A Publication of the Southern California Camellia Society



C. RETICULATA 'AL GUNN' COURTESY NUCCIO'S NURSERIES

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THE COVER FLOWER

C. Reticulata - 'AL GUNN'

In 1973 the late Al Gunn gave twelve C. reticulata seedlings to Willard F. Goertz to propagate. One of these, labeled AG No. 2 bloomed in 1976. The flower is a large to very large, rich pink with bright yellow stamens. It blooms early to mid-season. The plant is a very fast growing, open tree-like bush. Nuccio's Nurseries has further propagated the cultivar and has released it this fall. (Color separations courtesy of Nuccio's Nurseries.)

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THOUGHTS from the editor

The noun hybrid is described as the offspring of two true-breeding parents of different gene composition; or, the cross result of the combination of homozygous parents. One of our most famous American hybridizers was Luther Burbank. Through the scientific development of numerous varieties of fruits, grains and flowers he helped elevate plant breeding to a modern science. On his world famous experimental farm in Santa Rosa, California, Burbank utilized revolutionary breeding methods to develop more than 800 new strains

and varieties of plants.

Today we are looking to our camellia hobbyist hybridizers to develop our new camellia cultivars. Once in a while a chance seedling — a "one in a million" will come along — but if we look realistically at the goals — it is going to be the careful efforts of our hybridizers which will get the results. New colors, new fragrance, new early and late bloomers, more sun tolerance; these are the goals which everyone is striving for. This issue of CAMELLIA REVIEW contains several articles describing the progress in camellia culture and hybridizing from hobbyists in New Zealand, Australia, The United Kingdom and the U.S.A.

Personally I cannot pose as a hybridizer. I do have about 200 seedlings growing in my back yard but they are mostly chance seeds. I would not have the patience nor the temperament for the painstaking detail which it takes to carry on a good hybridizing program. In fact, my "hybridizers" are all on the roof of our kitchen — a hive of bees I captured in a swarm last May. I am looking forward to lots of chance seeds next year and, maybe, a few quarts of honey!

CAMELLIA NOMENCLATURE 1978 EDITION

Send Orders To

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1104 East Wilshire

Fullerton, CA 92631

THE QUEST FOR SOMETHING NEW

by John C. Lesnie

Looking back over the years of my association with camellias, I recall the shattering impact of a first visit to a local show. The variety of forms, the sheer size of some blooms and the wide range of colors was so instantly overwhelming, that from that moment on, I was irrevocably hooked.

Until then I had been a keen grower of roses, having accumulated a vast array of all the best known names. The glossy evergreen leaves, the handsome thornless growth habit and the blooming period, tipped the scales in favour of camellias. Rose enthusiasts would surely have wept, had they seen me uprooting the entire collection.

My early camellia efforts were not without their problems. Through inability to give protection from sun, wind and rain, the majority of blooms were very inferior. Being something of a perfectionist, I set about building protective houses. In all, I constructed five houses ranging in size from 400 to 1200 square feet. Two were completely covered overhead with fiberglass for increased heat and the others were purely shade houses with 50% Sarlon.

Compared with the sometimes harsh and extreme climatic conditions of the U.S., the Auckland area in New Zealand is a veritable camellia paradise. The latitude and nearness to the sea both combine to give a relatively high humidity, very mild winters and summer temperatures that rarely top 85°. Although the annual rainfall is about 50 inches much of it occurs when least needed and the long dry summer days call for special care for camellias, particularly young plants.

About seven years ago I began importing scions and plants from the U.S. with the express purpose of evaluation. I soon noticed all manner of growing and flowering habits, some of which appealed and some of which

appalled. Although I had at first been greatly impressed by sheer size, I gradually became very choosey.

The lanky and often ungainly growth of the reticulata foliage, plus the often broken and imperfect centre petals of the blooms, gave me little joy. From then on, my taste turned toward miniature, small and medium sized japonicas and hybrids, with particular emphasis on formal doubles. I noticed how some blooms had the unfortunate habit of petal browning and hanging on the bush, while others dropped or shattered relatively quickly. I also noted the difference when growing blooms for the show bench and for day to day use in the home.

Not being overly interested in the competitive aspect of camellia growing, I began rejecting plants whose blooms would not last at least five days when picked.

After several years of close observation learning cultural methods and propagation by grafting and rooted cuttings, I embarked on what I now regard as the ultimate joy of camellia culture, namely, hybridizing.

At first, through ignorance, I adopted a haphazard method of pollen dropping but after reading a few articles, decided to follow a clearly defined policy.

Perhaps the most significant article I read, was one in the Review, by New Zealander Les Jury in which he outlined his experiments leading to the production of what he called the "super breeder" plants. I wrote to him requesting scions and being the generous person he is, they arrived within a few days.

Some months later, I had the privilege of meeting the great man himself. I found him to be a very gentle, quietly spoken man, completely immersed in all aspects of camellia culture but most importantly, to be able to communicate his vast knowledge.

Equipped with houses capable of raising a winter temperature to the requisite 60° minimum I was now able to plan a hybridizing schedule with several positive objectives. First and foremost, the hunt for the elusive orange, yellow and blue colors would be pursued vigorously. However, the attainment of those colors should be accompanied by several other desirable refinements, not the least of which would be an extended blooming season. In addition, a free blooming habit should be accompanied by sufficient substance to impart a longer life both on the bush and when picked.

If all the above features, plus bright, long lasting anthers and neat compact foliage could be incorporated into one plant it would be a truly great camellia. Les Jury is convinced that the "super breeders" have the potential to produce some or all of the qualities listed.

In a world laboring under all manner of tension and dissension, I believe the one sure path to peace and tranquility is through the growing of plants. For me, the ultimate plant is the camellia and hybridizing is an activity that can occupy an entire lifetime.

I should regard the production of a formal double the size of ALBA PLENA, having a rich daffodil yellow color, a six month flowering period, blooms that last at least 2 weeks, fall in one piece and grow on an elegant plant, as being in the same category as landing a man on the moon. The moon landing has been accomplished. Who will produce the camellia?

REPORT FROM AUSTRALIA By Ray Garnett

ED NOTE: This article is a reprint from the June, 1979 issue of CAMELLIA NEWS; the publication of The Australian Camellia Research Society.

On a close look at the camellia varieties that have been produced and named in Australia, it seems that most originators are satisfied to allow the humble bee to do all of the hybridizing.

One cannot find fault with the bee's long list of beautiful results. But taking the average, the percentage is very low from the many thousands of chance seedlings that are sown each year. As the area of our suburban gardens are generally becoming smaller, quality and not quantity is to be preferred in our seedling production.

Without doubt the patient hybridist can usually show a much better percentage, and also a desired end effect.

There are undoubtedly many active hybridists in Australia; however not much is ever published of their efforts or results. Usually one is left to analyse overseas programmes on hybridizing, and research, to form some basis for one's own attempts.

With this problem in mind the Victorian Branch of the ACRS formed a Research Study Group some 3 years ago.

As in any research or hybridizing programme the results take years to achieve. The general direction of most members during these last few years has been to introduce a darker red into the many camellia species. Initially 'Fuyajo' and 'Kuro Tsubaki' were used as pollen parents, but recently the group have obtained flower bearing plants of Les Jury's 'Fuyajo' hybrids.

'Joyful Bells' (Saluenensis x 'Fuy-ajo')

'Bright Buoy' ('Fuyajo x Hassaku) 'Scarlet Buoy' ('Fuyajo' x 'Moshio') 'Black Nite' and 'Crimson Buoy' also 'Fuyajo' hybrids.

As they are F.1 hybrids they give us a jump ahead in our hybridizing programme. Seedlings are already growing of such crosses as 'Brilliant Butterfly' x 'San Demos,' 'China Lady' x 'Fuyajo,' 'Dream Girl' x

'Fuyajo,' 'Cornelian' x 'Fuyajo.'

Some of these it is hoped will carry the long chromosome of 'Fuyajo' that gives this variety its black red coloring. After using pollen for the first time last year from the Jury hybrids, seed has been collected and planted from such crosses as: 'Brilliant Butterfly' x 'Black Nite,' 'Dream Girl' x 'Black Nite,' 'Dream Girl' x 'Bright Buoy,' 'Edith Linton' x 'Black Nite,' Edith Linton' x ('Fuyajo' x 'Moshio' Hybrid), 'Nancy Bird' x 'Kuro Tsubaki.'

With the 'Edith Linton' and 'Nancy Bird' hybrids it is hoped that by further crossing with 'Gwenneth Morey' or 'Brushfields Yellow,' a seedling may be obtained that has orange coloured petaloids or a light orange petal toning. The best of the Fuyajo and Fuyajo hybrids seedlings of 'China Lady,' 'Dream Girl,' and reticulata, will be crossed back again into the *reticulata* hybrid line.

This way there is a chance of a good large dark red flower, with bright long lasting pollen anthers being produced.

I have often wondered why a large white reticulata hybrid has not yet appeared on the show bench.

'Howard Asper' ('Cornelian' x 'Coronation') has been around for a long while. 'Otto Hopfer' ('Crimson Robe' x 'Lotus') is another one with a white *japonica* parent.

Surely by crossing these two together, or back crossing to their white parent, a good white hybrid should result!

In an endeavour to obtain a white hybrid, one member has seedlings growing from a pale, pink fading to white retic seedling, crossed with 'Mrs. Bertha A. Harms.' They may need to be crossed back to a white variety or to 'Howard Asper' or 'Otto Hopfer' to finally achieve the planned result.

A few years ago I began crossing 'Exquisite' a large single sasanqua with some of the newer sasanqua varieties in: 'Bonanza,' 'Jean May,' 'Sparkling Burgundy,' 'Chansonette,' 'Yuletide,' and 'Showa Supreme.' My idea was to study the variation and predominance in the sasangua species. As yet I still have a few years to go before I may be able to analyse a pat-

It may be as one eminent camellia personality said "At least they'll make good understock!" Although I have a seedling growing of 'Dream Girl' x reticulata and reticulata x 'Dream Girl,' I am more interested in this year's batch of seedlings of: 'Dream Girl' x 'Bonanza,' 'Yuletide, 'Rose Anne,' 'Showa Supreme' and 'Bert Jones' x 'Dream Girl,' 'Yuletide' x 'Dream Girl.' Most overseas hybridists seem to be crossing the "Girls" back to reticulata and reticulata hybrids, and also japonica.

They seem to consider that the 'Narumi Gata' sasangua genes are enough. However, by way of a change, I have crossed back to sasanqua again, and will sort out the better flowered and bushier ones to cross into the retic-line once more. Although it would need another cross again into reticulata to bring us back to square one ('Dream Girl' x reticulata) equal \(\frac{1}{4} \) retic \(\frac{1}{4} \) SAS, the improvement in flowers and bush may be worth the effort. There are also a few seedlings germinating from 'Dream Girl' x 'Guilio Nuccio,' 'Elegant Beauty,' 'Ville De Nanties,' 'Onetia Holland,' 'Mouchang,' 'Purple Gown.'

As these are diverse crosses except for 'Purple Gown' it will be a wait and see game until they are growing stronger, or have been grafted. One facet of hybridizing that needs more effort and research is the use of various species wherever possible in combining with the present day hybrids.

Species such as, Fraterna, Salicifolia, Assimilus, Pitardii Pitardii, and the hybrids 'Cornish Snow,' and 'Bellbird,' would add new genetic material in future crosses even though it may take several generations of seedlings to obtain good gar-

den varieties of plants.

One member has already reported seedlings from reticulata x 'Bellbird,' as this is a small Cornish Snow hybrid it may produce a good low compact large flowered hybrid so necessary for the modern small gardens. On our attempts for a yellow or scented variety we are as yet only beginning. Our crossing of 'China-Lady' by 'Fuyajo' and its hybrids, may add some orange tinge to the small amount of yellow already there. We have however, only just begun to obtain in Victoria the Les Jury breeders: 'Grannie' (Sal x Granthamiana) and 'Grandee' (Granthamiana x 'Edith Linton') with these and Walter Homeyer's Granthamiana hybrids crossed with 'Edith 'Brushfield's Yellow,' 'Gwenneth Morey' and 'Jury's Yellow,' there may be a chance of deeper yellow petaloids and possible pale yellow petals, on a variety of different type flowers. Yet it seems that most hybridists do not believe we will obtain the perfect deep yellow "breeder" in any recombination of genes from the camellia varieties presently available.

In this coming grafting season, we hope to irradiate 50 scions of various varieties. If 'Brushfield's Yellow' and 'Gwenneth Morey' are among these the outcome could be interesting, as American experiments with radiation show definite changes in the plants genetic makeup. Whether these changes are permanent it will

remain to be seen.

On the fragrance scene we have not really started yet. Although we have had 'Fragrant Pink Improved' for a number of years, pollen is still scarce and to date no crosses have been reported. The "Cutter Hybrids" flowered for the first time last year, so possibly as they mature crosses to 'Kramers Supreme,' and 'Odoratissima' may yield seedlings with a combined scent of both parents.

I did raise (two years ago) 8 'Tiffany' x 'Lutchuensis' seedlings, but as they were so small they eventually perished. I have again planted seed from the same cross this year, but as the seed is so small I do not hold much hope for success.

Possibly if we could master the technique of "Aseptic Culture" as outlined by W.L. Ackerman in the 1978 American Camellia Yearbook, we would have a better chance of raising some of these small embryo seeds from interspecific hybrids.

Jim Finlay of New Zealand has produced a highly perfumed Tiffany' x 'Lutchuensis' seedling that he will probably name. If we could obtain this and cross it with our other scented clones we may be well on the way to creating a good

large perfumed flower.

Sometimes the results of a particular cross do not always meet our expectations. A cross of 'The Czar' x 'Cornelian' that flowered recently produced a single 2" pink flower. Not what one would expect from two such illustrious parents. However, although it is pollen sterile I have been able to cross it back to reticulata, so it may show better results in the F.2 generation.

With this long term plan of hybridization it is usually necessary to grow the seedlings quickly, and when possible, take one or two from each cross, and cleft graft the top two inches of the seedlings when they are about four inches high. This can be done when they are only three or four months old. The ones that are not big enough by then can be bark grafted or approach grafted in the summer. This way flowers are not unusual in two years.

Most members of the Research Study Group have only an average suburban garden area. So large scale hybridization projects are beyond our scope. In most cases camellia plants are already crowding every nook and cranny. It is hoped that by careful selection of seed setting parents and pollen parents, that a minimum of seedlings will need to be grown to achieve certain goals.

We are indebted to Katsuhiko Kondo of the Hiroshima University of Japan for sending us detailed literature on current chromosome counts of named camellias and species, and genetic and chromosome variation within certain varieties.

One can visualize that in the near future hybridists will produce large rabbit-eared flowers 10-12 inches in diameter.

It is hoped they do not forget the beauty, and need, of an attractive compact profuse flowering garden variety.

THE SACRAMENTO CAMELLIA FESTIVAL

by Bill Donnan

As any camellia hobbyist knows, the City of Sacramento goes "all out" in the spring of each year to celebrate the blooming of its camellias. The city has adopted the camellia as its official flower and designates itself as the CAMELLIA CAP-ITAL (I'll add) OF THE WORLD. I dare say that there is no other place which can compare with Sacramento when it comes to honoring the camellia flower. This last March, 1979 marked the fifty-fifth Annual Camellia Show and the 25th or "Silver Anniversary" of their Camellia Festival. In order to put on their Camellia Festival, the citizens have created a permanent Festival Committee and they have a permanent Festival Office in the Chamber of Commerce Building. Herewith is a list of the events staged in connection with the 25th Camellia Festival: December 1978 to March 1979 — CAMELLIA FESTIVAL POSTER COMPETI-TION — Open to all the Primary, Grade and High Schools in Sacramento County — prizes awarded for the best posters. January 17th — BUTTON SALE KICKOFF — Sale of camellia lapel buttons in banks -

shops and other organizations — cost \$1.00 — to raise funds for the Festival.

February 10 & 11 "SLEEPING BEAUTY" Theater Ballet — Proceeds to the Camellia Festival.

February 15th — ANNUAL PAST ESCORTS DINNER — Black Tie dinner to introduce the CAMELLIA PRINCESSES and Escorts. (Princesses are chosen from each local College or University.)

March 2 — MEN'S CAMELLIA GOLF TOURNAMENT

March 3 — PHOTO-PRINT EX-HIBITION — Color — nature print exhibit by Sierra Club.

MARCH 3 — CAMELLIA HORSE SHOW — Sponsored by the Future Farmers Booster Club.

March 3 — CAMELLIA BALL — Sponsored by the Hospital Auxiliary.

March 3 & 4 — AIRPORT CA-MELLIA PIN-ON DAYS — Camellia blooms are pinned on incoming plane passengers by the Girl Scouts.

March 3 & 4 — FIFTH-FIFTH Annual CAMELLIA SHOW sponsored by the Camellia Society.

March 3 & 4 — CAMELLIA DAYS BICYCLE RACES — Sponsored by Sacramento Golden Wheelmen.

March 3 & 4 — CAMELLIA THEATER ON ICE — Sponsored by the Icehouse Skating Club.

March 5 — SENIOR CITIZENS DAY — Campfire Girls offer Camellia Blooms to the elderly.

March 6 — PINK PERFECTION LUNCHEON — Sponsored by Mercy Hospital.

March 8 — CAMELLIA ART SHOW LUNCHEON — Sponsored by United Methodist Women.

March 9 — CAMELLIA HAT LUNCHEON — Sponsored by Soroptimist Club. Members wear hats with camellia blooms.

March 10 — CAMELLIA PA-RADE — Includes cars and Show Horses decorated with camellias.

March 10 & 11 — CAMELLIA CUP REGATTA — Sponsored by the Folsom Lake Yacht Club.

March 10 & 11 — CAMELLIA FOLK DANCE FESTIVAL — Sponsored by the Sacramento Folk Dance Clubs.

April 6 — WOMEN'S CAMEL-LIA GOLF TOURNAMENT.

And there you have it. If that is not going "all out" for camellias I

don't know what is any better. The people of Sacramento are to be congratulated on their efforts to salute the camellia flower. Some one has coined the phrase: "THE CAMELLIA — KING OF ALL SHRUBS AND QUEEN OF ALL FLOWER BLOOMS." I know that I am biased but I agree and I say that whoever said that *must* have been born in Sacramento.

CAMELLIA GIANTS OF THE PAST

Carl Tourje — Editor of "Camellia Culture" Harold E. Dryden

Ebon Carl Tourje is best known among camellia people as the Editor of the Southern California Camellia Society's publication "Camellia Culture." He was a Chicago lawyer, a rather successful one I understand. At least, in the 1930's when his health broke down, he was able to come to Southern California to follow the pattern of so many others who had preceded him to seek recovery of his health in the "land of sunshine." Many of his predecessors in this search made themselves a part of the business and professional community, and their names are found frequently in the history of Southern California. Carl, on the other hand, chose to live a life of enjoyment of things he liked, and growing camellias was one of the things that appealed to him. He was one of the founding members of the Southern California Camellia Society in 1940.

Carl had an uncanny ability to become involved in controversy and it is understandable that he was not an officer of the Southern California Society. He was a rather slow talking person, ponderous at times. He knew his subject, and I found when I was President of the Society that I would receive solid, if extended answers to my questions. To me, he was a bridge between the old timers and the new group that was coming in when I became President in 1953. Because of his controversial nature

and a seeming aloofness, he was not popular with most of his age group and never really became acquainted with the younger generation unless he had some particular occasion to work with them.

To me, there are two reasons why he deserves the honor of having been made an honorary life member of the Southern California Camellia Society. First and foremost is his having edited the book "Camellia Culture" that the Society published in 1958. I was not active in Society affairs then so I write as an outsider. I was in meetings when the idea of a book was conceived, and I recall that his views were well crystallized when others were searching for the outline of such a book. He knew camellia people in the other parts of the United States and what they could contribute. True, his ideas of the duties of an editor were grandiose, and his ability to build up an expense account (paid by the Society) would do credit to a modern day politician. But the book was his, and to him should go a big part of the credit for a book on camellia culture that was needed by camellia hobbyists. It did not pay for itself, but I believe that the deficit can well be credited to good will to the Southern California Camellia Society.

The second reason why I believe that Carl Tourje deserved his honorary membership is the contribution in thought and time that he gave to the camellia garden at the Huntington Botanical Garden. As has been written before, The Southern California Society participated actively in the development of the "camellia test garden" that ultimately became the present world famous camellia garden. Carl was Chairman of the Society's Garden Committee for several years, and should have some of the credit which is passed out for the acquisition of new camellia varieties that made its expansion possible. The Camellia Garden was opened to the public on January 15, 1955.

Carl Tourje was not always easy to get along with. He was slow and deliberate in thought and some people did not like to judge with him at camellia shows because of this. But underneath it all he was a constructive member of the Southern California Camellia Society and contributed much of benefit to the Society.

INTER-SOCIETY NEWS

The Modesto Camellia Society will hold its famous Kick-Off Dinner on Saturday Night, February 2, 1980. This has always been one of the highlights of the Winter Camellia Season in the Central Valley and it will feature the usual wine and camellia plant raffle. For further details write to Dr. Fred Rankin, President of the Modesto Camellia Society — 2122 Montecello, Modesto 95350, Phone (209) 529-8789. Everyone is invited.



The South Coast Camellia Society held a raffle to generate funds for the trophies at its annual Camellia Show. This year's Show will be held in the weekend of January 26 & 27, 1980 at the South Coast Botanical Gardens. There will be a Show Dinner on Saturday night, January 26th.

* * * * *

One of the finest displays of camellias and camellia culture was the booth of

the Southern California Camellia Council at the Fall Garden Extravaganza, held at the Los Angeles County Arboretum. The two-day event staged on October 27 & 28th was a show-case for some twenty different flower and cactus societies. The Camellia Booth, erected this year by the Temple City Camellia Society and "manned" by representatives from the various camellia societies in Southern California was a mecca for thousands of visitors to the Arboretum.



The Santa Clara County Camellia Society held its annual Kick-off Dinner on the night of September 22nd, 1979. The dinner was preceded by a cocktail party at the Charles O'Malley home in Woodside. The main speaker of the evening was Julius Nuccio, who confined his remarks on "how bad S.C. was going to beat Notre Dame." His predictions proved to be true! This annual event is attended by camellia hobbyists from all over the Bay area and Northern California



The San Diego Camellia Society puts out a 4-page circular entitled THE CAMELLIA BULLETIN. In addition to news of their monthly meetings it contains excellent tips on seed culture, grafting, watering, fertilizing, and pruning. Their BULLETIN comes out ten times a year and subscriptions can be purchased for \$3.00 per year. If you are interested, please write to Mr. E. C. Snooks, 6114 La Jolla Blvd., La Jolla, California 92037.

DON'T FORGET
YOUR 1979-80 DUES FOR
MEMBERSHIP IN
S.C.C.S.

NEW ZEALAND CAMELLIA SOCIETY PRINCIPAL NATIONAL SHOW RESULTS

Whakatane, 1979

Best Bloom in Show (Bethwaite Memorial Trophy) - Mr. and Mrs. H. B. Cave, Wanganui. 'Lasca Beauty.'

Best Japonica (McLisky Trophy) - Mr. and Mrs. T. A. Lennard, Te Puke. 'Clark Hubbs.'

Best Hybrid with no Reticulata Parentage (Society Trophy) - Mr. and Mrs. L. Berg, Whakatane. 'Dream Boat.'

Best Reticulata or Reticulata Hybrid (Roland Young Memorial Trophy) - Mr. and Mrs. H. B. Cave, Wanganui. 'Lasca Beauty.'

Best Seedling Bloom (Society Award) - Mr. L. E. Jury, New Plymouth.

Best Yunnan Reticulata (Durrant Trophy) - Mr. and Mrs. H. B. Cave, Wanganui. 'Moutancha.'

Best White Bloom (Rayner Memorial Trophy) - Mrs. P. Drury, Kutarere. 'Fimbriata.'

Best Bloom of American Origin (American Camellia Societies Trophy) - Mr. and Mrs. H. B. Cave, Wanganui. 'Lasca Beauty.'

Best Bloom of New Zealand Örigin (Edith Mazzei Trophy) - Mr. and Mrs. L. Berg, Whakatane. 'Dream Boat.'

Best Miniature or Small Bloom (Clere Memorial Trophy) - Mr. and Mrs. C. R. Bischoff, Waiuku. 'Wilamina.'

Best Japonica Seedling and Best Reticulata or Reticulata Hybrid Seedling (Clark Cups) - No awards.

Best Other Seedling (Society Award) - Mr. L. E. Jury, New Plymouth.

Honours Table Blooms:

'Coronation.' Mrs. J. A. Hansen, Waikanae.

'Dixie Knight.' Mr. and Mrs. R. E. Russell, Ohope. 'Ecclefield.' Mr. and Mrs. R. B. Nelson, Katikati.

'Elegans Supreme.' Dr. and Mrs. P. Fogarty. Three individual blooms achieved this honour.

'Elegans Supreme.' Mr. and Mrs. J. Jardine, Rotorua. 'Grand Finale.' Mr. and Mrs. T. A. Lennard, Te Puke. 'Grand Prix.' Mr. and Mrs. R. B. Nelson, Katakati.

'K. Sawada.' Miss B. Urquhart, Rotorua.

'Margaret Davis.' Mr. and Mrs. R. B. Nelson, Katikati.

'Midnight.' Mr. and Mrs. R. J. Macdonald, Waiuku.

'Pink Diddy.' Mrs. M. Mathers, Waihi.

'Tomorrow Park Hill.' Mr. and Mrs. R. J. Macdonald, Waiuku.

'Ville de Nantes.' Mr. and Mrs. D. J. Henderson, Tauranga.

'Howard Asper.' Mr. and Mrs. H. B. Cave, Wanganui.

'K. O. Hester.' Mr. and Mrs. D. McArthur, Lower Hutt. 'Mouchang.' Mr. and Mrs. H. B. Cave, Wanganui.

'Patricia Coull.' Mrs. R. Clere, Taupo.

'Purple Gown.' Mr. and Mrs. B. Jones, Wanganui. 'Samantha.' Mr. and Mrs. H. B. Cave, Wanganui.

'Anticipation.' Mr. and Mrs. O. G. Moore, Wanganui.

'Dream Boat.' Mr. and Mrs. H. B. Cave, Wanganui.

'Esme Spence.' Mrs. E. G. Spence, Tirau.

'Phyllis Austin.' Mr. and Mrs. R. B. Nelson, Katikati.

'Water Lily.' Mr. and Mrs. R. J. Macdonald, Waiuku.

'Wynne Rayner.' Mr. and Mrs. R. E. Russell, Ohope.

AUSTRALIAN CAMELLIA SHOW RESULTS - 1979

A.C.R.S. "First of the Season" - Gordon

	o	
Champion of Show	'Moshio'	C. E. & H. Cowell
Champion Single	'Spencer's Pink'	P. Levick
Champion Semi-double	'Moshio'	C. E. & H. Cowell
Champion Elegans Form	'Mrs. D. W. Davis Descanso'	Craig Carroll
Champion Informal	'Tomorrow'	Wallace Campbell
Champion Formal	'Optima Rosea'	P & H Trood
A.C.S. Trophy, best American Va	riety 'Tomorrow'	Wallace Campbell
Best Australian Variety	'Polar Bear'	M. Savell

Bowden Brae

Champion of Show	'Phillipa Ifould'	Craig Carroll
Champion Single	'Yukumi Garuma'	Craig Carroll
Champion Semi-Double	'Drama Girl'	John Cartwright
Champion Elegans Form	'Silver Chalice'	John Cartwright
Champion Informal	'Tomorrow Park Hill'	Craig Carroll
Champion Formal	'Phillipa Ifould'	Craig Carroll

St. Albans Epping

Champion of Show	'Elegans Splendour'	V. Lane
Champion Single	'Henry Turnbull'	P. Levick
Champion Semi-double	'Laurie Bray'	J. Taylor
Champion Elegans Form	'Elegans Splendour'	V. Lane
Champion Informal	'Dixie Knight'	W. Campbell
Champion Formal	'Blushing Beauty'	K. & L. Mealey
Champion Australian	* *	•

Wollongong - Torchbearers for Legacy

Valker

'Brushfield's Yellow

C. Carroll

HUNTER'S HILL

Raised - Hortico Award

Champion of Show	'Tomorrow Park Hill'	P. Levick
Champion Single	'Spencer's Pink'	C. Carroll
Champion Semi-double	'Angel Wings'	Mr. & Mrs. S. Andrews
Champion Informal	'Tomorrow Park Hill'	P. Levick
Champion Formal	'Prince Frederick William'	J. Cartwright

Hornsby - Asquith

Champion of Show	'Fimbriata'	C. Carroll
Champion Single	'Kamo-hon-ami'	N. Hamilton
Champion Semi-double	'White Nun'	C. Carroll
Champion Elegans Form	'Elegans Supreme'	S. H. Andrews
Champion Informal	'Tomorrow Park Hill'	P. Levick
Champion Formal	'Fimbriata	C. Carroll

Roseville Chase

Champion of Show	'Frances Butler'	S. H. Andrews
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Albury

Best of Show	'Betty Sheffield Supreme'	D. Handorf
Best Japonica	'Moshio'	J. Harold
Best Retic	'Lasca Beauty'	T. Savige
Best Non-Retic	'Galaxie'	Dr. & Mrs. R. Hayter
Best Novice Bloom	'Alba Plena'	Miss Montgomery
Best White Bloom	'Snow Chan'	J. Harold
Best Pink Bloom	'Elegans Supreme'	D. Handorf
Best Variegated	'Emperor of Russia Var.'	Mr. & Mrs. Fraser

UP-DATE ON GROWING CAMELLIAS IN THE SAN JACINTO-HEMET VALLEY

By Gardener Eikenbery

The weather was not conducive for man or beast this past year. We had three straight days where the low in my lath house went to 17° F. I thought I was going to lose all of my plants because even the containers were frozen. This freeze occurred in December and needless to say what buds were on the plants turned brown and dropped off. Not only that, but 12 to 15 plants died. In January the low was not as extreme — it varied between 27-30°.

This past summer we did not have as much heat at one time as the summer before. The high temperature was 110° for about nine straight days in July; then we had another stretch of twelve days or so in the early part of September at 109°. In-between the normal temperature varied between 97°-103°. At this writing the low has been 37° and we have had a trace of rain twice.

I had less problem with alkaline burn caused by the water. I contin ued to leach heavily quarterly. In addition, I used a liquid iron with trace elements every six weeks. I still do not understand why some camellias set buds and others do not. This summer, all of my Sasanquas (three-five years old) set buds except Rainbow-Yultide has one. My sasangua collection includes Chansonnette, Bonanza Star Above Star, Miss Ed, Hannan Jiman. Last year they did not set buds. The Japonicas and Reticulatas this year have done much better than last year, as far as setting buds are concerned. However, my large Nuccio Gem has no buds but my six year old of the same variety has one — will it open? The last time either plant has set and opened buds was three years ago. Some other plants that have not set buds — Reg Ragland, Fimbriata, Pink Perfection, Berenice Boddy, and Blood of China.

In the area of propagating, my effort has not been earth shattering. Considering that I have lost all of my cuttings the past two years, this time I have 13 out of thirty-six that, so far, have survived. I used a mixture of perlite and sand in two 14-inch clay pots with plastic domes.

I am convinced that anyone living in this area faced with poor soil and poorer water should probably grow camellias in containers. If one takes that premise, then a regular fertilizer program should be followed. I started in April with Liquid Fish and Cottonseed meal; May, 2-10-10 Liquid; June, Liquid Iron with trace elements; July, Liquid Fish and Cottonseed meal; September, Liquid 2-10-10 plus Liquid Iron; October, 0-10-10.

I think it would be a great idea if someone could develop plants that would be resistant to sodium salts and our other enemy, alkaline.

GAVELS FROM CAMELLIA WOOD By Dr. Herbert Shirley

ED. NOTE: Dr. Herbert Shirley, long-time member of the Southern California Camellia Society, has been making gavels out of camellia wood to present to each of our out-going Society Presidents for years. I have asked him to tell us about his gavel making activities which are world famous.

I started making gavels when our girls belonged to the Girl Scouts and Brownie Groups. I made them for their Group Leaders. The next ones I made were for the Honorary Mayors of Hollywood: Laurence Welk, Betty White, Johnny Carson and others. The retiring Presidents of the Hollywood Kiwanis Clubs and the different Camellia Societies have received gavels. I have never made a gavel from any other wood than ca-

mellia wood. It is very hard.

When Bill Wylam was at the Huntington Gardens they cut down an old camellia tree. Bill sent the wood to me. I wanted to see how large a gavel I could make. That one was six to eight inches long and about 4 to 5 inches in diameter. There were a couple of cracks in the wood but, being a dentist I "inlayed" the cracks which really made it look better. I thought that a gavel that big should go to our President of the United States. I. wrote to President Johnson saying that I wasn't a Democrat nor was I looking for a job, but I told him where the wood came from and that I thought he should have it. I never expected to hear from him, but I received the nicest letter from his Secretary — on White House stationery. Also, I received his personal card, thanking me for the gavel. At the end of the letter the Secretary wrote that the President wanted to thank me for my views on Viet Nam.

A friend, Mrs. Hearst, knew that I had made the gavel for President Johnson and asked me why I didn't make gavels for Vice President Humphrey and Speaker of the House McCormack; then all three top men in the Government would have camellia gavels. I told her that when I had time I would do so. When the next two gavels were finished I wrote to

our Congressman, Mr. Reinecke, and asked him to give the gavels to Humphrey and McCormack. There must have been some publicity about it because Mr. Reinecke sent me a large picture of him presenting the gavel to McCormack. I had two letters from the Speaker. In one he said that he couldn't imagine anyone making a gavel for him. I have heard that he used it when he presided at Congress. I had another letter from him saying that if I was ever in Washington D.C., that he would like to have me stop in and see him and he would thank me, in person, for his gavel. I also received a nice letter from Vice President Humphrey, thanking me for his gavel.

When Nixon and Agnew came into office I made gavels for them. The last letter of thanks came from Jerry Ford. I had made a large gavel for the 1972 Republican National Convention. Someone brought me a newspaper article into my office with a picture of Governor Reagan of California presenting a gavel to Gerald Ford. Under the picture was a caption which said that these two men would be fighting it out for the 1976 nomination for President. It was my gavel in the picture! The person who brought the paper in to me didn't know that it was my gavel in the pic-

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Several months after I had sent the two gavels to Congressman Reinecke to give to Humphrey and McCormack, I met him at a Republican meeting. He asked me to make a gavel for Governor Reagan, which I did. One of the local papers had a picture of me presenting the gavel to Maureen Reagan, his daughter, and the paper had quite a write-up about my gavel-making hobby. Now, I am making a gavel for President Jimmy Carter. It is taking me a long time because it is to be in the shape of a peanut!

A few weeks ago (September 1979) Mrs. Shirley and I went on a trip to China. We visited the Yunan Province, where the oldest camellia trees in the world are located. Our guide let me cut several scions. I wrapped them in wet cotton and put them in a plastic bag. I hope that at least a couple will take, althought it is not the best time of the year to graft them.

FOLLOW UP REPORT

By Les Jury New Zealand

ED NOTE: This is a follow-up report of hybrid work described in the article: 'AN INTERNATIONAL ENDEAVOR" by Les Jury in the CAMELLIA REVIEW Vol. 39-No. 3 — January-February, 1978.

When I received a note from Bill Donnan, requesting a follow up report on my hybridizing, I thought, there is nothing to report! Then came a letter from a friend of mine saying he had seen plants of 'Jury's Yellow' with seed pods, at the Nursery of my U.S. Agent, and he was surprised to see a camellia which blooms so double, set seed. My original plant of 'Jury's Yellow' has not set seed until this last season, when there was one pod. I just thought of it as one of those unusual things which happen, occasionally, in a double flowered variety.

Now it is clear, 'Jury's Yellow' can play a more prominent part in the work on increased yellow content. By crossing it with 'Golden Gate,' 'Brushfield's Yellow,' and others, one should get a higher percentage of doubles, when both parents are double. Also, by raising a large number of seedlings, an "additive" yellow is more likely to eventuate.

Readers who have read my previous articles in the S.C.C.S. CA-MELLIA REVIEW or the I.C.S. IOURNAL will know that there is 25 percent C. saluenensis in 'Jury's Yellow.' Therefore some pinks are likely in the above crosses. Another point of interest: at the present time (July 1979) I have germinated about 70 seedlings of 'Scarlet Buoy' (Fuyaji x 'Moshio') x 'Brushfield's Yellow.' 'Scarlet Buoy' is an orange scented single. Looking at its colour, I get the impression that it has a recessive gene colour content of either yellow or orange, or maybe both. It was very interesting to see the colour of the shoots of these seedlings. As they appeared about 25 percent had reddish stems. The other stems were all yellowish. It is said that these colours are indicative of the colour of the blooms to come. There is some hope for an increase in the yellow content, but I am hoping for an orange, or at least one showing a more definite orange content. This could then be again crossed with 'Brushfield's Yellow' and finally get the desired orange colour.

In regard to my "Breeder Plants," I sent a few scions to Mr. Alton Parker, three years ago, with the intention that he distribute scions to American hybridists. Word has come to me that he has taken ill and I do not know what the situation has been with regard to the availability of these plant materials. The reason I sent these scions to only one nurseryman was because — at the time my parent plants were very small and I only had a small number of scions to give out. My thought was that a few scions, grafted in America, would quickly produce scions for distribution to interested hybridizers. And, of course, I wished to avoid sending out individual lots and seeing to the permits for each lot. Another point was that I wanted to obtain seed from my own parent plants as soon as possible and therefore was anxious that they should not be stripped of growth.

If American hybridizers are not able to obtain scions of my "Breeder Plants" namely — 'Scarlet Buoy;' Bright Buoy;' Crimson Buoy; 'Dark Nite;' and 'Villes Delight' I would be glad to send one set of scions — provided the recipient send a permit for no later than the first week in August.

(This would have to be scions sent out in 1980.)

The newer commercial varieties such as: 'Mona Jury;' 'Jubulation;' 'Jury's Yellow;' 'Rendezvous' and others will come on the market in 1981 or thereabouts. They should be purchased from a commercial grower. My "Breeder" scions are free except for the cost of airmailing and the Department Fee for inspection. I get great pleasure out of raising new varieties, and get a small commission on sales, which I give to charities, thus getting two good results from the hobby which I enjoy very much.

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AN EVALUATION OF GERMINATION METHODS FOR CAMELLIA SEEDS

David Gotelli

INTRODUCTION

Although the seeds of some plants germinate immediately after maturation, most seeds undergo a period of dormancy before they will sprout. The reasons for the seed dormancy are related to the ecological conditions in which a given plant must grow. For example, it would be of little survival value if seeds of many spring wildflowers germinated immediately. It would be too dry for the plants to grow, the plants would not mature, flower and set seeds and therefore probably not survive. It is far more advantageous for these seeds to have a dormancy period so that they germinate the following spring when growth conditions are again favorable.

There are many factors alone and in combination that are known to break dormancy. Some seeds need an extended period of cold. Peach seeds need at least six weeks of between 32-45° F. before they can germinate. This process is called stratification. In many other seeds germination does not occur until the hard outer seed coat is broken, a process called scarification. Scarification in nature is brought about by a number of forces; fire, chemicals, digestion by animals. In the laboratory or garden, scarification may be done by mechanically nicking the seed coat, treating the seeds with chemicals or by boiling the seeds a short time. No matter the method, after the seed coat is softened or broken, the seed can absorb water and the process of germination can begin.

Camellia seeds have, if any, only a short period of dormancy. This condition is related to the native habitat of the Camellia where the environment is benign enough to allow immediate germination and growth. Nonetheless, a problem often facing Camellia growers is slow, poor ger-

mination and fungal infection. Can anything we know about seed dormancy be used to improve germination rates? The purpose of this set of experiments was to show seed germination rates of *C. japonica* and *C. sasanqua* using different treatments and conditions.

METHODS AND MATERIALS

All experiments were done in a cool-warm greenhouse (range, 50° F minimum — 80° F maximum) with natural light. Each treatment consisted of two sets of 100 seeds each, one set with Captan (a common fungicide) and one without. The seeds were purchased from the Southern California Camellia Society. The types of treatments were:

- 1. C. japonica in moist peat, in flats, covered with black plastic sheets (no light).
- 2. C. sasanqua same treatment as
- 3. C. japonica seeds treated with boiling water, allowed to soak 24 hours in cooling water, planted in moist peat, covered with black plastic.
- 4. C. sasanqua same treatment as 3.
- 5. C. Japonica same as 1 except in flats with heating cables at 76° F.
- 6. C. sasanqua same as 5.
- 7. C. sasanqua seeds scarified by cutting seed coat, planted in flats in moist peat, covered with plastic.
- 8. C. sasanqua same as 7 except bottom heat used.
- 9. C. sasanqua moist vermiculite, black plastic.
- 10. C. sasanqua same as 9 except no plastic.

RESULTS

There was no difference between sets (treated or not treated with Captan) except in #10. Therefore, only results of one set are listed. In #10, it was a constant struggle to keep the vermiculite moist. In attempting to do so, there were large changes in the wetness of the flat and conditions were excellent for fungus growth. Since the black plastic held in the moisture in the other treatments, these moisture fluctuations did not occur, conditions for fungal growth did not occur, and the fungicide was not needed.

Germination rates, determined by shoot appearance through medium. One hundred seeds each.

CONCLUSIONS

Obviously the warmth of the greenhouse was sufficient so that the bottom heat was not necessary. The seeds given the boiling water treatment were all killed. Even though this is an acceptable seed treatment, obviously for Camellia it is not. Scarification also had little effect, indicating that these seeds were able to obtain water easily through their

seed coats. The largest differences were noted between the two species when identical treatments were used. C. japonica gave a better germination percentage each time. Since the C. japonica seeds were larger and more robust, this germination difference could be due to the fact that more of the C. sasanqua seeds had incompletely formed embryos.

In sum, the best germination procedure seems to be one that can be used by every Camellia grower and is indeed practiced by many experienced and astute individuals. Place the newly gathered seeds in moist sterile peat in a plastic bag, place out of the light in a warm place. Germination starts between the second and third week and most of the seeds which will germinate will have done so by the seventh to eighth week. If the bag is not constantly opened and exposed, little fungus growth will occur, and therefore, the potentially hazardous fungicide will not have to be used.

		Days from Planting							Total	
Treatment	11	14	18	21	25	29	34	41	50	%
1. Peat, plastic	0	0	4	7	21	30	34	41	46	46
2. Sasanqua, plastic	0	1	1	2	6	15	25	33	33	33
3. Boiling	0	0	0	0	0	0	0	0	0	0
4. Sasanqua, boiling	0	0	0	0	0	0	0	0	0	0
5. Peat, plastic, heat 76° F.	1	2	4	9	20	32	38	41	44	44
6. Sasanqua, peat plastic, heat	0	0	0	2	8	14	19	25	29	29
7. Scarified	0	0	0	0	1	13	24	30	31	31
8. Sasanqua, scarified, and heat	0	0	1	3	6	29	30	29	41	41
9. Vermiculite, plastic	0	0	0	0	1	14	16	21	21	21
10. Sasanqua, vermiculite, no plastic	0	0	1	1	1	11	13	19	19	19

KNOWLEDGE OF NORTHWEST CAMELLIAS SOUGHT

By Andrew F. Sears

Portland Community College, with the cooperation of the Oregon Camellia Society is considering the possibility of starting at P.C.C., Rock Creek Campus, a Camellia Demonstration Garden.

Among other objectives, would be the planting of a collection of as many as possible of the many Camellia varieties originated in the Northwest. It is known that Camellias have been grown in the North-west since 1892, and during this time many varieties have been originated here.

The officially recognized "Camellia Nomenclature Book" lists 30 of these. Some of these have been really outstanding and are well-known by Camellia fans all over the world. Others too closely resembled some of the 3000 known varieties to become

popular or have been surpassed by some of the 150 or more new varieties that are introduced each year.

Many others were not distributed widely enough to become well-known or for various reasons were never propagated and distributed at all and therefore, were never listed.

The varieties listed in the Nomenclature Book are listed below.

Anyone knowing of others are urged to notify the Oregon Camellia Society c/o Andrew F. Sears, 10145 N. Smith St., Portland, Oregon 97203, or attend one of the Camellia Society meetings which are held in the Community Room, Bldg. #3 on the Rock Creek Campus of the Portland Community College Meetings the third Friday of each month, September through May.

VARIETY	INTRODUCED BY	FROM
Alba Queen	Barney Golleto	Milwaukie, Oregon
Auburn White	Darney Goneto	Washington
Carolyne S.	; 2	Oregon
Dainty (Oregon)	;	9
Daniels Fluffy	:	Oregon
Doreen	r H. H. Harms	Oregon
		Portland, Oregon
Ecstacy (Oregon)	Doty & Doerner	Portland, Oregon
Gardenia	Doty & Doerner	Portland, Oregon
Good Morning		Portland, Oregon
Gypsy	Doty & Doerner	Portland, Oregon
Kathleen	Dorothy Bradley	Milwaukie, Oregon
Lady De Sanquinae	?	Portland, Oregon
Laura Schafer	· · · ?	Washington
Lellah Callison	Joel Callison	Portland, Oregon
Lilly Pons	Barney Golleto	Milwaukie
Martha Proppe	Martha Proppe	Portland, Oregon
Monta Rosa	? **	Portland, Oregon
Monte Carlo	Barney Golleto	Milwaukie, Oregon
Mrs. Bertha Harms	H. H. Harms	Portland, Oregon
Mrs. Dorothy Van Der Bom	Pete Van Der Bom	Portland Oregon
Pauline Wetzler	Mrs. E. Wetzler	Portland, Oregon
Portland	Doty & Doerner	Portland, Oregon
President Lincoln	Barney Golleto	Milwaukie, Oregon
Salmon Queen	Doty & Doerner	Portland, Oregon
Selina Lousie	Charles Grischow	Portland, Oregon
Serenade	Mary Johnson	Beaverton, Oregon
Sweet Bon Air	Barney Golleto	Milwaukie, Oregon
Tiny Bud	Charles Grischow	Portland, Oregon
Wicke	H. H. Harms	Portland, Oregon
Willmeta	Mrs. A. Jensen	Washington

RESEARCH AND BREEDING IN AMERICA

By Trevor Lennard

ED NOTE: Reprinted from the March 1979 issue of The New Zealand Camellia Society Bulletin.

Back home after an extended tour of America, Alison and I stood at our front gate and gasped. The Spring growth had been incredible, everything so green and flourishing. We had just left California, in the grip of drought — no rain for four months. The Eastern States were likewise parched. Now, as I write this in February, large areas that we travelled through have been under snow and ice for at least six weeks. We have now a far better appreciation of how very fortunate we are in New Zealand with our most favorable climatic conditions and how much more easily we can grow camellias than our American friends.

The highlight and main purpose of our trip was to attend the International Camellia Society meeting which was combined with a meeting and show of the American Camellia Society held in Perry, Georgia. This report will be on the technical aspects of camellia culture that we observed, both at the meeting and in moving around America.

A lot of work has been done over the years to collect together and breed cold hardiness into camellias in order to extend their range into the more northerly states. Dr. W. Ackerman at the National Arboretum in Washington, D.C., is currently in charge of this work, and some very worthwhile results were being achieved until the winter of 1977-78 when the extreme cold killed off most of the experimental plants. This winter will probably see the loss of the survivors, a few japonicas. However, some hybrids of C. oleifera and C. hiemalis are growing well and point the way to more use of these species for breeding cold hardiness. Already several plants showing distinct ornamental possibilities have been produced. These are sasangua crosses and could be the start of a whole new breed of cold hardy camellias.

The main system of propagation is, of course, grafting. Whilst cleft grafting is still the most used form, it was interesting to note that growers were recognizing its limitations and were thinking about and using other forms, notably whip, veneer and acute cleft for small stock. For the big ones, summer bark grafting in its var-

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ious forms was becoming popular. Nurse seed grafting was being used and had its enthusiasts.

Some interesting ways of seedling grafting were seen. This is being done to hasten flowering by at least two years. Some enthusiasts claim to be flowering their seedlings the second year. At home here, we are flowering in three years from seed quite easily. Approximately twoyear-old stock is used, then as soon as the second flush of growth of the seedling is hard enough either cleft graft the tip or plant the seedling as closely as possible to the stock plant and do a form of approach grafting. This can be by simple approach graft or by a cleft graft without cutting off the tip of the seedling, the top of the seedling being slanted right across the cleft cut, i.e. four cambium contact points. The contact points of the seedling should be scraped, not cut, down to the cambium. With luck, after the graft has taken, in about 30 days time, it can be cut off from the seedling and the seedling replanted.

Little use was being made of cutting grafting. I have felt for some time that, whilst that is a very useful means of grafting, special conditions are needed — that is, high humidity, heat and the correct propagation me-

Yellow is a continuing quest. Several growers are trying to breed for this elusive colour. Some are collecting together all the camellias with a trace of yellow and breeding them together in the hope of a breakthrough. If yellow is controlled by a recessive gene as some claim, then surely the best way to bring it out is by continual inbreeding, e.g. 'Gwenneth Morey' and 'Brushfield's Yellow' either together or back to 'Edith Linton' and continuing for several generations. In California Meyer Piet considers he has broken the barrier by an unusual out-cross. The proof of this will be in the next two years when the plants flower. Other growers are also trying way out species crosses. Some special seed has been received from China and the survivor is being carefully nurtured. All this could add up to yellow round the corner.

The search for scent is another continuing story. At least two scientists, plus a whole lot of enthusiastic amateurs, are trying out all sorts of crosses and combinations. Dr. C. Parks is carrying on the work started by the late Dr. Cutler. Several small to medium flowers with pleasing scent have been developed. Most of this work seems to be based on C. lutchuensis and C. fraterna. In California, some are using fragrant Japanese types, e.g. 'Nioi Fubaki,' and other Higos. Again, some interesting flower types even without scent could

be developed.

America is certainly the home of variegation. Some of the blooms are most attractive, some, particularly those treated with gibberellic acid, are almost garish. There appear to be four main strains of virus. Strain A gives a spotted effect to the flower and should not be used. Strains B and C, giving petal striping or blotching but not leaf blotching, are the ones to aim for. Strain D causes in some varieties almost complete leaf blotch and should not be used. The main method to induce variegation is to graft the scion, then on the opposite side of the cleft, graft a scion of 'Professor Charles S. Sargent var, 'Ville de Nantes,' or 'Adolphe Audusson Special.' If this latter graft grows, leave it for six months and then cut it off. Variegation should appear in the new graft. Some enthusiasts are aiming at a red flower completely variegated white. It seems a bit futile to me when there are so many good whites about.

Camellia breeding was for me the main interest, and whilst I did not get to meet all the growers I know so well by name, at least I did get a general idea of what was being achieved.

With japonicas, apart from a colour break or scent, it does not seem possible to get any more variaition than is given by existing cultivars. From Nuccio's 10,000 seedlings, blooming each year to the small hybridist with his half dozen or so plants, this each year adds up to a vast number of new plants. With reticulatas and hybrids it is much the same story. There are too many semi-doubles, but there is still a place for good formal doubles

and peony types.

The colour range is widening, with the bi-colours now starting to appear quite nicely. It was interesting to note the use of C. grandthamiana for unusual form and colour and the triploid forms of C. japonica crossed to C. reticulata for size and vigour. 'Miss Tulare,' 'Jean Pursel,' etc., are only forerunners of this crossing. 'Mouchang' is proving an outstanding parent for size and vigour of its seedlings and very useful for crossing to the ja*ponica* triploids. Some of the species crosses are giving interesting garden plants and a bonus to the hunt for scent. There is more interest in the C. saluenensis crosses in the colder areas. Existing hybrids are being used, notably 'Elsie Jury' and 'Gay Time.' It is a pity that the new Jury registrations are not more readily available. Some very interesting seedlings with 'Elsie Jury' as pollen parent were seen. This line of breeding could be carried out to advantage in New Zealand using existing material.

In California, I was privileged to see the work being done by Meyer Piet and a small band of enthusiasts. The careful scientific approach and the meticulous attention to detail are already paying off, and some very good flowers have already been produced. When one sees the number of hybridised plants still to flower and the extent of the hybridising still being done, the future for camellias looks very exciting indeed.

My main interest was in the work being done with the sasanqua-reticulata crosses. They now have three generations and are on the way to the fourth. This generation will be inter-

bred hoping for that early flowering reticulata type flower. The use of saluenensis blood, 'Elsie Jury' and 'Gay Time' at this time is proving an interesting variation. The only flower I saw gave me very itchy fingers.

Another highlight was a number of irradiated plants. Scions of known plants were bombarded with rays in a special facility and then grafted]. Their leaf structure had been completely altered. Granthamiana leaves were identical to japonica. Japonica and reticulata leaves were huge with prominent veining. There are no flowers yet and nobody knows quite what to expect. It seemed likely to me that the chromosome count had been altered and the flowers could be any shape or colour. 'Gwenneth Morey.' Brushfield's Yellow,' 'Elegans Champagne,' and C. granthamiana were some of those irradiated.

Gibberellic acid has a place in the hybridist's hands. By gibbing, pollen can be collected up to six weeks earlier. Pollen seems more viable. Treated flowers are proving more fertile. It is definitely worthwhile treating any difficult-to-breed flowers with the acid.

Then, farewell to America and non-stop to Auckland. The huge Pan Am jet with a full load of fuel aboard creaked and groaned across the Los Angeles airport and seemed to take ages to become airborne. There is no truth in the story that this was due to the large number of scions, plants and seeds on board. For the curious, the 109 scions grafted 240 plants and it looks like over 95% take — a permanent reminder of our many wonderful American friends. Back home the bees had done an amazing job of hybridising — seed even on 'Ross Clark,' 'Elegans Supreme,' 'Jean Clere' and 'Midnight' as well as many of the reticulatas.

How to Get a Member... ASK HIM!

REPRINT FROM NOVEMBER 1979 A.C.S. JOURNAL

ED. NOTE: Roy Stringfellow, President of The American Camellia Society, writes a column entitled "President's Message." These excerpts from his "message" are so timely and so "to-the-point" that I must include them in our Camellia Review.

As the show season starts in November, and after gazing into my crystal ball in August, I can't quite discern what will happen to our shows this coming season. It doesn't take a look into the ball to be aware that inflation is really here or that the energy crunch is for real.

However, these are "Chicken Little" days in America and the American Camellia Society. Everyone has picked up the cry "the sky is falling," and if we say it is, so must it be.

As Americans, we have already talked ourselves into a recession, and have done such a good job of it that a depression no longer sounds out of the question.

As American Camellia Society members we are crying, "what will happen to our Society? And with the gasoline shortage, what will happen to our shows?"

I know I am walking uphill against the stream of public opinion, but pardon me, if you will, for this gasp of positivism.

Bad as things are, I have an idea that they've never been so good. Furthermore, the worst that things have been in this country is better than most of the world has it, and they were still lining up to get here the last time I checked.

We in this Society must all work towards getting new members. Don't worry about our shows. We will have them, and they will be beautiful!

The biggest challenge in this nation in the 1980s may not be energy—it may simply be bringing the American people together and this certainly applies to the American Ca-

mellia Society membership.

At any rate, the next time you personally pick up the chant "the sky is falling," sit down and count your blessings, say thank you God.

MY TEN () FAVORITE CAMELLIAS

Jim McClung

Camellia Review Editor Bill Donnan recently asked me to name my ten favorite camellias and to give the reasons for my choices. Well, that might be just a tad difficult. All of the 'Elegans' family are favorites, but they now number well into the teens. The same is true of 'Aspasia Macarthur' and her offspring — unto the third generation of mutants. Any higo will start my antennae twitching. So pinning down my list of ten favorites besides the above I came up with a list of 14 plus five that will have to be added to the list as soon as they prove themselves.

All of my ten () favorites must be able to take our weather conditions. Our inland valley is hot and dry during the summer and can get pretty doggone cool during the winter. The soil ranges from the finest gumbo clay to very coarse desert sand. All of it has enough alkali to form a hardpan if allowed to dry out. Only very deep spading or the use of chemical penetrants will make it friable. Keeping these conditions in mind my favorite camellias, not necessarily in order of choice, are given, along with those particular things that make the plant a favorite.

'Nuccio's Gem:' Not only is this the finest white formal since 'Alba Plena' appeared on the scene it is also extremely adaptable, taking both neglect and considerable sun in stride.

'Marie Bracey:' An easy plant with a uniquely colored flower. It is a favorite of mine for hybridizing.

'Silver Waves:' Nuccio's "Italian Higo" is an exceptionally beautiful white. Its ruffled petals and plum blossom stamens would make it a favorite even if it were a difficult plant, which it is not.

'Charlean:' This second generation 'Donation' cross has gained substance and form in both plant and flower by being crossed back to its maternal parent. An all around beautiful camellia.

'Francie L.:' Not the easiest retic hybrid in my garden but its beautiful flowers make it more than worthwhile. The plant is less gaunt than

most retic hybrids.

'Nuccio's Ruby:' A retic hybrid that is in a class by itself. The flower is stunning and is excellent for use in

hybridizing.

'Mouchang:' Although the plant is unattractive 'Mouchang's' flowers make it a showpiece during its

blooming season.

'Miss Tulare:' One of the finest retic hybrids both for flowers and fullness of plant. This camellia is, to me, a demonstration of things to come in the retic world.

'Rob Roy:' An outstanding plant with exceptional flowers. It is both a landscape plant and a show flower.

'Ichiraku:' This rusticana is unbeatable. Its upright growth and dark green foliage make it a valuable plant even if it bore no flowers. Blooming season presents a mass of miniature white, single bells that seem to bloom all season.

'Midnight:' For beauty of plant form and the distinct quality of its high red flowers 'Midnight' stands

alone in its class.

'Helen Bower:' I bought this one as a curiosity and fell in love with its first flower. The brilliant dark red of its great flowers makes it a traffic

stopper.

'Conquistador:' Since the beautiful 'Guilio Nuccio' will not perform well in my area I have found that 'Conquistador' is an exceptionally good replacement. It should fit the

bill in any inland garden.
'Taffeta Tutu:' This origination of Dr. Fawns is seldom seen in the area

and needs time to get established before giving its best flowers. Once it has its roots its tricolor fragrant flowers cause all visitors to stop and take a second look. Does particularly well in the dry parts of the camellia

Coming along rapidly are several new camellias that will have to be added to everyone's list of all-time favorites. These have not yet been on the market long enough to completely evaluate them but are worth mention here as future favorites.

Kramer's recently introduced 'Utsukushi Asaye' outclasses its sister, 'Coral Delight,' in every way. The color is much better. It is an excellent seed and pollen parent. This one should quickly find its way to the head tables of all the shows.

Nuccio's Nursery recently introduced one of the original Yunnan retics, 'Mayehyinhung.' This camellia, long of name and longer of beauty should become one of the favorites of all camelliaphiles. The color is different and, since larger is no longer more beautiful, its medium to large flower has those qualities of form that catch the eye. It is denser than other Yunnan retics and makes a good landscape plant. Very sunproof.

Another Nuccio original is 'Debut.' This shows promise of becoming another favorite retic hybrid. It has a new and distinctive color (described as China Rose but unlike any other China Rose in the camellia spectrum). An upright grower 'Debut' is an excellent landscape plant.

A Southern import that is just now finding its way around the western states is 'Look Again.' This anemone form japonica almost grows in the dark with the delicately shaded pinks that give exceptional depth to the flower. A long blooming season and good growth habit should make it a winner.

Finally, another southern belle. Japonica 'Helen Boehm' is from Dr. Homeyer's stable and might prove to

be his most popular flower. The flower is a large blush pink multiform bloom that is carried on a sturdy upright plant. Mrs. Boehm chose this one to duplicate in porcelain.

Ok, Bill Donnan, there's my list of ten () favorites. Can you pin your down to ten?

LETTER TO THE EDITOR

Nov. 5, 1979

Dear Bill:

The CAMELLIA REVIEW arrived to cheer up a very dull November English morning, but we seem to have got back to those dreadful "Breeder Plants" again! My previous comments provoked such a response, which surprised me at amateurs taking such a narrow view of what is, in fact, a highly scientific and exact study. I give in! There are only seven camellias to breed from henceforth!

Your reader, Mr. Lesnie, is welcome to 'Bright Bouy.' I looked at the stock plant at Mr. Jury's Agent this spring and I am quite sure that this great breeder is having a leg pull at us all. Don't forget that many of us have followed Mr. Jury's work on

lilies and camellias and the real Jury hybrids in both cases are outstand-

ing.

The whole trouble started when Mr. Jury tried to extend the color range of his Williamsii's into the red end of the spectrum. He did not have the dark forms of C. saluenensis available to achieve his objective. Last spring I went on a tour of gardens in Cornwall in the West end of England with the International Dendrology Society. In fact, we went to see magnolias, but the weather was not to make that possible. Imagine my delight to find a whole wide range of coloured forms of C. saluenensis in full flower — very pale pink right through to an even darker form than the red form at Jreweithen. All these are original George Forest seedlings collected in China in 1931 and sent back to these Cornish gardens.

With so much interesting material to study and the real possibility of new material from China in the near future, let us in the meantime all enjoy Mr. Jury's little joke. Mr. Lesnie, be brave and dip your toe into the water! You may not end up a second (or should I say third!) Jury, but, at least your breeding reading will never be a bore.

John Gallagher Verwood, Dorset, England

A Plant for A Contained Atmosphere

by John Provine Ed Note: Reprinted from The December, 1975 issue of Lasca Leaves.

Early in the nineteenth century, Dr. Nathaniel Ward, an English botanist, discovered plants growing in a few sealed bottles stored in his basement. This discovery led to his experimenting in shipping plants across the sea in glass cases which eventually became known as Wardian cases, our first terrariums. Most people now think of a terrarium as a landscape in a glass container while single plants in a glass container are referred to as growing in a contained atmosphere.

The subject of this series of articles deals with selected plants especially adapted for use in a contained atmosphere.

One of the nicest and easiest to grow is *Begonia prismatocarpa* — prismatocarpa meaning prism-fruited. *Begonia prismatocarpa* is an epiphyte which was first found growing on rocks and trees on the small island of Fernando Po off the coast of West Africa at an elevation of 3,000 feet. It was discovered by Gustov Mann and was first published in Curtis' Botani-

cal Magazine of 1862 Vol. 18. Begonia *prismatocarpa* became very popular in California as a plant for a contained atmosphere in the early 1970's because it is a compact plant requiring a small sized container, almost everblooming, and requires little care. The compact plant grows to a height of about two inches and spreads slowly with new rhizomes filling the bowl nicely. The stems or rhizomes are herbaceous, rounded and hairy. The hairy leaves are green from onehalf inch to two inches long with long petioles. The great abundance of yellowish-orange flowers, most of the year, is what makes this such a desirable plant to have.

Steps in growing Begonia prismatocarpa in a contained atmosphere:

- Select a clear glass or plastic bowl
 10-inch or larger.
- Clean the bowl thoroughly with detergent and rinse with bottle water.
- Cover the bottom of the container with chips of charcoal to allow for drainage.
- 4. Add moist growing mix. The Arboretum prefers a soilless mix of one half peat moss and one half perlite. This is a light-growing mix and will allow for necessary drying. Remember this plant is an epiphyte so about one inch of growing mix is needed.
- 5. Plant begonia in the growing mix.
- Cover your container with a lid or Stretch 'n Seal.
- 7. Selecting a place in the home or office is one of the most important

steps. Without the proper light, the plants will not bloom. Begonia prismatocarpa needs lots of light but not direct sunlight. If the plant is not blooming and is stretching, it may not be getting enought light.

8. Another very important step is watering. As the container lacks drainage, distilled water should always be used. A baster should be used by pointing the open end against the glass so that the water will run down the inside of the container thereby preventing water on the foliage and splashing the soil on the sides of the container.

Let the water set, so the growing mix can soak up the water, then tilt the container slightly and take the baster and pull off the excess water. Cover the container.

The Arboretum's soil mixture will turn a lighter color when the growing mix is dry. Also, when the leaves turn silverish in color, the mix has become too dry. On hot days as the temperature of the house or office gets warmer, the temperature inside the bowl will likewise get warmer. To correct this, pull back the lid to allow the temperature to adjust. This is the same as opening a greenhouse vent.

Begonia prismatocarpa can be easily started by obtaining a leaf from a friend, as they root very easily. Plants are available at the Arboretum's Gift Shop, although the supply is limited. Nurseries that specialize in begonias carry them or you are able to get one at the yearly Baldwin Bonanza.

NOTICE

The Southern California Camellia Society has appointed a new overseas Membership Representative

Milton Schmidt 1523 Highland Oaks Drive, Arcadia, Ca. 91006

He will handle all correspondence with foreign members and take care of the Australian and New Zealand Society memberships.

Southern California Society's MEETING PROGRAMS

		JANU	JARY	- 19	80	MARCH - 1980							
Sun.	Mon.	Tue.	Wed.	Thr.	Fri.	Sat.	Sun.	Mon.	Tue.	Wed.	Thr.	Fri.	Sat.
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20	21	22	23	24	25	26	16	17	18	19	20	21	22
27	28	29	30	31			23	24	25	26	27	28	29
Tue. January 8th - 7:30 P.M. Sergio Bracci - "So You want to enter A Camellia Show"							31 March r <i>Piet</i> - '				Camell	ia."	

FEBRUARY - 1980								APRIL - 1980					
Sun.	Mon.	Tue.	Wed.	Thr.	Fri.	Sat.	Sun.	Mon.	Tue.	Wed.	Thr.	Fri.	Sat.
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24	25	26	27	28	29		. 27	28	29	30			
Tue	Februar	ny 12th	- 7:30	PМ			Tue	April 8	h 7.3	орм			

Tue. February 12th - 7:30 P.M.

Carl Quanstrom - Japanese Camellias and Gar
Tue. April 8th - 7:30 P.M.

Grady Perigan - "The 1979-80 Camellia Trail"



CALIFORNIA CAMELLIA SHOW SCHEDULE

	0	
DATE	EVENT	LOCATION
Nov. 3&4, 1979	California Camellia-Rama	Smuggler's Inn, Fresno
Dec. 8&9, 1979	Camellia Council "Gib" Show	Los Angeles County Arboretum,
		Arcadia
Jan. 12&13, 1980	So. Cal. Camellia Society I	Huntington Gardens, San Marino
Jan. 26&27, 1980	South Coast Camellia Society	South Coast Bot. Gardens,
_	•	Palos Verdes
Feb. 9&10, 1980	San Diego Camellia Society	Balboa Park, San Diego
Feb. 9&10, 1980	Peninsula Camellia Society	Vet. Mem. Bldg. Redwood City
Feb. 16&17, 1980	Temple City Camellia Society	Los Angeles County Arboretum,
	,	Arcadia
Feb. 16&17, 1980	Santa Clara Camellia Society	Santa Clara Community
	•	Rec. Center, Santa Clara
Feb. 23&24, 1980	Pomona Valley Camellia Society	Pomona 1st Fed. S.&L.,
		Pomona
Feb. 23&24, 1980	Delta Camellia Society C	ampolindo High School, Moraga
Mar. 1&2, 1980	So. Cal. Camellia Council	Descanso Gardens, LaCanada
Mar. 1&2, 1980	Sacramento Camellia Society	Convention Center, Sacramento
Mar. 8&9, 1980	Kern County Camellia Society	Aram Adams Mem. Gardens,
		Bakersfield
Mar. 8&9, 1980	Northern California Camellia Soc.	. Willows Shopping Mall,
		Concord
Mar. 9, 1980	Central California Camellia Soc.	Fashion Fair Mall 1st & Shaw,
		Fresno
Mar. 15&16, 1980	Modesto Camellia Society	Gallo Administration Bldg.,
	,	Modesto
Mar. 22&23, 1980	Somona County Camellia Society	Santa Rosa Junior College,
,	, ,	Santa Rosa

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