Northern California Camellia Society, Inc.

A Non-Profit Organization

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OFFICIAL BULLETIN

June, 1949



FRED SANDER

FRED SANDER (Fimbriata Superba), flame-red semi-double with curled, crepetextured, fimbriated petals. One of the four known Camellia Japonica varieties with fimbriated petals.

Courtesy SUNSET MAGAZINE Photograph by Herbert V. Mitchell

NORTHERN CALIFORNIA CAMELLIA SOCIETY

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Walker M. Wells, M.D., (HU 3-0951) 133 Hagar St., Piedmont.

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MEMBERSHIP: G. Myron Grismore, D.D.S. (KE 2-3449)

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ANNUAL CAMELLIA SHOW:

Chairman: D. L. Feathers 1 Camellia Lane, Lafayette 1 Vice-Chairman: Walker M. Wells, M.D. (HU 3-0951) 133 Hagar St., Piedmont.

The Northern California Camellia Society is a non-profit organization of camellia fanciers interested in the culture, propagation, and development of camellias. Meetings are held cn 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 Barlow W. S. Hollingshead, Secretary-Treasurer, 12 La Cintilla Avenue, Orinda, California.

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MESSAGE FROM OUTGOING PRESIDENT

This is my last opportunity to address you as your President — my Swan Song, as it were. They say when a person is in imminent danger, in one fleeting moment he reviews all of his life that has gone before. Well, I do not exactly feel in imminent danger-in fact, perhaps subconsciously there is the feeling of relief that comes with finishing any job; but my thoughts go back to that day some three and one-half years ago when thirteen of us sat down and, when we got up again, had organized what is now this Society. On that occasion, a very "dear" friend of mine proposed my name as Secretary, and since then I have been bustling around one way or another.

Looking back on it all, though at times the road may have seemed a little rough and rugged, there is not one moment of it that I begrudge, and it is an experience in this thing called Life that I would not have missed for anything. As I said before, when one nears the end of the trail, one naturally reflects upon what has gone before and what has been learned from his experience. Instead of thirteen, we are today about two hundred, from all parts of Northern California and from many other States as well. Now that is not a particularly large membership but it does represent a rate of growth that is really phenomenal. My part in all this, while active, has (continued on page 4)

Northern California Camellia Society

RESULTS OF THE ELECTION OF BOARD OF DIRECTORS AND OFFICERS — MAY 1949

Dr. Herman V. Allington, Chairman of the Nominating Committee, reports the following results of the April 30, 1949 election of a Board of Directors of the Northern California Camellia Society, Inc., to serve for the ensuing year:

John Paul Edwards	Oakland
David L. Feathers	Lafayette
G. Myron Grismore, D.D.S.	Oakland
Barlow W. S. Hollingshead	Orinda
Gordon W. Richmond, M.D.	Richmond
Mrs. W. L. Stoeckle	Concord
Walker M. Wells, M.D	Piedmont

At the May 20, 1949 organizational meeting of the Board of Directors, the following were elected as officers:

Walker M. Wells, M.D.	President
Gordon W. Richmond, M.D	Vice-President
G. Myron Grismore, D.D.S	Treasurer
John Paul Edwards	Secretary

MESSAGE FROM OUTGOING SECRETARY-TREASURER

The past two years in which I have served as Secretary-Treasurer of the Northern California Camellia Society have been busy but pleasant. The feeling that I have helped to contribute something toward the development and growth of our young society and toward a mutual understanding between our society and other camellia societies is indeed gratifying. And the association with you fine people who are members of our organization and with others who are interested in growing fine camellias has been a rich and valuable experience.

I wish to thank you for your vote of confidence in me at the recent election of Board members, which resulted in a tie for first place.

In declining to accept the nomination for either of the offices of Secretary or Treasurer during the recent election of officers, I did so in order to relieve the heavy burden of secretarial and clerical work upon Mrs. Hollingshead, Bulletin Editor. During the two years of my office, she handled all of the secretarial work for Secretary and Treasurer and in addition kept the Treasurer's records. At the same time she was Bulletin Editor and carried out the secretarial work for that office and for some of the committee and show chairmen. I wish to express my deep appreciation for her devoted, generous and efficient service in behalf of the society.

In closing may I again express my pleasure in having been selected once more for your Board of Directors. Perhaps at some future time it may again be my privilege to serve you and the society as one of its officers.

Barlow W. S. Hollingshead Secretary-Treasurer

RESOLUTION OF BOARD

The newly elected Board of Directors at their first meeting, held on May 20, 1949, unanimously passed the following resolution as a means of formally expressing the gratitude of the Society to the three retiring Directors who, for personal reasons, requested that their names should not be placed in nomination this year:

"RESOLVED, that this Board of Directors, on behalf of the Northern California Camellia Society, Inc., expresses its deep appreciation for the invaluable service rendered the Society, to the following Directors who have contributed so much to the growth and success of this organization:

> Louis P. Glaudon Louis J. Macchia Harold L. Paige."

PRESIDENT'S MESSAGE

(continued from page 2)

been far overshadowed by that of others but I feel that it has left me with a thought which I should like to pass on to you for whatever it may be worth.

They say that a person usually gets out of a thing about in proportion to what he puts into it, and based upon my personal experience this has been quite true. I guess it is the natural law of compensation. In any event, I am quite certain that this is particularly true of any phase of gardening. And certainly belonging to the camellia society is a phase of gardening, or horticulture, if you prefer. Therefore, based on this premise a member of a camellia society gets out of that society about what he puts into it. So, the theme which I have taken so long to develop is: TAKE AN ACTIVE PART IN YOUR SOCIETY IF POSSIBLE.

Many of you will say: "I can't do this," or "I can't do that," and there are, of course, some who are singularly equipped, better than others, for certain tasks. But in a society such as ours there are a great many things that must be done and your aptitude along certain lines may be just what we are looking for. One of the things which has impressed me most during the past year is the hidden talent that we have. People who said they had had no experience in this or that have often turned out to be among our most capable and successful contributors. This was particularly demonstrated at our Camellia Show, and if we can uncover latent talent there, we can make ourselves a better society if we can have the benefit of their ability during the entire season. For the building of a bigger and better society is no one person's nor one group's job; it is a job which we should all work at and, if we do, the result will be something which will endure and reflect lasting credit upon us all. In the meantime, while we are building this structure for the future, we will all be getting greater day-today enjoyment out of it. I think I may speak for those who have been most active in our affairs when I say that our work will have been worthwhile only if we have succeeded in projecting the same pioneering spirit into those who follow, to the end that we will always be a growing, progressive organization. As we become an older, more established society, we are bound to improve in many ways. After all, we have only just begun to grow. But our progress in some respects has been remarkable, which proves that our fundamentals are sound.

It is my sincere hope and full expectation that our policies will continue to stress the desirability of attracting new members. For our new members are like our children: in them to a large extent repose our hopes for the future; they are our new blood, from which we will draw new energies and talents which will keep this organization alert and aggressive. The passage of time inevitably takes with it, for one reason or another, a

(continued cn page 14)

THE EFFECT OF CONTINUOUS LIGHT. HIGH NUTRIENT LEVEL AND TEMPERATURE ON FLOWERING OF CAMELLIA HYBRIDS

By Walter E. Lammerts, Ph.D. Rancho del Descanso, La Canada, California

Camellia seedlings grown under even ideal garden conditions rarely begin flowering in less than four years from germination of seed, and usually, from five to eight years elapse before all seedlings may be indexed as to color, petal number, and form of flower. Because of the previously demonstrated great stimulative effect of continuous light on peach seedlings, both as regards vegetative growth and rapidity of flowering (1), I believed it would be very worthwhile to test the effect of continuous light on growth and flowering of camellia seedlings.

For this purpose the normal daylength was supplemented by light at night from 100-watt Mazda lamps placed in standard reflectors about 5 feet apart and hung 3 feet above the young seedlings in the greenhouse.

The seedlings, germinated in the spring of 1946, were not placed under this continuous light until about nine months after germination. The hybrids, germinated in October, 1946, were, however, placed under continuous light about six weeks after germination.

Both groups of seedlings were given weekly feedings with a nutrient solution patterned after that developed by the John Inner Horticultural Institution of Merton, England. This solution is made from a salt mixture (2), consisting of 25% nitrogen, 19% of which is organic, i.e., derived from urea, 7% phosphorus, and 7% potash. In addition, 1% of sulphur, 1% of cal cium, 1/2% of iron and smaller percentages of manganese, magnesium and other minor elements are present to satisfy any minor element deficiencies which may arise during continued pot culture. A dilution rate of 420 ppm. of nitrogen, 120 ppm. phosphorus, and 120 ppm. of potash was used. This rate is obtained by using 2 level teaspoonfuls of the above salt mixture to 1 gallon of water.

For small pots, i.e., sizes up to 5-inch, enough of the nutrient solution was added each week to fill the pots. The plants were **always** thoroughly watered at least once between feedings in order to avoid any possibility of burning by accumulation of salts to a toxic level. A high-moisture level was always maintained. For plants in gallon cans, $\frac{1}{2}$ pint of nutrient solution per week is adequate and more might be harmful.

It may be of interest to note that throughout the progress of this experiment the camellia seedlings and hybrids were kept in 4-inch pots. Some of the plants now are 4 feet tall, bushy and clothed with an abundance of large dark-green foliage, even though growing in 4-inch pots.

Of equal importance with the above light, moisture, and nutrition conditions are the heat factors in this experiment. These plants were grown at temperatures of 65° F minimum and fluctuated often to rather high temperatures of 95° F in the summer.

Evidence recently obtained by Dr. James Bonner of California Institute of Technology, indicates that higher minimum temperatures may be even more effective in inducing both rapid vegetative growth and early flowering. Thus, in one series of experiments, he was able to bring seedlings only 4 inches high and 4 months old into bud ten months after being placed under continuous light at 80° F minimum temperature.

More experimentation on the exact optimum minimum temperature is

needed as well as data on the effect of intermittent light, i.e., hourly light flashes, and weaker light intensity.

In any event, under the conditions outlined above, growth was very rapid and almost continuous; that is, the time interval between growth cycles was so greatly reduced that wood of the previous growth cycle did not really harden up before a new cycle of growth began.

In spite of this rapid vegetative growth, however, buds were observed in December 1947 on some of the seedlings germinated in the spring of 1946. Even more rapid was the response of some of the seedlings germinated in October 1946. Several of these showed flower buds in January of 1948, one year and four months after germination.

In Table I, the results as of November 1, 1948, and April 1, 1949, are presented in terms of progeny numbers. It may be readily observed that certain progenies come into flower more slowly than others.

Also an observation not shown in the table is worth mentioning. In each population, seedlings occur which are extremely vigorous vegetatively speaking. Some of these are now over 6 feet high. These extremely fast-growing seedlings tend to be slow in flowering, only a few of them so far showing buds. Also the weaker growing seedlings are slow in flowering.

However, even with the handicap of 9 months under normal day-length prior to continuous light treatment, the seedlings germinated in February 1946 were all in flower by April 1949. In other words it is quite clear that by use of this technique it is possible **to shorten the breeding cycle** of the camellia from a period of four to eight years to a period of one-year-fourmonths to three years.

Furthermore, from the point of view of varietal introduction, the very weak growers and overly vigorous hybrids would probably not be worthwhile anyway. As the hybrids come into flower they are indexed for color, petal number, and size. Already some very interesting hybrids have flowered, which, because of their petal number, form and color, have been considered worthy of grafting in order to test them thoroughly under garden conditions.

It is obvious that the above technique has many other uses besides the induction of early flowering of camellia hybrids. The collector or fancier may greatly **speed up the growth of his cuttings or grafted scions** by its use and thus bring into flower some recently-acquired rare variety years sooner than would otherwise be possible.

Furthermore, by combining this treatment with an artificial winter effect, he may bring camellias into flower at any time or season of the year he may choose.

Thus experiments by James Bonner, reported in the 1948 Yearbook of the American Camellia Society, indicate that camellias which have an abundant bud formation as a result of continuous - light treatment, will flower normally in 21/2 to 3 months following the lowering of minimum temperature to 55° F and resumption of normal day-length. This change of temperature and day-length should be done when flower buds are about $\frac{1}{2}$ to $\frac{3}{4}$ inches in diameter and before they show color. The flowers produced in this way are as lovely and even more perfect than those produced under the usual outdoor garden conditions, due to elimination of such adverse factors as rain-andwind damage or insect injury.

Plants left under continuous light and high temperatures do not open flower-buds normally and flowers are small and of poor quality. Considerably less time under continuous-light (possibly only 2½ to 3 months) is needed to induce flower-bud formation in plants which have already reached flowering age.

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CAMELLIA-CONSCIOUS SACRAMENTO

The Camellia Society of Sacramento is sponsoring a rather unique camellia-planting program to promote interest among Sacramentans in the planting of camellia bushes to enhance the city's reputation as the "Camellia City." This is planned to be a continuing project from year to year, from December 15 through March.

The members of the Society who were in charge of the 1948-49 campaign were Mrs. Frederick N. Scatena, Mrs. A. E. Morrison, and President Carl M. Hoskinson.

The promotion plans included a Slogan Contest. The winning slogan was required to be short and to contain the word camellia or camellias, earning a prize of \$25 in camellia plants or \$15 in cash.

Three prominent leaders in organization work were selected to judge the 184 entries. The winning slogan was: GLORIFY THAT GARDEN SPOT! PLANT CAMELLIAS, PLANT A LOT. This slogan was used all during the drive.

Each person who contributed a slogan was presented with a camellia plant through the courtesy of the Sacramento Park Department.

Mrs. Scatena, Chairman, Camellia Planting Season, was permitted to meet with the Retail Merchants Association at their Board Meeting to present to its members the proposed plan: that the merchants cooperate with the nurseries in an effort to sell camellias at greatly reduced prices; that they give the Society front-aisle space; the Camellia Society members to sell the plants and have full charge of cash — no deliveries, charges or C.O.D.s.

The response was very gratifying: 18 leading merchants and six wellknown nurseries combined their efforts to make the project a tremendous success.

The planting campaign also received the endorsement of the Sacramento Chamber of Commerce and the various local parlors of the Native Sons and Native Daughters of the Golden West.

The Press was most cooperative: daily articles, many pictures and editorials proved of great value.

The Radio stations were generous with their announcements. One station contributed 35 announcements which would have cost \$1400.

The Camellia Society, through the courtesy of President Hoskinson, printed window streamers and placards for all the stores and nurseries that participated in the sale, which lasted from March 14 through March 19.

The leading stores featured camellias in their show windows and the Bank of America loaned the Society cash boxes.

Luncheon Clubs and other organizations were urged to give camellia plants as prizes.

A Committee was organized for the purpose of handling the material in the stores. Each store was provided with a person in charge and four workers. Some stores could have used twice that number. The volunteer sales force totalled 90 persons.

In checking the sales of camellias for the week, it was gratifying to learn that 13,500 plants were sold.

A request was made by the nurserymen that the sale continue for the second week. The Committee concluded, however, it was a wise plan to end the campaign in a blaze of glory and start formulating plans to establish an Annual Camellia Planting Season.

A gift of a set of Sterling silver flatware was given the Society as a prize to be raffled off at a later date, to launch the creation of a fund to help plant camellias on Sacramento's proposed 17-Mile Camellia Drive.

THE NEWER INSECTICIDES AND FUNGICIDES

By G. S. Hensill, Ph.D., Assistant Manager, Research & Development California Spray-Chemical Corporation, Richmond, California

The subject of the newer insecticides and fungicides, used in the control of insects and diseases affecting plant life, is wrapped in chemistry, especially organic chemistry; and the chemistry of the control materials is changing so rapidly that new discussions are worthwhile to keep those who are interested informed on new developments.

Prior to World War II, the insecticides and fungicides for use on plant life were well standardized; we knew what materials were available and what could be used. These consisted chiefly of insecticides such as lead arsenate and cryolite, nicotine, rotenone, and pyrethrum. The chief fungicides were copper and sulfur. Oil sprays, of course, were also included in the list.

Since World War II and the advent of DDT and a whole series of developments in insecticides and fungicides, the tendency for such material has swung very definitely to organic chemicals; and today, the gardener, grower and insecticide man as well, are faced with a whole series of new materials with which to become familiar and obtain knowledge as to their value and use. I shall not dwell too much on chemistry but shall try to clarify information on these new insecticides and fungicides.

Newer Insecticides and Fungicides

As an introduction it seems worthwhile to mention some of the newer insecticides and fungicides and tell something about them and their uses, so that when they are referred to later with reference to specific insect or plant diseases, the compound will seem somewhat more familiar. **DDT**, **Dichloro-Diphenyl-Trichloroethane**, is the well-known and widely-publicized insecticide developed during the war and used widely in sanitation work in the armed forces for insect and pest control, as well as for general pest control work in American agriculture.

The material is effective in controlling flies, mosquitoes, beetles, caterpillars, bugs, thrips, and a few miscellaneous insects. It is of value not only because of its double action as both a stomach and a contact poison, but also because of its stability: it does not break down rapidly and it may leave a poisonous residue on some surfaces for several months. It has proved to be of value to the gardeners of America for insect and pest control and will no doubt continue to be a prominent insecticide for some time to come.

DDT has worked marvels in the control of coddling moth, the major pest for apples and pears. But how far DDT applies to camellias, there is a guestion in our minds. A considerable amount of test work needs to be done. I admit that I do not know the answer whether or not some camellias will tolerate it. I have seen DDT damage to camellias. These were cuttings. DDT dissolved in light petroleum or some similar solvent is very penetrating, and some solvents are harsh to the human skin and no doubt to plants. It is possible that the damage was caused by the solvent rather than by DDT. We have records of DDT in powder form being used safely on camellias; but I don't want anyone to consider this a recommendation for its use on camellias.

One or two other materials discovered about the same time were found to have properties similar to those of DDT.

BHC, Benzene Hexachloride, also called Hexachloro cyclohexane. This material was developed in England during the war and was widely used there as an insecticide. It has properties similar to those of DDT; it is more effective and more rapid in action on some insects; it can be used

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in smaller amounts, requiring only about half as much; it has a shorter residual life, but long enough; and, in addition, it has a three-way action as a stomach, contact, and fumigant poison.

However, it has one chief drawback: the musty, penetrating odor associated with the regular commercial product. But some degree of progress has been made in the insecticide industry in the matter of refining the material to produce 100 per cent gamma isomer or active isomer of benzene hexachloride which is practically free of odor, at the same time, retaining the full insecticidal value and residual life of the parent compound. It leaves a residue for perhaps half the length of time as DDT. This is an important step in the field of insecticides and no doubt the product will become of greater value to the gardener as it is developed into usage.

This chemical is effective in the control of flies, mosquitoes, fleas, bugs, beetles, caterpillars, white flies, aphis, and is more effective than DDT in the control of thrips due to its fumigating action which tends to penetrate the protective parts of the shell of the insect.

Tetraethyl Pyrophosphate, or Hexaethyl tetraphosphate, as it was originally called when first introduced into the United States from Germany after World War II, has been found to be an excellent insecticide for the control of aphis and red spider mites. These are its chief uses, and it has been applied largely to the agricultural control of these pests.

It is now available for garden usage, and is particularly suited for red spider control where the use of spray oils is not particularly desirable. This material is manufactured in liquid form for spray purposes. Although it will control some other insects, its chief use is as a control of aphis and red spider mites.

Methoxychlor or Methoxy DDT is a new insecticide which is a close

relative of DDT; has similar uses, and in some formulations is used in its place.

Chlordane is another new insecticide especially useful in the control of ants and to some extent in the control of other household insects. But it is not particularly recommended for use on garden plants.

Parathion or No. 3422. I won't attempt to give the chemical name. This material is highly poisonous; but is is a very effective insecticide: it will even control adult scale. For that reason it might eliminate the use of oil sprays. But for several reasons it has not developed into anything the gardener would want to use; so far it has been applied only to agriculture. Don't look for this material on suppliers' shelves for some length of time. However, there is no real need for the use of this chemical by gardeners until factors can be worked out for its use in safety as well as assurance that it is not going to affect the plants it is used upon.

NEW FUNGICIDES

Of the new organic fungicides now available for garden use, the chief two are **ferric dimethyl dithiocarbamate** and **zinc dimethyl dithiocarbamate**. These materials are effective against mildew, rust and black spot on roses.

SPECIFIC INSECT PESTS

Brachyrhinus weevil larvae in soil around the roots of camellias and other plants feed upon the roots and even girdle the trunks just below the ground level, killing the plant. Both DDT and gamma isomer of benzene hexachloride are effective. We are putting the latter on the market in one or two forms.

Aphis tend to frequent new growth and spoil the appearance of plants and flowers by causing leaf curling and stunting in some cases. Insecticides now available for aphis control include pyrethrum, rotenone and combinations of the two, nicotine, tetraethyl pyrophosphate, and gamma isomer of benzene hexachloride. These materials are available in various liquid or dust combinations and give effective control of aphis.

RED SPIDER

Red spider or red spider mites have previously been controlled by applications of summer strength oil sprays, such as 1 per cent solutions of sulfur dustings. Now there is on the market various forms of tetraethyl pyrophosphate which is an excellent spider control material and leaves no visible or poisonous residue on the plants. Repeat applications may be necessary with this material as it does not kill red spider eggs, in order to stop young spiders emerging from eggs present at the time of the original spraying. This one insecticide alone is considered to be a boon to the control of red spider in the garden. The spray of tetraethyl pyrophosphate should be well mixed in water, thoroughly shaken and applied at fairly good pressure with a fine nozzle in order to get the spray as well atomized as possible, to give more effective results.

Thrips are another important garden pest throughout the United States. Rotenone and pyrethrum have been used as fairly effective control against thrips; but the advent of the new insecticides, such as DDT and benzene hexachloride or materials using the high gamma isomer of benzene hexachloride have produced excellent control of thrips on roses. This problem is not the serious one it has been. DDT will give satisfactory thrip control on roses as a dust or spray; but it is felt that the gamma isomer of benzene hexachloride would be a more effective thrip control due to its three-way action and the tendency of the fumes of the material to penetrate into the deeper parts of the flowers and result in better thrip control. Of course, the older materials such as rotenone, pyrethrum and nicotine may still be used for thrip control; but the new organic chemicals have really made progress along this line.

Leafhoppers, White Flies, and Rose Midge have been grouped together more or less, although the control for one is not necessarily the control for the other. In general, however, DDT in any form will give adequate control of leafhoppers and rose midge and fair control of white fly. Against white fly, benzene hexachloride or the refined gamma isomer form will give better control on the whole than DDT. Benzene hexachloride or gamma isomer is not so good a control for leafhopper as DDT. Unfortunately we do not have any information as to the effect of benzene hexachloride for the control of rose midge. The older insecticides. such as oils, nicotine, pyrethrum and rotenone are effective in the control of these insects; but the new organic materials still have their distinct advantages and have made control of these pests considerably simpler.

Beetles and Caterpillars. The new organic insecticides, DDT and benzene hexachloride or its refined gamma isomer, are very satisfactory materials for the control of beetles and caterpillars when applied in dust, powder or liquid form. These materials give additional control of insects because of their residual life on the plant, thus DDT is very effective against Rose Snout Beetles. Diabrotica Beetles, and other flower damaging pests. They do not require as frequent applications. The older insecticides such as cryolite, lead arsenate are still usable wherever it is desired, but they put down heavier deposits on the foliage and have shorter residual life than the newer developed insecticides.

MULTI-PURPOSE DUSTS

Present day development of insecticides has made possible the formulation of all-purpose or multi-purpose dusts which are now being produced and placed on the market for the first time. These dusts are probably more effective in an overall way than any insecticide compositions which have previously been made. For instance, there is one dust containing high gamma isomer of benzene hexachloride and the methoxy DDT, or Methoxychlor, in the way of insecticides. As fungicides it contains ferric dimethyl dithiocarbamate and zinc diethyl dithiocarbamate. As an example of what such a multi-purpose dust can do, it is recommended for the control of the following insects:

Aphis Thrips Mealybugs White Fly Leafhoppers Lace Bugs Tarnish Plant Bugs Mexican Bean Beetle **Japanese** Beetle Diabrotica Beetle Caterpillars Rose and Pear Slugs Spittle Bugs Earwigs and other insects or larvae in the soil.

It will control some other insects in addition to those listed. Such a dust mixture will also control powdery mildew, rust and Black Spot or leaf spot on roses. The dusts of this type now being manufactured can also be dispersed in water in the form of wettable powders and used as sprays.

Before I let the audience ask questions, I have introductory samples of Isotox Spray No. 100 to give out. The sample contains 10% of material by weight. It is solvent in water. Directions for use: 2 teaspoons to 1 gallon of water; i.e., 1:400 dilution. It has been tested to some extent on camellias and numerous other plants. We feel this chemical has a place.

QUESTION: Which one of the sprays do you recommend for earwig?

ANSWER: Dust of DDT or dust of gamma isomer or a combination of the two rather than liquid sprays. Use these chemicals along with bait program. Earwigs only take bait about twice during the season. QUESTION: Would you say something about Chlordane? I've heard it is good for earwigs.

ANSWER: I want to see that for myself; if it is good on earwigs, more power to it. It is excellent for the control of ants.

QUESTION: Which of your products is best for earwigs?

ANSWER: I think the dust; and you could put bait out from the middle of April on.

QUESTION: What about the compatibility of liquid Isotox?

ANSWER: It can be used with Fermate; but don't combine it with Rix. We have been experimenting. You might get some burn on new, tender growth. Rather you would use them separately, so far as Rix goes; but you can use it with Fermate.

QUESTION: How would you use it on Brachyrhinus?

ANSWER: Make your solution in an ordinary sprinkling can.

QUESTION: What about ants in cutting bed? Would Isotox control that?

ANSWER: Yes, you can spray it on cuttings and around the bed and keep ants off for a few days; but watering and weathering would dissipate it. Perhaps Chlordane around edge of cutting bed would keep ants away a longer time.

The above talk was given at the April 4, 1949 meeting of the Northern California Camellia Society, Inc.

CALIFORNIA SPRING GARDEN SHOW

Two members of the Northern California Camellia Society, Harry Mohr, Oakland, and Barlow Hollingshead, Orinda, showed camellias in the California Spring Garden Show, April 25 to May 1, 1949, despite the lateness of the season, and received many award ribbons.

CONTINUOUS LIGHT-

(continued from page 6)

By the use of the above technique one can readily bring such varieties as Chandleri Elegans and Gigantea or even Mathotiana Alba, which normally flower in January, February and March, into flower before Christmas. Continuous-light treatment for such results should begin in May or June.

TABLE I. CLASSIFICATION OF CAMELLIA SEEDLINGSAS TO FLOWER BUD FORMATION AS OFAPRIL 15, 1949.

		Number without flower buds Nov. 1, '48		
Seedlings germinated February 1946	10	6	16	0
Seedlings germinated October 1946:				
Single red 9 x Daikagura red 3	2	3	3	2.
Amabilis 🎗 🗴 Var. Daikagura 🔏	2	11	2	11
Amabils 9 x Fragrant Single red J	4	7	6	5
Amabilis 9 x Herme J	3	2	5	0
Large Single Var. 9 x Daikagura J	3	7	6	4
No. 103 🎗 x Daikagura 👌	3	3	0	3
Amabilis selfed	0	1	1	0
Daikagura selfed		1	0	1
Single white No. 1 9 x Daikagura 🖧	9	15	10	14
Single white No. 2♀x Daikagura ♂…		0	1	0
No. 100 º x Daikagura J		0	1	0
Peppermint Var. 9 Albatross 8		1	2	0
Single white type $3 \ 2 \ x$ Daikagura δ .		. 1	1	0
Berenice Boddy 9 x Apple Blossom d	1	0	1	0
Total of October 1946 seedlings		52	39	40

 Lammerts, W. E. Effect of photoperiod and temperature on growth of embryo-cultured peach seedlings. American Journal of Botany, 30:707-711.

(2) Sold under the name of Rancho del Descanso plant food. Other liquid plant foods of lower nitrogen content may be used if this product is not available, by adjusting the dosage rate to match the high-nutrient level used in these experiments. It is believed, however, that most of the nitrogen fed to plants should be given in organic form, i.e., be derived from urea so as to provide micro-organisms as well as plants with food.

AS OTHERS SEE US

Rolly Langley, Garden Editor, Oakland Tribune, 5/18/49:

"Congratulations to the Northern California Camellia Society on publication of their slick 32-page April Bulletin. It's a dilly."

V. Haugaard, Secretary-Treasurer, Camellia Society of Santa Clara County, San Jose, 4/26/49: "We wish to inform you that we have received the special April issue of your Bulletin. In all sincerity, I think this Bulletin is really something, and I am positive that our members will enjoy it. Your Editor and all those who had a part in it certainly deserve praise for their work."

PRIZE WINNERS AND DONORS

Through the generosity of the nurseries, many fine camellia plants have been donated for Exhibitors' and Door Prizes at the regular meetings of the Northern California Camellia Society, Inc.

February 7, 1949 Meeting

DEBUTANTE donated by BROCK'S FLOWER SHOP AND NURSERY, 4105 MacArthur, Oakland, won by Otto M. Butzke, Berkeley.

VILLE DE NANTES donated by SARATOGA CAMELLIA NURSERY (E. Gilligan) Saratoga-Sunnyvale Hiway, between Cupertino and Saratoga, won by Gordon Courtright and turned over to the Lakeside Park Planting project.

ADOLPHE AUDUSSON VGT. donated by SARATOGA CAMELLIA NURSERY, Saratoga, won by Ernest Higgins, Berkeley.

SENATOR DUNCAN FLETCHER donated by SARATOGA CAMELLIA NURSERY, Saratoga, won by Dr. Charles V. Covell, D.D.S., Piedmont.

March 7, 1949 Meeting

RETICULATA donated by McDON-NELL NURSER, 5146 Telegraph, Oakland, won by Wallace H. Brown, Oakland.

WILLIAM PENN donated by CA-MELLIA HALL NURSERY, 4950 44th St., Sacramento, won by Toichi Domoto and turned over to Lakeside Park Camellia Planting project.

CAMELLIA SOCIETY OF SANTA CLARA COUNTY

The Camellia Society of Santa Clara County held their annual election on April 20, 1949, and the following Officers and members of the Board of Directors were elected for the ensuing year: REGINA DEI GIGANTI donated by CAMELLIA HALL NURSERY, Sacramento, won by Alfred Stettler, San Francisco.

CAPITOL CITY donated by CA-MELLIA HALL NURSERY, Sacramento, won by Edward C. Larsen, Oakland.

April 4, 1949 Meeting

LAUREL LEAF donated by EAST BAY NURSERY, 2332 San Pablo Ave., Berkeley, won by Gordon W. Richmond, M.D., Richmond.

ELENA NOBILE donated by VAN'S NURSERY, 2943 MacArthur, Oakland, won by Warren S. Turner, Oakland.

KUMASAKA donated by VAN'S NURSERY, Oakland, won by H. V. Mitchell, Oakland.

May 2, 1949 Meeting

YOSEMITE donated by H. A. BOGH, 3800 39th Ave. Oakland, won by C. T. LeHew, Alameda.

MATHOTIANA donated by JAMES RARE PLANT NURSERY, 605 So. San Jose-Los Gatos Road, Highway 17, Campbell, California, won by Benjamin F. Enos, San Leandro, and turned over to Lakeside Park Camellia Planting project.

HERME donated by J. VENDES MANN, formerly LEONARD COATS NURSERY, 3121 Fruitvale Ave., Oakland, won by Charles E. Martinson, Oakland.

Mr. H. G. Sanders, Chairman of Door Prizes, has done an outstanding piece of work in contacting the nurseries and arranging for the donations of plants.

PRESIDENT......L. A. Bergna VICE-PRESIDENTW. H. Regan SECRETARY-TREAS.....V. Haugard BOARD OF DIRECTORS:

- L. I. Cammack A. L. Erickson A. M. Foster
- G. W. Halford

SHOW REGISTRATION

Mrs. Barlow Hollingshead, Chairman of Registration would like to take this opportunity to thank the following for their cooperation in the strenuous behind - the - scenes work connected with Show Registration:

Miss Barbara Head

Mrs. Rhoda H. Head

Mrs. John J. Kampschroer

Mrs. Sydney L. Munro

In addition, she would like to thank Miss Barbara Moe, whom Dr. G. Myron Grismore so kindly lent from his office to help with the typing.

PRESIDENT'S MESSAGE

(continued from page 4)

certain percentage of our older members, voluntarily or involuntarily. We cannot remain in a status quo — we must either go forward or backward. A steady infusion of new blood will prevent any hardening of our organizational arteries. So, fellow members, take a keen interest and as active a part as possible in your Society's affairs. Don't hesitate to volunteer if you have anything to offer in the way of assistance, for this is your Society just as much as it is mine, or any other of your elected agents.

In conclusion, I must say a few words in behalf of our retiring Board of Directors, if you will overlook the fact that I happen to be a member of that Board also. We have been most · fortunate this past year in having men on the Board who are not only capable but conscientious. Some of them have come long distances to attend our meetings, held more often than once a month; they have paid their own expenses and the attendance has been uniformly good. I can say without the least hesitation that they have been a grand bunch of fellows to work with and that our meetings have been most harmonious. I sincerely believe that our outgoing Board has performed an important and valuable service to the Society. D. L. Feathers, President,

STAGING AND DISMANTLING 1949 CAMELLIA SHOW

Dr. G. Myron Grismore, D.D.S., Chairman, Staging and Dismantling, wishes to express his deepest appreciation for services rendered in the heavier tasks involved in staging and dismantling the Fourth Annual Camellia Show, March 19-20, 1949, by the following:

Dr. H. V. Allington
J. D. Black
Floyd Bourlier
Otto Butzke
Gene Cooney
Will Crocket
Dr. Robert K. Cutter
John Paul Edwards
David L. Feathers
Clarence R. Foster
F. A. Grimmelman

Bruce Harless Sidney Higgins Barlow Hollingshead Harry Mohr H. V. Mitchell Harold L. Paige G. W. Richmond, M.D. Donald K. Staples W. M. Wells, M.D. H. G. Sanders John Vasquez

In addition to our own members, Arthur E. Mohr, Past President of the Camellia Society of Sacramento and one of our Judges, donned coveralls and spent several hours helping with the dismantling of our show. Many thanks, Mr. Mohr!

BOOK SALES

Mrs. Barlow Hollingshead, Chairman of Book Sales, reports the profit from the sales of 58 copies of Camellias Illustrated and 15 copies of The Camellia, Its Culture and Nomenclature, during the 1948-49 camellia season:

Gross Sale	\$327.00
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Cost of books 241.75

Profit\$ 85.25

Twenty-eight copies of Camellias Illustrated were sold at the Fourth Annual Camellia Show, and Mrs. Hollingshead would like to thank the following members for their able assistance:

Mrs. J. H. Biddle

Mrs. John J. Kampschroer Mrs. Sydney L. Munro Mrs. Herbert Teachout

BOARD RESOLUTION

The following Resolution was unanimously adopted by the Board of Directors of the Northern California Camellia Society, Inc., at their April 15, 1949 meeting, with the request that it be published in the official BULLETIN:

"WHEREAS, it being the sentiment of this Board of Directors that an outstanding contribution to the welfare and prestige of this Society has been performed, voluntarily and unaided, by one of its family memberships, and

"WHEREAS, there does not exist at present any suitable method of recognition thereof except by this means, inadequate though that may be, now, therefore, be it

"RESOLVED, that the Board of Directors of the Northern California Camellia Society, Inc., for itself and on behalf of the Society, hereby gratefully acknowledges, and wishes to express its deep appreciation to MR. AND MRS. BARLOW W. S. HOL-LINGSHEAD for their outstanding contribution to camellia knowledge in general and this Society in particular through their preparation, and compliation, at great expenditure of time and effort, of a comprehensive list of camellia varieties classified according to form, based upon botanical considerations as set forth by Dr. H. Harold Hume, which classification has since been adopted by this Society for show purposes and which is believed to be the first such index of record, and be it

"FURTHER RESOLVED, that this Board of Directors is of the opinion that this important work reflects great credit upon its authors and this Society, and furthermore, it being a contribution of effort wholly voluntary and above and beyond the call of their regular duties, the same stands as a highly commendable and most exemplary act of helpfulness and good will." I feel quite certain that each and every member of our Society has the same deep feeling of gratitude and appreciation as expressed above by your Board of Directors. We are most fortunate in having such a wholly sincere and industrious husband-andwife team engaged actively in Society affairs.

David L. Feathers, President.

NEW MEMBERS

The Northern California Camellia Society announces the following new memberships during the period February-May, 1949:

H. A. Bogh, Oakland E. C. Brown, San Francisco Mrs. Lenore Broze, Oakland James A. Buzard, Bellevue, Wash. A. R. Carstensen, Sacramento Donald E. Creagmile, Oakland Helen C. Donoghue, Lafayette Mervil H. Engh, Berkeley Mrs. L. G. Fox, Rockingham, N. C. Strent Hanna, Martinez Elmer W. Hansen, Oakland Mary J. Hanson, San Francisco John P. Illges, Columus, Ga. Charles H. Lester, Oakland Charles E. Martinson, Oakland Noble C. Massey, Berkeley J. D. Merritt, Berkeley Jack Osegueda, Oakland Mrs. Carl G. Peterson, Oakland P. F. Phillips, Oakland Lovell M. Preston, Oakland Mrs. Rosaline Pura, Gonzales Albert Quatman, Oakland Mrs. William P. Roth, San Mateo Guy Smith, Healdsburg Arthur W. Solomon, Savannah, Ga. G. H. Taylor, Oakland Warren S. Turner, Oakland Univ. of Calif. Library, Berkeley Adrian W. Young, San Leandro

It will be noted that four states are represented.

Northern California Camellia Society



MAGNOLIA QUEEN, large incomplete double with large crinkly white petals sparsely striped with red. A Magnolia Gardens seedling.



GENERAL GEORGE PATTON, pink, incomplete imbricated. Seedling of Purity, introduced by Coolidge Rare Plant Gardens.

Courtesy SUNSET MAGAZINE Photographs by Herbert V. Mitchell



MRS. K. SAWADA (Plant Patent 481), medium - sized, delicate blush - pink complete double, regular imbricated. Overlook Nurseries seedling named in memory of the late Mrs. K. Sawada.