

The *Camellia Bulletin*

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C. japonica 'MARY PAIGE'

—*Photograph by Harold L. Paige*

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The Camellia Bulletin, in keeping with the fundamental concept of the amateur organizations it serves, is a non-profit enterprise published quarterly (Nov., Feb., May and Aug.) by the Northern California Camellia Society, Inc. Its principal objects and purposes are furtherance of the enjoyment and benefits derived from the culture of camellias and the dissemination of knowledge related thereto. By special arrangement with the several collaborating Societies listed on Page 2, this Bulletin is also available in conjunction with membership, which is open to the general public upon application to the Secretary of any of the societies mentioned, at the respective addresses shown above. For full membership in the Northern California Camellia Society, Inc., and with respect to all persons resident in the counties of Alameda, Contra Costa, Marin, San Francisco and San Mateo, the annual dues are \$5.00—outside that area, limited membership privileges, including the right to all Society publications, are \$3.00 per year. **MEETINGS** are held on the first Monday of each month November through May, at 8 p.m. in the Claremont Junior High School Auditorium, Oakland, and include an informal flower display and refreshments. All matter regarding the content of the Bulletin should be addressed to the Editor. **CHANGE OF ADDRESS** should be reported promptly to **your Secretary**, as the Post Office will not forward periodicals. Remit dues to Treasurer.

EDITORIAL

We believe that the function of any worthwhile publication in our field should be, among other things, to act as a forum for the discussion of all relevant matters and, in particular, to present the divergent viewpoints whenever an issue is encountered that is controversial. Certainly it should not be used as a vehicle whereby regularly to foist upon the camellia public the particular predilections of any person—least of all those of the editor—who should be prudent enough to know his own limitations.

Nevertheless, a publication, as an individual, should have character and as such express its opinions, right or wrong, leaving it to its readers, many of whom may be a specialist in some particular field, to help develop the facts so that we may arrive at the object we all seek—the truth. This does not amount to “passing the buck”—it is merely an acknowledgment that it is impossible for any one person to be an expert in all matters.

So it is with the problems the widespread use of gibberellin is creating. Note that we do not say “the gibberellin problem.” It is not in itself a problem any more than the coming of commercial television or nuclear energy were, in themselves, problems per se, because they were discoveries whose value certainly was of the first magnitude. But it is the *use* to which these tremendous discoveries have been put that has created a Pandora’s Box of problems for the world to endeavor to harness and bring within control, lest they create widespread moral and physical destruction.

Consequently, and as said previously, people of sincerity cannot shrug off their responsibilities in such matters. So we enlist the aid and solicit the views of persons well informed pro and con, in order to bring our problems into focus and avoid disruption of our “world” or the particular segment of it with which we are concerned. Thus we welcome and are pleased to present herein the views of Col. Frank Reed, well known as an outstanding grower of exhibition camellias but certainly better known as the leading exponent and proponent of gibberellin culture.

We are quite certain that no knowledgeable person is going to take issue with the fact the discovery of the benefits of gibberellin on camellias is an important one and, for such purposes as obtaining early bloom, an invaluable tool. The widespread increase in its usage, particularly in the Southern States, is sufficient proof of this. Although the evidence in that direction is mounting, we are not yet certain that broad treatment of the plant with gibberellin, even used as directed, will not, over the long run, prove to be detrimental. But, as heretofore stated clearly, our concern is not with gibberellin culture but with the effects upon the general public, camellia nurseries and the club or society member who has neither the time nor the desire to go into laboratory techniques, of the widespread showing of camellia blooms of a type which cannot be obtained in any other manner as a rule. Like the fanciful advertising of some household products on TV, he is just going to find out that there really is no other way unless he uses the bottle with the genie in it!

Now let us reflect a moment upon the primary purposes of the annual camellia show as educational to the public and the focal point of society interest. Further, as the means whereby each member, especially the newer ones, can demonstrate physically the knowledge and skill acquired in the culture of our favorite plant. The newcomer views the top rank exhibitor and collector with awe and lives in the hope that, someday, he may be able to approach such quality of bloom. But his environment and climate may be such that this is an almost impossible task (see our discussion of the Great Variables herein). Any number of people have moved from a less favorable to a most favorable locality in order to grow better camellias. You know and I know of several people whose sense of fairness long ago persuaded them to withdraw from competitive exhibiting simply because their growing conditions and facilities were so much superior to those of the average member that it could not possibly be a fair contest of cultural skill. Those who are sincerely interested in the

welfare and growth of their camellia society appreciate that, rather than adding to the imbalance in the weight of advantages, they should act in a way to *encourage* the participation of the "average gardener" type of member and, of course, of the general public not yet interested enough to join a camellia society. In fact, the ideal camellia show would be one in which *every* member had an exhibit. Compare this with the present increasing tendency to place greatest emphasis upon the unabashed jousting of the top competitors, with no holds barred! Now do not misunderstand me—participation of the top growers is quite necessary to a good show—but is it wise to change rules in a way that will widen their advantage over the newcomer? Would not the end result of wide-open competition between gibbed and ungibbed blooms spell the death knell of the very type of exhibitor we should be encouraging—instead of discouraging? Are we to represent to the general public, uninformed in such technical matters as gibberellin treatment, that the blooms they see bearing the blue ribbons (primarily gibbed flowers) are what one might expect from good garden culture, especially when there is *nothing*

to indicate otherwise to them?

One can generalize and say "Oh, well, fertilizers are also chemicals, aren't they—what's the difference?" This is surely as much an oversimplification as to say that, because an athlete breathes oxygen, he should be artificially stimulated with it when competing in the Olympic Games, to give him momentary surge. We have seen good and bad gibbed flowers but our most striking impression of them is that they often have exaggerated size, color and, to a lesser extent, form. If we are to accept gibbed blooms in open competition with untreated flowers, then we most certainly must, as a prerequisite, change those rules relating to the judging of camellia blooms that are untypical, presently a serious demerit. This was difficult enough before we had gibbed flowers to contend with—grouping all together would make it an impossible task.

We have set up elaborate regulations separating "protected" blooms from those grown in the open and providing a separate category for greenhouse flowers, in order to be perfectly fair. All this seems rather futile if we make no distinction between gibbed blooms and those grown in the normal way.



Typical native oak cover at Descanso Gardens. Portion of Camellia planting may be seen on bank at left center.

DESCANSO GARDENS, LA CANADA, CALIFORNIA

Roy T. Thompson, Glendale, California

In the last few years Descanso Gardens in La Canada has achieved surprising popularity for week-end visitors, and since camellias are its major garden feature—there are well over 100,000 plants, many of them small trees — and since it is owned and supported by Los Angeles County, it has truly become an important public camellia center here in Southern California. Many of the camellias are well into their third decade of growth.

The early history of these grounds is interesting: these 165 acres were the last remaining part of the territory given to José María Verdugo by California Governor Pedro Fages in a Spanish land grant of 1784. The acreage was first a cattle ranch, then a vineyard, but by the time it was "discovered" by Manchester Boddy during week-end hikes with his two sons it had become overgrown and totally neglected. In the early 1930's he purchased it, built a home, and in the course of the next decade planted thousands of camellias. Mr. Boddy opened the gardens to the public in 1951; in 1954 Los Angeles County bought it and made it a public garden.

The principal natural features of the Garden are the native live oaks which cover 30 acres and afford ideal shade for camellias. There are two ponds, a running stream, and ducks for the children to feed. It is surrounded mostly by native brush-covered hills and has the feeling and freshness of open California country rather than that of a city park. To be

sure, there is a clubhouse and Mr. Boddy's former residence, but they are separated by half a mile of hills and oaks and fit unobtrusively into the surroundings. Last, but not least, it affords a center of activity for several garden groups, including the Los Angeles Camellia Council (composed of half a dozen separate societies) which puts on its annual camellia show outdoors under the oaks and amid thousands of blooming camellia bushes. County authorities cooperate handsomely by providing rainproof shelters for the show tables, and other necessary equipment. At show time thousands of visitors are comfortably taken care of without crowding.

An interesting item concerning the planting of camellias is apparent in some of the older camellia groups. These were planted originally four or five feet apart but have now intertwined and grown to 12 or 15 feet high. They are, of course, hopelessly cramped for room and afford an interesting object lesson in how not to plant camellias. The newer plantings of current varieties have been spaced 10 or 12 feet apart and will not be crowded for a long time to come.

One of the most delightful features of this garden is the stream which is bordered for a considerable distance by huge spreading camellias of exceptionally healthy appearance. In the thick vegetation along the stream one occasionally finds, in proper season, a duck sitting on a nest of eggs.

COVER FLOWER — 'MARY PAIGE'

It is a real pleasure to offer as our cover illustration a fine reproduction, made available through the co-operation of the originator, Harold L. Paige of Lafayette, California, of his new seedling. We say this not only from the standpoint of the quality of the flower, which is amply attested by its having won three ACS Provisional Seedling Certificates in its first season (1964), but because this permits us to evidence the honor and recognition

long due a lady (his wife) who has for years worked tirelessly in the best interests of the camellia.

'Mary Paige' may be described as a "powdery pink" formal double of mid-season to late blooming, 4" in diameter or more, which holds its form well, has good lasting qualities and falls in one piece. The plant is sturdy vigorous and upright, bearing excellent dark-green foliage of above-average size.

IS GIB NATURAL OR IS IT A NATURAL?

Frank Reed, Pasadena, California

Since we positively vote positive on both questions, a brief was presented to Judge Rhone, President of the Los Angeles Camellia Council, which governs the annual shows at Descanso Gardens. The purpose was to protest against making rules for the 1965 show based upon:

1. ACS "Chemically Treated Blooms" rule published in (2) November 1963, Chapter 1, Section 2, par. C.

The assumption that the judicious use of a gibberellin and/or an auxin to regulate growth of a Camellia is unnatural and unfair, and that the use of other compounds and elements is righteous and proper.

3. Acceptance of claims or insinuations that any use of gibberellin and/or auxin cause:

- a. Significant damage to plants.
- b. Unusual defects to color, form and size of bloom.

The ensuing sections will follow the numbers and letters above.

Sec. 1. ACS "CHEMICALLY TREATED BLOOMS" Rule

This rule seems ambiguous and meaningless. So far as known, no one is treating blooms with Gibberellic Acid, nor is there any other compound of the gibberellin type on the market. "Similar type chemicals" is vague and could mean many things to many people.

Sec. 2. GIBBERELLINS, AUXINS, FERTILIZERS

Gibberellins and/or auxins are quite universal growth regulators in plants, especially those bearing seeds. As a result of the work done by Lockhart and Bonner in 1957, Bonner wrote on page 114 (4) that the growth of the Camellia appears to be mediated through the plant growth substance, gibberellic acid, and that it was normally manufactured in the plant.

Lang and Reinhard in discussing Endogenous (produced within) Gibberellins and Flower Formation on page 75 of (11) indicate that gibberellins are of very general if not ubiquitous occurrence in seed plants. On the next page, they state:

"There is no question that gibberellins are normal materials of seed plants and that these native or endogenous gibberellins are capable of causing and promoting flower formation in plants in which they are actually found."

Went points out in (10) that "without auxin there is no growth"; many capabilities of auxin; and (page 74) that auxin is the agent which causes the apical dominance of stems, preventing the lower lateral buds from growing. (Reed note: This apical dominance is evident in practically every Camellia stem and branch).

Van Overbeek, in his meticulous review of Auxin literature in 1959 (7), stated that auxin, usually indoleacetic acid, is responsible for apical dominance of most plants.

This year Van Overbeek points out on page 108 of (8) that the dozen naturally occurring auxins are all variations of indoleacetic acid. They are all hormone and growth regulators.

Chandler North of UCLA believes that there is a gibberellin and an auxin in Camellias and the amounts thereof vary throughout the year and vary with environment.

Sachs shows on pages 54 and 55 of (11) that apparently the auxin and Gibberellin must be present in the flower bud of Transvaal daisy and that in other plants, differing ratios of gibberellin and auxin are required at succeeding stages of growth.

P. B. Nichols of California Institute of Technology reported (12) that the amount of endogenous gibberellin in barley increased until flowering and then decreased. Other workers at the symposium (12) reported that 16 gibberellins have been identified in plants and are being found in additional flowers, seeds and fruit.

The fact that there has been widespread success with gibberellic acid (gibberellin A3) in different concentrations, localities, weather, varieties, soils, etc., lends credence to the assumption that gibberellic acid is an endogenous (produced within) growth regulator of Camellias.

There seems to be no doubt that there is endogenous auxin (another growth regulator) in Camellias and that it is indoleacetic acid or a variation thereof.

It is not denied that we must use fertilizers since we do not have the natural environment so well outlined by Feathers in (9) page 10. For example, while we are waiting for nitrogen from the air and rain, we will trot down to the garden store and get a sack of synthetic plant food which can give all the nitrogen and nutrients needed. The fact that we perform this feat quite often does not make it a "natural" process. In fact, Feathers states on page 6 (1) March, 1963, that fertilization is generally an artificial rather than a natural process, and as such entails some risks and can be dangerous in the hands of a novice. These two articles contain no material change from Feathers' articles in the earlier edition of the *Sunset* book and *The Camellia Review* for July, 1956.

Rest assured there is no personal prejudice against fertilizer, because I am very pleased with the results from pouring on 3 or 4 times as much fertilizer in 1964 than in any previous year. No criticism is made of the venerable but artificial practice of pruning because I am proud of May blooms which seem to result from pruning several of the earliest shoots of each plant more than a year previously. This practice, coupled with a good Gib/indole program, should give wearable blooms from October first to June first. Just tell us how to spread out our 10,000 corsage-worthy blooms and we'll try the scheme forthwith.

Sec. 3a. PLANT DAMAGE

Many articles on gibbing have warned against techniques that will damage plant parts. Recently this has been done under the title of "Counter-Bumblemanship" (6) July, 1964, issue and (3) for 1965. "Suggested Dont's" are in (1) October, 1964, issue. Apparently it is within your capability to avoid significant damage to your Camellias.

"Don't" Summary:—Don't gib before September; don't use alcohol solution; don't spill or spray gib solution on small growth buds; don't inject gib into woody portion of branches except on advice of

an experienced plant biochemist; and don't gib below the terminal or tip of branch. You may get extra growth on Reticulatas started before normal time. You may want this last effect since it will make a bushier plant and we seldom get a freeze that kills early growth.

I have had troubles with all of the above but otherwise there has been no significant damage to my plants. This includes plants which have had 5 or 6 terminals of one branch treated with 100,000 parts per million (10 per cent) gib solution. At present the bud set, the growth, and foliage of my Camellias are the best ever.

Some have reported getting die-back from gibbing. No such effects have been noted on our plants. Helen Reiners in (5) August, 1964, page 12, reports "that overuse of this acid inhibits growth bud development some time after you have applied it to your flower buds." We are not aware of any one using such a gibbing technic in the past few years in our area. (*Technically this was incorrect—the gibb is applied to the adjacent growth bud stub, of course.—Ed.*)

Sec. 3b. BLOOM DEFECTS

Am going to apply some modified rules of Quality Control ("call for Walter Harmsen, the QC man"), Sampling, and Inspection by Attributes (in Camellia Nomenclature) on Camellia blooms. At the outset we will accept changes in color, form, and size as a "defect." If a Camellia can't stay within one official size, it is a defect. Likewise, if the bloom can't be one form only, it is a defect. If it gets to indiscriminately sporting around, one defect is scored for each time it gets out of control and has to add another new name.

The samples listed below have been among the leaders in sales and competition in recent years. (It is admitted that our sampling is better than Dr. Gallup's.) Our attributes, except for a few new defects on 'Carter's Sunburst,' can all be gleaned from the Woodroof Nomenclature "Bible." The total 'defects' for each Camellia sample are shown below:

Adolph Audusson	2	Guest of Honor	2
Alba Plena	4	Mathotiana	15
Betty Sheffield	10	Herme	8
Carter's Sunburst	6	Joshua Youtz	2

Daikagura	3	Kumasaka	3
Donckelaari	2	Mrs. D. W. Davis	2
Elegans	9	R. L. Wheeler	2
Flame	1	Reg Ragland var.	1
Glen 40	2	Te Deum	2
Guilio Nuccio	2	Tomorrow	5
		Total defects	83

Here it is:—415 defects per 100 units of product! Just how are you going to pin any defects on innocent little Miss Gib when Papa Camellia is such an inherently unreliable skalawag with four defects per original variety!?!*

Sec. 4. CONCLUSIONS

a. It appears that gibberellic acid and indoleacetic acid which qualify from the standpoint of organic compounds, growth regulators, hormones and availability should have better standing in Camellia culture than those elements and compounds none of which can qualify on these four counts. It does not seem proper to legislate against Gib and Indole as if the reverse were true.

b. It is felt that enough has been published on the use of natural growth substances that most Camellia fans can have success with them if they so desire.

c. Further experimentation will doubtless result in better Camellia blooms

*It should be noted that this ratio is for the sample given—not necessarily applying for all camellias.—Ed.

PARDON - OUR SLIP IS SHOWING

(with apologies to *Readers' Digest*)

In our May, 1964, issue appeared an excellent article by the Woodford F. Harrisons covering the American Camellia Society's 1964 convention, which had to be condensed slightly to fit the available space. In the process, a slightly different impression than the authors intended may have resulted, which we now regretfully note. To avoid any possible misunderstanding, we quote below the pertinent paragraph exactly as written by the authors:

"Some of us value the camellia plant more in garden culture than in strictly protected space. The weather in the past few years has certainly greatly diminished the use of camellias in the Southern gardens. Those that we saw

when we find the optimum mixture of gibberellic and indoleacetic acid and develop better methods of applying the mixtures. Rules should not be made to discourage such work.

d. Camellia blooms, which normally vary in form, color and size, do not abnormally and materially change their form and color due to the gibbing of terminals.** The blooms are naturally larger when Nature's growth regulators are used to regulate their growth.

e. It is quite possible that your Best in Show will contain a giberellin and/or an auxin in its petals, leaf and growth bud. It would be very interesting to know.

**This is debatable. We have seen much evidence that gibbed blooms change form OR color—OR size. Ed.

LITERATURE CITED

- (1) *SCCS Camellia Reviews*
- (2) *ACS Camellia Journals*
- (3) *ACS Yearbook*
- (4) *SCCS "Camellia Culture"*
- (5) *Northern California Camellia Bulletins*
- (6) *Texas Camellia Bulletins*
- (7) Van Overbeek's "Auxins" *Horticultural Review*, 1959
- (8) Van Overbeek's "Lore of Living Plants"
- (9) Sunser's "How to Grow and Use Camellias"
- (10) Skoog's "Plant Growth Substances"
- (11) American Chemical Society, *Advance in Chemistry* 28 "Gibberellins" 1961
- (12) Unpublished papers. Cal Tech Symposium on Plant Growth Regulators, Feb. 28, 1964

were generally sorry-looking specimens. The plastic-covered greenhouse, hastily erected in a desperate effort to save precious plants, is not exactly an asset to the garden. But the devotion and skill that have made Southern gardens famous in the past are already at work on solving this problem. We in California are indeed very fortunate to have an almost ideal climate for camellia culture. We must, however, bow in recognition of the Southerners' long-lived love of the camellia. Its culture in this country started there and, with determination, they are working out practical means to continue growing camellias, and camellias with as fine blooms as we have ever seen."

—Editor.

THE BELLINGRATH GARDENS CAMELLIA ARBORETUM

*Hoyt Lee, Mobile, Alabama

Here is a rare combination of Camellia Arboretum embracing a large collection of camellias and a beautiful landscape, all "rolled into one."

It happened in the season of 1955-1956 when "Mrs. D. W. Davis," "Guest of Honor," and "Guilio Nuccio" appeared in the Mobile show and in Mobile gardens along with such already popular ones as Mathotiana Supreme. Harry Hardy Smith and the writer found it easy to sell "M. B." Greene, Landscape Engineer, on the idea of adding a Camellia Arboretum to the already world-famous Bellingrath Gardens. "M. B." agreed that since the Camellia Japonica had been one of the dominant plant subjects—sharing top honors with the azalea—in the Gardens since their inception, certainly the finest camellias that would thrive in this locality should be grown here. He felt also that provision should be made for maintaining an up-to-date collection by replacing the poorest each year, from the standpoint of both growth and bloom quality, with the proven best.

When the Camellia Arboretum idea was presented to Fred Holder, General Manager, and George Downing, Chairman of the Board, they too were enthused and authorized "M. B." to make a study of potentials. An area embracing about seven (7) acres was found adjacent to the Gardens that seemed to have all the attributes requisite for a Camellia Arboretum. It was a wooded area, having a good cover of yellow pine with a sparse growth of small oaks and scrub palmetto. The terrain was slightly rolling, giving perfect surface drainage, and the soil was sandy. Soil acidity was 4.5 to 5.0 p.h. Another advantage, which was of great importance was that of location. The site was adjacent to and about midway the Gardens trail system.

Immediately upon inspection of the site and of the plan "M. B." had prepared, the Board of Trustees and the General Manager gave the green light and in

August, 1956, actual work started. All of the undergrowth and all hardwood trees except a few choice dogwood trees were cleared out and the pines were thinned to stand roughly 35 feet apart. The next step was to locate and stake out a trail system that would at once present a pleasing landscape effect, afford the visitor opportunity to study growth and bloom characteristics of the different varieties and provide for access by maintenance equipment. A system of winding trails 12 feet wide, with curves sufficiently easy to accommodate trucks, was located, as much along contours as practicable. Three or four short cuts were provided for those who might tire. An irrigation system was installed providing coverage by large sprinklers spaced at intervals of about 120 feet and $\frac{3}{4}$ -inch faucets 80 feet apart.

Planting the first year consisted in moving in 300 ten to fifteen-year-old cutting grown plants that several local nurserymen gave to the Gardens and 600 stumps of Professor Sargent, $\frac{3}{4}$ -inch to 2-inch caliper. The large plants were carefully balled and burlapped in November and December and the Sargent grafting stocks were moved bare rooted in January. About 1,000 scions were grafted onto these stocks in late February and early March. The "take" was exceptionally good—97 per cent.

The spacing of plants was at a minimum of 12 feet and 6 feet from the trail. However, plants at trailside were set double thick for quicker effect to be thinned to 12 feet before crowding. Spacing was the same for all varieties, regardless of habit of growth.

The native soil being sandy, with a little top-soil humus, all planting was in the existing soil and without fertilizer. No fertilizer was applied during the first year. The entire ground surface was covered with a liberal mulch of pine needles, to shade and cool the soil around the camellias and to help control weed growth. Since the initial application the natural drop from the pines has supplied adequate replacement each year.

*President Emeritus, American Camellia Society.

Self-growing annuals, including phlox, gaillardia, torenia and vinca, and perennial phlox, were sown broadcast in informal patches for the purpose of showing color through the warm months, but this program was "scrapped" after two or three years because of the untidy effect of the fading plants following bloom. Several climbing plants have been grown on the pine trees with excellent results—Cherokee rose, Belle of Portugal rose, white and yellow Banksia rose, cat's paw begonia, coral vine—to name a few.

The trails are surfaced with emerald zoysia grass and bordered with ophiopogon japonicus, with a light sowing of rye grass in October or November. These trails are pretty and green all year.

The initial grafts in this planting are now seven years old and are 5 to 10 feet

tall. Foliage and flower quality are above average, due largely to apparently optimum shading and protection by the pine trees. The Arboretum contains over 1,200 plants of about 900 varieties.

Two or three applications of fertilizer in spring and early summer are broadcast around each individual plant on the pine needle mulch and well watered in. A mixture of equal parts of cottonseed meal, dolomitic limestone and 8-8-8 with minor elements is used.

"M. B." plans to treat several hundred buds with gibberelic acid in September.

The plants in this arboretum are not given the finest maintenance possible but are "given a chance to grow." Those that cannot thrive under the conditions provided are discarded as being poor risks for the average home grower.



A view in the Camellia Arboretum, Bellingrath Gardens showing twelve foot spacing, ideal mulch of pineneedles supplied by the stand of native yellow pines. Note plastic label on aluminum stake. Photo 1960.



Two views of the Camellia Arboretum, Bellingrath Gardens, which embraces about seven acres and contains 1200 grafts of over 800 varieties.

Walks are of grass, edged with *opbiopogon*. Native yellow pines provide the required shade and do not compete for food nor moisture. Photos, 1960. Spacing detail pictured on page 12.





PLEASURE OF EARLY CAMELLIA BLOOMS

*A. Wilkins Garner, Glendale, California

Many of us spend considerable effort in growing and grooming our camellias that come into peak bloom at show time. In so doing we are overlooking the thrill and joy of seeing the first blooms of the many varieties of Japonicas which bloom September through December and on into January.

There are a large number of early blooming varieties proven over the years and known to bloom well over a large part of the camellia belt as their normal blooming season. Some of these date back to the very earliest history of camellias: ALBA PLENA (to England 1792) starts blooming in November. Many of us feel there has never yet been a formal white to equal it, even though petals shatter if allowed to stay on the plant too long. The Sport FIMBRIATA, though more delicate to grow, is a genuine beauty. VEDRINE (Ruby Glow) (early 1900) combined with ALBA PLENA makes an unequaled display for a CHRISTMAS TABLE. This combination provided at Christmas will help keep our wives interested in our

hobby. VEDRINE blooms well before Christmas for me and is a true Christmas red.

ARE-JISHI (Japan 1891) is a good red peony and one of the first good flowers to bloom in all areas. Some years ago I planted an 'Are-Jishi' on my neighbor's side of my driveway. It is now up to the roof. It starts blooming each year September 15th to October 1st. YOHEI-HAKU (September Morn) is usually the first to bloom but is not a satisfactory variety for most growers. The DAIKAGURA FAMILY (Japan 1891) Variegated-Red-'High Hat' (Light Pink), Conrad Hilton' (White), all are good in most areas and bloom usually by October 15th.

DEBUTANTE (Magnolia Gardens, early 1900's) is one of the most beautiful of the early bloomers. It has perhaps the most sought after blooms by the retail florists and is considered the most popular camellia of California and one of the bread and butter varieties of the nurserymen. PINK PERFECTION — probably one of the first camellias many of us acquired. A large 'Pink Perfection' covered with blooms makes an impressive sight.

*Director and Past President of Southern California Camellia Society.—Ed.

WHITE EMPRESS is a very fine white semi-double. Since we now have many fine mid-season semi-double whites, 'White Empress' can be rated the best of K. Sawada's older seedlings, due in part to its early blooming quality. This covers some of the older early varieties. A few more which bloom early and perform satisfactorily in many areas are: DAITARIN, EMMETT BARNES, JOSHUA YOUTZ, LADY CLARE, and Vern McCaskill's MATTIE O'REILLY, MANDARIN, DESSA THOMPSON, and INDIAN SUMMER.

There are a number of newer varieties to add to our early list: MARIE BRACEY (1963 Illges Award Winner); ELEANOR GRANT, very large, semi-double to peony, delicate rose; ALICE WOOD, large, bright red, formal, good. Les Marshall's FIRST PROM, blush white, large formal, holds well, and PATTI ALL VORCE, light pink, rose-form double Nuccio's KICK OFF, very large, loose peony, pale pink striped darker pink, and the solid-colored sport TOUCHDOWN; also his 1964 introduction COVER GIRL, clear pink, medium to large formal. ASTRONAUT, medium size, semi-double red, introduced by Select Nurseries of Whittier, California.

In writing about early blooming camellias we cannot overlook the very desirable sasanquas. They grow well over a much broader range of soil conditions and do well in light to full sun. All bloom early, even before the early Japonicas in most areas. The small attractive foliage is one of the reasons why Sasanquas are used extensively in landscape work and should be used more. The beautiful blossoms, which are mostly singles and semi-doubles, shatter in a few days; however, some of the recent introductions are said to hold on much better. Better holding quality will likely be considered a must in future introductions. Some of the older, and a few of the newer, Sasanqua and Hiemalis named varieties are listed:

Sasanquas

- CHARMER, white edged pink, large, single;
 HANA-JIMAN, white edged pink, large semi-double;

- JEAN MAY, shell pink, large double;
 LITTLE GEM (Ko-Gyoku) pink bud opening pinkish white, medium rose-form double;
 NARUMI-GATA ('Oleifera') white shaded pink, large single of cupped form;
 OCEAN SPRINGS, white with wide red border, medium single;
 SETSUGEKKA ('Fluted White'), white, large, semi-double;
 SHICHI-FUKUJIN, rose pink edged mallow pink, very large, semi-double;
 SHINONOME, flesh pink, very large, single;
 SPARKLING BURGUNDY, ruby rose overlaid with sheen of lavender, large, peony; All-America Camellia selection 1959;
 WHITE DOVES ('Mine-No-Yuki'), white, large peony form, double;
 YAE-ARARE, white edged pink, large single;
 YULETIDE, bright red, compact, holds better, new

Hiemalis

- BONSAI BABY, deep red, small formal to rose-form double;
 CHANSONETTE, brilliant pink, large, formal double with ruffled petals; Ralph Peer ACS Award 1949;
 DAZZLER, rose red, large semi-double;
 SHISHI-GASHIRA, red, medium, semi-double to double;
 SHOWA-NO-SAKAE, soft pink, occasionally marbled white, medium, semi-double to rose-form double.

There have been many fine articles written on Sasanquas and I suggest you re-read them.

There are many other Japonicas listed as early; we can all study our Nomenclature Book to good advantage. It is suggested that you search out the varieties listed, determining performance in your area, then complete your collection of the early bloomers. There is a lot of enjoyment to be had with the early ones. Happy Hunting!

For a further discussion of *C. sasanqua* see: *The Camellia Review*, July, 1955 special issue, October, 1961, November, 1963, issues. *The Camellia Bulletin*, Vol. 10, No. 1; Vol. 13, No. 1; Vol. 14, No. 4; Vol. 16, No. 4; Vol. 17, No. 4.

THE SACRAMENTO CAMELLIA FORUM

Mrs. J. C. (Helen) Reiners, Sacramento, California

In Sacramento, since 1957, we have had a rather small organization named the Camellia Forum. Though it has a slate of officers and a set of by-laws, regular meeting dates, and the like, the Forum has in other ways departed from the usual paths followed by garden clubs.

In the beginning it was as the gleam in someone's eye, and soon became the conscious thought and action of no more than three persons who did see eye to eye. These charter members termed their group The Camellia Study Committee, and met whenever it was convenient for all. The subject matter was always participated in by the whole group, and the first subject was a poll on the most popular Camellias of the time. The scope of the subject matter became wider, but not as broad as now, with the ever-enlarging horizons being seen by scientists everywhere.

It was mandatory that the social grace of coffee and hospitality be kept in a subjective area and, to this date, the line is being held. The addition of members to the group has not seriously hampered the activity as originally planned; the membership well knows the first importance of the cause, and makes conscious effort to preserve an objective view of its own activities. It has been well noted that informal scientific inquiry is nearly throttled by a too great diversity of opinions, each represented by one person. For these reasons the Forum remains small.

To repeat, the foremost exception from conventional procedures is the lack of stress on a singular socially oriented program. The first purpose is study of many facets of Camellia culture, and everything pertaining to Camelliana is of interest to us. The object, being of common interest to all the members, draws us close in a special way; there is much loyalty to the group and distinct good fellowship.

It could be mentioned here that the Camellia Forum is not a second Camellia Society of Sacramento, nor in competition with it. Forum members belong to both

societies because the aims and procedures of each vary; also, Forum members enter into the American Camellia Society and the International Camellia Society. These many contacts, and more I have not named, serve to bring us a wider perspective.

In recent years the Forum has conducted a two-year experiment on the regulated use of a name brand fertilizer, other short term studies on plant foods, has worked with colchicine, gibberellin, the auxins, and various growth retardants. We have investigated propagation, grafting, hybridization, methods of soil preparation, and types of containers. The original popularity poll has been repeated at intervals of two or three years. The whole group is particularly interested in use of name-brand chemical products recommended for use on Camellias, and members test and report their results, with any unusual factors given special review.

The varied programs can not have been vainly pursued. Our Science Recorder keeps records of the experiments which are directed by members with advanced education backgrounds. The ledger shows a profit rather than a loss at the conclusion of all experiments, even though variations with too great an allowance for error are often the case. If we should fail in our pre-set goal, the cause can usually be determined and we gain from the failure. We do not study in a strictly academic manner, but reported observations as to complicated procedures have definitely been of great advantage to us.

This description of our efforts may show you to what extent an Informal Study Group can comfortably proceed. If the duties for any member are not onerous and if the study is of general interest, success of the Camellia Forum may be of comparatively long duration. Certainly there is no foreseeable termination of this special interest in Camellias by a large segment of horticulturally minded people. With biological inquiry advancing at a logarithmic pace, the many paths of research tempt us to continued effort.

NEWS and VIEWS

By Roy Thompson

Here is an interesting diversion for anyone who has been in the camellia hobby for fifteen or twenty years: go back over the camellia publications of, say, two decades ago and read all about the varieties which were then madly desired by collectors and most other camellia hobbyists — the "hot" ones — and note how few of them are heard of today. This situation is, of course, normal, but to any who are philosophically inclined, it points up the fact that, with few exceptions, the true merits of a new camellia cannot be ascertained in a few years. Reflecting on this, one wonders why he has been so eager to secure all the new varieties when they were "hot."

* * *

Disbudding. The chief purpose of disbudding is to reduce the number of blooms so that those remaining will be larger and better. The matter is, apparently, not controversial, but there are many opinions on *when* to disbud. If it is done too early, say in September, the camellia will at once begin to form new buds to replace those which have been removed. This makes it necessary to disbud a second time, maybe a third. But if disbudding is timed about a month before the plant is accustomed to bloom there will probably be very little replacement of buds.

Some camellia varieties, however, have the thrifty habit of setting just enough buds to enable them to open all into good flowers. Others go mad and produce great clusters of buds on the ends of twigs—from five to fifteen in each group. But these two groups are in the minority; most camellias are in between these two extremes and need to be disbudded according to their various uses.

Still another group of camellias in landscape plantings — and this includes sasanquas — are expected to produce masses of blooms, of whatever size, and need no disbudding.

In most normal disbudding certain details should be observed. Whether there are two buds or many in a given group, the disbudder must decide which one

should be left, and this decision varies a good deal. If the buds are in the center of the plant in a crowded situation, all should be removed. If a bud lies against a stem, or is too closely surrounded by twigs, it should be removed. Sometimes the direction in which a bud is pointing makes a difference—up or down or toward a window or whatever. If a show flower is sought, it is a good idea to choose a bud pointing straight down so that the opened flower will not gather dust, debris, and rain. In all cases enough space should be left for the flower to open fully without touching leaves or twigs. The most favorably located bud should be left in place even though its size is smaller than those around it. Especial care should be given to providing places for formal blooms for the very essence of the formal's effectiveness and beauty depends upon the perfection and proper placement of each petal. A petal with a wiggly edge could easily be accepted in a *Frizzle White*, but not in an *E. G. Waterhouse*.

* * *

Speaking of sasanquas, there is one variety which tempts the grower to disbud, the *Shinonome*. The flowers of this variety sometimes reach four inches, and all are large enough to have an individual character: there are 8 to 10 large petals which twist and turn in an irregular circle surrounding the prominent stamens. When fully opened the flower is a pale pink. In the case of *Shinonome* one has to decide in advance whether he desires specimen blooms or a general color effect.

* * *

Light: In our concern to supply proper soil, food, and water to a camellia plant, we often overlook a matter that is just as important as any of these—the importance of light. If any part of a camellia is in any way prevented from receiving adequate light, the growth buds die, the leaves die, and presently certain twigs die. This is an especial hazard when older plants are growing close together since

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THE CAMELLIA NURSERYMAN AND HIS PUBLIC

*A. E. Campbell, St. Ives, New South Wales

Before starting to talk about such an interesting and involved subject, it would not be out of place to take firstly a short look at ourselves and our aims as nurserymen, then a rather longer look at our customers and their expectations. Unless we can clearly see both sides of this picture I believe that we as nurserymen are not truly fulfilling our obligations and our customers are buying in hope and not with that degree of certainty that we in our own capacity as customers like to feel when we buy some other commodity. Now to begin with, most nurserymen are rather dedicated people. They have to be, for there are probably fewer fortunes to be made in this trade than in most other vocations, though it will afford a good living and provide a most interesting life, even though the hours are long and the work as constant as that on a dairy farm. Our aim must always be to provide healthy and vigorous plants quite suitable for the purpose for which they are intended by our customers. The price of such plants is of relative unimportance; competition sees that it doesn't get too high but, as in most other commodities, top quality can never be achieved at the lowest price—and the purchase of quality always pays! There is nothing original in the above few lines but it is as well to remind ourselves that a nursery is a commercial undertaking.

Now a look at our customers. They are divided broadly into two rather distinct categories. Relatively few are really knowledgeable — the discriminating collectors who, in many cases, know rather more than we do! They know what they want and are usually prepared to wait for us to produce it for them. They are on our lists for contacting about new varieties and special items and they have first call on new releases. In effect they are the leading amateurs, frequent winners at Shows and speakers at Meetings — the *cognoscenti*. It is a pleasure to look after their requirements, for they appreciate our efforts in producing the standard of quality they desire.

On the other hand, we have the great majority of comparatively inexpert home-gardener customers who are buying garden decoration; decoration that will give them so many square feet of evergreen foliage, a particular effect for Winter or Spring, a supply of flowers of not too particular a type or something like their neighbors' down the street, which is so attractive the year around. Very often they don't quite know what they want and would be just as happy to purchase a maple or a magnolia, a camellia or a cryptomeria. They don't know a great deal about horticulture but would like to, and probably would if they didn't play golf or go fishing, or work such long hours. Because camellias can be such excellent garden subjects for this great majority of nursery customers, it's time we started to talk about the title of this article.

We need a good range of form and color. Forms should include a few singles, rather more formal and informal doubles and a large range of semi-doubles, of colors from white to deep red with a few variegated. Above all the plants must have a good habit of growth and be able to maintain reasonable health and vigor in face of indifferent attention which can almost border on neglect at times. Additionally, they should flower at an early age, with blooms well displayed on the plant. Sun hardiness is of very considerable benefit to us, and to a slightly lesser degree, so is cold hardiness. Early to mid-season flowering is preferable as there is so little other color in the garden at that time. Late bloomers are not very satisfactory. Being mostly formals, a few warm days can fully open all the flowers and soften them. Freedom from disease is of the utmost importance and here we refer to fungal "dieback" and root rot. We cannot be held responsible for damage caused by scale, aphids, mites and thrips as plants so infected should never be sold by reputable nurseries. "Dieback," caused by the fungus *Glomerella cingulata*, is prevalent in humid climates such as ours in Sydney and in the Deep South of the United States. Losses can be severe in a number of varieties — most of the

*Manager, Camellia Grove Nursery.

williamsii family, some of the reticulatas and a number of japonicas. Susceptibility among the japonicas varies considerably. 'Magnoliaeflora' and 'Peach Blossom' are prone, 'Emperor of Russia' and 'Great Eastern'* are proof. Root rot, caused by the activities of the organism *Phytophthora* in badly drained, over-wet soils, can also cause losses, the 'Herme' family being rather susceptible. After-sale losses from these causes, which may well have initiated in the customer's hands, do not make for the happiest relationships.

Additionally, the problem of petal blight in the United States, which heavily penalizes those camellias whose gorgeous blooms shatter easily, must be taken into account. It might be noted that here in Sydney, fortunately free from this scourge, 'Cho Cho San' is regarded as one of our finest varieties, notwithstanding it is a shatterer. Ease of propagation is another important factor, it being considered that a plant growing strongly on its own roots is preferable to a graft and also cheaper to produce. Color and habit of foliage is also of some importance — glossy dark green, profuse and erect leaves make for eye appeal during the summer months, in fact all year round.

Whilst it may be thought that by now there are sufficient good camellias to fill most of the above requirements, the writer does not believe that the efforts of the scientific hybridist and the backyard grower are of little interest to the nurseryman. The goals of a yellow or a strongly scented camellia are so very worthwhile, for they may well be attained—an early pink formal, a reliable sun hardy white,

a formal that opens perfectly near the sea and so on—all are desirable objectives.

However, one cannot help but feel that the efforts of the hybridist are largely hit or miss. Have they learned over the years those varieties from which the most promising seedlings are likely to arise? Certainly in the rhododendron world the most successful parents have been discovered and are being continually worked upon. How marvelous it would be if new seedlings could be produced with that indefinable quality that places great blooms on a pedestal and at the same time have such great beauty backed by those desirable plant qualities mentioned above.

Yet, while there appears to be no limit to what can be achieved, the inferior must be ruthlessly discarded. A bewildering number of camellias are being produced, named, propagated and distributed. Some are so very good and worthy of the honors heaped upon them but most are little or no improvement on the favorites of long ago and should never have been allowed to escape, or at most just named for Aunt Matilda!

Lastly, a plea to name this so desirable new cultivar with imagination, brevity and euphonism. Many old camellias have appalling names, do not let our grandchildren think this of the camellias we name today. Of course the 'Madame de Cannart de Ham'le' of yesterday is the "Beat'e" of today and the "Lordknowswhat" of tomorrow—Dame Fashion must be allowed her play. If only it could be impersonal!!

*See American Camellia Year Book, 1964, page 185.

ACS CONVENTION IN 1966

The Camellia Society of Sacramento will be host to the annual convention of the American Camellia Society in 1966! This fact has been known for some time, but we bring it to your attention again because the dates, March 3, 4, and 5 of 1966 are just 16 months hence.

Sacramento, the Camellia Capital, has much to offer visitors and delegates to the convention. Our Camellias will be at the height of their bloom; Sacramento weather is set in its spring pattern; the annual Camellia Festival will be a contin-

uous celebration at that time; and the 42nd annual Camellia Society of Sacramento Show opens on the closing day of the American Camellia Society Convention.

Preliminary plans for the entertainment of visitors have been made under the leadership of Past Presidents Harold Rambath and John K. Bennett. President Clifton W. Royston announces that a program of events is far along in the planning stage, The Sacramento Executive

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SOME GREAT VARIABLES IN CAMELLIA CULTURE

David L. Feathers, Lafayette, California

If there is one thing above all that is true of camellia culture it is that there are many exceptions to the rule—that circumstances alter cases. Our late revered friend and patron of the camellia, Ralph Peer, used to say that one of the most fascinating things about camellia culture was that one always seemed to be learning something new—the plant never ceased to amaze him. We agree that the fact we are constantly learning more about this superb plant is one reason its culture holds our interest so well.

It might serve some useful purpose to attempt to list some of the anomalies to what is generally regarded as "the written law" in the interest of a better understanding of just what we are up against. Before going into the specifics, however, perhaps it would be well to set out, as a reminder, some of the more important variables in conditions that must enter into the difficulty of any universal prescription of camellia culture rules. First we must begin with:

ENVIRONMENT, which would embrace both local climatic conditions and immediate environment, or micro-climate. This is a factor of undeniable first importance, controlling, as it does, almost all the others because it determines how much and how often water must be applied, how much fertilizer may safely be given and can thus be absorbed, and, most important of all, what degree of light intensity and temperature will be present whereby to convert these into plant energy through the process of photosynthesis.

SUN AND LIGHT, which are vital to plant growth, will vary in quality as well as quantity, due to differences in the clarity of the air. These differences may be pronounced, particularly in environments near large bodies of water and/or major metropolitan areas. Both the amount of humidity and pollutants present in the air will filter, to some degree, the sun's rays and affect light values. This may be determined visually in some localities. For example, here at our place the sky is always much bluer to the north and east

(inland) than to the south and west (toward the bay and the ocean and the large cities).

WATER, the quality of which is one of the most variable of all the factors we have to deal with. Dependent as so many of us are upon man-made facilities for a constant water supply, we may have an acid, neutral or an alkaline type of water; it may be hard or soft and it may have lime, sodium fluoride or other chemicals introduced into it for one reason or another. In this country, at least, it is rarely the case that one can depend entirely upon rainfall or natural sources of untreated water. The differences in the reaction of the plant can be material.

SOIL, or the growth medium, is probably the most variable and important of all. Here we have chemical, mineral and texture differences and thus the immensely important factors of nutrition, water retention and aeration are subject to variability. Not only does this involve natural or native soil differences, ranging from the less desirable sandy and clay-type soils to the more desirable loams and humus-bearing kinds, (which more nearly approach the natural soil in which the camellia grows wild) but this also includes man-made mixtures which generally, but will not always, constitute an improvement. It will rarely be the case that any two growers use exactly the same growth medium.

THE HUMAN ELEMENT, meaning the difference in cultural practices employed, which not only appertains to all four of the variables listed above but, in addition, takes into account the degree of skill, energy, faithful execution and common sense exhibited by the individual grower. On any one of these points there will often be great variability and, overall, will constitute as important a factor as any, if not indeed the most important factor.

To the foregoing may be added the lesser variables, such as exposure or protection, the proximity to other plants and their roots, and the contour of the terrain if grown in the ground, the extent of

pests and the remedial measures taken, and even what pets and one's neighbors do or do not do. All of these things have some bearing upon the camellia's performance and add up to a situation in which there are perhaps no two growers with exactly the same over-all conditions. That the camellia, not native to the countries in which it is grown most extensively to begin with, is able to cope with all these diversities is indeed a tribute to its versatility.

In consequence of the foregoing differences in individual circumstances each individual grower will find it necessary to modify, to lesser or greater extent, the general rules prescribed for outstanding success in the growing of camellias. Some of these specific cultural rules so subject to modification and an attempt to suggest suitable adjustments to cover follow.

SOIL: The depth at which to plant should be modified according to the kind of soil, the terrain and the water table. High planting (shallow) is absolutely vital where the terrain is flat and the soil heavy or the water table high, other wise the camellia will die from lack of aeration. Conversely, where the ground is light and humus-bearing and sloping, one may safely plant a camellia considerably deeper. Even in fairly heavy soil, on a steep slope one can grow perfectly healthy and normal camellias at what has usually been considered impossible depths *provided they are not planted that deep initially*. We have a dozen or so large (20-year-old) japonicas, either on a steep slope or at the top of such a slope, which were originally planted at the proper depth but which, due to erosion, mulching, etc., are now up to a foot deeper than planted (no trunk visible, branches coming right out of the ground) that are as healthy as any on the place. This is just further evidence of the ability of the camellia to adapt itself to conditions it does not like, *given time to do so*. The presence of a thick (up to 6-inch) mulch has not been found deleterious, provided the material used is coarse and does not exclude all air. Wood chips, nut shells and even crushed rock have been used with complete success at heights on the plant stem engulfing the beginnings of

the first few low branches. The writer is starting to feel that crushed stone (gravel size) is actually the ideal mulch for topping off potted camellias, provided the container is large enough to accommodate it. Such material is available in many colors and can be quite ornamental. It has the great advantage of not decomposing, keeping out the weeds and the grub-seeking birds (who can be messy) and insulating the soil against the danger of petal blight, besides staying put when the tub is watered.

WATER: One of the most frequently asked questions is "how often should one water a camellia?" Of course, a common answer cannot be made in terms of days or weeks for everybody. Here we have almost innumerable variables, among which may be numbered the following: Is it planted in the ground or in a container? What species camellia is it? What season of the year are you referring to? What is your highest temperature? Humidity? What exposure is it placed in? What protection? What kind of soil do you have? When do you get your rainfall and in what amount? **HOW** do you water? What size is the plant, the container if any? Is the plant on level or sloping ground? How deep is your water table? Do you mulch and if so, with what? And so on. Thus the answer can only be generalized in this manner—*water often enough to insure that the soil is at all times moist*—water heaviest when the camellia starts to bloom and through the first flush of spring growth. It is our view that proper watering is perhaps the most important single factor in good camellia culture, and seems to cause the novice the greatest difficulty.

FERTILIZATION: Just as proper watering is perhaps the most vital factor, unquestionably the matter of fertilization constitutes one of the greatest sources of danger to the life and health of the camellia. The use of fertilizer on a fairly constant basis is absolutely necessary to successful container culture—it is far less important when the camellia is grown in the ground in good soil. Improperly used, this can be perhaps the greatest source of trouble of all. This is such an important

and complex subject that we devoted an entire issue to a discussion of Fertilization a few years ago (see Vol. 9, No. 4, July, 1956).

As in the case of water, the amount of fertilizer a plant can assimilate or be subjected to without damage will depend largely upon environment, for, as stated under that heading, this involves the means whereby plant food is converted into energy—photosynthesis. As photosynthesis is brought about by light and heat, it is obvious that it will be less efficient in heavy shade, for example, than where there is adequate sun. Thus the amount of fertilizer used should be correspondingly less. This would seem to be true, but perhaps to a lesser extent, where the climate is cooler.

PRUNING AND DISBUDDING:

Aside from the object of shaping the plant by pruning, to keep it neat and sufficiently open, these are steps taken for the same general purpose—to restrict the amount and improve the quality of the bloom. In some cases, heavy pruning may be done for health reasons, however, through bringing the top again into balance with an impaired root system. Small plants, if pruned at all, should be pruned lightly with the object of directing the plant growth into the proper shape and thus establishing a good frame. The larger camellias may be pruned back to keep the flowers within reach, to open up air space and light when they become crowded and

to keep them within proper bounds. It is difficult to kill a well-established camellia even by cutting it off within a foot of the ground. *Reticulatas*, however, are not generally regarded as being as amenable to pruning as japonicas. It is, of course, usually necessary to prune a camellia in order to achieve an unusual effect, such as in espaliering or cascading usage, in order to make the plant conform to the shape and purpose desired. Heavy pruning is usually required in bonzai culture. Thus there is a variety of reasons for pruning a camellia.

To a lesser extent, this is also true of disbudding. If one desires a mass bloom effect, which is usually the case with *sasanquas* and some hybrids, disbudding is seldom called for. On the other hand, the development of good blooms for exhibition usually requires careful and heavy disbudding. There is also what might be called a very happy medium—good flowers and lots of them—obtained by moderate and prudent disbudding—leaving on plenty of them but spaced well apart or opposing and removing all internal buds where blooms will be hidden from view.

One could go on and on with this subject of "circumstances alter cases." What it all really boils down to, however, is the application of good common sense in conjunction with a working background of the art of floriculture. The latter can be acquired through membership in a camellia society or garden club.

ACS CONVENTION IN 1966 (Continued from Page 17)

Board has met with officers of the American Camellia Society: Mr. Al Parker, Vice-President; Caryl Pitkin, State Director; and Woodford F. Harrison, Director-at-Large. These representatives expressed

their pleasure with the plans as outlined.

The invitations are being extended. In '66, come to the Golden State for a large Show and an important Convention.

—H. E. R.

NEWS AND VIEWS (Continued from Page 15)

we tend to take them for granted as "established" plants. The supply of light to each plant should be carefully studied and

plenty of pruning done, if necessary, for light is an absolute necessity for all the leaves on the plant, not just the top ones.

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