THE

Camellia Review

A Publication of the Southern California Camellia Society



Camellia Japonica, Old Favorites

Courtesy Nuccio Nurseries

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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.

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THE COVER PICTURE

Camellia Japonica — Old Favorites

In our never-ending search for the new and the more gorgeous we are reminded by a bloom in our garden that beauty is not a new creation. For, if the bloom be an Alba Plena (pictured on the left), we know that people have treasured its loveliness for 200 years and more — it is the greatest favorite of all Camellias. Other favorites, growing older but retaining their place in the hearts of Camellia lovers, are Prince Eugene Napoleon (shown in the center) and Mrs. Tingley (on the right).

Color Photograph Courtesy Nuccio's Nurseries

HISTORICAL NOTES ON CAMELLIAS*

Douglas G. Thompson

THIRD INSTALLMENT

We had been content that our earliest records of camellias in Europe put them in the possession of Lord Petrie in London in 1739. We had fancied our mental pictures of redoubtable English clippers and their picturesque skippers plying the 18th century trade lanes to the Orient and tea. We had been told that they brought the first camellia to the Western world and European acclaim. Now, in these last few weeks, new pieces of the fascinating jigsaw puzzle of camellia history have been fitted into place. Another pattern has emerged, telling of an earlier date and another place in an awakening Western world.

The U.S. Department of Agriculture explored the ornamentals of Portugal in cooperation with the Longwood Gardens of Longwood Foundations Inc. Their newly published 1959 findings brought to light and focused world attention on long forgotten, very old camellia trees, believed to be the earliest members of the C. Japonica yet reported in Europe. They are in the garden of the Villa Nova De Gaya in Oporto. The family archives of Conde de Campo Bello, owner of the villa, tell of three living C. Japonica plants coming from Japan and being set out in the garden in the middle of the 16th century. Here they stand after 400 years of majestic patience to add their bit to history.

The date is credible. Portuguese traders first made contact with Japan in 1542. Since 1550 many exotic Eastern ornamentals have found their ways across the seas. Scarcely 60 years after Columbus, the tulip and the hyacinth were well established European favorites. The Portuguese were the master mariners of their day. Captains, travellers, and diplo-

matic envoys participated as plant explorers of the Renaissance. C. Japonica was introduced by way of Portugal in the mid-16th century, not by way of England in the 18th as recorded in all books.

The 200-year earlier dating stimulates our imaginations to muse upon fantastic hardships of sea passage, to appreciate the seemingly impossible task, and to ponder the achievement of bringing living plants to a lovely garden villa, cherished solely for their ornamental beauty. The trees are all of nearly equal size — 18 to 24 inches in diameter at the base and nearly 30 feet tall. The flowers are rose-pink. Self-sown seedlings have grown up to form a court around their stateliness.

While Europeans were sipping their tea and admiring their exotic blooms, our American forefathers were becoming similarly intrigued. As with England, American interest was stirred less by beauty of bloom than by gain of purse. The New World camellia story begins in Georgia with attempts to introduce and cultivate C. Sinensis, tea. Francis Moore narrates his trip to Savannah in 1738. In "A Voyage to Georgia," he recounts his visit to the then famous Trustees Garden laid out in 1733 by General George Oglethorpe. He tells of the many fruits, apples, olives, figs and pomegranates; of coffee, coconuts, and cotton. He comments on bamboo imported from far away East India and how it flourished in the garden. He tells of tea seeds shipped from the same East Indian islands, but they, Moore announces sorrowfully, "though great care was taken, did not grow." The East Indies remained one supply source for later tea farm attempts. Other strains of seeds and plants came to Georgia and South Carolina from China, Japan, Assam, and Surat.

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CAMELLIAS IN MADEIRA

Mildred Blandy

Madeira has been called "The Flower Garden of the Atlantic." This statement bears little exaggeration, as at all times of the year the floral growth is of immense interest and quantity. Flowering trees, shrubs, ferns and herbaceous plants and climbers are everywhere.

This small island is a Portuguese possession — lying 400 miles west off the coast of Morocco, and 550 miles from the Azores.

The soil is volcanic in origin, and free of lime, a gentle climate with winter temperatures between 45° and 60°F, and in summer between 70° and 85°F.

The winter rainfall between November and March varies from 30 to 45 inches in the hill regions, with long periods of winter mists.

Land rises sharply in great hills and mountains from coastal level with deep cut ravines and valleys. It is on the slopes above 1,000 feet that Camellias grow in lovely and luxuriant profusion. Many of the old Portuguese gardens (or "Quintas" as they are called) are found to contain Camellia trees of great size and age; mostly of the Japonica type. Neglected as many of these are they still give a wealth of blossom.

Since the War, Madeira, like other parts of the world, has experienced a great revival in Camellia interest. Realizing as we do now, the ease with which they grow — we are "succouring the old, and planting the new."

My home lies in the very heart of Camellia land, as from the year 1800 these plants were introduced into the garden of the "Quinta do Palheiro." This property lies 1,800 feet up on the eastern slopes above the Bay of Funchal, and here one finds Camellias used as avenues, as wind break

hedges, and in large clumps by pools and lawns.

The flowering starts in November and goes steadily on till the end of May. I would say that February and March are the best months.

Owing to the large number of trees there are always quantities of fallen leaves and flowers. These afford the rich mulch and soil blanket which so considerably enriches all Camellias — protecting roots, and retaining moisture (very important in our dry summer months). This "leaf coverage" is left undisturbed year after year.

The main bulk of the Palheiro Camellias are Japonicas, with additions of Sasanquas, Reticulatas and the many Hybrids. The Japonicas have seeded freely throughout the years, and there is one long "hedge" composed entirely of these "seedlings." Now 15 feet high, these "singles" compose some most delicate and beautiful colours. Varying from deep poppy reds to the faintest blush on a parchment coloured petal. In many cases stamens are very pronounced, standing high above the centre of the blossom. These are, of course, all un-named, and as far as I know, unknown.

I have introduced many of the new varieties now so widely distributed and have had several surprises when seeing a "new" plant's first blossom, to find that it is identical, or almost so, with one of existing old trees.

One cannot write of Camellias without a mention of the late Mr. Ralph Peer. His sudden death was, indeed, a tragic event. I recall a very happy meeting with him and his wife some years ago, and I owe him much for his warm interest — and encouragement in my garden here and for his generosity, too, in sending me scions.

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PHOTOGRAPHING CAMELLIAS*

W. F. Neubert

Quite a few of our members have been making colored slides of camellias over the past number of years. There is, of course, special interest in the new varieties as they come into bloom for the first time.

Most of the slides have been very good with some finding their way into various books and publications.

How can one go about taking slides of good quality? First you must have the proper equipment. The best type of camera for this particular work is the reflex camera. With this type of camera you view the picture that is taken directly through the camera lens instead of the usual range finder. This enables one to see exactly what will appear on the slide and whether or not it is in focus. The Exacta camera is recognized as perhaps the most versatile of the 35mm cameras for this purpose because of the large range of lenses that are available. Other reflex cameras are also suitable. One need not purchase the most expensive lenses to get good pictures for the individual plays the all-important part in the picture taking.

A good quality 50-75-80 or 85 millimeter lens will do an excellent job. My preference is the 85mm because I think it has a longer depth of field which means that both the closest and furthest part of the flower will appear sharp. Whichever lens you choose or prefer, there are two approaches to taking the picture so the flower will fill the frame. One is the use of porta lenses, either the +1, +2 or +3, or a combination of these. The other approach is the use of extension tubes between the lens and camera body. Here again my choice is the extension tubes using either a 5, 10, or 15 millimeter spacer, depending upon the size of the flower. The 5 millimeter spacer is called a two-in-one adaptor. Some

photographers use one setup for all size blooms so that when they are projected the viewer can compare the size of the flowers. With the smaller flowers use several to help balance the picture.

The next thing to consider is a proper setup for taking the picture. It is an easy project to make a pipe stand or one can purchase a copy stand for this purpose. Mine is a homemade variety and it is made so the camera can be raised or lowered. I have provided two arms on top of the stand to hold flood lights which can be moved closer or farther away when necessary.

The background for the picture is very important. Any large stationery store will have what is called construction paper which comes in many colors for around 15¢ a sheet. Various kinds of cloths or a velvety material are also good. My personal preference is the light blue construction paper, although it is good to vary the background to avoid monotony when projecting the slides.

To hold the flower and foliage at the right angle, have several sizes of flower frogs, the type with prongs pointing up. At an electrical or radio parts store or Sears you can obtain several alligator type electrical clamps (very inexpensive). They are about two inches long and about one-quarter inch in diameter. There are used to clamp the back of the flower or stem into varying positions and the other end of the clamp is placed over a prong of the flower frog. A supply of empty brass cartridges of various lengths are used to raise the leaves to proper heighth.

Two good photoflood lights will do, although four may give an evener spread of light. Lights should be about 30 inches from object to be

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GROWING CAMELLIAS IN PENNSYLVANIA*

Mrs. Van Horn Ely

I believe it is possible to grow this lovely plant in our climate with a little care, research and experimenting.

The camellia is a beautiful plant, aside from the exquisite flower, and the texture of the leaf, is a needed addition to our gardens. Last winter was one of our worst. We lost many hollies, etc., but the camellias came through without even a brown leaf. I have about 60 plants that have been growing for over eight years. The date of blooming is approximately April 15th in this Paoli, Pennsylvania location.

The location is most important

Camellias will not tolerate strong winds, so a wall, or windbreak of tall evergreens, is necessary. A northern exposure is best, in order to protect the plant from the early morning sun. In winter the plant is frozen at night, so a gradual thawing is beneficial before the direct rays of the morning sun strike the plant. The winter sun is more damaging than the summer sun.

Ordering your plants

Be sure to order early, as the southern growers do not like to ship after April fifteenth. Container grown plants are preferable, as the shock of transplanting is not as great to the root system. The ideal size plant is 18" - 36".

Planting time

The most successful time to plant is early spring, so that the plant has time to become established before the cold weather. The late blooming varieties are best for this climate, as the buds are smaller when the first cold weather arrives.

A great many failures are due to improper planting. Camellias like a

shallow planting, with a mulch of pine needles or well rotted compost. White pine needles are a wonderful

mulch. The mulch is kept on all the year. However, in late August, the mulch is pulled away from beneath the plant, and left off until after the first frost. This lets in the cold and helps the plant to harden off. After the first frost, the mulch is carefully replaced around the camellia.

A good soil mixture is

- 1 part good rich loam
- 1 part dairy compost
- 1 part peat moss

Fertilizing

Do not feed the plants until they are well established. This may mean two or three years with large plants.

Fertilize in late February, again as growth starts in the spring, and the last feeding in June. Do not feed after June as this encourages a late growth. The tender shoots of the late growth are damaged by an early frost.

Watering

Water when just starting to flower and when growing. These are the two most important times. Naturally, during a dry spell, water deeply. By spraying the foliage, the leaves are kept clean and healthy.

Pruning

Camellias must be thinned and pruned regularly to admit light and air. Timing is important, and the plants should be pruned late in the blooming season. If the plants are pruned at this time the first cycle of growth has not started, and no flower buds are lost. The center should be thinned to admit air and light. Camellias are pruned to improve the appear-

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After returning home from a fast and dizzy, but lovely and most pleasant swirl through the South and Southeast I am almost at a loss to know where to start.

For the second time ole' man frost more or less succeeded in putting the damper on our seeing very many of the newer introductions or seedlings. However the warm and wonderful hospitality more than made up for the misbehavior of the weatherman.

We were told that before our arrival friends and gardens in Jackson, Mississippi had experienced a most unusual condition where the warm temperature reached a high of 80 degrees only to drop that night to a low of 19 degrees. Such sudden extreme changes were more than most plant material could stand, and this was a rather general experience throughout the camellia belt so we made every effort to try and find our flowers in greenhouses.

Upon stopping at one very lovely home and estate I introduced myself and the gentleman rather seriously commented "I expected to see you wearing a turban." After thinking it over maybe this would be an improvement.

However we saw enough camellias to make us feel like small tots returning from their first three ring circus but instead of being lions, tigers and elephants they were 'Tomorrow's', 'Guilio Nuccio's', and 'Drama Girls', and found myself so entranced I

know we missed some very fine performers.

One realization hit me very hard and this is our SPORTING CAMEL-LIAS and from these we might expect almost anything. I have a very strong impression that where we have a striped camellia seedling we can expect with time the solid color and perhaps even blush coloring flowers. Even realizing that in these sporting flowers the form and styling may vary to some degree from its parent. With so many of our newer and more versatile introductions we are finding with plant maturity an occasional bloom that will not be like the parent, sometimes better and othertimes not nearly so good so with this said maturity we are open for surprises.

To bear out this comment and thoughts the two "hottest" and finest camellias we saw in flower are sports. They were 'Tomorrow's Dawn', a blush sport of Mrs. Ross Hayes' 'Tomorrow', and the other 'Betty Sheffield Supreme', the pure white sport of 'Betty Sheffield' with the picotee edge of pink on the outer edge of every petal. These two we will comment on in a latter writing.

'Alpine Glow' and 'Alpine Glow Variegated'

An introduction of Mr. Caesar Breschini, San Jose, California, and one of several that he has been watching since 1953 or 1954. We could hardly have selected a more inspiring

time to voice our enjoyment of the Donckelarii seedling and to learn it was one of the more popular Breschini seedlings that has been tested and tried in the South and Southeast camellia gardens.

The flowers are semi-double in form with some showing a large cluster of stamens and others showing stamens but also carrying a swirling petal or two that might appear to even try to rabbit ear. These latter swirling petals may show fimbriation and the styling makes it a very beautiful bloom. The variegated form seems to carry a very even mottling of white on each petal and this marking on the flower that Mrs. Gish is wearing today makes it very striking and beautiful.

The flower can be 5" in diameter and with its excellent foliage and growth habit it makes an extra fine plant.

Donckelarii seedlings are one if not the favorite seed plants of Mr. Breschini and with this success I can understand his argument. Have often thought what an interesting article we might find if a report were made covering the favorite seed parent for those that love and play with seedlings and it may surprise one to learn the mother plant of our popular and more recent introductions.

'Sadie Mancill'

Two years ago a very dear friend said, "Don't sell 'Sadie Mancill' short" so this is not one of the newest introductions as it was actually registered in 1956. This comment came as a result of not having seen a flower that compared with its description but it was one of those seasons of adverse weather and frost.

As a seedling it was grown and registered by Mr. E. N. Mancill of Lafayette, Louisiana. It was given to Mr. Mancill by his sister, although he selected it because it had serrated,

heavily veined, crinkly edged leaves. Unfortunately the sister was killed in an automobile accident before it bloomed so they were never able to learn the parentage or where it came from.

It is listed as a 4" to 6" flower but feel it will be a strong 5" blossom. A very pale pink, striped and blotched rose flower with 12 to 20 petals, 7 to 13 petaloids and these large crinkly petaloids are intermixed among the cluster of stamens.

The flowers are long lasting and begin to appear in December, continuing through March.

Mr. Mancill named this flower for his wife, Mrs. E. N. (Sadie) Mancill and she is rightfully very proud of it.

While visiting friends in Beaumont, Texas we saw a flower of the solid rose red sport and liked it very much and upon returning home we learn that the pink sport of 'Sadie Mancill' won best of show at Slidell, Louisiana.

How many wonderful surprises can one find in his camellia garden from one fine variety.

'Ballet Dancer'

Mr. Harvey Short is releasing this coming fall of 1960 one of my favorite seedlings which first flowered in 1957.

From the very first we have felt this is one of the finest of the "sweet pea" form in our camellia world and having seen it many, many times we still feel the same way.

It will attain the average size of four inches, with the styling of 'Debutante' but in some areas the latter is a rather tight flower and 'Ballet Dancer' is a rather loose peony, creamy white with base shading and tinting to the tips of the petals as if dipped in soft coral pink paint or ink.

The flower is a unit flower and four or five days are required for it to open. It has excellent substance and

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THE WONDERS OF CAMELLIAS*

Has anyone ever come to you and asked, sincerely, what it is about CAMELLIAS that commands so much of your love and attention? What is about these plants and the growing of them, that holds such continued interest, week after week, year after year? And just what sort of an answer were you able to give this casually inquiring friend? These and similar questions have been asked of us many times, and we would like to think that our answers were adequate and satisfying to the inquirer.

We know of no other growing plants which GIVE SO MUCH for so COMPARATIVELY LITTLE. It might be well to elaborate somewhat to more fully explain our meaning. As an ornamental plant the CAMEL-LIA is magnificent — even when not in flower. With the coming of the blooming season, we gain a tremendous additional BONUS — whether we favor the large spectacular flowers, or the smaller forms for their over-all value in the landscape scene. We may have rather unlimited time to devote to the care of our Camellias and they will reward us for this attention or we may have little time to devote to them and they will still put on a remarkable performance for us. Camellias will tolerate a great deal of abuse, though we do not recommend it. There are Camellia plants growing today in several sections of the World that are known to have surpassed the combined average life spans of several persons. They have grown in size to huge and majestic trees, with little or no care over a period of many decades. This in itself is one of the WONDERS OF CAMELLIAS, but there are countless others.

Another more obvious wonder is their blooming period, both as to the time of the year, and the length of the Camellia blooming season. Gen-

erally, and in most areas, they burst into flower when little else has such courage, for many bloom during the winter months. Though occasionally halted by freezing weather, they will again produce their lovely, delicate blooms immediately following the next mild days. We are, of course, speaking of the out-of-door type WONDERS, but for those who are fortunate enough to have enjoyed the additional wonders of growing but a few, or many, of their Camellias under glass, their pleasure may in this way be multiplied many times. When these lovely plants have been grown with the added protection afforded by a greenhouse, the flowers not only are PERFECT, but the blooming time may be increased to cover a period often over six months, particularly in the Pacific Northwest, Serious efforts are presently being made, by both amateur and professional, through cross pollinization and interspecific hybridization, to extend the Camellia blooming season completely around the SEASONAL CLOCK. This, it is hoped, will result in the development of varieties that will flower during every month of the year. Certainly, experimentation toward this goal alone by any Camellia enthusiasts would provide fascinating interest, as well as the possibility of contributing worthwhile results.

We should not overlook the WON-DER of the *unpredictability* of Camellias, for they possess this RARE quality, to a greater extent, then most other ornamental shrubs. This may be due primarily to several very interesting factors. First, one thinks of the WONDERS OF NATURE, and the species of Camellias known to have grown for many CENTURIES in remote sections of the world. Yet, only comparatively recently have some been "discovered" and in some in-

stances, made available in our own and other countries. One of the characteristics of a SPECIES is the ability of this species to reproduce itself from seed - true to the particular species. In the NATIVE state or WILD FORM of any given SPECIES, there is generally very little major difference in either plant or flower, though there may occasionally be slight differences in the shade of the flower. In the case of the species c. saluenensis, this flower coloring varies from those plants having nearly white or blush shades to others having light pink blooms, and in some instances there are the lavender-pink flowers. So it is with other species — their MAJOR characteristics remain comparatively uniform, but occasionally, even in their natural (WILD) habitat, NATURE has created HYBRIDS, and these are known as NATURAL HYBRIDS, as the name would imply. Perhaps still another factor having a definite influence in this matter of UNPREDICTABILITY of Camellias may well have been the ancient crossing of some of the species — whether Natural or Purposeful. The earliest known hybridization of Camellias was accomplished by the Buddhist Monks - both in Southern China, as well as neighboring countries. Because number of the SPECIES — today regarded as most valuable sources of possible improvement in the Camellia — originated in these areas, we may

presume that these were used by the early hybridists. This very likely possibility may hold the answer that has "puzzled the experts" for many years, as efforts were made to determine the IDENTITY of certain Camellias. A rather good example in this regard may be found in the Camellia KURO-TSUBAKI Camellia). This rather strange, but interesting, Camellia has for a number of years reminded us of "the man without a Country," for it has been placed in such various classifications as japonicas, saluenensis, c. Iodina, under the heading "Miscellaneous Hybrids of Unproven Parentage," and perhaps a number of others that the writer does not recall. From a strictly amateur point of view, the latter or "unknown parentage" would seem by far the most appropriate though we express this opinion merely upon personal observation and hybridization experiences meager with the variety. It has been mentioned only because of the widespread interest in this particular Camellia, which we like to think of as one more of the Camellias that we WONDER about.

With the gradual availability of a number of SPECIES, it was quite natural that there should be considerable disagreement regarding the value of these species in the eventual improvement of the Camellia presently

(Continued)

MARSHALL'S CAMELLIA NURSERY

(At the sign of the Red Camellia)

SPECIALIZING IN CAMELLIAS AND AZALEAS

AARON'S RUBY
ANGEL
CLARICE CARLTON
DESCANSO BLUSH

DORIS FREEMAN GUILIO NUCCIO MARGARET SHORT MRS. D. W. DAVIS ONETIA HOLLAND SPARKLING BURGUNDY SULTANA TOMORROW

Reticulatas — Sasanquas

1960 Camellia Reticulatas - Sasanquas and Azalea list on request
6747 North Rosemead Blvd., San Gabriel, Calif. ATlantic 6-0452

WONDERS OF CAMELLIAS (from Page 9)

in cultivation. Perhaps merely because the flowers of most of the newer species are SMALL and comparatively uninteresting, individually some felt that they were worthless — except for their NOVELTY value — while others were eager to suggest the farreaching possibilities of these plants through HYBRIDIZATION. This was particularly true following the first distribution of c. Fraterna some ten vears ago. Mr. Andrew Sears, from this region, when asked to evaluate the c. Fraterna, speculated that it had definite worthwhile possibilities as a parent in hybridization — particularly as it was a profuse bloomer and had CONSIDERABLE FRAG-RANCE. He carried on numerous personal investigations and discovered that this species was extremely difficult to propogate. Out of some 30 grafts made, using japonica as understocks, only two plants survived, and the ratio was similar in the attempts to root this plant as cuttings. However, once grafted, the scions from the grafted plants were rather readily successful — both as further grafts and as rooted cuttings. This would make us wonder if the UNDER-STOCK does not have more influence upon the graft than is presently believed. With this possibility in mind, Mr. Dean Asper has suggested the possibility of further investigations with SPECIES which may be difficult — or so far impossible — to CROSS. He WONDERS if any experimentation has been attempted by grafting TWO quite incompatible species upon MUTUAL understock. He WONDERS if — when these sorts so grafted reach blooming age would it be possible to then successfully cross them. Would the mutual understock bring any greater success in the crossing of two previously incompatible SPECIES? So many "rules" have been altered within the past few years in the experimentation

with Camellias that we WONDER about all of these possibilities!

Quite obviously records are not available concerning the investigations of the early hybridists in different parts of Asia, but it is not difficult to imagine the joy, and pride as well, that was associated with the first blooming of the KUNMING RETICU-LATAS several centuries ago, Camellia enthusiasts of our time have only speculated upon the exact background of this magnificent group. We do not WONDER that these plants have been cared for and carefully guarded for centuries for they are breathtakingly beautiful, even today where they must often appear almost side by side, with the BEST that the modern Camellia world has to offer. We often WONDER in our more thoughtful moments if it is possible that the work of the ancient experimenters has any bearing upon the present day sporting of Camellias that has given us many of our finest new varieties.

Many of the fine older varieties of Camellias were imported into this country from either Europe or Asia, so it is little WONDER that records of exact parentage are obscure in most cases. Without doubt the fascination that Camellias held, even in quite ANCIENT times and in distant lands. was the direct result of the beauty of the flower, and not in the HISTORY of its origin. This has been largely true in the United States as well, until rather recent years. With the gradual importation, however, and subsequent distribution of more and more of the interesting and unusual species, ever intensifying efforts in research are being undertaken, primarily as the result of amateur experimentation. Today, as perhaps never before, in the history of Camellias, we are becoming constantly more aware of the value and the tremendous possibilities which these quite unspectacular "rela-

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THE SHOWING OF THE BLOOM

From San Diego to Sacramento the Shows went on as scheduled and all were the "greatest" ever, San Diego's show really started things off with color and enjoyment to be followed in quick succession by Pomona, Temple City, and Orange County shows. Despite poor weather fine blooms were exhibited everywhere.

Then followed the Big Show at Descanso with the most extensive exhibit of fine reticulatas ever seen anywhere, according to judges and travellers from Camellialands. They were gorgeous.

Kern County, Central California, and Sacramento Societies finished the series. Results of awards follow of Shows reported and now the season ends, but a new one begins. Fine blooms to all.



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ALSO SPARKLING BURGUNDY **JAPONICAS** SASANQUAS

RETICULATAS HYBRIDS

The Southern California Camellia Society Show LIST OF AWARDS

SWEEPSTAKES: Mr. and Mrs. R. W. Ragland RUNNER-UP SWEEPSTAKES: Dr. and Mrs. L. J. Taylor

Best Japonica: 'Guilio Nuccio' — Won by Alan Grimley Best Reticulata: 'Noble Pearl' — Won by Masao Nishimoto Best Miniature: 'Florence Daniell' — Won by John C. Robinson Best Seedling: 'Alice Wood (Var.)' — Won by Alice Wood

Best Hybrid: 'Lady Gowrie' - Won by Mr. and Mrs. R. W. Ragland

Runner-up Japonica: 'Lady Kay' - Won by H. C. Gernandt

Runner-up Reticulata: 'Moutancha' — Won by Mr. and Mrs. Carl Keyes Runner-up Miniature: 'Reveras Baby Pink' — Won by Edwards Metcalf

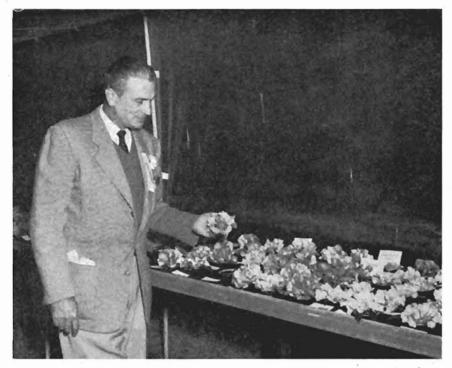
Runner-up Seedling: Won by Mr. and Mrs. R. W. Ragland

Runner-up Hybrid: 'Donation' — Won by Carl Keyes Best 3 Japonica: 'Reg. Ragland Var.' — Won by Amos Kleinsasser Runner-up 3 Reticulata: 'Butterfly Wings' — Won by Caryll W. Pitkin Best 3 Reticulata: 'Purple Gown' — Won by Dr. and Mrs. L. J. Taylor



The Southern California Camellia Society Descanso Show Managers

The management of the Descanso Show was ably handled by the group above. From left to right they are: Wilber Foss, Douglas G. Thompson, Show Manager, William Goertz and K. W. Newerf. Mr. Goertz holds a winner.



K. W. (Ken) Newerf, assistant Show Manager, holds a beautiful C. reticulata, Lions Head' and is surrounded by one of the finest displays of reticulatas ever shown.

Best 5 Japonica: 'R. L. Wheeler Var.' — Won by Mr. and Mrs. R. W. Ragland

Best 5 Reticulata: 'Buddha' — Won by Earl S. Gorton

Runner-up 5 Reticulata: 'Crimson Robe' — Won by Caryll W. Pitkin

Runner-up 5 Japonica: 'Purity' — Won by Elmina M. Edwards

Runner-up 3 Japonica: 'Mercury Var.' — Won by Mr. and Mrs. R. W. Ragland

Commercial

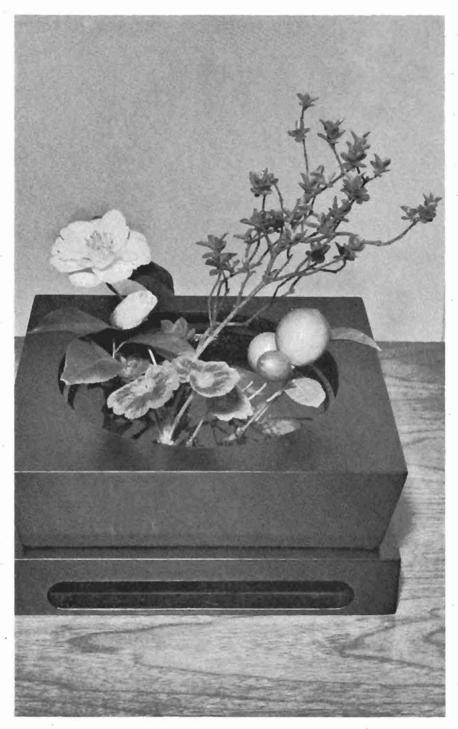
Best Japonica: 'Guest of Honour' — Won by Harvey Short Best Reticulata: 'Crimson Robe' — Won by Nuccio's Nurseries

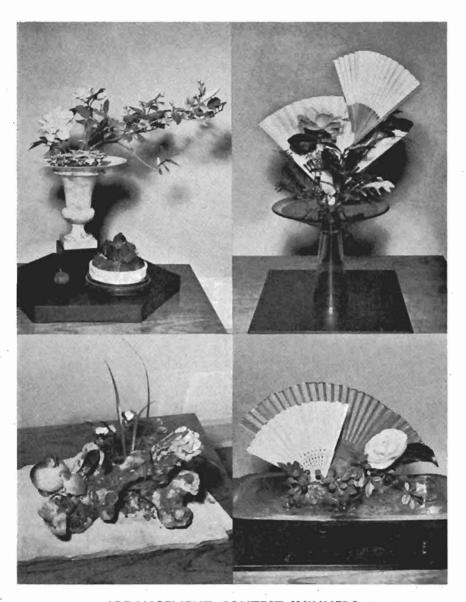
Species

First: 'Show-a-no-Sakae' — Won by R. F. Dickson, Sr. Second: 'Dawn (Vernalis)' — Won by R. F. Dickson, Sr.

Court of Honor

Mr. and Mrs. John Robinson	'Drama Girl'
Mr. and Mrs. Reg Ragland	Tomorrow
Mr. and Mrs. W. F. Goertz	
Alan Grimley	'English Donckelarii'
M. E. Chapman	
Mr. and Mrs. Wilber Foss	"Coral Pink Lotus
A. Kleinsasser	
Alan Grimley	'Audusson Special'





ARRANGEMENT CONTEST WINNERS
Southern California Camellia Society Descanso Show
February 27, 28, 1960

Best In Show Award went to Martha Myers for her attractive arrangement. Best In Division A was won by Mrs. Joe Garat, upper left; Best In Division B, lower left, won by Mrs. Anne Boyd, who also won Runner-up Division B, lower right. Runner-up Division A was won by Martha Myers (shown upper right).

The San Diego Camellia Society Show LIST OF AWARDS

The Outstanding Bloom of the Show — 'Buddha'

Won by Mr. and Mrs. Arthur E. Krumm, Altadena, California

Super Sweepstakes Division — Sweepstakes Winner:

Won by Reg Ragland, Orange, California

Super Sweepstakes Division — Sweepstakes Runner-up:

Won by Fred Hamilton, Santa Maria, California

Amateur Division — Sweepstakes Winner:

Won by Mr. Edwards H. Metcalf, San Marino, California

Amateur Division — Sweepstakes Runner-up:

Won by Mr. and Mrs. Albert H. Dekker, Glendale, California

Super Sweepstakes Division

Best Japonica — 'Tomorrow'

Won by Reg Ragland, Orange, California

Best Reticulata — 'Confucius'

Won by Fred Hamilton, Santa Maria, California

Best 3 Japonicas — 'Frances Butler'

Won by Reg Ragland, Orange, California

Best 5 Japonicas — 'Reg Ragland'

Won by Reg Ragland, Orange, California

Best 3 Reticulatas — 'Lion Head'

Won by Fred Hamilton, Santa Maria, California

Best 5 Reticulatas — None

Best Miniature — None

Best Hybrid of Species — 'Citation'

Won by Mr. and Mrs. Stanley Miller, El Cajon, California

Amateur Division

Best Japonica — 'Mrs. D. W. Davis'

Won by Mr. D. H. Roberts, San Fernando, California

Best Reticulata — 'Lion Head'

Won by William Gibson, San Diego

Best 3 Japonicas — 'Flame, Var.'

Won by Mr. and Mrs. A. W. Garner, Glendale, California

Best 5 Japonicas — 'Guillio Nuccio'

Won by Mr. and Mrs. C. Irvine, North Hollywood, California

Best 3 Reticulatas — 'Chang's Temple'

Won by William L. Gibson, San Diego, California

Best 5 Reticulatas — 'Buddha'

Won by Mr. and Mrs. C. Irvine, North Hollywood, California

Best Miniature or Boutonniere — 'Reviers Baby Pink'

Won by Mr. Edwards H. Metcalf, San Marino, California

Best Hybrid or Species — 'Donation, Var.'

Won by Mr. and Mrs. C. H. Mathis, San Diego, California

Best New Introduction—Amateur or Professional—Seedling or Sport — Unnamed as yet

Won by Mr. and Mrs. Stanley W. Miller, El Cajon, California

Container Grown Plants

Blooming Plant: Not over 3 feet in height — 'Victor Emanuel'
Won by Grace W. Ames La Jolla California

Won by Grace W. Ames, La Jolla, California

Blooming Plant: Over 3 feet in height — 'Dave Strother' Won by Ray Greer, Spring Valley, California

One Year Old Grafted Plant — 'Prof. Charles Sargent'

Won by Mr. and Mrs. C. H. Mathis, San Diego, California

Two Year Old Grafted Plant — 'Stella Sewell'

Won by Mr. and Mrs. Byron Lindsley, San Diego, California

Artistic Division

Advanced Section — Sweepstakes Winner:

Won by Mrs. Chas. Bustamente, La Mesa, California

Most Outstanding Arrangement in Advanced Section:

Won by Mrs. Chas. Bustamente, La Mesa, California

Amateur Section — Sweepstakes Winner:

Won by Mrs. Peg White, San Diego, California

Most Outstanding Arrangement in Amateur Section:

Won by Mr. Stanley Miller, El Cajon, California

The Orange County Camellia Society Show LIST OF AWARDS

Sweepstakes — Mr. and Mrs. R. W. Ragland

Sweepstakes Runner-up — Dr. and Mrs. L. J. Taylor-

Best Japonica — Tomorrow — Mr. and Mrs. R. W. Ragland

Best Reticulata — Crimson Robe — Dr. and Mrs. L. J. Taylor

Best Arrangement — Mrs. Joe Garat

Best Hybrid — Donation — Miss Esther Rideout

Best Multi-bloom Reticulata—5 — Noble Pearl — Mr. F. L. Storment

Best Multi-bloom Japonica — White Nun — Dr. Cecil Eshelman

Best Miniature — Johnny's Folly — Mr. E. H. Metcalf

Best Seedling — Teresa Ŕagland — Mr. and Mrs. R. W. Ragland

Best Collector's Table — Mr. and Mrs. R. W. Ragland

Coral Pink Lotus — Wilber Foss White Nun — Cecil Eshelman

Guilio Nuccio - Mr. and Mrs. R. W. Ragland

Noble Pearl — A. W. Garner

Buddha — Harold Larson Tali Queen — Dr. and Mrs. L. J. Taylor

The Central California Camellia Society Show LIST OF AWARDS

Sweepstakes — Mr. and Mrs. Milo E. Rowell

Sweepstakes Runner-up — Mr. and Mrs. H. H. Collier

Outstanding Bloom — Mr. and Mrs. Charles E. Ahrens

Best Japonica — Mr. and Mrs. Milo E. Rowell

Best Reticulata — Mr. and Mrs. H. H. Collier

Best Miniature, Japonica — Mr. Edward H. Metcalf

Best Seedling — Mr. and Mrs. H. H. Collier

Best Hybrid — Mr. and Mrs. H. C. Hamilton Best Arrangement — Mr. and Mrs. H. C. Hamilton

The Camellia Society of Kern County Show LIST OF AWARDS

Sweepstakes — Dr. Leland Chow Sweepstakes Runner-up — Mr. Fred Hamilton Best Japonica — Clarice Carlton — Amos Kleinsasser Best Reticulta — Noble Pearl — Tom Stull Best Arrangement — Catherine Carter



Four Sweepstakes

One of the most outstanding accomplishments in Camellia Competition was achieved in four successive shows by Mr. and Mrs. R. W. Ragland of Orange, California. The San Diego, Orange County, Temple City, and Southern California (Descanso) Sweepstakes went to this pair of camelliaphiles who love Camellias and people. It couldn't have happened to finer people - Congratulations Reg and Lollie - Keep our shows beautiful with your flowers!



FREQUENT WINNERS IN CAMELLIA SHOWS

The name of Taylor and Eshelman often appear with prize-winning ribbons and lovely flowers on the winners' table. Pictured above (on the left) is Dr. Cecil Eshelman with five blue ribbon blooms at the recent Orange County Show. The L. J. Taylors (on the right) have won fame as sweepstake, sweepstake runner-up, and individual bloom winners over several years. Here they are shown with the best reticulate in the Orange County Show.

The contributions these people make to our Camellia world endear them to us. Congratulations! Many times!

A.C.S. DIRECTORS AT LARGE—PACIFIC COAST AREA

In recent elections in the American Camellia Society signal honors were conferred on Californians known in the pursuit of happiness among camellias. Directors at Large for the Pacific Coast Area were elected in the persons of Mr. William (Bill) Woodroof and Mrs. Vern (Billie) McCaskill. Mr. Woodroof known for his many and varied interests and activities among camellia people and their favorite flower, will continue to serve all of us in his usual unselfish and efficient manner.

Billie McCaskill, long a leader among us, extends her service to the Society through this position of Director. She is a pleasant, friendly, efficient person who will achieve successful results and always with a smile. She states, so well in the following, her beginnings with camellias.



"My love for camellias goes back to gifts from two very dear friends, a Pink Perfection from D. W. Coolidge and a sasanqua from Hugh Evans. From these two plants and from the inspiration and influence of two of Southern California's greatest horticulturists, a fascinating hobby began. Through the years the hobby developed into a full-time business with every busy day filled with new and exciting camellia experiences. As charter member of both the American Camellia Society and the Southern California Camellia Society, I have watched the camellia grow from its infancy, from Pink Perfection to Crimson Robe, and from a few casual admirers to thousands of devoted camellia lovers. No hobby is so rich in genuine pleasure and true and lasting friendships as 'the camellia and camellia people hobby.'

"In retrospect, I have come to the conclusion that camellias and camellia people are much alike anyway. There are hundreds of big, handsome ones like Reg Ragland; many, many more charming and exquisite ones such as Jessie Katz; and, of course, just a few contrary ones whom complain about their location, environment, etc., — no names please.

"My whole life is just one camellia after another, and I love it!"

A few of her camellia activities are that she was a charter member of American Camellia Society; charter member of Southern California Camellia Society; member of many other camellia societies; she helped organize Southern California Camellia Society; served as vice-president of the Southern California Socity two years; a Board Member three years; and served on various committees, especially the Review Committee. Truly she has a wealth of background on which to draw for her assisting as an officer of A.C.S.

E. C. TOURJE—FELLOW A.C.S.

Congratulations are extended to our E. C. Tourje for the honor bestowed upon him at the A.C.S. meeting in February when he was named a Fellow in the Society. For his long, arduous and successful hours spent on producing "Camellia Culture," research on Camellias, writing, and service to camellias and people this honor is a fitting tribute. Representing the A.C.S., Mr. R. W. Ragland made the presentation to Mr. Tourje at a winter meeting of the Southern California Camellia Society. We are proud of Carl Tourje and wish him further happy hours with camellias in his many fields of interest with them.

GROWING CAMELLIAS

(from Page 5)

ance and the shape of the plant, I also like to prune by removing the terminal leaf bud as the new growth starts. In this way the plant is kept compact.

Clean up under the camellias, as the droppings cause disease. If disease shows, spray with malathion, or volck, but only spray if necessary.

In October, a light spray of wiltpruf is beneficial. Be sure to spray only the tops of the leaves, otherwise the plant is sealed.

Hardy varieties

Pink:

Berenice Boddy Marjorie Magnificent

Rose Color:

Kumasaka

Mathotiana

Chandleri Elegans

Rev. John Drayton

Lady Clare

White:

Leucantha

Red:

Blood of China, or

Victor Emmanuel

Simeon

Arejishi (Blooms in October)

Variegated:

T. K. Var.

Elegans Var.

Tri Color Seibold

* Editor's Note: In the spirit of

assisting those in areas similar to those of Pennsylvania this article was requested and is printed in the interest of camellias in cold winter climates.

CAMELLIAS IN MADEIRA

(from Page 3):

Too — I would say how grateful I am to Mr. Charles Puddle of "Bodnant," Sir Giles Loder of "Leonardslee," and Mr. Tsuneshige Rokujo of Tokyo, Japan, all of whom have sent me valuable additions to my Camellia "family."

I have often been asked how best I like to see a Camellia. A difficult question!

The wealth of blossom colouring a tree? The beauty of a deep carpet of fallen petals?

Reticulatas scattered on a polished table in the reflected glow of candle light? Or a few tiny buds worn by my daughter on a party dress?

I don't really know. What is certain is — that Camellias are one of the loveliest things found here in Madeira, where nature's treasury has been richly filled.

Quinta do Palheiro, Funchal, Madeira

BREEDING CAMELLIAS FOR NORTHERN GARDENS

Francis de Vos

The southeastern states and the coastal areas of California, Oregon and Washington have been the traditional homes of the camellia in this country for over one hundred years. During the past two decades, intrepid gardeners have gradually introduced camellias with varying results to the more hostile climate of the coastal areas from Norfolk, Virginia, to Long Island, New York.

It was not altogether unexpected when the camellio, aristocrat of southern gardens, did not prove to be altogether hardy further north. Reports of cold damage to foliage and flower buds were numerous and discouraging but always tempered by scattered successes. These successes have been numerous enough as far north as Washington, D. C., and Baltimore, Md., for growers to feel that the help of horticulturits and plant breeders would result in finding and developing camellias better adapted to northern gardens.

General Considerations

The first thing that the potential camellia breeder should do is to acquire a thorough knowledge of the behavior, under varying climatic conditions, of the species and varieties that might be useful in obtaining his objectives.

With literally thousands of varieties to choose from, why is it necessary to resort to breeding? Are not the varieties now available satisfactory to meet our needs? There are no simple answers to these questions. Even the most ardent northern camellia enthusiast will admit that many of the varieties that he must choose from are second rate. Also, no individual or institution has tested all existing varieties for hardiness or general landscape usefulness in colder climates. The camellia collection at

the U. S. National Arboretum in Washington, D. C. is perhaps the most extensive of the cold-climate collections, but it is composed of only 150 varieties of *Camellia japonica*, 90 varieties of *C. sasanqua* and a few miscellaneous species. Undoubtedly, among the thousands of untested named and unnamed varieties, others besides those now known would be useful in northern gardens. However, we must look to breeding to attain the more spectacular goals.

Breeding Objectives

Although greater cold hardiness is always an underlying objective of most camellia-breeding programs, the primary concern has been improving flower size, color, substance, form and, more recently, fragrance. This approach is understandable when we consider that the plant breeder usually has had in mind the camellia enthusiast who, because he lives in an area where a wealth of varieties can be grown, can afford to be discriminating in his choice.

The person living at the northern fringe of camellia culture cannot or need not be so discriminating. The preoccupation of many camellia gardeners has been with varieties that will win prizes at the annual camellia shows rather than with the overall landscape value of camellias. Varieties unacceptable to more favorably located gardeners may be the best he can hope for. The principal objective of a camellia-breeding program designed to extend the cultural range of camellias northward must first be the cold problem. The approach should be made along the following lines: (1) increasing flower bud hardiness; and (2) developing forms that will bloom during the relatively frost-free periods of early fall and late spring.

Increasing Flower-Bud Hardiness

The flower buds of camellias are much less hardy than the rest of the plant. The approximate temperature ranges for bush hardiness and flower-bud hardiness, respectively, of the major camellia species grown out-of-doors in the North are as follows: C. japonica—15° to +10° F. and—5° to +15°; C. sasanqua 0° to 10° and 15° to 18°; C. oleifera—5° to +5° and 15° to 18°.

Cold injury to camellia flower buds may be evident after the first fall freeze during which the temperature drops to 20° or lower, or at any time during the winter. A mild fall, followed by an abrupt freeze, invariably results in extensive bud damage even to varieties that can withstand lower temperatures in mid-winter. Observations made by cutting open flower buds after the cold spell on November 24 and 25, 1956, when the temperature dropped to +18°F. indicated that the following varieties of C. japonica were able to withstand this freeze without serious injury: 'Adolphe Audusson', 'Are-jishi', 'Gov. Mouton', 'Kumasaka', 'Marjorie Magnificent', 'Jarvis Red', 'Řev. John Drayton' and 'Leucantha'.

The much-heralded Snow Camellia (C. rusticana) has not proved to be any more and perhaps is less bush-hardy than most japonicas when not protected by a continuous snow blanket during the winter. Less than one-third of the 200 three-year-old plants of this species survived three winters outdoors in the Washington, D. C. area even though the lowest temperature recorded was only +2°F.

The race of free-flowering camellias developed in England from crosses between C. saluenensis and C. japonica and known collectively as C. williamsii have not yet been tried extensively in northern gardens. Such Williamsii Hybrids as 'J. C. Williams' and 'Donation' have been said to

produce satisfactory flowers after exposure to 0° F. Additional crosses should be made between these diploid species by using many of the extremely hardy forms of C japonica now known.

Other interesting crosses that may be worth repeating by using hardier forms are *C. japonica* x *C. reticulata* (a very tender hexaploid species with flowers ranging up to 6 inches in diameter) and *C. saluenensis* x *C. cuspidata* (*C. cuspidata* is a diploid and the hybrid is called 'Cornish Snow').

With the possible exception of the largely untried varieties of *C. williamsii*, the flower-bud hardiness required is confined to the various

varieties of C. japonica.

Varietal trials at the National Arboretum have uncovered a number of *C. japonica* varieties which produce good-quality flowers after having been exposed to temperatures of 0° to 5° F. They are as follows: 'Adolphe Audusson', 'Are-jishi', 'Berenice Boddy', 'Blood of China', 'Elegans' (Chandler), 'Donckelari', 'Dr. Tinsley', 'Flame', 'Gov. Mouton', 'Herme', 'Jarvis Red', 'Kumasaka', 'Lady Clare', Lady Vansittart', 'Leucantha', 'Magnoliaeflora', 'Marjorie Magnificent', 'Professor Charles Sargent', 'Rev. John Bennet', 'Rev. John Drayton', 'T. K. Variegated', 'Thelma Dale', 'Tri-color' (Siebold) and 'Tri-color' (Siebold) Red.

Unnamed varieties that have shown even greater bud hardiness such as Zimmerman's variety Z (see Plants & Gardens, Vol. 12, No. 3), the Kominato strain from northern Japan and various unnamed varieties that are being uncovered from time to time should also be used.

Whether all the aforementioned varieties would be useful as pollen, seed parents, or both, can only be determined through trials. Varieties with double and peony-type flowers

(Continued)

seldom are satisfactory as seed parents, but the same can be said for some of the single and semi-double-flowered forms. The cold-hardy 'Donckelari' and 'Leucantha' as well as the less hardy 'White Hibiscus', 'Dr. W. G. Lee' and 'Mrs. F. L. Gibson', are excellent seed producers.

The excellent performance of the above-mentioned varieties under actual field conditions and the fact that the crosses would be of the intraspecific type and largely between diploid parents* seems to indicate a good chance of developing a race of camellias that would make satisfactory landscape specimens in areas with an average annual minimum temperature of —5° F.

Earlier and Later Blooming Varieties

The development of a race of fall-blooming camellias having the flower quality of *C. japonica* seems to pose a more difficult, but at the same time more intriguing problem. The reason is that 'Are-jishi' is the only variety of *C. japonica* now known which regularly produces some flowers in the relatively frost-free September to mid-November period in what is now the northern fringe of the camellia belt in the East, Washington, D. C. The attainment of this objective will undoubtedly require interspecific crossing of diploid and hexaploid parents.

Fall-blooming camellias are largely confined to the species *C. sasanqua* and *C. oleifera*. These species are about equally cold-hardy, fruit abundantly, and are hexaploids (2n=90). The sasanqua, however, is much more variable in flower form, color, growthhabit and foliage, as evidenced by the more than 100 named varieties. *C. oleifera* is grown as a species and is in little demand because of its poorquality single white flowers and dullgreen foliage. Both species lack the flower quality and general cold hardi-

ness of *C. japonica*. Hybrids having the earliness of *C. sasanqua* or *C. oleifera* and the flower quality of the japonicas would do more for camellia culture in the northern fringe areas than any other single development an deliminate the concern over flower-bud hardiness.

The attainment of early-flowering plus better flower quality and bud hardiness is partially approached in the anomalous and discredited species C. hiemalis* represented by the varieties 'Shishi-gashira', 'Chiri Tsubaki', 'Meoto-zaki' and 'Sandanka'. Sealy believes that this group of varieties, often called "Winter Sasanguas," actually are sasanquas, but he does not attempt to explain their tetraploid nature. Information as to whether these interesting varieties represent tetraploid forms of C, japonica or hybrids from crosses between the hexaploid C. sasangua and the diploid C. japonica must await future studies. There are, however, no authenticated records of crosses between C. japonica and C. sasanqua or C. Oleifera, but it is encouraging that the tender hexaploid species C. reticulata has been successfully crossed with the diploid species C. japonica and C. saluensis. Since C. reticulata has the same chromosome count as the sasanguas, every effort should be made to effect crosses between these species.

The eminent rose breeder Dr. Walter E. Lammerts, who has also done considerable camellia breeding, cautions would-be camellia breeders to watch out for apomictic** seedlings when dealing with species at the tetraploid or hexaploid level. He found that, in some crosses involving polyploid species, the seedlings invariably resembled the diploid *C. japonica* female parent in foliage and plant habit. In such cases, the pollen merely stimulated the development of an abnormal diploid egg (a normal egg would be haploid) without actual

fertilization.

The difference in flowering time of the fall-blooming camellias and the winter- and spring-flowering C. japonica would not seem to offer an insurmountable barrier to crossing. The early-flowering 'Are-jishi' normally flowers along with most sasanguas. Other early-flowering japonicas grown in greenhouses can be made to bloom at the same time as sasanguas growing out-of-doors. Pollen storage offers still another means of crossing species with widely separated flowering periods. It should also be possible to retard the blooming of sasanquas growing under greenhouse conditions by regulating temperature and day length and thereby making them available as seed parents in crosses with winter and spring-blooming species.

Seemingly the possibilities are good for developing varieties that will come into bloom throughout April, when the frequency and severity of frosts are decreasing. Crosses involving the late-blooming Kominato strain with such medium-late bloomers as 'Ville de Nantes', 'Kumasaka', 'Leucantha', 'Rev. John Bennett', and 'Blood of China' may well produce late-flowering hardy types for north-

ern gardens.

Camellia-Breeding Techniques

Since camellias bloom when frosts or freezes are likely, the parent plants should be protected. Better results are obtained from crosses made in greenhouses than from those made outdoors. Pollen subjected to temperatures below 60°F. becomes impotent, and new pollinations subjected to temperatures below 25° may be severely damaged.

Emasculating and pollinating camellia flowers is comparatively easy because the parts are large and readi-

ly accessible.

Emasculating. Flower buds selected to serve as female parents should be opened and the anthers removed before they split and discharge their pollen. The right stage of development for emasculating may differ with varieties but usually occurs three or four days before the petals unfold. The petals are often removed at the time of emasculation. After emasculation, the flower should be covered to prevent chance pollination. Kraft paper bags secured to the stem below the flower with a Twist-Em tie, staples, or paper clips are satisfactory.

Collecting and Storing Pollen. Pollen from selected male parents may be collected in a number of ways. The pollen may be shaken from the anthers into a small envelope or the anthers may be removed and placed in small gelatin capsules just before they open; or at the time of pollination the ripened anthers can be removed with tweezers and applied directly to the stigma of the female parent. In all cases it would be well to cover the flowers before the anthers are ripe, to avoid contamination.

Limited tests have shown that pollen from early-flowering varieties may be stored successfully as long as two and one half months at room temperatures by placing No. 1 gelatin capsules, half-filled with pure pollen, in a large test tube containing anhydrous calcium chloride.

Pollination. Usually within three days after emasculation the stigma becomes swollen and sticky and is said to be receptive. The pollen, whether recently collected or stored, is applied in copious quantities to the stigma with a camel's-hair brush, or, the stamens from the male parent including the ripe anthers may be picked off by hand and the pollen applied directly to the stigma. After pollination, the flower should be covered again and the branch bearing the potential seed capsule labeled with the name of the female and male parents and the date of pollination.

Once the style of the pollinated

(Continued)

BREEDING CAMELLIAS (from Page 25)

flower begins to wither, it is safe to remove the bag. Whether an initial "take" has been effected and fertilization has taken place can be determined by the condition of the ovary, which begins to swell within three weeks after pollination and provides a contrast to the shriveled ovary of unfertilized flowers.

Collecting and Germinating the Seed. The seed is ready for harvesting at the time the fruiting capsule begins to dry and crack open. Under outdoor conditions, the seeds are usually gathered in early fall. To prevent the loss of seeds from capsules that may open before collections are made, the fruit may be enclosed in a cheesecloth bag in late summer.

Camellia seeds should be sown immediately after they are harvested. Seeds placed in a container of damp peat from which no water can be squeezed, placed in the shade or moderate light and kept at a temperature of 65° to 75°F, will germinate within 10 to 30 days. When the young root is about 1 inch long the germinating seeds may be transferred to a flat containing a 50-50 mixture by volume of sand and peat and placed under light shade. When the stems have elongated to 3 to 6 inches they can be potted in a composted soil of pH 5.5 to 6.5.

The embryo-culture method for germinating hybrid seed is of special interest to hybridizers since the seeds resulting from interspecific crosses often contain defective embryos and can be germinated only by this method.

Concluding Remarks

Despite the alluring goals that have awaited would-be camellia breeders there has been relatively little planned breeding with these outstanding plants. Among the possible reasons are the high mutation rate which has provided a constant supply of variation and the difficulty of attaining large hybrid seedling populations that

would enable the breeder to uncover superior types. The azalea breeder may expect 200 to 500 seeds per capsule, whereas the camellia breeder is fortunate if he averages two.

Although the frequency of mutations can probably be increased by radiation techniques, the plant breeder cannot look to this method for fulfilling specific objectives. There is no controlling the type of mutation that appears. Controlled intra- and interspecific hybridization should, in the long run, provide superior camellias not only for northern gardens but for wherever they can be grown.

Suggested Reading List

 Bonner, James. "Climate and the Flowering of the Camellia" in Camellia Culture, Macmillan Co., 1958.

 de Vos, Francis. "Camellias at the U.S. National Arboretum" in American Camellia Yearbook, 1957.

 de Vos, Francis. "Sasanqua Camellias, Their Introduction, Culture and Use" in National Horticulture Magazine, October, 1958.

4. Feathers, David and Thompson, Roy.
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^{*} There are three known triploid varieties of *C. japonica*: 'Julia Drayton', 'Nagasaki', and 'Grandiflora'.

^{*} J. R. Sealy, "A Revision of the Genus Camellia."

^{**} Apomixis is the ability of a plant to form seeds without the process of fertilization.

WONDERS OF CAMELLIAS

(from Page 10)

tives" offer. Those who deeply appreciate Camellias, and who are presently working with the various species, will continue and in all probability, intensify their breeding program or experimentation. As a result, with each successive blooming season, petals will unfold to reveal new flower coloring, unusual petal shapes, and flower formations, bringing about countless numbers of additional WONDERS OF CAMELLIAS.

Two things that we need not wonder about are the importance of keeping accurate records of our experimentation, and the permanent labeling of the plants which are the fruits of our labor. We would not wish to add to the confusion of Camellias of future generations by being neglectful in this most important regard.

When one loves and understands plants, almost anyone can try his hand at being a Camellia breeder. This pleasant and very rewarding hobby knows no age limit. It will provide a lifelong interest if begun early in life, and may still become an absorbing interest for those approaching retirement. We have not yet met a Camellia enthusiast who has any spare time on his hands — for the days to him are rarely long enough to accomplish even half of the Camellia tasks that he has in mind. With the planting of one's first Camellia, or the sight of the first flower from one's very own seedling, or even the first sign of growth on a grafted plant — if this is a new adventure — a

FOR SALE BY SOCIETY

Books from this up-to-date list can be purchased from the Secretary of the Society.

Camellia Nomenclature—1958 edition, \$1.50 postpaid; in lots of not less than 12, 90c; 1950 and 1954 editions containing culture section, 50c.

Camellia Bulletin — Special edition on Rare Species & Hybrids, \$1.00.

Camellia Culture — Published by Southern California Camellia Society—Editor, E. C. Tourje, \$11.50.

How to Grow Camellias — published by Sunset, \$1.75.

A Revision of the Genus Camellia—J. Robert Sealy, published in England, \$10.00.

Camellias Illustrated — Morrie Sharp, \$5.00.

Nomenclature of Sasanqua of Japan, 50c; Camellia Varieties in Japan (both printed in Japan), 50c.

seed of interest is planted. Later on, as more time and care are devoted to Camellias, the greater one's interest becomes and the greater the satisfaction gained as we behold the neverending WONDER OF CAMELLIAS.

* Reprinted from the Oregon Camellia Society Bulletin.

PHOTOGRAPHING CAMELLIAS

(from Page 4)

photographed. Even though indoor film is used a correcting filter, 82-A, flood lights. This filter is necessary to is recommended with use of photobring the color out in the film as near as possible to the true color of the flower. Care should be taken not to overlight the flower because you do want each petal to stand out from the other and overlighting will tend to blur the flower. A light meter is essential to give you the right exposure. Check the meter on all sides of the flower to see that each side is evenly lit. Taking pictures of blossoms on the plant requires the same careful planning and lighting technics. To get different effects, take pictures from various angles, Record your meter readings and F stops with the name of each flower so that corrections can be made on future slides. I find that the "whites" are the most difficult to photograph. Perhaps the one most important thing to remember for better slides is to be sure that the flower is in focus A trick I learned from another member is to gently place an empty gum wrapper on the top of the flower and then focus the lens until the fine print on the wrapper is very clear.

*Reprinted from Oregon Camellia

Society Bulletin.

"The Rose Still Grows" With apologies to A. L. Frink

Near a shady wall camellias grew, Budded and blossomed in God's free

light.

Watered and fed by the morning dew, Revealing their beauty day and night. A Gardener watched with tender care These plants he knew so very well, Each day his time and talent share Giving blooms on which the eyes of

many fell.

Shall claim of death cause us to grieve And make our courage faint or fall? Nay! let us faith and hope receive, Camellias grow beyond the wall. Lending their beauty far and wide, Just as they did in days of yore, Just as they did on the other side, Just as they will forever more. The Gardener who on earth did strive, To help them bring the greatest joy, To friends and loved ones who survive.

In heaven his genius will employ.

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UPLAND, CALIFORNIA

HISTORICAL NOTES: (from Page 2)

There is a curious pronouncement by United States Patent Records of 1857 stating that tea plants were imported to Georgia in 1772. They conclude that, hampered either by accident or want of cultural knowledge, most efforts to establish tea were unsuccessful. It seems certain that a limited scale planting was established and grown on Skiddaway Island in Georgia before 1805, Tea ventures of the American South appear to have suffered from insufficient capital, poor adaptability to plantation cultural practices, and the mediocre quality of the tea itself. It was denounced by connoisseurs as "weak." They argued that a strong brew required a robust climate, hotter summers, more temperate winters. American tea failed. Îndividual C. Sinensis specimens continued to be grown as

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garden greenhouse curiosities until the War Between the States.

Further north, the 1880 History of Massachusetts Horticultural Society, tells of Michael Floy coming from England to New York in 1800. He brought a plant of the Double White camellia (Alba Plena) and delivered it to John Stevens of Hoboken, New Jersey. Two or three years previously, by another traveller, Mr. Stevens had obtained a single red. How odd it seems today that our earliest arrival of a named Japonica took up residence and thrived in Hoboken. Well north of the camellia belt for outdoor cultivation, these plants were greenhouse grown,

Mr. Floy established nurseries at 12th and Broadway in New York and in outlying Harlem. He planted the first Japonica seed in America in 1809. He originated many fine varieties, of which 42 were named and sold, Although Mr. Floy initiated seed propogation of Japonicas in the New York area, Philadelphia soon became the recognized center of production of both seeds and plants. Many fine nurseries turned their attention exclusively to the camellia: Robert Buish, J. B. Smith, Ritchie and Dick, Landreth and Company, In Boston Marshall P. Wilder and C. M. Hovey operated nurseries which became known throughout the world. Dr. J. S. Gunnell established his greenhouses across the street from the Capitol in Washington, D.C. There were 213 varieties catalogued and distributed during the first quarter of the 19th century. At least 17 are to be found in present-day collections: A. J. Downings, C. M. Hovey, Mrs. Abby Wilder, Jacksonii, Sarah Frost, Spectabile, Leucantha, and Cleopatra, to mention a few.

Between 1835 and 1860 the camellia reigned as most popular of green-

(Continued)

HISTORICAL NOTES (from Page 29)

house plants in all the principal cities of the North. Growers originated and exported new favorites which became immensely popular in the great camellia centers of Europe. Novelty, in that day as in this, drove the collectors on to the newest and the latest, the rarest and the "hottest."

Interest in the camellia passed its peak in Europe and began to wane almost at the same time that civil unrest and war clouds began to gather in the United States. With the preoccupations of war and the cooling of public fancy, the golden era of Northern greenhouse camellia culture in America died almost abruptly, never to be revived.

At the turn of the 19th century in the South, Andre Michaux brought three C. Japonica plants to Middleton Place, South Carolina, From this modest beginning has arisen Middleton Gardens. He began what may well be the oldest outdoor planting in America. Other Southern gardens followed. In 1840, Reverend John G. Drayton imported plants from Belgium and France to Magnolia-on-Ashley, South Carolina, creating Magnolia Gardens, In 1947 Magnolia Gardens offered 154 varieties from the veritable jungle of their own seedlings: Mrs. Charles Cobb. Debutante, Dearie Mealing, Mme. Marguerite Calusaut. Tina Gilliard. Marion Mitchell, Elizabeth Boardman, Eleanor Hagood, and a host of others.

Throughout the South, plantation homes featured camellias in their landscapes. In a real sense, along with the magnolia and the azalea, the camellia symbolized their way of life, the pace and tempo of the Southern gentry. Visited by the heartbreak ravages of war, whole regions were almost totally destroyed. Palatial homes were gone. Gardens reverted to wilderness. Camellia trees languished forgotten in apathetic neglect during the hard days of Reconstruction. A Southern way of life and the camellia, hand-in-hand, went out of fashion.

In 1900 Edward McIlhenny began to scour the Southern countryside for surviving camellia specimens. His interest in turn spurred others to rediscovery, reidentification, and revival. He brought his refound treasures from here and there to his Jungle Garden on Avery Island in Louisiana. Under his enthusiastic leadership, after 40 years of sheer neglect, the camellia was brought back to favor, made again the crowning joy of flower lovers throughout the winter months. From this inspiration and example began one of the great advancements of modern horticultural history. The camellia again personifies the South, again graces Southern gardens, again symbolizes the graciousness of Southern living.

*See previous issues for earlier history. Editor

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Camellia Society of Kern County	Bakersfield
President: Ronald Langsworthy; Secretary, Floyd Lee, Meetings held 2nd Wednesday of the month, Oct. Memorial Art Gallery, 1930 R St., Bakersfield.	
Camellia Society of Orange County	Sutler, 1121 Orange Avenue.
Central California Camellia Society	en Lee Ahrens, 1444 Saginaw
meeting on 3rd Monday at Heaton School, Del M	ar and McKinley Aves., Fresno.
Huntington Camellia Garden	San Marino Road, San Marino.
Pomona Valley Camellia Society	. Bottom, 5913 Riverside Drive,
San Diego Camellia Society	Jones, 4545 Dana Drive,
Temple City Camellia Society	of E. Wooley St., Temple City. rough April, at Women's Club

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SCIONS OF THE TIMES (from Page 7)

will last for fifteen or twenty days, making it an excellent camellia for the corsage trade. Growth habit is upright with handsome foliage.

Mr. Short feels this is probably his most beautiful camellia to date and says, "One of the few artistically styled and colored to please the most discriminating."

To me 'Ballet Dancer' carries the best of its type for styling and is almost a must with the consistent making and coloring.

'Red Elephant'

A seedling grown and introduced by Dr. Gilbert E. Fisher on his Halcyon Plantation in Union Springs, Alabama, has shown up so well on the seedling tables that it has won two A.C.S. Highly Commended Seedling Awards.

It is a large flower, 5" to 5½" in diameter and more than three inches deep.

Coloring is listed as brilliant dark red and Dr. Fisher explained that the flower we were judging which looked rose red had been cut for seven days and may have faded a little but is a beautiful red when fresh.

Loose peony in form with a few yellow stamens intermingled with petals and petaloids in the center of bloom. Blooming season is December through March.

Even had Dr. Fisher named his seedling 'Pink Elephant' rather than 'Red Elephant' it was by far the finest flower I saw on the seedling table for shows of 1960.

'Miracle Madge'

Mr. Paul A. Kennon of Lafayette, Louisiana has reported a very interesting camellia seedling with parentage unknown.

A complete double in form with $12 \cdot 14$ base petals and 10 upright rabbit ears. About 60 petaloids with a 1/4 of these with yellow and yellow filaments. Flowering coloring is egg shell white with an occasional splotching of pink. Flower size is said to be 51/4" or better.

Plant grows upright and fairly full foliage with leaves said to be 5" in length and 3" in width. The foliage is very dark — for a white flowering camellia.

Mr. Kennon recently moved from Bogalusa, Louisiana to Lafayette, Louisiana so it required digging and moving all his plants. After this transplanting we may have to wait another year or two to see the best flower from this most interestingly described seedling.

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