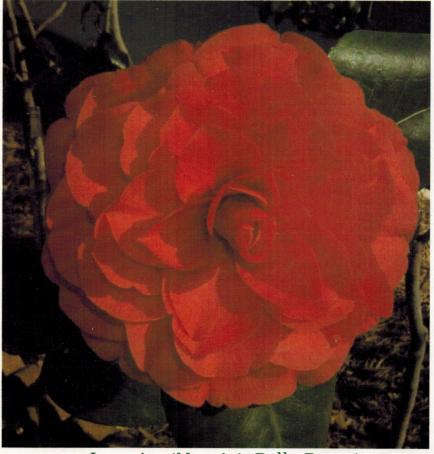
# THE Camella 1. REVIEW

A Publication of the Southern California Camellia Society



Japonica 'Nuccio's Bella Rossa'

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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## **COVER PHOTO**

Japonica 'Nuccio's Bella Rossa'

Large red formal double with excellent texture. Very long blooming season.

Heavy bud set. Medium, bushy, upright growth.

Photo by Mel Belcher

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## THOUGHTS FROM THE EDITOR



In physics we learn that two solid objects cannot occupy the same space at the same time. I want to extrapolate that concept just a little to apologetically state that two time-consuming things don't get done on time if they are worked on at the same time.

It seems that the little Camellia Review office is the same office as the Southern California Camellia Society office which is the same office coordinating the myriad of tasks required for the joint ICS Congress and the ACS Convention scheduled for mid-February 2001

We've proven the above stated theory in a somewhat convoluted way by saying that some things don't get done on time if they are competing for the same time space. So—if

you've wondered what happened to the Review, now you know.

While I'm apologizing, let me state that my article on the holistic approach to camellia culture is long, but I do think that we as camellia hobbyists need to consider more seriously the below ground part of the camellia plant and the responsibility that exists below and above ground. Hopefully, the article brings some order to a complex subject.

As Thomas Mann has said, "Order and simplification are the first steps toward the mastery of a subject—the actual enemy is the unknown."

-Mel Belcher, Editor

# WELCOME NEW MEMBERS

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## SEARCHING FOR BIG RED

Bradford King, Arcadia, California

Bill Woodroof is frequently quoted as saying, "If it isn't big and red it's not a camellia." While these may be fighting words to many, it is certainly true that a bloom 5 or more inches in size and a rich red color is a spectacular sight in the garden, floating in a bowl or at the head table. Have we reached the perfect large red camellia? In 1978 the initial awards of the William Woodroof Camellia Hall of Fame were made. Ten camellias were selected; half of them were large red japonicas. Listed alphabetically they are 'Grand Prix', 'Guilio Nuccio', 'Kramers Supreme', 'Mathotiana Supreme', and 'Reg Ragland'. These old favorites periodically make it to the show but generally have given way to newer varieties. In Don Bergamini's 1999 article (this Journal vol. 61, #1) only 'Grand Prix' made the top 20. Specifically 'Grand Prix' ranked 3rd in the 1980's, but went down to 16th in the 1990's.

In 1983 the two Hall of Fame awards went to 'Dr. Clifford Parks' and 'Wildfire'. 'Dr. Clifford Parks' is a very large red, semi double, loose peony to full peony or anemone form. This reticulata is still showing well (Bergamini has it #2 in the 80's and #3 in the 90's).

'Wildfire' is a semi double red japonica that still holds its own in shows. Bergamini has it in #4 and #5, respectively, in the 80's and 90's. However, as a medium bloom it doesn't make it into the top 5 for big and red.

A case could be made for 'Grand Slam', which joined the Woodroof Hall of Fame in 1984. It's a brilliant dark red, large to very large semi double to anemone form. Bergamini has it ranked 8th in the 80's down to 11th in the 90's. It seems it has lost some of its popularity. In part this may be due to how difficult it is to transport as it shatters easily. My best ones seem to be on the plant and not

even in my transporting box. As Marilee Gray says, "The 'Grand Slam" is the boom as it hits the ground."

At the top of the list of big red camellias would have to be 'Harold L. Paige'. It's a very large red rose form double peony form reticulata. When you see one of Sergio and Elsie Bracci's at the head table, it's a beautiful sight. It makes you recall Bill Woodroof big and red mantra. Bergamini rates 'Harold L. Paige' as #1 in the 80's and #4 in the 90's.

In 1989 three camellias were inducted into the Woodroof Hall of Fame. They are all excellent cultivars that continue to be show winners. However, none are big and red. First is 'Emma Gaeta', which is a deep rose pink reticulata. Bergamini rates the variegated form #1 for the 1990's, but it's not a red bloom. Second is the bright red non-reticular hybrid 'Freedom Bell'. It's a winner, but a small flower. Third is 'Katie', a very large salmon rose pink. It's an excellent japonica that has the size and shows well, but doesn't have the red color.

'Grand Marshal', one of my personal favorites, was selected in 1998 to the Hall of Fame. It's a rich deep red that shows best in its full peony form. While listed as a medium to large flower we show it in the medium japonica class. Bergamini reports a rating of #5 for the 1990's in the japonica medium class and listed it as a winner four times in 2000.

'Red Hots' is a small brilliant red flower. It is an excellent addition to ones collection. It became a frequent winner in the 1990's (Bergamini's #2 rating). Like 'Freedom Bell', 'Red Hots' is just too little for Bill Woodroof.

On the other hand, 'Royal Velvet' meets his criterion. It's a dark velvet red semi double large blooming japonica. It made it to the Hall of Fame in 1999 and is a winner. It is ranked #1 in the 1990's and had the

most victories (seven) as a single entry in the large/very large japonicas according to Bergamini.

In order to receive consideration to be selected into the Hall of Fame a cultivar must have been available in Southern California for at least ten years

There are two large camellias not in the Hall of Fame that are big and red and deserve serious consideration to the Hall of Fame or as an addition to anyones collection. First is 'Larry Piet' introduced in 1989. It is a rich red large to very large rose form double to peony form. This reticulata was ranked #2 in the Bergamini Survey for the 1990's. Personally I like 'Frank Houser' just as well. Bergamini found it ranked #12 in the 1990's, but it seems to be moving up in wins. In Bergamini's article (Camellia Review vol.61, page 9) listing the 1999 winners 'Frank Houser' was a winner 11 times to 5 times for 'Larry Piet'. In his listing of 2000 winners (Bergamini's Camellia Review vol.61 #1 page 11) 'Frank Houser' had 5 wins to 4 for 'Larry Piet'.

The newest candidate for the best big red is 'Nuccio's Bella Rossa'. Nuccio's Nurseries introduced this large red formal double japonica this year. In my search for big red, I purchased two the first week they went on sale to the public. Several years ago Jim and Tom Nuccio showed my wife and me this cultivar

in bloom. We fell in love with the flower. This meant removing a very good 'Bob Hope'-never a show winner-to make room for my new purchases. Is the 'Nuccio's Bella Rossa' the one to end the search for big red? Time and experience will tell, but I'm prepared with two in the ground. I highly recommend adding it to your collection and expect it to become a winner. Sergio Bracci told an interesting story about 'Nuccio's Bella Rossa'. He and Elsie took a two gallon plant to a recent camellia meeting in the Southeast where it was put up for auction. The auctioneer cut the bidding war off at \$300.00 although three people were still bidding. Well, you can get one at a more reasonable price at Nuccio's Nurseries.

My current top five big red Camellias in order are:

- 1. 'Harold L. Paige'
- 2. 'Frank Houser'
- 3. 'Royal Velvet'
- 4. 'Larry Piet'
- 5. 'Grand Marshal'

A favorite small red is 'Red Hots'. My two favorite medium red japonicas are 'Grand Marshal' (medium to large bloom) and 'Wildfire'.

Will 'Nuccio's Bella Rossa' join the list of top five big red Camellias after this season? Will the search for big red end there or is some seedling being secretly grown that will end our search?

# THANKS!

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# From the archives GRAFTING CAMELLIAS

## An interview with Vern McCaskill of McCaskill Gardens

Editor's note: This interview appeared in Vol. 32, No. 3 (January, 1971) but the information appears just as pertinent and timely today as it did thirty years ago. Vern McCaskill operated McCaskill Gardens in Pasadena for many years and made many thousands of camellia grafts. He introduced several new varieties such as 'Coronation', 'White Nun', 'Spring Sonnet', 'Lady in Red', 'Billie McCaskill', 'Waltz Time' and others that were and are seen on the winning tables at the camellia shows.

Q. When is the best time to graft camellias?

A. It depends on whether the grafts are placed in the open or in a heated house. I place my grafts in the open and find that February and March are the best months for grafting. Reticulatas should be grafted later than Japonicas. If I used heat I would graft in December and January to obtain longer growing time.

Q. What is the best understock to use?

A. I prefer sasanqua seedlings because they are more vigorous, have deeper roots and do not bleed as japonicas do. Japonica seedlings are of course good.

Q. Are there any considerations to observe when cutting off growing grafted plants for regrafting?

A. They should be healthy plants with good roots. I like to cut them off below the former graft if the graft is high enough. I know of no reason, however, against cutting them above the former graft if necessary.

Q. How about grafting on wet plants?

A. Everyone says we should not graft on plants that are real wet, just after a heavy rain for example. Actually I have no evidence to support this, but unless one is pressed for time, as in a nursery, I am sure it would be wise to wait a few days for the plants to dry out some.

Q. How do you select scions?

A. I prefer the terminal and #2 buds, unless I am short on wood so that I must use buds lower down. I want a growth bud that will push, which means that it has started to move. I do not use a bud that has not started to move nor, of course, one that shows new plant growth.

Q. What steps do you take to assure yourself that the cambiums are matched?

A. The important thing is that the cambium of the scion touches the cambium of the understock. I use my finger to feel that the edges are together. I prefer to have the two cambiums parallel with each other. Some people cross the two cambiums which, of course, is faster. I may tilt the scion a little now and then. I have no time for fussiness.

Q. How do you cut the understock for the cleft graft?

A. While most people split the understock in the center, I split it a little off-center. This gives me a wider cambium to match against. I trim the scion to allow for this matching "on the curve." Splitting off-center is necessary, of course, when large plants are used as understock; otherwise, there is too much pressure against the scion.

Q. Do you use anything on the graft to protect against fungus?

A. No. I have had no experience to indicate that this is necessary. This is particularly true with sasanqua stock that does not bleed. Some people sterilize their tools, then put the scion

on roots in soil that is full of bacteria. Sterilizing tools is all right to avoid transmittal of virus that will cause variegation, but I have never done it to protect against fungus.

Q. How to you protect your grafts?
A. I place them under a plastic screen that protects them against the direct rays of the sun. New grafts will take any amount of light but must not have the direct rays of the sun.

Neither should they be in a dark place. That will encourage fungus. Lath alone provides too much direct sun.

Q. How about watering grafts? A. They should be kept on the dry side, although rain does not seem to create a problem.

Q. How do you control fungus?
A. As I have said, I do not have
much of a fungus problem. Too much
wetness may cause it. When I see
some fungus, I apply some vinegar
and water with an old toothbrush. I
cover up the graft right away but it
might be a good idea to leave off the
jar for a few minutes to permit the
plant to dry off. Remember, though,
that the jar has been removed and get

it back on. This should be done in the morning while it is cool.

Q, When do you start to uncover the grafts?

B. When the graft has started to grow and a leaf shows. I do this in the cool of the morning. I tilt the jar (wood blocks accomplish the same thing) and look at it in the afternoon. If it is wilting, I put the jar back on. I leave the jar tilted for a couple of days then remove it, always checking in the afternoon to be sure it is O.K.

Q. How about watering the new plants?

A. I keep them on the dry side until they are a foot or so high. There is little above the soil to absorb very much water. I give them a good soaking when they are large enough.

Q. Do you fertilize new grafts? A. Not in the first year.

Q. When do you treat your new grafts as you do your other plants.

A. I do not put them into the full light of lath until fall when hot weather is definitely over.

## **CAMELLIA STATIONERY**

Our beautiful camellia notecards (back cover) 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, or through Southern California Camellia Society, 7475 Brydon Road, La Verne, CA 91750 (909) 593-4894. In either case make you 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.

# THE HOLISTIC APPROACH TO CAMELLIA CULTURE

Mel Belcher, La Verne, California

During the past three years I've written twelve articles titled "Twelve Steps to the Head Table." These articles were directed to the new hobbyist and based on my observations and experiences as a camellia hobbyist and competitor in shows.

As a Professor of Electrical Engineering, I spend considerable time with students solving problems and establishing methodologies for obtaining reasonable solutions. One effective method for a large problem is to break it down into logical manageable parts. Eight of the twelve articles dealt with important cultural considerations. These logical manageable parts are listed as follows:

- 1. Location—sun/shade preference
- 2. Proper soil mix—pot vs. planted n ground
- 3. Water requirements—irrigation methods
  - Nutrient needs—fertilizers
  - Pest control—pesticides
  - Wind protection—screens
  - 7. Pruning—creative (fall)
  - 8. Disbudding-vigorous with

pruning
Each of these cultural topics is
very important; however, they, as a
group, emphasize the visual side of

the camellia hobby.

The beauty of the camellia plant, both foliage and blooms, can so hypnotize us that we devote too much time and effort to caring for the "visual camellia" at the expense of the unseen below ground camellia.

An argument can be made that the above ground camellia is totally dependent on the below ground camellia. In other words, the camellia is both above and below ground level. I am convinced that we hobbyists don't devote enough of our attention to the unseen. So, I want to suggest that we emphasize the holistic approach to camellia culture. The

leaves and branches can't exist without the roots and the roots can't exist unless fed by the part exposed to the sun.

I think a lesson can be learned by taking a look at the gigantic baobab tree, a strange looking specimen that is widely viewed along the Equatorial Zone of East Africa. As the legend had it, "The gods became angry with the tree and pulled it out of the ground and stuffed it upside down back into the ground" thus leaving the root structure exposed above ground. It's a strange looking creature that appears to have leaves growing out of its roots.

If we could examine the roots of our camellias as we can symbolically examine the baobab tree roots, we might find them to really look awful, neglected, mistreated and diseased. Question—what would your camellia roots look like if "The gods exposed your roots?"

See Circle diagram -Fig. 1

As an engineer my experience and expertise does not encroach on the territory of botany, but I do have an interest in plants, particularly fruit and nut tree culture and, of course, camellias. So, for the non-botany hobbyist let's review what the whole plant requires to exist and then dig into the underground to see what is there and what the camellia plant needs down beneath the surface. But first, let's look at the chemistry involved.

## The Chemical Tree

Healthy plants must have water, oxygen and carbon

Water is needed to make the nutrient elements movable through the cells of the plant. The cells are made up of a gel-like substance that has a strong attraction to water and may consist of 99% water.

Oxygen is taken from the air,

which is approximately 20% oxygen. Oxygen combines with other elements forming oxides and complex organic compounds. Oxygen can oxidize sulfites and nitrites forming beneficial sulfates and nitrates.

Carbon, which as carbon dioxide is taken from the air, is a most essential element in the development of a plant. It is actually the keystone of all organic substance. This element carbon is obtained when the sun acts upon the chlorophyll in the cells of the leaves. Because of this, it is important that the leaves be kept free of dust, dirt and insect residue. Frequent hosing down the entire plant will be beneficial.

Let us detour for a moment for some relevant history. Jan Baptista Van Helmont, a Flemish chemist thought he had proved water to be the "principle" in a famous experiment with a willow tree. In about 1635 he planted a small tree in 200 pounds of oven-dried soil. After growing 5 years, protected from dust and given only rainwater, the tree was removed. The soil was re-dried and weighed. Because the soil loss was only 2 ounces (which could be considered experimental error) and the tree had gained 165 pounds, Van Helmont assumed that the growth was due to water alone. Now we know that the 2 ounces were critically important nutrients and that the bulk of the 165 pounds was carbon, oxygen and hydrogen taken mostly from the air and water.

## Soil

Let's take a closer look at the subterranean culture of camellias. (Steps 2-6 on the circle diagram.) It is important that we start by reviewing soil characteristics. Even though we want to apply the "holistic" approach to the underground culture, I think we can best understand what goes on by applying the "Logical Management Parts" approach. Soil can be viewed as having mineral fraction and an organic fraction

## **Mineral Fraction**

The mineral fraction defines soil as being composed of sand, silt and clay and all soils are mixtures of these three particles. A delta triangle can be designed that graphically illustrates the relationship of various mixtures of the mineral fraction.

The properties affected by particle size are water percolation, water retention, aeration, nutrient supply, nutrient release rate, nutrient storage and resistance to change in temperature. The mineral fraction also provides a plant with most of the essential nutrients it needs for growth.

## **Organic Fraction**

Organic matter is a broad term which includes an amazing display of living soil microorganisms along with decomposing plant roots, leaves, compost, bugs and insects. Whether it is living or in any of the various stages of decomposition, organic matter is what makes up the organic fraction of the soil.

Most importantly, organic matter is the food of the microorganisms that inhabit the soil in unbelievable numbers. For example, if we examine a cubic inch of typical soil we find that it contains these incredible facts:

6 billion bacteria 90 million fragments of fungi 300 thousand protozoa

Most of these microorganism are not only beneficial but also essential for plant growth. The above numbers are not static but part of a dynamic process that works day and night, 360 days of the year. The effects of countless microorganisms keep organic matter in an almost constant state of change. These microorganisms use organic matter for food—as a source of energy. They use it for a time then pass it on in a form usable by plants. Organic matter in the soil usually contains approximately 5% nitrogen nearly all of which cannot be used by plants until the microorganisms have converted it to a form of usable nitrogen.

A bit of irony enters the picture here in that we should concentrate on feeding and caring for the microorganisms; they in turn will take care of the camellia roots and support the structure above ground. This means that fresh organic matter must be put back into the soil periodically to feed the "bugs." We feed the camellia through our friendly out-of-sight intermediaries.

## Fertilizer.

The circle diagram (Fig. 1) lists Step #5 as fertilizer. The requirement of plants for nutrients is continuous and the small daily amount should always be available. Holistically, the plant above ground will give signals if it needs nourishment. But by that time, the plant has been stressed and Head Table goals may have been thwarted.

Any fertilizer applied to camellias should be of the type and quantity that does not adversely affect the roots and the microorganism's dynamic system. Plants also resemble humans in the wide range of food they are capable of assimilating.

Almost every element available is or can be made use of. "Like humans, plants are at times greedy and take in more of a given food than is good for them; furthermore, plants do not differentiate between non-harmful and harmful materials—if it is in an available form in it goes." Many hobbyists have learned this lesson the hard way. It can also be an expensive lesson that some hobbyists learn more than once.

The major nutrients required for all plants are nitrogen, phosphorus and potassium (N-P-K). Camellias consume these elements in large quantities. Therefore, they must be replaced as needed. Secondary elements of sulfur, magnesium, calcium and iron are needed in smaller quantities, but are essential elements for good healthy plants.

## Water vs. Air.

Step 4 of our circle diagram lists water in the soil as one of the steps to the Head Table. This is another important consideration for the subterrannium and is one of the most complex since plants need a regular and uniform supply of moisture, but air must also be available. They both compete for the same space. This space is a function of the soil mix of sand, silt and clay. If the soil mix inhibits percolation and if too much water is applied, the pore spaces in the soil stay saturated with water and the roots drown.

Water has been called the "hazardous necessity." It is easy to kill a plant with too much water. Plant roots require both moisture and air for growth. The roots require a growing medium through which air can move, bringing oxygen to them and removing the carbon dioxide they respire. Unfortunately, it is difficult to know the condition of the air/water battle. Too frequently a conscientious grower will notice a plant that needs something and, assuming that it needs water, unintentionally proceeds to drown it. Soil moisture meters would aid in establishing optimum irrigation schedules. It is probably impossible to keep the soil moisture at its optimum continuously. We can, however, alternate brief periods of time in which the soil is too moist followed by a time of less moist, but not excessively dry.

# **Total Plant** Energy Transfer (Fig. 2 and 3)

I want to conclude by revisiting leaves and roots. The leaves above ground are connected to the roots below ground by a nutrient highway—the unglamorous trunk. This is a two-way highway with water and nutrients going up and photosynthetic products coming down. There is also an air transportation system that works alongside the tree trunk. This air transport carrier hauls carbon dioxide up from the ground to the stomata

breathing pores on the underside of the leaves. The return haul brings oxygen, emitted from the top of the leaf, down to and through the soil to the roots.

Above ground the leaves produce food for the plant and release water and oxygen into the air. This reaction takes place when light interacts with chlorophyll bodies within the cells in which photosynthesis takes place in order to manufacture starches and sugars (food) for the plant, both above and below ground.

Meanwhile, below ground level the plant has feeder roots that grow from the lateral roots providing connection terminals to the upstream highway system. These feeder roots absorb and transport nutrients and water to the visual plant above. Additionally, the feeder roots have helpers in rounding up water and nutrients by using microscopic root hairs attached to feeder roots. These root hairs are most prominent on the feeder roots at the outer drip line of the plant. Presumably, in potted plants the preponderance of root hairs are on the tips of the feeder roots

within the root ball. Whether it be with a hoe, fertilizer or water, we must not damage these feeder roots.

I have only recently been introduced to a new soil amendment. mycorrhizae. "Myco" means fungus and "rhiza" means root. Mycorrhizae are root structures created when young lateral roots are invaded by specific fungi that form symbiotic associations to the advantage of each. mycorrhizae-infected plants are reported to grow more vigorously and remain healthier than non-infected plants, particularly under stressful conditions and poor soil conditions. Plants benefit from mycorrhizae in several ways, but most commonly by moisture and nutrient uptake Mycorrhizae tablets can be obtained at garden supply stores.

My concluding statement is that somewhere in these ramblings you were stimulated to consider more seriously the value of holistic camellia culture. Perhaps you will have concluded, as I have, that what we don't see may be more important that

what we do see.

# 2001 CAMELLIA SHOW SCHEDULE

# From San Diego to Fresno

February 3 and 4	The Prado, Balboa Park, San Diego Hosted by San Diego Camellia Society
February 10 and 11	Church, Bonita and E Streets, La Verne Hosted by Pomona Valley Camellia Society
February 17 and 18	Huntington Gardens, San Marino Hosted by Southern California Camellia Society

February 24 and 25 Descanso Gardens, La Canada Hosted by Southern California Camellia Council

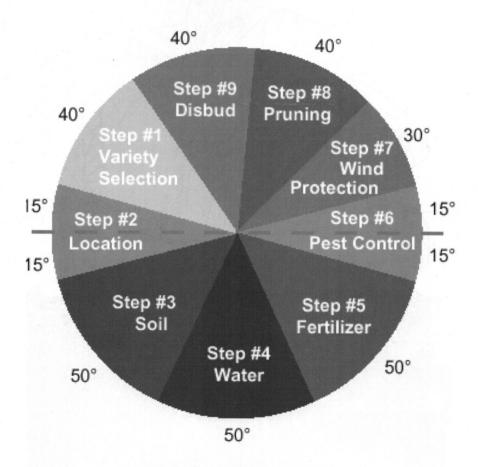
March 3 and 4 Church, 17th and S Streets, Bakersfield Hosted by Kern County Camellia Society

March 10 and 11

Church, 5673 N. First Street, Fresno
Hosted by Central California Camellia Society

# TREE STRUCTURE

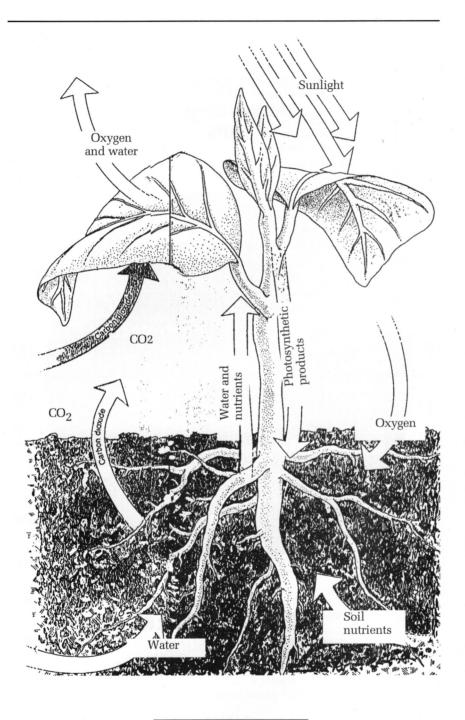
Above Ground 50%



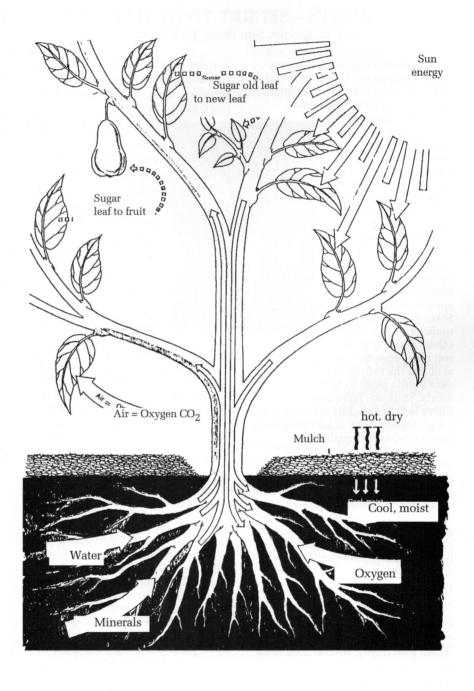
# ROOT SYSTEM

Below Ground 50%

Fig. 1



Energy Transfer—Fig. 2



Energy Transfer—Fig. 3

## ROOTS—SECRET TO HEALTH

E. C. Snooks, San Diego, California

The most important part of any plant is that which is unseen—the roots. All plants can live for some time, at least, without leaves as

witness deciduous plants and others which pass through a totally dormant period. On the other hand, roots of one form or another are essential for growth to occur. There are, as to nearly, any statement, some few exceptions.

The environment of the roots, the soil, must be adjusted to fit the needs of each plant species for best results. Some plants require very moist or even wet soil,

others less to quite dry. The pH of the soil may range from alkaline to very acid and the texture or tilth may vary over a wide range to fit the particular needs. Thus, we know that camellias thrive best in a slightly acid soil with a high organic content and possessing excellent drainage qualities.

What is frequently overlooked is the bacteria, fungal and other microorganism content of the soil media. We tend to only consider these organisms from the negative view, i.e., diseases of the roots. The beneficial qualities far outweigh the detrimental ones. In fact, plant life is limited, at best, in a completely sterile soil environment.

From research performed by Dr. Robert Linderman, a plant pathologist at Oregon State University, he explained the role of mycorrhizae, a fungal ally; thusly, mycorrhizal fungi live symbiotically (an intimate relationship of two dissimilar organisms, to the mutual benefit of each) on roots and send out an extensive network of hyphal strands

into the soil. These strands function as an extended root system, greatly increasing the plant's uptake of water and nutrients. Some mycorrhizae also

inhibit root pathogens and aid the plant in storing nutrients. Thus, they make the plant more efficient and less wasteful of nutrients made available to it. When they are in abundant supply, the amount of fertilizers needed may be significantly reduced.

To aid mycorrhizal activity, add organic matter to the soil, mulch

to prevent high soil temperatures and avoid heavy fertilizations.

The process of adding beneficial microorganisms to the soil is called bacteriazation. A commercial product, Bio-Con CRC0400, does just that. It is composed of "aerobic, facultative and anaerobic bacteria and filamentous fungi."

A statement from the manufacturer states:

"Because of its make-up it is not possible to overdose a small plant. For the gardener, a mixture of 1/4 teaspoonful to 1 quart of water would be sufficient. If this solution is applied every fourth watering, the Bio-Com microbes will dominate the entire root system. The biological domination of the rhizophere by 'good' bacteria has many advantages—very efficient fixation of atmospheric nitrogen, conversion of nitrogen into amino acids, production of growth hormones and vitamins, rapid release of nutrients, improved soil structure.

The control of plant pathogens has always been difficult for the gardener. Chemicals are available but they are inconsistent and sometimes kill the plant as well as the pathogen. The gardener is always questioning whether he or she is doing the right

things.

With Bio-Con the problem is simplified. Bio-Con is not a pesticide but it does have the ability to establish an environment that will eliminate most pathogens. In the world of microbes possession is nine points of the law. The organism that can get to the plant tissue first has an advantage. In the competition for oxygen, nutrients and space, the strong saprophytes of Bi-Con make it difficult for a foreign pathogen to enter

the system. This is a simple, natural way for the gardener to guard against plant pathogens. The regular use of Bio-Con CRC-400 to promote healthy root growth and to dominate the microsystem is an inexpensive, natural process."

Editor's note: I have not confirmed if Bio-Con is still available. It does appear that mycorrhizae tables "Plant Success" by Plant Revolution should be a reasonable equivalent.

## 20 20 20

# PACIFIC CAMELLIA SHOW

Descxanso Gardens—January 13 and 14, 2001

rJaponice—Large

Best Single 'Royal Velvet'
Runner-up Single 'Kramer's Supreme'
Special Culture—Best Single 'Elegans Splendor'
Special Culture—Runner-up 'Tomorrow Park Hill'

Les & JoAnn Brewer Dale & Mary Kay Mittag Mel & Bobbie Belcher Mel & Bobbie Belcher

Japonica—Medium

Best Single Runner-up Single Special Culture—Best Single Special Culture—Runner-up 'Margaret Davis' 'Mrs. George Bell' 'Grand Marshal' 'Magnoliaeflora' Dale & Mary Kay Mittag Dale & Mary Kay Mittag Mel & Bobbie Belcher D. T. Gray Family

Japonica—Boutonniere

Best Single 'Red Hots' Mel & Bobbie Belcher
Runner-up Single 'Little Babe Variegated' Don & Mary Bergamini
Special Culture—Best Single 'Red Hots' D. T. Gray Family
Special Culture—Runner-up 'Little Babe Variegated' Don & Mary Bergamini

**Taponica** 

Best 3 large/very large Runner-up 3 large/very large Special Culture -Best 3 large Runner-up 3 Best 3 Medium Runner-up 3 Medium

Special Culture -Best 3 med. Runner-up 3 'Royal Velvet' 'Kramer's Supreme'

'Kramer's Supreme' 'Miss Charleston Var.' 'Firedance Variegated' 'Ville de Nantes Red'

'Nuccio's Carousel' 'Cherries Jubilee' Les & JoAnn Brewer D. T. Gray Family

Mel & Bobbie Belcher D. T. Gray Family Dale & Mary Kay Mittag Dale & Mary Kay Mittag

> D. T. Gray Family D. T. Gray Family

Best 3 Medium 'Firedance Variegated' Dale & Mary Kay Mittag Runner-up 3 Medium 'Ville de Nantes Red' Dale & May Kay Mittag Special Culture Best 3 Medium 'Nuccio's Carousel' D. T. Grav Family Runner-up 3 'Cherries Jubilele' D. T. Gray Family Don & Mary Bergamini Best 3 Boutonnieres Little Babe Variegated' 'Red Hots' Mel & Bobbie Belcher Runner-up 3 Boutonnieres Special Culture -Best 3 Boutonnieres 'Tinsie' Don & Mary Bergamini

Reticulata or Reticulata Hybrid

'Dr. Clifford Parks' Best Single Les & JoAnn Brewer Rudy V. Blanco Runner-up Single 'Emma Gaeta' Special Culture Single 'Hall's Pride' Edith Mazzei 'Harold L. Paige' D. T. Grav Family Special Culture Runner-up 'Sean Armijo Retic' Rudy V. Blanco Best Tray of 3 Runner-up Tray of 3 'LASCA Beauty' Mel & Bobbie Belcher Special Culture - Best Tray of 3'Margaret Hilford' D. T. Gray Family

Non-Reticulata Hybrid

Best Single 'Spring Daze' Les & JoAnn Brewer Runner-up Single 'Phil Piet Retic' Rudy V. Blanco Special Culture Single 'Waltz Time Variegated' Mel & Bobbie Belcher Best Tray of 3 'Nicky Crisp' Todd & Lindsey Brewer Runner-up Tray of 3 'Freedom Bell' Mel & Bobbie Belcher

Species

Best Single 'Egao' Mel & Bobbie Belcher Runner-up Single 'Grady's Egao' Bradford D. King Best Tray of 3 'Shishi Gashira' Les & JoAnn Brewer Runner-up Tray 'Shibori Egao' Don & Mary Bergamini

**Mixed Tay of 3 Different Varieties** 

Best Tray of 3 'Carter's Sunburst', Dale & Mary Kay Mittag 'Margaret Davis'. 'Pink Perfection'
Runner-up Tray of 3 'Fire Chief', 'San Dimas', D. T. Gray Family

'Red Hots'

Collector's Tray-6 Blooms

Best Tray of 6 'Kramer's Supreme' Dale & Mary Kay Mittag
'Margaret Davis', 'Firedance Var.'
'Ville de Nantes Red', Coral Delight Var.',

'Red Hots'

Best Seedling

Don & Mary Bergamini

Novice

Best bloom—4" or more 'Snow Chan' Mary Flynn
Best bloom—less than 4" 'Prof. Charles S. Sargent' George & Karen Harrison
Runner-up bloom less than 4" 'Pink Perfection' Jane Davis

Court of Honor

'Dusty' Don & Mary Bergamini 'Grand Marshal' Marvin & Virginia Belcher 'Loretta Feathers' 'Charlean' 'Mathotiana Supreme' 'Jenny Mills' 'Man Size' 'Renee Land' 'Freedom Bell' 'Yuletide' 'Tata' 'Nuccio's Cameo' 'Memento' 'Waltz Time Variegated' 'Mathotiana Supreme' 'Pink Wings' 'Navajo' 'Snowie', 'Betty Ridley', 'Henry Huntington' 'Black Tie'

Don & Mary Bergamini
Mel & Bobbie Belcher
D. T. Gray Family
Mel & Bobbie Belcher
Marvin & Virginia Belcher
D. T. Gray Family
D. T. Gray Family
Boris & Kathryn Korin
D. T. Gray Family
Mel & Bobbie Belcher
Don & Mary Bergamini
Mel & Bobbie Belcher
D. T. Gray Family
D. T. Gray Family
D. T. Gray Family

Don & Mary Bergamini Mel & Bobbie Belcher

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## THERE'S A NEW SHOW IN TOWN!

January 2001 saw the culmination of several years of planning—the newly formed Orange County Camellia Society held its first annual camellia show at beautiful Rogers Gardens in Corona del Mar. The delighted public were invited to bring their own blooms to enter the mini-show held on the following day.

Marilee Gray has acted as mentor to this group of camellia enthusiasts who, for the most part, are newly "addicted" to this hobby.

The setting was perfect—the weather was perfect! A good time was had by all.

## BEST WISHES TO THE ORANGE COUNTY SOCIETY FROM ALL OF US!!





Theresa Piech gives Vivian Skirvin a few pointers about bloom presentation.



Linda Rodriguez, President Orange County Camellia Society

Pretty flowers all in a row



# ORANGE COUNTY CAMELLIA SOCIETY

lst Annual Camellia Show January 20-21, 2001 Rogers Garden, Corona del Mar

## Japonica—Large/Very Large

Best Single Runner-up Single Court of Honor Single Best Trav of 3 Runner-up Tray of 3 Court of Honor Tray of 3 Special Culture—

Best Single Runner-up Single Court of Honor Single

'Elegans Splendor' 'Silver Anniversary' 'Charlie Bettes' 'Hahn Supreme' 'Kramer's Supreme' 'Royal Velvet'

'Tomorrow Park Hill' 'Miss Charleston Variegated' 'Nuccio's Bella Rossa' Marvin & Virginia Belcher

Mel & Bobbie Belcher Victor & Linda Rodriguez Mel & Bobbie Belcher Dick & Jackie Stiern D. T. Gray Family Les & JoAnn Brewer

> D. T. Gray Family D. T. Gray Family

## Japonica—Medium

Best Single Runner-up Single Court of Honor Single Best Tray of 3 Runner-up Tray of 3 Court of Honor Tray of 3 Special Culture— Best Single Runner-up Single Court of Honor Single

'Dawn's Early Light' 'Margaret Davis' 'Grand Marshal' 'Margaret Davis' 'Wildfire' 'Herme'

'Black Magic' 'Prima Ballerina' 'In The Red'

Mel & Bobbie Belcher Dale & Mary Kay Mittag Mel & Bobbie Belcher David & Susan Trujillo **Julius & Dorothy Christinson** Vivian Skirvin

> D. T. Gray Family D. T. Gray Family D. T. Gray Family

Japonica—Small		· · · · · · · · · · · · · · · · · · ·
Best Single	'Pink Perfection'	Dale & Mary Kay Mittag
Runner-up Single	'Demi-Tasse'	Mel & Bobbie Belcher
Court of Honor Single	'Hishi-Karaito'	Mel & Bobbie Belcher
Special Culture—	Tilbiii Rafaito	Mor & Bobbio Boldior
Best Single	'Red Hots'	D. T. Gray Family
Runner-up Single	'Demi-Tasse'	D. T. Gray Family
Court of Honor Single	'Little Babe Variegated'	Don & Mary Bergamini
Court of Honor Dingle	Entiro Baso Variogatoa	Don't Wary Dorganini
Japonica—Miniature		
Best Single	'Little Michael'	Mel & Bobbie Belcher
Runner-up Single		us & Dorothy Christinson
Court of Honor Single		Victor & Linda Rodriguez
Best Tray of 3	'Little Babe Variegated'	Don & Mary Bergamini
Runner-up Tray of 3	'Little Michael'	Mel & Bobbie Belcher
Court of Honor Tray of 3		Don & Mary Bergamini
Special Culture—		
Best Single	'Shikibu'	Don & Mary Bergamini
Runner-up Single	'Men's Mini'	Don & Mary Bergamini
		<i>yG</i>
Japonica—Boutonniere		
Best Tray of 3	'Shikibu'	Don & Mary Bergamini
Runner-up Tray of 3	'Little Babe Variegated'	Don & Mary Bergamini
Court of Honor Tray of 3		Don & Mary Bergamini
Special Culture—		, 0
Best Tray of 3	'Shikibu'	Don & Mary Bergamini
Runner-up Tray of 3	'Little Babe Variegated'	Don & Mary Bergamini
Court of Honor Tray of	3 'Men's Mini'	Don & Mary Bergamini
Reticulata or Reticulata Hy		_
Best Single	'Emma Gaeta Variegated'	Gene Snooks
Runner-up Single	'Frank Houser'	Les & JoAnn Brewer
Court of Honor Single	'John Hunt'	Gene Snooks
Best Tray of 3	'Frank Houser'	Les & JoAnn Brewer
Runner-up Tray of 3	'LASCA Beauty'	Don & Mary Bergamini
Court of Honor Tray of 3	'Larry Piet'	Gene Snooks
Special Culture—		
Best Single	'LASCA Beauty'	Mel & Bobbie Belcher
Runner-up Single	'Howard Asper'	D. T. Gray Family
Court of Honor	'Margaret Hilford'	D. T. Gray Family
Best Tray of 3	'LASCA Beauty'	Don & Mary Bergamini
Runner-up Tray of 3	'Harold L. Paige'	D. T. Gray Family
Nian Dation Late Timber!		
Non-Reticulata Hybrid	'Buttons 'N Bows'	m ( Danathy: McOwiston
Best Single		im & Dorothy McQuiston
Runner-up Single	'Coral Delight Variegated'	Don & Mary Bergamini
Court of Honor Single	'Debbie'	David & Susan Trujillo
Best Tray of 3	'Paper Dolls'	David & Susan Trujillo
Runner-up Tray of 3	'Waltz Time Variegated' 'Buttons 'N Bows'	Mel & Bobbie Belcher
Court of Honor Tray of 3 Special Culture—	DUUOUS IN BOWS	Les & JoAnn Brewer
	'Coral Delight Variogated'	Don & Mary Bargamini
Best Tray of 3	'Coral Delight Variegated'	Don & Mary Bergamini

## **Species**

Best Single 'Egao' **Bradford King** Runner-up Single 'Shibori Egao' Julius & Dorothy Christinson 'Dwarf Shishi' Court of Honor Single D. T. Grav Family

## Collector's Tray of 3 Mixed Varieties

'Carter's Sunburst', **Best Tray** Dale & Mary Kay Mittag 'Margaret Davis', 'Pink Perfection'

'LASCA Beauty', ' Runner-up Tray Don & Mary Bergamini

'Julie Variegated'. 'Buddy Variegated'

Court of Honor Tray 'Mathotiana Supreme' D. T. Grav Family

'San Dimas', 'Freedom Bell'

**Best Seedling Best Sport Best Fragrant** 

'Koto-No-Kaori'

Rudy V. Blanco Rudy V. Blanco Dean Turney

## **Novice**

Best Single 'Tama Beauty' Martha Hammond 'Ville de Nantes' Runner-up Single Martha Hammond Court of Honor Single 'Maroon and Gold' Roula Vitakis

## Intermediate

Best Single Todd & Lindsey Brewer 'Herme' Runner-up Single 'Nicky Crisp' Todd & Lindsey Brewer Court of Honor Single 'Ace of Hearts' Vivian Skirvin



Theresa Piech, her trusty computer and wowed onlookers



Judging is serious business

#### DIRECTORY OF CALIFORNIA CAMELLIA SOCIETIES

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.

DELTA CAMELLIA SOCIETY: President—Larry Pitts; Secretary—Edith Mazzei, 1486 Yosemite Circle, Clayton 94517. Meetings: 2nd Tuesday, November-March, 7:30 p.m., City of Pittsburg Environmental Center, 2581 Harbor St., Pittsburg.

KERN COUNTY, CAMELLIA SOCIETY OF: President—Helen Maas; Secretary—Jane Brady, 7401-21 Hilton Head Way, Bakersfield 93309. For meeting dates and times, call Helen Maas (805)872-2188.

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

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

ORANGE COUNTY CAMELLIA SOCIETY: President—Linda Rodriguez; Secretary—Peggy Sheldon, 20151 Crown Reef Lane, Huntington Beach 92646. Meetings: lst Monday, October-April, 7:00 p.m. Dept. of Education Building, 200 Kalmus, Costa Mesa

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

PENINSULA CAMELLIA SOCIETY: President—Barbara Coates Tuffli; Secretary—Nicky Farmer, 360 Santa Margarita Avenue, Menlo Park 94025. Meetings: 4th Monday, October-March, Veterans' Building Annex, 711 Nevada St., Rm. 20 (elevator available), Redwood City

POMONA VALLEY CAMELLIA SOCIETY: President—David Trujillo; Secretary—Dorothy Christinson, 3751 Hoover St., Riverside 95204. Meetings: 2nd Monday, November-April, 7:30 p.m., Church ofthe Brethren, Corner "E" & Bonita, 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—Dean Turney; 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.

SANTA CLARA COUNTY, INC., CAMELLIA SOCIETY OF: President—Walt Dabel. 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, 7475 Brydon Road, La Verne 91750. Meetings: 7:30 p.m., Ayres Hall, Los Angeles County Arboretum, 301 Baldwin Avenue, Arcadia. Call Marilee Gray for meeting dates (909) 624-4107.









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