it is earlier and its bloom is larger.

Another year when no killing frost had yet hit the area around Masee Lane, we stopped to see the garden. 'Margaret Radcliffe' was in full bloom but it was out-classed by a very tall 'Liberty Bell' with more than a hundred white, bell-like blooms. On this bright December morn, I was especially fortunate, for Dave Strother, the gracious owner of Masee Lane, was also enjoying the flowers in his garden. The most esteemed benefactor of the ACS toured the grounds with me and pointed out a few new varieties that were in bloom. I remember that he called my attention to three small plants of a mutation that had been successfully grafted the February before, with the remark that he thought it the best of the recent introductions. It was 'Elegans Supreme'. Considering the many sports of this excellent variety, notably 'Elegans Splendor' and 'Elegans Champagne', I presume most members of the ACS would concur in his opinion. From the scions that Mr. Strother sent me later in the winter, I now have two large plants in the greenhouse.

On this same morning at Masee Lane, I noticed on the western border of the garden a plant in full bloom that resembled 'Dr. Tinsley'. When I commented upon it, Mr. Strother told me it was a seedling of this hardy variety. A few years before, I had bought 'Dr. Tinsley', 'Marjorie Magnificent', and 'Magnoliaeflora'. All bloomed more than two months later than this seedling. As severe freezes are not frequent later than March 1 in the Piedmont, I think all three are more likely to do well outside than this beautiful seedling which at Masee Lane is

as early as 'Debutante'.

Though the latest sports of 'Elegans' are among the best possible *C. japonicas* for the greenhouse, I believe that if they are planted outside under tall pines and out of wind, they will generally, despite the hard winters of the Piedmont, do better than 'Guilio Nuccio', 'Helen Bower', the 'Mathotianas', and the many sports of 'Betty Sheffield' and 'Tomorrow'. About twenty years ago, an 'Elegans (Chandler)' was planted along with a ton or more of soil by a home in Salisbury. Every spring, according to the owner, its blooms are beautiful. In the best locations, 'Elegans' is to my mind, almost as hardy as 'Ville de Nantes'. Though 'Ville' and 'Lady Kay' are susceptible to dieback, they are first-rate varieties in the Piedmont, either in the greenhouse or in the open. In Wells Cranford's front yard in Salisbury, a large 'Lady Kay' usually blooms beautifully; he bought it years ago from Rufus McGill, the brother of William McGill of Adams Run, SC, who introduced the show winner 'Miss Charleston'.

To anyone enamoured of camellias in the upper Piedmont who wishes to plant a dozen or fifteen, I would suggest these varieties. Of the early bloomers, I like 'Daikagura'. It will usually have several striking blooms, especially when gibbed, before the first hard freeze of winter. Of the mid-season and early spring bloomers I would recommend 'Debutante', 'Bernice Boddy', 'Elegans', or one of its sports. 'Ville de Nantes' or 'Lady Kay'. Of the late bloomers I would plant 'Magnoliaeflora', 'Kumasaka', and 'Sieur de Bienville' or 'Florence Stratton'. These varieties will usually have some blooms worthy of a corsage or an arrangement when the azaleas are about to burst into bloom.

Of the hundreds of *C. japonicas*,

together with the hybrids of the many species of camellia that have been registered in recent years, there are certainly some that are hardier than many of these varieties. A late bloomer which I have planted outside is 'Sawada's Dream'. I am told it is hardy in Greensboro. I have also planted 'Wells Cranford', a seedling grafted on 'Frizzle White'; and 'Frost Queen', an introduction from Beltsville that is reputed to be hardy to -10 degrees F. A few other late bloomers that rate for the greenhouse but which might be tested outside in a suitable location are 'Pink Diddy', 'White Queen', 'Miss Charleston, Var', 'Essie M. Rollinson' and 'Colonial Dame'. Several years ago Mrs. Hayes, of Thomasville, GA, the lady who discovered and gave 'Tomorrow' to the world, presented me with another seedling which she named 'Colonial Dame'. In the greenhouse about Easter time it is covered with gorgeous white blooms. I think it deserves a trial outside.

There is no flower more beautiful than a 'Ville', 'Elegans', or 'Tomorrow' blooming outdoors in winter. In the Piedmont, a greenhouse is an added pleasure.



CAMELLIAS FOR THE COLDER PARTS OF SOUTH CAROLINA

Luther W. Baxter, Jr. and Peggy Mitchell

Camellias are generally regarded as exotic plants for the South. While South Carolina is regarded as a southern state, there are varying climatic conditions within the state. In the northwest corner of South Carolina the prevailing weather during winter months has minimum low temperatures usually from 10 to 20 F with occasional winters (usually January) having a low temperature of 0 F (1966, 1982). Temperatures below 10 F usually cause some damage to both vegetative and floral camellia buds. Many semi-double floral type cultivars such as Reverend John G. Drayton, Dr. Tinsley, and Flame do fairly well even when the temperature drops below 10 F. Observations and studies on cold tolerance forms the basis of this report.

During the winter of 1981-82, in the South Carolina Piedmont, camellias were severely injured by the freezing temperatures. Even old-timer *C. japonica* cultivars such as 'Reverend John G. Drayton,' 'Professor Charles S. Sargent,' and 'Dr. Tinsley' suffered leaf damage (Fig. 1). In our garden the most severely injured cultivars were 'Marjorie Magnificent' and 'Julia France.' The foliage of *Camellia sasanqua* cultivars were not as visibly affected but there was some foliar injury.

A few seedpods are now evident on 'Dr. Tinsley,' Reverend John G. Drayton,' and 'Roosevelt Blues.' There may be a total of 12 seedpods on all *C. japonica* plants in the garden. However, several *C. sasanqua* cultivars such as 'Rosea,' 'Daydream,' and two seedlings have some developing seedpods. One particular seedling, in full sun, has many seedpods and a seedling of *C. oleifera* has a full crop of pods.

The temperature at Clemson (in our garden) was 4 F but officially the temperature was 0 F on January 11 and 2 F on January 12. The official reading at 8:00 AM on January 11 was 4 F which is about the time I took my reading. Thus some *C. sasanqua* seedpods, set in the fall of 1981, were able to survive 0 F and the critical flowering parts of a few *C japonica* buds survived this temperature since a few set seedpods. Surprisingly very few branches were injured on either species. A 10-yr-old plant of 'Valley Knudsen' (*C. salsuenensis* x *C. reticulata* 'Buddha') suffered severe vegetative bud damage but the branches survived. Non-mature vegetative buds developed later and some have set a few flower buds for 1982-83. A 3-yr-old 'Valley Knudsen,' transplanted in the fall of 1981, was severely injured with some dead branches but it too has come back with a few healthy branches. It would appear in time that this plant will overcome the effect of the January 1982 freezes. The 10-year-old and well established cultivar 'Forty-Niner' (*C. reticulata* 'Butterfly Wings' x *C. japonica* 'Indian Summer') escaped any apparent injury. It has excellent vigor at Clemson and "gibs" very well, so it is good for fall blossoms but in the spring the flowers are generally poor.

In a study that began in 1980, 12 camellia cultivars (3 plants of each cultivar) were purchased from Nuccio's Nurseries (California) and grown in the greenhouse for 1 year. They (the 36 plants) were transplanted to the field in October 1981 according to sound horticultural techniques. The results are presented in Table 1, along with other pertinent information. It is surprising that two plants of Pharaoh

are still surviving just as well as Dolores Hope, Forty-Niner, Harold L. Paige and Howard Asper, each of which has *C. japonica* as one of the parents. It is conceded that *C. japonica* is more cold hardy than *C. reticulata*.

The flowering response of 'Valley Knudsen' has been excellent for several years when grown outside at Clemson except for the winter of 1981-82. Thus it is now considered advisable to test the flowering performance of some of these camellia hybrids out-of-doors in the Piedmont section of South Carolina which probably could be extended

across the 35th parallel to Arkansas and Texas. Of course the isotherms would have to be considered. Since these newly-transplanted cultivars withstood the winter of 1981-82, these would likely prove to be satisfactory if they "gib" well. Whether or not the flower buds can withstand the Clemson winters and bloom satisfactorily in the spring is not known but experimental evidence will soon provide us with the needed answers. Perhaps the best answer so far is to find the best ecological niche and then plant these beautiful camellia varieties and hybrids in this area.

Table 1. The survival of 12 *Camellia reticulata* hybrids transplanted from the greenhouse to the field in the fall of 1981. Greenhouse grown 1 year before transplanting. Plants of each cultivar replicated three times.

Cultivar	Parentage	Results
Sunset	<i>Camellia reticulata</i> x <i>C. japonica</i>	3/3*
Valley Knudsen	<i>C. saluenensis</i> x <i>C. reticulata</i> 'Buddha'	3/3
Dr. Clifford Parks	<i>C. reticulata</i> 'Crimson Robe' x <i>C. japonica</i> 'Kramer's Supreme'	3/3
Lasca Beauty	<i>C. reticulata</i> 'Cornelian' x <i>C. japonica</i> 'Mrs. D. W. Davis'	3/3
Milo Rowell	<i>C. reticulata</i> 'Crimson Robe' x <i>C. japonica</i> 'Tiffany'	3/3
Dolores Hope	<i>C. reticulata</i> x <i>C. japonica</i>	1/3**
Pharaoh	<i>C. reticulata</i> seedling 'Lion Head'	2/3**
Jean Pursel	<i>C. reticulata</i> 'Crimson Robe' x <i>C. reticulata</i> x <i>C. japonica</i> hybrid)	2/3
Forty-Niner	<i>C. reticulata</i> 'Buddha' x Hybrid 'Donation' (<i>C. saluenensis</i> x <i>C. japonica</i> 'Donckelarii')	3/3**
Harold L. Paige	<i>C. japonica</i> 'Adolphe Audusson' x <i>C. reticulata</i> 'Crimson Robe'	2/3**
Otto Hopfer	<i>C. reticulata</i> 'Crimson Robe' x <i>C. japonica</i> 'Lotus'	3/3
Howard Asper	<i>C. reticulata</i> 'Lionhead' x <i>C. japonica</i> 'Coronation'	2/3**

*Denominator - number planted outside, fall 1981; numerator - number plants surviving July, 1982.



*Fig. 1. Cold injury to vegetative buds of **Camellia japonica** showing typical distortion of the affected leaves. Compare left and right affected twigs with healthy twig in center. All twigs were taken from the same plant indicating that all vegetative buds are not equally affected (from unnamed **C. japonica** seedling).*

OUR SICK CAMELLIAS

James H. McCoy Fayetteville, NC

This discussion is prompted by an article by M. Claude Thoby.¹ M. Thoby is the owner of the world famous camellia nursery in Nantes, France, which used to be known as Guichard Soeurs. His article is a scathing condemnation of the practice, so prevalent especially in this country, of introducing viruses into healthy camellias in order to produce variegated blooms.

We can relate to M. Thoby and can agree with him on the detrimental effect of doing this, but only to a degree. The practice is so widespread here and in other countries, that the suggestion that we cease and desist would be an act of futility — like trying to rein in a mule with one arm in a sling!

Let's look at the pros (if there are any) and the cons, and try to decide whether or not we would want to eliminate viruses, even if we could.

It had been known for years that viruses are capable of breaking color in flowers, and in fact, had been

used for such purposes. It was not until an article by J.A. Milbrath and F.P. McWhorter, published in 1946², that growers were made aware that viruses are responsible for many camellia flower color breaks. Prior to this, such color breaks were considered bud mutations or sports and new variety names were registered. The importance of this information did not register on American camellia growers nor did an article by Dr. A.G. Plakidas in 1948³ which offered the same explanation for this phenomenon. In this article, Dr. Plakidas specifically recommended the use of viruses to produce new camellias. It was not until the 1953 ACS convention in Mobile that a talk by Dr. Plakidas literally set the camellia community on fire. Many growers, in the words of Mr. Les Marbury⁴ "—could not wait to get back home and try our hand in grafting a few plants in line with what we had learned from Dr. Plakidas."

In defense of virus use, let's con- 17

sider some of our loveliest, most popular cultivars. 'Ville de Nantes', considered by almost everyone as the greatest camellia of all time is virus infected. What makes this cultivar so appealing to Americans are its fimbriated, vivacious, upright petals and its beautiful moired variegation. A solid red 'Ville' would not even slow up the judges, no matter how near perfect it might be.

The big red retics such as 'Harold Paige', 'Dr. Clifford Parks', and 'Nuccio's Ruby' are viewed by many American exhibitors as potential show winners - "with the right variegation." A beautifully variegated 'Valentine Day' will win out over a solid colored one every time if all else is equal. Even the great non-retic hybrid 'Charlene', which has consistently won shows in the past, is going to have to be variegated to be of a contender from now on, here in the East.

Actually, if it were not for virus variegation, some camellias would never have even been registered. 'Glenwood' was just another red medium peony, something like 'Professor Sergeant' until Mr. Smith, by grafting it with a scion of 'Kramer's Supreme', variegated it. The surprising result, white in the center petals only, made it an eye-catching, different camellia and this, the virus infected camellia was registered. The solid red, forgotten! 'Apollo 14' is virus infected. The virus free, or solid red, was never registered. 'Miss Charleston' is another camellia which would never get to first base without variegation.

Is there danger of spreading the virus by use of the same pruning shears for virus free and virus infected plants? Some believe that there is. The writer is convinced that there is not. In the previously mentioned article by Milbrath and McWhorter, the authors state that the virus "—is transmissible by budding, there is no danger of its being

transmitted within a garden by touch, handling the plants or picking flowers." Dr. Plakidas in a series of tests made in 1950, 1951 and 1952 satisfied himself that virus transmission will not take place in the grafting process unless at least a partial union of the virus infected scion is accomplished. He says, referring to the results of some grafts where the virus infected scion did not take: "This shows that the virus is not transmitted by mere contact."⁵

Is there danger of the virus being spread by insects? Here again, it doesn't seem likely. It would seem extremely difficult, if not impossible to determine this scientifically. In their 1946 article, Milbrath and McWhorter state: "— we have not observed evidence of rapid spread of the disease within garden areas by means of insects or other natural carriers."

Dr. Luther Baxter of Clemson University writes in a personal letter: "There is absolutely no evidence that camellia virus is transmitted by a biological vector in the United States."

Dr. Plakidas writes, referring to several reports of sudden appearance of variegated camellias on plants that had previously bloomed only solid colored flowers: "— in practically every case the plant in question was growing adjacent to variegated (virus infected) plants."⁶ He proved that the virus can be transmitted through natural root fusion or root grafts.

Now, are we weakening our plant by introducing virus? Are we making them more susceptible to other diseases? Are we advancing the time, which some think is surely coming, when it will be difficult to find a camellia without virus contamination? The answer to all these questions, according to some, would be "yes". M. Thoby claims that: "Even shade planted, a virus

infected camellia will grow but little, is the prey of too strong a sun and is a victim of snow and cold."¹ Dr. Plakidas says: "The assumption that the variegation is harmless is not entirely correct. In addition to being more subject to sunburn, variegated plants, particularly those with extensive chlorosis like 'Kumasaka' show noticeably smaller, weaker, growth than their solid-green counterparts."⁵ Milbrath and McWhorter say: "The chlorotic leaves are unsightly and are more susceptible to sunburn and frost injury."²

How about greenhouse protected camellias? Mansfield Latimer wrote in VOL XV, No. 2 of Carolina Camellias that good strains deteriorate. Good strains meant to him, camellias with a lot of white or a striking or unusual type of variegation, in short, a virus infected camellia. A greenhouse grower recently asked this writer if he believed camellias had a life span. What was meant was did he believe that camellias in the greenhouse thrived and produced good blooms for only a few years before they either died or began a decline from which they could not

be saved. The answer would have to be, it certainly seems so, especially for variegated plants. Virus free plants seem to fare better in this respect. The late Mr. Louis Knock said one time that he had plants of 'Mary Knock' that had been in the same container for more than 10 years and still produced as fine blooms as they did when they were young plants. In all fairness, though it would seem to contradict the contention that viruses weaken camellia plants, we should note that there are countless very old, virus infected camellia plants which are happily blooming away in countless gardens. To mention one, Mr. Les Marbury's plant of 'King Lear' must be more than 30 years old and shows no signs of senility.

There is no known cure for this disease. Plants which seem to have recovered, actually still harbor the virus though the symptoms have disappeared.

So the question still plagues some (but doesn't bother others), should we continue to spread this virus disease among our camellias or should we join M. Thoby in his attempt to eliminate it. Please note the word "attempt".

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CAMELLIAS IN THE SUNBURNT COUNTRY

Tom Atkinson Victoria, Australia

This is the story of the establishment of a large camellia garden in Australia. It records some of the trials and tribulations encountered, steps taken to overcome them, and valuable lessons learnt from the experience.

But first, some background information. The Australian Camellia Society's Victorian Branch headquarters are in Melbourne, the State capital, a city of 2.7 million. Victoria is tucked away in the south-east corner of Australia. It has an area of 227,600 square km. which makes it roughly the size of North and South Carolina combined. It extends from latitude 34 degrees S to 38 degrees S, a distance from the equator equal to the area stretching from Columbia, S.C. to Richmond, VA. Victoria's climate is significantly different from that of the U.S. eastern states of similar latitudes. Firstly, Victoria has a mild winter - snow has never

fallen in Melbourne and frosts are rare. Secondly, humidity is low and summer temperatures are high, with long periods in excess of 90 degrees F and occasional days peaking at 110 degrees to 115 degrees F. Dryness and heat are associated with strong northerly winds which sweep in from the arid heart of the continent. There are similarities between Victoria's climate and that of central California.

Because of the mild climate, gardening is the favourite hobby, amounting almost to an obsession, of Victorians. Automobile plates proclaim the message, "Victoria, the Garden State". Camellias are grown with ease and in great profusion everywhere - in private gardens, public parks and botanic reserves. Most residences have plantings of camellias, many dating back to the camellia boom in the latter half of the 19th century.



The author who is vice president of Victorian Branch and Councillor to the Federal Branch, Australian Camellia Research Society.

At this stage in our narrative I can sense the reader asking "In view of the ease with which camellias are grown, how is it that difficulties were met with in starting a camellia garden"? To provide the answer we must take the story a step further.

In 1975, the Australian Rhododendron Society was in the course of expanding the size of its magnificent National Rhododendron Garden at Olinda, situated in the foothills of the Great Dividing Range some miles east of Melbourne. That organisation generously offered 5 acres of the new area to the Camellia Society for development as a camellia garden.

The offer was too good to refuse, - the elevated site of 1900 feet overlooked some of the finest panoramic views in Australia - and rainfall of 50 inches per year was about double that of Melbourne. Some reservations were felt because the site was bare of vegetation and exposed to hot and drying winds, but confidence was high, - "Didn't camellias grow like weeds in our climate?" It was also optimistically noted that rhododendrons thrived in the area, practically without attention.

It was decided to push ahead and some 2000 camellia plants were transferred from containers to the open garden. Simultaneously, considerable numbers of wind-breaks, shade trees and companion shrubs were planted. It very quickly became apparent that the plantings were not progressing and a rapid reappraisal of the situation was made. It would be boring to set out at length details of all enquiries made into suspected causes of growth. It suffices to say that soil was tested for Ph, various fertilisers and trace elements were tried, heavy mulches were applied, watering and drainage were checked, depth of planting was looked at etc. etc. In the end only one real culprit

was found - drying winds. Existence of these winds was known when the site was accepted and it was realised that this would be a disadvantage, but the really devastating effect on camellia growth was not fully appreciated. Once the cause had been determined, immediate corrective measures were taken. Some re-positioning was necessary to take greater advantage of existing belts of protective trees, overhead sprinklers were installed instead of the original micro-tube drip system and greater numbers of companion plants were introduced.

Happily, most of these measures were successful and to-day the Camellia Garden gives promise of becoming a worthy part of a great international Garden. Set out hereunder are some of the lessons learnt from our period of unhappy experimentation; it is stressed that conclusions reached merely summarise observations, - they do not claim to represent results of controlled scientific tests followed by proper statistical analyses. On the other hand, it is thought that the large number of plantings, involving some 2000 camellias, would lend weight to opinions expressed. Because of the fact that camellias and rhododendrons are both planted extensively in the general area, it was possible to compare the effect of conditions on the two distinct genera.

It was found that camellias require little by way of soil moisture for their survival. They are most drought resistant. On the other hand, dry air conditions are particularly damaging to their welfare. Leaf mechanisms do not seem to be able to adjust to prolonged spells of low humidity or the drying effect of excessive air movement. It is essential therefore, where nature does not provide enough moisture in the atmosphere, that a mini climate of high humidity be artificially created. 21



The cameillia garden at Olinda.



A sheltered corner of the garden.

For this purpose it is essential to retard air movement as much as possible by choosing a site that has a great deal of lateral protection, whether it be sides of hills, valley walls, banks of trees, shrubberies or whatever. Also there should be propinquity with other vegetation such as ground covers, companion trees, shrubs, etc. for mutual support in the transpiration process. It is im-

portant that, in windy areas, supporting plants be well established prior to camellias being introduced. Lack of sufficient protection rarely results in loss of camellias, they simply refuse to make any progress. Leaves are dull and pale, edges are yellow and the whole plant stagnates.

Rhododendrons, with few exceptions, are markedly different. Unlike

camellias they are sensitive to lack of water in the soil and cannot tolerate drying of the roots.

Whereas camellias have little resistance to low humidity, rhododendrons are well adapted to cope with this condition by varied systems of leaf scales, leaf hairs, (indumentum), closely spaced waxy pegs called papillae, leaves that roll up or hang down in other intricate ways they easily cope with both over-wet and over-dry atmospheric conditions.

Experience with camellias in exposed situations indicates that provision of overhead screening from the sun is not of major importance provided lateral protection is given and other means of increasing humidity are adopted. In fact, within limits, the more open sun the better for bud formation. On the other hand, overhead shade is an advantage at flowering time in order to prevent sun damage to delicate blooms. Ideally, there should be a tall bank of trees or other substantial protection set at such a distance that shade in the summer is minimal but shadows protect the blooms when the sun is lower to the horizon in the flowering season.

Experience at Olinda has thrown further light on the question of leaf-burn which, in the past, has been the subject of some misconceptions. Burn manifests itself as a brown patch of scorch on a leaf and should not be confused with overall or marginal yellowing. Leaf-burn seldom occurs on camellias exposed day in and day out to full sun conditions no matter how hot the conditions. It is usually met with where plants were sheltered in deep shade during portion of the day, and, with the sun's angle changing, are then struck by the direct rays for a limited period. Leaf-burn affects older leaves only. Contrary to popular belief, the young tender

new growth does not burn.

Those camellias which have, over a period of two or three years best withstood conditions of heat and strong winds are mentioned hereunder. Generally, sasanqua, japonica and williamsii hybrids survive better than both reticulatas and the minor species - (lutchuensis, fraterna, cuspidata etc.). Although sasanquas are popularly thought to be more sun-hardy than japonicas, this has not been borne out by experience at Olinda.

The most durable camellias over a long period proved to be several japonicas originating in California and developed by Nuccio's Nursery, namely Spring Deb, Berenice Perfection and Guilio Nuccio. Some Australian japonicas have proved to be equally resilient, no doubt due to their long history of local acclimatisation. These include most of the progeny of *Aspasia MacArthur*, notably *Margaret Davis*, also *Great Eastern* and *The Czar*. Hybrids which performed well were *Debbie*, *Waterlily* and *Crinkles*.

Among the 2000 or so camellias planted out at Olinda were a number notorious for the fault of bud-balling, that annoying habit where buds colour but fail to open completely. However under the dry conditions it was noticed that this bud-balling did not occur. (Elimination of this defect has also been noted in the drier inland areas of New South Wales). This suggests that over-watering, if not the cause of bud-balling, then certainly aggravates it.

It is hoped that the foregoing brief account of our experience in Australia will prove of interest to American readers and stimulate further discussion about camellias and their culture.

Greetings and best wishes from "Down Under."

FOR THE BEGINNER

Regular Feature

December, January and February are the best months for grafting, so we're going to talk about grafting today. I know you're probably thinking: "Grafting camellias is not for beginners!" Yes it is. There is no reason why a camellia lover shouldn't try his hand at grafting. The procedure is not complicated, the results fantastic! It's a quick way to get a blooming size plant of almost any variety you want. I will not say that it's the best way, because I think the best way is to buy a 2 or 3 year old grafted plant from a camellia nursery. But if you can't find a particular variety in a nursery, then graft it yourself. Within 2 years you will have a blooming plant.

The basics of grafting, including sketches, can be found in any issue of the ACS yearbook, so we will cover that aspect briefly and go on to some other things that might not be mentioned in many articles, aspects which might give you a better ratio of success.

Basically, you need a piece of grafting stock: a healthy camellia (japonica or sasanqua) with a stock about the size of, or larger than, your finger. The other basic is a scion of the variety you want. Cut the stock off about 2 inches above the ground, smooth the top with a sharp knife or razor blade and split it, also using a sharp knife and a hammer. Trim the scion into a wedge shape and insert it into the split stock, keeping the cambium layers of each in contact. The cambium is the green layer under the

bark. Cover the whole thing with a glass jar. Cover the glass jar with a kraft paper bag, and wait as patiently as you can until May 1. It would be a wise move to drive several stakes around the jar if you're grafting in the yard to prevent the jar being knocked over by an animal, a child or even the hose.

Actually, this is all there is to it. Nuccio doesn't do anything else, and he doubtless grafts more camellias than anybody in the States. But there are some other steps that some experienced grafters follow.

Some soak the scions in a fungicide solution, 1 tablespoon of Captan per gallon of water, for a few minutes. This surely will not hurt.

Some cover the union of stock and scion with sand, some with clay, some paint it with asphalt, some wrap it loosely with aluminum foil. I prefer not to wrap the union or cover it with anything. I wait till the graft is uncovered, then wrap the union with aluminum foil. Darkness hastens development of callus, and your graft will more quickly heal over if you do this.

Some dust the union of stock and scion with Rootone at the time the graft is made. I have tried using Rootone, and not using it. I do not use it anymore because I get about the same results whether I use it or not.

Some douse the stump of the grafting stock and the surrounding soil with a Captan or Benlate solution. I do, if it's expedient to do so. If not, I don't bother. I'm in favor of

saving time if possible.

Some disinfect grafting tools after each graft by soaking them for a few minutes in Captan solution. This is to prevent infecting the new graft with dieback spores or with color breaking virus. I certainly don't do this, because I don't believe that the color breaking virus can be spread in this manner, nor do I think there is much danger of infecting the graft with dieback. If you have the time and want to disinfect your grafting knife and shears after each graft, then go ahead and do it.

Some clip the leaves of the scion. It won't hurt a thing to do this if you need to: i.e., have trouble covering the leaves with the cloche. Some of our best growers and propagators believe that it would be better not to clip the leaves.

Some provide bottom heat for their grafts, and this will certainly shorten the time under glass. But I don't think that a beginner needs to get into this. Just wait and let mother nature do her thing. Whether you graft in December, January or February, very few can be uncovered before the first of May.

How do you know when to take the glass off? When the bud of the scion starts to grow **and** callus (new tissue) has formed at the junction of stock and scion. The more important of these two requirements is the formation of callus. Don't be fooled by new growth without callus formation. This is the best way I know of to lose a healthy graft. Sometimes it is possible to take off the cloche before new growth has started without danger to the graft, but **not** without callus formation.

Generally, it is not necessary to gradually take your graft out from under the cloche. If you observe the above mentioned two conditions, go ahead and remove the cloche. Do this in the evening. Look in on it a couple times the following day, say mid-morning and mid-afternoon. If it has not wilted by mid-afternoon, you've got it! If it does wilt, which is unlikely, slap the jar back on it and wait a few more days before trying again.

Happy grafting!

MEETING OF CLUB OFFICERS AND DIRECTORS

A meeting of the Fayetteville Camellia Club officers and directors was held July 24 at the home of club president James McCoy. It was a working meeting, but all work and no fun doesn't set well with camellia people. So home-made ice cream and cake were served.

Activities of the coming year were discussed, location for the club meetings decided upon (Eutaw Cafeteria), fund raising plans discussed (no increase in dues) and the old stand-by, how to attract new members.

Everyone seemed to have a good time and when they left, many of them left with a bag of squash and zucchini, brought to the meeting by our master vegetable gardener, secretary Nelson Condit.



AN INTERESTING OBSERVATION

"— we simply water and feed our plants. No gib, no cygon and no other chemical additives. So perhaps our plants are rather more like mother nature had in mind when creating them."

John Hunt, Australia 25

A BOOK REPORT

Serious camellia growers and camellia lovers should rejoice to learn that the finest book depicting camellias that has ever been published in the English language is just off the press and is available. It is Sterling Macoboy's "The Colour Dictionary of Camellias." It is different from Brown and Feathers "The Camellia" in that more than 400 camellia varieties are shown in their glorious colors!

Anyone who is at all familiar with printing will recognize what an awesome, costly undertaking is the publication of a book with 400 pictures in color! I believe that it could be said for most of us that if we had saved every color picture of a camellia that we had ever seen, we still would not have 400, and probably never would have.

Reviewers have pointed out that the colors are not representative. I do not find this to be the case in general. It would be unreasonable to expect every one of the 400 color pictures of camellias to be perfect as far as colors and shades go, but at least 99% of them are very good. I can still see in my mind one page where 'Nuccio's Pearl' and 'Nuccio's Jewel' are depicted side by side. They are so beautiful and so near perfect colorwise, till anyone would be tempted to run out and buy them both.

The few which do not measure up to acceptable standards would certainly include 'Crusselle' (page 78) and 'Jessie Katz' (page 96), both of which look like they should have already been thrown out. The picture of 'Mrs. D.W. Davis' (page 106) does not do justice to this great camellia. But the most disappointing photograph of all is the one of that magnificent retic-hybrid, 'Jean Pursel' on page 158! It reminds me of a painting I once saw by Salvador Dali of a melting pocket watch. But on the fa-

cing page is a superb photograph of 'K.O. Hester'. Tit for tat!

I would have to admit that there are a few blooms depicted which are such poor examples of the cultivar till they could not be recognized by anyone, regardless of his knowledge of camellias. For examples of this, see 'Betty Sheffield Supreme' on page 57, 'Pink Frost' on page 110 and 'Angel Wings' on page 182. The last two are probably mistaken identities.

The best section of the book, though far from the most important, is the section on Higos. The Higos need a good selling job, at least in the States, and in this book they got it. The pictures show bright, cheerful, interesting flowers, and the photography is excellent. On the other end of the rope, the section on Reticulatas appealed to me least. For the most part, the flowers are coarse looking and uninteresting. There are many exceptions, of course, but the colors don't come across correctly and photography leaves a lot to be wished for.

Mr. Macoboy is a camellia lover. This is obvious. His lovingly worded descriptions of most cultivars leaves no doubt of that. For example, of "Bella Romana" he says: A gorgeous Italian cultivar — a floral paean to the beautiful women of the city that gave it birth." Of 'Easter Morn' he says: "— may vary all the way to full peony form, when the flower's heart mingles beautifully waved inner petals among the golden stamens." The author won my heart with his comment on 'Zing', a miniature camellia which followed 'Wart' and 'Widdle Wun'. He said: "Trust McCaskills to bring nomenclature back in line! Zing is the perfect epithet for this formal double miniature of bright rose red."

Someone commented that this book may never become a collector's item, and indeed it might not,

but it certainly is a magnificent, all-inclusive, beautiful, informative, awe-inspiring work of art! It certainly should be in every camellia lover's library. It is doubtful that a book so fine as this one on the subject of camellias will ever again be published.

The ACS is the agent for the publisher in the United States. The book sells for \$30.00 postpaid. Mail your check to The American Camellia Society, P.O. Box 1217, Fort Valley, GA 31030 and ask for the Colour Dictionary of Camellias.

Carolina Camellias



REFLECTIONS ON OLD TIMERS

Dave and Nell Heriot

Columbia, SC

We seem to live in a period in which "newer" and "bigger" appear to be synonymous with "better". What can be lovelier than a 'Pink Perfection' floating in a silver bowl flanked by a pair of "Magnoliaefloras"? These two beauties still win blue ribbons and elicit a full share of oo-oo's and ah-h-h's from an admiring public and occasionally make it as far as the Court of Honor, but seldom any further.

Although entirely different in form, 'Pink Perfection', a formal double and 'Magnoliaeflora', a semi-double, the same adjectives can be used when describing them; i.e., delicate, dainty, refined and satisfying to the esthetic faculties.

'Magnoliaeflora' has the added attraction of sufficient cold hardiness to be grown outside in almost all of the camellia growing range. In his studies on cold hardiness which were published in the American Camellia Society Yearbook in the 1960s and early '70s, the late Mr. Wendell Levi of Sumter, SC consis-

tently rated 'Magnoliaeflora' as Class 1; "Varieties which bloom successfully regardless of how cold down to 4 degrees - their buds tight or swollen, hold back and are usually unharmed. They bloom normally in our coldest winters".

'Pink Perfection' is not so cold hardy but blooms well in mild winters. From Columbia to the coast it is well worth growing as an outside plant. With some degree of protection the grower will usually be rewarded with a display of "perfection".

You will note that we have studiously refrained from referring to the two beauties mentioned as being our two favorites. We find it impossible to select any two as favorites when there are others from which to choose such as 'Alba Plena', 'Debutante', 'Elegans', and 'Ville de Nantes'. All of these are "old timers" and maybe someone will, in the future, see fit to proclaim their attributes.

Milly Mattie Kahn's Garden Column

James H. McCoy Fayetteville, NC

Milly Mattie Kahn moved to Sumter, SC, when her husband bought the Sumter furniture factory. I was nine or ten at the time. Looking back on it, I'm sure that she deliberately set out to become the social arbiter of Sumter as soon as possible, leading various drives, throwing parties and espousing this cause and the other. She even contributed \$5,000.00 toward repairing the DAR home, well publicized in the Sumter Record, of course. Shortly after she moved to Sumter, which was only 9 miles from our old home place, she started writing a weekly garden column in the Record. It was called, "Gardening with Milly Mattie." She wasn't much of a writer and I don't think she knew much about gardening, but I guess that the editor didn't dare refuse to publish her material.

My grandmother Gordon, couldn't stand her. She said that if anybody listened to Milly Mattie Kahn, she'd kill everything in the yard in one month. She called her, "Silly Mattie."

If my grandmother didn't like her before she met her, she liked her even less after she finally met her. That meeting brought about the end of "Gardening with Milly Mattie", and gave us something to laugh about for years afterward. Let me tell you the story.

Amy Brown lived on the farm bordering ours. Her husband owned the cotton gin and also graded cotton for one of the buyers in Sumter. There were two old ladies in the house, Miss Alice and Miss Abby, who did or directed all the housework and yard work. So Amy didn't have much to occupy her time. Every morning after breakfast, she would leisurely bathe, dress like she was going to church, complete with hat and gloves, and would drive

to Sumter. She always went to DeLorme's Drug Store, sat at one of the little tables and ordered a coke. It was called a "dope" back then. She spent from a half hour to an hour and a half drinking her coke and chatting with anybody who would stop at her table. One day she met Milly Mattie Kahn. They hit it off immediately. They quickly became good friends.

One sultry Saturday in July, Milly Mattie came out to visit Amy. Well, most of the community was out at Foxworth's Mill Pond swimming. Somebody, I guess somebody named Foxworth, had dammed up a little stream of water many years before, and had created quite a sizeable pond. If there ever had been a mill there, it wasn't there any more. But the folks in the community used to go to Foxworth's Mill Pond on Saturday afternoons to swim and just get together and talk. Whole families would come. The children and young people would swim and most of the old folk would sit on the banks gossiping and swapping stories. Some of the adults went swimming too. I can still see Miss Lyle, the local postmistress, floating around in Foxworth's Mill like a grounded blimp. My cousin Gordon and I liked to go, but if given a choice, we'd rather go to the trestle, a place in the swamp where the boys sometimes went to swim. There, you didn't have to wear a bathing suit.

Well, Amy brought Milly Mattie out to Foxworth's Mill Pond, for that was where the action in the community was. She introduced her to my grandmother. She was about 40 years old, had dark hair and was dressed in a tight pull-over shirt.

Milly Mattie gushed: "Oh, Miss Gordon, I hear that you grow the biggest japonicas of anybody! What do

you fertilize them with, horse manure, cow manure or chicken manure?"

Asking such a question was a breach of local etiquette, but my grandmother didn't bat an eye. Without a moment's hesitation she said: "Well, what's the biggest animal?"

"A horse?"

"No, I mean, what's the biggest animal that God ever made?"

"An elephant?"

"That's right."

"Elephant manure? But where do you get that?"

"You can get it out at the fair grounds. The circus comes to town every October. If you go out there the day after they leave, you can get all the elephant manure you want."

"Oh, I'll bet you can! I never thought of that! Thanks a lot, Miss Gordon."

I laughed all the way home, but my grandmother didn't.

She said: "That woman ought to be ashamed to go out in public dressed like that. That sweater was so tight you could count her ribs. And I'll bet she dyes her hair, too!"

I said, "Well, you didn't have to tell her that you use elephant manure on your japonicas."

"I didn't tell her that I use elephant manure. I just told her where she could get it."

A few days later, my grandmother came in with the Sumter Record. She said, "Look at this. I can't believe anybody could be so stupid!" She had the paper open to "Gardening with Milly Mattie." Her subject was how to grow beautiful japonicas. Believe it or not, she recommended - the use of elephant manure, even repeating my grandmother word for word: "You can get all the elephant manure you want out at the fair grounds when the circus pulls out." Mercifully, she didn't say from where she got her information.

This was Milly Mattie's last gardening column. I guess that the editor decided that enough is enough, or maybe he just didn't want to hear his gardening columnist referred to as "The Elephant Woman."

My grandmother cut the column out of the paper and saved it. Ever now and then she'd take it out, read it and laugh her head off. "I should have told her to be careful and not get any zebra manure or she'd get striped flowers. She'd believe that, too."

"It's a wonder you didn't," I said.

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