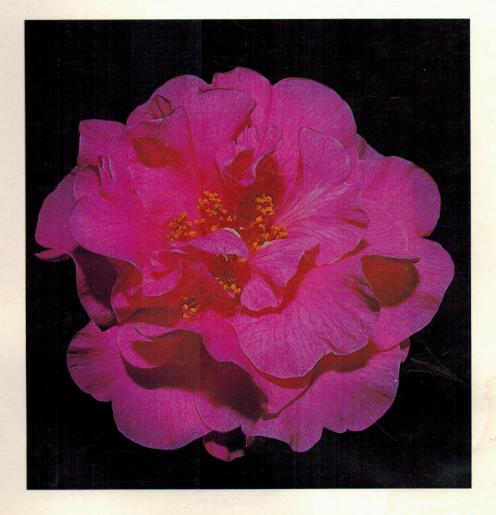


A Publication of the Southern California Camellia Society



'Al Gunn'

# Southern California Camellia Society, Inc.

An organization devoted to the advancement of the camellia for the benefit of mankind — physically, mentally and inspirationally.

The Society holds open meetings on the second Tuesday of every month, November through April at Ayres Hall, Los Angeles County Arboretum, 301 No. Baldwin Ave., Arcadia. November and February meetings to be held in the Lecture Hall. A cut-camellia blossom exhibit at 7:30 p.m. regularly precedes the program which starts at 8:00.

Application for membership may be made to the membership chairman. Annual dues, \$15.00.

#### **OFFICERS** — 1990-91

SERGIO BRACCI, President 5567 N. Burton Ave., San Gabriel 91776 Tel. (818) 286-4338

BILL DONNAN, Secretary 700 S. Lake St. #120, Pasadena 91106 Tel. (818) 795-9427

BOBBIE BELCHER, Foreign Membership Chairman for Australia and New Zealand 7475 Brydon Rd., LaVerne 91750 Tel. (714) 593-4894 DEAN ALLTIZER, Vice-President 1253 Bruce Ave., Glendale 91202 Tel. (818) 241-1211

JEANNE TREFZGER, Treasurer U.S. and Foreign Membership Chairman (exclusive of Australia and New Zealand) 607 Santa Cruz Rd., Arcadia 91007 Tel. (818) 447-7598

#### DIRECTORS

DEAN ALLTIZER

1253 Bruce Ave., Glendale 91202

Tel. (818) 241-1211

HERMAN BELCHER

2630 Gem Circle, LaVerne 91750

Tel. (714) 593-5316

MELVIN BELCHER

7475 Brydon Rd., LaVerne 91750

Tel. (714) 593-4894

SERGIO AND ELSIE BRACCI 5567 N. Burton Ave., San Gabriel 91776 Tel. (818) 286-4338

BILL DONNAN

700 S. Lake St. #120, Pasadena 91106 Tel. (818) 795-9427

101. (010) 750 511.

CHUCK GERLACH 3721 Cedarbend Dr., La Crescenta 91214

Tel. (818) 248-3838

MARILEE GRAY 868 Kent Dr., Claremont 91711

BOB JAACKS

5554 N. Burton Ave., San Gabriel 91776

Tel. (818) 286-3834

Tel. (714) 624-4107

PAT NOVAK

6516 Murietta, Van Nuys 91401

Tel. (818) 782-3709

GRADY PERIGAN

1380 Winston Ave., San Marino 91108

Tel. (818) 792-0829

JOHN UTVICH

2975 Somerset Pl., San Marino 91108

Tel. (818) 286-5555

DAVE WOOD

2434 Allanjay Pl., Glendale 91208

Tel. (818) 247-1986

#### HONORARY LIFE MEMBERS

SERGIO BRACCI WILLIAM W. DONNAN COLONEL TOM DURRANT WILLARD F. GOERTZ BERNICE GUNN THOMPSON

JOSEPH NUCCIO
JULIUS NUCCIO
CARYLL PITKIN
GRADY PERIGAN
WILLIAM E. WOODROOF

#### FOREIGN REPRESENTATIVES

MR. J. L. WARSAW P.O. Box 204, Wanganoi, New Zealand

YVONNE YOUNG

34 Rushall St., Pymble, NSW 2073, Australia

THE CAMELLIA REVIEW: PAT GREUTERT, Editor, 3230 Mesaloa Ln., Pasadena, CA 91107
Tel. (818) 797-7793

#### PUBLISHED BY THE SOUTHERN CALIFORNIA CAMELLIA SOCIETY, INC.

Copyright 1990

Four issues per volume—September, December, February, and May.

Correspondence and manuscripts for publication should be sent directly to the editor. Republication is permitted if due credit is given to The Camellia Review and the author.

CHANGE OF ADDRESS: Notify the secretary at once. Magazines are not forwarded by the Post Office.

# TABLE OF CONTENTS

Vol. 52	2 January-February, 1991 No	. 3
New N	Members	2
	art of Grafting, Alvin L. Gunn	3
	ng and Pruning with a Mikita, William E. Ehrhart	5
My 'B	uddha', Bill Donnan	6
'Budd	lha' Comes High	7
	CS-SCCS Joint Convention, Bill Donnan	
	Convention Schedule	
	k You	
	Sport of 'Donnan's Dream'	
	Same Flower That Smiles Today, Dr. Rod Bielski	
	now Camellias, Professor Kaoru Hagiya	
	Garden Varieties of Camellia, Bill Donnan, Julius Nuccio and	
	Woodroof	
	onne'—Will It Fly?, Pat Greutert	
	Is Why I Can Not Spell, Bill Donnan	
	Pacific	
	Damage to Camellia Buds, Marilee Gray	
	llia Concepts, J. Carroll Reiners	
Came		
	Cover Photo	
	'Al Gunn'	
Colo	ch medium pink. Very large, semi-double. Vigorous, upright grow (Seedling of reticulata) (A. Gunn and W.F. Goertz, San Marino, Car separations courtesy of Bernice Gunn Thompson in memory of housband, Al Gunn.	th. a.) ier
Name .		
	ate and Zip Code	_
Toloph		



# THOUGHTS from the editor

The Southern California Camellia Society extends a warm welcome to the American Camellia Society members who will visit us for their Convention February 20-23. Dave Wood has set up some interesting and entertaining events for your pleasure. The camellias will be at peak bloom and our

members eager to meet you sojourners from afar. Enjoy!

You may wonder why The Camellia Review is late. Two reasons: The first is that printing The Review is expensive for our society. And even though Wood & Jones, our printer, has kept our cost the same for several years I asked Hanna Wood for other ways we could reduce printing costs. "Put The Review on a computer," she replied, "It could reduce the cost by a tenth."

So the Society rented a computer for a month so I could give it a try. After much frustration, I began to catch on. This issue was put out almost entirely on that computer. If we're lucky, we'll save \$200.00 of the

\$2000.00 it costs to print a Review.

The second reason for the delay is that we planned to put the Society Directory in this issue. Dues came in very slowly and we hesitated to cut a large number of members from our listing. Society Treasurer Jeanne Trefzger hand addressed a great many postcards to procrastinating members, and only those who have paid will receive this issue unless they pay later on. Also, only those who are up-to-date will be included in the Directory which will go to press February 1.

Special thanks to members who responded quickly with their dues.

—Pat Greutert

#### **New Members**

Southern California Camellia Society welcomes:

Dr. and Mrs. Ben R. Byrd 1311 Tacoma St. Dothan, AL 36303

W. B. Carroll 12411 Oak Park Dr. Houston, TX 77070

Marilyn Frick 9702 Center Drive Villa Park 92667

Bill and Lisa Green 3425 Rosemary Ave. Glendale 91208

Carlas Hill 554 N. Thomas St. **Orange** 92669

Janet Mayne 6045 Sunglow Court Carmichael 95608

Robert L. Hoffman 1302,Otter Lane Oregon City, OR 97045

Robert and Erin Stroud #2 Oak Grove Way Slidell, LA 70458

Robert W. Thau Rt. 11 Box 851 Lake Charles, LA 70611

# The Art of Grafting

#### Alvin L. Gunn

Lynwood, California

Reprinted from The Camellia Review, Vol. 30, No. 3, January 1969

The season in which most camellia hobbyists do their grafting is here. The summer growth has hardened months ago. Now is the time to graft the varieties which were show stoppers. Don't be shy about asking one of the big collectors if they can spare one wood on a particular variety. You will find if you visit these collectors they will probably give you more scions than you want.

To save scions wet the inside of a plastic bag then pour out the water. This will leave small beads of water on the bag. Put the scions in the bag and press the bag flat to get as much air out as possible. Then tie the open end closed with a wire tie or a rubber band. This may be kept in the refrigerator for an indefinite time or until you have time to graft them all. There is some unconfirmed talk that the Reticulata and Hybrid scions won't keep long.

The selection of understock is the next step. We usually say don't graft on recently fertilized understock and don't on sick or weak understock. Seedlings or rooted cuttings make good grafting stock. Better still, cut off a plant in your collection which doesn't do well in your area, or isn't as good as it was touted to be, and heaven knows there are plenty of those. Be sure that the reason is not because of an unhealthy plant.

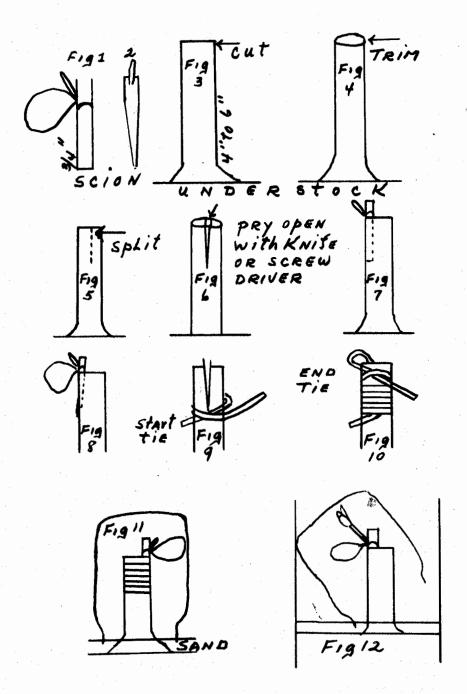
You will need sharp clippers or a saw to cut the plant off four to six inches above the soil level. (Fig 3). A sharp knife or a single edged razor blade is used to trim off any ragged or bruised edges caused by the clippers or the saw. (Fig 4). Place a knife across the center of the understock forcing the knife to split the understock about one and one half inches. (Fig 5).

Cut the scion wood about one inch or three quarters of an inch below the bottom leaf. Then trim the scion into a wedge shape starting just below the level of the leaf. (Fig 1 & 2). Be careful not to touch the scion as the oil from your fingers could hinder a take.

Now for the accurate part of grafting. Force the tip of a knife or a thin long handled screwdriver into the top split of the understock and pry it open so the scion may be put into place. While you hold the split open, place the scion into the split far enough to leave about a quarter of an inch of the trimmed part of the understock. (Fig 7). The bark of the scion should be flush with the bark of the understock unless the bark of the understock is very thick, the match the cambium layers (the dark green just under the bark). Some of the old timers tilt the scion just a little. (Fig 8). That way the cambium layers cross which is enough to get a take. Remove the knife when the scion has been placed just right, I use the magnifying glass to check it.

To tie the scion in place firmly use a grafting rubber. Start the tie below the bottom of the scion crossing the first loop of the rubber (Fig. 9) to hold it in place while the rubber is wound around the understock until the top is reached. Put your finger under the last loop and pull it out enough to thread the end of the rubber under the last loop. (Fig. 10), then run your finger around the last loop as you pull on the end. Try it a couple of times for practice, it is easier than it sounds. If there are no grafting rubbers available, cotton string, plastic tape or almost anything which has a little give to it may be used.

The next step may be omitted



but it appears to serve two functions: one, to suppress the formation of mildew and two, it seems to cause a faster and heavier callusing of the understock when a rooting powder with fungicide added is dusted over the cut portions of the graft. Another step which may be omitted is pouring, a layer of sand over the soil surface. When a quart or gallon jar is placed over the graft the mouth of the jar sinks into the sand and makes an air tight seal. (Fig. II).

Moisture should form on the top inside of the jar in a few hours, which lets you know there is a good

seal.

The graft may now be placed where it gets light but no direct sunlight as the sun will burn the leaves. If the graft cannot be moved to a suitable location place something

over it to shade it.

Little needs to be done to the graft until it starts to grow, usually in three weeks to three months depending on the time of year the grafting was done. If moisture forms on the top of the understock, blot it dry with a kleenex and leave the jar off for an hour when it is

cool. Wet the inside of the jar before replacing it. The graft needs very little water. If it looks dry, pour a cup of water on the soil.

When the growth bud has grown enough that the form of the new leaves can be seen, remove the jar. Look at the new growth occasionally to be sure the new growth hasn't started to wilt. If it does wilt, wet the inside of the jar and replace the jar for a day or two, then tilt the jar (Fig 12) to let a little air under the jar. If it wilts again, cover it again and repeat in a couple of days. When the jar has been tilted for a few days without the new growth wilting, you may remove the jar. Watch it closely for a few hours. Once you start to remove the jar give the plant a good drink of water. The new growth will need it. When the graft has been free of the jar for a week the plant may be placed in the lath house. Usually we graft on unfertilized understock so I like to put a tablespoon of cotton seed meal to a gallon-sized container when placing it in the lath house. Most hobbyists will disagree with this procedure. I find that I get a stronger, healthier plant.

# Grafting and Pruning with a Mikita

by William E. Ehrhart

More than once I have taken out my Skil (Circular) Saw and cut off a camellia plant measuring one to two inches in diameter to graft a more desirable variety onto that understock. But for the past two years, it has been "Good-by, Skil Saw," and "Hello, Mikita." That's right, if you're not using a Mikita, you're missing something good.

Yes, Mikita manufactures a rechargeable reciprocating saw that whacks off a one-inch understock so quickly that you won't want to do it any other way. And, the best thing about it is that there's no split bark from the back edge of the shears, and moreover, it leaves the bark

just a little higher on the lower edge, which enhances callusing of the lower side of the sloping understock.

Now I never whittle the top of the understock with a razor blade. I simply cut off the very tip of the higher side in order to more clearly see the cambium layer when match-

ing that of the scion.

If you make over 10 grafts a year, you'll want one of these, or if you do any tree pruning, you'll find it much easier to use than loppers, etc. Don't take my word for it; get a hold of one and you'll never do it any other way.

## My 'Buddha'

by Bill Donnan

We bought a house on Yorkshire Road in the Chapman Woods area of Pasadena back in 1951. The house had been built in 1941 and the former owner had planted about ten camellias along the north and west sides of the house. When we purchased the home there were quite a few other plants—roses, gardenias, privet hedges, etc. around the border fences and the garage. However, since I was a camellia hobbyist, I was gradually pulling out these unwanted plants and replacing them with camellias.

In December 1962, my good friend and avid camellia hobbyist Ronnie Aronovici had accepted an assignment in India for the Federal Government. He and his wife, Eleanor, had sold their home in Claremont and Ronnie was selling off his considerable collection of potted camellias. I bought two or three. When I went to pick them up Ronnie said, "Hey, Bill, "I've got a two year graft of the Camellia reticulata 'Buddha' here in a one gallon pot. You might as well take it

and try it in your yard." I hauled the camellias home, including the one gallon 'Buddha' graft. When the gardener came to mow the lawn, I asked him to plant them along the east side of the house between the house and the driveway. When I came home from the office that night, I found that gardener had planted the camellias in the spots I had chosen, but in planting the 'Buddha' camellia he had broken the 18 inch high stem of the grafted scion at about 6 inches from the top. The broken scion was not completely severed but hung limply by the bark and the cambium layer. The graft itself okay, took I SO electrician's black plastic tape and, using a pencil-sized strip of wood as a splint, taped the broken scion upright. Lo and behold! By the following spring, the broken scion had healed and the plant began its rapid growth.

Fifteen years rolled by at the fast pace that Time seems to race with ever-quickening speed. By this time the Aronovicis had returned from India, done tours of duty in Reno, Nevada and Bushland, retired from the Federal Service and were now living in Rancho Bernardo, San Diego, California. Meanwhile, my late wife and I had retired. My camellia collection had reached over 200 varieties and my crippled 'Buddha' was 15 feet high! At that time I was an avid camellia show buff and had taken every opportunity to enter my prize camellia blooms in the Southern California camellia shows. I was having pretty good luck at some of the local shows but had never made the attempt to exhibit at the San Diego Show.

Occasionally we had arranged to meet with the Aronovicis and have lunch with them. Why not combine a luncheon date with them and an exhibit of some camellias at the San Diego Show? We phoned the Aronovicis and the date was set. On the morning of Saturday, February 12, 1977, I was up at 4 a.m. and as soon as it was light enough to see, I was out in my camellia patch cutting blooms. When I came to the 15 foot high 'Buddha', I got out my step ladder and picked 12 or more blooms. My plant was covered with blossoms and I could have picked another dozen or more good ones.

Piling everything into the car, we took off for San Diego and arrived at Balboa Park about 9 a.m. I placed my blooms in their respective divisions. When it came to benching the 'Buddha' blooms I chose five matching blooms for the Tray of Five Retics division and

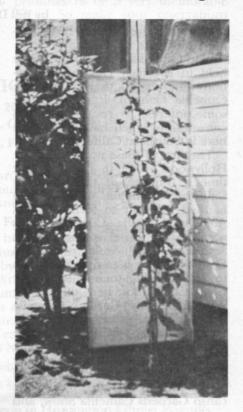
three matching blooms for the Tray of Three Retics division. I also placed two single 'Buddha' blooms in the Single Retic division and gave the rest to the blooms to the waxing department of the San Diego Show. We then found the Aronovicis and went out to have lunch.

About 1:30 p.m. we were back in Balboa Park at the camellia show to see whether the judges had saluted any of my entries. I had received several firsts and seconds for some of my c. japonicas and when I looked over the multiple retic bench, I could not find my entries. Rushing over to the Trophy Table, my heart leaped up into my throat. There was my tray of five 'Buddha's and they had been awarded Best Tray of Five Retics! There was my tray of three 'Buddha's and they had been awarded Runner-up, Best Tray of Three Retics!

The Aronovicis were almost as excited as we were, more especially since Ronnie had given me the one gallon plant back in 1962 when they went to India. Oh, I know what you are going to say! Sure some exhibitors can walk off with 10 or 12 trophies in a single show. Yep, you are right! But I am wondering whether they ever did it with a little old broken scion plant given in friendship and which may have wanted to show off its glory to the giver. One seldom sees 'Buddha' in the Southern California camellia shows these days. It has been shoved aside by some of the newer, showier, retic hybrids. Yet that event, and those awards top any other thrills I have ever had at one of the camellia shows.

Photo and caption on right copied from Camellia Review, Vol. 19, No. 3, December 1957.

# 'Buddha' Comes High



Here is a 'Buddha' graft that proves to really be full of vim and vigor for its owner, Mrs. Art Krumm of Altadena, California.

The picture was taken on September 9th and the graft was made February 9th. The height at this time was five feet.

Mrs. Krumm reports that it was a normal graft on a 10-year understock of 'Caprice.' Growing in an eastern exposure it receives the sun until about one o'clock every day.

The performance of this All-America Selection here certainly goes beyond the line of beauty.

#### The ACS—SCCS Joint Convention

by Bill Donnan

With the advent of the forthcoming American Camellia Society Pacific Camellia Convention, to be held in February 1991 in cooperation with the Southern California Camellia Council, it might be of some interest to recall past ACS conventions which have been held here in Southern California.

The first of these was held at the Hollywood Hotel in 1956. At that time a number of the Southern California camellia societies had banded together to form the Los Angeles Camellia Council. (This was the forerunner of the present Southern California Camellia Council.) They issued an invitation to ACS offering to host its Pacific Coast Convention here during the Annual Descanso Gardens Camellia Festival. This Festival was staged at Canada, California February 25 to March 11, 1956. The ACS delegates attended the Temple City Camellia Parade, participated in the judging at the two day Descanso Gardens Camellia Show, and made many lasting friendships at a convention banquet.

The second time that the ACS held its West Coast Convention here in Southern California was in 1961. This event was held at the Disneyland Hotel and it was hosted, again, by the Los Angeles Camellia Council. This convention covered the five day period from February 22 to February 26 and the SCCS Annual Camellia Show was held at the Disneyland Hotel rather than at Descanso Gardens. This was the first and only time that the Descanso Show was ever held indoors until the late 70s when Van de Kamp Hall was built at Descanso. Tickets were sold for \$1.00 each with all admission tickets entitling the holder to a chance to win a fully-equipped 1961 Plymouth station wagon. (Yes, a new car only cost \$1,500 then!) It was at this convention that an agreement was reached between the American Camellia Society and the Southern California Camellia Society regarding the nomenclature of camellias. The agreement specified that SCCS would publish its new editions of Camellia Nomenclature and ACS would become the official registrar of all new camellia cultivars. ACS agreed to designate each new edition of Camellia Nomenclature as its official publication. At this conventook convention tion, busses delegates to visit Descanso Gardens and the Huntington Gardens. The convention ended with a banquet at the Disneyland Hotel.

The next joint ACS—SCCS Convention was held in February 1971. This convention was headquartered at the famous Huntington Hotel in Pasadena. (It is interesting to note that the going rate for a twin beds room at the Huntington was then pegged at \$19.50!) This convention was held in conjunction with the 18th Annual Descanso Gardens Spring Camellia Show and this show drew over 4,000 blooms. One of the interesting features of this show was the addition of a new classification of competition for blooms originating from "East of Dodge City and West of the Pecos River!" Actually, it was for blooms originating from outside the boundaries of California, but the "East of Dodge" competition engendered considerable interest in bringing blooms by delegates from out-ofstate hobbyists. The delegates were met at train and plane. The blosbrought soms they refrigerated as soon as possible. In fact, there were 91 blooms entered in the "East of Dodge" competition from 12 different exhibitors from 10 different states. This convention also ended with a banquet at the Huntington Hotel.

The 1991 ACS Convention will be held in cooperation with the Southern California Camellia Council on February 22, 23, 24 and 25, 1991 at the Hilton Hotel in Pasadena, California. This promises to be a very memorable event. So make your reservations and plan to come!

#### ACS CONVENTION SCHEDULE

February 20-23, 1991 Pasadena, California

Wednesday, February 20

Registration

9:30 a.m. Governing Board Meeting (2 hours)

1:30 p.m. Endowment Foundation Meeting (2 hours)

Lunch and dinner on your own

Thursday, February 21

9:30 a.m. Leave hotel by bus for tour of Nuccio's Nurseries

Lunch at the nursery, courtesy of Nuccio's

1:30 p.m. Leave nursery by bus for visit to either the Rose Bowl

Museum and Wrigley Mansion or Gene Autry's

Cowboy Museum in Glendale

Dinner on your own

7:00 p.m. Travel by private car from hotel to Arboretum for the February Temple City Camellia Society meeting

Speaker: Julius Nuccio, Topic: Camellia Culture

Friday, February 22

9:30 a.m. Leave hotel via bus for Huntington Gardens tour ll:30 a.m. Assemble at Garden Terrace for wine tasting

12 noon Catered luncheon in Huntington Library Friend's Hall

1:30 p.m. Leave Huntington Gardens by bus for return to

Hilton Hotel Remainder of afternoon for shopping, etc.

Dinner plans to be announced

Saturday, February 23

Complimentary Hilton Hotel Continental breakfast 10:30 a.m.

Leave hotel via bus for Descanso Gardens Southern

California Camellia Council Camellia Show

Visit Bracci and Jaacks gardens. Lunch for all mem-

bers compliments of Braccis Happy hour at the Hilton Hotel

7:00 p.m. Convention Banquet

REGISTRATION FEES (per person) SEND REGISTRATION CHECK TO:

David G. Wood Full convention \$150.00

Thursday only 55.50Convention Chairman Friday only 50.002434 Allanjay Place Saturday only 55.00 Glendale, CA 91208

Convention Banquet only 35.00

6:00 p.m.

The above fees do not include hotel room. Make these reservations personally with the Hilton (800)445-8667. Twin beds room-\$87.00 per night

#### Thank You

Southern California Camellia Society extends thanks to the following members for their added financial support when paying yearly dues:

**Patron Members** 

Dr. and Mrs. Ben R. Byrd Edna B. McClelland George and Jean Vollmer

**Sustaining Members** 

Sherrill Halbert Jack Greenberg Milton and Marian Schmidt Jack and Hilda Thompson

**Sponsoring Members** 

Mr. and Mrs. Paul H. Baker Herman and Yvonne Belcher J. K. Blanchard Sergio and Elsie Bracci Elliott P. Brogden John A. Dutro D. T. Gray Family Ray and Pat Greutert Fred Harrison Howard E. Kruger Arthur E. Krumm Stanley W. Miller Tony Miranda James M. Randall W. T. Slick Jr. Glenn M. Smith R. E. Streit Leonne Summerson Dean Turney Dr. and Mrs. J. H. Urabec John Utvich Robert Van Zandt Dave and Alma Wood

#### A Little Extra

Louise R. Cies C. Boynton Cole Roy H. Homans Robert C. McNeil Pat Novack Dr. and Mrs. H. C. Schumacher Herbert F. Segner

New Sport of 'Donnan's Dream'

Art Gonos discovered a beautiful sport of 'Donnan's Dream' on a plant, purchased from Nuccio's Nursery, which first bloomed in 1985. Named 'Jerry Donnan', the flower is a white-washed and shaded pink, medium formal double like its parent, but distinguished by feathered petals.

# This Same Flower That Smiles Today...

by Dr. Rod Bieleski

The title above comes from a well-known verse by Robert Herrick: Gather ye rosebuds while ye may,

Old time is still a-flying,

And this same flower that smiles today

Tomorrow will be dying.

In it Herrick uses the powerful imagery of the flower to tell us how quickly things fade and die. But why is it that flowers die so soon? Some trees live for thousands of years and leaves last from several months to several years: why then is the life of a flower measured in days or even hours?

That was the basic research question in front of me when I spent eight months in 1989 in the Department of Horticulture at UC Davis on study leave from the Department of Scientific and Industrial Research in New Zealand. The ultimate aim of this line of research is, by understanding how flower senescence operates, to retard its progress and extend the vase life of flowers so that they are easier to market and give more pleasure to the person who receives them. Imagine being able to pick a bowl of 'Bob's Tinsie' and have the flowers garden-fresh a week later!

One of the tricks that scientists use in their work is to carry out experiments on what is called a "model system"—a plant that is easy to work with and which is likely to give good clear answers. Once the process in that plant is understood, it is less of a problem to tackle the more difficult (and sometimes

At Davis, where flower senescence has been vigorously studied for many years, two particular models have been rose and carnation. With these two, it has been shown that the gas ethylene, a powerful plant hormone, is closely involved in the process of flower senescence. When the flowers start to collapse, they begin to produce

more valuable) species.

large amounts of ethylene, and if ethylene is supplied to the flowers before that time, they will start to undergo senescence prematurely.

One result of this is that one senescing flower can trigger off the senescence of other flowers around it. Ethylene, of course, is the same hormone involved in fruit ripening; when green bananas or hard kiwi fruit eventually start to ripen, they produce lots of ethylene, but when ethylene is provided to the fruit before that time, the ripening will be hurried up. What this tells us is that the processes of flower senescence and fruit ripening have a lot in common, and may rely on the same basic mechanisms in the plant. It means we can apply some of our extensive knowledge about fruit storage and handling to flower behavior. For example, it tells us that if we can somehow stop ethylene working, or can prevent it from reaching the flower, then we may be able to slow senescence down.

That indeed has been found out to be the case, and keeping ethylene away from the flowers helps a lot in extending their vase life. It isn't always easy, as only small concentrations (one part in a million in the air) are required to act as an effective trigger, and there are a number of sources in the environment; natural gas, petrol motors, rotting vegetation and ripening fruit amongst them.

The most difficult source to control is, of course, the flower itself. Besides stopping environmental pollution of our subject, we have to stop its own self-pollution! The best way of controlling the external pol-

lution is to keep the sources of ethylene away from the flowers, although electrical discharge units and chemicals like permanganate can be very effective at destroying ethylene.

Recently, a way has been found of controlling the action of the ethylene inside the tissue itself. The flower is sprayed with or dipped in a chemical called silver thiosulfate, which enters the cell and stops ethylene from working. Problem

Well, not really. There are a number of complications. Firstly, while there is no doubt that ethylene speeds up senescence, in many cases it seems that other steps in senescence get started first, and then ethylene just greatly reinforces a process that has already begun. It would be more effective to halt these first steps.

Secondly, there are also other factors that are clearly involved in premature flower death, particularly a shortage of nutrients.

And thirdly there are some flowers (perhaps more than we realize at present) which simply don't produce ethylene and are not sensitive to it, yet which still undergo senescence.

Let's consider the nutrient supply first. When a flower is picked, it is usually removed from its main source of food, the leaves, which produce the sugar used by the flower in its growth and respiration (and sometimes nectar production). Two particular steps that can be taken to help in this situation are to keep the flower very cool during its trip from grower to florist because this slows down the rate at which flowers use up sugar (at 40° F, about 1/5 that at  $80^{\circ}$  F); and during the day or two after picking, to supply sugar in the vase water so as to eke out the flower's reserves while it completes development.

Both methods work with many flowers, but there are often complications. Part of my time at Davis was spent looking at what might be causing the short vase life of Protea flowers. The particular complication here was that these flowers are picked with a lot of leaves on the stems, and so have the capability for making their own sugar; yet it is the leaves rather than the flowers that collapse prematurely.

Our experiments showed that the flowers were able to drag the sugars away from the leaves so that the leaves ran out of sugar before they did. When the sugar had all disappeared from the leaves, after about three or four days, the leaves promptly died. You see, leaves need lots of light to make sugar (that's why the process is called PHOTOsynthesis), and the rooms in which flowers are typically held are very dimly lit by outdoor standards. When we put the Protea flowers out in the blazing sun (well, a glasshouse in midsummer) they survived for much longer because the leaves were able to function normally and make more sugar than the flower could use.

Most of the time at Davis, however, was spent in looking at another of the puzzles in flower senescence. As I noted earlier, some flowers are not responsive to ethylene, and yet they still undergo senescence. Very little has been done to study these sorts of flowers, and there are some quite simple questions to be answered: Are the major steps in senescence the same in the two sorts of flower? Does another hormone take the place of ethylene? Are there materials, like silver thiosulfate, that can interfere with senescence and extend the vase life?

The model flower we chose to work on was the Hemerocallis or daylily because, besides being insensitive to ethylene, and as its name suggests, it goes through its entire aging process very quickly, from opening bud to withered rag in 36 hours. It is also easy to grow in Davis and Auckland, and keeps producing its flowers over several months. As a result, I was able to get nice clear answers to some questions, and didn't have to try to do all my experiments in less than a month, as would have been the case if I'd been charmed by cherry blossoms.

In all its essentials, the senescence of daylily followed the same paths seen in other ephemeral flowers like morning glory and hibiscus, where ethylene is involved. In other words, ethylene may be a companion to flower senescence and may facilitate some of its steps, but it is unlikely to be the engine that drives the process.

So what does cause senescence to occur? Perhaps the most revealing information has come from the use of a metabolic poison, the antibiotic cyclohexine, on the flower. If it is put on the opening bud, the bud stops developing and remains frozen in the half-open state for several days. This is to be expected

from the way the poison works. It interferes with the instructions being passed from the genes to the enzyme-making machinery, so that new types of enzymes can't be made, and the instruction book is open on one page. The bud can go on living, but it can't change.

Rather less expected was the behavior of the fully-open flower treated with cycloheximide just before it was due to start shriveling. Instead of collapsing, the flower remained open and healthy for several days. Again, by stopping the genes from issuing new instructions, we had stopped further change in the flower. We had the paradox of a poison extending life, and it told us something very important; that when the flower becomes senescent, it is not simply "falling apart from old age," but is

being actively dismantled according to a pattern set out in the genes of the organism. Senescence is the final step in the growth of the plant, and the onset of disorganization is a very organized process!

#### CONTRIBUTORS TO THE CAMELLIA REVIEW FUND

In memory of Marcie Alltizer: Pomona Valley Camellia Society In memory of Jess George: Mrs. Leta Eaton

Mr. and Mrs. Mark Gehman Mr. and Mrs. James Lubeck

Mrs. Naomalee Rose In memory of Dolores Taylor:

Mr. and Mrs. Chuck Gerlach

In appreciation of Sergio Bracci's contribution of plants and efforts to the Society's Los Angeles County Fair exhibits:

Pomona Valley Camellia Society Send contributions to:

Jeanne Trefzger, 607 Santa Cruz Rd., Arcadia, CA 91007

Some further work gave us at least one good reason why the plant should operate this way. Some of the new enzymes that are made in order to do the dismantling belong to a group called "hydrolases." Their job is to break down complex big structural molecules into their simple building blocks; lipids into organic acids, polysaccharides into sugars, and proteins into amino acids. These small pieces are, unlike their parents, able to be shipped out through the flower stem back into the main body of the plant. During the last 18 hours of the daylily flower's life, somewhere around 80-90% of the amino acids and sugars formed this way are salvaged and made available for production of the next flower up the stem. I guess we can call it a conservation movement.

At present, all this doesn't have a great deal of direct importance to the camellia grower. Yet the short lifetime of a camellia bloom, on the plant and more so after picking, is probably the biggest single drawback of this splendid ornamental genus. And who among us has not lost a few yards of hair, pulled out at the roots, when a prizewinning bloom at home reaches the show as a pile of shattered petals in the bottom of the box?

The first hope we can offer is a slow but sure one: If flower senescence is driven by genes (and it is), then ultimately we will be able to produce much longer-lived camellia flowers by conventional plant breeding or by use of modern genetic engineering techniques.

More immediately, we should be able to apply some of the tricks that work with other flowers. Some recent research by Alan Woolf in New Zealand, sponsored by the Camellia Memorial Trust reported in the August 1990 issue of the New Zealand Camellia Bulletin, has shown that camellia flower buds are sensitive to ethylene, being shed without opening when exposed to it. It is probable, therefore, that ethylene is also involved to a greater or lesser degree in the shattering that occurs with open flowers of many varieties.

Thus there is a good chance that agents like silver thiosulfate which block ethylene action will help in extending the life of cut camellia flowers. Perhaps, too, the bulky camellia flower puts too high demands on the cut stem for carbohydrates, and feeding with sugar could help the flowers survive longer. Or maybe the most effective thing might be to stop those pesky genes from telling the flower to close down.

Certainly there are a number of things to try, and I hope it will not be too long before someone, perhaps on another Camellia Memorial Scholarship, will give us camellias that no longer "tomorrow will be dying."

# CONTRIBUTORS TO THE CAMELLIA NOMENCLATURE ENDOWMENT FUND

In memory of Dolores Taylor:
Leone and Ab Summerson
Send contributions to:
John Utvich
2975 Somerset Place
San Marino, CA 91108

#### The Snow Camellias

#### by Professor Kaoru Hagiya

Reprinted from Amateur Gardening, December 11, 1965

Hearing the word "camellia" one may picture a scene of flowers and shining leaves in the warm southern sunshine. In fact, the cultivation of camellias has become popular only in the milder parts of the world. But after World War II, a camellia, quite different from the usual Camellia japonica, was found in the mountainous districts in the north of Japan where wind and snow are very severe, and this kind was named the Snow camellia, C. rusticana.

The name Snow camellia may lead one to think mistakenly that it has a white flower, but the blossoms are, in fact, red or pink in colour and white blossoms are seldom found. Its name means the camellia which grows in districts of heavy snows

The petals of the wild Snow camellia are thin and open flatways like those of *Camellia sasanqua*. Stamens are yellow, and do not form a cylinder but are divided from each other.

C. japonica grows, in time, to a tree, but the Snow camellia shoots out many twigs from the part near its roots, and forms a shrub; especially in snowy mountains, its branches creep above the ground and occupy a large area. Because of this, the Snow camellia has another name, Creeping Camellia. As this shrubby shape does not change, even if it is planted in flat countries without snow, it is shapely when it is planted in the garden or grown in a pot with branches appearing low down.

The branches of the Snow camellia are very pliant and not easily broken by bending. When it snows heavily, they are forced down beneh the snow, but when spring comes and the snow thaws, they rise up again. Further, it is not completely uprooted by a snowslip. What a subtle adaptation character this is. This pliability is very convenient for flower arrangement and bonsai.

One might imagine that the Snow camellia is proof against cold, but the results of experiments using low temperatures in my laboratory show that the Snow camellia is practically equal with C. japonica with reference to resistance against cold. I think that the Snow camellia is protected against the very cold weather by the snow which covers it.

Cuttings root very well and the growth of roots is excellent even in the flowering time in spring. This fact is proved in my laboratory, using over 400 sorts of both Snow camellia and C. japonica. In its natural state the Snow camellia roots to the ground from creeping branches.

The Snow camellia sprouts six weeks earlier than *C. japonica* in spring and has beautiful new shoots by the time of flowering. Although this is generally later than that of *C. sasanqua* and *C. japonica*, yet its seeds mature a little earlier than that of *C. japonica*.

Camellias generally drop their blossoms easily, but the blossoms of the Snow camellia last long and it has many blossoms at the same time so that the whole bush looks really red. We can control the time of flowering because its buds and leaves, too, do not drop easily. When his Majesty the Emperor came to the University of Nigata in 1964, we showed him flowers of Snow camellias. At that time, we had cut off branches with tightshut buds in April and had kept them in store at O°C. (32°F.) in refrigerators and then let them blossom by keeping the temperature at 25°C.(77°F.)

for one week. Using these methods, we can delay their blooming for three months in the case of cut flowers and much longer in pots. As we can control its bloom freely by temperature, we can have a much longer flowering time in comparison with that of usual camellias.

In the Hokuriku district of Japan, C. japonica is distributed in the plains along the coast of the Sea of Japan, and the Snow camellia in the mountainous districts: A hybrid camellia between these two species is distributed in the middle district, assuming an intermediate form. Because camellias grow without cultivation throughout the areas, not much attention is paid to them. But beautiful sometimes camellias, originating from the wild Snow camellias, are cultivated in the gardens of farmhouses and shrines or temples. As most of these are derived from wild camellias which farmers have dug up while they were working in their fields, they have no particular names.

In my laboratory, we have investigated and collected these camellias for the past seven years and as a result, the number of kinds of Snow camellia that are valuable for the garden already exceed 1,500. This number is extraordinary when one considers that the varieties of the usual Japanese camellia total about 400. Furthermore, these kinds of Snow camellia not only cover all the floral shapes ever known; such as single, semi-double, anemone, peony, rose double and so on, but also have some particular floral shapes that are not to be found in the present classified table. In size of blossoms, there are many kinds from one inch to over five inches in

diameter. The colour range is also wide and includes white, pink, crimson, red, black, purple and dappled variegation.

The resistance to cold of the Snow camellia fell short of our expectation but, as it is very varied and has excellent features from the ecological point of view, it has a high horticulture value. Even in its present state, without any artificial improvement as a result of breeding, I think it will have an epochmaking role in the field of camellia breeding. It is little known yet, even in Japan, and the mass production has not yet got under way.

Because the Snow camellia is very strong, the usual methods of cultivation for camellias will be satisfactory, but it is not suitable for dry soil as it likes dampness and has a shallow root system. It is a little more difficult to transplant than *C. japonica*. The reason, I think, is that it does not drop its leaves even if it gets dry and, as a result, the leaves continue to transpire. Therefore, when transplanting, prune it rather drastically.

Snow camellias are not yet available in Great Britain though a number of named varieties are obtainable in Japan. It is hoped that nurserymen will begin to stock them soon.

EDITOR'S NOTE: Ann Richardson, Curator of Camellias at Huntington Gardens, sent me a copy of this article. I wrote to Professor Hagiya to obtain his permission to reprint his work. He kindly approved. He is still in the Agricultural Department of the University of Nigata, Japan, where he was when he wrote this article 26 years ago. You will find his name as a reference in many current books and articles.

#### **PASSINGS**

Dolores Taylor, La Canada Flintridge

#### The Garden Varieties of Camellia

by Bill Donnan, Julius Nuccio and Bill Woodroof

When most of the camellia hobbyists shop for a new camellia plant, they are looking for something that will win a trophy at one of the camellia shows. Nine out of ten times they will end up with a large to very large variety. They want something which will produce a bloom that makes a statement all by itself. They want something which will catch the eyes of the show judges as they pass along the display bench. They want something that they can alter with gibberelic acid to produce a monster! Never mind how the shrub looks in the lath house or under the pine trees. Not to worry if the shrub looks like a coat rack. The bloom is the thing! The bloom is the "Name-of-thegame!" The bloom has to be big and everything else is secondary.

However, it may surprise the camellia show hobbyist to learn that the varieties of camellia in greatest demand by the general public are good garden varieties. Oh! To be sure, some of the good garden varieties are often exhibited at the camellia shows. But the bulk of these types are planted in the garden or are used for landscaping. As consequence, they provide, probably, more joy to the eye and the heart than most prize-winning show blooms ever exhibited! For many years the garden varieties of camellia have been overlooked by the show hobbyist. This article is being written in order to point out some of the attributes of good garden varieties. We want to check off some of the characteristics of good garden varieties. Furthermore, we want to present a listing of some of the camellias which have proved over the years to be good garden varieties.

Here are some items to consider when choosing a good camellia to plant in your garden. (l) First of all, a garden variety of camellia must be a vigorous, compact and hardy plant with good foliage and bushy growth. Preferably the leaves should be dark, shiny green. In fact, the shrub should look great in your garden even when it is not in bloom. This characteristic of being a good shrub enhances its value as a landscape attraction during the non-blooming season.

(2) There must be a substantial production of buds over the entire shrub. After all, a garden variety is expected to produce a wealth of color when it blooms. Thus a variety which only produces a few buds could not be considered for the garden or the landscape.

(3) The flowers on a garden variety of camellia should freely and consistently open regardless of weather conditions (under normal culture). For example, varieties tend to bull-nose; some show color and then refuse to open; some produce fat buds which then dry up and turn brown. These are not good garden varieties. Furthermore, after the flowers have bloomed they should self-shed and fall freely to the ground. There is nothing more distracting in a garden variety than a shrub covered with desiccated, brown blooms that refuse to fall off the plant.

(4) The blooms should be pickable for general use and for display in the home. Many garden varieties are also exhibited at camellia shows, but this is not a critical criteria. Many good garden varieties such as the sasanquas, the hiemalis, and some of the non-retic hybrids are only pickable if part of the stem is harvested. Howevever, this does not detract from their value as a landscape item.

(5) The size of the flowers in a good garden variety tend to be

limited to the small to medium classifications. The reason for this is that, generally speaking, a large to very large bloom will often tend to droop or hang down with its face to the ground. In a good garden variety the blooms should look outward from the plant. They should literally look the observer in the eye and say: "Hey, ain't we pretty."

The following is a list of good garden varieties to consider when landscaping a garden. This list applies to the growing conditions found in Southern California, under good garden exposure. Furthermore, the varieties which have been chosen meet most —but perhaps not all—of the criteria set forth above. For example, the variety 'Debutante' does not self-shed its blooms. Yet, to leave it out of the list, would expose the authors to considerable censure! The list is offered by species:

#### C. japonica

	С. јаронса	
'Ace o' Hearts'	'Fimbriata'	'Nuccio's Gem'
'Adolphe Audusson'	'Fircone'	'Pink Perfection'
'Alison Leigh Woodroof'	'Glen 40'	'Prima Ballerina'
'Amabel Lansdell'	'Grand Slam'	'Purity'
'Betty Foy Sanders'	'Haru-No-Utena'	'Ragland Supreme
'Bob Hope'	'R.L. Wheeler'	'Royal Velvet'
'Cara Mia'	'High, Wide 'n	'Scarlet Glory'
'Charlie Bettes'	Handsome'	'Shiro Chan'
'Cherries Jubilee'	'Hishi Karaito'	'Silver Chalice'
'Commander Mulroy'	'Iwane'	'Silver Waves'
'Conrad Hilton'	'Katie'	'Spring Formal'
'Covina'	'Kumasaka'	'Spring Sonnet'
'Daikagura'	'Magnoliaeflora'	'Swan Lake'
'Debutante'	'Marie Bracey'	'Tiffany'
'Donckelarii'	'Maroon and Gold'	'Tinsie'
'Dr. Tinsey'	'Mathotiana'	'Ville de Nantes'
'Eleanor Martin Supreme'	'Mrs. D.W. Davis'	4
'Elena Nobile'	'Nuccio's Carousel'	

#### C. sasanqua

One could say that nearly all of the varieties of the C. sasanqua are good garden landscape plants. However, there are several cultivars which do not lend themselves to the classification of a good garden variety. They are listed as follows: 'Betty Patricia'; 'Caudata'; 'Chansonette'; 'Enishi'; and 'White Frills'.

Introducing in 1990-91

# 'BRAVO' — 'SUNNY SIDE' SPECIES — C. CAUDATA

Write for FREE catalogue

N UCCIO'S URSERIES

Closed Wednesday & Thursday

3555 CHANEY TRAIL P.O. BOX 6160 ALTADENA, CA 91001

(818) 794-3383

#### C. reticulata

In the opinion of the authors, most of the Yunnan reticulatas are not good garden varieties and we do not recommend them as landscape plants. However, there are several varieties of this species to consider: 'Buddah', 'Cornelian', 'Butterfly Wings' and 'Crimson Robe'.

#### Camellia hybrids

Most of the camellia hybrids fit all the criteria for good garden varieties and to list them all would not be too remiss. The following list contains those hybrids with the greatest potential when one is looking for camellia plants to grace one's garden.

'Anticipation'	'Flower Girl'	'Pleasant Memories'
'Baby Bear'	'Francie L.'	'Rose Parade'
'Buttons 'n Bows'	'Freedom Bell'	'Royalty'
'California Dawn'	'Garden Glory'	'Snow Drop'
'California Sunset'	'Lasca Beauty'	'Spring Festival'
'California Sunrise'	'Milo Rowell'	'Spring Mist'
'Coral Delight'	'Miss Tulare'	'Tiptoe'
'Donation'	'Nicky Crisp'	'Tulip Time'
'Dr. Louis Polizzi'	'Nuccio's Ruby'	'Valley Knudsen'
'Elegant Beauty'	'Orchid Princess'	

#### Higo camellias and Rusticanas

These two classifications are sub species of *C. japonica*. The higo camellias are all good garden varieties since they are all single form types with a tremendous burst of stamens and thus they lend themselves to a good landscape program. The Rusticana varieties are mostly all small bloom varieties and, here again, they lend themselves to beautiful landscapes and profuse color.

(Descriptions for all of these varieties can be found in the publication Camellia Nomenclature.)

# FOR SALE SECOND PRINTING

# 20th Revised Edition of 1990 CAMELLIA NOMENCLATURE

Members — First copy \$5.00 / Additional copies \$15.00 each
Non-Members \$15.00 per copy
12 copies or more \$10.00 each
Postage included on all copies

# **Southern California Camellia Society**

Box 3690 Arcadia, CA 91066

# 'Cloisonne'—Will It Fly?

#### by Pat Greutert

When I returned from a trip to China in 1988, I stopped in at Mc-Caskill Gardens to browse through rows of camellias. As I walked along with Vern McCaskill, I spotted a beautiful pink flower. I bent over to look closer. "What's its name?" I asked.

"It doesn't have one," replied Vern.

"It reminds me of the cloisonne I saw in China," I remarked. "This little line outlining the petals looks like the wire made into an outline on metal then filled with powdered enamel and fired."

"That's what I'll call it then," said

Vern, 'Cloisonne'.

Of course I bought the plant. Though rather scraggly, I felt the plant had possibilities. The flower itself had a flatness not usually desired for show flowers but contributing to its cloisonne-like appearance.

I showed the plant to some camellia men who looked at me like I was holding a wilted poppy. Even so, I registered 'Cloisonne' in Camellia Nomenclature for Vern.

Pruning, iron and fertilizer did good things for the plant's appearance. The leaves darkened and the blooms held true to form.

Thinking that perhaps 'Cloisonne' would have more appeal for the ladies, I went back to Vern and bought more plants. Up in his 80s and rather casual about business, Vern doesn't label his plants. I got a couple of plants that proved to have red flowers, but

finally found another 'Cloisonne' which I gave to Marilee Gray, an outstanding grower. At the 1990 Pomona Show she brought three 'Cloisonnes'. One went up to the head table for consideration, but came back.

Mel Belcher did a double-take when he saw Marilee's flowers: "Hey, I got that flower from Vern a year or so ago but haven't brought it to the shows because it wasn't registered. Now I can show it."

Green-thumbed Mirian Schmidt liked the flower, so I found a plant in bloom for her and another for Leone Summerson who also grows

beautiful show flowers.

Things got a bit sticky at the Kern County Camellia Show. Marvin Belcher labeled his pink flower 'Cloisonne'. It was sent back from the head table because it was actually 'Jennie Mills'.

Bill Donnan remembered that McCaskill's had propagated 'Jennie Mills' at one time. Quite possibly 'Cloisonne' was a 'Jennie Mills' seedling. The main difference is in the tiering. 'Jennie Mills' has three tiers of petals. 'Cloissone' has two tiers.

Now, as a new season starts, we'll have a better opportunity to evaluate 'Cloisonne'. Will it end up amid the china and silver or sink into oblivion—saved from obscurity only by a four line blurb in *Nomenclature*. The show tables deal swiftly with questions like that.

#### **CAMELLIA NOMENCLATURE**

The second printing of 1990 Camellia Nomenclature has 'Cherries Jubilee' on the cover because the 'Bill Woodroof' color separations were on loan to another society when the second printing took place.

Camellia Nomenclature is revised every three years. Each membership is entitled to only ONE of those Nomenclatures at \$5.00 in a three year period. Additional copies are at regular prices.

## Here Is Why I Can Not Spell

by Bill Donnan

Author's note: Did you know that can not is misspelled? It should be spelled cannot.

I have the dubious honor of being the most notoriously poor speller in the entire camellia world! How I got that way has always been a mystery to me and it has bothered me very much. I love to write articles but I have become so "gun shy" that I find myself having to look up nearly every three syllable word to see whether I have spelled

it correctly.

Some of you may recall that, when I was editor of Camellia Review magazine, I wrote an editorial on my frustration with spelling. At that time I was spelling hobbyist as hobbiest. Well, I corrected that mistake—but then I saw the words leafiest and hardiest in the Los Angeles Times and I wondered what the correct spelling should be! My wife had been a former elementary school teacher and she told me that there are rules for adding a suffix to a word. If the word is an adjective, like merry or dainty, one should replace the "y" with an "i" and then add the suffix. I now had a handle to work with. I said to myself, "Learn the rules and you will be able to spell."

But wait a darn minute! The rules do not always apply! Take the rule: "i" before "e" EXCEPT AFTER "C" OR WHEN ENDING IN "Y." Our Southern California Society spelling breaks that rule. If I followed that rule, I would spell it Society! And, hey! Listen up! That is only the tip of the iceberg. For example, I thought that I had the suffix rule down pat. Then I found out that if you sing a solo, you are a soloist, but if you play a cello, you

are a cellist!

So, I have thrown the rules out the window along with my ability to spell correctly. I have read somewhere that there are about 40 sounds in the English language; such as "sh" or "o" or "a" but, there are some 200 ways to spell those sounds. Take the sound "o." This sound is found in such words as beau, sew, stow, doe and escargot, to name a few; all of which are confusing to a poor speller like me.

Here is a quick test for all of you readers. See if you can tell which of these words are mispelled: supercede, conceed, concensus, accomodate, irresistable, diptheria, anamoly, cemetary and grafitte. All of them are, including the word "misspelled" at the end of the preceding paragraph. So is the word "preceding" in the last sentence! But you surely get the point as to why I can not spell, don't you?

The English language has rules which are made to be broken. Here is a good example. Take the word "four." It is then used in the word "fourth" and again in "fourteen" and "twenty-four" but when we come to "forty" the "u" disappears. Why? Abdomen has an "e" but abdominal has an "i." There is no "r" in colonel. Why do we have an "s" in island? Someone once made a list of about 200 English words which are commonly spelled two ways, such as ax-axe; dialoguedialog; color-colour; etc. Even the word "spelled" becomes "spelt" in some places, like Australia.

I guess that I should just stop giving the English language and its spelling such a bad time. I should just resign myself to the fact that I will always remain a poor speller. I should rejoice in the fact that our language, while perhaps difficult to spell, remains one of the best, if not the best, when it comes to delineating what one says. After all, if I should spell the number "eight" like it sounds, i.e. "ate," you would

think that I had eaten all those Mc-Donald hambergers instead of telling you how many there were. Let us face it! I just cannot, willnot, shallnot, (Oops! There I go again with those dumb rules!) ever be-

come a good speller.

EDITOR'S NOTE: Anyone who writes as well as Bill Donnan need never fear a few misspelled words. Editors pray for articles like his.

Can You Help Gene Snooks?

Gene Snooks gave a scion from his sasqua x miyagii plant. His plant has since died. If you received the product of Gene's largess, he would greatly appreciate a scion in return.

#### **FLASH**

Grafting Demonstration—Bring a camellia plant you'd like to graft to the Arboretum SCCS meeting on February 12. Scions of 'Al Gunn' available or bring your own.

# Pacific Camellia Society Show-December 2-3, 1990

Best Treated Large Japonica Runner-up Best Treated Medium Japonica Runner-up Best Treated Small Japonica Runner-up Best Treated Miniature Japonica Runner-up Best Large Japonica Runner-up Best Medium Japonica Runner-up Best Small Japonica Runner-up Best Miniature Japonica Runner-up Best Retic Hybrid Runner-up Best Non-Retic Hybrid Runner-up Best Species Bloom Runner-up Best 3 Large Japonicas Runner-up Best 3 Medium Japonicas Runner-up Best 3 Retic Hybrids Runner-up Best 3 Non-Retic Hybrids **Best 3 Species** Runner-up Best 3 Mixed Varieties Runner-up Best Collector's Tray Runner-up Best Seedling Best Novice over 4" Best Novice under 4" Award of Merit Chairman of Judges-John Movich 'Miss Charleston Var.' Elizabeth Weaver' 'Nuccio's Jewel' 'Astronaut' 'Little Bit' 'Demi-Tasse' 'Hopkin's Rose Pink' 'Shala's Baby' 'Margaret's Joy' 'Grand Marshall' Desire' 'Rudolph' 'Shala's Baby' 'Ave Maria Var.' 'Shala's Baby' 'Lemon Drop' 'Harold Paige' 'Curtail Call' Elsie Jury' Buttons 'n Bows' 'Shibori-Egao' 'Yuletide' 'Grand Prix' 'Tiffany' 'Margaret's Joy' Debutante' Betty Ridley' Francie L Waltz Time Var.' 'Shibori-Egao' 'Showa-No-Sakae'

> Egao' 'Yuletide'

Mr. and Mrs. Sergio Bracci Mr. and Mrs. Wilbur Ray Mr. and Mrs. Sergio Bracci Mr. and Mrs. Wilbur Ray Chuck Gerlach Mr. and Mrs. Sergio Bracci Mr. and Mrs. Wilbur Ray Mr. and Mrs. Sergio Bracci Mr. and Mrs. Walter Harmsen Matt Wilkin Dr. and Mrs. Robert Stiern Mr. and Mrs. Grady Perigan Marvin Belcher Mel Belcher Pat Greutert Mr. and Mrs. Julius Christenson Mr. and Mrs. Sergio Bracci Mr. and Mrs. Sergio Bracci Mr. and Mrs. Robert Jaacks Mr. and Mrs. John Movich Dean Turney Pat Greutert Mr. and Mrs. Sergio Bracci Mr. and Mrs. Sergio Bracci Mr. and Mrs. Walter Harmsen Janice Martens Mr. and Mrs. Jack Woo Mr. and Mrs. Sergio Bracci Mr. and Mrs. Sergio Bracci Mr. and Mrs. Sergio Bracci Mr. and Mrs. Robert Jaacks Mr. and Mrs. Sergio Bracci Mr. and Mrs. Jack Woo Mr. and Mrs. Sergio Bracci Mr. and Mrs. Sergio Bracci Jim Wilkin Mr. and Mrs. Bill Green Mr. and Mrs. Bill Green Mr. and Mrs. Sergio Bracci

Show Chairman-Tom Hughes

# **Cold Damage to Camellia Buds**

by Marilee Gray

Response to a prior article ("A Fertilizing Program for Southern California?",) The Camellia Review, November-December, 1990) was such that I intended, at the conclusion of this camellia season, to write a sequel that would give the blooming results and some addiobservations and clusions. Swayed by the weather and my camellias' responses, I modified my intended program here and there. Unfortunately, it is pointless to define the program and the reasons for the modifications at this time because the conclusions to be seen in the blooming cycle cannot be reported this year.

To begin with, the blooming season appeared to be later than usual this year, and significantly later than the two prior years. Additionally, my initial gibbing was delayed so that my gibbed blooms were all but nonexistent for the Gib Show the first weekend in December. But by mid-December, the blooms began to appear, and for 1-1/2 weeks my camellias produced some really spectacular blooms. Many of the blooms that were cut and put out into the community or stored in the refrigerator for holiday decorating were among the best I have ever grown. Their quality would certainly have placed them on the head table and possibly even on the awards table. Then came the freeze!

For three successive nights, the temperatures under the influence of an Alaskan cold front plummeted until, on December 23, lows of 16 to 18 degrees were reached in my immediate area. That night was the coldest my garden had ever experienced. Not only were all the tropicals gone, but plants that had never suffered cold damage before were severely hurt. Covering had saved nothing. Before the sun gave

any thawing warmth, the camellia garden looked black because all the leaves were discolored from being frozen solid. Both because of the area and the fact that my camellias are being grown in locations that test their endurance to exposure in summer and in winter, it is likely that my damage was equal to or greater than that experienced by other growers. I sincerely hope so.

'Misty Moon' appears to have died from the freeze. 'Silver Cloud' and my larger, more exposed 'Bill Johnston' are severely damaged and may not survive. 'Angel Wings' is now showing a moderate to severe leaf drop. Leaves on last season's growth on 'Midnight Var.' thawed and remained viable, but leaves from the prior year's growth died into the main stem of each leaf. (Was this difference a consequence of the fertilizing program or the age of the leaves?) Unless more extensive damage becomes evident, my camellia plants, on the whole, seem to have survived fairly well. The buds, however, are a different story.

All the gibbed buds with exposed petals were ruined and were removed immediately. Within a few days I began cutting open buds that were starting to show discoloration and were losing their firmness. In all cases, the buds had a dark brown center (if a formal double) or a darkening of the calyx/stamen area and the stem immediate to the bud. At this time (2-1/2) weeks after the freeze), a heavy bud drop is occurring that is already total on some varieties. With the buds gone, I my spring pruning began January 1! It is interesting to note that only now are the agricultural losses being better established. Recent state-wide loss estimates now are quoted at \$700 million, with those losses in my immediate area

being doubled over those figures

given initially.

Among those varieties showing the most immediate and extensive bud damage are 'Nuccio's Gem' and 'Tomorrow Park Hill.' Thinking back, I can recall years in which these two varieties produced buds that seemed to develop but never opened. This was discouraging and baffling at the time, but I now am considering the possibility that, since they may be more cold-tender than most, freezing temperatures may have been the cause of their failure to bloom in other years also. In the future, I will sacrifice and cut a few buds open after freezing tempeatures at least on these two varieties.

From even the worst of situations

we should try to glean something of benefit. Cold-hardiness evaluation seems to be the most likely for this However. unpromising season. since the temperatures were so low that the bud damage appears to be almost complete in my garden, my relative evaluation is very limited. About all I can deduct at this time is that, as a group, the retic buds seem to be the most vulnerable to cold and the non-retic hybrids the most tolerant. I would appreciate hearing from those who had less damage and can, therefore, make a distinction among the varieties. I will be watching the show tables to see which varieties are hardy and still blooming and hoping for better luck next year!

# Queen Elizabeth Tops with Mary Ann Bottoms

by J. Carroll Reiners

Reprinted from "Concepts of Camellia Culture" in Sacramento Camellia Society's

Camellia Bulletin, January 1985

The strength and vigor of camellia roots determines the excellence of the top of the plant. Yet we consistently graft the wonderful new cultivars onto untried understocks, or anything available. We miss our goal of optimum plant and bloom quality when we utilize mediocre understock. The camellia understock should be specifically selected for geographic areas, graft compability, increased vigor, longevity and freedom from root diseases, as in the rose and commercial fruit industries.

We read that Camellia sasanqua may be best for some conditions, but that is too generalized, although there is a nursery in New Zealand which fosters C. hiemalis 'Kanjiro' as very compatible, vigorous and free of root rot. Years ago I found that seedlings of 'Tiffany' and 'Ville de Nantes' were of outstanding vigor and these were used as japonica understock. Understock research and information is sadly lacking. We need Queen Elizabeth bottoms.

NORTHERN CALIFORNIA CAMELLIA SOCIETY—President, Gordon Goff; Secretary, Jim Toland, 1897 Andrews Dr., Concord 9452l. Meetings: 1st Monday, November through April, 7:30 p.m., Oak Grove Intermediate School Auditorium, Minert Rd., Concord

All Camellia Review covers are printed during the summer before the season starts. Unfortunately, the above information will be incorrect

in our last issue.

#### Directory of Other California Camellia Societies

ATWATER GARDEN CLUB AND CAMELLIA SOCIETY—President, Bill Lee; Secretary, Ruby Eason, P.O. Box 918, Atwater 95301. Meetings: 4th Tuesday of each month, 7:00 p.m., Conference Room, Bloss House, 1020 Cedar Ave., Atwater.

CENTRAL CALIFORNIA CAMELLIA SOCIETY—President, Chris Gonos; Secretary, Dolores Martin, 2405 E. Pontiåc Way, Fresno 93726. Meetings: 3rd Wednesday, November through February, Sheraton Smugglers Inn, Fresno.

DELTA CAMELLIA SOCIETY—President, Larry Pitts; Secretary, JoAnn Weeks, 2337 Westbrook Ct., Walnut Creek 94598. Meetings: 2nd Tuesday, November through March, Oak Grove School, 2050 Minert Rd., Concord.

KERN COUNTY, CAMELLIA SOCIETY OF—President, Beverly Dukes; Secretary, Shirley Jenkins, 4824 Hasti-Bob Ct., Bakersfield 93309. Meetings: Call Beverly or Fred Dukes for meeting dates, time and location (805) 831-4383.

MODESTO, CAMELLIA SOCIETY OF—President, Robert Dorn; Secretary, Betty Grover, 1108 Ulrich Ave., Modesto 95350. Meetings: 2nd Tuesday, September through April, Centenary Methodist Church, Room 6, Norwegian & McHenry Avenues, Modesto.

NORTHERN CALIFORNIA CAMELLIA SOCIETY—President, Jack Lewis; Secretary, Jim Toland, 1897 Andrews Dr., Concord 94521. Meetings: 1st Monday, November through April, 7:30 p.m., San Francisco Federal Savings, 1660 Olympic Blvd., Walnut Creek. Final meeting in Spring is first Monday in May.

PACIFIC CAMELLIA SOCIETY—President, Russel Monroe; Secretary, Mary Simmons, 5616 Freeman Ave., La Crescenta 91214. Meetings: 1st Thursday, November through April, 8:00 p.m., Descanso Gardens.

PENINSULA CAMELLIA SOCIETY—President, Howard Oliver; Secretary, Betty Semich, 11891 Magdalena, Ave., Los Altos 94024. Meetings: 4th Tuesday, October through March, Ampex Cafeteria, 411 Broadway, Redwood City.

POMONA VALLEY CAMELLIA SOCIETY—President, Larry Andrews; Secretary, Dorothy Christinson, 3751 Hoover St., Riverside 95204. Meetings: 1st Tuesday, November through April, 7:30 p.m., Pomona First Federal Savings and Loan, 1933 Foothill Blvd., La Verne.

SACRAMENTO, CAMELLIA SOCIETY OF—President, Donald Lesmeister; Secretary, Evalena Smith, 601 - 34th St., Sacramento 95816. Meetings: 4th Wednesday, October through April, 7:30 p.m., Shepard Garden & Arts Center, 3330 McKinley Blvd., Sacramento.

SAN DIEGO CAMELLIA SOCIETY—President, Dean Turney; Secretary, Edalee Harwell, 2165 Leon Ave., San Diego 92154. Meetings: 3rd Wednesday, October through April, 7:30 p.m., Casa Del Prado, Room 101, Balboa Park, San Diego.

SANTA CLARA COUNTY INC., CAMELLIA SOCIETY OF—President, John Mendoza III; Secretary, Mrs. Roy Williams, 1159 Park Ave., San Jose, 95126. Meetings: 3rd Wednesday, September through April, except Wednesday, November and December, 7:30 p.m., Sumitomo Bank Community Room, 515 No. First St., San Jose.

SOUTH COAST CAMELLIA SOCIETY—President, Glenn Burroughs; Secretary, Pauline Johnson, 1251-10th St., San Pedro 90731. Meetings: 3rd Tuesday, October through May, 7:30 p.m., South Coast Botanic Gardens, 26300 Crenshaw Blvd., Palos Verdes Peninsula.

TEMPLE CITY CAMELLIA SOCIETY—President, Elsie Bracci; Secretary, Alice Jaacks, 5554 N. Burton Ave., San Gabriel 91776. Meetings: November 15, January 25, February 21, March 28, April 25, 8:00 p.m., Lecture Hall, Los Angeles County Arboretum, 301 No. Baldwin Ave., Arcadia. February and April meetings transferred to Arboretum Ayres Hall.

S O U T H E R N C A L I F O R N I A

CAMELLIA SOCIETY, Inc.

P O B O X 3 6 9 0 ARCADIA, CA 91066

Address Correction Requested

Bulk Rate
U.S. Postage
PAID
Permit No. 740
Pasadena, CA