

THE  
*Camellia*  
REVIEW

A Publication of the Southern California Camellia Society



'Donckelarii'

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# TABLE OF CONTENTS

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No. 2

California Camellia-Rama XXII, <i>Mary Anne Ray</i> .....	3
“New Commandments” for Camellia Show Participants.....	6
Challenge Award, <i>Don Bergamini</i> .....	7
Thanks! .....	7
What I’ve Been Doing, <i>Wilbur Ray</i> .....	8
Shade Tree Research, <i>Jim McQuiston</i> .....	11
The Physical State of Fertilizers, <i>Marilee Gray</i> .....	12
Twelve Steps to the Head Table, <i>Mel Belcher</i> .....	16
New Members.....	16
Looking Toward the Head Table, Step 1, <i>Mel Belcher</i> .....	17
I’ve Been Thinking, <i>Scottie Illes</i> .....	19
From the Archives, <i>H. S. Wolfe</i> .....	20
1997 Camellia Show Schedule .....	24

## COVER ILLUSTRATION

*Camellia Japonica* ‘Donckelarii’.

Red marbled white in varying degrees. Large, semi-double.

Slow busy growth. Blooms mid-season. Imported by Franz von Siebold from Japan into Belgium in 1834. Artist: Paul Jones.

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## THOUGHTS FROM THE EDITOR



The holidays may have come and gone by the time you get this issue of the Review but, late or timely, let me wish each of you a Merry Christmas and a Happy New Year. As Bobbie and I reflect back over the events of the past year, we conclude that it has been one of excitement, much travel and the making of many new friends.

You will note that the cover photo on this issue of the Review departs from the normal pattern. I've elected to highlight one of Paul Jones' watercolor paintings of camellias. 'Donckelarii' is one of eight reproductions used on note cards available through the Southern California Camellia Society. Although this cultivar is more than 150 years old, it still finds its way to the Head Table at camellia shows today. (More information about these cards can be found between the covers on page 7.)

One topic I plan to use in each issue can be labeled "From the Archives." This issue contains an article reprinted from *Camellia Culture* (edited by E. C. Tourjé, 1958) by H. S. Wolfe who at that time was Professor of Horticulture at the University of Florida and also Editor of the *American Camellia Yearbook*. To me his article seems just as relevant today. Even though the article takes several pages, I think you will have a better understanding of how cold weather affects camellias. For example, nitrogen feeding should be suspended early enough so that new growth is inhibited prior to the possibility of freezing weather.

For those of you who enjoy being in the arena of competition, here's wishing that your winnings will exceed your bruises.

Mel Belcher

# CALIFORNIA CAMELLIA-RAMA XXII

Mary Anne Ray

## The Winning Camellias

Best Retic - and BEST OF SHOW:

'Valentine Day Variegated'	Bob and Alice Jaacks of San Gabriel
Best Hybrid 'Julie Variegated'	Joe Roup, Fresno
Best Large Japonica	Jim and Jackie Randall, Sacramento
Best Medium Japonica 'Margaret Davis'	Sergio & Elsie Bracci, San Gabriel
Best Boutonniere 'Kiku-toji'	Sergio & Elsie Bracci, San Gabriel

## Winners of the "Need Not Be Present To Win" Drawing

Donor	Donation	Winner
Anne Woo	Cream-colored afghan	Shirley Jenkins, Bakersfield
Betty Kellas	Christmas cardigan	Deanne Burch, Citrus Heights
Pat Pozdol	Christmas Purse	Ron Morrison, Sacramento
Ann Brown	5 pounds pecans	Bob & Joanne Logan, Fremont
Jim Randalls	Camellia charm	Barbara Gobrecht, San Clemente
Edith Puckett	Lavender afghan	Elsie Hughes, La Canada
Virginia Rankin	Camellia flag	David & Ruta Haggmann, Orinda
Joe Roup	Flower turntable	Dorothy Grier, Chino
Jeanne Shoemaker	Embroidered pillow	Don & Mary Bergamini, Sacramento
Al Biggs	Stained glass	Ruth Marcy, San Jose
Chris Gonos	Bird Cage	Marvin Belcher, Bakersfield
Robin Ray	Painted sweatshirt	Bob & Joanne Logan, Fremont
Jean Toland	Christmas bag	Elsie Hughes, La Canada

## Costume Winners

*Cleopatra and entourage* -

Hal & Deanne Burch, Bill & Bev Allman, Jim Toland and Chris Gonos

*George & Martha Washington* - Bob Ehrhart & Linda Williams

*Moses* - Sergio Bracci

*Angel Gabriel* - Elsie Bracci

*Braveheart* - Jim Randall

*Harpo Marx* - Jackie Randall

*Betsy Ross* - Virginia Rankin

*America's Backbone* (workers) -

Dick and Pat Pozdol

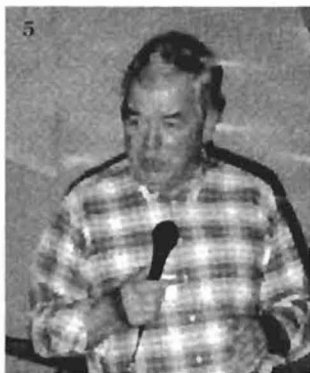
*Editor's note: Thanks to Mary Anne for mentioning these winners but, in reality, everyone who attended Camellia-Rama was a winner. A great time was had by all !!!*



*Bob Ehrhart & Linda Williams  
make a charming  
George and Martha Washington*



1. *The pre-dinner champagne party in the Hospitality Room. See anyone here you know??*
2. *Introducing the members of the newly-established Italian Camellia Society— Nancy Pitt, Elsie Bracci, Sergio Bracci, Don Bergamini and Tom Nuccio.*
3. *Lucky Ruth Marcy won this beautiful camellia stained-glass window made and donated to the raffle by Al Biggs.*
4. *Alice and Bob Jaacks look happy about their 'Valentine Day Variegated' winning Best of Show.*



5. *His Honor, Don Fretz, related the trials and tribulations accompanying the establishment of the Napa Camellia Society.*
6. *Dolores Martin sold many raffle tickets throughout the weekend.*
7. *Faithful Registrar Chris Gonos "on duty" as Edwin Streit signs in.*
8. *Moses accompanied by the Angel (Elsie Bracci) Gabriel.*
9. *Don Bergamini tried to convince the group that he was their Leader but he wasn't sure which way his followers had gone.*
10. *Marilee Gray and Dorothy Christinson selling camellia note cards and enlisting new Southern Cal members.*

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## “NEW COMMANDMENTS” FOR CAMELLIA SHOW PARTICIPANTS

Moses, looking much like Sergio Bracci, arrived at Camellia-rama with two new tablets of “commandments” which are printed here for your attention.



- I** Thou shall put no blooms above mine.
- II** Thou shall not lie about how many blooms thou has.
- III** Thou shall not covet thy neighbor's blooms.
- IV** Thou shall not steal scions.
- V** Thou shall not bother my wife while she is staging blooms.
- VI** Thou shall have plenty of doughnuts at the shows.
- VII** Thou shall not touch my blooms.
- VIII** Thou shall not talk bad about my blooms.
- IX** Thou shall refrain from talking to Head Table personnel.
- X** Thou shall not say, “Thou has not a thing for the show.”



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## CHALLENGE AWARD

Don Bergamini

The Challenge Award is an award given to the exhibitor that can predict twelve entries that he or she has entered that will receive a blue ribbon. Prior to the morning of the show, the exhibitor will list on a sheet of paper, prepared by the show committee, those entries, whether single or multiple entries, that he or she feels will be awarded a blue ribbon by the judges. They then will put a "C" on both parts of the entry card signifying that this entry is on the entry sheet. The sheet is then given to the show committee upon arrival at the show, before the exhibitor can view the other entries. At the time of judging, the tally committee determines the number of blue ribbons each entrant has correctly predicted. In case of a tie, the number of seconds that were

received will be considered. If there is a tie, then the number of thirds will be considered. If there is no "C" on the card then that selection is considered as getting no award by the judges. If the exhibitor wins Sweepstakes, Runner-up Stakes, Novice Sweepstakes or Award of Excellence the day of that show, then the exhibitor is not eligible for the Challenge Award.

A great time is had by all who enter this category. I think this is another way to have fun at the show because in this competition you don't have to have trophy winners but just some nice blooms to show. This competition will add blooms to your show and enable anyone who brings twelve good entries a chance to win a trophy.

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## CAMELLIA STATIONERY

The back cover shows a collection of eight of Paul Jones beautiful camellia paintings that are printed on note cards. These cards are available in sets of eight for \$6.00 including tax and shipping. Printed on quality stock with matching envelopes, they make wonderful stationery for sending your greetings to your camellia friends. They also make wonderful gifts for your fellow camellia lovers or for

those you are trying to get involved in this wonderful hobby!

The cards may be ordered through Dorothy Grier, 13229 Pipeline Avenue, Chino, CA 91710 (909)628-1380 or through the Southern California Camellia Society, 7475 Brydon Road, La Verne, CA 91750. Send your check payable to "SCCS" to either of these addresses.

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W. T. & Sally Slick

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## WHAT I'VE BEEN DOING

Wilbur Ray

*Editor's note: The following paper was delivered by Wilbur Ray at the 1996 Fresno Camellia-Rama.*

Mary Anne and I have been growing camellias for a couple of years now, and we (or she) have developed a division of labor regarding this hobby. This means that I have been told what I can and cannot do. Now, part of my responsibilities have turned out to be watering and feeding. I'll first talk a little bit about watering. We always hand watered camellias from the time we built the lath house and, while I did set up an overhead sprinkling system in that lath house, of course we don't use it during the blooming season or during the raining season. I really feel there is no substitute for hand watering for camellias. The heads on those overheads were mounted about 5 1/2 feet off the ground enabling the top of the spray to come up to about 10 feet which is what the ceiling of our lath house is. This way we get pretty good coverage and get a lot of watering in a relatively short period of time. It saves a lot of labor. It takes about 40 minutes to hand water and for some years this system was somewhat adequate but, for about the last 12 years, it has turned out to be more than I wanted to do. Because, we grew with the hobby, our collection grew and some of the plants were getting shaded out from the sprinkling system. Like most of yours, our collection keeps expanding. Mary Anne has never met a camellia she didn't like. So I had to do something. Then we started growing plants out under some shade trees. That just expanded the amount of hand watering that had to be done. A large part of our collection now is out under those trees.

Recently, my friend Art Gonos told me that he firmly believes in borrowing expertise from those people who are outstanding in those areas in

which he wants to improve his skills. So, several years ago, Art installed an automated watering system because he felt the need to get away from being tied to his hand watering system. Art's son, Dimitri, told me that it was because Art has run out of "slaves." I'm sure Art has talked to many of you as he did to me about his system. So, I decided to take a page from his book and I went to the same system of "spot spitters." Spot spitters are little plastic stakes fastened into a small tube that goes into each pot. These are quite common in commercial nurseries and they work about as well as anything I have seen. They put out a small spray and are color coded according to the volume that each one puts out. I use several different sizes. You just stick this stake in your pot and you get pretty good coverage. Because I'm still a novice at this, I use a manual timing system for my watering. If you wish to discontinue the use after you have the spitters plugged into your main line, you simply reverse the peg thus stopping the flow of water.

Like any watering system, there are pitfalls to these spitters. They can plug so it is necessary to be sure that you have a good filtration device installed in the system. Even so, you need to monitor it to make sure that nothing slips through and clogs up the spitters.

A few thoughts on feeding: I think that the ideal food that many of us use is cottonseed meal. Here in Fresno we have been very fortunate through the years to have easy access to cottonseed meal. Now, however, the seed no longer goes to cottonseed mills. There are only two of these mills left in this area. Neither of these mills does us any good because they sell only in bulk—by the truck load. They don't bag it; they are not interested in selling small quantities. We are still able to get cottonseed meal, but it has not had the oil

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extracted. This doesn't make a particle of difference to the camellia, and it does add a little protein to what you are feeding. There is also a little fiber left in the meal but this doesn't seem to matter to the camellia.

Now, I have had cottonseed meal for a long, long time. At first, I was very conscientious about it. We fed three times a year, generally six weeks apart, something like that, until it was time for it to break down and become a factor in the growth. I measured it in spoonfuls and cupfuls but, as the collection expanded, things had to go, so I started using handfuls—big handfuls and little handfuls. I've never burned a camellia with cottonseed meal. I don't think you can. I use a handful if it's a seven gallon or a couple of handfuls if it's a fifteen gallon and that's it. But even this has gotten bothersome to go around that collection three times. So, four or five years ago, I decided I was going to do something else. The result was to look for a time release feed. Osmacote has been around a long time, but I hadn't really given it much thought. I went into the wholesaler's one day and a lady there told me that a new product had come out that has a lot of minor elements in it. Of course, you know about osmacote-type fertilizers with their released feedings which consists of a resinous bead around chemicals and, by osmosis it works its way out through pores. She told me that the 7 or 8 minors (trace elements) were incorporated. I decided that sounded like a good deal, so we use Osmacote along with the cottonseed meal. I have discontinued using cottonseed meal three times. I only use it once and then give the plants a shot of Osmacote that has the minors of calcium, magnesium and sulfur plus the other micro-nutrients including some iron. This procedure cut down on my labor quite a bit and I was left only with my fall feedings of 2-10-10 or 0-10-10. I can't tell any difference between when I was feeding three times with cottonseed

meal and when I was feeding once plus with a formulation of 17-6-10 plus minors.. What I'm using is a three-month release formulation so I put it on in March or early April and it's dissipated by the time I'm ready to quit feeding for the season. I know that some of you told me that Osmacote does not work in the coastal areas because the temperatures stay too low. This is probably true, but we don't have that problem in Fresno. We get enough temperature here to make this stuff work; in fact, it makes it work a little faster.

There are different formulations offered by Osmacote. Newer ones are even better. There's one that they will be releasing this year which will include all the minors that will be incorporated right with the NPK so they will all be released at the same time.

Last spring I was intrigued with an article I read in a gardening magazine about the use of silicon in promoting plant growth. I had heard of other uses of silicon but had never heard of it being used agriculturally. Research shows that silicon has the ability to reduce the risk of plants developing fungus diseases and mildew. The use of silicon as a plant food in Europe is popular enough that there are four major manufacturers making it and selling it. In North America you probably haven't heard of it because government regulations have slowed the efforts to register the product which is potassium silicate and it's been a little slow to get on the market.

Sandy soils have a lot of silicon in them but it's generally not available to the plants because it's highly insoluble. The silicon that I am talking about is in solution. To my knowledge there is only one source of potassium silicate available in the United States and it's with a company called Dyna-Grow Corporation in San Pablo, California. This company offers a product called ProTect and it is water soluble potassium silicate. It provides potassium in 3.7 and silicon is just an

added feature. ProTect is a liquid concentrate as opposed to being just water soluble—it's already in liquid form. How does silicon work with camellias? I don't know. It's used widely in the orchid trade. It's used in raising hothouse cucumbers and those growers are interested in fighting fungus diseases of various kinds. It is also used on bonsai commercially and also on roses. I was interested enough that I called and got some samples. Then I ordered a couple of cases and have been using it this season. Now I can't tell you that it's making any changes in my camellias—it's too early yet. But I think it's like a lot of things—if you believe it works, it works. This company has been in the liquid feed business for a long time. They specialize in hydroponic supplies and that sort of thing. I have found through a lot of experiences that, if something promises you it's going to change the world, look out. I haven't killed any camellias with this stuff yet, but I've killed my share of camellias in the past few years. Their literature states that their product can be used either as liquid feed through the irrigation system or as a foliar

spray and, of course, they manufacture a lot of other products with the regular nutrients.

After I put my spot spitters in, I got interested in this liquid because it could be used in an irrigation system. But I got hold of another catalog this year. Seems like everyone had me on their lists. This was a San Diego company that sells a lot of irrigation material. I ran across something called an "injector." I know a little bit about injectors in large nursery systems where they use spot spitters and feed right through their watering systems. But those things were pretty expensive—\$500 or \$600 a piece. In this catalog I found a little injector for about \$20 which is easy to use. I like it very much. I have about 300 seedlings in one gallon pots. I'm able to feed them with this system and it's working pretty well.

It may be that there is something that one of these companies has that may be of interest to you. Perhaps some of our Research Committees might want to look into this silicon liquid. I'm using it and I think I'm going to continue at least until I kill a few more plants.

## INTRODUCTIONS FOR 1996-97

'Grady's Egao' (Sasanqua)

'Lemon Twist' (non-reticulata hybrid)

'Junior Prom' (Japonica)

'Moonstruck' (non-reticulata hybrid)

and these Species:

'Camellia Chrysanthoides'

'Camellia Glabsipetala'

'Camellia Trichoclade'

'Camellia Cordifolia'

'Camellia Rhytidocarpa'

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# SHADE TREE RESEARCH

## SEEDS AND SUBDUE (METALAXYL)

Jim McQuiston

Camellia culture can also be a satisfying hobby for apartment and mobile home dwellers, but the excellent information in camellia books and journals must be adapted to be appropriate for them. As an apartment dweller and engineer, I hope to share my experiences and findings in later articles because I believe the wave of the future is to enable such dwellers to enjoy camellias as a hobby.

Seed culture is definitely an absorbing and practical camellia hobby for apartment dwellers. Each year I start about 2,000 seeds in a confined space indoors. More of that anon, except now to say that I use 6-inch high plastic boxes containing about 1 inch of virgin coarse vermiculite to grow the seeds; the box lids I replace with single-strength glass.

This year as before I moistened the vermiculite with distilled water; however, this year the water contained 4 drops per gallon of SUBDUE (Metalaxyl). The result was astounding.

Generally before, each seed's roots would grow downward, finally forcing the seed above the vermiculite whereafter the plant would sprout leaves and grow. After a while I would move the sprouts to small pots, but the 6-inch height would keep the sprouts unrestricted in the boxes if I delayed transplantation.

This year, however, the seeds emerged at least twice as fast from the vermiculite evidencing faster germination. Being otherwise occupied, I let them grow in the boxes for about a week more. To my surprise, at transplanting many seeds' roots measured in excess of one foot long! Moreover, much of the seeds' total energy had gone solely into root-growth instead of into sprouting.

A knowledgeable avocado

technician from Fallbrook told me something which may explain how SUBDUE reacted upon the seeds and, by analogy, how it reacts on roots in general. Although he discussed ALIETTE (Fosetyl Al), it is said to react the same as SUBDUE in controlling but not killing various fungi such as water mold, damping off, crown rot and cinnamon rot. He said that the avocado journals reported that Aliette in Australia is registered as a Fertilizer and not as a fungicide. This squares with the fact that neither ALIETTE nor SUBDUE actually "kill" fungus, so neither should be called "icides."

Avocado growers bore holes in the trunks of their trees and pour Aliette into the holes, thereby "fertilizing" them. As a systemic, the agent promotes root growth so exuberantly that the various fungi have no effect upon the tree. However, the fungus itself is apparently unaffected.

I would not recommend any heavier concentration of SUBDUE than that above. According to the Ohio Florist Association Bulletin #735, January, 1991, SUBDUE may be phytotoxic and the product should be used at the lower end of the rate range.

I believe the result I got in the seed box does demonstrate that SUBDUE acts as a "super fertilizer," and that too much of it would likely be too much for a seed to handle (phytotoxicity). Remember, too, that precautions must be observed when handling SUBDUE. Read the label.

My results could explain also why SUBDUE cannot revive a plant which is already overwhelmed by fungi. Treatment is required before symptoms occur. Remember that the camellia plant reacts very sluggishly to disease and neglect.

Apparently, SUBDUE is substantially beneficial to seed culture.

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# THE PHYSICAL STATE OF FERTILIZERS

Marilee Gray

The camellia culture aspect that I address most frequently in presentations to the general public is that of fertilizers. Without a doubt, fertilizing mistakes are responsible for the majority of failures when conscientious gardeners, who water and plant intelligently, report problems with their camellias. The three questions that must be answered positively are these: Is this a suitable *type* of fertilizer? Is this the right *amount* of fertilizer? Is this the *proper time* to use this type of fertilizer? Bear in mind that a suitable camellia fertilizer used at the wrong time (*i.e.*, a growth season fertilizer used in the dormant season) can be just as fatal as a chain saw. A discussion on fertilizers covered these considerations in a previous article, "The Basics of Fertilizing Camellias" (*The Camellia Review*, January—February 1995, Vol. 56, No. 3, pp. 20-22).

The most fundamental description of a fertilizer is found in the three numbers (nitrogen-phosphorus-potassium) that must be shown on the labels of all fertilizers, *e.g.*, 2-10-10 (suitable for a dormant season camellia fertilizer), 5-3-1 (suitable for a growth season camellia fertilizer), 15-15-15 (a general all-purpose garden fertilizer), 12-55-6 (a typical bloom-forcing garden fertilizer), etc. The two characteristics that a suitable camellia fertilizer must possess are that it has a slightly acidic reaction and that it is comparatively low in nitrogen; fertilizers suitable for use in the growing season are generally only in the 5-7% range for nitrogen; in the dormant season low- to no-nitrogen fertilizers are suggested.

There are a number of suitable fertilizers that may be selected either as growth or as dormant fertilizers for camellias. Beyond their chemical composition, however, it is important

to understand how their *physical state* influences the frequency and timing of their usage. The physical state of a fertilizer *as it is applied* has everything to do with *when* and *how rapidly* the fertilizer is taken into the plant. In this respect, I have grouped usable camellia fertilizers into four general categories: organic fertilizers, water-soluble granules, liquid solutions, and controlled release fertilizers. An understanding of what is occurring is helpful in the management of a successful fertilizing program:

In the organic line, the most commonly used growth fertilizer for camellias is a naturally occurring fertilizer, cottonseed meal. It has the desired acidic reaction and a favorable chemical composition of something in the 6-3-1, 6-2-1 range. To my knowledge, all commercial growers and most amateur hobbyists use cottonseed meal because of its effectiveness combined with its safety factor.

It is the available nitrogen that produces the healthy, rich green foliage; it is that same nitrogen, if present in too great an amount, that burns feeder roots and results in the characteristic foliage damage or, in the extreme, in totally dead plants. The safety feature of cottonseed meal occurs because the nitrogen it contains is bound up in complex organic molecules, so that, *at the time of application*, the nitrogen is unavailable to the plant. If the nitrogen is not available, neither can it burn and damage the roots and plant. The job of making the nitrogen available falls to the bacteria in the soil that digest the cottonseed meal and, in so doing, convert the nitrogen into a usable form. The rate at which the plant feeds, therefore, is determined by the bacteria's digestion rate, and that rate, in turn, is determined by the soil

temperature. Under normal conditions, the rate of digestion produces available nitrogen at a level that is tolerable for camellias. Under conditions of extreme heat, I have experienced some loss of the new and tender foliage, but no loss of plants.

The second and third applications of cottonseed meal are generally made in six to eight weeks after the previous feeding. Any feeding should always be delayed if it coincides with extreme heat. The timing is significant because it indicates how slowly the nitrogen is converted and used. Some growers take the slower rate of digestion into consideration in the spring, when the weather is cool and the ground temperatures are low. Contrary to customary practices, they feel that it is advantageous to apply the first feeding of cottonseed meal *a few weeks before* the appearance of new growth that indicates the beginning of the growth season; with cool soil temperatures, the conversion of nitrogen initially is sluggish, but with warming it quickly accelerates and provides ready nitrogen for sturdy growth. The suggested amount of cottonseed meal per feeding is 1T/ gallon, 2T/ 2-gallon; a tight fist full for an egg can, and so on.

Some growers provide an extra surge of nitrogen for the early flush of growth with an initial feeding of fish emulsion (5-1-1), a aqueous suspension of the nitrogen-containing material. Note that the product labels direct that the fish emulsion is to be agitated to assure a homogeneous mixture. Even though it appears to be a liquid, consider the emulsified material the same as a solid, suspended material that, like the cottonseed meal, must be acted upon to provide usable nitrogen. This conversion is much more readily accomplished than with the cottonseed meal, so the feeding effect is dissipated in two or three weeks; at that time, growers generally switch to

the slower and safer cottonseed meal. Fish emulsion is too fast-acting, or "hot," to be used in Southern California except as a starter fertilizer in the cool spring (late March to early April) when the first new growth appears. Using the more concentrated fish emulsions (at least 90%), the recommended concentration for camellias is 1T/gallon of water; or 1/2 of the suggested dosage.

Also in this category is blood meal (13-0-0). The nitrogen in blood meal is one of the most available and rapid acting forms of organic nitrogen. For this reason, some growers opt to mix blood meal with cottonseed meal at a ratio of about 1:5 or less for their growth season fertilizer. By the time the blood meal is used up, the nitrogen from the cottonseed meal is becoming converted and available.

The second general type are those fertilizers that are granular and water-soluble, but are applied dry. In contrast to the natural fertilizers already discussed, a number of dry, water-soluble fertilizers exist that are prepared to the desired N-P-K composition. A popular dormant dry fertilizer in Southern California is Red Star's 2-10-10 *Flower Power* that is applied every four weeks. Growth season fertilizers of this type are *Gro-Power* (5-3-1) and a number of similar products carrying different brand names but generally described as fertilizers for "azaleas, camellias, rhododendrons, and other shade and acid-loving plants." The water-soluble, dormant fertilizers with their low- to no-nitrogen composition should pose no real overuse problem, but the growth-promoting fertilizers that are water-soluble can be harmful if used without discretion. If it is suggested that such a growth-promoting product be used every six to eight weeks, it assumes that the expected watering will completely dissolve and deplete the material in that length of time. The dissolving process has the materials ionizing

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and becoming accessible to the plant. If high temperatures occur, however, more frequent watering than normal will be required, and the increased watering unavoidably will dissolve the fertilizer at a faster rate than intended. If the watering rate is two to three times normal, the fertilizing rate is also two to three times more than desired. The accelerated feeding rate is very likely to burn the delicate feeder roots and produce foliage damage or, in an extreme case, kill the plant altogether. Damage can be minimized or avoided in most scenarios if only 1/2 of the suggested dosage of such water-soluble, granular fertilizers is used.

The third type of fertilizers are those that are *applied* in a liquid state. These may be products that are either purchased as liquids or as solid crystals that are dissolved in water before application. Dissolved materials are wholly ionized, so their components are immediately and completely available to the plant *when applied*. Therefore, their uptake and the plant's response are rapid, their effect is quickly dissipated, and applications can be as frequent as every two weeks. An example of the liquid products is the dormant season fertilizer *Super Bloom*, 0-10-10. Fertilizers that are applied as liquids may be preferred over dry types when a quick response is desired.

A prime example of the solid type that is dissolved in water before application is the crystalline *Miracid*, 30-10-10. Its nitrogen content would suggest that this would not be a suitable fertilizer for camellias; however, if its use is carefully regulated, it is a very effective camellia fertilizer for the growth season. At 1/2 T/gallon of water, 1/2 the recommended dosage, the amount of nitrogen contained in each application is in the high, but still acceptable, range. Furthermore, since all plants should have been thoroughly watered prior to fertilizing, the amount of fertilizer-

laden water that can be retained in the root area is limited. I use three to five feedings of *Miracid* (the lesser number on the non-retic hybrids and those that evidence heavy feeding by excessively large foliage) with some consideration given to the timing of the applications. The first application coincides with the appearance of new growth after the camellias have bloomed. The ionized nutrients are quickly taken into the plant, and the heavy initial growth will benefit from a ready supply of nitrogen, so the second application can follow in two weeks. However, to avoid too much concentrated feeding over too short a span of the growing season, I increase the time between applications as the season progresses and the growth rate slows. The third feeding may follow in three to five weeks; the fourth and the fifth, if at all, in four to six week intervals. In my area, I am looking at a growth fertilizing window of approximately 16 weeks, roughly April 1 to August 1, depending upon the season. By September 1, I would prefer to see no new growth. If the buds appear unusually advanced for the season or I am away on travel, I may opt to replace the last feeding(s) of *Miracid* with a light feeding of cottonseed meal that will slowly feed into the fall. If nitrogen is still being supplied as the dormant season nears, a 0-10-10 product may be chosen for the first and second dormant feedings in lieu of a 2-10-10 fertilizer. Another option for the dormant season might be to alternate every two weeks a dry 2-10-10 and a liquid 0-10-10; this would keep the nitrogen to a desirable low level while still supplying adequate amounts of phosphorus for exceptional bloom color.

One conscientious camellia hobbyist that I know feeds with each watering by dividing the quantity of *Miracid* that would be fed every two or three weeks among the separate waterings that are made during that time. The result is a more controlled,



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continuous feeding that produces robust growth without presenting an excessive and damaging amount of nitrogen at any one time. Applying dilute concentrations of liquid fertilizers with each watering would certainly be an ideal program, one that would require minimum effort if an automatic watering system with a fertilizer dispenser were used.

The fourth type of fertilizers to consider are the controlled release fertilizers, such as *Osmocote*. At present, I have not been recommending controlled release fertilizers because of all the horror stories involving camellias. The *Osmocote Time Release 18-6-12* is the formulation suggested for use with camellias. The label states that the soil moisture will cause the granules to swell into capsules filled with liquefied plant food that will release a continuous flow of nutrients for *nine* months. It also states that "excessive watering or rain will not leach away the plant food." If the maximum growth season in Southern California is *five* months (April 1 to September 1), the problem is obvious; there simply is not enough time for even the earliest application (mid-March to April 1) to be consumed without feeding well into the dormant season. Disasters resulted because the controlled release products were used in lieu of cottonseed meal and without a full appreciation for the proper timing, the influence of temperature, or the frequency of use. In rebuttal, however, Wilbur Ray, a dedicated grower from the Fresno area, has reported good success with a controlled release product he has used for the last five years in an effort to find a less taxing camellia culture program. Employing only one application in late March, he uses cottonseed meal in combination with a Scotts products called *Sierra 17-6-12 Plus Minors*, a fertilizer that has a 3-4 month longevity *when the soil temperature averages 70°F*. The

dependence of longevity on temperature means that, while this controlled release fertilizer is being used successfully in Fresno, it would not be as safe or effective in areas with cooler average soil temperatures. Instructions for the product indicate that its longevity depends upon cultural practices (frequency of watering and the leaching effect of water quantity), upon environmental factors (temperature and rainfall), and upon the rate of application. Suggested topdressing quantities for low-feeding plants, such as camellias, are 2 teaspoons/gallon container and 1/4 cup/5 gallon container. This product is really a combination of the second and the fourth general types of fertilizers. The majority of the nitrogen, phosphorus, and potassium-containing materials are coated for slow-release; the remaining amounts of each are of the solid, water-soluble type that are quickly dissolved and released for fast growth. It is absolutely imperative that anyone using controlled release fertilizers know precisely what the effect of watering and temperature will have on the longevity of the product; the release of growth-producing nitrogen must be accomplished by the onset of the dormant season.

If there is a question about the advisability of a particular fertilizing program, go with the decision that provides less, not more, feeding. A camellia will survive better on neglect than excesses where fertilizers are concerned. The management of a fertilizing program that is both safe and effective can be a challenge, especially when a combination of products is being used on sensitive camellias. To be successful, one needs to understand *how* and *when* a fertilizer becomes active and to make the program adaptations that are needed for a particular plant, an atypical season, or abnormal weather.

# TWELVE STEPS TO THE HEAD TABLE

Mel Belcher

There are many reasons why people grow camellias. Some gardeners are fond of camellias as landscape plants and I certainly agree that they grace landscapes in an unparalleled way. Most of us who enjoy the competition provided by camellia shows started out with landscape plants. But the stimulation of competition encourages the purchase of additional plants beyond the landscape variety to successfully compete.

If we compete, the question is immediately asked "How do we become competitive?" Put another way, "What does it take to get to the Head Table?" If I may be somewhat presumptive, I'll say there are at least 12 steps, or considerations, each of which are important and most must be followed carefully in order to ever get to the Head Table.

I plan to submit an article in following issues of *The Camellia Review* (one step per issue) covering in some detail those things that I think are important in each step. This information will be geared primarily to the new or beginning hobbyist. Please understand I am not an expert but am one who enjoys the hobby and competition and has learned a few things over the years. As an aside, I find it somewhat sad to compete with friends who bring blooms to show after show but seldom win. These competitors can be heard to say, "These blooms are the best that I can grow." If these same exhibitors follow carefully the following steps, they can become strong competitors.

- Step 1—Selection of winning varieties
- Step 2—Sun vs. shade—location
- Step 3—Proper soil mix—plant vs. pot
- Step 4—Water requirements
- Step 5—Fertilizer considerations
- Step 6—Pest control
- Step 7—Wind protection
- Step 8—Pruning
- Step 9—Disbudding
- Step 10—When to cut blooms
- Step 11—Placement of blooms
- Step 12—Participation in activities

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# LOOKING TOWARD THE HEAD TABLE

Mel Belcher

## Step 1. Initial selection of varieties

All camellia hobbyists who want to compete at the camellia shows must start somewhere. The natural starting point is the selection of camellia varieties that stand a good chance of winning favor in the eyes of show judges. The following comments will be applicable to the home gardener in selection of landscape plants and will be even more important for the hobbyist who wants to compete in the various camellia shows.

What varieties to buy is a very important question. *Camellia Nomenclature* describes thousands of varieties of reticulatas, japonicas, hybrids and other species—some new, some old, but only a few hundred varieties in any geographic area would ever be seen at the Head Table. Therefore, let us concentrate on identifying those varieties that are most popular, at least in the eyes of the judges.

There are at least three publications that list most frequent winners at the shows. First, *The Camellia Review* list in the September-October issue lists the most frequent winners of the previous year's shows in Southern, Central and Northern California. Second, the American Camellia Society prints in their *Annual Camellia Yearbook* those varieties that are most popular show winners. This list is somewhat slanted toward the Southeast area of the United States. Third, the tri-annual publication of the *Camellia Nomenclature* lists a broad range of varieties that are recognized as outstanding cultivars. From these three sources one can easily select varieties that at least have a proven track record.

Simultaneous with selection of potential winning varieties comes the

next important question—how many? The quantity is controlled by factors of finances, amount of planting or potting space available and the amount of time available.

Since most shows have at least six categories of blooms described by specie and size, consideration must be given to varieties that cover these categories. These six categories are as follows: 1) Reticulata and Reticulata Hybrid; 2) Japonica—large or very large; 3) Japonica—medium; 4) Japonica—small; 5) Japonica—miniature; 6) Non-Reticulata hybrid. Some shows tend to lump together the Japonica small and Japonica miniature and call the category Japonica boutonniere resulting in five major categories. Assuming that all exhibitors want to have the greatest exposure to winning, the initial investment should be spread over the five/six categories. Before we leave the subject of quantity, it should be recognized that, as plants get older, they take up more space and require more time.

One practical variety distribution model would suggest that 5 plants per category would provide an interesting and exhilarating place to start your journey to the Head Table. Most serious competitors go beyond that number but, if discretion is exercised in selecting the initial 25 plants and if steps 2-12 are followed, your chances of being on the Head Table are very, very good.

The grid that follows on the next page will illustrate one possible initial selection.

The varieties listed do very well in any garden; however, many varieties are sensitive to geographic and climactic conditions. Therefore, additional information should be obtained that is area specific.

It should be stated that some varieties may be unavailable to buy through nurseries and will require

## VARIETIES THAT HAVE A PROVEN TRACK RECORD.

<b>Reticulata</b>	<b>Size</b>	<b>Form</b>
'Emma Gaeta variegated'	Very large	Semi-double
'Harold Paige'	Very large	Rose form double
'Queen Bee'	Very large	Semi-double
'Dr. Clifford Parks'	Very large	Semi-double
'W. P. Gilley variegated'	Very large	Semi-double
<b>Japonica-large and very large</b>		
'Katie variegated'	Very large	Semi-double
'Royal Velvet'	Large	Semi-double
'Carter's Sunburst'	Large	Semi-double
'Lady Laura'	Large	Peony
'Guilio Nuccio variegated'	Large	Semi-double
<b>Japonica-medium</b>		
'Fire Dance variegated'		Semi-double
'Black Magic'		Semi-double
'Margaret Davis'		Peony
'Nuccio's Gem'		Formal double
'Eleanor Martin Supreme'		Semi-double
<b>Japonica—boutonniere</b>		
'Red Hots'		
'Spring Daze'		
'Something Beautiful'		
'Man Size'		
'Hishi-Karaito'		
<b>Non-Reticulata Hybrid</b>		
'Waltz Time variegated'	Medium	Semi-double
'Buttons n' Bows'	Small	Formal double
'Julia variegated'	Medium	Rose form double
'Coral Delight variegated'	Small	Semi-double
'Honeymoon'	Medium	Rose form double

grafting scions onto understock. Most hobbyists will be delighted to provide scions from their plants.

One last word. Regardless of your finances, space and time, I would enthusiastically encourage new

hobbyists to take the plunge because camellias attract a lot of good friendly people working and playing together and, of course, always looking toward the Head Table.

## Join Australia and New Zealand Camellia Societies

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\$16.50 Family/U. S. Dollars

### New Zealand Society

\$16.00 Single

\$19.00 Family/U.S. Dollars

Send your check payable to  
Southern California Camellia Society  
7475 Brydon Road, La Verne, CA 91750-1159

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## I'VE BEEN THINKING

Scottie Illes

All right, you caught me—I lied. I said I would not “gib” because it seemed somewhat like cheating. Besides, if you mess with Mother Nature she just might decide to get even and I really don’t want to lose any plants (except for one that is really ugly). At the start of the lovely rain last week I moved a number of our pots out to get the benefits of a much-needed bath. As I was putting them back I was thinking forward to the shows and remembered that I had no blossoms fit to show until late February last season. The decision was made! One or two buds on a couple of plants might prove to be interesting. You’re right—I got a little carried away. All but two plants of that group have from one to five treated buds. I have no idea what will happen. I will hope for the best but prepare for the worst which is something like covering your eyes with criss-crossed fingers. Who knows. Maybe Mother Nature will smile on a novice. I just hope it’s not a smirk.



I was thinking of my mother the other day. She was one of those scary people who could plant a stick today and have a 50 year old oak tree tomorrow. When she gave up housekeeping and joined Max and me she brought her beautiful African violets and said to me, “Thou shalt not touch!” At that time our garden consisted of a couple of rose bushes, some arborvitae, pots of herbs (that kept dying) and lots of white rock. After about two years Mother moved north with my brother but gave her gorgeous violets to friends who would keep them safe. Now, several years later, in my mind’s eye, I can see that look of surprised approval as she looks down from above on our healthy but crowded camellia garden. I even have three happy African violets just blooming away—but my philodendron is beginning to look a little odd...



We make many plans in our lives, some practical, some far-fetched, and even some that have a chance of coming to fruition. We had planned a trip to Wisconsin to drown ourselves in Mother Nature’s “Fall Splendor” but, for various reasons, we had to postpone. How does Jack Frost and ankle deep snow sound for a substitute? BUT—with this change of plans came a bonus. Some of our azaleas have begun to bloom with others trying to catch up and our young but rapidly growing sasanquas have started to strut their stuff. So we now plan to enjoy a different bounty of beautiful color right in our own backyard. Meanwhile we will wait patiently for our camellias to bloom in prize winning glory and we will hopefully look forward to an award or two. With the great number of buds our beauties have produced, that is one plan that could work out without postponement!

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## FROM THE ARCHIVES

### COLD: ITS EFFECT ON CAMELLIAS AND THEIR BLOOMING

H. S. Wolfe

Few are the camellia growers, except, of course, greenhouse producers, who do not wonder at some time every winter whether they will lose flowers or even plants because of cold. This is equally true of the camellia fan in Orlando, Florida, in Sacramento, California, or in Yonkers, New York. Size and quality of bloom may be seriously affected by malnutrition, unsatisfactory soil moisture, or pest attack, but rarely is complete loss of blossoms or bushes due to some cause other than cold. Yet it seems paradoxical that camellia bushes may endure without injury several inches of snow and temperatures well below 0° F. in some places, and be badly injured—at least the blossoms—by 25° in other places. The explanation lies largely within the plant itself, although external factors play an important secondary role.

The most important effect of cold on camellias is that of more or less serious injury, but this is not the only way it affects them. A certain amount of coolness is necessary for proper opening of camellia buds. Likewise the color intensity of camellia flowers is affected to some extent by temperature, and the season of bloom is delayed greatly by continued cold, even though no injury is done. Completely double flowers opening after warm weather sets in tend to show some development of the innermost petals, so that they no longer have a tight center. Cold which fails to have any effect on leaves may injure the petals of swollen or partly opened buds, and sometimes even of apparently tight buds, so that the petals are somewhat brown. In very double varieties the youngest, innermost petals are injured when the older, outer ones are normal. White or light pink petals show browning most easily and are disfigured more by small amounts of browning. Cold may

kill flower buds completely without injury to leaf buds, or it may kill leaves and twigs progressively with decrease in temperature, until plants are dead to the ground.

#### Internal factors affecting cold injury

It is desirable, first of all, to make clear the nature of cold injury itself. The low temperature to which the plant is subjected is not in itself harmful, which explains why the same plant is unhurt by 15° F. at one time and is badly hurt at 20° F. at another. Injury to plant cells results only from formation of ice within plant tissues. Although ordinary water usually turns to ice at 32° F., it is well known that the cell sap in plant cells often contains substances which prevent ice formation until the temperature is several degrees below freezing. Then again, the cells may not have these antifreeze materials in them.

Ice can never form in plant tissues under normal atmospheric pressures unless the temperature is at or below 32° F., but ice may form without injury to cells or it may kill them, depending in part on where the ice forms. Ice crystals may form within living cells or they may form between cells. In the former case the cells are always killed; in the latter, they may survive uninjured or they may die. Formation of ice crystals within living cells seems to take place only when the temperature falls very rapidly—perhaps more rapidly than often occurs naturally—or when plant tissues are in a very tender condition. Usually, ice formation takes place in the spaces between cells, which are usually somewhat separated to permit more ready gas exchange. In this case the degree of injury to the cells varies with the tendency of the cells to lose water to the growing ice crystals. Depending on factors within the cell itself, there is a limit to the amount of

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water which the cell protoplasm—the living part of each cell—can lose without injury. When this limit is exceeded, the cell dies. Cells of the same plant tissue differ greatly at different times in the amount of water loss which can be endured, and cells of different tissues of the same plant—or of the same tissue in different plants—likewise differ greatly.

Plant tissues which are well matured can usually endure more cold than plant tissues which are tender and succulent, although the difference may be very small in many tropical plants. Plants of all kinds are readily hurt by temperatures little below freezing when they have tender new shoots. Later in the season these shoots mature and when winter comes they may be able to endure without injury very low temperatures. The fact that camellia survive winter temperatures below 0° F. in New York and New Jersey indicates that the plant has the inherent ability to form in its cells the substances which enable them to resist water loss beyond the recovery point even when the tissues are frozen hard at these temperatures. It is largely a matter of how well matured the tissue cells are, or as it is often phrased, how dormant the plant tissues are during the period of critical temperatures.

Dormancy is affected by many factors, especially if we include in this term the concepts more accurately differentiated into rest period (due to internal factors) and dormancy proper (due to external factors). Previous temperature conditions play the most important role, although dormancy in some areas and with some plants may be solely due to drought. In regions where temperatures decrease slowly in autumn to a point well below freezing and stay below this point all winter, the plants remain quite dormant all winter and will endure minimal temperatures uninjured. In regions where temperatures during the winter are frequently well above freezing—even above 60° F. for long

periods alternating with occasional drops to points below freezing, the plants may be far from dormant and may be injured more or less seriously by such drops.

Under the same conditions of temperature, different camellia plants of the same variety may differ in degree of dormancy; and camellia plants of different varieties quite commonly show different degrees of dormancy, as indicated by different degrees of cold injury. Under identical conditions of temperature and moisture, some varieties tend to start growth in spring sooner than other, and even more striking differences are commonplace in the opening of flower buds. The expansion of flower buds involves multiplication and growth of cells, so that opening buds are more easily injured than dormant buds. Even with apparently similar degrees of dormancy—and it is almost impossible to know when cells first start growth in buds—there seem to be some differences between camellia varieties which are inherent in the varieties themselves—genetic differences.

It has frequently been suggested that varieties with dark-colored flowers are harder than those with light blossoms. While there are many exceptions, this does seem to be true as an average. An analysis of the reports of cold injury by many people in different areas for some sixty-five common varieties indicated that five out of thirty red varieties were considered very hardy while only one out of thirteen whites was so rated, and one of twenty-two pinks. Conversely, three of the thirty white varieties were rated very tender, against two of the thirty red varieties and three of the twenty-two pinks.

Double-flowered varieties are often said to be more tender than single or semidouble types, and this concept also has some validity as an average statement, although it is not always true. Analysis of the same sixty-five varieties for flower type showed that

only six of the thirty-three classed as hardy were completely doubled, while six of the seven tender varieties were of this type, and the other was an incomplete double. Yet three completely doubled reds rated high for hardiness.

It should be stressed that these analyses are based on reports from the southeastern states, where large numbers of camellia varieties are grown. They represent responses to winter conditions of fluctuating temperatures. The lowest temperatures recorded for camellias are those given by Dr. P. W. Zimmerman at Yonkers, N.Y., and he found relatively few differences among varieties. Such complete doubles as 'Purity' and 'Eleanor Hagood', which are rated usually as tender, survived  $-5^{\circ}\text{F.}$ , as well as the semidoubles 'Berenice Boddy' and 'Lady Clare', commonly reported as very hardy. Such early fall bloomers as 'Alba Plena' proved very tender at Yonkers because they were not dormant when the first autumn freezes came, but with winter temperatures so low that all were equally dormant, there were rather small differences between the few varieties tested. Most surprisingly, opening buds in February were not hurt by  $0^{\circ}\text{F.}$  Season of bloom seems to have relatively little to do with cold hardiness, except as the subfreezing temperatures are experienced during a given season. In some areas the early bloomers may escape cold injury more often than the later ones, while in other areas the reverse is true. In general it is probably safe to say that the further north camellias are grown, the more hazard is found for early varieties. Conversely, in the extreme southern part of their range, late varieties may open poorly because the weather is too warm.

Absolute rating for hardiness is hardly possible because the conditions to which camellias are exposed are not uniform. Reports on varietal behavior for closely adjacent

areas often different from grower to grower. Among the sixty-five varieties above mentioned which a dozen growers in a half-dozen states had rated for hardiness, only two were quite uniformly agreed upon. 'Flame', a semidouble red, was in every list as very hard, and 'Alba Plena', a completely double white, was always rated very tender. Mention should be made of a careful study of cold injury made by F. S. Batson at Mississippi State College in 1951. He exposed cuttings of a large number of varieties to subfreezing temperatures in a uniform procedure, and reported on injury to flower and leaf buds. As a measure of the resistance of the plants to cold in January, 1951, these results are sound, but they do not necessarily indicate relative ability to endure cold at other times and they are at some variance with reports of cold injury to the same varieties elsewhere in Mississippi during the same season.

#### **External factors influencing cold injury**

For any given variety, injury from cold will vary with the conditions of its environment. Temperature is, of course, the most important environmental factor, but degree of injury will not necessarily be correlated with readings of an air-thermometer. Apart from the variations in degree of dormancy just mentioned, there is the question of the temperature actually reached by the plant cells, how long this temperature was maintained, and other external factors.

For convenience in discussing these matters, the distinction between a *frost* and a *freeze* must be made clear. On clear, still nights in winter, the ground loses heat to the sky by radiation, the air is cooled next to the ground by conduction to the ground, and air temperatures are lowest next to the ground and are higher as one measures them upward for many feet. Frost forms on the ground when air temperature a few feet above the



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ground is above freezing, and this type of cooling of air and plants is also called a frost. Leaves and buds of camellias lose heat by radiation also under these conditions and may be colder than the air. When a mass of air of subfreezing temperature moves into an area, plants are chilled by conduction to the air temperature. This is called a freeze, and occurs on a windy night (or day), with or without clouds. A frost can occur only at night with no clouds, and will usually bring temperatures only a few degrees below freezing.

Under frost conditions, any object that is between the plant and the sky will retard or prevent radiation of heat. Camellias under trees are largely protected from frost injury, and temporary covering has the same effect if the foliage does not touch the cover. Air drainage is important as a means of decreasing frost injury in some locations. Chilled air is heavier than warm air and flows down slopes much as water does. If camellias are planted in a depression with no outlet, chilled air may fill this depression and the plants in it become much cooler than those on the slopes above.

Mulch on the ground under the plant may be either good or bad, so far as cold injury is concerned. In a freeze, it may insulate the roots from the cold air and prevent injury to them, but under frost conditions, when temperatures are not low enough to injure roots, the mulch may increase the injury suffered by leaves and buds, because it retards the radiation of heat from the ground to the foliage directly above it. Mulch on frozen ground also is helpful in reducing heaving and in making soil moisture more available to plants. With temperatures well below freezing, even with leaves frozen solid, transpiration of water continues from the leaves and stems. Heavily mulched ground is not frozen so deeply as unmulched soil, and roots under the mulch supply more water,

helping prevent desiccation of the frozen twigs. A windbreak is also valuable under the same conditions because it decreased the rate of water loss in a cold wind. With or without severe cold, adequate soil moisture is an important factor in cold hardiness of camellias. Mulches and windbreaks help the plant conserve moisture, but there must be plenty of moisture in the soil to be conserved.

Vigor is another factor in survival of cold by camellias. Plants of low vigor because of poor nutrition, deficient root systems, insect attack, drought, hail, or disease are less able to endure winter cold than vigorous specimens, provided the latter are well matured and dormant. An oil spray applied in autumn makes foliage more subject to damage by cold.

Avoiding cold injury to camellias has several aspects, therefore. In part it may involve selecting varieties found by experience to be above average in hardiness for a given area. In part it rests upon providing a protected location, with shade from winter sun and windbreaks to mitigate winter winds. It may or may not require mulching of the ground, depending on whether the soil is likely to freeze deeply or not. And it involves getting vigorous and healthy plants into well matured condition of dormancy before freezing temperatures develop. Application of nitrogen late in the summer and pruning at this time are practices likely to delay maturity. Unless one can enclose a camellia bush completely, it is not likely to be profitable to attempt using article heat for keeping temperatures above the danger point; and using water spray to keep camellia leaves and flowers from freezing is feasible only when frosts a very few degrees below freezing threaten open flowers.

*Editor's note: This article is reprinted from CAMELLIA CULTURE, 1958, edited by E. C. Tourjé.*

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## CAMELLIA SHOW SCHEDULE 1997

- January 18 and 19**     **Southern California Camellia Society**  
Descanso Gardens, La Canada  
Show Chairman:     David Trujillo, Tom Gilfof Assistant  
Chairman of Judges: Mel Belcher
- January 25 and 26**     **South Coast Camellia Society**  
South Coast Botanic Gardens, Palos Verdes  
Show Chairman:     Helen Gates
- February 1 and 2**     **San Diego Camellia Society**  
Casa del Prado, Balboa Park, San Diego  
Show Chairman:     Les Baskerville  
Chairman of Judges: Dean Turney
- February 8 and 9**     **Southern California Camellia Society**  
Huntington Gardens, San Marino  
Show Chairman:     Grady Perigan, Tom Gilfof Assistant
- February 15 and 16**     **Pomona Valley Camellia Society**  
Church of the Brethren, Bonita & E, La Verne  
Show Chairman:     Marilee Gray, David Trujillo Assistant  
Chairman of Judges: Julius Christinson
- February 22 and 23**     **Southern California Camellia Council**  
Descanso Gardens, La Canada ("Spring Show")  
Show Chairman:     Brad King, David Trujillo, Assistant
- March 1 and 2**     **Camellia Society of Kern County**  
First Christian Church, Bakersfield  
Show Chairman:     Marvin Belcher  
Chairman of Judges: Mel Canfield
- March 8 and 9**     **Central California Camellia Society**  
Fashion Fair, Fresno  
Show Chairman:     Bob Kellas  
Chairman of Judges: Mary Anne Ray
- March 15 and 16**     **Camellia Society of Modesto**  
Gallo Administration Building, Modesto

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## DIRECTORY OF CALIFORNIA CAMELLIA SOCIETIES

**CENTRAL CALIFORNIA CAMELLIA SOCIETY:** President—Don Martin; Secretary—Christine Gonos, 5643 North College Avenue, Fresno 93704. Meetings: 3rd Wednesday, November-February, 7:30 p.m. Sheraton Smuggler's Inn, 3737 N. Blackstone, Fresno.

**DELTA CAMELLIA SOCIETY:** President—Larry Pitts; Secretary—Evelyn Kilsby, 11 Tiffin Court, Clayton 94517. Meetings: 2nd Tuesday, November-March, 7:30 p.m., City of Pittsburg Environmental Center, 2581 Harbor St., Pittsburg.

**KERN COUNTY, CAMELLIA SOCIETY OF:** President—Helen Maas; Secretary—Susan Coyle, 7401-24 Hilton Head Way, Bakersfield 93309. For meeting dates and times, call Helen Maas (805)872-2188.

**MODESTO, CAMELLIA SOCIETY OF:** President—Don Kendall; Secretary—Sue Kendall, 1505 Gary Lane, Modesto 95355. Meetings: 2nd Tuesday September-May, 7:00 p.m., Ensen School, 515 Coldwell Avenue, Modesto.

**NORTHERN CALIFORNIA CAMELLIA SOCIETY:** President—Larry Pitts; Secretary—Eric Hansen. Meetings: 1st Monday, November-April, 7:30 p.m., Oak Grove School, 2050 Minert Road, Concord. Final meeting in May is a dinner meeting.

**PACIFIC CAMELLIA SOCIETY:** President—Sergio Bracci; Secretary—Kathryn Korin 1241 East Calveras St., Altadena 91001. Meetings: 1st Thursday, November-March, 7:30 p.m., Descanso Gardens, 1418 Descanso Drive, La Canada.

**PENINSULA CAMELLIA SOCIETY:** President—Ed Tooker; Secretary—Nicky Farmer, 360 Santa Margarita Avenue, Menlo Park 94025. Meetings: 4th Tuesday, October-March, Veterans' Building Annex, 771 Nevada Street, upstairs, Redwood City.

**POMONA VALLEY CAMELLIA SOCIETY:** President—David Trujillo; Secretary—Dorothy Christinson, 3751 Hoover St., Riverside 95204. Meetings: 2nd Monday, November-April, 7:30 p.m., Church Fellowship Hall, White and Sixth Streets, La Verne.

**SACRAMENTO, CAMELLIA SOCIETY OF:** President—Gary Schanz; Secretary—Mary Louise Jones, 4454 Marley Drive, Sacramento 95521. Meetings: 4th Wednesday, October-April, 7:30 p.m., Garden and Arts Center, 3330 McKinley Boulevard, Sacramento.

**SAN DIEGO CAMELLIA SOCIETY:** President—Gene Snooks; Secretary—Catherine Marlar, 4734 Cather Circle, San Diego 92122. Meetings: 3rd Wednesday, November-April, 7:30 p.m., Room 101 Casa del Prado, Balboa Park, San Diego.

**SANTA CLARA COUNTY, INC., CAMELLIA SOCIETY OF:** President—Bev Allman; Secretary-Treasurer—Helen Augis, 2254 Fairvalley Court, San Jose, CA 95125. Meetings: 3rd Wednesday, October-April, 7:00 p.m., Lick Mill Park, 4750 Lick Mill Boulevard, Santa Clara.

**SOUTH COAST CAMELLIA SOCIETY:** President—Helen Gates; Secretary—Pauline Jones, 1251 Tenth Street, San Pedro 90731. Meetings: 3rd Tuesday, September-July, 7:30 p.m., South Coast Botanic Garden, 26300 Crenshaw Boulevard, Palos Verdes Peninsula.

**SOUTHERN CALIFORNIA CAMELLIA SOCIETY:** President—Marilee Gray; Secretary—Bobbie Belcher, 7475 Brydon Road, La Verne 91750. Meetings: 7:30 p.m., Ayres Hall, Los Angeles County Arboretum, 301 Baldwin Avenue, Arcadia, on October 30, November 21, January 23, February 27, March 27, April 24 (potluck). Note: No December meeting.



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