

THE *Camellia*
REVIEW

A Publication of the Southern California Camellia Society



'Scentsation'

Courtesy Nuccio's Nurseries

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One Dollar

Southern California Camellia Society Inc.

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

The Society holds open meetings on the Second Tuesday of every month, November to April, inclusive at the San Marino Women's Club House, 1800 Huntington Drive, San Marino. A cut-camellia blossom exhibit at 7:30 o'clock regularly precedes the program which starts at 8:00.

Application for membership may be made by letter to the Secretary. Annual dues: \$6.00.

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THE COVER FLOWER

C. Japonica ‘Scentsation’

The distinctive feature of this month’s cover flower is that it has a definite sweet fragrance. The bloom is good also, a large silvery pink japonica seedling. Plant growth is medium, upright, compact. It blooms early to mid-season.



THOUGHTS

from the editor

What is the Best Flower of the show, or the Division, or the Class? This question confronts me, as well as other camellia show judges, every time I face the table of candidates for this camellia show honor. After all, this, in my opinion, is the highest honor that an exhibitor can win. The judge cannot take his duties lightly. It has been my experience that the question is easier asked than answered, not because of difficulty in reaching a decision but more because of different approaches that can be and are taken.

It has been said that the Best Flower is the one that the judge likes best. This is a dangerous approach, in my opinion, because it gets into the realm of personal preferences. Does it mean that the judge would be thinking of his "20 Best" selections as he studies the flowers that are in contention? On this basis, I would be judging a bloom of 'Guilio Nuccio Variegated' against the field, because no camellia is more beautiful to me than a bloom of this variety that is perfectly formed with four rabbit ears and is uniformly and artistically variegated. But should this make it the Best Flower of the show?

Another approach is that the Best Flower should be in relation to what the variety normally produces as its best. I have always remembered when an exhibitor said to me after the judging had been completed, "I thought that my 'Nagasaki' had a chance because it was the best 'Nagasaki' I had ever seen." He had been a camellia grower long enough and had attended and judged enough camellia shows that he was able to base his judgment on broad experience and knowledge of camellias. This approach to judging would require, of course, that judges have a broad knowledge of camellias; otherwise, their thinking processes would revert to their own preferences and not to critical analysis of the variety itself.

Needless to say, the Best Flower must be perfect in all respects. A blue ribbon flower in the varietal judging can have a blemish or two, but not so with the Best. It is interesting to observe the two types of judges as they study the blooms before voting. One type walks along the table or stands behind the other judges as he ponders his choice. The other type always gets up front and leans down close to the flowers so that he might detect flaws that are not apparent otherwise. One judge at a recent show thought that he detected that the flower had become detached from the pistil; this was not apparent to the casual looker.

The Best Flower is always a beautiful flower; otherwise it would not have been placed in contention by the judges for Best. I often wonder, however, whether the Award actually goes to the grower who for that show has done the best job. Best Flower is a high honor that should not be treated lightly.

Harold E. Dyer

TO FERTILIZE OR NOT TO FERTILIZE

David L. Feathers
Lafayette, California

This is the third publication of this excellently written, basic article about fertilizing. It first appeared in THE CAMELLIA BULLETIN, publication of the Northern California Camellia Society, then was re-published in the March 1963 issue of CAMELLIA REVIEW. It is must reading for camellia people, particularly those who are new in the hobby.—Editor

The principle of fertilization is so old that it is idle to argue its case — under certain conditions it is indispensable in the culture of camellias. However, the fact remains that it is generally an artificial, rather than a natural process, and as such entails some risk. I say “generally artificial” because the use of mulches composed of vegetative matter also constitutes feeding, while fertilization, in our terms of reference, means the use of something other than the camellia’s natural food. Using the same expression, “under certain conditions” fertilization is also unnecessary, for the writer has seen hundred-year-old camellias bearing thousands of blooms, many of which would be blue ribbon candidates, which had never been fertilized although annually mulched. Because of this contradiction and two other controlling factors which I shall mention later, the fertilization question has become without doubt the most controversial matter in the entire culture of camellias.

Although much has been written on this subject, a review of the literature is not a solution. For example, consider the bald statement by Halliday: “I never use guano or any other fertilizer for camellias”, in relation to the occasional super-technical advice of the present day that one should make up his own compound of the trace as well as the essential elements and adhere to a strict program of plant feeding — or else! Unquestionably, for the average person, the truth

lies somewhere in between these extremes.

It is our guess that this confusion and controversy arises largely by reason of the failure of the person offering advice to qualify it properly, for there are two matters that are absolutely controlling: one’s growing conditions and one’s objectives. Certainly we cannot prescribe the same technique for the person growing camellias in the ground as for him who grows his plants solely in containers, for in one case the environment is natural while in the other it is artificial. Nor can the same case be made for the private individual as for the commercial grower because their objectives are usually quite different and may even be diametrically opposite. A nurseryman’s business being to produce a salable plant as quickly as possible, the emphasis naturally must be upon growth; however, the average person’s usual concern is with florescence and he may actually prefer slow growth to avoid the necessity of frequent repotting or transplanting. (In fact, many regard the camellia’s slow growth as one of its greatest attributes.) Now, if we make the extreme comparison of the professional growing his plants in containers versus the amateur growing camellias in the open ground we get a contradiction of both the objective and the environment. No wonder there are widely different techniques, resulting in bewilderment on the part of the uninitiated! It follows, therefore, that there can be no standard procedure that will fit all conditions. This is certainly an instance where circumstances alter cases and it is up to the individual to determine first, what his objectives are; then to apply such methods as are generally agreed
(Continued on next page)

upon as desirable, *under his particular type of growing conditions.*

The farther away we get from nature, the more necessary it is to employ artifices and substitutes. Thus, in the case of container culture, fertilization becomes absolutely indispensable. Whereas, in the open ground, the camellia has comparative freedom for the roots to seek out nourishment and moisture, when imprisoned between the walls of a container it rapidly consumes all the nutrients in the soil and, in fact, the roots will eventually supplant the soil itself unless repotted. In the case of ground planting, there are also many conditions which necessitate fertilization if optimum performance is to be had. Where the soil is poor or lacking in any essential element, and even in good soil where there are strongly-competing roots from other vegetation, the use of an acid camellia-azalea type fertilizer will be found extremely beneficial. Aside from such ordinary needs of the plant for proper growth, fertilization at or slightly prior to the blooming period has been proven to increase the size and quality of the flowers.

However, in those exceptional cases where virgin soil and ideal environmental conditions generally are present, the camellia, which has the superior form of growth of a tree (which it is) soon acquires such vigor and strength as often to make unnecessary and even unwise the use of supplemental feeding devices. In this regard, we should never lose sight of the fact that, in Nature's wonderful scheme nothing is destroyed, it simply assumes another form. Let me quote the following from an excellent source on the subject of plant foods:* "In nature the decay of accumulated vegetable matter in the surface soil and the disintegration of mineral parts of the subsoil maintain a balanced sup-

ply of these (essential) substances, the elements continually being returned to the soil as plants die and decay where they grew." If, then, we regularly and systematically add humus (compost, leaf mold, etc.) as a surface dressing, a well-grown camellia has everything it needs, *provided* it is growing naturally in good soil to begin with. But the question arises, "Do you know you have such soil?" and, if the answer is "no", you had better fertilize.

Granted that fertilization is indicated, what to use, when and how? Here, again, there certainly is no unanimity of opinion — in fact, there are almost as many pet techniques as there are outstanding growers — and this opens up another battle: the organic vs. the inorganic fertilizer partisans. Boiling it all down, there seem to be at least three important principles that come to the surface: (1) the fertilizer used should have an organic source of nitrogen; (2) normally, feedings should preferably be frequent and light, not heavy feedings widely separated; (3) alternate in the type of fertilizer used, particularly as between the liquid and dry forms, to get the benefits of each. There is sufficient evidence that there is no one and only way to achieve outstanding success in this matter. The principles on which authorities and experienced growers generally do concur should, of course, be given the most careful attention. But above all, the reader should first be sure that his conditions and objectives match those of whichever qualified authority he chooses to follow.

A parting admonition: Fertilizer in the hands of the novice can be a dangerous weapon in the garden, especially the chemical forms and particularly those having a high nitrogen content (over 5%). Being soluble in water, their stimulative effect is instantaneous, and easily fatal in a confined area. Animal manures have

(Continued on page 22)

*The New Garden Encyclopedia, Wm. H. Wise & Co., 1941 revised edition.

CAMELLIA PERSONALITIES -- PROFESSOR E. G. WATERHOUSE, O.B.E.

T. J. Savige

Canterbury, Victoria, Australia

It was with some gratification that a letter was received from your Editor, Harold Dryden, requesting that a story be supplied on Professor Waterhouse, whom he had selected as the Australian Camellia personality. That he is somewhat more than this the following article will show. Indeed, in an article on such a man with his wide range of interests and experiences it is difficult to know where to start so it is best to go to the beginning.

The beginning was on April 29th 1881 when Eben Gowrie Waterhouse was born and if it is imagined for a minute that fronting the age of 87 must make a person rather ancient it will be found that this can be far from the actual fact for another man with the same interest in life as a whole, with the same intelligence and, indeed, youthful enthusiasm in his various interests, would be hard to find.

As this is being written mostly for people who have not enjoyed a visit with the Professor a precis of his attainments, scholastically, socially and camellia-wise should not be amiss. He was educated at the Sydney Grammar School and gained the degree of Bachelor of Arts at the Sydney University with first honors in the French, German and English languages. Scholarship was, and still remains, his second nature and he became a teacher, initially at the famous King's School, Parramatta. In 1906 he went abroad to Germany and studied German at Leipzig and Berlin, and then, in 1908 to Paris to study French. It was there that he met the Scottish lassie who, in 1912, became his wife and lifelong companion.

On his return to Australia he taught languages at his old school, Sydney

Grammar, and then the Sydney Teachers College. In 1924 he was offered the chair of Professor of German at the Sydney University, a position he held with distinction until his retirement in 1945.

During this period and later he made many trips abroad to expand his knowledge and experience. Amongst these experiences is one that is probably unique. He was granted an audience by Hitler, which was conducted in Germany, and one also by Mussolini conducted in Italy. Amongst other things, he felt their manners could have been improved and mentions the long walk up to a huge desk occupied by a short bullfrog of a man, Mussolini, who apparently was too busy to notice his visitor for some time.

A great admirer and connoisseur of the arts he was for many years on the Board of Trustees of the Sydney Art Gallery and was associated with some of the early controversial Archibald Prize decisions. This prize is for portraiture and one of the most sought after in Australia; many winners have become world famous artists. In similar strain his selection of Paul Jones and Adrian Feint to illustrate his camellia books helped to set the seal on both these fine flower painters and artists.

For many years also the Professor was a Life Governor of one of the largest public hospitals in New South Wales, in the Royal Prince Alfred Hospital. It can be mentioned that both the grounds of the Hospital as well as the Sydney University now have quite a few camellia bushes in their gardens.

Yet with all these interests there still remained the one dearest to his heart, as in it he can express his love

(Continued on next page)

of beauty, his interest in history and language and indulge in association with people of many countries in all walks of life — his abiding interest in camellias. This interest began — as it does with many of us — when he began planning his interesting garden at “Eryldene”, New South Wales in 1914 shortly after his marriage. In this original planting, 12 camellias were used, 6 of which still remain amongst the endless others that have joined them in the following 54 years.

Struck with the beauty of these early varieties Professor Waterhouse found, in his search for more varieties, that the camellia was almost a forgotten plant in the gardening world. Very few varieties were obtainable and many were just duplications under other names. During the 1920s and 1930s a collection was slowly and laboriously built up and he found it necessary to conduct considerable research into the origins of camellias amongst the horticultural publications of the last century. In the 1940s he was joined in his interest by Alex Jessep, newly appointed Director of the Royal Botanic Garden, Melbourne where he had found a great mass of poorly identified camellia material stemming from Guilfoyles time as Director in the 1880s.

By 1939 sufficient interest was developing for the Professor assisted by his wife and a friend, Mr. A. O. Ellison, and supported by Mr. George Linton, who had acquired the old Hunter camellia collection, to put on what was the first camellia show in New South Wales for over 50 years.

At this time Professor Waterhouse, who had a dream to grow all the then known varieties of camellia in Australia in one garden and properly identified, bought the land of the present Camellia Grove Nursery at St. Ives, New South Wales. To be self supporting it was set up as a nursery and managed by Mr. R. Fisher who finally acquired it in 1946 when it was obvious that its future was en-

tirely commercial. It is now the foremost specialist nursery in New South Wales and well worth visiting by overseas travelers of horticultural bent.

For many years the Professor's camellia interest was absorbed in the study of old camellia plantings, nurseries and nursery catalogues and other early camellia literature and with correspondence with friends, both at home and abroad, of like interest and with travel. It was during a visit to England in 1950 to attend the Royal Horticultural Society's Camellia and Magnolia Conference that he met and gained the friendship of Dr. Harold Hume. It was also during this trip that he realized the extent with which camellias were coming back into the gardens in many parts of the world. It was obvious from the recent discovery of the Kunming *reticulatas* and the development of the various families of hybrids from Forrest's seeds which were appearing in the English gardens that a great resurgence of interest in the camellia was in the beginning.

On his return to Australia, together with Alex Jessep, Dr. Raoul Merrillees and Walter Hazlewood, they started to put together the Australian Camellia Research Society which became a viable concern in 1954. He was the Society's first Secretary and Editor and carried the twin tasks for the first seven years. In 1964 he started a three year term of President of the Society and has been a member of the Council for its complete history. The present high standard of the Society and the esteem in which it is generally held is due, in great measure, to his continued interest and guidance.

His very full life has been rounded out by raising a family of four sons, one also a University Professor and another a well known scientist, recently granted the rare honor of a Fellow of the Royal Society.

His excellences in many fields are best exemplified by the many honors

granted him: The Goethe Medal from Germany for his advancement of the German language, the Cavaliere della Corona d'Italie from the King of Italy and later the Dante Gold Medal from the Italian Republic. From France the Alliance Francais Medal and later the dainty insignia of an Officier d'Academie. Finally the Queen of England granted him the honor of An Officer of the Most Excellent Order of the British Empire usually known as the O.B.E.

The Royal Horticultural Society of England granted him one of its highest honors as an horticulturalist in the Veitch Memorial Gold Medal and, in 1966, The Australian Camellia Research Society decided to establish its premier award under the name of the "E. G. Waterhouse Medal" with the citation: "For notable contribution to the development of Camellias in Australia." The first medal granted was unanimously awarded to the man himself.

Amongst the camellias themselves he is very well known as he has fathered many of them, in particular the group of *C. x williamsii* seedlings, often referred to as the Waterhouse williamsii, including 'E. G. Waterhouse', 'Lady Gowrie', 'Clarrie Fawcett', 'Margaret Waterhouse', 'Bowen Bryant', 'Farfalla', 'Ladies Maid', 'Shocking Pink', 'Crinkles', 'Tatters' and 'Sayonara'. Amongst the *C. japonica* seedlings he has raised are 'Beverley Caffin', 'Barbara Mary', 'Dainty Maiden', 'Betty Cuthbert', 'Candy Stripe', 'Carillon', 'Maroona', 'Corroboree', 'Kurrajong', 'Max Cotton', 'Moonflower', 'St. Ives', 'Red Moon', 'Tahiti' and the sasanquas 'Plantation Pink', 'Exquisite', and 'Weroona'. Other varieties from various sources which he named and released include 'Mrs. Swan', 'Prolific', 'Redgrove', 'Somersby', 'Tomago', 'Virginal', 'Waverley', 'Levertons', 'Lilian Pitts', 'Trumpetor' etc.

On the literary side the most famous of the Waterhouse publications are

Camellia Quest and *Camellia Trail*, both brought out in a limited edition and with their fine illustrations and text have become collector's items. Articles of a high standard, particularly on camellia varieties, their history and nomenclature written by Professor Waterhouse can be found in many horticultural publications and the Camellia Section of the Readers Digest's book on gardening came from his pen. He has recently collaborated with Norman Sparnon, the noted Australian expert on Japanese flower arrangement, by supplying the text for a book having a series of colour plates of flower studies in the manner of various Japanese schools, but using a different variety of camellia for the basis of each study. This book is shortly to be released and is full of information and ideas on camellias and their decorative uses.

Ever the scholar, Professor Waterhouse has taken up the study of the Japanese language to help him the better to understand the camellia names and descriptions unearthed from Japanese publications and catalogues sent to him by his Japanese friends.

His home and garden at Gordon have been the scenes of a multitude of visits from friends and horticulturalists from most countries of the world as well as Australian interstate and local camellia addicts, most of whom soon fall under his charm and become also Waterhouse addicts.

If this article has given the reader a picture of a kindly, erudite and courteous gentleman, a continual seeker of knowledge and endowed with an undimmed love of beauty and an ordered and incisive mind then he will know Eben Gowrie Waterhouse.

The end of a
camellia show season
marks the start of
preparations for
next year's show season.

Show Results

SAN DIEGO CAMELLIA SOCIETY

San Diego, California February 10-11, 1968

- Sweepstakes — Mr. and Mrs. B. M. Pace, Upland
Sweepstakes Runner-up — Mr. and Mrs. Paul McClelland, Orange
Sweepstakes — Boutonniere — Edwards H. Metcalf, San Marino
Sweepstakes Special Culture — Mr. and Mrs. Larry Shuey, Temple City
Best Japonica — 'Tiffany', Dr. John Urabec, La Canada
Best Japonica Runner-up — 'Ballet Dancer', Mr. and Mrs. B. M. Pace, Upland
Best Miniature Japonica — 'Tinsie', Harvey L. Morton, Lafayette
Best Small Japonica — 'Kitty', Fred V. Hamilton, Santa Maria
Japonica Blooms on Court of Honor —
 'Betty Sheffield Supreme', Mr. and Mrs. Al Dekker; 'China Doll', Mr.
 and Mrs. Roger P. Treischel; 'Dixie Knight Supreme', Mr. and Mrs.
 Paul M. McClelland; 'Donckelarii', Mr. and Mrs. Roger P. Treischel;
 'Guest of Honor', Fred V. Hamilton; 'Guilio Nuccio', Mr. and Mrs.
 Paul M. McClelland; 'Mark Alan', Mr. and Mrs. Paul M. McClelland;
 'Moonlight Sonata', Mr. and Mrs. Harold L. Rowe; 'Pope John XXIII',
 Alan DuFloth; 'Sawada's Dream', Melvin E. Canfield; 'Tomorrow', Dr.
 John Urabec
Best Group of 3 Japonicas — 'Betty Sheffield Supreme', Mrs. Estelle Lindsley,
 San Diego
Best Group of 5 Japonicas — 'Adolphe Audusson Special', Arthur Krumm,
 Altadena
Best Reticulata — 'Mouchang', Dr. John Urabec, La Canada
Best Reticulata Runner-up — 'William Hertrich', Florence Humphrey, San
 Diego
Best Group of 3 Reticulatas — 'Lion Head', Fred V. Hamilton, Santa Maria
Best Group of 5 Reticulatas — 'Lion Head', Fred V. Hamilton, Santa Maria
Best Special Culture Bloom — 'Clark Hubbs', Caryll Pitkin, San Marino
Best Hybrid Without Reticulata Parentage — 'Julia Hamiter', Harvey L.
 Morton, Lafayette
Best Hybrid With Reticulata Parentage — 'Howard Asper', Mrs. Peg White,
 La Jolla
Best Species — 'Dawn', Mr. and Mrs. L. R. Shuey, Temple City
Best New Introduction — 'Kohinor', Mrs. Monique S. Peer, Los Angeles

POMONA VALLEY CAMELLIA SOCIETY

Pomona, California February 17-18, 1968

- Sweepstakes — Not Scheduled
Best Flower of Show — 'Grand Slam', Caryll W. Pitkin, San Marino
Best Very Large Japonica — 'Elegans Supreme', Mr. and Mrs. Walter
 Harmsen, Claremont
Best Very Large Japonica Runner-up — 'Drama Girl', Mr. and Mrs. Walter
 Harmsen
Best Large Japonica — 'White Nun', Frank Reed, Pasadena
Best Large Japonica Runner-up — 'Mark Alan', Mr. and Mrs. B. M. Pace,
 Upland
Best Medium Japonica — 'Wildfire', Mr. and Mrs. William Meyer, Glendora

- Best Medium Japonica Runner-up — 'Sunset Oaks', Thomas Hughes, La Crescenta
- Best Small Japonica — 'Tom Thumb', Mr. and Mrs. Harold Rowe, Upland
- Best Small Japonica Runner-up — 'Reeves Sweetheart', Mr. and Mrs. John Movich, Pomona
- Best Miniature Japonica — 'Hopkins Pink', Edwards H. Metcalf, San Marino
- Best Miniature Japonica Runner-up — 'Pearl's Pet', Melvin Canfield, Bakersfield
- Best Group of 3 Large Japonicas — 'Drama Girl', Mr. and Mrs. Walter Harmsen, Claremont
- Best Group of 3 Large Japonicas Runner-up — 'Guilio Nuccio Var', Caryll W. Pitkin, San Marino
- Best Group of 3 Medium Japonicas — 'Professor Charles S. Sargent', L. Maas, Bakersfield
- Best Group of 3 Medium Japonicas Runner-up — 'Are-Jishi', Mr. and Mrs. H. Shropshire, Cucamonga
- Best Group of 3 Small or Miniature Japonicas — 'Starlet', Dr. L. E. Chow, Bakersfield
- Best Group of 3 Small or Miniature Japonicas Runner-up — 'Tom Thumb', Mary and Lester Dehmel, Pasadena
- Japonica Blooms on Court of Honor —
 'Ballet Dancer', Mr and Mrs. B. M. Pace; 'Cara Mia', Wilkins Garner; 'China Doll', William E. Woodroof; 'Disneyland', R. J. Briggs; 'Dixie Knight Supreme', Paul M. McClelland; 'Donckelarii', Mr. and Mrs. R. P. Treischal; 'Dr. Tinsley', Mr. and Mrs. Ernie Pieri; 'Elegans Var', Mr. and Mrs. B. M. Pace; 'Elizabeth Dowd', Dr. L. E. Chow; 'Florence Daniell', Edwards H. Metcalf; 'Lady in Red', A. L. Summerson; 'Magnoliaeflora', Mr. and Mrs. H. Shropshire; 'Maroon and Gold', Mr. and Mrs. Walter Harmsen; 'Mathotiana Supreme', Paul M. McClelland; 'Monte Carlo Supreme', Mrs. Mary Thomas; 'Pink Perfection', Mrs. Nancy Roth; 'Twilight', Mr. and Mrs. R. P. Treischal
- Best Reticulata — 'Crimson Robe', Mr. and Mrs. L. R. Shuey, Temple City
- Best Reticulata Runner-up — 'Lion Head', A. L. Gunn, Lynwood
- Best Group of 3 Reticulatas — 'Buddha', Mr. and Mrs. A. E. Krumm, Altadena
- Best Group of 3 Reticulatas Runner-up — 'Buddha', Mr. and Mrs. L. R. Shuey, Temple City
- Best Other Specie — Roseaflora, Mr. and Mrs. John Movich, Pomona
- Best Other Specie Runner-up — Sukiya, Mr. and Mrs. Harold Rowe, Upland
- Best Hybrid Over 4" — 'Howard Asper', R. J. Briggs, Arcadia
- Best Hybrid Over 4" Runner-up — 'Elsie Jury', Mr. and Mrs. L. R. Shuey, Temple City
- Best Hybrid Under 4" — 'E. G. Waterhouse', Paul M. McClelland, Orange
- Best Hybrid Under 4" Runner-up — 'Charlean', H. S. Putnam, Long Beach
- Best Special Culture Bloom — 'Guilio Nuccio Var', W. F. Goertz, San Marino
- Best Special Culture Bloom Runner-up — 'Grandeur', Thomas Hughes, La Crescenta
- Best Seedling — Reticulata 'Dragon Head', Edwards H. Metcalf, San Marino
- Best Seedling Runner-up—#K133, Mr. and Mrs. George Kalin, La Mesa
- Best Sport—Sport of 'Mamie', Mr. and Mrs. Harold Rowe, Upland

(Continued on next page)

PENINSULA CAMELLIA SOCIETY
Redwood City, California February 17-18, 1968

Sweepstakes — Not Scheduled

Best Very Large Japonica — 'Guilio Nuccio Var', Mr. and Mrs. Kai Freitag, Woodside

Best Large Japonica — 'Tiffany', (Gibbed), Richard F. Roggia, San Jose

Best Large Japonica Runner-up — 'Grand Slam' (Gibbed), David Hallstone, Lafayette

Best Medium Japonica — 'Herme', D. R. Abernethy, Pleasant Hill

Best Medium Japonica Runner-up — 'Coed', Mr. and Mrs. J. D. Hansen, Sr., Sacramento

Best Small Japonica — 'Kitty', D. R. Abernethy, Pleasant Hill

Best Miniature Japonica — 'Pearl's Pet', Mr. and Mrs. George Stewart, Sacramento

Japonica Blooms on Court of Honor—

'Destiny', W. O. Addicott; 'Donckelarii', W. O. Addicott; 'Elegans Supreme', Oscar Tomlinson; 'Fircone Var', Tony Pinheiro; 'Grandeur', C. F. O'Malley; 'Hopkins Pink', C. A. Boynton; 'Kick Off', Mrs. J. J. Balzarini; 'Nancy Mandarich', Jack Mandarich; 'Pink Perfection', Ken Rice; 'Starlet', Tony Pinheiro

Best Group of 3 Japonica Blooms — 'Jessie Katz', C. F. O'Malley, Woodside

Best Group of 5 Japonica Blooms — 'Sweetheart', Mr. and Mrs. S. B. Davi, Pittsburg

Groups of Japonica Blooms on Court of Honor —

'Cardinal Var', Mrs. George McKee; 'Herme', D. R. Abernethy; 'Prince Eugene Napoleon', Mrs. Rex Peterson; 'Shiro Chan', Abe D'Innocenti; 'Sweetheart', S. B. Davi.

Best Reticulata — 'Crimson Robe', Mr. and Mrs. E. Passinetti, Menlo Park
Reticulata Blooms on Court of Honor —

'Tali Queen', George Stewart; 'Buddha', John Augis

Best Group of 3 Reticulata Blooms — 'Mouchang', H. L. Morton, Lafayette

Best Group of 3 Different Reticulata Blooms — 'Cornelian', 'Crimson Robe' and 'Noble Pearl', Mr. and Mrs. H. E. Burnette, Castro Valley

Reticulata Multiples on Court of Honor —

'Buddha', John Augis; 'Crimson Robe', Mr. and Mrs. H. E. Burnette

Best Tray of 12 Different Blooms — Fred Hamilton, Santa Maria

Best Tray of 3 Different Blooms (Society Members Only) — W. O. Addicott, Portola Valley

Best Hybrid — 'Howard Asper' (Gibbed), Mr. and Mrs. H. E. Burnette, Castro Valley

Best Seedling — Hybrid SFD-2, D. L. Feathers, Lafayette

Best Judges Bloom — 'Clarise Carleton', Dr. Fred Heitman, Lafayette

TEMPLE CITY CAMELLIA SOCIETY
Arcadia, California February 24-25, 1968

Sweepstakes — Not Scheduled

Best Large Japonica — 'Guilio Nuccio Var', Mrs. Estelle M. Lindsley, San Diego

Best Large Japonica Runner-up — 'Julia France', Mr. and Mrs. Carey Bliss, San Gabriel

Best Medium Japonica — 'Magnoliaeflora', Frank B. Anderson, Bakersfield

Best Medium Japonica Runner-up — 'Ballet Dancer', Mr. and Mrs. Berkeley M. Pace, Upland

- Best Boutonniere — 'Dryade Var', Dr. Leland Chow, Bakersfield
 Best Boutonniere Runner-up — 'Demi-Tasse', Mr. and Mrs. R. P. Treischel, Glendale
- Japonica Blooms on Court of Honor—
 'Adele Clairmont Var', Mr. and Mrs. Harold Rowe; 'Alexis Smith', G. & S. Stump; 'Cara Mia', A. W. Garner; Carter's Sunburst', Mr. and Mrs. B. M. Pace; 'Dr. Robt. Schwartz', A. H. Dekker; 'Dr. Tinsley', Mary Thomas; 'Elegans Suprême', Walter Harmsen; 'Erin Farmer', Harold Dryden; 'Glen 40', John Movich; 'Jennie Mills', Mr. and Mrs. Harold Rowe; 'Kick Off', P. M. McClelland; 'Lovelight', A. L. Summerson; 'Mark Alan', G. & S. Stump; 'Mrs. D. W. Davis', Mrs. Peg White; 'R. L. Wheeler Var', G. & S. Stump; 'Tom Knudsen', Caryll Pitkin; 'Tom Thumb', Ernest Pieri; 'Tomorrow', A. L. Summerson; 'Vedrine', Frank Anderson; 'White Nun', Melvin Canfield
- Best Group of 3 Large Japonicas — 'Mrs. D. W. Davis', Mr. and Mrs. J. V. George, La Mesa
- Best Group of 3 Medium Japonicas — 'Cara Mia', A. Wilkins Garner, Glendale
- Best Reticulata — 'Crimson Robe', A. L. Gunn, Lynwood
- Best Reticulata Runner-up — 'Tali Queen', Caryll W. Pitkin, San Marino
- Reticulata Bloom on Court of Honor — 'Craig Clark', W. F. Goertz
- Best Group of 3 Reticulatas — 'Chang's Temple', Mr. and Mrs. Carey Bliss, San Gabriel
- Best Group of 3 Reticulatas Runner-up — 'Tali Queen', Jessie Lee Cromer, Altadena
- Best Treated Bloom — 'Mercury Var', Mr. and Mrs. W. F. Goertz, San Marino
- Best Treated Bloom Runner-up — 'Kick Off', A. L. Summerson, Glendale
- Best Other Species Bloom — 'Star Above Star', A. L. Summerson
- Best Hybrid With Reticulata Parentage — 'Francie L', Mr. and Mrs. W. F. Goertz, San Marino
- Best Reticulata With Other Than Reticulata Parentage — 'Charlean', John and Mary Movich, Pomona.
- Best Japonica Seedling — Mrs. Anne W. Grim, San Clemente
- Best Reticulata Seedling — Monique Peer, Los Angeles
- Best Hybrid Seedling — #53, Harold Dryden, San Marino

CAMELLIA SOCIETY OF SANTA CLARA COUNTY

San Jose, California February 25, 1968

- Sweepstakes — Not Scheduled
- Challenge Award — Tie between W. O. Addicott, Portola Valley and Mr. & Mrs. C. A. Boynton, Lodi
- Best Flower of Show — 'Julia Hamiter' (hybrid), Harvey Morton, Lafayette
- Best Large Japonica — 'Erin Farmer', W. O. Addicott, Portola Valley
- Large Japonica Blooms on Court of Honor —
 'Barbara Woodroof', W. O. Addicott; 'Betty Sheffield Pink', John Augis; 'Carter's Sunburst', Dr. and Mrs. D. J. Faustman; 'Clark Hubbs', H. S. Ashuckian; 'Kick Off', Harvey L. Morton; 'Mercury Var', W. O. Addicott; 'Mrs. D. W. Davis', H. S. Ashuckian; 'R. L. Wheeler Var', W. O. Addicott; 'Tick Tock', Jack L. Mandarich; 'White Nun', H. S. Ashuckian
- Best Group of 3 Large Japonicas — 'Mark Alan', Dr. and Mrs. F. L. Rankin, Modesto

(Continued on next page)

- /
- Groups of 3 Large Japonicas on Court of Honor —
 ‘Drama Girl’, Harvey L. Morton; ‘Fashionatta’, Matt Talia; ‘Lady in Red Var’, Richard F. Roggia
- Best Medium Japonica — ‘Lady Kay’, W. O. Addicott, Portola Valley
- Medium Japonica Blooms on Court of Honor —
 ‘Cheryl Lynn’, Richard Roggia; ‘Pink Pagoda’, W. O. Addicott
- Best Group of 3 Medium Japonicas — ‘Eleanor Martin Var’, Mr. and Mrs. A. Eckendorf, San Jose
- Groups of 3 Medium Japonicas on Court of Honor —
 ‘Billie McCaskill’, Mr. and Mrs. C. A. Boynton; ‘Dr. Tinsley’, Mr. and Mrs. A. Eckendorf; ‘Fimbriata’, Mr. and Mrs. Pete Grosso
- Best Small Japonica — ‘Little Bit’, W. O. Addicott, Portola Valley
- Small Japonica Blooms on Court of Honor —
 ‘Cardinal’s Cap’, Harvey Morton; ‘Fairy Fountain’, W. O. Addicott; ‘Kitty’, Dr. Fred E. Heitman
- Best Group of 3 Small Japonicas — ‘Colletti Maculata’, Mrs. Eric A. Flunker, Milpitas
- Groups of 3 Small Japonicas on Court of Honor —
 ‘Cardinal’s Cap’, Dr. and Mrs. F. L. Rankin; ‘Wilamina’, Mr. and Mrs. Anthony Pinheiro
- Best Miniature Japonica — ‘Baby Sargent’, W. O. Addicott; Portola Valley
- Miniature Japonica Blooms on Court of Honor —
 ‘Bimbo’, W. O. Addicott; ‘Memento’, Dr. Fred E. Heitman
- Best Group of 3 Miniatures — ‘Fircone Var’, R. W. Dorn, Modesto
- Group of 3 Miniatures on Court of Honor — ‘Baby Sargent’, Mrs. F. L. Rankin
- Best Reticulata — ‘Willow Wand’, Jack L. Mandarich, Menlo Park
- Reticulata Blooms on Court of Honor —
 ‘Lila Naff’, Harvey Morton; ‘Lion Head’, Mrs. Rex W. Peterson; ‘Tali Queen’, W. O. Addicott
- Best Group of 3 Reticulatas — ‘Buddha’, S. K. Smith, Orinda
- Group of 3 Reticulatas on Court of Honor — ‘Mouchang’, Harvey Morton
- Best Hybrid With Other Than Reticulata Parentage — ‘Julia Hamiter’, Harvey Morton, Lafayette
- Hybrids With Other Than Reticulata Parentage on Court of Honor —
 ‘Phyl Doak’, Jack Mandarich; ‘Waltz Time’, Dr. and Mrs. D. J. Faustman
- Best Hybrid with Reticulata Parentage — ‘Howard Asper’, Mr. and Mrs. A. Eckendorf, San Jose
- Hybrid with Reticulata Parentage on Court of Honor — ‘Francie L’, Mr. and Mrs. E. P. Passinetti
- Best Seedling — B-1 (Reticulata), D. L. Feathers, Lafayette
- Seedlings on Court of Honor — JR, D. L. Feathers; Un-named variety, Jack L. Mandarich

LOS ANGELES CAMELLIA COUNCIL

Descanso Gardens, La Canada March 2-3, 1968

Sweepstakes — Not Scheduled

- Best Large Japonica — ‘Coronation’, H. G. Gernandt, La Canada
- Best Large Japonica Runner-up — ‘Guilio Nuccio’, Mr. and Mrs. J. L. Eskridge, Julian
- Best Medium Japonica — ‘Nina Avery’, Mr. and Mrs. J. L. Eskridge, Julian
- Best Medium Japonica Runner-up — ‘Flame’, P. A. Koldhusdal, Sun Valley
- Best Boutonniere — ‘Demi-Tasse’, H. S. Gernandt, La Canada

- Best Boutonniere Runner-up — 'Maroon & Gold Var', Mr. and Mrs. George Kalin, La Mesa
- Japonica Blooms on Court of Honor —
 'Alba Plena', Mr. and Mrs. John Movich; 'Ballet Dancer', Melvin Canfield; 'Cara Mia', A. W. Garner; 'Donckelarii', Mr. and Mrs. Roger Treischel; 'Grand Slam', Melvin Canfield; 'Guilio Nuccio Var', Mrs. Estelle Lindsley; 'Mrs. D. W. Davis', Mr. and Mrs. Walter Harmsen; 'Pink Pagoda', Gertrude and Slone Stump; 'Tiffany', Dr. John Urabec; 'Wildfire', Melvin Gum.
- Best Group of 3 Japonicas — 'White Nun', Melvin Canfield, Bakersfield
- Best Group of 3 Japonicas Runner-up — 'My Darling', Mr. and Mrs. Berkeley M. Pace, Upland
- Best Group of 5 Japonicas — 'White Empress', Mr. and Mrs. Arthur Krumm, Altadena
- Best Group of 5 Japonicas Runner-up — 'Elegans', N. Y. Fenwick, Pasadena
- Best Reticulata — 'Chang's Temple', Dr. Norman Palmer, North Hollywood
- Best Reticulata Runner-up — 'Crimson Robe', E. J. Alvarado, Ontario
- Best Group of 3 Reticulatas — 'Crimson Robe', Mr. and Mrs. L. R. Shuey, Temple City
- Best Group of 3 Reticulatas Runner-up — 'Purple Gown', Mrs. Peg White, La Jolla
- Best Group of 5 Reticulatas — 'William Hertrich', Mr. and Mrs. W. F. Goertz, San Marino
- Best Group of 5 Reticulatas Runner-up — 'Crimson Robe', Mr. and Mrs. L. R. Shuey, Temple City
- Best Hybrid With Reticulata Parentage — 'Howard Asper', Gertrude and Slone Stump, Vista
- Best Hybrid with Other Than Reticulata Parentage — 'Charlean Var', Melvin Canfield, Bakersfield
- Best Group of 3 Hybrids With Reticulata Parentage — 'Howard Asper', Fred Hamilton, Santa Maria
- Best Group of 3 Hybrids With Other Than Reticulata Parentage — 'El Dorado', Thomas Hughes, La Crescenta
- Best Other Species — Kin-Sekai, Norman Krueger, Alhambra
- Best Treated Bloom — 'Francie L', Frank Reed, Pasadena
- Best Treated Bloom Runner-up — 'Clark Hubbs', A L. Summerson, Glendale
- Best Japonica Seedling — Seedling #68, Surina's Camellia Nursery, Sepulveda
- Best Reticulata Seedling — Unnamed, Ernest Pieri, San Gabriel
- Best Hybrid Seedling — Seedling #53, Harold Dryden, San Marino

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CAMELLIA FLOWER BLIGHT CONTROL

Harold E. Dryden

Any thought that camellia flower blight is under control in Southern California was dispelled in mid-February when it descended in full fury in camellia gardens. There have been two theories about control. Many people have believed that cleanliness, i. e. picking up the fallen blooms, would limit and might effectively control it. The 1967 season was reasonably satisfactory, with only a few cases of blight in my own garden after having sprayed with Terraclor in 1965. I was converted to the cleanliness theory. My February blight was the worst that I can remember; likewise Larry Shuey who has followed the cleanliness theory. Al Dekker, on the other hand, has used Terraclor, both spray and powder, for over ten years. He reports that his blight has been the worst that he has experienced. It is evident that cleanliness alone is not the answer and that the use of a fungicide such as Terraclor will not prevent flower blight in succeeding years.

I set out as a reporter to seek ideas, and, hopefully, knowledge. I obtained ideas but little knowledge in the sense of solid suggestions that if followed will control flower blight. Nothing is known to have been developed that, if applied this year, will prevent the blight next year. Apparently the ingredients for the blight, the sclerotia in the ground, are ever-present and the proper combination of dampness, humidity and temperature will put them to work. That is what happened in Southern California in mid-February — light rain that was almost a drizzle, high humidity and a temperature increase, particularly at night. It was not hot, just warm with the proper combination of moisture.⁽¹⁾

⁽¹⁾The Los Angeles Times of March 1, 1968 reported that February was the second warmest February, mean temperature, of record.

The blight showed up seemingly overnight.

Nuccios promptly dusted the entire nursery with Terraclor. This was around February 15th. The blight effects the buds that are opening and the blighted flowers in the nursery at this time of writing are those that the blight got to before the time of dusting. The buds that have newly opened look clean and Nuccios believe that the dusting effectively controlled the blight for the present. An inspector of the Los Angeles County Agricultural Commission was present during my visit to the nursery and he pointed out to me that the buds that did not have a protective covering of the fungicide were showing the signs of the blight and that those that opened after the dusting and therefore had a protective covering were opening cleanly.

There is no thought that the single dusting has solved the problem even for the season. The sclerotia are still present, and a recurrence of the climatic condition of mid-February will again bring the blight. There is no known knowledge that will contribute toward anticipating such a condition. It might be helpful if, for example, some graduate student working toward his doctorate would compile data of temperatures and humidity in relation to camellia flower blight, leading to the possibility of guiding camellia people in the application of fungicide treatment. Meanwhile, on the basis of what I have been told, the camellia grower must try to anticipate when the climatic conditions will occur that will bring the blight, and dust or spray before that time. This would be repeated say every three weeks during the blooming season, having in mind the provision of a protective coating on the buds. The initial application would probably be

made in January, with two more in February and early March.

The fungicide that is used in Southern California is manufactured under the trade name "Terraclor" by Olin Mathieson Chemical Corporation, a nation-wide operating company. The product cannot be purchased from the manufacturer but must be obtained from a retail outlet. It comes in both liquid and powder which is water soluble. The liquid has about 25% strength, the powder 75%. Limited experience indicates that the liquid is not as effective as the powder. The powder, however, being so much stronger, presents problems of harmful effects to the person applying it unless he has proper dusting or power spraying tools and is careful to protect himself, both against inhaling and body contact. Joe Nuccio, who has used both methods, told me that he will recommend the liquid unless he is satisfied that his customer fully understands the dangers inherent in the use of the powder, has the equipment to use it, and will take the necessary precautions to protect himself. Even with his own knowledge and equipment, he got "burned" at the time of his last dusting.

P. S.

The above was written in the week following the Temple City Society's show at the Los Angeles County Arboretum, where blooms on the second day of the show were the worst I

have seen because of flower blight. Then something happened, and the blooms on the second day of the Descanso Gardens show, only one week later, were as clean and free from blight as I have seen. I stripped my old blooms on Sunday, March 3rd and found very few cases of blight, in contrast with my statement above of the condition of my flowers in the previous week, which was the worst condition I have ever had. I considered scrapping the type that was standing of my original article, then decided that I could not possibly add to the confusion and lack of understanding and knowledge that now exists by running the original plus this post script.

I talked with Jimmy Tuliano who is the "impresario" of Monique Peer's Park Hill garden. Jimmy said they had no flower blight because they go on the preventive theory — they spray beforehand. They use the 75% Terraclor as a spray, using a large sprayer with an agitator that keeps the solution well-mixed as they spray. This is necessary, otherwise the sediment will sink to the bottom and the solution will lose its strength. Joe Nuccio also emphasized this to me when we were discussing the merits of spraying and dusting. Park Hill sprays first in early January before the occurrence of the combination of temperature and moisture that seems

(Continued on page 29)

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CONTAINER CULTURE OF CAMELLIAS DOES NOT REQUIRE LARGE CONTAINERS

People who have seen Harvey Short's collection of container-grown camellias at his La Mesa, California home are always interested that the containers are not as large as those that are commonly used by most growers. Most camellia growers work on the theory that it is time to move a plant to a larger container when the roots reach the sides, fearing that the plant will become root bound. It is time, on this basis, to move a plant from a five gallon can to a 14" tub when the caliper at the base may not exceed 1".

The Harvey Short method, on the other hand, is to leave a camellia in a container as long as its foliage and annual tip growth indicate that it is healthy. This condition exists every year in his collection, and the flowers show every indication of healthy

plants. Following are examples of large plants that are in containers smaller than usually found.

'Grand Finale', 5 feet tall and 4½" caliper, in 15½" tub.

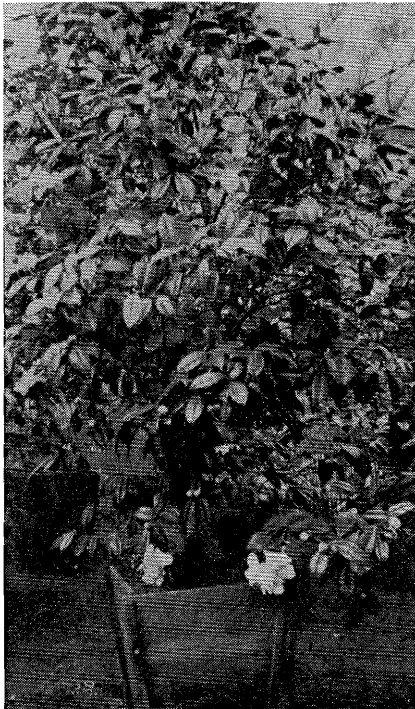
'Masterpiece', 8 feet tall and 8 feet wide in an espalier, 21½" caliper, in 16½" tub.

22 year old 'Masterpiece', 8 feet tall and 8 feet wide, caliper 21½", was in 16" tub until recently transplanted to a 22" tub.

'Bride's Bouquet', 7½ feet tall and 4½ feet wide, 2" caliper, in 15" tub.

He says that first in importance in growing healthy plants in small containers is the soil mix. Proper drainage is a must. He has used for years a mix consisting of equal parts of peat moss, leaf mold and sandy loam. He has now substituted ground fir bark for one-half of the peat moss. He buys treated oak leaf mold. He

(Continued on page 32)



FEEDING CAMELLIAS

I. John Movich
Pomona, California

This evening I was discussing income tax items (a horrible subject) with Jim Black. To break the monotony, Mrs. Black was talking to Ruth. She said, "Our camellias give us such pretty blooms this time of the year, but they must be starving, they get no care at all. When is the best time to feed camellias?" Ruth said, "Why don't we ask Mr. Movich?"

"The best time of year to feed camellias," I said, "is just as soon as they get through blooming. If you feed them too early, the tip buds will start growing and then instead of having two or three leaves showing on the edges of the blooms, long stems with small new leaves will project from the center. The chances are that your best flowers for next year will be on this new growth so do not cut it off. This is my main reason to wait until the plant is through blooming before you feed. Usually this would be the latter part of March, or in some varieties, the latter part of April."

"For my first feeding in the spring, I mix an eighty-pound sack of cottonseed meal, five pounds of blood meal, five pounds of chelated minerals and about five pounds of soil sulphur. The purpose of the cottonseed meal is to give the plant a slow but long-acting, complete feeding. But because

cottonseed meal is slow-acting, I add blood meal to give plants the needed nitrogen for quick, strong growth. The minerals will replace the trace elements lost during the rainy season and with the heavy leaching we like to give our plants when we water in this alkaline water area. The soil sulphur will help to acidify the soil when the temperature warms the ground and enable the plant to absorb the growth elements that it needs. Incidentally, I also feed the azaleas and the cymbidiums with the same mixture."

"After the first mixture feeding, I will feed plain cottonseed meal in about six or eight weeks and again in another six to eight weeks. In the early fall, I will give the plants a very light feeding of the minerals and trace elements again. After that I can hardly wait for the flowers to bloom, especially those great big gorgeous flowers that win the prizes at the shows."

Jim Black said, "How much do you feed?"

"I make my measurements very exact. The basis of measurement is a handful. For a plant growing in the ground, five or six feet tall, I will scatter a full handful on each

(Continued on page 32)

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WILLIAM HERTRICH MEMORIAL DEDICATED

A Memorial to William Hertrich, builder of the Huntington Botanical Gardens, was dedicated in the Gardens on January 16, 1968. Mr. Hertrich was an active and popular resident of the city of San Marino, California, in which the Huntington Library and Art Gallery is located. Among his interests was the San Marino Garden Club of which he was an Honorary Member. It was appropriate, therefore, that the Garden Club should initiate a project for the collection of funds for the building of a Memorial to him in the Gardens that he built and loved so much, as an expression of gratitude from his many friends.

The site of the Memorial in the Huntington Botanical Gardens is at the head of the lily ponds near the Desert Garden, the area that first received Mr. Hertrich's attention as he developed the garden for Henry E. Huntington's home early in the

(Continued on page 22)



Mrs. William Hertrich



SYSTEMIC PESTICIDES

Harry G. Walker

Los Angeles State and County Arboretum, Arcadia, California

Systemic pesticides are those pesticides which, when applied to the seeds, soil, roots, stems or trunks and leaves, are absorbed and translocated to all parts of the treated plants making them toxic to insects feeding thereon. This brand of pesticide has received much attention in recent years and rapid strides are being made in the development, formulation and improvement of this type of product for the control of certain kinds of insects.

These pesticides have shown most promise for the control of pests such as mites, scale insects, aphids and others where thorough spray cover is most essential. For by the use of these products, all parts of the treated plants become lethal to susceptible insects and mites. In addition, they protect the new untreated growth for a period of time, whereas the more conventional type of pesticide protects only that part of a plant that is actually treated and then may give only partial control of the sucking insects where thorough spray coverage has not been obtained. Furthermore, the use of this type of product, especially when used as a seed, soil, root, stem or trunk application, has a tendency to increase the residual effectiveness of a given product by giving some protection to the spray

residues from attrition by weathering. Also, except for the foliage applications, the systemics have much less damaging effect on such beneficial insects as parasites, predators, and pollinators. However, because of the highly toxic nature of many of these compounds to man and other warm blooded animals, care should be taken not to use them on or near food crops unless there is no danger of a poisonous residue remaining on or in the treated plant at harvest time.

At the present stage of development systemic pesticides have given excellent control of such sucking pests of Camellias as aphids, mites and scale insects but not for the control of the chewing insects. Due to the variety of systemic pesticides available, the rapid strides being made in the development of new products and, or formulations, general recommendations for their use will not be given. Instead, it is recommended that the user of a given product read the label carefully and use as directed for the control of the insect or mite causing damage. It would be difficult and take too long to discuss all of the systemic products, however, it might be stated that two of the most effective and widely available systemic products available in the California

(Continued on page 32)

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SEEDLINGS AT PARK HILL

William H. Pike
Los Angeles, California

The bees have been very busy at Park Hill. An excess of 3,000 seedlings are usually started each year. Japonicas, Reticulatas and many rare specie plants are arranged to help the bees spread the pollen. The hybridizing possibilities are limitless. Many very fine seedlings have resulted from this seedling program. At present, two fine seedlings are being propagated by Nuccio's Nursery. They are:

KOHINOR (Reticulata Hybrid):

A large iridescent pink semi-double, with upright vigorous growth.

GRANADA (Reg Ragland Seedling):

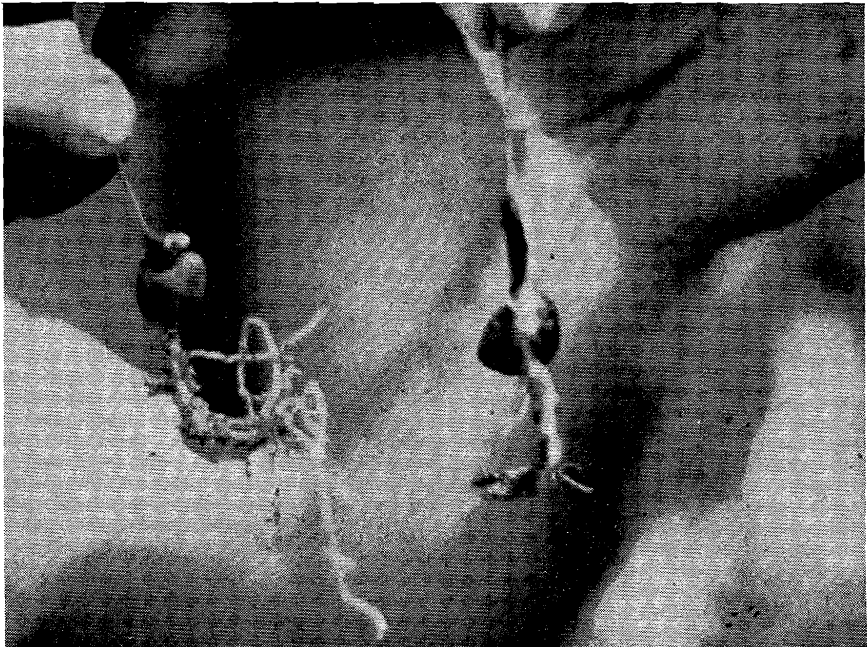
A large orange-red, very full semi-double.

Obviously, when so many seeds are sprouted, labor saving methods are followed. Various methods have been tried, usually depending on the availability of time and labor. In the past, the seeds have usually been placed

in flats of damp loose decomposed granite soil and allowed to sprout and grow for approximately six months. The rooted seedlings then have their tap roots clipped and are placed in four inch plastic pots in a 75% fir bark (forest humus) and 25% decomposed granite soil. The four inch pot plants are allowed to grow for about a year and are then placed in gallon containers until they bloom. The soil mix for the gallon containers is 50% fir bark and 50% decomposed granite soil (sharp sand could be substituted).

This year a considerable number of seeds have been sprouted using the Tourje method. The seeds are sprouted in damp peat moss. The tap root is pinched to approximately one inch length and the seedling is then placed in damp sharp construction

(Continued on page 32)



Root Systems — Left, Tourje method; Right, Standard method.



Upper: Seedling plants, Tourje method. Lower, Seedling plants, Standard method.
Seeds were planted at the same time.

CAMELLIAS IN BRAND PARK, GLENDALE

Mrs. W. V. Lytle
Glendale, California

Glendale, California is the home of The Pacific Camellia Society. The city maintains fourteen parks and has a well regulated system of crafts and recreation for all ages. The most unique of these parks is Brand Park, located in the northwest section of the city.

In 1925 Leslie C. Brand, a pioneer of Glendale, granted 660 acres to the city with provisions for development of the area into a public park. On the death of Mrs. Brand in 1945, "El Miradero", the family mansion also passed to the city. A five year plan of development was started in 1951, the work outlined to include park improvements and conversion of the mansion to a reference collection of fine arts, including a musical library. An addition including a craft center is now being completed. Not only students of fine arts but also the public in general are fortunate to enjoy these privileges, as it is rare for a city of the size of Glendale to sponsor an art library.

The beauty of this park is the terrain, natural to the Verdugo Hills. Looking down from the steps of the library, "El Miradero", meaning Great View, one sees landscaping of a beautiful fountain and farther down, along the wall, several hundred camellias. The Pacific Camellia Society first planted the camellias in 1958. Permission was given by Mr. William Burr, head of the Department of Parks and Recreation. The advisory committee consisted of Harvey Short, Bill Wylam, Roy Thompson and the late R. Flinn Dickson. We are now refurbishing and adding plants along a newly extended wall and donation of camellia plants for this work are needed.

It is well known that Mr. Brand with his vast holdings was not interested in acquisition for its own sake

but rather for the public to enjoy. The charter of the American Camellia Society states the Society's purpose is to promote interest in camellias, with affiliation of local societies. Thus The Pacific Camellia Society wishes to share these camellias with the public.

All are welcome to visit this lovely park. A nice picnic area is provided. For those who cannot walk too much, driving is feasible through the area around the library and the developed part of the park. The library is open from 12 o'clock to 9 on Tuesdays and Thursdays and from 12 to 6 o'clock on Wednesdays, Fridays and Saturdays. The grounds are open daily from 8 a.m. to 10 p.m. Drive out either Glenoaks or San Fernando Road to Grandview, turn north and stay on Grandview to the entrance to "El Miradero" in Brand Park.

TO FERTILIZE (Cont.)

a relatively low nitrogen content and, like cottonseed meal, must decompose before becoming available to the camellia, thus are slow-acting and relatively safe. The more highly concentrated the fertilizer, the more experienced the user should be. As in the case with the people in this plentiful country, of whom far more die from over-stimulation and over-eating than from starvation, so it is with camellias — far more are killed by over-fertilizing than die from malnutrition.

WILLIAM HERTRICH (Cont.)

century. Here has been created a setting of granite mountain stone from which issues a spring which feeds the ponds. The plaque, sculptured by Cataldo T. Papaleo, is placed on a stone beneath a towering *araucaria*, one of the earliest trees planted in the Gardens.

Sunset Camellia Book Updated

Lane Books of Menlo Park, California, publishers of *Sunset Magazine*, have updated and republished their popular and informative book *How to Grow and Use Camellias* with a February 1968 printing date. This book is one of the *Sunset "How to Grow"* series of books that covers most of the flowers that are grown in Pacific Coast gardens. The completeness of the book is indicated by the chapter titles, as follows:

Choosing a Quality Camellia
How to Plant Camellias
Caring For Your Camellias
Bonsai — and other Experiments
Landscaping With Camellias
How to Control Pests and Diseases
How to Propagate Camellias
Arrangements and Corsages
A Camellia Encyclopedia

Sunset has made this book authoritative by consulting with many of the leading camellia growers on the Pacific Coast, both commercial and amateur. Price of the book is \$1.95, plus 5% sales tax in California.

Temple City Camellia Society

The March meeting of the Society will be held on Thursday evening, March 28th in the Lecture Hall of the Los Angeles County Arboretum, 301 N. Baldwin Avenue, Arcadia, at 8:00 p.m. Blooms will be placed on the display tables at 7:30 p.m.

Mr. and Mrs. L. R. Shuey will discuss and demonstrate methods of preserving and refrigerating camellias for subsequent placement on show display tables.

The highlight of the evening, however, will be a colored slide program by Mr. Melvin L. Gum, Long Beach grower and connoisseur of camellias. Mr. Gum will take us down the camellia trail and will show slides of some of the best camellias in existence

today and also some of the camellias of tomorrow. These very recent pictures will feature new Japonica and hybrid introductions and will be a wonderful opportunity to see some of the most discussed new seedling introductions of the present time.

Northern California Camellia Council

On February 9th, representatives from the nine Northern California camellia societies met in Modesto for a kick-off dinner and an unofficial camellia show. 85 people attended the meeting. There have been previous meetings of representatives of these societies, largely informal. It was decided at the February 9th meeting to hold annual meetings and to form an organization to be called Northern California Camellia Council. A permanent date was set for Council meetings; namely, the Friday of the week before the first camellia show in Northern California.

The representatives of the different societies filled in the group on the upcoming shows. It was agreed to adopt uniform entry cards for all the Northern California shows, which will be advantageous for the exhibitors who attend several shows because it will eliminate the need for obtaining entry cards for individual shows. Bill Johnston of Fresno M.C.'d the meeting.

Judging of the camellia blooms brought the following results.

Best Japonica

1st—'Aaron's Ruby', Jack Lewis,
Concord

2nd—'Jean Marie', E. P. Passinetti,
Menlo Park

3rd—'Coronation', Jack Lewis

Best Reticulata

1st — 'Buddha', Mr. and Mrs.
George A. Stewart, Sacramento

Best Gibbed Bloom

1st—'Tomorrow Park Hill',
Richard Roggia, San Jose

FERTILIZERS -- WHAT WE SHOULD KNOW ABOUT THEM

Reprinted from March 1965 Issue of Missouri Botanical Garden Bulletin

Edgar Denison

Editor's Note: While this article does not deal with camellias, I feel that it is of sufficient interest to gardeners in general to warrant its insertion in a publication that is intended primarily for camellia hobbyists.

Spring is here: Crocus announce it, narcissus and forsythia confirm it, and one look in the papers clinches the news—ads and more ads telling us about the wonders of fertilizers, "You will have the most beautiful lawn in the neighborhood," "Your lawn will be your pride," "You won't believe it!" Well, that last one comes close to the truth. The great mass of home owners and gardeners is almost totally lost when it comes to the evaluation of fertilizers and is in the same frame of mind as the pupil in Goethe's *Faust* after listening to Mephisto: "I am as befuddled as if a millstone was turning around in my head." And yet, it does not take much effort to lift the mysteries and to make order out of confusion.

Plant Food Elements

Of the over 100 chemical elements known to man, there are at least 17 which are commonly found in plants and most of them are essential for growth and health. But only three elements are needed for plant nutrition in substantial quantities and are therefore called major plant food elements:

Nitrogen (N)

Phosphate (P_2O_5)

Potash (K_2O)

Fertilizers are either sold one element to the bag or in mixtures of the major elements. When all three major elements occur in one mixture, the fertilizer is called "complete." This designation may be misleading to the amateur because it does in no way denote a definite ratio of the three elements.

Availability

Here we come to a most important detail in our excursion. Every container of fertilizer, be it a bag, or a sack, or a box, or a bottle, must show the amount of *available* plant food which it holds, in percent of the total weight. Availability means that portion of the fertilizer which, dissolved in water, becomes available plant food.

The percentages of availability are always recorded in the sequence of nitrogen, phosphate, and potash. A 12:12:12 fertilizer has 12% each available nitrogen, phosphate and potash. If only one element is sold in a bag, the absent elements are usually indicated by zeroes. If a sack of ammonium nitrate contains 33% available nitrogen, this will appear on the sack as 33:0:0. But at times the zeroes are not shown and the buyer is expected to know the chemical designations which represent nitrogen or phosphate. In the case of phosphate, it is always a combination of words which would contain the word phosphate such as rock phosphate, triple phosphate, or ammonium phosphate. Returning to our ammonium nitrate with an availability of 33%, we will obtain 33 pounds of available nitrogen plant food for each 100 pounds we buy. Obviously, if we buy a 50 pound bag with the same 33% availability, it means that 16½ pounds are available nitrogen fertilizer. Many people wonder why only a portion of the weight which is sold is available as plant food. Were it not for these "fillers," most fertilizers would cake into rock-like substances soon after exposure to air. Nitrogen more than other elements is capable of taking moisture from the air. :-"

When nitrogen, phosphate, and potash are sold separately, that is, not

in mixtures, considerable variation in their availability exists.

	Nitrogen Available %
Ammonium Nitrate	33
Ammonium Sulphate	20
Urea	45
	Phosphate Available %
Super Phosphate	20
Triple Phosphate	42-48
	Potash Available %
Muriate of Potash	50-62

Price

Those gardeners who buy a fair amount of fertilizer can certainly save much by comparing the prices of fertilizer offered by the many suppliers.

Let us go to a number of stores and establishments and record the cost of fertilizers on sale and their availability. In doing just that, we detected a source from which we could purchase a great variety of fertilizers, both the complete fertilizers and the individual elements. Taking the sales prices, we can convert the cost of the fertilizer. Let us turn to the table.

At the top of the listing, we see that 33% available nitrogen can be purchased for \$2.50 in 50 pound bags, which brings the price per pound of available nitrogen to 15.2¢. This unit cost can be calculated by dividing 33 into 100, which tells us that it takes 3.03 pounds of fertilizer to obtain one pound of available nitrogen. The purchase price per pound of the 50 pound sack is 5¢ (\$2.50 divided by 50 pound). Multiply the 5¢ cost by 3.03 to obtain the cost per pound of available nitrogen, namely, 15.15¢ or for

(Continued on next page)

1 Chemical Designation of Fertilizer	2 % Available Plant Food			3 Lbs. Per Bag	4 Actual Cost Per Bag	5 Cost Per Pound of Available Fertilizer			
	N*	Ph*	Po*			N*	Ph*	Po*	Total
(A) Ammonium Nitrate	33			50	\$2.50	15.2¢			\$2.50
(B) Triple Phosphate		46		80	3.25	8.8¢			3.25
(C) Potash			60	80	2.50		5.2¢		2.50
"Complete" Fertilizers						Value, Based on Fertilizers A-B-C			
D	10	6	4	50	\$3.35	\$.76	\$.26	\$.10	\$1.12
E	10	6	4	80	3.98	1.21	.42	.17	1.80
F	12	12	12	50	2.75	.91	.53	.31	1.75
G	12	12	12	80	4.00	1.46	.84	.50	2.80
H	12	12	12	50	2.98	.91	.53	.31	1.75
I	12	12	12	50	2.40	.91	.53	.31	1.75
J	6	10	4	50	2.34	.46	.44	.10	1.00
K	5	10	5	50	1.69	.38	.44	.13	.95
L	5	10	5	50	1.19	.38	.44	.13	.95
M	23	7	7	17	4.95	.59	.11	.06	.76
N	20	10	5	22	4.95	.67	.19	.06	.92
O	20	10	5	22	2.99	.67	.19	.06	.92
P	12	5	7	35	3.95	.64	.15	.13	.92
Q	20	10	5	22	4.49	.67	.19	.06	.92

* N = Nitrogen Ph = Phosphate Po = Potash

our purposes 15.2¢ We can follow the same method for the phosphate and the potash.

This calculation tells us that we can buy a pound of available nitrogen for 15.2¢, phosphate for 8.8¢, and potash for 5.2¢. We now apply these "base" costs to the availability figures of the fertilizers which we have priced in the St. Louis area. The comparison of the prices in column four with those based on the prices of fertilizers A, B, and C in column five may be startling to you. One fertilizer with an availability of 23:7:7 and a cost of \$4.95 for 17 pounds would cost only 76¢ if the elements were purchased separately at the prices mentioned above.

Undoubtedly, the manufacturers are entitled to some charge for mixing the elements. Mixing, however, is not essential in garden practice as the elements can be applied separately with only a slight increase in time and effort. The granulated fertilizers, sold today, are so easy to handle and are so dust free that applying them is certainly no hardship. Again, some few fertilizers are sold in pelletized form, with the objective of making them dissolve over a longer period of time. This is definitely a desirable feature, but pelletizing is expensive and you will have to ask yourself the question if you want to pay the price for this feature or if you can afford the time to make two or three applications of non-pelletized fertilizers a year instead of one but at a much lower cost. In

our day, when the parting words of "good bye" have been replaced with "so long, and take it easy" any suggestion of physical work has to be questioned. Another objection to the reasoning on costs, proposed here, could be made for fertilizers which supply nitrogen in the form of urea—a highly concentrated chemical which can be easily assimilated by plants. Urea is still somewhat of a newcomer and this makes the price fairly high. It is quite reasonable to believe that the price will come down as more chemical and oil companies in this country are going into fertilizer production. In fact, the tough competition in this field shows itself today in questionable advertising claims but may well result ultimately in a reduction in the selling price. The comparison of costs shown on the table is intended to awaken your interest in the price differences which exist. It is quite possible that fertilizers can be purchased right now at even lower costs than those which were used in the comparison; the writer has neither the time nor the opportunity to cover the entire field to assemble comprehensive data.

Area Coverage and Other Problems

The sales promotion departments of the fertilizer industry have come up with a new sales approach. Instead of a simple statement on the percentages of available chemicals, we are told what area the fertilizer in a bag will

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Introducing

'EL DORADO' (Hybrid)

'INNOVATION' (Hybrid)

'ALLIE HABEL'

'NANCY MANDARICH'

Specializing in Recent Introductions

Price List Sent on Request

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SEBASTOPOL, CALIFORNIA 95472

cover. This is like selling you a pound of sugar, stating that it will sweeten, let us say, 100 cups of coffee. But, suppose you want very little sugar, then the same pound could sweeten 200 cups, and if you are a truly "sweet" person the sugar may suffice for 50 or fewer cups. It does not seem a proper function of the supplier to prescribe how much fertilizer we should apply. That decision depends on (a) what we want to fertilize, (b) how

much or little we choose to apply at any one time, and (c) naturally, on the composition and availability of the chemicals. These decisions are yours and yours only.

To test this "area coverage" approach, we picked six different brands of fertilizer at random and jotted down the percent of available major elements and the recommended square feet of coverage per bag. Here is what we found:

Fertilizer	1 % Available Fertilizer			2 Lbs. Per Bag	3 Lbs. Available Fertilizer			4 Square Feet Coverage Per Bag	5 Lbs. Available Fertilizer Per 1,000 Sq. Ft.		
	N.	Ph.	Po.		N.	Ph.	Po.		N.	Ph.	Po.
A	10	10	5	11	1.1	1.1	0.6	2,500	0.4	0.4	0.2
B	23	7	7	19½	4.5	1.4	1.4	5,000	0.9	0.3	0.3
C	10	6	4	50	5.0	3.0	2.0	5,000	1.0	0.6	0.4
D	35	5	10	20	7.0	1.0	2.0	5,000	1.4	0.2	0.4
E	6	10	4	30	1.8	3.0	1.2	1,000	1.8	3.0	1.2
F	12	5	7	35	4.2	1.8	2.5	1,200	3.5	1.5	2.1

Let us proceed and analyze our findings:

(1) Gives the percentage of *available* plant food. "N" stands for Nitrogen, Ph. for Phosphate, and Po. for Potash.

(2) Shows the pounds of fertilizer in a sack.

(3) Converts the percentage figure of availability to pounds per sack.

(4) These are the square feet of ground which the manufacturer tells us the bag will (adequately??) fertilize.

(5) To get a common denominator, we calculate the *available* pounds for 1,000 square feet.

The results of our inquiry are, to say the least, astonishing and disturbing. Fertilizer A provides only 11% of the Nitrogen contained in fertilizer F. Fertilizer D contains one-fifteenth of the phosphate in fertilizer E. It seems obviously that these recommendations are completely unreliable if not deliberately misleading. The ques-

tion of price is purposely not introduced here as it has already been discussed.

Another confusing item for the buyer is the ever changing weights of the bags in which fertilizers are sold. Only a few years ago fertilizer was marketed quite uniformly in 80 pound bags. But that is history. The higher concentration of chemical elements, the ever increasing entry of the ladies into gardening activities, and, last but not least, what seems to be a deliberate attempt to cause confusion in the mind of the buyer, has brought a steady reduction in the pounds per bag. This reduction is still going on, but it will come to an end when it has reached the "ad absurdum" stage, and we are not far from that. With the variables of (a) availability, (b) weight per bag, and (c) price, it is impossible to make on the spot decisions what fertilizer to buy economically; that takes now a little figuring and research.

(Continued on next page)

How Much to Apply

Let us now discuss the amount of fertilizer which we should apply:

Lawns: In order to maintain lawns, it is essential that they be fertilized each year. Once a lawn has been established, the growing grasses will exhaust whatever fertility there is in the soil on which they grow and nature cannot replace the elements used in their growth. It is therefore necessary to give lawn areas applications of plant food in a regular pattern. It seems to be an accepted rule that to maintain a lawn, five pounds of nitrogen per year per 1,000 square feet of lawn area must be supplied. Obviously, such a general rule should not be taken too literally. On light, sandy soils and those with very high humus content, leaching is a problem and larger amounts of fertilizers are needed. These five pounds of nitrogen represent *available* nitrogen and *NOT* five pounds of any fertilizers which contain some amount of nitrogen. Under St. Louis conditions, it seems desirable to apply 2 pounds of available nitrogen in late February or very early March, one pound in early May, and the remaining 2 pounds in early fall. These recommendations assume a fairly normal rainfall and a lawn consisting of Kentucky Bluegrass in the amount of not less than 50% of the lawn community of grasses. Obviously, the application of plant food to zoysias must be related to the growth cycle of this summer grass, and would differ from that recommended for Kentucky Bluegrass.

Flower Beds and Shrubs: One of the most important considerations in fertilizing flower beds and the deciduous shrubs is that we abstain from over-fertilizing at any one time, but that we should apply a complete plant food in small amounts frequently. It would be senseless to fertilize plants which either have completed their life cycle or being perennials are close to their dormant period in late fall. Shrubs

and perennial plants should not receive applications of fertilizer after early July, but can be fertilized prior to the emergence of any growth in the spring. Spring flowering bulbs benefit by an application of fertilizer in early September when many of them produce roots for next year's flowers. It is my experience that a light application of a complete fertilizer casually spread by hand several times during the growing season will give good results in flower beds. It should be kept in mind that up to 40% of available plant food of fertilizers spread on the ground may be lost through the escape of gases into the air. It is always desirable to scratch the granules into the soil surface lightly to avoid their dissipation. Care must be taken that such scratching or cultivating will not damage the root systems of the flowers. When it comes to shrubs, there seems to be no established measure for fertilizing. Depending on the size of the shrubs, light to heavier applications in early spring and again in early summer seem to do the trick. As said before, when in doubt, apply small quantities of fertilizers frequently.

Trees: Trees referred to here are large specimens with a trunk diameter of not less than 6 to 8 inches. Small trees and saplings can be fertilized in the manner of shrubs (Flower Beds and Shrubs above). Large trees also need complete fertilizers and are especially grateful for nitrogen food. It is not necessary to fertilize trees every year. It seems best to determine the need for fertilizers by watching the tip growth of the tree branches. When this growth is less than a foot per year or when the general appearance of the tree gives the impression of "undernourishment" then a good meal will do wonders. Determine the height and spread of the tree in feet and add to this figure the circumference of the trunk, taken about chest high, in inches, and divide the total by two. The resulting figure will give you an

approximate quantity of a complete 12:12:12 fertilizer which the tree should receive.

This fertilizer should be applied to the outer drip area of the branches. Most gardeners seem to have a healthy respect for the effort involved in digging holes into which the fertilizer can be poured. However, this is not such a dreadful ordeal if it is done at a time when the soil is quite moist. While there are soil augers on the market, the writer feels that their use is far too time-consuming. Obtain a heavy iron bar, preferably 4 to 5 feet long. Such bars are frequently available from construction sites where drills have been used and broken. Any iron bar $\frac{3}{4}$ inch or 1 inch diameter will do the trick. Thrust this bar into the wet ground to a depth of 18 inches, make a circular hole of about 4 to 5 inches diameter and pour into this hole about 2 to 3 pounds of the fertilizer. These holes should be about 3 feet apart and if the tree needs more fertilizer than can be put into one circle move inward some 2 or 3 feet and make another row of holes. A gardener in fair physical condition and after a good breakfast should be able to dig between 200 and 250 holes in a morning, while home owners whose minds are on fishing usually do less.

Evergreens: Special care should be taken not to fertilize evergreens, both the needle and broadleaf types, in the fall. Fertilizing at this time may induce the evergreens to send out vigorous growth, but the lush, young shoots cannot sustain the rigors of the winter and are killed. Such freezing can damage a tree seriously.

Most evergreens are acid soil lovers, and we must take precautions that fertilizers used for them do not contain lime as a constituent (filler). Of course, the same precaution must be taken with all plants which demand an acid soil like the azaleas, rhododendrons, and hollies.

Conclusion

In conclusion, let us summarize:

(1) All fertilizing of lawns, plants, shrubs, and trees can be accomplished with the same complete fertilizer, such as a 12:12:12 formula.

(2) Remember that grass, plants, shrubs and trees will not know if the plant food was bought in mixed form or in the individual components of nitrogen, phosphate, and potash.

(3) It pays to check into the cost of fertilizers on the basis of their availability.

(4) Do not fall for sales gimmicks, such as the one which occurred recently to a Kirkwood gardener when she voiced surprise at the high cost of a fertilizer and the salesman told her: "Lady, remember this is not a field fertilizer, this is a garden fertilizer."

CAMELLIA FLOWER (Cont.)

to bring about the flower blight, then again during the blooming season.

I again emphasize that I write as a reporter, not as an expert. I am completely confused over why my own camellias lost their blight within a few days without action on my part. Possibly Harvey Short was correct when he told me the other day that he believes there are two conditions; a rot in the center of the flower that is brought on by the climatic conditions I have described, and the flower blight that is caused by the sclerotia. It is reasonable that we camellia people should be able to pool our own experiences and thus, in our unscientific way, collectively bring about an improvement in what is certainly a scourge to camellias. I shall welcome articles, brief or otherwise, that tell what people are doing and the results they are obtaining, whether such results are good or bad. We sometimes learn from the adversities of others.

"MY TWENTY BEST JAPONICAS"

It is timely to again list the favorite japonicas of camellias growers in Southern California who are not only camellia enthusiasts but also have more than average success in winning awards at camellia shows. This was last done in the November 1964 issue in the article "If I Were Limited to 20 Varieties", page 22. Seven people were requested to list their favorites for the present article. They were also asked to give their choices of the five japonicas that take "gib" best. Their choices follow.

Dr. Lee Chow, Bakersfield

ANGEL
 HERME
 KRAMER'S SUPREME
 MATHOTIANA
 MATHOTIANA SUPREME
 BETTY SHEFFIELD SUPREME
 RED WINE
 MOONLIGHT SONATA
 BALLET DANCER
 BILLIE McCASKILL
 CLARISE CARLETON VAR.
 JULIA FRANCE
 TOMORROW
 HISHI KARAITO
 CARTER'S SUNBURST
 ADOLPHE AUDUSSON VAR.
 GENERAL LeCLERC
 MRS. D. W. DAVIS
 ELEGANS SUPREME
 TOMORROW PARK HILL

A. H. Dekker, Glendale

ONETIA HOLLAND
 LAURA WALKER VAR.
 REG RAGLAND VAR.
 CARTER'S SUNBURST
 CLARK HUBBS
 GUILIO NUCCIO VAR.
 ADOLPHE AUDUSSON VAR.
 GIGANTEA
 BETTY SHEFFIELD SUPREME
 EDWIN FOLK
 ELEGANCE SUPREME
 DEBUTANTE
 DIXIE KNIGHT

CORONATION
 LALLAROOK
 MRS. D. W. DAVIS
 INDIAN CHIEF
 TOMORROW PARK HILL
 TIFFANY
 KRAMER'S SUPREME

W. F. Goertz, San Marino

BETTY SHEFFIELD SUPREME
 SPRING SONNET
 PINK PAGODA
 ELEGANS SUPREME
 GUILIO NUCCIO
 REG RAGLAND
 MRS. D. W. DAVIS PEONY
 CLARK HUBBS
 TIFFANY
 MATHOTIANA SUPREME
 POPE JOHN XXIII
 ELEANOR MARTIN SUPREME
 MARY AGNES PATIN
 MERCURY VAR.
 GRAND SLAM
 TOM KNUDSEN
 KRAMER'S SUPREME
 LAURA WALKER VAR.
 ECCLEFIELD
 MRS. FREEMAN WEISS VAR.

Melvin Gum, Long Beach

WHITE NUN
 R. L. WHEELER
 GUILIO NUCCIO
 REG RAGLAND
 ELEGANS SUPREME
 BETTY SHEFFIELD SUPREME
 TOMORROW
 TOMORROW PARK HILL
 TIFFANY
 ADOLPHE AUDUSSON SPECIAL
 AVE MARIA
 MERCURY VAR.
 MATHOTIANA SUPREME
 MARY ANN HOUSER
 GUEST OF HONOR
 VILLE de NANTES
 POPE JOHN XXIII
 TOM KNUDSEN
 MARIE BRACEY
 DEBUTANTE

Alvin L. Gunn, Lynwood

BETTY SHEFFIELD SUPREME
CARTER'S SUNBURST
CORONATION
CLARISE CARLETON
CLARISE CARLETON VAR.
DRAMA GIRL
DEBUTANTE
ERIN FARMER
GUILIO NUCCIO
GUILIO NUCCIO VAR.
KING SIZE VAR.
KRAMER'S SUPREME
MATTIE O'REILLY
KITTY
R. L. WHEELER
SILVER CHALICE
TIFFANY
TOMORROW
TOM KNUDSEN
WHITE NUN

Berkeley Pace, Upland

BALLET DANCER
ELEGANS SUPREME
CARTER'S SUNBURST PINK VAR.
MRS. D.W. DAVIS PEONY
MARK ALAN
BETTY SHEFFIELD SUPREME
TIFFANY
REG RAGLAND & VAR.
TOMORROW & VAR.
BILLIE McCASKILL
JULIA FRANCE
MARIE BRACEY & VAR.
DIXIE KNIGHT SUPREME
FRED SANDERS VAR.
LADY IN RED
SPRING SONNET
MATHOTIANA
COLONIAL DAME
VILLE de NANTES
GUILIO NUCCIO & VAR.

Caryll Pitkin, San Marino

GUILIO NUCCIO
C. M. WILSON
DEBUTANTE
REG RAGLAND
TOM KNUDSEN
ONETIA HOLLAND
TIFFANY
VILLE de NANTES
POPE JOHN XXIII

WILDWOOD
BETTY SHEFFIELD SUPREME
ADOLPHE AUDUSSON
TOMORROW'S DAWN
MRS. FREEMAN WEISS
SHIRO CHAN
MATHOTIANA SUPREME
GRAND SLAM
ERIN FARMER
DRAMA GIRL
ELEGANS SUPREME

SUMMARY

BETTY SHEFFIELD SUPREME	7
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ELEGANS SUPREME	6
TIFFANY	6
REG RAGLAND & VAR.	5
ADOLPHE AUDUSSON VAR.	4
KRAMER'S SUPREME	4
MRS. D. W. DAVIS & PEONY	4
MATHOTIANA SUPREME	4
TOMORROW	4
TOM KNUDSEN	4
DEBUTANTE	4

BEST GIBBED

Dr. Lee Chow

HERME
SPRING SONNET
MISS ANAHEIM
MISS CHARLESTON
MARK ALAN

A. H. Dekker

ONETIA HOLLAND
LAURA WALKER
EDWIN FOLK
ELIZABETH LeBEY
CLARK HUBBS

W. F. Goertz

CLARK HUBBS
TED KOHL
JENNIE MILLS
MERCURY VAR.
THELMA DALE

Melvin Gum

CLARK HUBBS
TIFFANY
TOMORROW
JUDGE W. T. RAGLAND
TE DEUM

(Continued on next page)

Alvin L. Gunn

CLARK HUBBS
ELEGANS SUPREME
ONETIA HOLLAND
TIFFANY
TOMORROW PARK HILL

Berkeley Pace

CLARK HUBBS
LADY IN RED
GUILIO NUCCIO
BALLET DANCER
MRS. D. W. DAVIS

Caryll Pitkin

CLARK HUBBS
ONETIA HOLLAND
TIFFANY
VILLE de NANTES
CARTER'S SUNBURST

SEEDLINGS (Cont.)

sand. The faster rate of growth from this method has permitted placing the rooted seedlings in four inch pots in approximately two months. The rest of the procedure will be the same as the old way.

The condition and appearance of the Tourje method seedlings compared to the old method employed, presents an overwhelming comparison in favor of the Tourje method. Blooms can be anticipated in a much shorter time span.

After the seedlings are placed in four inch and gallon size containers, they are given routine care, with the exception of specie seedlings and special crosses. For example, seven Jaune (Fortune's Yellow Camellia) seedlings are being watched with interest. The anticipation and thrill of raising seedlings is very rewarding.

CONTAINER CULTURE (Cont.)

goes to the mountain area of San Diego County for his sandy loam.

For fertilizer he continues to use cotton seed meal as the basic element, with a summer supplement of higher nitrogen content. He was one of the first in Southern California to rely primarily on cotton seed for fertilizer. He feeds in April, July and September.

Watering must be watched very carefully with small containers. He says, "don't let them wilt". This means that he has no watering schedule, but watches regularly for need.

SYSTEMIC (Cont.)

area are Meta-systox R, 0,0-dimethyl S-2- (ethylsulfanyl) ethyl phosphorothioate and dimethoate (Cygon) 0,0-dimethyl S-(N-Methylcarbomoyl)-Methyl phosphorodithioate. Because of the toxicity of these and other pesticides to man and warm blooded animals, great care should be taken to handle and use the pesticides as directed on the labels and to store them in places where children and pets cannot reach them. In addition empty containers should be carefully destroyed and disposed of where they will not cause a toxic hazard.

FEEDING (Cont.)

side of the plant. To a good-sized plant growing in a five-gallon can, I will give close to a full handful. For a slightly smaller can, I will give a slightly smaller handful. A three-gallon can gets three-fourths of a handful, two-gallon can a half a handful, and a one-gallon can about one-half a handful for two cans. You will notice that these are all very exact measurements! I always water the plants thoroughly after fertilizing."

"Another important thing is to look at your plants every day. They seem to enjoy this, at least mine do—they give me some pretty nice blooms."

Directory of California Camellia Societies

Societies with asterisk () are Affiliates of Southern California Camellia Society*

***CAMELLIA SOCIETY OF KERN COUNTY**

President: James Hicks, Jr.; Secretary, Melvin Canfield, 2709 Scott Pl., Bakersfield 93306
Meetings: 2nd Monday October through April in Police Bldg., 1620 Truxton Ave., Bakersfield

***CAMELLIA SOCIETY OF ORANGE COUNTY**

President: Douglas Nowlin; Secretary, Mrs. George T. Butler, 1813 Windsor Lane,
Santa Ana 92705
Meetings: 1st Thursday October through April in Orange County Farm Bldg., 1916 W. Chapman,
Orange

CAMELLIA SOCIETY OF SACRAMENTO

President: Dr. Roy O'Neal; Secretary: Mrs. Martha Derr, 6454 Oakridge Way, Sacramento 95831
Meetings: 4th Wednesday October through April in Garden & Art Center, McKinley Park,
Sacramento

***CENTRAL CALIFORNIA CAMELLIA SOCIETY**

President: Robert Kellas; Secretary, Mrs. Glenn S. Wise, 5493 E. Liberty Ave., Fresno 93702
Meetings: Nov. 15, Dec. 13, Jan. 24, Feb. 21, Mar. 20 in Mayfair School, Fresno

DELTA CAMELLIA SOCIETY

President: A. M. Patterson; Secretary: Mrs. Dorothy Blackard, 2707 Prospect St., Concord 94520
Meetings: 4th Tuesday October through April in School Services Bldg., 6th & G Sts., Antioch

JOAQUIN CAMELLIA SOCIETY

President: Karn Hoertling; Secretary: Mrs. Ethel S. Willits, 502 N. Pleasant Ave., Lodi 95240
Meetings: 1st Tuesday November through April in Micke Grove Memorial Bldg., Lodi

LOS ANGELES CAMELLIA SOCIETY

President: James Tuliano; Secretary: Mrs. Joe L. Vendracek, 13176 Fenton, Sylmar
Meetings: 1st Tues., Dec. through April, Hollywood Women's Club, 1749 N. La Brea, Hollywood

MODESTO CAMELLIA SOCIETY

President: Dr. Jake Holtzman; Secretary: Mrs. Hazel Grosso, 1424 Encina Ave., Modesto 95351
Meetings: 2nd Monday October through May in "Ag" Bldg. of Modesto Junior College

NORTHERN CALIFORNIA CAMELLIA SOCIETY

President: Robert E. Ehrhart; Secretary: Carl W. Schroeder, 41 Van Ripper Lane, Orinda 94563
Meetings: 1st Monday November through May in Claremont Junior High School, 5750 College
Ave., Oakland

PACIFIC CAMELLIA SOCIETY

President: Albert H. Dekker; Secretary: Mrs. A. L. Summerson, 1370 San Luis Rey Dr.,
Glendale 91208
Meetings: 1st Thursday November through April in Tuesday Afternoon Club House,
400 N. Central Ave., Glendale

PENINSULA CAMELLIA SOCIETY

President: Louis J. Giomi; Secretary: Mrs. Pauline Moore, 80 Wheeler Ave.,
Redwood City 94061
Meetings: 4th Tuesday September through April in Hospitality Room, First Federal Savings
Bldg., 700 El Camino Real, Redwood City

***POMONA VALLEY CAMELLIA SOCIETY**

President: Nelson R. Gatov; Secretary: Nancy McCormick, 568 E. Francis, Ontario 91728
Meetings: 2nd Thursday October through April in First Federal Savings & Loan Bldg.,
399 N. Garey Ave., Pomona

***SAN DIEGO CAMELLIA SOCIETY**

President: Samuel E. Foster; Secretary: Mrs. Peg White, 5951 Germaine Lane, La Jolla 92037
Meetings: 2nd Friday (except February which is 1st Friday) November through May in Floral
Assn. Bldg., Balboa Park, San Diego

SONOMA COUNTY CAMELLIA SOCIETY

President: Alton B. Parker; Secretary: Mrs. Inez Tryon, Sebastopol
Meetings: 4th Thursday, November through April

SOUTHERN CALIFORNIA CAMELLIA SOCIETY

See inside front cover of this issue of CAMELLIA REVIEW

***TEMPLE CITY CAMELLIA SOCIETY**

President: Laurence R. Shuey; Secretary: Mrs. Violet Shuey, 5813 N. Golden West Ave.,
Temple City 91780
Meetings: 5th Thursday of November and 4th Thursday of December through March
in Lecture Hall of Los Angeles County Arboretum, Arcadia

SOUTHERN
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CAMELLIA

Society, Inc.

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