

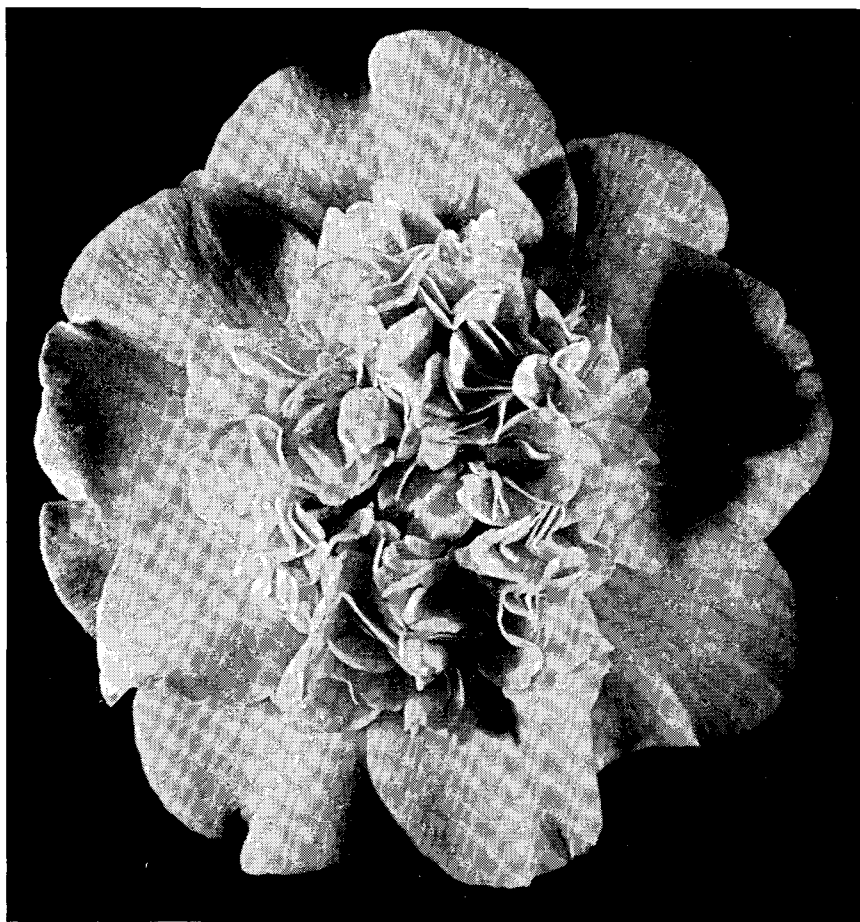
Northern California Camellia Society, Inc.

A Non-Profit Organization

Vol. 3, No. 2

OFFICIAL BULLETIN

December, 1949



C. M. WILSON (Grace Burkhart)

Shell Pink Sport of Chandleri Elegans. Typical Chandleri flower, double irregular in form, with the identical shade of Otome Pink. Each petal has a white margin that varies from 1/16 to 1/4-inch. Foliage and growth habit are those of Chandleri.

Courtesy James Rare Plant Nursery, Hiway 17 at Union, Campbell, California.
Photograph by Herbert V. Mitchell, Oakland.

NORTHERN CALIFORNIA CAMELLIA SOCIETY, INC.**ROSTER OF OFFICERS****PRESIDENT:**

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The Northern California Camellia Society, Inc. is a non-profit organization of camellia fanciers interested in the culture, propagation, and development of camellias. Meetings are held on the first Monday in each month from October to May inclusive, at 8 p.m., at the Chabot School Auditorium, Oakland. Membership is open to all those with a serious interest in the subject. Annual Dues \$5.00. Membership application blanks may be obtained from John Paul Edwards, Secretary, 1347 Trestle Glen Road, Oakland.

Published by the Northern California Camellia Society, Inc.

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NEW MEMBERS

We are pleased to announce the following new memberships in the Northern California Camellia Society, Inc.:

E. C. Brown, San Francisco
Mrs. Robert Dixon, Oakland
John E. Edwards, Palo Alto
Mrs. Thelma Hellman, Burlingame
Paul A. Hjort, Thomasville, Ga.
Mrs. W. H. Hoyt, Berkeley

George H. King, Director
Georgia Coastal Plant Experiment
Station, Tifton, Ga.
Dr. George F. Nesche, Oakland
Mrs. M. P. Olsem, Hayward
Dr. Abilio Reis, Piedmont
Frank D. Russ, Alameda
Tom W. Snedden, Oakland
Mrs. Violet H. Stark, Hollister
Kenneth J. White, Clyde
Adrien W. Young, San Leandro

CARE AND GROWING OF CAMELLIAS

By John Edwards, Edwards Nursery, Palo Alto

For years, I have been in the nursery business, but have not always propagated camellias. There are others here tonight who have grown camellias long before I cared whether they were pink or green. However, it has been my experience that to step from one plant material to another is just another step.

I think a Society like yours has a function that is more important than you yourselves realize — to interest others in camellias. In order to do that, first stress the fact that camellias are the easiest thing in the world to grow. I don't think anyone, during the extremely cold weather this winter (1948-49—the coldest in California recorded weather history. Ed.), has lost a camellia plant, which proves they are hardy.

About three blocks from Capitol Park in Sacramento, there is an Alba Plena in front of an old building, now used as a boarding house. Although that old plant is not given care, one of the fellows brought a blossom from that old Alba Plena tree to the Sacramento Camellia Show two years ago, where I was one of the judges, and it won first prize. If you have neighbors, friends or relatives, don't give them an idea that you have to plant a camellia like you bake a devil's food cake. If the pH of the soil is 5.5 or 7.0, the camellia still blooms.

No doubt you are all familiar with the Stoeckles' super-blooms. Having judged their flowers in camellia shows for several years, I ask you, what are you going to strive for? In the first place you must have a star to win; and unless you start a year before the camellia show to work for it, you have completely lost your opportunity to grow a blue- or gold-ribbon winner. There have been many classes I have judged where no first awards were made because there

were no blossoms of that high calibre; at best they could be given a second or a third award.

To be grown to perfection, camellias need sunlight, water, fertilizer. The fertilizing must be done with a thought for flowers rather than for growth. Watering is not done by rule of thumb but by careful watching of your plant; it must never be allowed to become dry. For blooms, the amount of nitrogen should be reduced; and the amount of potash, phosphorus, magnesium, iron, increased. Camellias, like all other evergreen plants in this state, require iron, which is best given in iron sulfate. If the pH of your soil is in the neighborhood of 7, the iron normally available in the soil is locked up and the plant cannot get a bit of it.

In San Jose several years ago, we were growing a block of patented roses. Imagine roses completely defoliated. It was July and not a leaf out! I grabbed a rose bush and some soil and got hold of Prof. Harry Butterfield at the University of California in Berkeley. "All you need do," he advised, "is give them iron; the pH is 7.2. The iron is locked up and the chlorophyl cannot operate." We drilled in iron sulfate to the acre, watered them, got a good profit. I have formed an opinion that introducing iron sulfate into the fertilizer is advantageous. Bill Arneson and Bill Woodroof, in working with the California Institute of Technology, at Pasadena, used about 4 lbs. iron sulfate to 100 lbs. fish meal and 10 lbs. magnesium sulfate (nothing more nor less than epsom salts). Their plants have excellent foliage, show good growth, and the color of the flowers is just a little better.

The size of blooms can be increased by disbudding.

But one of the major precautions to take in the proper growing of good

camellia plants to obtain quality blooms is to water them properly. I believe that overhead watering is essential — simulating rain. One way you can tell whether the plants need water is to stick your finger in the ground.

Another important thing is to mulch your plant well with oak leaf mold or with pine needles. As the mulch breaks down, acid is given out. Camellias prefer an acid type of soil, you have been told time and time again.

If there are aphids on the young growth when the plants are in the second or third growth in summer or fall, you can wash them off with a good syringe.

In classifying your blossoms for a Camellia Show, I believe that the classification and nomenclature of the American Camellia Society should be used. I think that system will help to classify and unify more than any other. (Dr. H. H. Hume's classification, recommended by the American Camellia Society, was used at the 1949 Berkeley Camellia Show of our Society. Ed.)

When Louis Glaudon, your Program Chairman, telephoned me and invited me to speak to your group on propagating, I said No. As wholesale growers, we deal with liners out of 2½-inch pots. We are like an incubator; we turn these liners out by the thousands to sell to the retail trade. But after talking to Louis, I thought perhaps I would mention propagation in the manner we do it, compared to the way you have been told to do it.

I see no reason for grafting camellias except in special cases (This season we grafted less than 1000 plants.): Certain varieties won't make a good plant; or wood is very scarce; or a new variety comes along that we want to develop. When it comes to commercial working out of a new variety, we get ahead of the game by grafting scions onto heavy understock, so that it will be possible to

make cuttings by the thousand and produce plants at a price you can afford to pay.

Of course, you may have a plant in your yard of a variety that is not to your liking. In that case, cut off the top and graft a good variety onto it. I am quite sure that during the past few months, you have been told the mechanics of grafting.

In caring for a baby graft, the method is similar to caring for a baby human. **Sanitation** is necessary. It must be clean; it must be neat. We sterilize all jars. We dust the cut on a heavy understock with fermate, in order to reduce the chance for infection. You must do the same thing.

A good many chapters have been written about how to make cuttings. We use a pair of pruning shears that cut like scissors. A boy helper stands by and we say, "All right, cut!" Don't use a razor blade; don't cut at any angle. The leaves are snipped off; the cuttings are put in the cold frame; and the bottom heat is turned on. In 75 days the rooted cuttings are potted up. We will pot between 95% and 98% of the cuttings we have put in. The reasons for such low mortality are: We take no cuttings from plants that are not healthy and thrifty. The stock must be absolutely clean; there must be no scale infection (If you have more than 10 camellias in your garden, you have scale on your plants.); no aphids; no thrips.

In taking cuttings from plants that are presumably very difficult to propagate, we take the scions a week sooner, when the wood is a little greener and we get a much better percentage.

There are certain varieties that it doesn't pay to try to root. On their own roots they will make a misshapen plant or they won't form rooted stock that is vigorous enough.

My favorite variety is Daikagura. You may wonder why it isn't C. M. Wilson, High Hat, Pride of Descanso,

(continued on page 12)

REMARKS BY PAST PRESIDENT O. E. HOPFER

I had no idea about four years ago, when we called an initial organizational meeting of some thirteen red-hot camellia fans that we would expand into a Camellia Society with more than two hundred members, publish a Bulletin, sponsor a Camellia Garden in Lakeside Park, and put on an Annual Camellia show.

But I am no longer at such fever heat about camellias as I was some years ago, when at one time I had 350 varieties. Now I am down to about 100 varieties. But my interest continues in propagation and hybridizing — about 5500 camellias a year. That, of course, is too many camellias for one man. Recently one of the members of this society has relieved me of two of my hot beds; each cold frame is 3 feet by 18 feet. I still have about 800 camellias in gallon cans, so quantity is still there.

In regard to the Lakeside Park Camellia Garden, we just received a truckload of 31 big camellia plants from Dr. Robert Cutter, President, Cutter Laboratories at Berkeley, one of our earliest members.

I should like to entitle my talk this evening, DON'T YOU BELIEVE IT!

A recent speaker said camellias don't need water. When people say you can raise camellias without giving them water or keeping them uniformly moist, DON'T YOU BELIEVE IT! Without water, camellias will die.

If they say you can raise fine camellias without fertilizing, DON'T YOU BELIEVE THAT, EITHER! A camellia might live on its stored sugars and starches for a while; but if you

don't feed them, they will just peter out and die.

If they say you can break off limbs of camellia plants, DON'T TRY THAT IF YOU WANT BLOOMS THE FOLLOWING YEAR.

Some people may tell you a grafted camellia plant is better than one on its own roots. If I go to a nursery and a salesman shows me a plant and says, "This is a grafted camellia," I know that:

- 1) The nurseryman has little wood of this variety; or
- 2) They are average camellias on worthless understock (such as Pink Perfection); or
- 3) They are varieties that don't grow satisfactorily on their own roots; or
- 4) They are very fine varieties really worth grafting.

If the scion is grafted on large root stock, the plant will grow faster for a while than the same variety on its own roots — until the roots and the upper part are in balance.

In grafting I prefer a whip graft, which gives about six contact points (if the scion and the understock are measured carefully with calipers), to a cleft graft or inarching, where there are only two points of contact. The whip-grafted plant does not have that bump at the bottom that you see on so many grafted plants.

But I don't see much sense in grafting unless the scion is a new or rare variety and the understock is large enough to insure rapid growth.

The above talk was given at the December 5, 1949 regular meeting of the Northern California Camellia Society, Inc.

JANUARY MEETING POSTPONED

Please note that the January meeting of the Northern California Camellia Society will be held on the second Monday evening, January 9, 1950, in

order not to interfere with your trip to the Rose Bowl or other New Year's weekend plans.

CAMELLIA AND MAGNOLIA CONFERENCE

Royal Horticultural Society, London

Mr. Ralph S. Peer of Los Angeles, a member of our Society, has provided the following information concerning the forthcoming Camellia and Magnolia Conference of the Royal Horticultural Society, to be held in London beginning April 4, 1950. As you will note, preceding this conference, there will be a conducted tour through the famous gardens of Cornwall.

"There will be a six-day conducted tour of the famous Gardens of Cornwall, starting March 25th and ending March 30th. The total cost, including rail travel from London to Falmouth, will be approximately \$60.

"On March 31st and April 1st, excursions have been arranged from London to various famous gardens in the vicinity of London, including the Royal Botanic Gardens at Kew, and the Royal Horticultural Society Gardens at Wisley. These trips will be by motor coach at a cost of approximately \$3 per person, including luncheon and tea.

"The Conference will open at 2:30 p.m. on April 4th, under the chairmanship of Lord Aberconway. The first speakers, Mr. G. H. Johnstone and Dr. W. L. Stewart will discuss 'Camellias in Cornish Gardens,' to be followed by Dr. H. Harold Hume, who will speak on 'Forms of Camellia Japonica.'

"On the morning of April 5th, at 10:30 a.m., Mr. H. G. Hillier will have as his subject, 'Propagation of Camellias and Magnolias,' to be followed by a talk of Mr. J. E. Dandy on 'Survey of the Genus Magnolia together with Michelia and Manglietia.'

"That afternoon, Mr. G. H. Johnstone will speak on 'Chinese Magnolias in Cultivation,' to be followed by Mr. J. R. Sealy, whose subject will be 'Camellia Species.'

"I give below the itinerary of the tour through the Gardens of Cornwall:

Saturday, March 25:

By train from London to Falmouth. Lunch and tea on train; dinner at hotel.

Sunday, March 26:

Lunch at Truro.

Visit to the Gardens of G. H. Johnstone, Esq., Trewithen, Grampound Road, and to the Gardens of Mrs. F. Williams, Scorrier House, Scorrier.

Monday, March 27:

Visit to the Gardens of Viscount Falmouth, Tregothnan, Truro. Lunch at Carlyon Bay, St. Austell. Visit to the Gardens of Comdr. H. H. Thomas, Heligan, St. Austell.

Tuesday, March 28:

Visit to the Truro Flower Show.

Lunch at Truro.

Visit to the Gardens of Charles Williams, Esq., M.P., Caerhays Castle, Gorran.

Wednesday, March 29:

Visit to the Gardens of M. P. Williams, Esq., Lanarth, St. Keverne.

Lunch at Penzance.

Visit to the Gardens of Mrs. Charles Williams, Trewidden, Buryas Bridge, Penzance, and to the Gardens of Col. E.H.W. Bolitho, D.S.O., Trangwainton, Penzance.

Thursday, March 30:

Breakfast at hotel. By train from Falmouth to London. Lunch and tea on train.

Anyone desiring to participate in the Conference and the Excursions should make advance reservations. This can be done by means of a letter addressed to the Royal Horticultural Society, Vincent Square, London, S.W. 1, England. Or Mr. Peer would be glad to transmit requests for reservations, since he and Mrs. Peer are planning to be in London at that time to attend the conference. The address is: Ralph S. Peer, 8159 Hollywood Blvd., Los Angeles 46.



GRACIOUS LADY OF ROSEBUD FARM

The above photograph of Mrs. Frank Edinger, the gracious owner of Rosebud Farm at Hood, California, was taken on March 6, 1949, by Herbert V. Mitchell, during the tour of the American Camellia Society which was conducted by our good friend Jerry Olrich, State Gardener.

Mrs. Edinger expressed her deep pleasure in having the opportunity of entertaining the American Camellia Society visitors from so many sections of the United States. It was indeed gratifying to her that so many of the visiting camellia celebrities admired her seedlings—especially Arrabella, named for her sister.

Mrs. Edinger's father, the late Mr. William Johnston, planted three camellias on the northwest side of their home which are now thought to be the largest in the United States. They are Wakanoura, 27' tall, with a 38' spread and a circumference of 39½";

Purity, 31' tall, with a 22' spread and a circumference of 31½"; and Pink Perfection, 28' tall, with a 22' spread and a circumference of 37".

Through the years Mrs. Edinger has originated many seedlings, several of which are nationally-known named varieties, including Arrabella, Anne Lindbergh, Mrs. William Beckman. Other introductions are Favorite, Scarlet Perfection, Captain Jack, Dorothy Edinger, Mrs. Edinger, Martha Washington, Lady Astor, Christmas Tree, Lady Wheeler, Barbara E., and several unnamed seedlings including a very fine single white. Pride of Rosebud Farm is a nationally-known named variety, a sport of the original Wakanoura tree.

Mrs. Edinger has made an outstanding contribution to the camellia world through the growing, development and introduction of the many fine seedlings mentioned above.

FIRST CHOICE OF TEN CAMELLIAS IF LIMITED TO TEN VARIETIES

Dr. Walker Wells, Piedmont:

When I told my wife I was trying to choose ten camellias that I could live with if limited to but ten varieties, she said, "Now we can clear the patio; we can put that table up there again."

A list of ten camellias, picked by one who loves camellias, must necessarily be his personal preference. Most of us prefer a large to a small flower. Men go for reds; women for pinks. The full-petal fluffy flower seems to be in the ascendance; but that was not true in the 19th century when the formal-type flower was preferred. To me some of the new delicate pink varieties have great appeal. But probably most of us are prejudiced by size—the big, full, buxom, Mae West type of bloom. Actually, I don't think that is our prettiest camellia. *Claudea Lea*, a single, has a delicate pink shading that no other camellia has. However, in choosing this list, I have tried to keep some of the old favorites, include some recent selections, as well as variation in form and color; but always I have been influenced by my own preference.

Albe Plena — A complete imbricated, pure white bloom, I believe to be the most outstanding in its class, though I think *Snow Queen* runs it a close second.

Kumasaka — Clear pink, well-shaped incomplete double flower. A good grower. I have had blooms in my garden since late October.

Te Deum—Deep rich red variform. A good grower.

Haku Rakuten — One of the outstanding new white varieties with upstanding petals.

Mrs. Freeman Weiss (A seedling of *Magnolia Gardens*) — Large, well-shaped, rich pink, loose incomplete double. Unusual lasting qualities. Shapely bush. One of the best growers.

Magnoliaflora — Delicate pink tint is my weakness. The bush itself is not too dense; shows the flowers off to good advantage. Suitable for pot culture.

Southern Donckelari—Red, marbled white in varying degrees; large semi-double of fine texture. I think this plant has the longest blooming season of any camellia in my garden. I am always able to pick one or two good flowers.

Eugene Lize (Lady Jane Grey) — I think for a double of its type it is an outstanding variety. Rich deep pink, marbled white. Good grower.

John Illges (A seedling of *Magnolia Gardens*) — Star-shaped, bright-red flowers, with upstanding yellow stamens. Undoubtedly it is our outstanding single today.

Henrietta M. Allan (A seedling of *Walter Allan Nursery, Summerville, S.C.*) — Clear pink, medium size, complete imbricated, but sometimes showing stamens. Good foliage. Compact grower.

O. E. Hopper, Oakland:

My choice, if limited to but ten camellias, is something I have given a great deal of thought. Before making up my list, I referred to the *Journal of the California Horticultural Society* of ten years ago in which I chose 25 camellias; and I find that my taste has not changed a great deal.

What do I like? What does my wife like? A little person can wear a *Lady Hume's Blush*; but we are not of the fox type—we are of the ox type.

Mathotiana Alba was my first choice. I like the substance of the petals and the large, full, imbricated form; white with an ornery little red streak. This variety has to have shade. We tried it in various locations, but finally moved it to the north side of the house where it is all right.

from France. One of the most desirable camellias in existence today.

Glen 40—Large, rich cherry-red incomplete imbricated flower, usually showing a few stamens when fully open. The blooms have unusual lasting qualities, often remaining on the plant for two weeks; and it does not shatter. Midseason to late bloomer. Growth habit slow, compact and upright. A good variety for pot culture or for foreground planting. Introduced by Azalea Glenn Nursery of Loxley, Alabama.

Donckelari Tea Garden — Large semi-double, rich red, heavily variegated with white, with a high cylinder of golden stamens. Prolific bloomer, producing high-quality blossoms from early to midseason. One of the most exquisite and stunning variegated camellias. Produces quality blooms in the open garden, even during cold or rainy weather. Growth habit slow and erect; small pointed leaves. The Tea Garden strain of Donckelari was produced at the Tea Garden, Summerville, S.C., and introduced by Magnolia Gardens.

Daikagura Variegated — Medium size double irregular, rosy-red

spotted with white. Prolific bloomer over a long period from early to late midseason. Fine corsage flower of lasting quality, both on plant and as a cut flower. Growth habit is slow and spreading, with willowy, drooping branches. Originally imported from Japan.

Gigantea Alba—Large white single, cup-shaped flower, of good substance, with a prominent cylinder of stamens. Midseason to late bloomer. Won first award in its class at both Berkeley and Sacramento Shows of 1948. Growth habit slow, upright and quite compact.

Haku Tsuru—Large clear white incomplete double with large petals intermixed with golden stamens. The central petals stand high, giving the flower the appearance of great depth. Requires mild, humid weather to produce the most beautiful blossoms. A perfect bloom of this variety is an exotic creation of great splendor. Growth habit is slow, upright and spreading. Imported from Japan by father of Toichi Domoto, Hayward.

The above talks were given at the May 2, 1949 meeting of the Northern California

PRIZE WINNERS AND DONORS

This season the nurserymen have continued to supply camellia plants as Door Prizes and Exhibitors' Prizes, with their traditional generosity. The names of donors, varieties, and prize winners are as follows:

October 3, 1949

SHOWA-NO-SAKAE donated by TOICHI DOMOTO NURSERY, Hayward, won by Dr. H. V. Allington, Oakland.

NARUMIGATA, also donated by TOICHI DOMOTO NURSERY, Hayward, won by Ernest Higgins, El Cerrito.

November 7, 1949

TEA GARDEN DONCKELARI donated by EAST BAY NURSERY, Berkeley, won by Dr. Fred E. Heitman, Oakland.

HIGH HAT donated by Vernon James Rare Plant Nursery, Highway 17, Campbell, won by H. G. Sanders, Oakland.

December 5, 1949

WOODVILLE RED donated by SMYTH CAMELLIA NURSERY, Thomas Court, Ross, won by Donald K. Staples, Oakland.

LOTUS donated by BERKELEY HORTICULTURAL NURSERY, 1310 McGee Ave., Berkeley, won by Jack Osegueda, Oakland.

Gift of Camellia Seed

Our good friend Mrs. George J. Helms has again donated a quantity of camellia seed from her own garden, which was distributed to members at the November meeting.

GROWING CAMELLIAS

(continued from page 4)

or some other newer variety. I will tell you why it is Daikagura: From a monetary point of view, Daikagura sells for lots less; lots of wood is available; we can always sell all the plants we propagate; there are never any left over; another State will take them if they are not sold here.

At Christmas time we had excellent blooms of High Hat. A cut-flower market in San Francisco was short of flowers; but they passed High Hat completely because the color was not brilliant. At the camellia shows in 1948, Adolphe Audusson took many prizes; but it's not wanted on the cut-flower market. This year I put out a new camellia that we named Governor Earl Warren. As a cut flower, it is desirable the first day; but the cut-flower market does not want a flower that shows stamens because stamens dry up. If we sell cut flowers to Chicago or New York, they want Chandleri, Alba Plena, and other varieties that have no stamens.

Question: Could we have the ingredients of that mixture you spoke of? Was it cotton seed meal?

Answer: We use fish meal; but cotton seed meal is just as good. Our mixture contains 100 lbs. fish meal, 4 lbs. iron sulfate, 10 lbs. magnesium sulfate, 10 lbs. sulfur. It depends upon the pH of your soil. Sulfur is slow in breaking down to a point where it will acidify the soil. It has a high pH. 15 lbs. of aluminum sulfate may be put with it. You will read articles stating that it will make the soil toxic. But consider using 15 lbs. aluminum sulfate in 150 lbs. fertilizer mix; how much aluminum sulfate is one single plant getting? How much is free aluminum? But 2% of it. So over the period of your lifetime, you might build up a slight amount of aluminum in your soil. You will find that all nurseries use aluminum sulfate. Iron sulfate will go a long way toward correcting too high a pH. The results of

camellia plants grown in soil with a pH from 5.5 to 6.5 or 7.0 showed so little variance that for a large plant, the pH doesn't make much difference so long as the camellia gets nutrients.

Question: What would you say is the analysis of fish meal?

Answer: We can only buy fish meal on protein count; fish meal in stores now is 15% protein. So far as its analysis is concerned, I don't know what it is; we have never had it analyzed.

Question: Do you use any liquid fertilizer?

Answer: We apply one or two shots in the greenhouse on liners when they first start to grow—when sufficiently rooted. The only reason we use it is to eliminate the odor.

Question: When do you spray and what do you spray with?

Answer: we spray between the 10th and 15th of March. We keep in touch with our Agricultural Commissioner at that time and find when ivy scale and green scale are in the hatch. At that time we spray with 2% oil. Humidity 85 and temperature 75 degrees. We dust grafts with pure fermate.

Question: What time of year do you take your cuttings?

Answer: We try to catch the first season's growth. Debutante and Emperor of Russia are the first to harden off, between the 10th and 15th of June. By the 10th or 15th of July, we have finished putting in our cuttings. They are potted up by the first of September.

Question: What are some of the varieties that don't grow from cuttings?

Answer: Coletti, Te Deum, High Hat. A plant that doesn't get off at all on its own roots is Rasen Zome. The flowers are about like the best of those of English Donckelari. It is a fine plant for a low foreground.

Other varieties that are grafted are those we have obtained from other

sources, such as C. M. Wilson, which we grafted onto big understock so that we could put in 1000 or 1500 cuttings. A thousand cuttings of a variety is nothing for a wholesale nursery. One retail nursery orders 50, another 100, and so on. When we start propagating a new variety, we try to develop wood as soon as we can. Our nursery is not interested in a camellia from the flower point of view; we whittle the mother plant unmercifully. One year we take Chandleri cuttings from one plant and the next year from another, giving the mother plant a chance to rest.

Question: When do you fertilize?

Answer: Fertilizer is usually applied at a growth period, rather than using a rule of thumb such as the first of March, first of April. Instead we watch the leaf buds and as soon as they begin expanding we apply fertilizer; it takes from 2 to 3 weeks for nitrogen to become available to the plant. Growth can be stimulated by adding blood meal or iron sulfate.

Question: Won't you lose your camellia blossoms if growth starts?

Answer: I am of the opinion, the way things are starting at the nursery this season, we will have blooms all at once and growth starting; you can expect spring to come with a burst this year. Blossoming will be over with a big whang. Just sacrifice what you lose this year and start fertilizing for next year's crop of blooms. Fertilize all that you dare the first time, roughly about April 1; then again about the middle of July; then a half-shot the first of October, giving lots and lots of water in between. Fertilizer is not available to the plant except in liquid form; it has to decompose. Keep your plants wetter; the ground must be kept moist. Don't ever let the ground dry out. Keep your plants moist all the time! We have a fairly cool summer here in the Bay area; we begin to get warmed up about a month before frost comes; then there is a period of low humidity. Let your

sprinkler run for a while in the morning. If the day is warm and dry and the nights are warm, give your camellias a syringing in the later afternoon or evening.

Question: What do you spray with?

Answer: We spray with parathion—an insecticide. When the American armies were bursting through Germany they came upon a Farben laboratory where they found a group of scientists at work on synthetic chemicals, one being used as an insecticide—No. 3422. This formula was given to the American Cynamid Company for manufacture and distribution. It is extremely toxic to human beings, but not to plants.

If some parathion is spilled on one's hand or arm, it causes temporary paralysis. But there is nothing on the American market to be compared with parathion. Mealy bug, greenhouse white-fly, disappear like magic. One San Francisco greenhouse had a block of azalea plants that refused to grow, although they had been properly fertilized. Dr. Pritchard of the University of California examined them and found they had mites under the leaves. Some were sprayed with parathion and within three weeks the sprayed plants had trebled in size. At our nursery we use parathion as a control for sucking insects, red spider, mealy bugs, thrip, white fly. In the greenhouse we use it in aerosol form, using a mask for protection. In the open air, it is safe to use in spray form. Back yourself into the wind so that any drift will be away from you. Parathion has been used on orchids and on African violets, with no toxic effect. Apparently no plant is toxic to this material.

It is a pellet; it does not go into solution but remains in suspension. We use 25% parathion— $\frac{3}{4}$ lb. to 100 gallons of water. The residual is good for months, depending on the leaf surface. The residue will remain on azaleas for 6 months; on camellias

for 3 months. But usually, if your place is clean and well-sprayed, one spraying of parathion a year should be sufficient because the colony cannot be built up again in a 3 or 4-month period sufficiently to do any damage.

Question: Will parathion catch the leaf hopper?

Answer: Yes; it has its own spreader. Part of the filler is spreader.

Question: Under what name can one buy it?

Answer: I believe there are several different brands; but we buy it from chemical houses in their original packages. I know Ortho has it. It will be on the market in extremely dilute form. They are not rushing it because handling of it by the general public is questioned. I think more research is being done on it. However, I think parathion is satisfactory for the average amateur to use.

Question: How about the control of brachyrhinus sulcatus?

Answer: We have just concluded an experiment at the nursery, in conjunction with the Agricultural Commissioner of San Mateo County, using benzene hexachloride, to determine the minimum amount necessary to kill brachyrhinus, and to determine the tolerance of camellias to hexachloride. At the agricultural experiment laboratory, they took four 1-gallon size plants infested with brachyrhinus larvae and applied 1 oz., ½ oz., ¼ oz., and ⅛ oz. respectively. They found that ¼ oz. would kill brachyrhinus. We used ¼ oz. for each gallon size plant and watered it well. To date there has been no loss from brachyrhinus. I think it was 5% benzene hexachloride. Mr. Max Leonard, Agricultural Commissioner of San Mateo County has been writing a paper on this experiment; he can give you complete information.

Brachyrhinus is the strawberry root weevil or Fuller's rose weevil.

The above talk was given at the February 7, 1949 regular meeting of the N.C.C.S.

SELECTING VARIETIES TO BLOOM OVER A LONG BLOOMING SEASON

By E. H. Carter, Monterey Park

(Continued from page 15 of October, 1949 issue of Bulletin.)

Pink Blooms

HIGH HAT is a light pink sport of Daikagura and is the earliest of the pink varieties to bloom. High Hat not only sets bloom buds on its first growth, but on second growth and even on third growth, which bloom later in the spring. Most varieties set bloom buds only on first growth.

ROSE GLORY was introduced and named by me, but I did not originate it. Some years ago I found a little plant of it behind a house in Pasadena. It is a large semi-double or incomplete double with artistically curling inner petals and golden stamens, rose-pink in color. It is an early bloomer and has a long season.

PINK PERFECTION is an old variety, shell pink and perfectly regular in form. It likes morning sun. This variety frequently loses its buds. To correct this, plant where it will get at least a half day of full sun and don't keep it too soggy wet. I had one placed where it had sunlight from eight in the morning until afternoon. It bloomed profusely and did not lose its buds. Those in the lath house, protected from the sun, lost their buds and stopped blooming. This indicates that Pink Perfection wants warmth and not too much water. Be careful not to plant it too deeply in the ground and make sure it has excellent drainage.

DEBUTANTE (Sarah C. Hastie) is a light pink, large complete double irregular, much used for corsages. A vigorous grower.

MARCHIONESS OF EXETER is another light pink, large full peony form which will vary considerably.

ENRICO BETTONI (Sarah Frost of the Pacific Coast) is a large, semi-irregular double of richest pink. I have seen it up to 6 inches in diameter. It is a wonderful bloomer with long blooming season and keeps well as a cut flower. A vigorous grower and makes excellent understock for grafting.

JOHN LAING has the form of Pink Perfection when it first opens, but is larger and will finally open up and show stamens. At the Pasadena Camellia Show last year I displayed six corsages, and the one that received the most oh's and ah's was the John Laing.

PINK SHELL—Light pink. Large, high-pointed center, incomplete imbricated. Not a success under all conditions. One man told me if he gets one good blossom a year he is satisfied because it is so beautiful. One of my customers succeeded in blooming it in San Bernardino and another in the San Fernando Valley.

PINK LAUREL LEAF is a solid formal-type flower. It frequently shows some white clouding. Last year my Southern California nursery sold more of this than of any other variety.

KUMASAKA—Very fine large, brilliant pink, with broad outer petals and with inner petals artistically curled, some stamens intermixed. Sure bloomer, setting many bloom buds which open without difficulty. Thoroughly lovely.

PINK BALL—Medium large, delicate, silvery light pink; irregular double ball. Plentiful bloomer. I have seen these as beautiful as Debutante. You can increase the number of blooms by increasing the number of tips. This can be done by cutting off a twig, and two or three branches will come out.

MARTHA BRICE is an extremely lovely light lavender pink, informal incomplete double. Give it a good location and fine soil and it will pay dividends.

LADY CLARE (Grandiflora Rosea) Very large. Two rows of broad, rich pink petals around a cylinder of yellow stamens, sometimes showing petaloids. Stunning.

ROSEA SUPERBA—Deep rose-pink; very large double, incomplete imbricated with high center, showing stamens when fully open. Some people consider this the most beautiful of all camellias. A magnificent camellia.

MAGNOLIAFLORA—Medium semi-double, bell-shaped with pointed petals. Delicate light pink. There are two strains. Get the one that has pointed petals.

LADY HUME'S BLUSH Famous old variety, rare and lovely, medium-size formal double, dusky blush. A marvelously beautiful variety. Its roots seem to be vulnerable to root-rot fungus when on its own roots. Remedy is to graft it on some good, vigorous understock. It does not produce good blooms until it is thoroughly established.

CALIFORNIA—A very large semi-double, sometimes 6 inches across. It really is a rich pink although some people claim it as a red. Probably a seedling. It has the most marvelous foliage I think I have ever seen. It was brought in from the Orient by a sailor who got off a ship at Long Beach Harbor and sold it to a rancher for 25 cents. It has become very popular in the deep south and more and more popular in California.

PINK SPORT OF MATHOTIANA ALBA (May be same as Pink Beauty) Clear pink, regular imbricated double.

SHELL PINK SPORT OF CHANDLERI ELEGANS (GRACE BURKHART) Uniform delicate pink in color, veins slightly darker pink giving a netted

effect, white margin; form of Chandleri Elegans. There are several sources of this variety, but we do not know whether the one in the South named C. M. Wilson is exactly the same as this or is a separate sport.

VIRGIN'S BLUSH—a new variety from Jungle Gardens. Medium-sized white, delicately washed with the faintest pink; petals almost transparent, loosely but regularly arranged, outer rows loosely imbricated, some petals deeply veined, inner petals cup-shaped around short petaloids and stamens. Virgin's Blush should be a must.

Variegated Blooms

DAIKAGURA VGT—The variegated form of Daikagura. Early bloomer.

DONCKELARI—One of the most brilliant of all camellias. Be sure to get a strain heavily variegated with white. Down south I had bought Donckelari from every nursery that had a plant; but only two were worth while—the Tea Garden strain.

PEONIAFLORA—Cream-white color with a few pink lines. Shaggy peony form.

PINK LADY—Delicate pink sport of Peoniaflora, each petal bordered white. After propagating it, I tried to find a suitable name. When I was a young man there was a comic opera called "Pink Lady," and I decided to give it that name. The next Sunday a lady came into the nursery and admired the flower. When I told her its name, she said, "When I was a girl I played the leading role in 'Pink Lady'."

NAGASAKI (Mikenjaku, Candida Elegantissima) Rose pink marbled white. Very large semi-double. Stunning.

STRAWBERRY BLOND—Another sport of Peoniaflora, originated at this nursery; patented. Cream-pink dusted over with tiny speckles of richer pink.

SPORT OF STRAWBERRY BLOND—Very rich pink, mottled all over

with variegations of white. Not for sale yet.

ROBERT CASAMAJOR—Another seedling from Huntington Botanical Gardens. Deep crimson, cup-shaped semi-double. Named in honor of a collector in Southern California.

COLLETTI MACULATA—Beautifully spotted; red that is red and white that is white. Medium peony form.

DAINTY (Fringed sport of Wakanoura Vgt.) Medium semi-double (almost single). Blush white, striped rich red, edges of petals deeply fringed and somewhat ruffled. Originated at my nursery.

GLEN 40 VGT.—Exceedingly brilliant and beautiful variegated form of Glen 40.

FRAGRANT STRIPED—Sport of Herme. Blush lightly striped pink, transparent quality of petals; considerable fragrance; incomplete double with large petals. Very fine.

ORCHID PINK—Sport of Fragrant Striped. Center of petals light pink with considerable orchid and bordered deep rose. Distinctive.

BELLA ROMANA—Rose pink densely striped maroon red; rich coloring. Incomplete imbricated double.

SIERRA SPRING—Originated in Sierra Madre. Delicate pink softly dappled with white. No two blossoms quite alike. Thoroughly lovely.

EMPEROR WILHELM—Gorgeous strain of Gigantea. Brilliant, red, splotched white.

KING LEAR—It is thought to be a seedling or sport of Donckelari. Light red marbled white. Large semi-double.

ANNE GALLI (Otome Pink, Pink Bleichroeder) Abundant blooming pink formal.

CAPTAIN JOHN SUTTER (Admiral Nimitz, Kishu Tsukasa) Rose pink blotched white. Large, formal double.

ALEXANDER NOWLIN—Gorgeous deep red clouded white. Large, incomplete imbricated double with high center.