

THE
Camellia
REVIEW

A Publication of the Southern California Camellia Society



C. vernalis 'Shibori Egao'

Southern California Camellia Society, Inc.

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

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THE CAMELLIA REVIEW

Mel Belcher, Editor

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CHANGE OF ADDRESS— Notify the Secretary at once (PLEASE!).

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COVER PHOTOS

Front cover—*C. vernalis* 'Shibori Egao'
Variegated form of 'Egao'. Deep rose blotched white.
Medium to large.

Back cover—*C. japonica* 'Elegans Supreme'
Sport of 'Elegans (Chandleri)'
Rose pink with very deep petal serrations.
Large to very large.
W. F. Bray, Pensacola 1960.

Photos by Mel Belcher

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THOUGHTS FROM THE EDITOR

This is Tuesday morning here at The Colony. Tuesday happens to be the day I take out to the curb three “garbage” cans. One is green, one is gray and one is brown. I remember the day when we took out only one can in which all refuse/garbage was deposited. Today we recycle. Into the brown can goes all the garbage that has no value except organic food for bugs, worms and bacteria at the landfill. Into the gray can goes newspapers, plastic bottles, glass material and cans that presumably are re-used. Into the green can goes weeds, tree trimmings and anything green.

I’m writing this not to stimulate your interest in my garbage, but my garbage has stimulated my thoughts on the value of recycling. The future will benefit from our setting aside things today that can be useful in the future.

As Editor of the *Camellia Review*, I sincerely appreciate the vast amount of research done on camellia culture back some half century ago. Much of this work was preserved in the “gray can” and is exceedingly appreciated today. Most any issue of the *Review* has recycled articles of yester year which contain nuggets of wisdom for us to use today.

I don’t want to belittle the valuable and interesting articles written by Messrs. King, Bonds, Bergamini, et al, but this is Tuesday and no telling what today’s “garbage” will be of value tomorrow. Jim McQuiston has done a terrific job of supplying me with articles he has found in his search through old publications. Several of his “offerings” are included in this issue. Thanks again, Jim.

One last overriding thought—this is the beginning of the 2004-2005 camellia season and I’m really looking forward to the camellia shows. One positive thought is that this year we will get to compete with the Braccis.

Good luck to each and every exhibitor!

—Mel Belcher, Editor

NOMENCLATURE NOTICE

Because of a very small number of new camellias introduced since the publication of the 2002 *Camellia Nomenclature*, the Board of Directors of the Southern California Camellia Society decided NOT to print a 2005 Nomenclature. A list of the new introductions will be printed and available for a very nominal fee. Copies of the 2002 *Camellia Nomenclature* are still available for \$10 and can be ordered from David Trujillo, 13265 Catalpa, Etiwanda, CA 91739.

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Someone has said the wise gardener anticipates June in January. It seems to me that camellia growers anticipate January—and February and March and sometimes April—in June! At least that is true in Southern California!

CAMELLIA WINNERS 2004

Don Bergamini
Martinez, California

Here it is almost camellia season again and you want to be prepared with the camellias that win. It does increase your chances to have varieties that the judges like. The usual big winners were 'Junior Prom', 'Miss Charleston Variegated', 'Nuccio's Carousel', 'Red Hots', 'Something Beautiful', 'Emma Gaeta Variegated', 'Frank Houser Variegated', 'Frank Houser', 'Waltz Time Variegated', 'Egao', 'Royal Velvet', 'Man Size' and 'Coral Delight Variegated'.

A few newer varieties that really caught the judge's eye were 'Hot Shot', 'Tango' and 'Island Sunset'. The older varieties that still do well at the show were 'Anita' (1940), 'Herme' (1875), 'Magnoliaeflora' (1886), 'Hishi-Karaito' (1934), 'Mathotiana' (1840), 'Debutante' (1900), 'Glen 40' (1942), 'Ville de Nantes' (1910), 'Tinsie' (1930) and 'Pink Perfection' (1875). These varieties won at least one time in 2004.

Many of the varieties that win were introduced in the sixties. They are 'Betty Foy Sanders', 'Betty Sheffield Coral', 'Black Tie', 'Charlie Bettes', 'Commander Mulroy', 'Eleanor Martin Supreme', 'Elegans Splendor', 'Elegans Supreme', 'Fashionata', 'Grand Prix', 'Helen Bower', 'Ivory Tower', 'Little Red Ridinghood', 'Little Slam', 'Little Slam Variegated', 'Man Size', 'Margaret Davis', 'Maroon and Gold', 'Melissa', 'Miss Charleston Variegated', 'Snowman', 'Tomorrow Park Hill', 'Veiled Beauty', 'Wildfire', 'Black Lace', 'Fire Chief Variegated', 'Francie L', 'Valentine Day', 'Charlean', 'Debbie', 'Freedom Bell', and 'Waltz Time Variegated'. This is a very representative group of winners.

These varieties are from this year's winners. They had to win at least once from the regular classes. I will feature another decade next time. Good luck to everyone on their hunt for silver or,

should I say, crystal.

SINGLES

Large to Very Large Japonicas

| | |
|------------------------------|---|
| 'Junior Prom' | 5 |
| 'Miss Charleston Variegated' | 5 |
| 'Royal Velvet' | 4 |
| 'Tomorrow Park Hill' | 4 |
| 'Han Ling Snow' | 3 |
| 'Carter's Sunburst' | 2 |
| 'Dusty' | 2 |
| 'Elegans Champagne' | 2 |
| 'Elegans Splendor' | 2 |
| 'Grand Prix' | 2 |
| 'Ivory Tower' | 2 |
| 'Katie Variegated' | 2 |
| 'Melissa Anne' | 2 |
| 'Rachel Tarpy' | 2 |
| 'Veiled Beauty' | 2 |
| 16 others with 1 win each | |

Medium Japonicas

| | |
|---------------------------|---|
| 'Nuccio's Carousel' | 4 |
| 'Betty Foy Sanders' | 3 |
| 'Elaine's Betty Pink' | 3 |
| 'Nuccio's Gem' | 3 |
| 'Nuccio's Jewel' | 3 |
| 'Desire' | 2 |
| 'Grand Marshal' | 2 |
| 'Haru-No-Utena' | 2 |
| 'In The Pink' | 2 |
| 'Margaret Davis' | 2 |
| 'Nuccio's Pearl' | 2 |
| 23 others with 1 win each | |

Smalls (Any Species)

| | |
|--------------------------|---|
| 'Red Hots' | 6 |
| 'Hishi-Karaito' | 4 |
| 'Paper Dolls' | 4 |
| 'Ave Maria' | 3 |
| 'Spring Daze' | 3 |
| 'Tom Thumb' | 3 |
| 'Black Tie Variegated' | 2 |
| 'Freedom Bell' | 2 |
| 'Jackie D' | 2 |
| 'Little Babe Variegated' | 2 |
| 'Peggy's Blush' | 2 |
| 'Tama Peacock' | 2 |
| 'Wilamina' | 2 |
| 8 others with 1 win each | |

| | | | |
|--|---|---|---|
| Miniatures (Any Species) | | | |
| 'Something Beautiful' | 4 | 'Snow Chan' | 3 |
| 'Fircone Variegated' | 3 | 'Tata' | 3 |
| 'Lemon Drop' | 2 | 'Katie' | 2 |
| 'Little Michael' | 2 | 'Mathotiana' | 2 |
| 'Man Size' | 2 | 'Mathotiana Supreme' | 2 |
| 'Melissa' | 2 | 'Tomorrow Park Hill' | 2 |
| 15 others with 1 win each | | 10 others with 1 win each | |
| Reticulata and Reticulata Hybrids | | Medium Japonicas | |
| 'Emma Gaeta Variegated' | 4 | 'Nuccio's Carousel' | 7 |
| 'Frank Houser Variegated' | 4 | 'Rudy's Magnoliaeflora' | 5 |
| 'Ruta Hagmann' | 4 | 'Firedance Variegated' | 4 |
| 'Frank Houser' | 3 | 'Wildfire' | 4 |
| 'Linda Carol' | 3 | 'Chie Tarumoto' | 2 |
| 'Miss Tulare' | 3 | 'Jennie Mills' | 2 |
| 'Valentine Day' | 3 | 'Margaret Davis' | 2 |
| 'Black Lace' | 2 | 13 others with 1 win each | |
| 'Harold L. Paige' | 2 | Miniatures and Smalls— Any Species | |
| 'Larry Piet' | 2 | 'Man Size' | 7 |
| 'LASCA Beauty' | 2 | 'Red Hots' | 7 |
| 'Margaret Hilford' | 2 | 'Maroon and Gold' | 4 |
| 'Miss Tulare Variegated' | 2 | 'Fircone Variegated' | 3 |
| 'Sir Robert Muldoon' | 2 | 'Little Babe Variegated' | 3 |
| 'Tango' | 2 | 'Spring Festival' | 3 |
| 'Valentine Day Variegated' | 2 | 'Black Tie' | 2 |
| 19 others with 1 win each | | 'Freedom Bell' | 2 |
| Non-Reticulata Hybrids | | 'Hishi-Karaito' | 2 |
| 'Waltz Time Variegated' | 6 | 'Lemon Drop' | 2 |
| 'Hot Shot' | 5 | 'Little Michael' | 2 |
| 'Julie Variegated' | 4 | 'Little Red Ridinghood' | 2 |
| 'Pink Dahlia' | 4 | 'Night Rider' | 2 |
| 'Lucky Star' | 3 | 'Pink Perfection' | 2 |
| 'Nicky Crisp' | 3 | 'Something Beautiful' | 2 |
| 'Tom Perkins' | 3 | 18 others with 1 win each | |
| 'Buttons 'N Bows' | 2 | Reticulata and Reticulata Hybrids | |
| 'Debbie' | 2 | 'Frank Houser' | 7 |
| 'Island Sunset' | 2 | 'Frank Houser Variegated' | 7 |
| 13 others with 1 win each | | 'Dr. Clifford Parks' | 4 |
| Species | | 'Emma Gaeta Variegated' | 4 |
| 'Egao' | 5 | 'Valley Knudsen' | 4 |
| 'Shibori Egao' | 4 | 'Francie L' | 2 |
| 'Star Above Star' | 2 | 'Valentine Day' | |
| 4 others with 1 win each | | 9 others with 1 win each | |
| MULTIPLES | | Non-Reticulata Hybrids | |
| Large to Very Large Japonicas | | 'Coral Delight Variegated' | 6 |
| 'Royal Velvet' | 7 | 'Waltz Time Variegated' | 4 |
| 'Grand Prix' | 4 | 'First Blush' | 3 |
| 'Easter Morn' | 3 | 'Julie Variegated' | 3 |
| 'Moonlight Bay' | 3 | 'Lucky Star' | 3 |
| | | 'Tom Perkins' | 2 |

WHY ARE YOUR CAMELLIAS NOT DOING WELL?

Ray Bond
Dallas, Texas

Many camellia growers have problems with their camellias not doing well after they have bumped them up into larger containers. Bit by bit and sometimes faster than that, some or all of them begin to go downhill.

Why is this happening? Ray Bond tells everybody that camellias are easy to grow, but others have said that growing them is tough. Who is right? Are they big sweat or no sweat? I continue to say that the answer is "no sweat."

With anything you plant, that "no sweat" means that you may have to abandon some old habits that may have worked for other crops. Let's look at some of these problems and what we can do about them. Many of these camellia problems may be obvious and are no problem to you, but read my mail or answer my telephone for a week and you will know they have been problems for others.

1. Sun. The sun is bright and hot, hotter in the summer than in the winter. Camellias cannot stand full sun. I suggest at least 63% shade in the summer and at least 40% in the winter. This may be increased in warmer climates and areas of more direct sun. If shade cloth is not available, a grove of trees (pine are best) will suffice and many nurseries use pine trees for shade.

2. Planting too deeply. I cannot preach this one enough, it seems. Camellia roots need air. They need a few roots on the surface of the soil to help them get it. Many nurserymen take pains to cover these top surface roots. This will drown camellias, if it doesn't cause root rot.

3. Soil mix. Camellias need air down in the root area. A tight soil mix with no air spaces can cause drowning or root rot. My recommended soil mix of 20% sharp sand and 80% 2 or 3

year aged pine bark mulch. Some nurserymen throw in about 10% pine bark "nuggets" and that is fine. Pine bark nuggets contain trapped air. Look into a root ball that contains them and you will see roots hanging on to these nuggets very tightly. Add enough dolomitic limestone to this mixture to raise the pH to 6.0. Peat moss should never be used; it fills the pores and air spaces in the soil mix, depriving the roots of needed air. Pine bark contains an agent that retards fungal root rot.

4. Root rot. We have covered the reasons for root rot, now for the remedies. There are two kinds of root rot that affect camellias. The first, *Phytophthora cinnamomi*, affects *C. japonica* and *C. reticulata*. It doesn't affect *C. sasanqua* and *C. oleifera*. Prevent it with a drench with Subdue® once every six months. For mushroom root rot, be sure your soil is clean. Mushroom root rot (*Cylindrocladium crotonariae*) is caused by using creek sand or silt which is contaminated with the fungus. A clean soil mix will fix this problem. This fungus rarely attacks mature and established plants. If your *C. sasanqua* and/or *C. oleifera* appear to have root rot, they are too wet and drowning. See paragraph 3, above and paragraph 7, below.

5. Mixing fertilizer with the soil mix or too much fertilizer. This applies to polyon coated fertilizers, such as Osmacote®, which are released by warm temperatures. When temperatures get hot, these fertilizers can "dump" on the roots and burn them. Camellias should be fertilized from the top, allowing the roots to "eat" as the nutrients are flushed by them from above. Overfed camellias may exhibit severe leaf burn, leaf browning on the older leaves and the younger ones wilt and turn black. If your camellias appear to

wilt, looking like they need water and they seem to be plenty moist, they could be overfed. If possible, repot in soil with no fertilizer in it and flush the plant with fresh water. In any event, try to flush out the fertilizer salts.

6. Tight roots. When plants are bumped from one size container to another, growth problems can appear. Many people, when bumping from one-gallon containers to three-gallon or larger containers wait until the plant in the one-gallon container is almost root bound before they bump it up. This can retard plant growth. A plant can sit for a year or longer in its original root ball with very few roots reaching out into the soil in the larger container. Those outside roots on the plant should be pulled out or cut (about 1/4" deep) into the root ball, vertically down the root ball in several places around the diameter of the ball. Trapped roots look awful to your customer. He starts to put the three-gallon plant into the ground and the soil falls away from the smaller root ball. The customer feels cheated. He paid for a three-gallon plant but received a one-gallon plant, disguised as a larger one.

7. Camellia dieback. Dieback is a disease caused by the fungus, *Glomerella cingulata*. Sometimes it is confused with root rot. A twig of new growth suddenly wilts. Or, a canker appears on the trunk or on a limb. Cut off infected areas down to clean wood. You might want to sterilize your pruning shears with Isopropyl Alcohol (IPA) from your local drug store between cuts, but we have found this to be unnecessary. (I used to carry a spray bottle of IPA on my belt when I inspect my plants.) Infected wood is brown with an orange cast. Die back is spread when contaminated water splashes on new growth or a plant wound, such as a leaf drop wound or a cut in the bark. *C. sasanqua* is

generically more susceptible to dieback than *C. japonica*. Some cultivars are easily infected; some are not. It is more prevalent in humid areas. A prophylactic spray of captan mixed with Cleary 3336 ® (both WP) at a rate of two pounds per 100 gallons is recommended in the spring. Add a little dishwasher detergent as a surfactant (spreader-sticker to break down the surface tension of the water). Spray every two or three weeks, beginning in early April, continuing through May or early June. You may have to spray more often in very humid areas and less in dryer areas.

8. Cold. Plants in containers will give up one hardiness zone as compared to plants established in the landscape. That is, if the camellia you have in the container is rated to zone 7, store it under zone 8 conditions in very zone 7 weather.

9. Rodents. Use the usual rodent poisons and get a cat or two. If you get a cat, give it a warm and friendly place to live feed it enough to keep it around. A cat will gather varmints for you and will shut them down.

10. Scale. Camellias are susceptible to scale attacks, usually tea scale. Use the usual scale eradication remedies and keep preferred hosts for scale away.

11. You tell me. I'll do my best to answer your questions.

I know a lot of this is redundant to what you already know. But, others are having these problems and questions. Sometimes we better understand what we observe when it is put into context. I hope this gives you some sort of context.

Brand and trade names and treatment portions are given for reference only. Consult your State Agricultural and Pesticide agencies for recommended chemicals registered by the State. Always follow instructions on the label.

ABOUT LIGHT

E. C. Tourle
La Canada, California (1953)

It has been said that the most important thing in the world is light. This may be the subject of controversy between botanists, biologists, biochemists, theologians and others, but it is not difficult to accept as fact during the short and ofttimes dark and dreary days of the winter months. Yes, but what does all this have to do with camellias?

If light is essential to all plant life, the growth and growth habits of camellias will be effected by the intensity of light, and to its duration. The purpose of this article is to discuss those aspects.

The temptation is great to discuss also the effect of light on the time of blooming, and the quantity and quality of bud seed and resultant blossoms. An attempt to cover in one article both phases of the subject would confuse rather than clarify.

Moreover, no consideration is being given to the subject of continuous light nor intermittent light, except as incidental to the discussion herein. The effect of intermittent light on plant life leaves many conclusions still to be reached. The same may be said for continuous light, although the topic is thoroughly covered by Dr. Walter E. Lammerts in "The Effect of Continuous Light," etc., appearing in "Camellia Research" by the Southern California Camellia Society and published by them. Refer to that article.

We have read about the lush vegetative growth in Alaska. There, during the short summer, plants grow to almost unbelievable size and with incredible rapidity. The amazing part of it is that this growth occurs in a top soil of but two or three feet above eternal frost! Why is no longer a secret; we know it is due to the long days during the short summers; the answer is light.

Please note that light intensity

during the summer in Alaska is relatively low. Thus it is that the effect of light is due to the duration rather than the intensity.

Absence of light also has its effect. A plant reaching for the sunshine realizes that it must have life-giving light, or it will perish.

The statements above apply to camellias too. The term "shade loving" as applied to camellias should not be taken literally. We know that camellias crowded together in the darker areas of the yard or the lath houses invariably grow spindly and "leggy". On the other hand, plants properly spaced in well-lighted areas grow better branches, and have better color.

Some years ago, I placed a flat of recently germinated seedlings under a bench in the propagating house. There were something over two hundred of these seedlings in the flat, averaging about three inches above the growing medium. Those seedlings which were directly under the edge of the bench were the only ones which had the benefit of strong light, only two or three rows. The seedlings further under the bench had no direct light. The indirect light lessened toward the rear of the flat.

The first change noticed in the appearance of the seedlings was that plants with indirect light leaned toward stronger light in front of the bench. The lean increased as the distance to the direct light increased and the light intensity diminished. Due to lack of space this flat of seedlings was permitted to remain under the bench for a considerable period of time.

When the seedlings were removed from their location under the bench it was found that not only were those at the rear bent further toward the light than those nearest to the light, but that the seedlings in the rear were very

definitely smaller and less developed than those in the front. And, from front to rear the size of the plants became progressively smaller. Furthermore, although the seedlings at the front were of good color, rich green, the color lessened as the rows progressed toward the rear. These rear plants were pale and anaemic in appearance.

There are definite reasons for the difference in size, leaf development, color and behavior of those seedlings receiving strong light under the front edge of the bench and those furthest removed from that light.

During the germination of the camellia seed the first evidence that manifests itself after the cracking of the hard coating is the primary root, or radicle. Where the radicle protrudes from the shell is the growth point of the infant seedling, the pumule.

If you examine this growth point closely, two miniature leaves will be discovered. The pumule with its tiny leaves starts to grow and thrusts its point upward to the light, shortly after the development and growth of the radicle. There the pumule unfolds its tiny leaves, and in the performance of the miracle light is the chief and basic factor.

This small plant grows, fed by the rich cotyledons within the seed. These cotyledons are attached to the radicle and pumule until they have exhausted their vitality. But as it grows, this small plant draws moisture from the medium in which it is growing, up through the root and the stem of the plant to the leaves, where much of the moisture is evaporated through transpiration. But a portion of the moisture is utilized in the growth process.

There are many factors which enter into the processing of raw materials with which the camellia grows. One factor, however, stands out as undoubtedly the most important factor: light.

The light most beneficial to plant life is that derived from the sun. This

solar light in its varying degrees of intensity has many influences on the plants which it affects. We have seen how the diminishing light influenced the growth and development of the seedlings under the bench. There are other influences exercised on plants by the presence or absence of light; the most important of all influences is that light is indispensable to the process by which raw materials consisting of moisture and carbon dioxide are transformed into plant food: photosynthesis.

When light falls upon the green cells of the camellia leaf, chlorophyll which is the green pigment in the leaf traps and absorbs some portion of that light. This trapped light, together with the chlorophyll, water, and carbon dioxide are converted into glucose, the most soluble form of sugar.

Sugar is the basic food of plants like camellias. The sugar manufactured by the plant is not only a food in itself, but also it is utilized to convert starches and other carbohydrates, fats and proteins, nitrogen, phosphorous, potash and other mineral salts into the foods essential to the life of the plant. It is widely believed that the glucose itself is convertible into these other substances.

The point, however, is that light is the basic factor in whatever occurs in nature's processes.

It should be noted that the camellia makes its maximum growth and sets its flower buds at approximately the time when daylight is at its longest duration and at the height of its intensity. The camellia in its growth and development is undeniably a "long day" plant, and light plays a most important part in that growth and development.

Light is so important that young seedlings will live for many months in a growing medium consisting only of washed sand and a bit of peat without added nutrient, and without displaying detrimental effect if given the benefit of strong light for long periods. The reason is that seedlings

with the aid of light manufacture their own food from the moisture in the leaves and the carbon dioxide abstracted from the atmosphere.

Under normal conditions the same processes which occur in the young seedlings take place also in the more mature plants. The difference is that it is less noticeable. Realize the value of that light, and give your plants the benefit of the cheapest but most important single factor in the development of plant life.

(Editor's note: Camellias exposed to too much light may "sunburn" the leaves, due to rapid transpiration. Without water, the temperature in the

leaf rises sharply, and the leaf actually chars. The reason is that camellias cannot draw water up the stem fast enough to replace water lost by transpiration. Without the cooling effect generated by transpiration, the leaf becomes hot.

However, like all chemical activity, the higher the leaf temperature, the more-rapid the growth may happen, until the leaf temperature becomes too water-deprived for photosynthesis.

Each plant will have an individual tolerance, based on leaf and stem structure, and depending also on external moisture.)

From Camellian January 1953

FOLIAR FEEDING OF MULTIPLE ELEMENTS

Frank Griffin

We read with much interest a reprint of an article by Dr. P. P. Pirone on "Feeding Plants Through the Leaves." We fully realize that Dr. Pirone was a great scientist. We also know that he did much work and research in plant feeding, etc. We do not discount his knowledge of the subject he covered in his article. We do know that he did not mention camellias in his article, but covered the field of other plants, some of which may or may not have similar characteristics as camellias.

We agree with the learned Doctor that by applying some nutrients to the leaves, the efficiency of the plant is greatly increased. There is a question regarding what camellia foliage will absorb through its leaf pores.

We agree with the part of Dr. Pirone's article, in which he says "... in the early spring when the soil is wet and cold, or in poorly drained soils, nitrogen is not readily absorbed by the roots even if it is in plentiful supply. Thus, many plants are temporarily short of this very important element at a time when they have the greatest need for it."

There are many so-called rapid growing and miracle growing spray plant foods on the market today. In our humble opinion we believe the majority if not all of them contain urea or Nu-Green as one of their principal ingredients. Several of them are completely soluble chemical fertilizers containing as much as twenty-three per cent nitrogen (largely derived from urea or Nu-Green), up to twenty-one per cent of phosphoric acid and seventeen per cent potash. Many of the claimed ingredients are known to be necessary for good plant nutrition. Nu-Green contains from forty-three to forty-five per cent nitrogen and thereby supplies one of the most important elements. Some of the manufacturers even go so far as to claim that their "sudden-growth" formulas for foliar feeding are compatible with the newer organic pesticides including the highly potent and dangerous insecticide Parathion. This poison should be used with the greatest care only by those who have their bodies, faces, and hands fully protected. We do not recommend the use of so-called pesticides along with

foliar feeding. The leaves have all they can do in trying to assimilate the multiple elements in the many nutrient sprays.

We do know from tests and experience that Nu-Green (urea) is a wonderful supplemental diet for camellias. We know that the nitrogen from this remarkable product may get to the plant through the foliage.

We also know that sugar (carbon) is also taken in by the plant through the foliage when combined with Nu-Green and when used in the ratio of one pound of Nu-Green, and one pound of sugar, to twenty gallons of water. We do not know what percentage of the other elements contained in the high-powered liquid fertilizers is actually taken in by the plants through the foliage. We suspect that most of the good derived from any of the sprays may be attributed to the Nu-Green (urea) content of the product.

We do not believe that any camellia plant will grow and prosper with foliar feeding alone. We believe if too many food elements are forced through the leaves, and the plants get all those elements it may need, that it will discourage root growth. A camellia plant without a good root growth will not grow and bloom as it should, and it will be more likely to be killed from cold and disease. Let us not try to beat nature in the proper feeding of plants by experimenting with unknown quantities as to what a plant will take in through foliar feeding. No foliar spray concocted by anyone can ever be a good substitute for good gardening practices in feeding plants through their root systems.

We do know that urea (Nu-Green), whether used in a foliar spray or on the ground, does wonders for camellia plants. No one may determine the good derived from any method of fertilizing camellias on mere opinion, when it may be determined as a matter of fact.

There is too much that we do not

know about foliar feeding to experiment with fine plants like camellias. The value of nitrogen as produced by Nu-Green has been determined beyond any shadow of doubt with field crops, fruits, etc. The use of ESMINEL (essential mineral elements), as produced by the Tennessee Corporation, has been found to be greatly beneficial in spraying many kinds of plants. This product is widely used in commercial fertilizers, and especially in some well-known camellia fertilizers like Magnolia Brand, as manufactured by Planter-Fertilizer and Phosphate Company of Charleston, S. C., for root feeding.

Multiple element foliar sprays were used in tobacco plant work at North Carolina State College. They were never able to get enough phosphate absorbed to do the plants any good. Some forms of potash were taken in by the plants in insignificant quantities, but other forms were not. It was found that the leaves of almost every plant differs as to what it will absorb. It was established that nitrogen (urea or Nu-Green) is one element that shows itself quickly if sprayed on foliage. We know that Urea or Nu-Green is the best element to get nitrogen through leaves.

Until proved otherwise with camellias, if Nu-Green is used as foliar spray along with other elements, the effects of the nitrogen from the Nu-Green is so sudden that it may appear that the plants are absorbing all the elements.

The field of foliar sprays for camellias needs specific research by scientists who grow and propagate camellias as a specialty, before its actual value in producing good, strong, healthy and bloom producing plants is settled. We will continue to use and to recommend Nu-Green and Sugar as the only foliar nutrient sprays for camellias to be used by amateur growers. Let the scientists do the experimenting with foliar feeding. Let us encourage root growth and apply

our own choice of liquid or regular fertilizer and feed our camellias through the soil.

(Nu-Green is the trade name of E. I. du Pont de Nemours Company for Urea.)

(Ed Note: Chelated Iron 3-0-0 is readily absorbed through leaves.)

From *Camellian* September 1952

WHAT'S NEW IN CAMELLIAS?

Bradford King
Arcadia, California

What new varieties of camellias were introduced the last several years that you may want to add to your collection? Which newer varieties appeared at the shows this season? You need to know "What's New!"

What's cooking? CUPCAKE! This non-reticulata hybrid has many flowers and is a lovely coral pink that shades lighter toward the center of the bloom. Nuccio's Nursery introduced this Saluenensis hybrid in 2002-2003. It is a small single flower that blooms mid-to-late season. The bloom occasionally shows deep coral pink stripes or an unwanted plain pink flower.

I recently purchased a plant when looking for small blooms to make up a mixed tray of three (consisting of a large, a medium and a small bloom of any variety). 'Cupcake' matches color tones very nicely with medium blooms like 'Nuccio's Carousel' or 'Nuccio's Pearl', and large flowers such as 'Tomorrow Park Hill' and 'Tiffany'.

This year I noticed that the non-reticulata hybrid show classes, especially trays of 3 and 5, had limited numbers of entries. 'Cupcake' is an excellent choice for trays as the blooms are like a row of cupcakes ready for "baking"—or, in our case, "traying" and "showing!" On the other hand as an entry as a single flower it may not rise to the head table.

Like many camellia hobbyists I am always on the lookout for blooms that show unique color tones. In this article I would like to point out some camellias that have unique shades of

coral or blue. First, the aforementioned 'Cupcake' is a coral pink saluenensis. Nuccio's has other new reticulata saluenensis hybrids that show coral colors. In 2003-2004 they introduced 'Coral Bouquet' which is worth looking into. I won my 'Coral Bouquet' at the Southern California Society plant raffles and have enjoyed this addition to my collection. The flower is a medium tubular deep pink coral. Other growers at our shows this season have showed it.

Another Nuccio 2003-2004 introduction is 'Hot Shot'. It is an unusual saluenensis hybrid with a bluish deep pink color. It has a medium semi-double flower that blooms mid-to-late season. This medium upright plant can make a showy garden specimen in a shaded garden location.

Nuccio's introduced another coral pink camellia in 2002-2003 called 'Jackpot'. It is a semi-double flat and rounded bloom. The flower is miniature-to-small in size. It is a profuse bloomer mid-to-late season. It too is a saluenensis hybrid. Another such hybrid that has recently become available is 'Island Sunset'. This has a semi-double medium flower from mid-to-late season. The blooms are a rich coral pink that is lighter in the center.

VARIGATION OF OLDER VARIETALS

Many of us have enjoyed the early red blooms of 'San Dimas', Nuccio's has produced a variegated form of this large brilliant red wavy semi-double.

It is an eye-catcher! A recent specimen at one of our shows was an excellent well-variegated entry. The variegation was widely distributed small white markings. The brilliant red with white markings gets my recommendation! On the other hand, I can't recommend 'Wildfire Variegated'. The ones I have seen had just enough white to ruin one of my favorite medium japonicas.

This year Nuccio's released their variegated 'Nuccio's Bella Rosa' and 'Frank Houser'. 'Bella Rosa' and its variegated form are excellent landscape plants, which are commercially available throughout the United States. Nuccio's has made an agreement with Monrovia Nursery to be the exclusive wholesaler of this plant. This is a boon for the camellia hobbyist throughout the country.

'Frank Houser' and 'Frank Houser

Variegated' are two of the best reticulatas available. The rose red blooms are very large, semi-double to loose peony with wavy 'rabbit ears'. It is a beauty! The plant has a great growth habit. According to the Nomenclature, 'Frank Houser' was first variegated in 1990.

Most Southern California camellia growers have variegated their own plants by grafting onto variegated understock. Therefore, the introduction by Nuccio's of a variegated 'Frank Houser' is an exciting development. 'Frank Houser' and its variegated form is one of my favorite reticulatas as it does well in the garden, in a home display and it wins at shows. What more can you ask of a beautiful camellia?

SCHEDULED PROGRAMS FOR 2005

JANUARY 27 PETTE OR SMALL BUT ALWAYS LOVELY!

This meeting will give you an opportunity to expand your knowledge about Small and miniature camellias. Our speaker, Don Bergamini, a frequent show winner, will show samples of his flowwers.

FEBRUARY 27 WHAT'S NEW IN THE WONDERFUL WORLD OF CAMELLIAS? Joint meeting with Pacific Camellia Society at Descanso Gardens to kick off Descanso's Camellia Festival! Featured speaker will be Tom Nuccio whose enthusiastic presentations are always enjoyable.

MARCH 24 PRUNING WORKSHOP. Workshsop on spring pruning camellias by the Society's best growers. Dmonsrtations for pruning landscape and "show" plants. Bring a camellia to this meeting to prune and receive supervision in shaping your plants. This workshop is recommended for all camellia lovers.

APRIL 22 POTLUCK DINNER. Social hour begins at 6:30 p.m., dinner at 7:00 with the program beginning at 8:00. After dinner Mel Belcher will show pictures of winning blooms and candid shots of Society members

UNUSUAL WAYS OF ROOTING CAMELLIAS

C. D. Cothran
Pomona, California

This discussion is to be largely on unusual, or seldom employed, methods of Camellia propagation, but to keep the record clear we should review the methods that are now in general use.

For the most part, cuttings of the Camellia are taken from the middle of June to the middle of July. The exact time is determined when the wood of the new growth has turned from green to a brown shade of color. Such cuttings may consist of the entire cycle of new growth with three to five leaves, or when a variety is scarce, may be reduced to a short piece of stem with one leaf. The small cuttings are more difficult to handle, but root well and make good plants. The leaves of the cuttings may be trimmed or not, space being largely the determining factor.

Plant hormones are much discussed, and we find many of the commercial propagators who are against their use. They say that under good conditions they have a high percentage of "takes" without the use of a hormone, and that costs of applying the material are too high, due principally to the extra labor required.

I am forced to disagree with them, for under my conditions the use of a hormone has been beneficial. Test flats arranged with rows of treated and untreated cuttings have shown from 10-25% gain in the number rooted in favor of the treated. This is important, but the most important thing is the comparison of size and number of roots on the treated and untreated cuttings. Follow the plants on for one year and you will find larger plants and a better survival rate among the treated plants. Since time is of the essence, all of these facts should be considered and not just the percentage of "take."

Each propagator has his own pet rooting medium, sand, peat, a

combination of the two, perlite, mica, or other materials. Perhaps the most important thing is knowing how to handle the medium. I prefer washed river sand to which has been added one-half volume of peat, and the mixture turned until it is quite uniform. It should be damp when packed into the flats.

Frames employed should be very tight. I prefer bottom heat and employ a soil cable and thermostat for this purpose. For summer cuttings bottom heat is not essential, though useful, but for some of the methods of rooting that will be discussed presently, bottom heat is essential.

To get to the first of the unusual methods of rooting Camellias, several years ago I made a few cuttings in June and July, and after removing these from the propagating frame in December I decided to try rooting another batch. Several commercial propagators advised against it, but I tried it anyhow, putting out about five hundred. The results were not good, quite a bit of mold, but the worst thing was the top would start growing before the roots had formed on the cuttings, and then they would die. Rooting response was very slow, less than 20% being rooted by the following June.

I should perhaps state that the above cuttings were treated with a hormone-talc preparation, and had bottom heat. The thermostat was set at 68°; on sunny days the temperature sometimes rose to 85° or 90°. The frame is in a lath house, and the glass of the frame is lightly coated with paint to diffuse the light.

The following year the experiment was tried again with some 400 cuttings. Two flats were used, and the cuttings were divided so that each flat had about the same number of cuttings of each variety. The cuttings were made from the tops of plants

which had been cut off for grafting, and on the whole represented hardy and easy-to-root varieties. The propagating frame was divided into two parts by a vertical partition, and a flat of cuttings was placed on each side of the partition. Over one of the flats was hung a 100-watt light with a wide angled reflector. This light was on each night, but was generally turned off through the day. The flat on the other side of the partition received only diffused daylight coming through the frame.

In about three weeks after the start of the test the flats were examined, and it was found that the flat receiving daylight-only had no rooted cuttings, and about 20% loss from mold. A number of the cuttings had swelling buds, and a few had growth started. The flat receiving the extra light had about 2% mold, and about 25% of the cuttings had initiated roots. No top growth was evident.

The flats were kept under these conditions for 100 days and then removed, and the rooted cuttings potted. The flat receiving extra light showed about 80% rooting response. The control flat had about 25% response, but the roots were smaller. Subsequent growth was much better with the light-treated plants.

The experiment was repeated last year with a smaller number but greater variety of cuttings. The results were essentially the same; the percentage shifted downward in both groups for those varieties which are hard to root. It should be noted that Alba Plena cuttings under light rooted to the extent of 65% in one hundred days, which somewhat surpasses the best results I had obtained before with June cuttings.

Not necessarily lending itself to commercial practice, but being useful on occasion, is the method of root grafting. Large sturdy plants may be more-quickly obtained by this method. Pieces of roots may be obtained from transplants, or in re-tubbing a large plant, pieces of roots

may be removed. As a last resort I have bare-rooted a common variety, trimmed some of its roots, and put it back in a tub. It does not seem to hurt them.

The piece of root should be as great in diameter, at least, as the stem of the cutting. Cut the root into pieces about one and a half inches long, splitting one end as for a cleft graft. Insert in the cleft a large cutting which has a long tapering cut on both sides. It is usually not necessary to tie the union. Insert the grafted root into a cutting medium past the point of the graft and treat like any cutting. Rooting may occur on the root section or the scion, or both, and usually occurs rather quickly. Some varieties which root with difficulty root rather easily with root grafts. Roots other than Camellia roots have not been successful in this operation.

There is another method of propagation which is perhaps more interesting than practical. A student at the University of California at Los Angeles first tried this procedure, and I found it very interesting and corroborated part of his work. We know that certain varieties root easily, and other varieties root with difficulty. Some factor is present in the easy-to-root varieties that is not present in the hard-to-root varieties. What if we combine the factors, as by grafting, and then try to root the cuttings thus formed? I took small pieces of 'Rosita', which is easy to root, and cleft grafted cuttings of 'Te Deum' on them, and inserted the cuttings thus formed in a rooting medium. They rooted easily, and grew in a normal manner afterward. Most of the roots formed on the Rosita wood, but a few formed on the Te Deum, also. I have found 'Te Deum' ('Grand Sultan') to be very stubborn about rooting, and the rooted cutting to be a poor grower. There would seem to be no object in reversing the above procedure, but it does suggest that dwarfing, or other changes, could be brought about in

this manner, selecting the proper stock to accomplish the purpose desired.

From *Camellian* March 1951

PRESERVING SCIONS FOR GRAFTING LATER

S. J. Marbury

Wilmington, South Carolina

Any of us in the past have had an idea that scions should be grafted as quickly as possible after they were cut from camellia plants. In fact, in years past, I would nearly always mail scions to my friends via air mail special delivery.

Several years ago, I sent many scions to New Zealand and also received from New Zealand a good many similar scions. These never arrived under seven to ten days, and I had no trouble whatsoever in grafting them satisfactorily.

With the thought in mind that scions would be in good condition for ten days, I began experimenting to see how long I could retain them and still graft with good results. The first experiment was for a period of thirty days. These scions were packed in a cigar box in damp sphagnum moss, sealed with cellophane and put away at room temperature. At the end of thirty days, they were in perfect shape and were promptly grafted. The variety was *Arejishi Variegated*, and today from these scions I have several fine blooming plants, some three and one-half feet high and well branched.

The following year after this first experiment, I tried to retain them for a period of sixty days, and this was a complete failure. Upon opening the box, I found the scions completely deteriorated and they were thrown away.

I felt sure the trouble was with too much heat; so, I began experiments by storing scions in the bottom of an electric refrigerator, and this year, with this method, I have had wonderful success.

For example, I put six scions of *Donckelarii* in the refrigerator on

March 18, grafted them on April 20, and today I have six very fine plants from these scions. At the end of forty-five days I made further grafts with similar scions with good results.

Knowing now that I can successfully graft with scions forty-five days old, I expect next season to start putting away scions in January to see if I can retain them for, say, sixty days, or even perhaps ninety days.

What I did this year was use several of these scions for re-grafting into stock which failed to take on first graft, and, from now on, I expect to put away a supply of various scions strictly for the purpose of re-grafting in April and May any grafts which failed to take.

As to the method used in retaining these scions, they were simply stored in a cellophane bag containing damp sphagnum moss. The names of the varieties and the dates were marked on the back of the leaf with a ballpoint pen and placed in the lower part of the refrigerator. Other than this, they were given no further attention.

Since a certain percentage of grafts nearly always fail to take, this method of preserving scions offers an excellent opportunity for re-grafting in the spring, and I believe that others will be well awarded for their efforts if they will make similar re-grafts from scions put away for this purpose.

EDITOR'S NOTE: We have also had reports that scions may be preserved in good condition by wetting them and placing them in a fruit jar with stems up and the jar top screwed on tight. Scions have taken when kept in this manner for 10 weeks.

Camellian, Sept. 1953

TRACE ELEMENTS FOR CAMELLIAS

Dr. A. A. Nikitin, Director of Agricultural Research
Tennessee Corporation Research Lab, College Park, George

Camellias and azaleas are among nature's most beautiful and colorful plants, and the pursuit of knowledge for maintaining their beauty has resulted in extensive studies of plant physiology and soil fertility. In view of the fact that more healthy growth of camellias and azaleas has been secured on acid soils, the character of fertilizer must be such that it will not substantially increase the soil alkalinity.

With this idea in mind, the information presented in this paper is chiefly concerned with the fertility of the soil. Both major (nitrogen, phosphorus, and potash) and trace element fertilizers have been discussed with regard to their need for prevention of chlorotic conditions which detract from the beauty of these ornamental plants.

The art of cultivating plants on acid soils presents many problems, because of the leaching which takes place. For this reason, different methods for correcting soil deficiencies have been worked out, and can be considered as a new line of approach for successful growth of ornamentals.

MAJOR FERTILIZERS

In using phosphate fertilizers, it is important to keep in mind that the latter must be acidified to such an extent that no tri-calcium phosphate will be present. This will help to maintain the required soil acidity. It is desirable that the nitrogen compounds used in fertilizing camellias and azaleas also be in the form of acid salts such as ammonium nitrate or sulfate. In using ammonium fertilizers, it should be kept in mind, however, to avoid an excessive amount of nitrogen in the soil, to regulate plant growth in such a way that it will help to prevent the formation of "blind wood" or shoots that do not produce buds.⁸

A certain amount of potassium

salts should be included in the fertilizer program, in order to strengthen stems and extend root activity for the assimilation of nutrients.

Organic matter has a considerable effect on soil structure, and also stimulates the functioning of soil organisms. Due to the absorption power of organic matter, it helps to store mineral nutrients; however, the availability of trace elements may be considerably affected in the presence of organic matter. Thus it may increase the availability of iron, but decrease the availability of zinc, manganese, and copper. Organic matter also regulates nitrogen supplies through the action of certain microorganisms, and affects the water supply, increasing or decreasing the dissolving action of nutrients stored in the soil.

Besides the problems concerned with the supply of mineral nutrients to plants, the following three points are of interest:

1. Soil conditions influencing the availability of nutrients to crops.
2. Amount of organic matter present in the soil.
3. Extent of mineral deficiency of plants.

The importance of trace elements as catalysts in photosynthesis and other biochemical processes is stressed in literature. Unlike the major elements, however, trace elements have no direct nutritional value.

Studies of the results on the performance of manganese compounds show that, with the aid of this element, the required amount of oxygen is furnished for oxidation-reduction processes in photosynthesis.

The function of manganese is extended to the activation of iron, which also plays a vital role in photosynthetic processes.³ It seems that both iron and manganese facilitate the

action of chlorophyll in the formation of carbohydrates (sugars and starches). Iron compounds also play an important role in biological oxidation in plants, and are contained in a number of enzyme molecules.

According to Sjollem, copper functions as a catalyst to render iron more effective for the formation of chlorophyll, and in the production of oxidative enzymes.

From the above, it seems that the oxidation-reduction processes, which are vital factors in the photosynthesis of starches and sugars, may be facilitated by such active trace elements as iron, manganese, and copper.

The function of zinc within the plant is rather unique, since most research men consider that for plants, zinc has a nutritional value which is entirely different from that of iron, copper, and manganese. This value of zinc has proved in the correction of chlorosis on several crops such as pecan trees, corn, and oats.

The correction of zinc deficiency on pecans was the most spectacular instance, since it saved the pecan industry in the South.

Chemical analysis of several crops shows that some of them contain only very small amounts of trace elements, and most of this is stored in the foliage and young stems. For these reasons it is advisable that the concentrations at which trace elements are used on camellias and azaleas be slightly lower than the general recommendations given for fertilizing most ornamentals.

Experience shows that, on acid soils, plants may display a sensitivity to manganese. This may be, in part, attributed to a deficiency of iron. The results published by several investigators show that iron deficiency in acid soils is intensified by the presence of a large amount of available manganese.

The art of using balanced fertilizer on ornamentals is rather new, compared to the growth and cultivation of vegetable crops. For

crops, the principal question relates to yields, but for ornamentals the problem is one of healthy foliage and beautiful flower production. For this reason, the supplementary value of the trace elements in preventing unhealthy conditions, such as those expressed by "dieback," should be considered.

Acid soils present a problem in retaining trace elements, and for that reason, it may be necessary to employ direct foliage treatment in the form of spray or dust. Neutral salts of the trace elements have proved to be very effective for correcting deficiencies of those elements, and are compatible with fungicidal and insecticidal materials. The trace elements in neutral form may be used at various concentrations, depending upon the stage of plant growth and the extent of deficiency. In order to keep proper balance between iron and manganese, considerably more iron than manganese should be available to the plants.

To prepare the soil for camellias and azaleas, the problem concerns also the improvement of its physical properties by cultivation. In considering the suitability of the soil, the following points are of importance:

1. Uniform distribution of fertilizer in the soil.

2. Aeration: based upon assimilation of oxygen and removal of carbon dioxide, should be helped by uniform particles in the soil.

3. Soil porosity: important for securing maximum utilization of fertilizers added to the soil. Soil porosity can be modified, to a certain extent, through the addition of organic material, as well as colloidal substances.

4. Drainage: this is a most important factor, since camellias and azaleas will not grow in waterlogged soil.

Building up the desired physical and chemical properties in the soil will help to produce such beautiful

plants as camellias and azaleas. One important problem is the retention of nutrient elements in such a way that they will not be leached away from the acid soil. If erosion is also a problem, the trace elements may be successfully applied in spray or dust form as a direct foliage treatment.

Trace-Element Functions in Plant-Life

Copper

1. Seed production
2. Assists in chlorophyll formation.
3. Assists in oxidative enzyme production.

Manganese

1. Seed production
2. Regulates carbohydrate metabolism

3. Enzymatic action.
4. Aids oxygen and carbon assimilation.
5. Active in chlorophyll formation.

Zinc

1. Seed production.
2. Assists in chlorophyll formation.
3. Promotes plant growth.

Iron

1. Chlorophyll formation.

Boron

1. Assists in transformation and utilization of carbohydrates.
2. Functions in protein metabolism.
3. Seed production.



The more one gardens, the more one learns'
and the more one learns, the more one
realizes how little one knows. I suppose
the whole of life is like that.

—V. Sackville-West

Gardening is an art which is learned
by practice, experience
and sensible advice.

—Jules Oravetz, Sr.

CAMELLIA STATIONERY

Our beautiful camellia notecards are still available in sets of eight for \$6.00 including tax and shipping. Folks who use them and re-order tell us how truly lovely they are. They make wonderful gifts for your fellow camellia lovers or those you are trying to get interested in this great hobby! You can even order them for your own use. They also look beautiful in frames. Cards can be ordered through Dorothy Grier, 13229 Pipeline Avenue, Chino, CA 91710 (909) 628-1380. Make your check payable to SCCS.

If any camellia society would like to use these cards as fund raisers, orders for 25 or more sets are priced at \$5.00 each, including tax and shipping.

EASY SEEDLING CULTURE

Wallace Barr

Never before did we see a better crop of fine camellia seeds than we saw throughout the south and southeast in 1956. Due to the fact that many fine varieties, including many of the most recent introductions, bloomed simultaneously that Spring, it is reasonable to assume that the chances for a successful cross was far better. It is easy to grow seedlings, and it is highly profitable to the average camellia grower. If nothing else is gained, the seedlings will make ideal understock that will be acclimated to your own particular environment.

At the first sign of the seed pods' opening they should be removed from the plant before the seeds drop. We usually gather them and immediately store them, in a container such as a jar or plastic bag, in our refrigerator. We allow them to remain in the refrigerator for from 48 to 72 hours. Use plastic or vinyl bags of any size that may be available.

Soak sphagnum moss in water and then squeeze it almost dry. Cover the seeds with a generous ball of the moss and place in the plastic bags. Close the opening as tight as possible, but allow it to be opened later without cutting. Hang the filled bags in your basement or somewhere in the house, or even in your garage if they will be protected from extreme weather. If they are kept at room temperature, or not under 55 degrees, they will germinate within a few weeks. The bags may be turned from time to time.

When each seed's "tap" root is from one and one-half inches to two inches long, remove it from the bag. Leave the ones that have not germinated undisturbed and shut the bag again. Cut the tap root in half.

Have ready a large mouth pot or can, say 12 inches across, filled to within two inches of the top with a mixture of peat moss, top soil, and clean sharp sand. Be sure the pot or can is well drained. Take a pencil or

small round stick and make holes in the potted earth about one inch apart. Insert the root into one hole, leaving the seed just on top of the soil. Pack the soil about the root, and water thoroughly.

Place the pot or can in a plate, can top, or some flat receptacle and keep in the house at room temperature. The seedlings will begin to grow almost immediately, and once they are up they will make an attractive green houseplant! The seedlings will gain almost a year in growth by following this method.

In the spring the seedlings should be carefully removed from the large container and potted in small pots or cans containing a rich mixture of soil. When the danger of freezing weather has passed the pots should be transferred to the open with some overhead protection such as a bushy shrub, under a picnic table, or any place where they will have semi-shade and will be protected from direct hot sun.

Be sure the pots or cans are well drained. Keep well watered throughout the summer. The following spring they should be repotted in gallon size containers. They should be kept watered and fertilized during that summer and may be kept in the containers until they bloom, or they may be lined out and planted in the open during the following fall. Remember at all times to keep the seedlings watered and fertilized. They must be well drained.

After the first year the holes in the bottom of the jars or cans should be checked, because very often the roots will go through the holes and shut off the drainage, thereby causing the seedlings to die. If this should happen just punch several small holes in the bottom of the container.

Be sure to tag all seedlings as seedlings and when they were germinated and planted.

Children should be encouraged to plant camellia seeds in the foregoing manner. They will become interested in growing things, and when they are older they may have the thrill of seeing one of their own seedlings produce a new and beautiful variety.

The foregoing method of growing seedlings was published before. However, I have added something to the procedure. This short article is written to call attention to the fact that camellia seeds from a bumper crop should produce more than the average fine new varieties.

(Ed. note: According to an article some time ago in the Southern California Camellia Society's REVIEW, a jar may be used in lieu of the plastic bag. It was also suggested that the moss be boiled and the jar and seeds made sterile with a solution

of Clorox. This will eliminate mold that so often forms in the container. We have never used the sterilizing solution and we have never boiled the moss but think it is a good idea.)

(Ed. further note: Plastic boxes having a height of 6 inches and of any other dimensions are even better containers for seeds. Use about 1 inch of rooting medium in the box, use a removable transparent lid, and place under a light for fast response. Put the "dot" of the seed downward in the medium. When the seed roots, the seed will pop above the medium. You can put the seeds in rows, with row tags, so you will know from where the seedling came. Treatment with Subdue will eliminate fungi.)

From *Camellian* September 1956

Northern California Camellia Society Show Results March 13 and 14, 2004

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|------------------------------|------------------------|----------------------|
| Best of Show | 'Edna Bass Variegated' | Don & Sue Kendall |
| Sweepstakes | 106 Blue Ribbons | Don & Mary Bergamini |
| Runner-up Sweepstakes | 69 Blue Ribbons | Bob & Linda Ehrhart |
| Award of Excellence | 43 Head Table Wins | Don & Mary Bergamini |

Very Large Japonica

| | | |
|----------------|------------------------|---------------------|
| Best Single | 'Edna Bass Variegated' | Don & Sue Kendall |
| Runner-up | 'Mary Fischer' | Larry & Nancy Pitts |
| Best Tray of 3 | 'Moonlight Bay' | Bob & Joanne Logan |

Large Japonica

| | | |
|----------------|-----------------|---------------------|
| Best Single | 'Dusty' | Larry & Nancy Pitts |
| Runner-up | 'Veiled Beauty' | Larry & Nancy Pitts |
| Best Tray of 3 | 'Tata' | Hal & Deane Burch |
| Best Tray of 5 | 'Tata' | Hal & Deane Burch |

Medium Japonica

| | | |
|----------------|-------------------------|------------------------|
| Best Single | 'Bobby Fain Variegated' | Bob & Linda Ehrhart |
| Runner-up | 'Satsuma Kuranel' | Tony & Natalie Miranda |
| Best Tray of 3 | 'Junior Prom' | Hal & Deane Burch |
| Best Tray of 5 | 'Nuccio's Gem' | Bob & Linda Ehrhart |

Small and Miniature—any species

| | | |
|-------------------|--------------------------|---------------------|
| Best Small Single | 'Little Babe Variegated' | Don & Sue Kendall |
| Runner-up Small | 'Tammia' | Bob & Linda Ehrhart |

| | | |
|--|---------------------------|------------------------|
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| Best Tray of 5 | 'Tata' | Hal & Deane Burch |
| Medium Japonica | | |
| Best Single | 'Bobby Fain Variegated' | Bob & Linda Ehrhart |
| Runner-up | 'Satsuma Kuranei' | Tony & Natalie Miranda |
| Best Tray of 3 | 'Junior Prom' | Hal & Deane Burch |
| Best Tray of 5 | 'Nuccio's Gem' | Bob & Linda Ehrhart |
| Small and Miniature—any species | | |
| Best Small Single | 'Little Babe Variegated' | Don & Sue Kendall |
| Runner-up Small | 'Tammia' | Bob & Linda Ehrhart |
| Best Tray of 3 | 'Little Babe Variegated' | Larry & Nancy Pitts |
| Best Tray of 5 | 'Jackpot' | Don & Mary Bergamini |
| Best Miniature Single | 'Melissa' | Bob & Linda Ehrhart |
| Runner-up Miniature | 'Jackie D.' | Larry & Nancy Pitts |
| Best Tray of 3 | 'Man Size' | Don & Mary Bergamini |
| Best Tray of 5 | 'Jackie D.' | Larry & Nancy Pitts |
| Best Collection of 9 | | Don & Sue Kendall |
| Reticulta or Reticulata Hybrid' | | |
| Best Single more than 5 1/2" | 'Pharaoh' | Larry & Nancy Pitts |
| Runner-up Single | 'Paprika' | Larry & Nancy Pitts |
| Best Tray of 3 | 'W. P. Gilley Variegated' | Don & Sue Kendall |
| Best Tray of 5 | 'Frank Houser Variegated' | Bob & Linda Ehrhart |
| Best Single less than 5 1/2" | 'Fire Chief Var.' | Don & Mary Bergamini |
| Runner-up Single | 'Ruth Jernigan' | Larry & Nancy Pitts |
| Best Tray of 3 | 'Frank Houser Variegated' | Hal & Deane Burch |
| Best Tray of 5 | 'Fire Chief Variegated' | Don & Mary Bergamini |
| Non-Reticulata Hybrid | | |
| Best Single | 'Hot Shot' | Gary & Carol Schanz |
| Runner-up | 'Tom Perkins' | Don & Sue Kendall |
| Best Tray of 3 | 'Tom Perkins' | Don & Sue Kendall |
| Best Tray of 5 | 'Julie Variegated' | Don & Sue Kendall |
| Best Collection of 9 Blooms | | Larry & Nancy Pitts |
| Best Collection of 3 Different Blooms | | Larry & Nancy Pitts |
| Best Collection of 5 Different Japonicas' | | Larry & Nancy Pitts |

Seedlings

| | | |
|-------------------------|--|-----------------------|
| Best Large/Very Large | | Gary & Carol Schanz |
| Best Medium | | John Wang |
| Best Miniature to Small | | Don & Mary Bergamini |
| Best Fragrant | | Gordon & Barbara Goff |

Youth

| | | |
|--------------------------|-----------------|-----------------|
| Best Japonica | 'Kuro Tsubaki' | Chris Bergamini |
| Best other than Japonica | 'May Westbrook' | Chris Bergamini |

| | | |
|----------------------------------|----------------|---------------------|
| Best Named after a Member | 'Ruta Hagmann' | Larry & Nancy Pitts |
|----------------------------------|----------------|---------------------|

Novice

| | | |
|-----------|--------------------|-----------------|
| Best | 'Bob Hope' | Barbara Sampson |
| Runner-up | 'Katia Variegated' | Sheilah Langsam |

| | | |
|------------------------|--------------|---------------------|
| Challenge Award | 11 out of 12 | Larry & Nancy Pitts |
|------------------------|--------------|---------------------|

Join Australia and New Zealand Camellia Societies

| | |
|-------------------|---------------------|
| Australia Society | New Zealand Society |
| \$17.00 Single | \$17.00 Single |
| \$19.00 Family | \$19.00 Family |

These are U.S. funds.)

Send your check payable to Southern California Camellia Society
c/o Beth Stone
1997 Queensberry Road
Pasadena, California 91104-3351.

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When all is said and done, even after 10,000
years of husbandry, we still have much to learn about what
makes our gardens flourish.
—Shelley Goldbloom

The lesson I have thoroughly learnt,
and wish to pass on to others, is
to know the enduring happiness that
the love of a garden gives.
—Gertrude Jekyll

The love of flowers is really
the best teacher of how to grow and
understand them.
—Max Schling

DIRECTORY OF CALIFORNIA CAMELLIA SOCIETIES

ATWATER GARDEN CLUB & CAMELLIA SOCIETY; President—Sherry Miller; Secretary—Pam Jambor, PO Box 918, Atwater, CA 95301, Meetings 3rd Tuesday, September-June, 6:30 p.m. St. Nicholas Episcopal Church, 1635 Shaffer Road, Atwater.

CENTRAL CALIFORNIA CAMELLIA SOCIETY: President—Jeane Shoemaker; Secretary—Joan Hill, 37341 Ave 17 1/2, Madera, 93638. Meetings: 3rd Wednesday, November-February, 7:30 p.m. Sheraton Smuggler's Inn, 3737 N. Blackstone, Fresno.

KERN COUNTY, CAMELLIA SOCIETY OF: President—Dick Rutherford; Secretary—Helen Maas, 4616 Pico Avenue, Bakersfield, CA 93305. For meeting dates and times, call Helen Maas (661)872-2188.

MODESTO, CAMELLIA SOCIETY OF: President—Don Kendall; Secretary—Sue Kendall, 1505 Gary Lane. Modesto, 95355. Meetings: 1st Sunday, October-April, 1:00 p.m., 220-A Standiford Avenue, Modesto.

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

ORANGE COUNTY CAMELLIA SOCIETY: President—Doug Nowlin; Secretary—Bob Sheriff. Meetings: 1st Monday, October-April, 7:00 p.m. Tustin Senior Center, 200 S. "C" Street, Tustin.

PACIFIC CAMELLIA SOCIETY: President—Elsie Bracci. Meetings: 1st Thursday, November-April, 7:30 p.m., Descanso Gardens, 1418 Descanso Drive, La Canada.

POMONA VALLEY CAMELLIA SOCIETY: President—David Trujillo; Secretary—Dorothy Christinson, 3751 Hoover St., Riverside 95204. Meetings: 2nd Thursday, November-April, 7:30 p.m., La Verne Community Center, "D" Street, La Verne.

SACRAMENTO, CAMELLIA SOCIETY OF: President—Jackie Randall; Secretary—Gary Schanz, 1177 Cavanaugh Way, Sacramento 95822. Meetings: 4th Tuesday, October-April, 7:30 p.m., Studio Theater, 1028 "R" Street, Sacramento

SAN DIEGO CAMELLIA SOCIETY: President—Gene Snooks; Secretary—Lew Gary, 11419 Cabela Place, San Diego 92127. Meetings: 3rd Wednesday, November-April, 7:30 p.m., Room 101 Casa del Prado, Balboa Park, San Diego.

SAN FRANCISCO PENINSULA CAMELLIA SOCIETY: President—Denise Kupperman; Secretary—Christina Isenberg. SFPCS, PO Box 2103 Menlo Park, CA 94026-2103. Meetings: 3rd or 4th Monday, October-March, Elizabeth Gamble Garden, 1431 Waverly St, Palo Alto (elevator available), Redwood City (formerly Peninsula Camellia Society)

SANTA CLARA COUNTY, INC., CAMELLIA SOCIETY OF: President—Kathleen Hall.. Meetings: 3rd Wednesday, October-April, 7:30 p.m., Lick Mill Park, 4750 Lick Mill Boulevard, Santa Clara.

SOUTHERN CALIFORNIA CAMELLIA SOCIETY: President—Brad King; Secretary—Bobbie Belcher 40641 Via Amapola, Murrieta, CA 92562 Meetings: 7:30 p.m., Ayres Hall, Los Angeles County Arboretum, 301 Baldwin Avenue, Arcadia. Call Marilee Gray for meeting dates (909) 624-4107.



C. japonica 'Elegans Supreme'