

THE  
*Camellia*  
REVIEW

A Publication of the Southern California Camellia Society



'Oshima Red'  
'Oshima White'  
'Oshima Pink'

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

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# TABLE OF CONTENTS

Vol. 56

January—February, 1995

No. 3

New Members.....	2
Science in the Service of the Camellia Grower:	
Prospects for the Future, <i>R.L. Bielecki</i> .....	2
Show Ribbons and Old Friends, <i>Helen Augis</i> .....	9
Our Camellia Garden, <i>Jim and Jackie Randall</i> .....	10
Budding and Disbudding, <i>Marilee Gray</i> .....	11
Hooked on White? <i>Leone Summerson</i> .....	14
Observations, Ideas and Memories, <i>Grady Perigan</i> .....	16
Remembrance of Things Past, <i>Bill Donnan</i> .....	17
Thank You.....	18
The Basics of Fertilizing Camellias, <i>Marilee Gray</i> .....	20
Passings.....	22
Pacific Camellia Society Show, Los Angeles County Arboretum .....	23

## COVER PHOTO

'Oshima Red'  
'Oshima White'  
'Oshima Pink'

From the Island of Oshima, Japan.

Photo: Grady Perigan. Color separation: courtesy of Nuccios' Nurseries

## AN INVITATION TO JOIN

### THE SOUTHERN CALIFORNIA CAMELLIA SOCIETY

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## THOUGHTS FROM THE EDITOR



It is interesting how some competitive people, when asked about their abilities, tend to denigrate their accomplishments. In the Camellia crowd one occasionally hears the comment, "I could bring only a few trashy blooms, but they may help the show." One has to be leery of those competitors because they may walk away with the trophies. Southern California has experienced unusual weather this camellia year. First, it was cool; then there was lots of rain; then we had record-breaking hot weather. Just now it is cold again and, as a result, many of us may bring only "trashy" blooms to the show. We've seen some plants with every bud bursting into bloom, yet some dependable varieties have buds of immense size and no hope of blooming before the swollen buds drop to the ground. Hopefully, my pessimism will be reversed before the last show, but I think we will all agree that the weather in this area has been 'interesting.'

When you think of all the time you have spent with your camellias—pruning, disbudding, fertilizing, watering, dreaming, etc., and then weather plays tricks on your efforts, we should remember that the really important reasons for growing camellias are the enjoyment of the plants themselves, the wonderful folks you meet through the Societies and shows, and the great fellowship of the meetings, potlucks, garden tours, symposiums, work parties and the rest.

Another reminder: I would appreciate papers or articles of interest from any of you, particularly information related to your experience in growing camellias—good, bad or ugly. We can all learn from one another.

You will enjoy looking into Dr. Bielecki's crystal ball with him to see some exciting possibilities for the future in the camellia world.

The blooms featured on this issue's cover are varieties that will be available from Nuccio's Nursery in about two years. They are varieties brought back from Japan by the Nuccios from the Island of Oshima.

—Melvin B. Belcher

### NEW MEMBERS – WELCOME

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# SCIENCE IN THE SERVICE OF THE CAMELLIA GROWER: PROSPECTS FOR THE FUTURE

R. L. Bielecki

Horticulture and Food Research Institute of New Zealand Ltd.

Plant scientists are creatures of habit. They carry out most of their research on a very limited range of plants—ones that are either of major economic importance, such as wheat, soybean and cotton, or ones that can be grown easily and rapidly in a laboratory or glasshouse, and used as model systems. Typical examples here are spinach, pea, tomato and maize. What this means is that plants like the camellia, which is both slow-growing and prized for its beauty rather than its commercial values, don't receive very much attention at all. It was with the aim of jogging these unimaginative scientists into taking more interest in camellias that the New Zealand Camellia Society set up the Camellia Memorial Trust in 1985. Its stated purpose was to fund research on camellias and to catch scientists in their formative years. For this reason it was particularly aimed at supporting Masters and Doctorate students at New Zealand universities. I have recently given an account of what has been achieved to date in the New Zealand Camellia Bulletin, March, 1993, issue.

But that is in the past. What I want to do here is to gaze into a crystal ball—even if it is a very murky one—and tell you of some of the possibilities that I see in the future. The overriding impression I have is that most of the knowledge that will be useful to camellia growers will come not from work on camellias themselves but from work with other model plants—the sorts I have already mentioned. Our real trick for the future will be to adapt some of that knowledge to the camellia. If we start with some sort of picture of the knowledge that might be useful, this should make us more prepared to take the opportunities as they arise—and that is my purpose of this article.

The first area where we might look for advances is in control of plant disease. In New Zealand, a root rot called *Phytophthora* is the most troublesome disorder that camellia growers meet. The situation that we find here provides a good example of the general difficulties that lie in the way of devising new fungicides and pesticides. In the first couple of decades, agricultural chemical companies have had to meet increasingly stringent, extensive and expensive testing protocols before releasing a new agricultural chemical for general use. Even then the job is not done because there has to be further testing of its application to a specific crop before the chemical can be sold for that purpose and often the regulations are established on a country-by-country or a state-by-state basis. To give an idea of how stringent these controls can be, it is against State law in California to promote the use of dilute household bleach (Sodium Hypochlorite) as a vase additive to extend flower life because the specific use of that chemical has not yet been tested and approved. As a result, chemical companies will only invest effort in developing a new agricultural chemical if the extremely high costs of testing and gaining approval can be offset by a major future use of that chemical. In practice, it means that only the diseases of very major crops are worth their attention. And, although *Phytophthora* is often one of the most serious disease problems facing a wide range of fruit trees—avocado, apple, kiwi fruit, etc. not one of these crops provides a large enough market to make control of *Phytophthora* a high priority in the minds of the chemical companies.

Thus, I do not see major advances over the next twenty years in



*Phytophthora* control beyond what we have already. Even so, that still leaves us with two promising options for the camellia grower. The first is to select rootstocks that are much more resistant than run-of-the-mill cultivars to *Phytophthora* attack. There is every possibility that this approach will be successful, given some systematic testing. The cultivar 'Kanjiro' has already been identified as having some resistance to *Phytophthora*, and there is a lot more opportunity out there. There are many species available for testing, and these have come from a wide range of climates and habitats so that there is every chance there will be a resistant type out there somewhere. The second opportunity we have is to test the use of the simple inorganic chemical potassium phosphite (not phosphate) which is sold in Australia as "Foli-R-Fos" for treatment of *Phytophthora* problems in avocado for its ability to control *Phytophthora* infections in camellia. Some preliminary results suggest that the method may work well for camellias. A related organic chemical called "Aliette," or fosetyl-Al, would be expected to give similar and perhaps better results and offer similar opportunities.

The other main scourge of the camellia is the petal blight *Ciborinia* (*Sclerotinia*) *camelliae*. There are several *Sclerotinia* species, such as peach brown rot and onion black rot, which are of economic importance, but again no one crop is individually large enough and with a sufficiently big enough *Sclerotinia* problem to make the market big enough for agricultural chemicals companies to spend much effort developing a new specific fungicide. The over wintering organism that gives the genus its name, the *sclerotium*, is highly resistant to chemicals and inactivating conditions of all kinds; it is unlikely that we will see any major advance here. All the indications are that the main control will continue to come from good hygiene—that is, the

picking up of camellia litter and burning of any diseased material so that we reduce the load of *sclerotia* in the soil.

There is one type of camellia disease that at present we take rather for granted or even encourage, and that is virus disease. There is no spray or ordinary agricultural procedure that will cure it, nor will there be in the next twenty years. There are, however, procedures that could be used to eliminate virus infections from our plants should we want to. Wine grape industries in California and New Zealand and the apple industry in New Zealand have largely achieved this over the last thirty years, and there is every reason to believe that the techniques used there would work for camellias. They depend on three observations. First, virus is very slow to move between one camellia plant and another and is mainly transferred by grafting of infected material or by secateurs that have been used in infected material. Secondly, seedlings and new cultivars raised from seed begin their lives virus-free so there is no problem in starting off with virus-free material. Thirdly, where there are established cultivars that already have virus infection, it is often possible to remove virus from propagating material by the skilled application of heat therapy or meristem culture methods. At present these techniques have not been worked out for camellias, but I am confident that the camellia would be amenable to their use and that we would succeed if we put in the effort. An important first step would be to establish reliable and routine methods for the meristem culture and tissue culture propagation of camellias. There would be several other benefits to come from developing these tissue culture methods for camellias. I will discuss a couple later. For this reason, this is a research area I would recommend for high priority in the next twenty years. An extended discussion of the pros and cons of removing virus from our

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plants and of the techniques we would need is to be found in a recent issue of the Southern California Camellia Society publication, *The Camellia Review*.

On the whole, camellias are not too badly bothered by insect pests. Because most insect pests are highly catholic in their eating habits and usually attack plants from widely different genera and of very different growth habits, chemical companies have found it worthwhile to continue to develop new general pesticides. Some of the modern ones are very effective. Because they are much more easily broken down than the pesticides of the 1950's and 1960's (such as the halogenated hydrocarbons like DDT), they remain effective for only one to two weeks after being sprayed on the plant. At first sight this would seem to be a disadvantage, but it is not. It means that the biological world is under much less pressure to develop resistant strains of insects, and the insecticides are retaining their usefulness for very much longer. This process is helped by the current trend to use biological control procedures more and more and to spray with pesticides only when a problem is expected, rather than spraying the stuff on every other Tuesday regardless of need. Although some of the pesticides are very toxic and only for commercial use by trained operators, the safest ones—the sort sold to home growers in garden centers—are no more toxic than other materials we encounter in our everyday life, such as aspirin, tobacco, caffeine and dishwasher power. In the next twenty or thirty years there will be a slow development of new pesticides to adjust to the slow development of resistance in the insect population, but we should not expect any major change or advances. The area where there will be the biggest change will be in the development of biological control methods, sometimes called “integrated pest management systems,” in which the pests are brought under control mainly by

attacking them with a parasite or some other natural antagonist (such as the bacterium *Bacillus thuringiensis*) with limited assistance from insecticides not toxic to the parasite. Many of the procedures will be tailored specifically to a single or closely related species of pest and host, so it remains to be seen whether any of the methods developed will be applicable to camellias. My guess is that within twenty years there will be methods to control species of scale and aphid that attack camellias but that they will mainly be available on a commercial basis for orchard management. What we have to do is keep reminding scientists who get much of their funding from public money that they should keep the amateur gardener in mind when devising strategies for using biological control agents.

Another area where research may have an impact concerns the keeping quality of camellia flowers. Many cultivars produce flowers that will last for only a day after cutting before they drop their petals and become useless as decorations. Yet what can look nicer in winter than a bowl of fresh camellias on a dinner table or a sprig of gay miniatures on the sideboard? This quick loss of petals has been a problem with many flower species and a great deal of research has been carried out over the last 30 years to understand the process. Many flowers are triggered into wilting and losing their petals by their becoming affected by the plant hormone gas ethylene. We now know that camellias share this behavior—that is, they drop their petals as a result of the same sort of processes that cause fruit to ripen and other flowers to wilt. Various treatments have been devised that prevent ethylene from taking effect, and these are used commercially to extend the flower life of cut roses and carnations, for example. We need to methodically try these out with camellias. Another cause of early flower death is a shortage of carbohydrate—the food store for the

flowers—which is particularly serious when there is a bulky cut flower supported by few or no leaves as is the case with camellias. Here the vase life of the flower can be increased by supplying sugar in the vase solution so that it can enter the flower stem with the water. There have been preliminary experiments to test both ethylene inhibitors and sugar feeding for their ability to extend camellia life with only limited success, but there is enough promise there for me to believe that we will be able to develop procedures that will give us five to seven days of vase life for at least some cultivars. Will we ever see camellias sold by florists as cut flowers? I believe it is possible, but here we will need the breeders to help us by using cut flower life as the main criterion in making some of their crosses and selections. The combination of post harvest flower science and intelligent breeding that has worked for other species, such as the rose, should have every chance of success in making the camellia into a useful item for florists and thereby add to their choices in the lean winter season. We have an encouraging sign of what may be possible in the operations of a horticulturist stationed near us. One of the lines he produces is freeze-dried flowers, such as roses. He has recently found that camellias adapt well to the process. As a result we have learned a couple of things. The first is that camellias can compete with other standard dried flowers as decorative items for the home; the second is that, if we can stop the degenerative processes by freezing the tissue, the petals stick to the flowering stem firmly and are not readily shed.

Some other plant hormones and anti-hormones that are being developed may also have uses for the camellia. I have already mentioned the potential for compounds blocking ethylene action to extend the cut flower life of camellias. Another group of compounds with some promise is the anti-gibberellins such as “Cultar.”

These shorten the internodes of various woody plants and are already being used commercially to make cherry trees much smaller and more stocky, more floriferous and easier to harvest. A preliminary trial has shown that “Cultar” affects the growth of camellias as well, making the plant much less “leggy” and causing the flowers to bunch up. Some effects of this kind are not particularly desirable, but others offer real potential. Thus, I envisage nurserymen producing miniaturized “tub plant” varieties of suitable cultivars for the very small garden to be added to the present line of miniatures or even to produce consumable plants for house use, like the potted chrysanthemums that are purchased in flower then thrown out when flowering is over. Another option could be to make some of the lovely but straggly *Camellia reticulata* cultivars into tidier, smaller and more floriferous plants. As new compounds are devised for orchard use, other potential applications for camellia growing will undoubtedly develop.

Perhaps the area where science has the most prospects for helping the camellia fancier is in the broad field of plant breeding. I include here an understanding of the taxonomy of the genus (which species is related to what and how closely), the identification of parents of chance seedlings, and the sorting out of cultivar relationships and possible mix-ups. Some major opportunities are created by the rapidly developing techniques of molecular biology. These new tools let us do a number of spectacular things. They let us take genes from one organism and insert them into an entirely unrelated species and have them expressed there so that their products appear in the new plant environment, such as producing new color lines in petunia. So comprehensive is this that scientists have already produced plants that not only have genes from bacteria or yeast but those same genes have been made to work effectively in the new



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environment. One example that I am particularly interested in has involved taking a bacterium gene that causes a sugar alcohol to be made and putting it in a tobacco. Not only does the new tobacco make the product, the product causes the tobacco to be more resistant to salinity, that is, to the presence of salt in the water. Such a step could well adapt the camellia to a wider range of soils. The techniques even allow us to synthesize a pseudo-gene that totally blocks the operation of the real thing, preventing its action, e.g., slowing the breakdown of cell wall materials and extending storage life in tomato fruit. Yet another trick is to take a gene that controls where and when its neighboring genes are expressed and to put it alongside a different genus of interest so that gene can be "turned on" and made to operate in a different organism or at a different time in development. As an example of how this might work, consider the yellow camellia. Despite the general impression that bright yellow is a color not found in *Camellia japonica* cultivars, it does occur and is common. We don't register its presence because it is restricted to the pollen. But the pigments giving the pollen its yellow colors are likely to be closely related to the ones giving *Camellia nitidissima* (Camellia chrysantha) flowers their bright yellow color. This point may be settled during the next year by some research work being funded by our Camellia Memorial Trust. I hope you see the significance of this. It seems that *Camellia japonica* can make yellow pigment in high concentrations but not in the right places—the petals. What we need to do is to somehow give *Camellia japonica* cultivars the ability to make those pollen pigments in another place, the petals. And that is just the sort of property these genus's expression controllers have; they will dictate the organ in which a particular gene will function. This gives us an alternative path for making yellow camellias to using *Camellia*

*nitidissima* hybrids. Indeed, the lack of success to date with those hybrids may come about because the *Camellia japonica* parent is dominant in blocking the formation of yellow pigments in the petal and this is the barrier we may have to overcome, not the ability to synthesize the pigments themselves. At present the sort of techniques required for such genetic tinkering can only be carried out in an expensively equipped laboratory by skilled people, and the cost of generating a successfully manipulated plant is very high. However, the procedures are becoming more standard, easier and more practical as each year passes. I believe that within the next 20 years it will become commercially viable for one or another of the private firms, or an interested scientist in a university department, to try genetic manipulation on the camellias. The two most probable end-points would be to generate new color lines, particularly yellow and true blue, and to develop camellias that can be used as cut flowers by giving them a greatly extended vase life. It is worth noting that once the appropriate gene has been inserted it will usually behave like any other gene and become inherited in the progeny so that the modified plant will be able to become the parent of a whole family with related properties.

We do not need to wait, however, to take advantage of another branch of these molecular biology techniques and to try fingerprinting camellias to learn more about the origins of hybrids and the relationships of species. The techniques are already well-developed and routine should some student or researcher take an interest in the topic. This is one sort of project that I hope will come up for funding by the Camellia Memorial Trust within the next few years. One general approach is to compare the detailed pattern made by several key enzymes in the different plants. The enzymes that are selected are the ones that can exist in several different forms within the one

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plant. These are called "isoenzymes" or "isozymes." They typically make a characteristic pattern for each genotype (cultivar) and are inherited from the parents. In this way the parents can often be identified, particularly when there is a reasonable suspicion about what those parents might be. But this technique is rapidly being surpassed by RFLP mapping which has its best-known application in the DNA fingerprinting of murder and rape suspects but which is having an even more routine, though less publicized, application in resolving paternity matters. It is now being routinely carried out in commercial laboratories. It involves isolating a small amount of DNA from the individual cultivar of interest then chopping it into several fragments with highly specific enzymes that recognize particular code sequences in the DNA, then separating and measuring the length of those fragments. The pattern, or map, that is obtained is unique for each individual with the exception of identical twins or, in the plant world, for each cultivar. Again, the lengths of the various fragments are inherited from the two parents so that, if the pattern of one parent is known, part of the pattern of the other parent can be simply deduced from the pattern in the offspring. We have the tools now to resolve some of the many questions about parentage of various dubious camellia cultivars as well as the parentage of fatherless children! Another important task will be to test the relationships and validity of the various species, particularly the flood of new ones coming out of Southeast Asia.

Finally, tissue culture is a technique which has much to offer the camellia world, and I believe that developing methods to tissue culture camellias is of the highest priority. I have already indicated its use in virus elimination, but there is much more to it than that. All of the genetic manipulation I have talked about

earlier is of no use at all unless real plants growing in the garden can be raised from the manipulated cells, and tissue culture is required for this. Indeed, the manipulations themselves are often dependent on a range of tissue culture skills. Tissue culture methods are being used more and more by commercial nurserymen to raise many different species, even forest trees. Our experience with other plants suggests there will be occasional situations where a camellia will be better propagated by tissue culture methods than the more conventional techniques. But perhaps the most powerful use I can see in the next 20 years lies in the area of what is sometimes called "embryo rescue." When two species that are not closely related are crossed it is quite common to get seed which contains a small, poorly-developed embryo that dies either before or immediately after germination. This has been the problem with many of the crosses made with *Camellia nitidissima*. In such cases it is often possible to dissect out the fragile embryo under sterile conditions and then, by using tissue culture techniques, to grow it into a viable plant when it would have died if left to grow from a seed in the normal way. This approach could be a powerful tool for the more adventurous of our plant breeders where they are attempting some of the more outrageous and difficult crosses in order to develop new lines of breeding. Despite all the power of the molecular techniques, 95% of progress in the range of plants we have available to us in the next 20 years will come, I am sure, from relatively standard plant breeding procedures particularly if the breeder can be helped in successfully making difficult crosses.

The message I wish to leave with you is that in the next two decades science will be throwing up exciting new prospects for horticulturists and plant fanciers. Very few initiatives will be specifically developed for the

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camellia or the camellia grower. However, if we stay alert to what is happening, we will be able to adapt some of these advances to our own purposes. We need to keep ourselves educated about what is happening, be imaginative in thinking about how we might use the information, and be

adventurous in actually getting out and trying things. And it is my personal hope that, by funding camellia research through the Camellia Memorial Trust, New Zealand's camellia fraternity and sorority will catalyze the process. That is what I believe I am seeing in my crystal ball.

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## **SHOW RIBBONS AND OLD FRIENDS**

**Helen Augis**

Today I cleaned closets, the shelves and the drawers;  
I found ribbons in boxes set on the floor.  
There were red ones and blue ones and white ones, too,  
Green ones and gold ones,  
Plus a rosette or two.

I found certificates yellow with age;  
I thought of old friends as I turned each page.  
A few have departed and some are still near—  
So many memories to always hold dear.

I thought as I cleaned, "I'll toss these away."  
"But how can I do it?" I heard myself say.  
Then, ever so carefully, I put them back on the shelf;  
I realize now they are far better than wealth.  
A part of my life is tied up in these treasures.  
I'll keep them forever, they bring me such pleasure.

## **DID YOU KNOW?**

### **SENIOR CITIZENS ARE THE BIGGEST CARRIERS OF AIDS:**

Hearing Aids  
Band Aids  
Roloids  
Walking Aids  
MedicAid  
Government Aid

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## OUR CAMELLIA GARDEN

Jim and Jackie Randall

Our home is located on the south side of Sacramento in an area known as the "Pocket." The name is derived from being located in a convex area formed by the Sacramento River, which is only three blocks away. Our lot is just in excess of 1/4 acre. Our back yard is highlighted by trees, our "game room," lanai area and the camellia shade house.

Most of our camellias are in containers ranging in size from one gallon to half wine barrels. Our current

The camellia shade area, located between our house and the game room, measures about 24 by 26 feet with a pea gravel floor. The 45 percent shade cloth allows maximum sunlight for good growing. The area has overhead sprinklers installed and are used for cooling and humidity only. All container plants are hand watered. We have another small shade area (6 by 24 feet) where the seedlings reside. Our space is limited and dictates that for



camellia inventory consists of about 230 japonicas, 55 reticulata hybrids, 30 hybrids, 10 sasanquas and about 30 seedlings, most of which were originated by Jack Mandarich. We have about twenty japonicas and reticulatas in the ground that are inter-planted with sasanquas and azaleas. Some of our favorite sasanquas are 'Jean May', 'Tanya' and 'Yuletide'. Azaleas are used extensively as the front and back yard landscaping. We also use container azaleas and camellias at our front entrance, rear patio and lanai area for additional color. A dozen roses also do nicely in our front yard along one of the lot lines.

each large new plant we obtain, something must go. We are presently trying to find room to put a few of the larger plants in the ground.

We really enjoy showing our camellias. The first bloom we entered was in the 1970 Sacramento Show. In 1975 we began participating in all the Northern California shows and also in recent years we have tried to make one Southern California show each season. Traveling to all the shows with their accompanying lunches and dinners are great fun, but the best aspects of our hobby are the people and the friendships you establish through camellias.

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## BUDDING AND DISBUDDING

Marilee Gray

One of our avid, new society members called recently to ask about disbudding camellias. Having grown camellias for a number of years, she was accustomed to disbudding, but she had become aware that the more experienced members were following certain rules when disbudding. Her questions have prompted this article that is intended for our newer growers, for disbudding is, indeed, an important and necessary part of camellia culture for anyone who wishes to enter camellia show competition. All other things being equal, disbudding is the difference between blooms that are left on the table and those that are sent up to the head table.

Before we discuss disbudding rules, let us consider some factors that affect bud-setting. Blooms are, first of all, nature's way of perpetuating the species. If, as sometimes happens, a plant is blooming out of season, it is an indication that that plant is experiencing stress, and that stress is producing the abnormal bloom in an effort to reproduce before the parent plant dies. Conversely, if life is too good and too easy, a plant may fail to set buds because it has about decided that it is immortal and needn't reproduce. With camellias, the 'Elegans' family is notorious for failing to set buds if the plants are extremely happy growing in some very shaded and protected location. Their foliage will be lush and the richest, darkest green, but their buds will be few or non-existent. The remedy is simply to expose those plants to more light, particularly during the bud-setting time, so that they are goaded into a reproductive mode. The light level is critical; all camellias except sasanquas are considered shade plants, but too much shade pampers too much. The plant that blooms the best is the one that receives the maximum amount of light that it can tolerate without

damage, even though this may sacrifice something in the luxurious green of the foliage.

The bud-setting tendency of a variety is determined by its genes, and it is one of the considerations in the assessment of seedlings. We would like our camellias to set an appropriate number of blooms that, according to the size of the bloom, would be neither too generous nor too stingy. 'Silver Cloud', for example has such a large bloom that its size and weight would indicate that there should be only one bloom per tip. However, this variety sets clusters of buds at the tips, and is the variety that I find the most difficult to disbud. Indeed, were the seedling that became 'Pink Perfection' found today, it might have been relegated to the understock pool because of its overly excessive bud set; the majority of its buds are naturally dropped to leave still far more buds than would be optimum. Oddly enough, a near look-alike, 'Ave Maria', has always been one of my most sparsely blooming camellias; it has many budless tips, and it seldom needs a bud removed.

Atmospheric influences on bud-setting are dramatic. I have always maintained that everything that was considered normal flew out the window when St. Helens blew up in 1980. A major volcanic eruption sends ash miles into the atmosphere, and it becomes, for a time at least, a conditioning factor for the seasons and, ultimately, decrees whether we will have an early, a late, or a normal blooming season. The screening effect of major volcanic eruptions, such as Washington state's St. Helens and the Phillipine Mt. Pinatubo in 1991, and even the Los Angeles fires of August 1993 delayed the bud set and development and resulted in some rather late blooming. As a consequence, we have seen seasons where the blooming began abnormally

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early, as in 1993, only to have the screening effect call a temporary halt so that the end of the season was later than usual. While this is disconcerting to have this happen with our camellias, just imagine how devastating this might be if the crop being affected was one of food on which our existence and livelihood depended!

On the other hand, the Kuwaiti oil fires in 1991 produced a much different effect. The first effect of atmospheric hydrocarbons is to confuse the reproductive system. This confusion was evidenced by an incredible amount of cluster budding in those late-setting varieties that year. Varieties, such as 'Harold L. Paige', that normally set but one bud per terminal, frequently set as many as eight or nine buds instead, and the late-blooming varieties were very late. Never before or since then have we seen anything so extreme as the budding abnormality that year. All of these tips I eventually pruned off because the wood was unattractive from all the heavy disbudding scars. Clearly, our camellias are more responsive to atmospheric influences than we generally recognize.

I begin disbudding as soon as bloom buds are distinguishable from the growth buds and there are more bloom buds than desired. Logically, it seems expedient to divert the plant's energy into only those buds that will remain. This means that I will begin disbudding before a plant may have set all of its buds and will need to check it again. This presents no problem for me, as I enjoy inspecting my plants closely as I disbud. Some people, however, prefer to wait until all the buds have appeared, so that a plant need be disbudded only once during the season.

Sasanquas, because their blooms are so short-lived and so easily shattered, are not disbudded at all. Their profusion of bloom makes up for the short life of each bloom. The unusual, rare species are similarly

treated. However, the japonicas, reticulatas, and the hybrids that are small or larger (two and one-half inches or more in diameter) should best be reduced to one bud per tip. The miniatures of these species that have bud clusters should have, at least, the interior buds removed to reduce the congestion and allow the space needed for the remaining buds to open.

A variety's genes control the tendency to set buds down on the stem at several leaves on the new season's growth. If the caliper of the stem is adequate to support the weight of the blooms, some growers opt to allow a second bloom on the third or fourth leaf down from the tip. This will sacrifice something in size for each of the blooms, however. The expected size of a variety is not necessarily correlated with weight; 'Nuccio's Carousel' and 'Royal Velvet', for example, are large blooms that are not particularly heavy, while a medium-sized 'Debutante' is quite weighty. Those that are heavy, regardless of size, probably should not be allowed a second bud per stem unless the branch is very sturdy, or the mass of the two blooms will leave the branch with a permanent droop.

The situation with 'Kramer's Supreme' is a bit different than with most. This variety tends to grow vigorously and set a bud that appears to be a terminal bud. However, it soon sends out another vigorous growth spurt and sets another terminal bud. Now there are two buds widely separated on a single stem with the tip bud being younger and inclined to bloom later. Since I gib, I often will leave both of these buds. The tip bud will be gibbed so that it will bloom first and allow the stem to be cut back to the second bud before it blooms.

Ideally, spring pruning has created the necessary space to allow each bloom to open without restrictions. However, the new season's growth may have positioned a bud where there is not sufficient space for it to



open, and clothespins on the leaves cannot pull it into open area. The first rule of pruning is to remove all buds that have an impossible space problem, so that all the energy they would have received is diverted to make the remaining buds more substantial.

If there is but a single bloom bud per tip, it will be on the outside of the growth bud and opposite the last leaf; this is the ideal situation. If, however, there are two buds per tip, the second one will be located between the growth bud and the leaf. This is a less desirable position because, even though the growth bud remains dormant and fairly small during the blooming season, the angle between it and the last leaf offer a constricted angle in which the base of the bloom must open. Rule two would have the preferred bloom placed opposite the last leaf. Again, depending upon the tendencies of the individual variety, this outside bud may be the smaller of the two buds. If so, it may appear to be the less desirable of the two. In such cases, I make individual assessments to determine whether size or position is more important in each case. Obviously, if more than two buds are present per tip, the excess would be removed to still leave only the one most-terminal bud.

One very successful competition grower would disregard the previous

rule and choose to leave that bud that will open in the more downward-facing position. His reasoning follows that, since camellias bloom in our rainy winter season and rain quickly destroys fresh stamens, those buds facing downward will better survive the rain with fresh, dry stamens. A good example of this can be seen in 'Tomorrow Park Hill'. Since it produces heavy blooms on frail stems, it naturally tends to hang face down. Its blooms remain fresh and winning while blooms taking rain in their faces quickly become weathered and old.

Another competent grower chooses to leave the larger of the blooms, regardless of their position on the stem. If, however, the goal is to extend the blooming season as much as possible, then it might be advisable to vary the selection and leave the larger bud on some tips and the smaller on others.

Obviously, if the larger bud is not also the outward and downward-facing bud, some compromises have to be made. You need to decide which is the most important criteria for each particular situation. That, oddly enough, brings us down to this conclusion: When disbudding, you can justify about anything you do with one rule or another. The important thing is that you do disbud and give your blooms a step up toward the head table.

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## HOOKED ON WHITE?

Leone Summerson

Perhaps I am hooked on white. My camellia friends seem to think I am. I've been trying to go back in time to determine when my love affair with white began.

My first vivid remembrance of the color white was when my paternal grandmother made a white dress for me. I remember it vividly. I was six years old and, when I wore that dress, I felt like a child in Fairyland! My next real remembrance of the color white was when I was in college. I dated a guy who had a thing about white. I had a white dress which he liked, and every time I went out with him he wondered why I wasn't wearing that dress. It was a good thing he liked the dress—I was too poor to have much of a wardrobe! My next and most important remembrance of white was, and is, white camellias!

When we bought Dr. Clark Hubbs' home in Glendale, we discovered a number of fine old camellias. We bought the property in March, and it was cold and wet. I remember seeing a beautiful white flower in front of the house. Later I learned it was a 'Shiro Chan'. Dr. Hubbs was a camellia hobbyist and I understand that he was just a really great guy. We discovered a large grocery bag in the garage filled with what I termed "Horse Ribbons"—big, purple ribbons with large centers spelling out the name of the flower and around the center were pleated ribbons followed by streamers. This was quite a change from the ribbons I first learned about at camellia shows. Also in the garage we discovered a number of copies of *The Camellia Review*. I devoured them eagerly.

The following year I saw a notice in the newspaper about a show at the Arboretum. Armed with three 'Alba Plena', one 'Ko-Gyoku', one 'Setsugekka' and one 'Jean May', I set off for the Arboretum. The show was in the downstairs room. A lovely lady by the name of Blanche Groenveld

greeted me and inquired if my flowers were gibbed. I said, "What's that?" She took me to the proper section to place my flowers, and I spent much time arranging those 'Alba Plena'—for I had read in *The Camellia Review* that they needed to match.

Someone asked if I would clerk and, not knowing what was expected of me, I said, "Yes." After the show I found that we had won Best Three Medium Japonicas and a blue ribbon with 'Setsugekka' and one for 'Ko-Gyoku'. I drove home in a fog. Hooked? You bet! My husband could scarcely believe me when I told him my story and I'm not sure he really did believe until we went to the show the next day. I still cherish the silver bread tray we won and I still use it. I frequently bowed to that nice 'Alba Plena' plant.

When we moved to my present home we planted an 'Alba Plena'. Yes, I know it shatters! It has yet to produce a prize-winning bloom. Maybe it needs to age a bit. Perhaps it likes cold better and cold it was in our previous, canyon home. Mel Gum nicknamed the place "Pneumonia Gulch"—and it truly is a cold area.

When we moved to my present home there were no camellias—and miserable soil. In fact, there were no plants of any kind except a couple of cacti. The soil is still not very good.

There are so many beautiful white camellias. For starters there is 'Lily Pons'. Who can deny its fragile beauty. I just wish our Creator would have added a dab of glue to hold it together! Then there is 'Swan Lake' (a thing of beauty), 'Ragland Supreme', 'Ivory Tower' and, of course, my very favorite, 'Elegans Champagne'. How about 'Man Size'? Hody Wilson had to have had tongue in cheek when he named that one! Yes, I do love white flowers—but I also love pink and red and variegated.

If you are lucky enough to have

white azaleas, you can always see them after dark even though you have no outside lights on. I often step outside just to see them when they are in bloom. White camellias also show up nicely in the dark.

A few years ago, perhaps two, there was a white category in the show. This was at Descanso Gardens. I had suggested that category any number of times. I believe our Editor, Mel Belcher, won with the best white that year. It pointed up the often forgotten flowers. Why not have a category for best white one year and best red another year, and so forth. It might generate some interest and a bit of competition.

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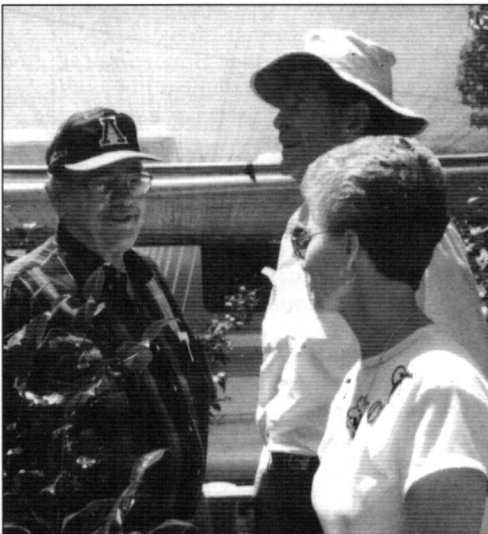
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*Above: Touring Bob and Delila Zimmerman's day lily acres!*

*Left: Jim McQuiston, Mary Kay Mittag and Mel share a chuckle about camellias.*

*Below: "Up close and personal"—Marilee shows Scottie Illes about growth buds (or bugs?)*



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# OBSERVATIONS, IDEAS AND MEMORIES

Grady Perigan

Referring to Marilee's Gray's article, "Exhibiting and Judging the Unlike Trays of Three," *The Camellia Review*, Vol. 55, Issue 3, Page 11, I feel that her suggestion on proportion is very timely. I also agree with her that judging the size of the flower at the time of the show rather than using the smaller of two sizes from *Camellia Nomenclature* is appropriate. I also agree that the choice of the judging team is important. When we introduced this category several years ago we tried to use a team that had artistic talents, if possible, and not send those choices up for voting by everyone. I believe that we destroy this concept when we allow everyone at the show to vote whether they are judges or not.

I agree that we should encourage new members to learn to judge, but I think that they should work with a team of two experienced judges. As Marilee mentioned, this is a difficult category to judge. Consequently, I think that the results should not be determined by voters with little or no experience. If it is thought that we should give new people more experience, possibly they could vote on singles. I have noticed that the voting on the miniatures and small categories has not been up to par in the last few years. As I have worked at the voting table, I have observed that most non-experienced judges will vote for size and color alone, neither of which is difficult.

It is my idea that trays of three and trays of five should not be judged by inexperienced judges. The choice of judges for these categories should be given careful consideration. Possibly all multiple categories should be judged for Best and Runner-up by only two teams. We did it this way for many years. This would help alleviate having to use inexperienced people at the head table because of a shortage of people.

I have helped set up shows and served as a judge for 35 years. Art Krumm was an expert show chairman for Temple City Camellia Society for many years, and I learned many successful things from him. Many of his innovations are still being used, e.g., covering entry cards at the head table to hide personal handwriting, stickers denoting "Best," "Runner-up" and "Court of Honor" on the entry cards, special buckets for filling cups, templates for placing cups and "Also Ran" stickers. Two of his innovations I think would still be helpful. One relating to Head Table Judging would be to have the judges vote by teams. This would allow each judge a chance to closely peruse the blooms before the next team is called. At present we call everyone at once and this creates a pile-up. When a large group of flowers is being judged, it is very difficult for the judges to go back to review the first ones on the table because of the pile-up behind.

A second innovation of Art's that I think is a good idea is that he would award trophies in accordance with the number of blooms entered. If there were very few entries, only a Best was awarded. If there were a larger number, possibly a Runner-up would be awarded. Courts of Honor were allotted according to the number of blooms entered in each section, e.g., several hundred blooms in a large section might receive two or three Courts of Honor. A smaller group may not have received any Courts of Honor. Many shows now allot such honors for each category. I have seen many cases where there were only four blooms in a category and three of the four received a trophy and, in a category with many blooms, there would be the same number of trophies awarded.

I fully agree that we all try for improvements to make better shows, and this is the reason I wanted to share my ideas.

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# REMEMBRANCE OF THINGS PAST

Bill Donnan

The shadows are lengthening for me—my twilight is here, and so I would like to conjure up memories of bygone days in this wonderful hobby of camellias.

I can recall vividly when I became “hooked” on camellias. I had a few camellia bushes at the home we had purchased in Chapman Woods, and I took four blooms to enter in the Temple City Camellia Society Show. I came to the Arboretum with my camellia blooms in a flat Olympia beer carton. I was a little ashamed of my modest equipment since some of the big show exhibitors had large special wooden varnished trays with brass handles. Also, the show chairman had arranged to have uniformed Boy Scouts ready to help exhibitors bench their blooms. This was in the days when Temple City had a camellia festival and a camellia parade with small camellia-festooned floats. In any case, I won a red second place ribbon and two yellow third place ribbons! I still have these ribbons along with a certificate from the Temple city Camellia Society attesting to my winnings.

Some of the finest camellia shows in the early days were the ones held out of doors at Descanso Gardens. The show benches were set up along a path through the camellia gardens and the live blooms on those bushes often rivaled the ones being exhibited. One year this outdoor show was held in a rainstorm and judging that show was a monumental task.

One camellia season, Bill Goertz, Frank Reed and several others decided to enter some blooms in the Royal Horticultural Society Camellia Show in London, England. They cut some blooms, packed them carefully and set them airmail to the Show. These blooms took some prizes in the London Show.

In those early days there were other rules and niceties about our camellia shows. For example, every exhibitor was given a number by the Southern

California Camellia Council and the exhibitor kept that same number each year. I recall that for many years Ed Kern was the “Keeper” of the exhibitor list, and he would be there at the door of the show checking off each exhibitor’s number as he or she signed in.

At the Pomona Valley Camellia Society Show they used to give a gift to each exhibitor. I still have a blue ashtray with a white camellia drawing fired under the glaze which was the gift for exhibitors.

In the “old days,” it seems that the dinners held after the show on Saturday were much nicer. In those days all the women came in long gowns and many wore furs or stoles. The men were always in their best black suits! When it came time to read off the various show winners, it seems to me that Fred Hamilton from Santa Maria would always win one or more of the best reticulata prizes with ‘Mutancha’. One time I asked Fred how come he managed to win so many prizes with ‘Mutancha’ and he said, “I have five ten foot high plants of Mutancha’ grown in the ground, and I can always pick a winning bloom. So, if you want to win a show prize, start with five plants of the same variety.”

Another little “trick” for winning was passed on to me one night by Colonel Frank Reed. I had purchased my raffle tickets and was about to deposit them in the squirrel cage when he said, “Don’t do that now. Wait until the last minute to deposit your tickets. If you do that, they will either be on the top or on the bottom, not in the middle, when they open the cage. Sure enough, that night I won two plants and since then I have always waited until the last minute to deposit my tickets!

The Society often sponsored a dinner for visiting camellia tour groups from New Zealand or Australia. However, one of the finest dinners I can remember was a dinner held at the Brookside Country Club in 1978 to honor Bill and Barbara

Woodroof. It was the 30th anniversary of the publication of *Camellia Nomenclature* of which Bill Woodroof was the Editor. Camellia hobbyists came from all over California and from Texas, Louisiana and the Southeast for this event. It was at that time that the Woodroof Hall of Fame Award was established.

In the "old days" when the Southern California Camellia Society was really thriving, *The Camellia Review*, which started in 1940 with a postcard, had blossomed and, by 1950, had become an eight-issue per year magazine. However, by the camellia year 1959-60, Volume 21 had regressed to six issues per year and in the camellia year, 1982-83, Volume 44 had regressed to four issues per year.

While membership in the Southern California Camellia Society has dropped considerably, I believe that some of the blame can be attributed to the abandonment of the affiliate membership in the Society. In the early days of the Southern California Camellia Society, its Board of Directors encouraged the formation of other affiliate societies. This is how all the other camellia societies in California were started. They became "affiliate members" of SCCS and, as such, they received *The Camellia Review* and also

the periodic publication of *Camellia Nomenclature*. Their membership dues were 50% less than a full SCCS membership. The Potomac Camellia Society in Washington DC. was also an "affiliate" member. At that time we had a total of nearly 1900 members and were a much stronger entity than we are today. "Affiliate membership" was abolished about 1975.

Membership in the Southern California Camellia Society Board of Directors used to be an honor and a reward. Now it is hard to find people willing to serve. The Presidency was always a signal of honor. Now people are reluctant to assume the mantle.

It is always the province of the old hands to call attention to the "good old days," and I will venture to declare that we had our problems then as well. Also, I believe that some of the newer innovations injected into the hobby recently, such as the Judges' Symposium, Garden Visits, 7:30 p.m. seminars at the monthly meeting and camellia talks at the Arboretum serve to enhance the hobby and will attract new members.

In closing, I fondly hope that the new ways of doing things will revitalize the Society and bring it back to the glories of the past.

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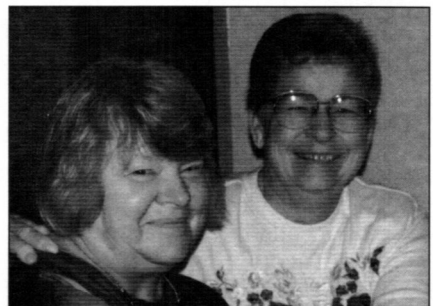
*Above left: John and Sonia Movich host a garden tour.*

*Above: Elsie Hughes and Jean Pursell admire the winners at Camellia-Rama.*

*Center: Here are the Judges: Marilee Gray, Jim Wilkin and Sonia Movich.*

*Below left: Mel Belcher shows Bob Zimmerman and Frank Williams some of the finer points of pruning.*

*Below right: "Best Friends"—Marilee and Dorothy Christinson.*



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# THE BASICS OF FERTILIZING CAMELLIAS

Marilee Gray

Camellias are so easy to grow that many people claim that their camellias are beautiful and productive even though they receive no special attention except watering through the dry seasons. Yet others, who are in the conscientious, attentive gardener classification, despair because camellias are so difficult to grow. Their dead and dying camellias attest to their frustration. Why this disparity? The most likely culprit for the latter is their fertilizing program, for camellias survive better on neglect than on too much attention, particularly where fertilizers are concerned. The attentive gardeners, failing to understand the feeding needs of camellias, smother them with tender loving care and succeed only in killing them. An understanding of the characteristics, the likes, and the dislikes of camellias will establish a few basic rules to permit effective and safe fertilizing.

Consider first the nature of camellias: they are acid-loving, surface-rooting, and light-feeding plants that have both distinct growing and dormant periods. These characteristics dictate the three critical factors that must be considered whenever camellias are to be fed: 1) the type of fertilizer, 2) the amount of fertilizer, and 3) the timing of the particular fertilizer. A violation of any one of the three can result in a lethal situation.

**The type of fertilizer:** Like most shade plants, camellias are also acid-loving plants. Their preferred acidity is something in the 6-6.5 pH range (7.0 pH is neutral); therefore, a suitable fertilizer must have an acidic reaction. They are light feeders, preferring something in the 5-7% nitrogen range for a growth-season fertilizer. This is a meager diet when compared to most fertilizers; lawn fertilizers, for example, contain roughly 35% nitrogen. There are a number of commercial fertilizers that are

identified as suitable for "azaleas, camellias, rhododendrons and other shade and acid-loving plants." Gro-Power (5-3-1) is a similar product that is non-specific for shade plants. All of these products are water-soluble and granular in nature. As such, they have an inherent danger, particularly here in Southern California. Bear in mind that it is the available nitrogen that produces growth, but it is that same nitrogen that will burn if it is present in excess. Therefore, if a heat wave hits shortly after the camellias have been fertilized, the temperature will require that the plants be watered more frequently. If one of these water-soluble, granular types has been used, the more frequent watering will, unavoidably, dissolve and feed the fertilizer at a faster rate than intended. The light-feeding camellias may be severely damaged or killed. To avoid this scenario, it is suggested that such products be used at a rate that is one-half of the recommended dosage to reduce the amount of available nitrogen that can be present at any one time.

Probably all of the commercial growers and most of the amateur hobbyists avoid this danger by using cottonseed meal, a natural organic product that is perfectly suited to camellias. Its per cent nitrogen-phosphorus-potassium content designation is 6-3-1. The beauty of cottonseed meal is that the nitrogen is contained in complex organic molecules and is not available to the plant and is not, therefore, capable of burning the roots until bacteria found in the soil have digested the meal and rendered the nitrogen into a usable form. The digestion process increases as the soil temperature increases, but it usually proceeds at such a pace that the roots survive heat spells without fertilizer burn.

A third growth-season fertilizer that is used by a few hobbyists is a

*\* See Nomenclature*

product called Miracid. Its nitrogen content is much higher than that considered safe for camellias in Southern California (30-10-10), and caution is recommended. Initial studies have shown that it should only be used at 1/2 T per gallon of water (one-half the recommended amount) and only three to five times during the growing season at two to four-week intervals. Its use should be terminated whenever the foliage becomes excessively large for that variety, an indication that the plant is feeding heavily and is precariously close to becoming over-fertilized. However, its use has been deemed advantageous, particularly in areas where the water and soil are alkaline and unsuited to camellias.

What have been discussed up to this point are fertilizers that can only be used during the growing season. There are other fertilizers that are suited to dormant-season use. The purpose of dormant-season fertilizers is to improve the quality of the blooms; as such, they are used commonly by growers who exhibit camellias; but they are not necessary for the health of the camellia plant. These bloom-enhancing fertilizers have little or no nitrogen and have content designations of nitrogen-phosphorus-potassium of 2-10-10, 0-10-10, or some such formulation with relatively little nitrogen and elevated phosphorus. Here are some examples: Hi-Bloom is a liquid 2-10-10 product; Flower Power is a dry 2-10-10; Super Bloom is a liquid 0-10-10. Studies have shown that the low-nitrogen products are generally more effective than the no-nitrogen products. The effect of phosphorus is seen in the increased brilliance and intensity of the color of the bloom.

The quantity of fertilizers: The rule of thumb that provides a margin of safety is to use only one-half of the recommended amount, regardless of the product being used. For the granular types and cottonseed meal this becomes about 1 T/ gallon-sized

plant, 2 T/2-gallon plant, 3 T/3-gallon plant; a tight fist-full for the 4 or 5-gallon plant; and proportionally more for the larger pots and those plants in the ground. Note that the amounts have been given by the pot size; however, if the camellia has been recently potted up, adjust down the amount used. Likewise, since the leaves are the manufacturing stations, if a plant has relatively few leaves for its size, disregard the pot size and use substantially less fertilizer. The varieties of camellias classified as non-reticulata hybrids tolerate less fertilizers than the other camellia species; their suggested feeding rate is one-half of whatever would be given to another plant of that size.

*\* South Seas Blue Dotted*

If the liquid dormant season fertilizers are used, apply the same one-half rule and use 1 T/ gallon of water at two to four-week intervals during the bud development and blooming period.

When to fertilize: The correct timing of fertilizing is all-important and is determined by the dormant and growth seasons. Many gardeners fail to understand the significance of these seasons and damage or kill their plants by doing the right thing but at the wrong time. During the seven months from September 1st to April 1st, the time when camellias are developing their buds and blooming, camellias are dormant. This time frame will vary, depending upon the specific variety and the season. If a variety is an early-blooming variety, it tends to go dormant sooner than most; if the season is early, all of the camellias may go dormant sooner than usual. Dormant camellias are not receptive to fertilizers that promote growth; to use a growth fertilizer during this time would be injurious, if not deadly.

*0-10-10 0-10-10*

When camellias have bloomed and the growth buds begin to lengthen and feather, they are signaling the beginning of another growth phase.

Anything labeled as a camellia fertilizer, Gro-Power, cottonseed meal, and Miracid are all growth-inducing

fertilizers and are to be used only during the growing season—usually from April 1st to September 1st in Southern California. As before, these dates may vary considerably, depending upon the variety and the season.

The first growth feeding is tied to the onset of new growth. Generally two more feedings follow at six to eight-week intervals, provided the temperatures are not excessive. If a heat wave coincides with a feeding time, delay the feeding until the temperatures have moderated. Pushing for growth during a heat wave only increases an already stressful situation.

It is generally advisable not to feed a growth fertilizer too close to September 1st. Instead, plan to feed far enough in advance of that date so that the particular fertilizer used will be fairly well consumed by that time and then switch to a dormant fertilizer, if desired. If the size of the developing buds leaves any question as to whether or not another feeding of a growth fertilizer can still be given, play it safe and switch to one of the dormant fertilizers instead. Be observant and adaptable and apply fertilizing schedules according to the season, not the calendar.

A number of variations on a basic fertilizing program can be tried. Camellias show a heftier flush of growth if the initial feeding is one of fish emulsion (1 T. of the 90+% concentration per gallon of water). Fish emulsion is a 'hot' fertilizer that reacts quickly and can only be safely used early in the season when heat would not be expected. This can be followed in two to three weeks with cottonseed meal at six to eight-week intervals. Additionally, better growth and blooms result if, instead of straight cottonseed meal, a mixture of ~~four~~ parts cottonseed, one part blood meal, and one part chelated iron is used. Such an iron-containing mixture prevents anemia and gives the leaves a rich green color; it also produces more radiant colors in the blooms. If a

camellia shows anemia (the leaf veins are a darker green than the pale color between the veins), it must be corrected with feedings of a chelated iron product before any growth fertilizer is used. Repeat the iron treatment, as necessary, until a healthy green color is restored.

Apply dry fertilizers evenly around the drip line and use water to drill it through the mulch material. Cottonseed meal can also be chucked into the side of a pot and watered lightly to form a hard cake. This cake will then break down slowly, and watering will provide an even, slow feeding.

Liquid fertilizers or those that are dissolved in water before using can readily be applied with watering if a proportioning siphon is used at the faucet. Each gallon of solution to be diluted contains the amount of fertilizer that will be dispensed; i.e., when using a 1:15 proportioner, each gallon of concentrated mix contains the fertilizer needed for 16 gallons of water with fertilizer.

Here are some general fertilizing tips. Do not fertilize a thirsty plant; it should be thoroughly watered the day before it is fertilized. Do not let a recently fertilized plant go dry; burning will likely occur. If using liquid fertilizer solutions, add portions until the solution drains from the pot holes.

This has been a brief discussion of fertilizing camellias for the beginner. Let me add one more bit of advice. You would not change the cart axle if it isn't broken; neither should you change your camellia culture if your plants are healthy and are producing good blooms. If you are winning, disregard all of this and stay with your winning ways!

## PASSINGS

Ralph Bernhardt  
Mildred Murray

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# PACIFIC CAMELLIA SOCIETY SHOW

Los Angeles County Arboretum

December 3-4, 1994

## Japonica—Large

Best Single	'Easter Morn'	Jack & Anne Woo
Runner-up Single	'Carter's Sunburst Pink Variegated'	Bob & Alice Jaacks
Special Culture—Best Single	'Elegans Champagne'	Sergio & Elsie Bracci
Special Culture—Runner-up	'Royal Velvet Variegated'	Bob & Alice Jaacks

## Japonica—Medium

Best Single	'Alta Gavin'	Milt & Marian Schmidt
Runner-up Single	'Jerry Donnan'	Roger & Lavinia Treischel
Special Culture—Best Single	'Wildfire'	Bob & Alice Jaacks
Special Culture—Runner-up	'Nuccio's Jewel'	Leone Summerson

## Japonica—Small

Best Single	'Ave Maria'	D. T. Gray Family
Runner-up Single	'Kiku-Toji Pointed'	George & Frances Butler
Special Culture—Best Single	'Tama Electra'	Sergio & Elsie Bracci
Special Culture—Runner-up	'Irene'	Sergio & Elsie Bracci

## Japonica—Miniature

Best Single	'Little Slam Variegated'	Sergio & Elsie Bracci
Special Culture—Best Single	'Kewpie Doll'	D. T. Gray Family
Special Culture—Runner-up	'Ellen Daniel'	Al Taylor

## OPEN CATEGORIES

### Japonica

Best Tray of 3 Medium	'Tama Americana'	George & Frances Butler
Runner-up Tray of 3 Medium	'Yuki-Botan'	Jim Emmons
Best Tray of 3 Boutonnieres	'Ave Maria'	Sergio & Elsie Bracci
Runner-up Tray of 3 Boutonnieres	'Shala'sBaby'	Sergio & Elsie Bracci

### Reticulata or Reticulata Hybrid

Best Single	'Queen Bee'	Bob & Alice Jaacks
Runner-up Single	'Valley Knudsen'	Bob & Alice Jaacks
Best Tray of 3	'Betty Ridley'	Jack & Anne Woo

### Non-Reticulata Hybrid

Best Single	'Buttons 'N Bows'	Leone Summerson
Runner-up Single	'Freedom Bell'	Bob & Alice Jaacks
Best Tray of 3	'Garden Glory'	Jack & Anne Woo
Runner-up Tray of 3	'Delores Edwards'	Sergio & Elsie Bracci

### Species

Best Single	'Shibori Egao'	Bob & Alice Jaacks
Runner-up Single	'Rosette'	D. T. Gray Family

Best Tray of 3	'Yuletide'	Dave & Alma Wood
Runner-up Tray of 3	'Egao'	Sergio & Elsie Bracci

**Mixed Varieties**

Best Tray of 3	'Carter's Sunburst', 'Nuccio's Jewel' 'Alison Leigh Woodroof'	Bob & Alice Jaacks
Runner-up Tray of 3	'Elegans Champagne', 'Nuccio's Jewel', 'Shibori Egao'	Sergio & Elsie Bracci
Best Tray of 6	'Miss Tulare', 'Elegans Supreme', 'Margaret's Joy', 'Eastern Morn', 'Valentine Day', 'Grand Prix'	Sergio & Elsie Bracci
Runner-up Tray of 6	'Show Time', 'Elizabeth Weaver', 'Nuccio's Pearl', 'Anticipation', 'Midnight Variegated', 'Carter's Sunburst Pink Variegated'	Bob & Alice Jaacks

**Court of Honor**

'Shibori Egao'	Sergio & Elsie Bracci
'Freedom Bell'	Bob & Alice Jaacks
'Rosemary Kinser'	Jim Emmons
'Mrs. D. W. Davis Descanso'	Sergio & Elsie Bracci
'Mrs. Freeman Weis Variegated'	Al Taylor
'Mary Fischer'	Jack & Anne Woo
'Wildfire'	George & Frances Butler
'Yuletide'	Dave & Alma Wood
'Ave Maria'	Sergio & Elsie Bracci
'Little Slam Variegated'	Grady & Helen Perigan
'Shala's Baby'	Sergio & Elsie Bracci
'Harvey Short's Finale'	George & Frances Butler
'Miss Tulare'	Sergio & Elsie Bracci
'Nicky Crisp'	Bob & Alice Jaacks
'Kewpie Doll' (3)	Sergio & Elsie Bracci
'Eastern Morn', 'Pink Diddy', 'Trinket'	Sergio & Elsie Bracci

**INTRODUCTIONS FOR 1994-95**

'Henry E. Huntington'	'Chrissie's Retic'	'Puniceiflora'
'Ruta Hagmann'	'Golden Glow'	'Spring Daze'
'Something Beautiful'		
<i>Fragrant Varieties:</i>	'High Fragrance'	'Koto-No-Kaori'
'Minato-No-Akebono'	'Minato-No-Haru'	'Souza's Pavlova'

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ATWATER GARDEN CLUB AND CAMELLIA SOCIETY: President—Ward Dabney; Secretary—Connie Freitas, P. O. Box 918, Atwater 95301. Meetings: 4th Tuesday of each month, 7:00 p.m. Bloss House, Cedar and First Street, Atwater.

CENTRAL CALIFORNIA CAMELLIA SOCIETY: President—Mary Anne Ray; 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—Glenn Burroughs; Secretary—Fred Dukes, 733 Del Mar Drive, Bakersfield 93307-3843. For meeting dates and times, call Fred Dukes (805)831-4383.

MODESTO, CAMELLIA SOCIETY OF: President—Anthony F. Miranda; Secretary—Sue Kendall, 1505 Gary Lane, Modesto 95355. Meetings: 2nd Tuesday September-May, 7:00 p.m., Memorial Hospital Education Dept., Room 62, 1800 Coffee Road, Modesto.

NORTHERN CALIFORNIA CAMELLIA SOCIETY: President—Larry Pitts; Secretary—Jim Toland, 1897 Andrews Drive, Concord 94521. Meetings: 1st Monday, November-April, 7:30 p.m., Oak Grove School, 2050 Minert Road, Concodd. Final meeting in May is a dinner meeting.

PACIFIC CAMELLIA SOCIETY: President—Mary Simmons; Secretary—Alma Wood, 2434 Allanjan Place, Glendale 91208. 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 Ave., Menlo Park 94025. Meetings: 4th Tuesday October-March, Veterans' Building, 1455 Madison Avenue, Redwood City.

POMONA VALLEY CAMELLIA SOCIETY: President—Mel Belcher; 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—Bob Conlin; Corresponding 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—Dean Turney; Secretary—Catherine Marlar, 4734 Cather Circle, San Diego 92122 Meetings: 3rd Wednesday, November-May, 7:00 p.m., Room 10, 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 Johnson, 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. For meeting times and places call Marilee Gray (909)624-4107.

