

# SOUTHERN CALIFORNIA



# CAMELLIA SOCIETY

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OFFICIAL BULLETIN

September, 1946

## THE STAGGERED LATH ROOF

The March 1946 issue of this Bulletin carried an article analyzing several designs of lath roof, from the standpoint of the amount of sun to which they gave entrance and the amount of shade they produced. Type No. 1 was the old design in which all the roof laths were laid in one plane. Type No. 2 introduced  $\frac{1}{2}$ -inch of vertical separation between alternate laths by nailing them alternately above and below a strip of  $\frac{1}{2}$ -inch wood. In Type No. 3, vertical separation between the two planes was increased to one inch, while in Type No. 4, a vertical separation of one and five-eighths inches was introduced.

A copy of that Bulletin was sent to Dr. Gustav A. L. Melquist, formerly Assistant Professor of Floriculture at University of California and now Horticulturist at the Missouri Botanical Garden in St. Louis. Since he had introduced the staggered type of lath roof in this area, Dr. Melquist was asked to comment on the article; was kind enough to do so and to offer an important suggestion, under date of March 15, 1946.

Dr. Melquist wrote: "Thank you very much for the March number of the Bulletin of the Southern California Camellia Society. Your diagrams of the staggered lath roof are very interesting and instructive.

"I think your statement concerning my having recommended putting the laths alternately above and below a 1x4-inch drip is incorrect. When I first started to think about this type of lath house and discuss it with my friends, I did so in terms of a 1x4 because using a member of this size would materially strengthen the lath house. However, when I made up diagrams just as you have in your article I realized that the most useful distance of the layers of laths would be approximately the same as the width of laths used. I therefore wished to build it with a strip  $1\frac{1}{2}$  inches between the two laths, but being unable to buy anything but  $7/8$  lumber at the moment (this was during the war) we built the lath house using what we could get. I think your diagram definitely shows the desirability of this type of construction.

"My own reason for becoming interested in this type of design which was not new, but I did not know it at the time, was that I had learned through experience that most shade-loving plants apparently do better if exposed to considerably more sunlight during the early morning hours than they will get during those hours in a lath house of standard construction. On the other hand, I have no evidence indicating hours, but since the design, as shown in your diagrams, allows for the same amount of sun in the afternoon as in the morning that becomes a practical consequence.

"At present I am so busy trying to get my materials in order so that I can attend the scientific meetings to be held here the latter part of this week that I have not had an opportunity to check your diagrams too carefully and indicate if any improvements could be made. However, it strikes me that while you are at it you might see what happens when you shift the upper layer slightly toward the west, for I am sure it will be desirable for experimental purposes to ascertain whether the plants would not do better when they are exposed to more sunlight during the early morning hours and mid-morning than at the corresponding hours in mid-afternoon. Whether such a design is feasible or not I could not say until I have seen the diagrams.

# Southern California Camellia Society

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Dr. H. Harold Hume, University of Florida

"One thing you failed to point out in your article is that this design requires that the laths be run essentially north and south. Of course everyone who starts to think for a moment will not build a lath house with the laths running in another direction, but I know of at least two people who after looking at our house U.C.L.A. went home and built theirs with the laths running east and west. The results were anything but good."

First of all, our thanks to Dr. Melquist for the courtesy of his reply; for correction of our misstatement tying his original suggestion to a vertical separation of 7/8 inch between the layers of lath. We knew from reliable authority that Dr. Melquist had built a house at U.C.L.A. with that vertical separation; had seen the house nor talked with Dr. Melquist about it, therefore did not know that the 7/8 separation was a wartime necessity used on the principle that half a lath is better than none.

We are also grateful to the Doctor for emphasizing the necessity for running lath roof north and south, to avoid continuous bands of sun and shade instead alternate bands of sun and shade which travel across the lath house throughout the day. In a house with east-and-west lath roof, some leaves would be in sunlit continuously all day, others in continuous shade. In a house with north-and-south lath in its roof, alternate bands of sun and shade pass over all the leaves throughout the day as the sun moves from east to west.

Now for Dr. Melquist's suggestion, which in this writer's estimation offers outstanding improvement in lath roof design. Taking a shot in the dark, we made a diagram similar to those in the previous article, moving the top row of laths 3/8 inch to the west. This, you will readily see, gives the same amount of sun and shade beneath the vertical rays of the noon sun, the only difference being that one band of light (that on the west) will be 3/8 inch narrower and that on the east 3/8 inch wider; the total of each two bands of sun will be the same as before.

The amount of morning sun is definitely increased, since the diagonal rays get access to the house through the increased space created by moving the top laths westward. By the same token, the burning sun of the afternoon is reduced by narrowing the space through which it must enter.

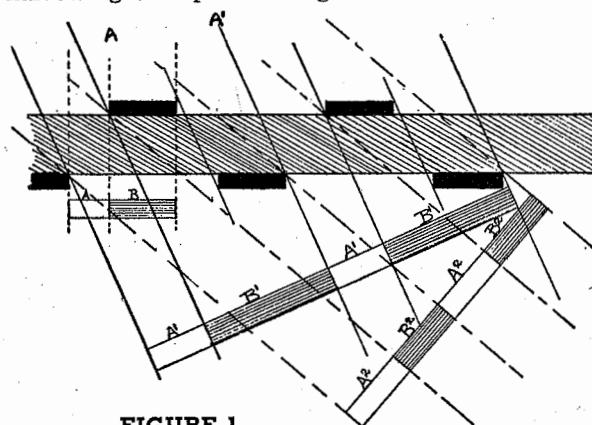


FIGURE 1

Figure 1 was "Figure 1" in the article in the May issue; it shows the symmetrical arrangement of top and bottom laths, the rows having a one and five-eighths inch vertical separation.

Figures 2 and 3 show asymmetrical designs suggested by Dr. Melquist, having an eccentric arrangement of the top laths which are placed 3/8 inch west of center. In viewing figure 2 and 3 you are facing north, viewing the south end of the house; therefore the sun rises at the right. The broken diagonal lines in Figure 2 (A2) represent

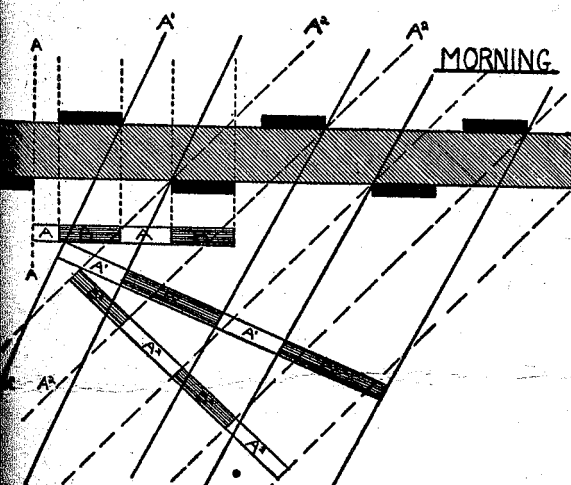


FIGURE 2

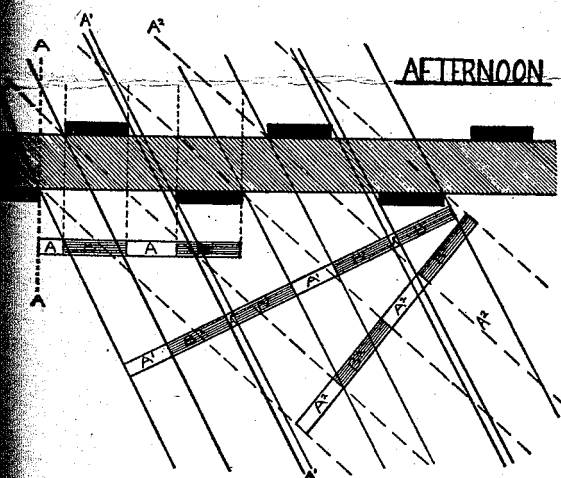


FIGURE 3

low slanting sun rays of early morning; the solid diagonal lines ( $A^1$ ) the higher rays of mid-morning. The dotted lines ( $A$ ) show the vertical sun at noon. In Figure 3, the solid lines ( $A^1$ ) again represent the sun rays in mid-afternoon and the broken lines ( $A^2$ ), the lower rays of late afternoon.

At the top of the drawings is the cross section of the lath layers and the separating strip  $1\frac{1}{2}$  inches thick. The alternate bands of sun and shadow are labeled similarly to the sun's rays which produce them ( $A$ ,  $A^1$ , and  $A^2$ ). These areas of sun and shade were measured in units of  $1/16$  inch on the original drawing (here greatly reduced in size), and the percentage of light and shadow computed. In listing the percentages, and in the graphic chart of them shown in Figure 4, we have arbitrarily clocked the low diagonal rays as of 8:00 A.M., the higher diagonal rays as of 10:00 A.M., the high rays of early afternoon as of 2:00 P.M. and the lower rays as of 4:00 P.M. This timing is purely arbitrary and the rays of these angulations might not fall at the stated hours of any single day in the year.

In the symmetrical Type 4, the low morning rays enter the lath house to the tune of 54.8%, whereas in the asymmetrical Type 5, they are reduced to 50%. From that point on, the percentage of sun in Type 5 progressively increases over the amount admitted by Type 4 until 10:00 A.M. it has risen to 37.2% as against  $33\frac{1}{3}\%$  in Type 4. At 2:00 P.M. the symmetrical Type 4 roof admits  $33\frac{1}{3}\%$  sun as it did at 10:00 A.M.; in the asymmetrical Type 5, however, sun rays at 2:00 P.M. have been reduced to 30.2%. At 4:00 P.M. the new Type 5 admits 46.6% light as against 54.8% in the symmetrical Type 4 house. These percentages are graphed in Figure 4.

SUN

SHADE

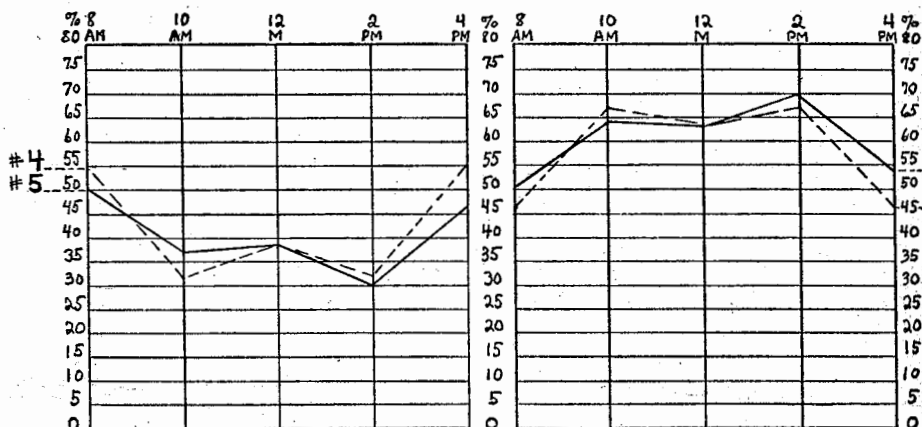


FIGURE 4

Please bear in mind that Dr. Melquist suggested this asymmetrical lath roof an experiment to be worked out on paper. It does not carry his recommendation. He may not approve of it at all. Nevertheless, it seems sufficiently interesting to pass on to you. When Dr. Melquist's comments have been received we will pass them on to you—and let's hope this writer's face will not be too red! We would like to have gotten Dr. Melquist's reactions to this analysis before publishing; however, we leave for the East September 30, to be gone throughout October. Bulletin is due in the mail about the middle of October; there was no leading article for it; swamped by other matters, the scribe is barely getting the material to the printer in time to correct the galley proofs before leaving town. Time was of the essence.

### THE BOARD OF DIRECTORS

The new Board of Directors met at the home of the President on September 1. A Committee was authorized to investigate the matter of carrying advertising in the Bulletin. Committee: The Editor and Business Manager of the Bulletin, and Thor Petersen.

A Committee was authorized to investigate the possibility of putting on a camellia show during the coming season. Committee: Howard Asper, William Huff, Robert Casamajor, Dr. McLean and Dr. Reeves.

It was voted that dues will remain unchanged. Admission to the meetings during the coming season will be by membership cards and guest cards. For guest cards during the year will be made available to members. The number of guests who can be accommodated at a given meeting will be determined on the basis of past attendance; applications for guest cards for each meeting will be filled in the order of their receipt. The February meeting will be closed to guests; the necessity for this provision becomes apparent when you consider that the Old Fellows Temple seats 250 persons and our membership is now close to 500. February attendance always tops the year; remember last year?

Membership applications received since last May have been delayed by the incorporation of the Society. Such applications will be dated as of October 1 and will cover the year 1947 in addition to the remainder of 1946.

### THOSE ELECTED TO MEMBERSHIP WERE:

FLETCHER PEARSON CROWN  
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716 W. Brockway St., El Monte, Calif.  
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C. W. HERRICK  
2516 Hermosa, Montrose, Calif.

**Test Garden Committee Reports** that the Camellia crop is being harvested at the Huntington Gardens and Mr. Hertrich has again offered to distribute seeds to members of the Camellia Society who have contributed plants to the Test Garden, or anyone who would like to do so now.

Last year over 6000 seeds were gathered. We do not know how many there will be this year, and cannot apportion them until we know how many want them. For best results, they should be sown as soon after gathering as possible. So, please communicate by telephone or postal with Mrs. Galli (SYcamore 9-2108), 314 Arroyo Drive, South Pasadena, if you have some plants to donate.

There are now about 309 varieties of Camellias in the Test Gardens, in most cases only one plant of a kind. The area set aside for the Camellias is large and we want several plants of the best varieties. There were about 60 varieties in the garden before the Test Garden was established. About 110 scions donated by members of the S.C.C.S. were grafted, and most of them have grown well. Seventy-five plants were donated, 73 plants were bought, part with money generously allocated by Mr. Hertrich for the purchase of Camellias, from funds at his disposal; the others were paid for by money raised at the plant raffles held at each meeting of the society. Nine members contributed scions, 17 members contributed plants.

The following list is only a small part of the varieties wanted. Do not hesitate to offer something that does not appear here; we have purposely left off the newest and most expensive ones.

Abundance	Sweeti Vera	Tricolor Dieboldi
Alba Plena	Pink Ball	Salmon Queen
Albidissima	Mrs. K. Sawada	Blood of China
Elizabeth Boardman	Queen Bessie	California
Embriata	Queen Victoria's Blush	C. M. Hovey (Col. Fiery)
Gizle White	Adah Pearl	Crimson Sunset
Kaku-Rakuten	Barbara Lodge	Daikagura
Cygnus	Crepe Rosette	Elena Nobile
Conningham-Smith	Cap. John Sutter	Flame
Cura	Christine Lee	Lady Van Sittart
Sawada	Cameo Pink	Lady Mary Cromartie
Edy of the Lake	Pink Star	Mathatiana Rubra
Ex	Gr. Rosea (Empress)	Mathatiana Alba
Express Nobilissima	Lois Hill	Pope Pius
Phosa	Kumasaka	Te Deum
Howard's White	Marchioness of Exeter	Aurora Borealis
alandia	Martha Brice	Brooklynia
itty McCaskill	Mme. Hahn	Monjisu
butante	Mme. Haas	Duchesse de Cases
agnoliaeflora	Pink Dawn	Duchesse of Sutherland
ome	Rosalinda	Elizabeth Arden
gantea	Rosea Superba	Eleanor Franchetti
allot Variegated	Governor Mouton	Laurel Leaf
		Variabilis

**The Chairman of the Horticultural Research Committee**, Robert Casamajor, reported to the Board that he and Mr. Tourje, member of the same committee, had that day attended a meeting of the Governor's Agricultural Research Committee in Riverside. This committee has been touring the State collecting information regarding research needed in the various fields of horticulture in California. The Horticultural Research Committee made a plea for research in Camellias and submitted the following letter.

"Sept. 19, 1946.

To the Governor's Agricultural Research Committee.

Gentlemen:

"The Southern California Camellia Society, through its Horticultural Research Committee, wishes to present the need for competent research with trained personnel, on the subject of virus diseases of the Camellia and their effect on flower quality, general health and the danger of infection and spread through the grafting process.



"Owing to the fact that many of the most costly plants marketed by the Camellia industry are large grafted specimens, and that this type is being sold in increasing numbers, as against the rooted cutting type, we suggest the advisability of conducting such a research program.

"While it is our opinion, based on check surveys, that the total capital investment in Camellia growing is substantial, and that the gross annual income from cut flowers and plants is of major importance to the nursery trade, we believe that the magnitude of the intrinsic values involved is of minor importance as compared with the need for a more thorough knowledge of the nature of these virus diseases which can only be gained through planned research.

"We therefore respectfully present our request that it be undertaken.

Yours very truly,

"HORTICULTURAL RESEARCH COMMITTEE,

Southern California Camellia Society.

By Robert Casamajor, Chairman,

385 East Green Street,  
Pasadena 1, California."

### HERE AND THERE

R. J. Wilmot, Secretary of the American Camellia Society, writes that the Louisiana Society will soon be represented by almost 100% individual membership in the A.C.S.; nearly 100 have come in during the last six weeks. Membership in the A.C.S. has now reached 1340, with \$10,660.00 in the treasury. The good work that can be accomplished in the field of camellia culture and scientific research by an organization of such size and means, is beyond computation. Are you a member?

The Editor hopes to spend a day with Professor Wilmot in Florida early in October, visiting the Gerbing Nursery, the Glenn St. Mary Nursery, and the Gainesville camellia test garden of the University of Florida.



Professor Victor S. Stoutemyer is the recently appointed Professor of Ornamental Horticulture at the University of California in Westwood. It is whispered that Professor Stoutemyer is quite partial to camellias.

### QUESTIONS AND ANSWERS

"What do you mean by 'plant hormones'?" asks one of our readers, referring to the article on planting camellias in the August issue. In human physiology, hormone is a substance secreted by a ductless gland which exerts an influence on some other gland or function of the human body. Plants, too, secrete substances not too well understood up to the present time, which influence the functions of particularly the development of plants. The term 'hormone' was first applied to plants by H. Fitting in 1910.

"F. A. F. C. Went and his son, F. W. Went, have proved that a root-forming material, which they call "rhyzocaline," is formed by the leaves; for defoliated green wood cuttings fail to form roots. In 1934, Thiemanns and Went reported on the chemical nature of this hormone.

"Bouillene and Went found a root-forming substance in cotyledons, evidently stored in the seed. Their work indicates that photo-synthetic action on the leaves is necessary to produce it. This is also apparent from the fact that leafy cuttings root more freely than do those stripped of leaves." (Propagation of Plants, Kainer and McQuestin.)

One such hormone is marketed under the name of Hormodin. However, too little scientific and more specific, the plant hormone so loosely referred to is Vitamin



"In your editorial on planting," comments another reader, "you speak of an uneven mixture of a good soil formula concentrating an excessive quantity of one constituent in a can or pot in which a camellia is planted. How can one avoid this and get good distribution of the constituents of a soil mix?"

Let us suppose the soil mixture is to consist of 1/3 soil, 1/3 leaf mold and peat moss. First, the peat moss should be moist. Open the bale, break up lumps, and then wet down the pile thoroughly, allowing it to stand long enough for the moisture to penetrate and "equalize" throughout the mass.

When making the mix, spread 2 shovelfuls of soil on a clean area of ground; then spread 2 shovels of leaf mold, then 2 shovels of peat moss, and repeat until the pile is large enough for the purpose at hand. Starting at the base of one end of the pile, shovel the pile to a new location nearby, spreading each shovelful before.

If the ingredients of the mix are not sufficiently damp, a helper should stand for the next operation, with a hose having a fine spray nozzle. The pile is now shoveled back to the first location, spreading each shovelful as it is deposited. As each shovelful is spread, the helper sprays it lightly with the hose; when each pile is moistened sufficiently, the hose is directed away until the next shovelful is deposited. When the entire pile has now been spread back shovelful by shovelful to the first location, it is allowed to stand for 2 or 3 days, so that the moisture can equalize throughout the entire pile.



Mrs. E. H. McC., of Buena Park, writes: "Will you kindly advise me if the Southern California Camellia Society has a pamphlet telling which camellias can stand more sun and which require more shade?"

The first book of camellia varieties published by the Society contained information as to which plants can stand little sun, medium sun or more sun. After discussion, the committee decided to omit such information from the book published last year, for the reason that the amount of sun which a plant can stand depends largely upon environmental conditions, such as the heat in the general area (whether coastal, inland, etc.); on the amount of humidity in the area, the amount of reflection from light surfaces nearby; the portion of the day in which the sun reaches the plant, whether in morning, at noon or in the afternoon; also, but not least important, the condition of the soil and the coolness and moisture of the plant's roots. In view of all these qualifying conditions, it is risky to state that a plant can or cannot stand sun.

P.S. Have you a question? If so, send it along. We will submit it to our private list of experts and answer at the earliest opportunity.



## MORE FAVORITE VARIETIES FROM EXPERTS

HERBERT SWIM, Ontario, California

Here is my list in the order of my personal preference:

- |                          |                            |
|--------------------------|----------------------------|
| Glen No. 40              | 11. Reticulata             |
| Eleanor Hagood           | 12. Marchionesse of Exeter |
| Pope Pius IX             | 13. Prof. Chas. Sargent    |
| Margarete Hertrich       | 14. Te Deum                |
| Debutante                | 15. Gloriosa               |
| Mrs. Chas. Cobb          | 16. Alba Plena             |
| General George Patton    | 17. Purity                 |
| Pax                      | 18. Gigantea               |
| C. M. Hovey (Col. Firey) | 19. Francine               |
| Fimbriata Superba        | 20. Fimbriata              |

A. P. CARLTON, San Diego, California

- |                   |                   |
|-------------------|-------------------|
| Pax               | 6. High Hat       |
| Eugene Lizzy      | 7. Flame          |
| Donklaeri         | 8. Matosi         |
| Chandleri Elegans | 9. Magnoliaeflora |
| Daikagura         | 10. Il Tramonto   |

PAUL L. SCOTT, Arcadia, California

Many good camellia varieties are not tried enough as yet to realize their individual worth. Other highly advertised varieties will lose value when planted. Because camellias are primarily corsage flowers my list contains mostly common material.

To me a good camellia variety should:

1. Grow on a reasonably thrifty plant.
2. Be at least fairly floriferous.
3. Open well.

The early blooming varieties are most desirable for cut flowers. To rate color camellia against another for highest choice isn't quite fair, but my favorite is Alba Plena. I had considerable difficulty stopping at five varieties in each class, and must perforce leave out many excellent ones such as Chandleri Elegans, Otome Pink, Prof. Chas. S. Sargent, Blood of China, etc.

RED

1. Pope Pius IX
2. C. M. Hovey-Colonel Firey
3. Te Deum
4. Mathotiana
5. Ella Drayton-Climax

WHITE

1. Alba Plena
2. Purity
3. Pax-Uki Duruma
4. Candidissima
5. Howard's White

PINK

1. Debutante
2. Francine
3. Pink Perfection
4. Wilder's Rose-John Laing
5. Il Tramonto-Laureleaf

VARIEGATED

1. Dai Kagura
2. Herme-Jordan's Pride
3. Catherine Cathcart
4. Otome Variegata
5. Emperor Wilhelm