# INTERNATIONAL CAMELLIA JOURNAL

# 国際ツバキ会誌

KOKUSALITSUBAKI KAISHI LE JOURNAL INTERNATIONAL DU CAMELLIA RIVISTA INTERNAZIONALE DELLA CAMELIA INTERNATIONALE ZEITSCHRIFT FUR KAMELIEN REVISTA INTERNACIONAL DA CAMELIA INTERNATIONAL CAMELLIA TUDSCHRIFT



### The International Camellia Society

was inaugurated in 1962 with the following motives:

- 1. To foster the love of Camellias throughout the world, and to maintain and increase their popularity.
- 2. To undertake historical, scientific and horticultural research in connection with Camellias.
- To co-operate with all national regional Camellia Societies and with other Horticultural Societies.
- 4. To disseminate information concerning Camellias by means of bulletins and other publications.
- 5. To encourage a friendly exchange between Camellia enthusiasts of all nationalities.



# **The International Camellia Journal**

No. 16 OCTOBER 1984

An Official Publication of The International Camellia Society DIRECTORS AND OFFICERS OF THE SOCIETY 1983-1985

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Cover: A reproduction of the cover of a charming brochure issued in English by Kunming Botanical Garden. A note within says, "Yunnan Camellia, the finest flower under Heaven; the best of the famous flowers of Yunnan and widely cultivated as early as the Ming Dynasty".

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### Message from the President

<u></u>	Message adressé par le Président	
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	Messaggio del Presidente	 

#### MRS. VIOLET LORT-PHILLIPS President, International Camellia Society

Firstly, I must thank the Board, our Executive Committee, and all those in every region who give generously of their time and support to the Society, and to members everywhere for their helpful advice. Without the active participation of all our members, we cannot grow; as gardeners, we know the importance of a good root system followed by steady growth.

There will be more detailed reports in the Journal of our activities and pleasurable events, in which many of us have been fortunate enough to participate.

I would like to emphasise the importance of the scientific work of our Patron and Past-President, Tom Savige, who has taken on, and is completing the work of Dr. Philbrick in editing and updating the Nomenclature lists of species and varieties of Camellia. He has been helped by many people: our American colleagues: Mr. Yoshiaki Andoh and Mr. Goro Imure of Japan; Dr. Antonio Sevesi of Italy; Mr. Robert Gimson of Spain; and Messrs. Charles Puddle and John Tooby of Great Britain. The Board of the Society is considering what financial support can be given towards the cost of publication of this work, and we should be glad of members' suggestions for sources who would be willing to assist us in this direction. This is an international enterprise of importance that has occupied many of our members for years, and it would be a great loss to the horticultural world if this project should fail through lack of funds.

### 'Gardens of Friendship' - China, March 1984

I do not think the forty members who travelled to China will ever forget their journey. They took between them 128 Camellia cultivars and countless gifts of seeds, books, and the presentation plates with a picture of Camellia 'Anemoniflora' (introduced from China in 1816-1831) from the R.H.S. 'Reeves Collection'. We flew to Kunming where the first 'Friendship Garden' was planted. The Director Emeritus, Professor Wu Cheng Yi was, unfortunately, in hospital but we shall not forget our hosts, the

Vice Director, Dr. Zhang Aoluo and his staff at the Kunming Botanical Institute, who arranged the interesting Conference, smoothed out any difficulties and made everyone welcome. The warmth and the hospitality we received there was echoed at the Botanical Institutes and gardens visited at Chengdhu, Wuhan, Nanjing, and Shanghai; and by the Abbott of the Buddhist Monastery on the Sacred Mount Emei. Unfortunately, the rain made it too difficult for all of us to climb up the many steps of the mountain but twenty intrepid members watched our U.K. Director, Lady Anne Cowdray, plant the first of the Camellia japonica to be 'returned to the wild' in a garden that was made there to commemorate the occasion.

Our extensive itinerary did not permit us to see and do all that we should have wished but our brief visit has whetted our appetites to return, and travel at a more leisurely pace. We are all indebted to our leader. Harold Fraser of Australia, for the imaginative concept of the 'Gardens of Friendship'. He prepared the way and established a 'rapport' with our hosts and the Directors of China International Travel. This was the fruit of years of planning, energy and hard work. Our thanks to Harold, his wife Dorothy, and their helpers for making this journey possible. Thanks too, to Mr. Milton Brown, former Director I.C.S. of Georgia, U.S.A. for arranging the visits to Nanking Botanical Institute and to Shanghai Botanical Gardens and Institute. We came away full of admiration for the people, the plants and the wonderful country. We were inspired by the work of the Institutes and imbued with the concept of evaluating trees and plants for their use as well as their beauty. Also present were the Head of Chancery at the British Embassy in Peking, Mr. A. C. Galsworthy and Mrs. Galsworthy, who added official lustre and were much admired for their fluency in speaking Mandarin.

On my return, I joined the I.C.S. members at Newquay, Cornwall in April. We visited the Truro Show and saw many splendid gardens. With new eyes, I noted the richness of colour, foliage, scent and form that grew in our temperate climate, and counted our blessings; but should we not explore some of the practical uses of Camellia which are practised in the East?

#### **Brighton Congress in 1985**

We hope to have the pleasure of seeing many of you at Brighton in May next year, from 9th to 14th. The date has worried us all as, due to the administrative difficulties, it was impossible to get a firm date when required. After the Congress, it is intended that our members will visit the famous Chelsea Flower Show. I must assure those who feel they will not see their favourite flowers at that time of year, that Camellias are still making a brave show as I write. I thought of taking some fine blooms of C. 'Elsie Jury' to Chelsea this year who knows what we shall do next year. We are fortunate in being able to plan exciting projects for the future. The horticultural world can be explored, new species discovered, our lives enriched. I look forward to greeting old friends and making new ones.

# Communication de Madame le Président

### MRS. VIOLET LORT-PHILLIPS

Tout d'abord je voudrais remercier les membres du Conseil et du Comité Exécutif et tous ceux dans chaque région qui se sont dévoués aux intérêts de notre Société soit par leur service soit par leur support, ainsi que les membres qui nous ont offert leur avis et leurs commentaires. Sans la collaboration active de tous nos membres nous ne pouvons pas croître; et comme nous sommes tous jardiniers nous sommes conscients de la valeur d'un bon enracinement et de la croissance qui suit.

Dans notre Journal vous trouverez des rapports plus détaillés sur nos activités aussi sur d'autres événements agréables dans lesquels plusieurs de nous ont eu l'opportunité de participer.

Je voudrais insister sur l'importance du travail scientifique que notre Président, Tom Savige, a antrepris et qui menera à fin les efforts du Docteur Philbrick pour éditer et mettre à jour nos Listes de Nomenclature d'espèces et de variétés de Camélia. Plusieurs ont prêté leur concours à M. Savige: nos collègues en Amérique: MM Yoshiaki Andoh et Soro Imure du Japon; le Docteur Antonio Sevesi d'Italie; M. Robert Gimson d'Espagne; MM Charles Puddle et John Tooby de la Grande Bretagne. Le Conseil s'occupe de la question quant au support financier que notre Société pourrait donner à la publication eventuelle de cette oeuvre et nous serions heureux de profiter des propositions que nos membres pourraient faire quant aux moyens possible pour obtenir l'argent nécessaire. Nous sommes une entreprise internationale d'une certaine importance qui, depuis longtemps, a bénéficier de l'intérêt et l'expertise de nos membres et ce serait une grande perte à l'horticulture si ce projet n'était pas pleinement réalisé.

#### "Jardins d'Amitié" — En Chine, mars 1984

Sûrement, les 40 membres qui firent le voyage en Chine retiendront pour toujours le souvenir de leur visite. Dans leurs baggages ils ont apporté 128 divers boutures de Camélia, une masse de graines pour cadeaux, des livres, et les plaques de présentation avec un tableau de Camélia Anemoniflora (importé de la Chine en 1816-1831) provenant de la Reeves Collection de la Royal Horticultural Society de Londres.

Nous sommes descendus de l'avion à Kunming pour établir le premier "Jardin d'Amitié". Très malheureusement, le Directeur-émérite Professeur Wu Cheng Yi était malade et nous sommes très reconnaissants à nos hôtes le Docteur Zhang Aoluo, Directeur-adjoint, et ses collègues à l'Institut Botanique de Kunming qui ont organisé une conférence très intéressante, ont surmonté tous les problèmes et ont chaleureusement accueilli tout le monde. Cette amitié et hospitalité se trouva aussi aux institutions botaniques et aux jardins que nous avons visité à Chengdhu, Wuhan, Nanjing et Shangahi, et également aux mains de l'Abbé du monastère Buddhic au Mont Sacré d'Emi. Ici, hélas, la pluie empêcha quelqu-uns de nous de faire face au grand nombre de marches pour arriver au jardin sur le montagne où, enfin, une vingtaine de notre groupe ont assisté à la plantation, dans un jardin spécialement preparé pour marquer l'occasion, par Madame le Directeur Britannique Lady Anne Cowdray, du premier des Camélias Japonica à être ainsi remis à leur "état sauvage".

Notre très long itinéraire ne nous a pas permis de voir, ni de faire, tout ce que nous aurions voulu, mais notre brève visite nous a donné le goût d'y retourner à loisir. C'est à notre conducteur. Harold Fraser d'Australie, à qui nous devons la conception, très à propos, des Jardins d'Amitié. Il en fut le pionnier et réussit à établir des relations amicales avec nos hôtes et avec les directeurs de China International Travel. Notre visite était le résultat de quelques années de préparation et de son devouement et indéfatigable travail. Nos vifs remerciments à lui et à son épouse Dorothy et leurs aides – c'est la combinaison de tous leurs efforts qui a fait ce voyage possible. Nos remerciments aussi à M. Milton Brown, ancien Directeur de la International Camellia Society of Georgia E. U. qui organisa les vistes à L'Institut Botanique de Nanking et à l'Institut Botanique et les Jardins à Shanghai. Nous quittions ce merveilleux pays avec une profonde admiration pour ses plantes et son peuple. Nos étions très impressionnés par le travail fait par ses Instituts et par leur conception d'évaluer l'horticulture par raison de son utilité aussi bien que la beauté de ses produits.

Monsieur A. G. Galsworthy, chef de la chancellerie de l'Ambassade Brittannique à Pékin, et Madame Galsworthy, ont assisté aux cérémonies ce qui a ajouté une autre distinction renforcée par leur facilité admirable avec la langue chinoise.

A mon retour en Angleterre j'ai fait avec nos membres de Newquay en Cornouailles, une belle promenade dont le but était de visiter l'exposition horticole à Truro et divers magnifique jardins privés. Après la visite en Chine j'ai pu apprecié de nouveau la richesse de couleur, le feuillage, le parfum et la forme qui se produisent dans notre climat doux et j'ai bien constaté les avantages dont nous jouissons. Enfin, devrions-nous peut-être explorer des usage du Camélia d'ordre pratique, ce qui se fait actuellement en Orient?

### Le Congrès à Brighton 1985

Nous esperons pouvoir accueillir beaucoup de nos membres au congrès à Brighton qui aura lieu le 9 au 14 mai 1985, malgré les difficultés que nous avons rencontré pour fixer ces dates, notre intention étant qu'après le congrès nos membres pourraient visiter le fameux Chelsea Flower Show à Londres. Puis-je assurer ceux qui doutent s'ils verront leurs fleurs favorites à cette saison de l'année que les camélias se presentent encore très bien à ce moment là. En fait j'avais l'intention d'exposer à Chelsea cette année de très beaux spécimens de C. Elsie Jury — qui sait, peut-être l'année prochaine...

Nous sommes vraiment très heureux de pouvoir préparer de nouveaux projets pleins d'intérêt pour l'avenir. Le monde d'horticole est a explorer et de nouvelles espèces a découvrir et ainsi enrichir la vie. Je me réjouis d'avance de revoir les vieux amis et d'en rencontrer des nouveaux.

As forecast in last year's Journal, the Society's principal event in 1984 was the visit of Society members to China. What has been called a mini-convention was held in Kunming where a 'Garden of Friendship' was planted and a time capsule interred. In order that Society members, who were not able to make the journey, may nevertheless enjoy something of the spirit of this unique expedition, there has been grouped together in this issue of the Journal the letters and speeches of introduction, the description of the members journeying and the papers read, both by Society members and by their Chinese hosts. The Society is particularly indebted to the latter for their kind welcome and to group leader Harold Fraser for his inspiration in conceiving the idea and for his enthusiasm in carrying it out.

The Society is also grateful to all the other contributors to the Journal. Without their willingness to take the time and trouble to put pen to paper, no journal would be possible. Although there is an emphasis this year on Camellias in mainland China, readers will be reminded of the universality of the Camellia by articles on Camellias in places as far apart as Japan, Korea, Northern Ireland, Hong Kong, Italy, New Zealand, Australia, North Wales, the U.S.A., Portugal, Germany and the U.K.

### **New Society Officers**

Nouveaux membres du bureau de la société Nuevos funcionarios de la Sociedad Nuovi dirigenti dell'Associazione



### **Regional Director for New Zealand**

Richard Howard Clere, a member of the International Camellia Society since 1962, is the Immediate Past President of the New Zealand Camellia Society and on his retirement from the Presidency was made an Honorary Life Member of this Society. He became interested in camellias some 26 years ago, through a chance meeting with Colonel Tom Durrant and has been an enthusiastic grower and exhibitor ever since. With his wife Jean, he farmed on the lower slopes of Mount Egmont, Taranaki, where he established a landscaped garden, featuring camellias in the main but also rhododendrons, azaleas, flowering cherries and magnolias. It was while here he found and propagated the Aspasia Macarthur Sport which he named for his wife Jean. Indifferent health put an end to farming activities and in 1970 he moved to Lake Taupo transporting over 100 tubbed camellias in a large cattle truck to form the nucleus of a new garden.

He has been Chairman of 2 different Branches of the New Zealand Camellia Society and on the Council of this society for over 20 years. He is both an Accredited Judge of the N.Z. Society and the American Camellia Society and has been Chief Judge several times at the New Zealand National Shows. In 1979 he succeeded the late Owen Moore as President of the New Zealand Camellia Society holding this office for 4 years and during this period attended International Camellia Society Congresses in Japan, Channel Islands and Sacramento as Mr Moore's deputy.



### New Director from Jersey, C.I.

After living in many parts of the United Kingdom and in the Bahamas, Mayda Reynolds settled in Jersey where she has been for the past 30 years. Her present home is on the southern coast of the island in an 8 acre garden which was planted 60 years ago. It contains a variety of shrubs and trees which are well protected from northerly winds by granite cliffs and woodland. A stream cuts across the lower lawn to the sea a few yards distant. The old camellias in the garden comprise 10 large japonicas, a reticulata and two sasanquas. Young camellias are now being collected for which there is plenty of space in this garden.

Mayda says that she joined the I.C.S. at a lecture given by our President and the late Barbara de Veulle in order to learn about her old camellias but that this original interest quickly developed into an absorbing study of camellias generally. Her first Congress was in Jersey followed by the Sacramento Congress which she says was a wonderful experience. She has also attended and enjoyed the recent U.K. meetings in Nottingham and Cornwall.

The Society welcomes her as the new Director for "other regions" and we are sure that her enthusiasm for the camellia and for the Society will enable her to make a useful contribution as a Director.



**Membership Representative for Australia** 

Nance Swanson is well known to a great many Society members both in Australia and in other regions. She has been growing Camellias for over 20 years and for the last 15 years has been a member of the Australia Camellia Research Society. She attended the I.C.S. Congresses in Spain and Jersey in 1981 and in Sacramento in 1983. In 1981 she took over the responsibilities of the Secretary of the I.C.S. from Harry Churchland and has now been appointed the I.C.S. Membership Representative for Australia. The Society is grateful to her for all the work she has done on its behalf in these two capacities. Apart from camellias she is very fully employed as the Secretary to the Manager in Sydney of Australia's largest financial Banking Institution.

### **Regional Director for Portugal**

José Gil de Veiga de Carvalho Ferreira, the Society's Director for Portugal, was born at Santo Tirso, Portugal. He has a degree in Agronomics and has been keenly interested in Camellias for about thirty years. His particular concern is in Portuguese varieties and he has been trying to get together a collection of all varieties existing in Portugal since Camellias were first cultivated, i.e. from the 16th century onwards.

In 1981 he and his family were visited by members of the I.C.S. when he was invited to be the Director of the I.C.S. for Portugal which he accepted with much pleasure.

Although an amateur, he has already a



collection of about 140 varieties and is still interested in increasing his collection with new varieties introduced into Portugal by Camellia lovers and professional gardeners. Recently he has been trying to grow new varieties from seed.

He is always willing to welcome to his farm all Camellia lovers and members of the I.C.S. in particular, in order to exchange knowledge so as to improve and refine Camellia cultivation.

### **Owen Gregory Moore**

N.Z. Director, International Camellia Society, 1974-1983

### **R. H. CLERE**

New Zealand members of the International Camellia Society were shocked and saddened to learn of the death of their Director and Membership Representative on the 1st November, 1983. At his funeral the officiating minister ended his eulogy with this quote from the Talmud: "There is no greater boon than to leave this world with the imperishable crown of a good name." Certainly no more fitting words could have been said about Owen Moore. His knowledge of camellias and his experiencé in administration, judging and growing has left a void that will be deeply felt in this country for a long time to come.

Leaving school soon after the outbreak of World War II, he joined the armed services and subsequently served in the Middle East and in the Italian campaigns. Upon demobilisation he joined the staff of the N.Z. Agricultural Department, taking a keen interest in the horticultural developments that were being undertaken at the time. While employed in the Wellington office he met and subsequently married his charming wife, Jocelyn. A need arose for a manager for the family sheep farm and Owen accepted the challenge and on the property on the outskirts of Wanganui, the young couple built their lovely home, raised their two children and established a large camellia garden that in later years was to delight many of his camellia and horticultural friends, both from home and abroad.

Owen became involved in local bodies and horticultural activities, became President of the Wanganui Horticultural Society. Secretary and then Chairman of the local branch of the N.Z. Camellia Society. In this role he was automatically on the Council of the Camellia Society and it was while holding this office he first gained experience in holding conventions. Wanganui staged the National Show and Convention for the N.Z. Camellia Society in 1974 and at the conclusion of the conference Owen was elected to the Presidency of the Society. In the same year, on the retirement of Colonel Tom Durrant, he also became the International Camellia Society Membership Representative and Director for New Zealand. While holding these dual roles, Owen, almost single-handed planned the 1979 International Congress. By combining and joining in the activities of the N.Z. Convention and National Show, the International Camellia Society visitors from the United Kingdom, Europe, United States, Japan, South Africa and Australia, together with our own New Zealand members, were treated to a Convention, still considered by many visitors to be one of the best ever held. Based in Rotorua, famed for its traditional Maori entertainment, the visitors were treated to magnificent camellia gardens of members residing in the Rotorua and Bay of Plenty areas. True New Zealand hospitality by the various Branches of the N.Z. Camellia Society. and a coach tour of the principal camellia growing regions, provided more entertainment for the visitors.

Owen retired from the Presidency following this Convention and, in recognition of his outstanding service to the New Zealand Camellia Society and his contribution to the Genus Camellia, he was made an Honorary Life Member of the Society. In 1979 and again in 1982, Owen was nominated for the vicepresidency of I.C.S. but farm commitments prevented him from attending Conventions and he reluctantly declined the honour but continued to look after the affairs of I.C.S. until his untimely death.

# Owen Moore Will Be Missed

### New Zealand's I.C.S. Director and former President of N.Z.C.S.

International camellia-lovers have been shocked and saddened by the death of Owen Moore in November last year.

Deservedly one of the most popular and knowledgeable camellia enthusiasts in New Zealand, Mr Moore served as President of the national camellia society, and represented New Zealand as regional director of the International Camellia Society since 1975.

I did not have the good fortune to meet Owen. His life as a farmer, near Wanganui, made it difficult for him to travel overseas during I.C.S. Congress time, while I was unable to leave my work during New Zealand camellia time.

But he was a most ardent supporter of and generous contributor to the International Camellia Society, and its objectives. And every person I know who ever met him in New Zealand spoke glowingly of him.

Add up all of that: Owen Moore, camelliawise and every other way, was surely the right man at the right time.

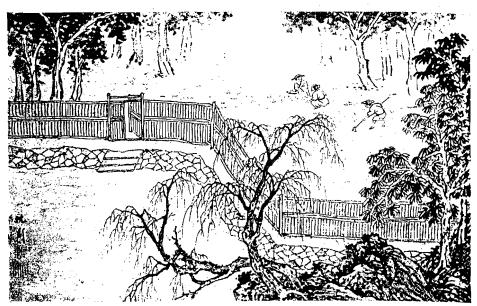
> Eric Craig Vice President, I.C.S.



The International Camellia Society expresses its grateful thanks for the helpful and friendly cooperation of the scientists of the Kunming Botanical Institute and to all who helped to make the Society's Congress and visit to China in 1984 such a memorable success. The following are some of the addresses and papers delivered during the visit of Society

The following are some of the addresses and papers delivered during the visit of Society members to China: Page

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"Gardening" by Shen Chou (1427-1509).

# A letter of introduction and greetings on behalf of the International Camellia Society

Lettre d'introduction et compliments au nom de la Société Internationale des Camélias

Carta de presentación y saludos de parte de la Sociedad Internacional de la Camelia

Lettera di introduzione e un cordiale saluto a nome dell'Associazione Internazionale della Camelia

### H. A. FRASER

Group Leader, Kunming, Yunnan 1984

We bring greetings of friendship from many countries specially from the plantsmen and lovers of Camellia species in particular.

The Delegation Leaders, Mr and Mrs H. A. Fraser of Australia, first visited these parts in 1978 and expressed a desire to bring their friends and offered help in various ways; the staff of the Institute graciously accepted and expressed their genuine interest in such exchanges, visits and writings.

Plants and materials, seed and books were sent over from 1979 onward.

Mrs Dorothy Fraser, accepted the kind offer of the Institute for Camellia plant material, saying seed only could enter Australia with safety because of quarantine procedures.

The Vice Director, Dr Zhang Aoluo, kindly sent seeds of *Camellia chrysantha, Camellia* forrestii, *Camellia yunnanensis*, firstly to Australia then Japan and United States of America.

These have flourished, being greatly treasured. We hope they will flower soon (1984) to be incorporated in plant improvement programmes. These we greatly prize and are thankful for the work of the plant collectors of Kunming Institute.

Over many centuries of time China has freely given to the outside world plants of varying species which have enriched the beauty of the landscape and has promoted the entire welfare of mankind, being plants for food and used in commerce. We think of their value in the medical field and in the everyday life of people in the beverage, tea. Australia would have found great difficulty in development of its hinterland without tea as a staple beverage still widely used.

At this pilgrimage we are reminded of a first impression we had in 1978 on being told we were the first western visitors for a very long time to come to these parts with knowledge of agriculture and plants. The reply to this generous statement is summed up in our conclusions, that we are convinced that as more and more informed people visit this area of China ("The Kingdom of Plants"), a new conception of plant life and of the origin of many cultivars in day to day use will emerge.

It was at that period of time I felt something should be done to build up friendship in the world of plants with Chinese people.

My wife and I set out just to do this and how it has grown in concept and persons (70 in a little over 5 years).

1980 saw us bring a group of some ten Australians and here we renewed friendship and upheld our promises of 1978 that we "would return". This was a very great occasion for all and much useful exchange of information took place as well as being able to see some of the delights of Yunnan specially the Camellias in bloom.

Returning again in 1982 with a group of 18 with wider interests including two from United States of America we were able to venture down the Burma Road to Dali and see many wonderful displays of Camellia reticulata as well as climbing part way up famous Mount Chang Shang to see a very ancient Camellia perhaps several hundred years old which had recently suffered severe pruning. On this our third visit to the province of Yunnan arriving from Rangoon by air, our many friends greeted us and further discussed Camellia species. The reticulatas in the Institute gardens were in full bloom and presented a riot of floral perfection. Prior to departure our friends and our Host, Dr. Cuian Kaiyun, spoke at a farewell luncheon and presented my wife and me with a freshly hand painted picture of a branch of a Yunnan reticulata of great beauty executed by Professor Wu Cheng Yi in grateful recognition of our friendship and three visits, being their first western visitors. The painting on rice paper titled "Our Friendship with Australia is Blossoming", is a most appropriate work of art. (See colour section).

Yes it was truly blossoming for some 18 came and many expressed a desire to re-visit on a future occasion.

By kind invitation in 1983 from the Vice

Director, Dr Zhang Aoluo, arrangements were made to plant a 'Garden of Friendship' and take part in a conference in Kunming during March, 1984.

After a great deal of preparation and consultation with the President of the International Camellia Society, Mrs V. Lort-Phillips, Mr Milton Brown of American Camellia Society, Mr John Tooby of Worcester, United Kingdom a Vice President, Mr Tom Savige of Australia, Past President and Patron and the help and advice from my wife and Mr A. E. Campbell of Australia this present visit has been made possible: being our 4th. During November 1983 it was necessary for me to visit Beijing to finalise all arrangements with China International Travel and Professors Tang Pei Sung and Te Tsun Yii of the Institute of Botany Academia Sinica, Beijing to complete conference arrangements and all details for this historic occasion.

We are now here assembled, some forty in number being representative of no less than twenty countries in the early spring (1984).

We have come to do something tangible, in a small way to repay and thank the people of China for the many horticultural and plant gifts to the western world over long periods of time. We do this using mainly the Camellia genus as a token. Our plantings in the various gardens in Yunnan and Sichuan province are cultivars derived from the early plants to leave China and improved, growing in the Homelands of Delegates.

They have brought a wide selection of *Camellia japonica* and *Camellia reticulata* of great beauty to grow side by side with ancient plants, some being centuries old.

The Congress in which the overseas visitors are afforded opportunity to renew friendship, build new ones, exchange knowledge and promote goodwill and understanding is of historic importance being a further milestone on the friendship trail.

A full list of all those taking part, signed in person giving the Camellia names is appended.

Plaques unveiled by visitors record details and copies of engravings placed in a capsule for historic records. A Time Capsule will be sealed and contains greetings from far and wide. Also full details of the build-up of association since 1978 with China. It will be placed in the Garden.

Many plant expeditions to these areas from the outside world from western countries was a feature in the 1800's through to the early 1920's.

This group is one of the modern world of dedicated plantsmen appreciating first the value of past association, wishing to continue good friendship into the future.

The Camellia Garden of Friendship is a small tribute to the Chinese Nation presented by people of International Goodwill.

### An Address of Welcome to I.C.S. Group

Message de bienvenu adressé du Groupe I.C.S. Un discurso de bienvenida al Grupo de la I.C.S. Discorso di benvenuto al gruppo dell'I.C.S.

### PROFESSOR TAN PEISUNG

Institute of Botany, Academia Sinica, Beijing

At Green Lake Hotel, Kunming, Yunnan, P.R. China, 29 February 1984

Welcome to Mr and Mrs H. A. Fraser of Wagga Wagga, Australia on the occasion of their 4th visit and to honoured members of the International Camellia Society

Please allow me as president of the Chinese Botanical Society to extend to you a very hearty welcome and sincere greetings for this momentous occasion being the planting and presentation of the **International Camellia Garden of Friendship**, and the convening of the symposium on Camellias. I am certain the garden and this great occasion will go down in history as a fine example of the expression of mutual understanding and friendship between the people of all nations. In this respect you have set a precedent for others to follow.

Due to richness of China's vegetation, our country has long gained the euphonic title of the "Central Flowery Kingdom". Since ancient time China has been the dreamland of plant hunters, explorers, and professional botanists from the outside world.

As a result, untold numbers of plants from this country, particularly from this very region where we are now gathered, have graced the gardens of all nations. The world has long acknowledged this in the words of the botanist E. H. Wilson who said "There is no landscape gardening in the world without the presence of Chinese flowers and plants."

This is high praise indeed. To the truly cosmopolitan and sympathetic mind, this does not seem enough. These words though gracious still leave something unfulfilled.

And today, you my dear friends, you have come with the precise purpose and aim for that fulfilment. As ambassadors of friendship and goodwill some forty members of your Esteemed Society have travelled thousands of miles from all parts of the World to perpetuate those praising words, by the planting and presentation of the "Camellia Garden of International Friendship" right on the soil from where Camellias sprang. By this action you have canonised the recognition of China's contribution to the plant treasures of the outside world. What is more important this garden of International Friendship will stand as a monument for our common love of beauty of peace and mutual understanding.

# Dedication of The Camellia Garden of International Friendship at the Kunming Botanical Institute – China

Inauguration du Jardin des Camélias de la Société Internationale des Amis des Camélias à l'Institut Botanique de Kunming - Chine

Ceremonia inaugural del Jardín de Camelias de la Amistad Internacional en el Instituto Botánico de Kunming, China

Inaugurazione del Giardino delle Camelie dell'Amicizia Internazionale presso l'Istituto Botanico di Kungming, in Cina

#### T. J. SAVIGE Patron

An ancient Persian philosopher said "if you have two loaves of bread, sell one and with the proceeds, buy a rose". I would, of course, buy a camellia but the meaning remains the same. As bread is nourishment for the physical body so is the beauty of the rose or camellia, nourishment for the spirit.

An old Chinese proverb has it that to be happy for a day, get drunk; to be happy for a week, kill a pig; to be happy for a month, get married; to be happy for a lifetime, build a garden.

Mankind has continually sought and created beauty in all its forms; painting, sculpture, music, dance, the love of nature, flowers and gardens.

The history of gardening extends back beyond China's first gardening Emperor, the illustrious Chin Ming, who reigned about 2,700 years B.C. and was well developed over 5000 years ago when the Hanging Gardens of Babylon were constructed. Gardening encompasses everything from such mighty landscaping efforts to the small window-box and pot garden of the modern apartment dweller.

In the old monasteries and abbeys of mediaeval England, the gardens were practical

things including fruit and vegetables for food, plants with pharmaceutical properties, aromatic plants as insect repellants and deodorants, and flowers for beauty. Cottage gardens were common in the days of Shakespeare.

With the growth of the British Empire in the 18th and 19th centuries and the accompanying flow of wealth from the far East, considerable interest in horticulture was developed by the wealthy landed gentry who began to build large parks and gardens around their manors. Many of these were of the Arcadian or Paradise type with idealised layout, using water in fountains, lakes and canals and set in wooded surrounds.

However, it was not the wealth alone that flowed out of the East, but also a range of beautiful and novel plant material. Through the arrival of paintings and ceramics depicting exotic plants and flowers and the reports of the travellers, such as the surgeons Cunningham and Kaempfer, who were stationed at the trading posts in China and Japan, it was realised that some extraordinarily beautiful and unusual plants grew in these countries.

Some of these plants were brought back to Europe by the Captains of the East Indiamen clipper ships, but soon botanical plant hunters such as Franz von Siebold, John Reeves, Dr. Abels, Robert Fortune and others began to work the areas of interest. This applied particularly to China which proved to have an abundance of horticulturally desirable plants, both natural species and horticultural cultivars developed over centuries of gardening.

This material, sent back to Europe by the plant hunters, caused a sensation in horticultural circles. Camellias, magnolias, rhododendrons, paeonies, chrysanthemums, dogwoods, viburnums, roses, deutzias, liliums; the Dawn Redwood, the Dove tree and the Ginkgo; the list is endless.

The advent of this material caused a colourful change in the great English gardens, with masses of flowering rhododendrons and camellias backed by magnolias and other Chinese trees. This soon spilled over into Europe and North America where many other magnificent gardens were soon in being, so that there were developed some of the most beautiful gardens the world has seen, nowadays mostly open to the people, due to the activities of such bodies as the National Trust.

In Australia and New Zealand, where most homes include a private garden of some sort, the plants of China are grown by everyone.

However, one of the most remarkable introductions to the Western world from China was of recent years, and the material was made available at a very difficult period in China's recent history, through the helpful and friendly co-operation of the scientists of the Kunming Botanical Institute. I refer to the advent of the Kunming Reticulatas.

It was not only because of the large and extraordinary contribution made by China over the past 200 years to the gardens of the world, but more specifically due to this very recent benefaction of the large group of C. *reticulata* cultivars, as well as a number of camellia species of great interest, that led Mr Harold Fraser of Wagga Wagga, Australia to make the suggestion that these facts should be recognised in a suitable manner.

This suggestion was put to the International Camellia Society at its recent Congress in Sacramento where it was agreed that Mr Fraser should investigate the possibility of planting a Garden of International Friendship at the Kunming Botanical Institute, as a small token and an expression of appreciation and gratitude owed to China for sharing the riches of her plant kingdom with the rest of the world.

Approval from China was quickly forthcoming and so today, on this site are gathered together representatives from most countries in which camellias are grown.

Therefore, before the assembled company I have much pleasure in dedicating this camellia garden, on their behalf, to the cause of lasting peace and enduring friendship between the peoples of China and those of the nations here represented.

May this work, here begun in amity, be conducted in harmony and completed in concord.

# The Genus Camellia Yunnanea and Primitive Species of Yunnan Camellia

Le genre Camellia yunnanea et les espèces primitives de camélias du Yunnan

El género camellia yunnanea y especies primitivas de la camelia de Yunnan

Il genere Camellia Yunnanea e specie primitive de camelia dello Yunnan

### FENG GUOMEI

Associate Scientist, Kunming Institute of Botany, Academia Sinica, Kunming, China

# 1. Chinese Historical Literature on the Genus Camellia

As early as the 11th century B.C. it was recorded that, when the Emperor Zhou-Wu sent an army to suppress the fatuous Emperor Shang Zhou, the participant hordes in Sichuan paid tribute in tea to the Imperial Court. The first copy of the Chinese Materia Medica records that Kutu (otherwise cha or tea) grew in mountain valleys and beside mountain paths. It could survive severe winters and was picked in March. This demonstrates that, as early as the Zhou Dynasty, tea was used as medicine and beverage. In the Tang Dynasty (760-780 A.D.) an expert on tea, Lu Yu, wrote a book entitled "Scripture on Tea" in which he systematically summed up many valuable practical experiences gained during various Dynasties and gave detailed accounts of the origin of tea, tea planting and the picking and processing of tea, with qualifications and effects of the water used for infusion. This is the earliest specialized writing which confirms China as the native country and original utilizer of tea.

India, a country with a long and ancient culture, had no writings on tea until the Italian priest, Giovanni Maffei, wrote about it in his book, "The Indian History".

From about the 8th century, as communications between nations were improved, the tea plant, its culture and the technique and lore of tea making and drinking, spread to Japan, Sri Lanka, India, Indonesia and Russia. From these countries it has spread to 40 or more other countries and districts. In modern times it has become one of the three staple drinks of the world.

With reference to the *Camellia*, China has had considerable experience and a long history of its culture and has bred many varieties and grown many species. In the Song Dynasty, about 1150 A.D., Xu Zhizhong wrote a poem in praise of the Camellia. His contemporary, Fan Chengda (1128-1193 A.D.) wrote a book in which Camellias are mentioned. More especially the author, Pu Song Ling (1640-1715 A.D.) from Shandong, wrote of it in his story entitled "Xiangyu" (fragrant jade) as follows:

"In the Abbey of Xiaqinggong on Mount Loshan there is a tree called Naidong (winter resistant) which attained the height of 20 Chi (7 metres)".

This is at the northern margin of the naturally occurring Camellia area (North Latitude 36°11'). In short, there are plentiful records concerning Camellias in historical documents in China.

# 2. A Survey of Systematic Studies of the Genus Camellia

The Swedish Botanist Carl Linnaeus first published *Thea* Linn and *Thea sinensis* Linn. in 1753. Later, in the same year, he published *Camellia* Linn. and *Camellia japonica* Linn. and these were adopted by later botanists.

W. T. T. Dyer (England) first divided the Genus *Thea* Linn. into two Sections: Section *Camellia* and Section *Thea*. (vid. H. K. f., Flora Brit. India 1: 292-3, 1874). Pierre (France) added to the Genus *Thea* Linn., three Sections, namely: Section *Stereocarpus* Pierre; Section *Camelliopsis* Pierre and Section *Piquetia* Pierre (vid. Flora Forest Cochinchine 11 sub. t. 119, 1887). Cohen Stuart then added to the genus *Camellia* Linn. the Section *Theopsis* Cohen Stuart (vid. Med. Proefst. Thea, 40 : 66-73, 1916) and at the same time he re-aligned Genus Calpandria Blume into Section Calpandria (Bl.)

In 1921 H. Hallier upgraded Section Stereocarpus Pierre as Genus Stereocarpus (Pierre) Hallier. Then Nakai (Japan) divided the Genus Camellia Linn. into five Sections (vid. Journal Jap. Bot. 16, 1940), upgraded the Section Theopsis Cohen Stuart and founded the Genus Camelliastrum Nakai.

Sealy (England) amalgamated all these Genera into Genus *Camellia* Linn. and founded 12 Sections within the Genus. (vid. "A Revision of the Genus Camellia" 1958) namely:

Archecamellia Sealy; Stereocarpus (Pierre) Sealy; Theopsis Cohen Stuart; Camelliopsis (Pierre) Sealy; Piquetia (Pierre) Sealy; Thea (Linn.) Dyer; Corallina Sealy; Calpandria (Bl.) Cohen Stuart; Pseudocamellia Sealy; Heterogenea Sealy; Camellia (Linn.) Dyer; and Paracamellia Sealy.

In China, Professor Hu Xianxiao published Genus Yunnanea Hu in "Acta Phytotax. Sin. 5, 1956". Later, however, Hu amalgamated it into Genus Camellia Linn.

In 1981 Professor Zhang Hongda of the Sunyatsen University, systematically studied the Genus *Camellia* in East Asia and in his "A Taxonomy of the Genus Camellia", 1981, divided it into 4 Sub-genera and 19 Sections. (See I.C.S. Journal 1983, p.69).

# 3. Geographical Distribution of the Genus Camellia

The Genus Camellia is native to East Asia. It ranges from East Longitude  $85^{\circ}$  to  $150^{\circ}$  and from North Latitude  $37^{\circ}$  to South Latitude  $10^{\circ}$ . It is distributed in China, Japan, Vietnam, Laos, Cambodia, Thailand, Burma, India, Bhutan, Sikkim, Nepal, Indonesia, Philippines and Malaysia. There are about 200 species in all. China with about 180 species makes up 90% of the species in the world. They are concentrated in South China, especially in the Provinces of Yunnan, Yuangxi and Guangdong, all located near the Tropic of Cancer.

More than 70 species occur in Guangxi; 63 species and 5 sub-species in Yunnan; 51 species in Guangdong; 29 in Sichuan; 25 in Hunan; 23 in Guizhou; 23 in Jiangxi; 13 in Zhejiang; 12 in Fujian; 9 in Hubei; 8 in Taiwan; 6 in Anhui; 5 in Jiangsu; 4 in Shanxi; 2 each in Shandong and Xizang (Tibet). There are no Camellias distributed in the other Provinces of China. However 23 species occur in Vietnam, 8 in Burma; 6 in Japan; 5 each in Laos and India; 3 in Thailand, 2 each in Nepal, Bhutan and Sikkim; 1 each in Malayasia, Indonesia and the Philippines.

According to Professor Zhang Hongda, the

provinces Yunnan, Guangxi and Guangdong have been the modern distribution centre as well as the centre of origin of the Genus *Camellia*.

Of the 63 species in Yunnan all, except the cultivated species *C. japonica* Linn., *C. sinensis* Ktze, and *C. oleifera* Abel, are wild; 23 species to the south and 21 species to the north of the Tropic of Cancer and 16 common to both sides.

From what can be seen the distribution of the Genus *Camellia* is rather narrow. Except for Guangxi, Yunnan has the greatest number of endemic species, that is, 33. This is closely related to the complication of Yunnan's topography, terrain and climate. Owing to the varying environmental pressures of the area new species can be created but can only be spread with difficulty, hence the phenomenon of isolation.

# 4. The Primitive Species of the Yunnan Camellia

As one of the famous flowers of the world the Yunnan Camellia has long been known for its large flowers, bright colours, great varieties, long florescence and spring blooming. It is admired by people of all nationalities alike in Yunnan. It is grown in beauty spots and in public and private gardens and courtyards. Admiring Camellias in the Spring Festival has become a tradition in various parts of Yunnan. Modern young people like to use it as wedding decorations and it has been used on Postage Stamps and as brands of Television Sets, Radios and cigarettes. In 1981 the Yunnan Camellia was selected as the Municipal flower of Kunming. In short, the Camellia and the people of Kunming have entered into an indissoluble bond. For this reason huge Camellias of 300, or even more, years of age occur in Kunming and many other Yunnan Counties.

Although the Yunnan Camellia has a long history of culture its Botanical name, *Camellia* reticulata Lindl., was first published by Lindley in Curtis's "Botanical Magazine", 1827. It was a cultivated variety of semi-double form. Horticulturalists and Botanists in China use *C. reticulata* as the botanical name of such Camellias as 'Zaotaohong' (Early Crimson), 'Shizitou' (Lion Head) and 'Juban' (Chrysanthemum Petal); yet where are their ancestors (primitive species)? This did not occur to people until the 1950's.

It is now known that there are large areas of forests of Camellia plants identical to that published by Sealy as *C. reticulata* f. *simplex* Sealy in 1958. Through checks and observations we have associated it with the cultivated Yunnan Camellia. However it has smaller flowers arranged in one whorl of 5-7 or 7-9 petals. It is in fact the primitive species of the Yunnan Camellia. Following are the morphological characteristics of the plants as observed in its native habitat at Tengchong:

Small to large tree, 5-15 metres high (16.5 metres for the highest), girth up to 62 cm; leaves oblong-ovate, ovate-lanceolate, oval, obovate-oval, lanceolate, 5-15 cm long, 3-7 cm wide. Leaf shape is not stable and has great variability.

<u>Bracts</u>, 5-7 in 2-4 whorls, imbricated, silverbrown, densely short pilose on outside. Sepals 5-7 in 2 whorls, imbricated, broad-ovate, 1-2 cm in diameter, margins membranous, silverbrown pilose both sides.

Petals, 5-7 or 9-11 or more, obovate, subrotund, broad-lanceolate, etc., 4-6 cm long by 3-4 cm wide in 2-4 whorls, imbricated; flower type trumpet shaped, magnolia, lotus, semicurvate, butterfly winged; flower colour pink, silver-red, deep red.

<u>Stamens numerous</u>, united at base forming a tube, symphysis with petals at base or divided into several fasciles, (becoming Yunnan Camellias); pistil, 1; ovary spherical, 3-5 cell, style branched at top into 3-5 arms. Capsules, spherical, thin walled spheroidal, thick walled; conical, thin walled. Many different names were given to the fruit depending on the different shape of the fruit and as to whether the walls of the epicarp are thick or thin.

Moreover, when petal numbers increased, the pistil and stamens changed to petaloids so that some plants are sterile. These plants have large flowers and are of high ornamental value. They are called "Xianyecha" in the local area. In short, with the C. reticulata forma 'simplex' Sealy as growing wild near the Yunhua township, Tengchong County, there is great variability and complication of plant height, leaf shape, flower type and colour, florescence and fruit shape. Therefore it is my assumption that it is a hybrid species. It may be related to C. saluenensis or C. yunnanica. Therefore its nomination as a species is a misfortune. According to the unreasonable regulations of International Botanical Nomenclature the cultivated species has to be treated as the original species and the wild species is its forma 'simplex'.

*C. reticulata* forma 'simplex' is distributed in the Counties Tengchong, Yongping, Dali, Weishan, Fengqing, Kunming, Songming, Yilang, Yuliang and Tonghai in Yunnan; the wide area of North Latitude 25°30' to 23° and East Longitude  $98^{\circ}10'$  to  $104^{\circ}30'$ . Amongst them Tengchong County has the greatest part of the distribution.

Data on the area around Yunhua, Fengchong County is as follows: Location North latitude  $25^{\circ}7'$ ; 1628 metres altitude; annual average temperature, 15.2°C, average temperature of hottest month, 20.2°C with a maximum of  $30.5^{\circ}$ C. Average temperature of coldest month  $8.2^{\circ}$ C with lowest  $-6.7^{\circ}$ C. Annual rainfall 1495 mm, precipitation in spring, 235 mm. Relative humidity 79%. Surrounding terrain is highest to the south-west and south-east. To the north is the Dalucong Mountain with 2800 metres altitude.

The area is a mountain fastness with a mixed culture of farming, forestry and animal husbandry, mostly the latter. Dalucong Mountain is covered with sub-tropical, broadleaf, evergreen secondary forest. Dayun Mountain to the south-west is an extinct volcano with an altitude of 2700 metres. It is sparsely covered with *Alnus nepalensis* and grass.

All around mountains reach to the sky. They are mostly igneous rock and are severely weathered with exposed rock but relatively gentle slopes. The red soil is inclined to be acid with a pH of 6.0. It is deep and fertile and of a porous nature. Mild slopes below 2400 metres are cultivated by non-irrigated farm land growing buckwheat, potatoes, rape and maize. At altitudes of 1800-1900 metres trees of economic use are planted such as *Toona sinensis, Catalpa duclouxii, Lindera communis* and *Pinus armandi.* 

Grassy slopes or evergreen, broadleaf, secondary forest and shrubs occur over 2400 metres. From 1800-1900 metres are terraced fields and a river valley. The river Xiangshuigou runs northwards through the district. It has a small summer flow and is subject to occasional floods in the rainy season.

Pristine forest are nowhere to be seen. Most areas have been reduced to secondary growths. Magnolias, Cinnamons, Camellias and Beeches are the staple trees. Species that can be seen include: Manglietia insignis (Wall) Bl., Michelia florabunda Fin. & Gagn. Cinnamomum glanduliferum Meisen. Neocinnamomum delavayi 'mekongensis' (H-M) allan; Lindera var. communis Hemsl., Neolitsia aurata f. glabrescens Liouho.; Phoebe ssp.; Schima khasiana Dyer; Schima yunnanensis Chang; Gordonia yunnanensis (Hu) Li.; Cartanopsis delavayi Tr.; Lithocarpus hancei (Benth.) Rehd.; Cylobalanopsis augustinii (Shan.) Scottky.; C. glaucoides Scottky.; Ilex ssp.; Symplocos ssp.; etc. Besides the evergreen, broadleaf, secondary forest, *Pinus yunnanensis* is very common here, often forming a pure forest.

The belt ranging from 1900 to 2300 metres has become a forest of Camellia reticulata Lindl. forma 'simplex' Sealy owing to long time culture and management, with a history of 300 to 400 years. In the late winter and early spring the area is covered with charming and striking pink and red Camellias forming a Shangrilla. Huge plants of 15 to 16 metres height and girths of 40 to 60 cm occur commonly here. The Camellia forest is dotted with Pinus huashamensis. Lindera communis. the Chinese Toon, Walnuts (Juglans regia): the Chinese Strawberry (Myrica rubra): Taiwania flousiana Rich.: Taxus vunnanensis Cheng & Fu: many of them growing around households. In the vicinity of farm houses and villages are stands of pure bamboo and towering palms are everywhere.

### 5. Camellia Varieties in the Camellia Woodlands of Tengchong

As mentioned previously the *C. reticulata* f. *'simplex'* Sealy is the ancestor of the Yunnan Camellia. During our search we selected 35 further varieties. With further investigation there will be many more located. Having observed the flower type and numbers of petals of *C. reticulata* F. *'simplex'* we know that it evolves according to Darwin's theory, from simple to complex; from elementary to advanced; that is from a primitive single to semi-double to double petalled type.

Following are the specific names given to the Camellias selected from the Camellia woods of Tengchong:

- I. Single Group
  - 1. Trumpet Type Flushed White Jade (Biyu) Beauty Twin (Erqiao) Pinkish Jade (Fenyu)
  - 2. Magnolia Type Small Magnolia (Xiaoyulan) Pretty Magnolia (Qiaoyulan)
- II. Semi-double Group
  - 3. Lotus Type Early Sunshine (Dajinsui) Golden Heart Scarlet (Jinxin Dahong) Lotus Pearl (Lianpian Tuozhu) Beautiful Jade (Caiyu) Large Cloudy Petal (Dayunpian) Crimson Corn Poppy (Yumeiren) Happy Spring (Xiyinchun) Silver Lotus (Yinhehua) Rosy Clouds (Fenzhaoyun)
  - 4. Semi-Crooked Petal Type

Pink Hibiscus (Shuifurong) Pink Star (Fenhongxing) Rolling Crimson (Ouban Taohong) Osmanthus Leaf Crimson (Guiye Taohong) Morning Glory (Zhaoxia) **Butterfly Wing Type** 5. **Rolling Butterfly Wings (Juanban** Diechi) Yunhua Camellia (Yunhua Cha) Small Crimson (Xiaotaohong) Fairy Pink (Xianye Cha) Crimson Perfection (Taohong Zhaoyang) Broad Leaf Butterfly Wing (Tuanye Diechi) Flying Clouds (Feixia) Crimson Lion (Yushizi) Sunset Glory (Fendan) Crimson Ball (Taohong Xiuqiu) Crimson Mume (Hongmei) Crimson Five-heart (Hongwuxin) Late Spring (Songchungui) Double Petalled Group 6. Paeony Type Crimson Paeony (Taohong Mudan) Double Paeony (Lianmudan) Crimson Petaloid (Hongjinling) 10. Section Thea (Linn.) Dyer C. kwangsiensis Chang C. quinquelocularis Chang et Liang C. crassicolumna Chang C. pentastyla Chang C. taliensis Melchior C. irrawadiensis Barua C. crispula Chang C. gymnogyna Chang C. costata Hu et Liang C. yungkiangensis Chang C. sinensis Ktze C. sinensis var. assamica Kitamura C. parvisepala Chang C. tachangensis F. S. Zhang C. tahieshensis F. S. Zhang 11. Section *Glaberrima* Chang C. glaberrima Chang IV. Subgen. Metacamellia Chang Section Theopsis Sealy 12. C. cuspidata Wright C. crassipes Sealy C. forrestii Cohen Stuart C. forrestii var. acutisepala (Tsai et Feng) Chang C. callidonta Chang

III

- C. costei Levl.
- C. tsaii Hu
- C. tsaii var. synaptica Chang

- C. rosthorniana Hand.-Mzt
- C. stuartiana Sealy
- C. percuspidata Chang
- C. membranacea Chang
- C. tsingpienensis hu
- C. trichandra Chang
- Section Camelliopsis (Pierre) Sealy 13. C. wenshanensis Hu C. candida Chang C. caudata Wall
- The List of the Genus Camellia from 6. Yunnan
  - I. Subgen. Protocamellia Chang
    - Section Stereocarpus (Pierre) Sealy 1. C. vunnanensis (Pitard ex Diels) Cohen Stuart C. liberistyla Chang
      - C. liberistyloides Chang
- II. Subgen. Camellia
  - Section Oleifera Chang 2. C. oleifera Abel
    - 3. Section Paracamellia Sealy C. confusa Craib
      - C. kissii Wall
      - C. tenii Sealy
      - C. brevistyla (Hayata) Cohen Stuart
      - C. phaeoclada Chang
    - 4. Section Pseudocamellia Sealy C. trichocarpa Chang C. henryana Cohen Stuart
    - 5, Section Tuberculata Chang C. obovatifolia Chang
    - 6. Section Camellia
      - C. mairei Melchior
        - C. lapidea Wu
        - C. albovillosa Hu
        - C. albescens Chang
        - C. reticulata Lindl.

C. reticulata Lindl forma 'simplex' Sealv

C. pitardii Cohen Stuart

C. pitardii Cohen Stuart var.

vunnanica Sealy

- C. crassissima Chang
- C. xylocarpa Chang
- C. saluenensis Stapf
- C. boreali-yunnanica Chang
- C. japonica Linn.
- III. Subgen. Thea (Linn.) Chang
  - Section Corallina Sealy 7. C. wardii Kob
    - C. pentamera Chang
    - C. scariosisepala Chang
    - C. acutiserrata Chang
  - Section Brachyandra Chang 8. C. muricatula Chang C. szemaoensis Chang

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### Seedling Breeding with Camellia chrysantha

Culture de plants avec le Camellia chrysantha	
 Cultivo de plantas de semillero con camellia chrysantha	
Produzione da piantine con la Camellia chrysantha	

### MISS XIA LIFANG

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There are about 200 species of the Genus *Camellia* in the world of which 90% are concentrated in south and south-west China. Plants of this Genus have been used for their flowers, for oil and beverages and have an important position in the national economy. At present those that are grown all over the world as ornamentals are mainly the following three species:

1. Camellia japonica which is native to Japan and China and is cultivated in regions south of the Yangtse River. There are only a few varieties in China.

2. Camellia reticulata which is native to Yunnan. This species has large flowers with bright colours. The trees of this species can be several hundred years old. Recently it was chosen as the municipal flower of Kunming.

3. *Camellia sasanqua* which is native to Japan and China.

All these three species have a long history of cultivation and have enjoyed general popularity in the field of international horticulture. Through the arduous efforts of horticulturalists of all countries many thousands of varieties have been cultivated. In the past most varieties were bred by intraspecific hybridization within a species or interspecific hybridization amongst a few species. They therefore varied within a narrow range. Amongst the present varieties and species most are only red or white and there is no white in C. reticulata. Moreover they have no scent. Requirements set forth by present day breeding, such as aroma, variation in flower colour and type can not be achieved by hybridization within a few species. These goals can be obtained only through distant hybridization (interspecific or intergeneric), by introducing advantageous genes of different species to promote interspecific gene combinations and create varied types. In this respect modern horticulturalists of many

countries are working hard to cultivate fragrant and hardy varieties.

It has been the common wish and goal of camellia lovers the world over to cultivate new yellow and orange coloured camellias. As early as 1958 the Kunming Botanical Institute set forth a goal, to cultivate camellias of new colours. They made every effort to search for camellia species with yellow flowers. The Chinese botanists, for the first time, discovered a camellia plant with yellow flowers - Camellia chrysantha - in Guangxi in 1965. Through many years of searching and investigation by the botanists, we have discovered 11 species and 1 variety of camellias with yellow flowers, amongst which 10 species and 1 variety occur in Guangxi. The other species occurs in Guizhou.

In 1973 our Institute obtained the first batch of seedlings by hybridization with pollen of *Camellia chrysantha* and since then hybridization has been carried out each year. In 1978 the hybrid seedlings began to bloom.

Following is a brief introduction to the experiment and its result.

### Material and Method of Experiment

This experiment was conducted according to the convention of using as female parent, the camellia plants cultivated at Kunming Botanical Institute and as male parent *Camellia chrysantha* growing wild in Guangxi. While the maternal plants were in full bloom, branches with flowers were collected from Guangxi and kept in refrigeration. To increase the fertilization percentage it was necessary to check the vitality of the pollen. The method used was that of germination. Pollen grains were solution or agar and then held at a temperature of 20-25°C for 1 or 2 hours. It was then taken out

Camellia reticulata 'Gongtan'	New variety cultivated at Kunming Botanical Garden
C. reticulata 'Hongwan Cha'	New variety cultivated at Kunming Botanical Garden
C. reticulata 'Zaotaohong'	Cultivated variety at Kunming Botanical Garden
C. reticulata "seedling"	Seedling cultivated at Kunming Botanical Garden
C. reticulata f. simplex	Cultivated at Kunming Botanical Garden. Introduced from Tengchong
C. pitardii var. yunnanica	Introduced from Songming
C. saluenensis Stapf ex Bean	Introduced from the vicinity of Kunming
C. japonica 'Zhudinghong'	Introcuded from U.S.A.
C. japonica 'Qingkou'	Introduced from U.S.A.
C. chrysantha (Hu) Tuyama	Introduced from Guangxi

 Table 1
 Camellia Species Used in Hybridization Studies

 Scientific Names
 Source

Table 2Hybridization, Pollination and Fruition<br/>(1976-1977)

and examined under a microscope to observe the germination of the pollen. Only pollen with vitality was used for hybridization. Before pollination, flowers were chosen on the female parent which were about to bloom or half open (with anthers unsplit). These flowers were then castrated with forceps and pollen of proven vitality smeared on the styli. Finally the fertilized flowers were enclosed in paper bags for isolation and labelled. Thus pollination was over.

From this table we find that 4 species were used as female parents in hybridization, the male parent being *Camellia chrysantha*. A total of 674 flowers were pollinated, representing 9 interspecific hybridization combinations. From 630 flowers of 6 combinations, 77 fruits were obtained containing 456 seeds. From these, 228 seedlings were obtained. The other three combinations fruited but the seeds were tiny and without plumule. Only 39 larger seedlings survived from the 228. The reason was that, with such wide interspecific hybridization, the seeds obtained formed many, very weak seedlings, most of which grew slowly without fibrous roots. They gradually died away when

	,	Fru	lition			Eme	rgence
Cross Combinations	Pollinations	No.	Rate	Seeds	Seed Quality	No.	Rate
C. reticulata 'Gongtan' $\times$ C. chrysantha	100	22	22%	106	Good	73	68.8%
C. reticulata 'Hongwan Cha' $\times$ C. chrysantha	9	1	11%	8	Ill-developed	4	50%
$\overline{C. reticulata 'Zaotaohong'} \times C. chrysantha$	26	5	19.2%	32	Poor, hollow empty, small	9	28.1%
C. reticulata "Seedling" $\times C.$ chrysantha	260	30	11.5%	246	Ill-growth	129	52.4%
C. reticulata f. simplex × C. chrysantha	20	1	5%	8	Ill-developed	4	50%
C. pitardii var. yunnanica × C. chrysantha	214	18	8.4%	61	Most ill-growth	13	21.3%
C. japonica 'Qingkou' × C. Chrysantha	8	2	25%	5	Small hollow no plumule		
$\overline{C. japonica 'Zhudinghong'} \times C. chrysantha$	20	2	10%	2	Small hollow no plumule		
C. saluenensis × C. chrysantha	16	- 3	18.7%	2	Hollow no plumule		

#### Table 3 Morphological Contrast

	Cotyledon Number and Colour	Leaf Shape	Stalk Length	Tip Sprouting
Female	2 pieces, milky yellow	Oval to Broad-Oval	Almost no stalk	One
Male	3-5 pieces purple red	Oblong	1 cm.	Twice-thrice
F.1	2-4 pieces milky yellow, purple red	Long-Oval	With and without stalk	Once-twice

the nourishment in the cotyledons was exhausted. Also, owing to poor conditions and the disappointing quality of the potting medium, many died through poor management after planting out.

From the external morphology of the plants obtained the following variations can be discerned.

Though certain variations can be seen from the external morphology such distant hybridization is very complicated. The colour of the flowers of the existent plants remained in the red group. Whether the variations demonstrated real fertilization or whether it was only the combination and exchange of part of the hereditary substance only cytological study can tell. It should be noted that the hybridization was carried out in one direction only and not yet in the other reverse direction.

This is only part of the work of seedling breeding that has been done at the Institute with C. chrysantha as male parent.

### **The Reeves Paintings**

 Les peintures de Reeves	
Las pinturas de Reeves	
I dipinti di Reeves	

### JOHN TOOBY \* See colour section

The distinctive ornamental plants of China excited the interest and admiration of British traders from the earliest times they visited your great country. Two events combined to increase this interest early in the nineteenth century. The London Horticultural Society was founded in 1804 by a group of enthusiasts of whom Sir Joseph Banks was the most influential. In 1812 John Reeves, a man who combined expert knowledge of tea with great enthusiasm for natural history, went to Macao and Canton as an inspector of tea for the British East India Company. When he came home on leave in 1816 he met Banks and, after returning to China, arranged with the Society to send home plants and paintings of plants. A steady stream of paintings flowed to London: he bought a few and then arranged for artists to live in his house in Macao and paint the subjects he wanted. As you will see they are of great accuracy and beauty.\* He also bought plants from the Fa-tee gardens in Canton and from Chinese friends and established them in pots for the long journey home. Among the plants he sent were chrysanthemums, paeonies, azaleas, an ornamental cherry and the Wistaria. But few of his plants arrived alive. So the Horticultural Society decided to send experienced gardeners who would be able to select plants over a longer period and, more important, look after them on the way home. John Potts who went in 1821 had unfortunately contracted tuberculosis before he left England. In spite of being ill, in Canton he got together a good collection, particularly of chrysanthemums but including some camellias and other plants. However he was still dogged by misfortune for on the way home his ship ran aground near the Cape of Good Hope in South Africa and most of his plants were thrown overboard to lighten the ship. He is remembered as the first man to bring back seed of Primula sinensis but sadly he died soon after his return. John Damper Parks followed in 1823, returning in 1824. Parks amassed a large collection and sent back 38 cases of plants in nine different ships. Both men were hospitably received by Reeves in Macao. Parks relates in his manuscript journal that he met Captain Rawes there and was able to show him plants of C. reticulata - the cultivar which now bears his name - which he had bought in Canton. The two men agreed that this must be a new species and speculated that it might be the double vellow camellia 'Shocq-tcha' which was rumoured to grow somewhere in south China.

In 1830 the London Horticultural Society was in one of its financial crises and asked Reeves to stop sending plants and paintings. This crisis must soon have been overcome as it seems that someone else, presumably a former colleague, continued to send paintings for a few years after Reeves retired as chief inspector of tea in 1831. John Lindley, already Professor of Botany at London University, was appointed in 1832 as Assistant Garden Secretary of the Society and promoted to the post of Assistant Secretary in 1835. Clearly he must have had very little spare time but nevertheless he personally filled three portfolios with paintings of Camellias (Vol. I and part of Vol. II). Chrysanthemums (remainder of Vol. II, part of Vol. III) and Tree-Paeonies (remainder of Vol. III). Then in 1840 he was made Vice-Secretary and had to carry out most of the administrative work. The remaining paintings were put into five further portfolios without further sorting.

Less than 20 years later, in 1859, the Society faced another financial crisis. The headquarters building and the magnificent library were sold (for pitifully low prices) to help clear the debts. Then in 1936 the five unsorted portfolios returned to the Society, now the Royal Horticultural Society, as part of the bequest from Reginald Cory, a prominent horticulturist and industrialist. The three remaining portfolios were offered to the Society and repurchased in 1953.

The paintings speak for themselves, they are accompanied in many cases by numbers, in some by Chinese characters and in a few by English names. Three seem to call for some comment. 'Anemoniflora' the subject of the painting on the plates were used very successfully by Chandler and Buckingham as a seed-parent. They sowed a large batch of seed in 1819 and were rewarded by over 100 seedlings of which they introduced 10 or 12. Three of these are still commonly grown in England, namely 'Althaeiflora', 'Elegans' and 'Eximea'. The 'Hexangularis' appears several times and was responsible for much disappointment; it is now clear that the hexangular arrangement of the formal double flowers was due to the warmer climate of China and even if the plants flowered true on the voyage home the relatively cold and cloudy English summer lacked the necessary degree of warmth or light (or both) to produce the hexangular form in the developing buds. The third slide of interest may possibly be a painting of C. rosaeflora. In the 1820's both C. maliflora and Chinese garden forms of C. oleifera were thought in England to be forms of C. sasangua. An English merchant in Macao, John Beale, had collected a few camellias and left them for Parks to pick up in the East India Company's building in Canton. Unfortunately the building was gutted by fire and the camellias were destroyed. In conversation with Parks, Beale referred to one of these plants as "The Intermediate Sasanqua". Beale had another plant in his garden and Parks budded some to bring home. A few of Potts' camellias had survived the voyage home, but only as understocks, the scions having died. Some of these rootstocks proved to be a species new to England, C. euryoides. Then in 1858 Hooker published a plate of C. rosaeflora which had been found at Kew, the gardens having been in a poor state since Banks' death in 1820. Whether one of Parks' plants survived or whether C. rosaeflora had been used as a rootstock is a matter for conjecture.

Reeves maintained a number of paintings himself and after his death his daughter donated them to the British Museum (Natural History) where they remain. Of equal beauty and in better condition (as far as I saw them) they lack the interest of the R.H.S. series.

In preparing this paper I must acknowledge the great help which has always been accorded me by the staff of the Royal Horticultural Society's Lindley Libray.

# A Historical Review and Future Development of Camellia reticulata in Yunnan

 Analyse historique et développement future de Camellia reticulata au Yunnan

 Reseña histórica y futuro desarrollo de la camellia reticulata en Yunnan

Una rassegna storica e lo sviluppo futuro della Camellia reticulata nello Yunnan

### **PROFESSOR TE-TSUN YU**

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It is my great pleasure and high honour to attend this International Camellia Symposium in Kunming and to have an opportunity to speak with so many specialists and amateurs about the Yunnan Camellias. We are in the native country of the Yunnan Camellia, in its flowering season, to hold a Camellia conference and to plant a Camellia 'Garden of Friendship' in Kunming Botanical Institute. This is really an excellent design and best arrangement from our good friend Mr H. A. Fraser, an active member of the Australia Camellia Society. There is an old proverb in China, "Fine weather, a favourable geographical position and a coordination within one's own ranks, are three essential factors for the success of everything." I would like to offer my hearty congratulations on the opening of this conference. It will make great achievement both in horticultural science and in international friendship between many countries.

Today, my topic is "A Historical Review and Future Development of *Camellia reticulata* in Yunnan".

### A. The History of Cultivation and Introduction of Yunnan Camellias

It is well known that the enormous garden varieties cultivated in the world mainly belong to three species in botany. First is *C. japonica* L., the second *C. sasanqua* Thunb. and the third *C. reticulata* Lindley. But today I shall speak only about the newly developed popular Yunnan camellia *C. reticulata*, its history of cultivation in China and its introduction into other countries.

According to the Chinese literature, *C. reticulata* was cultivated in China as early as the Sui and Tang dynasties, over thirteen hundred years ago. The old names of Yunnan Camellia were "Hai-Liu" or "Hai-Shi-Lin". After Bei-Sung dynasty in ninth century it was called "Shan-Cha-hua", the same as the common name at the present time.

A book on the history of Yunnan province, published in the sixteenth century, indicated: 'The camellia is the best under the heaven' Xie Chao-zhi of the Ming dynasty described 72 cultivars; Teng Mei composed a poem of two hundred lines in which he pointed out the ten excellences of Yunnan Camellias; Chao Pu wrote a genealogical record of the Camellia listing nearly a hundred sorts. Unfortunately all these original works were lost, but reference to them was made in the provincial historical record. The name "Nan-Shan-Cha" was included in the important Herbal, Ben-Tso-Kon-Mu written by Li Shi-Chen in 1590. A book entitled Chi-Wu-Min-Shi-Tu-Kao, written by Wu Chi-Tsun in 1848, gave a full description and some critical notes on this plant. Another semimonographic note of importance is the Tien-Nan-Cha-Hua-Hsia-Chi, written by Feng Shumei in 1930. He gave a brief history of Camellia cultivation and a short literary description of the 72 kinds of Camellia grown in local gardens and also included a collection of poems and songs on Camellias from the early Ming dynasty to the beginning of the Republic. This is of considerable historical importance in the studies of the cultivated camellias in Yunnan province. In 1938-45, I worked in the Yunnan Botanical Institute and visited several gardens and temples near Kunming and Tali that were famed for their Camellia culture. However, I failed to find as many varieties as were cited in the old literature. I have only identified 18 distinct varieties and I made a report on this in the Camellia and Magnolia conference held by the Royal Horticultural Society in London in 1950.

The introduction of this marvellous plant and its garden varieties to the western world was done only in recent times, within the last 150 years. Its scientific name C. reticulata was first given by an English botanist Dr. J. Lindley and published in the Botanical Register t.1078, 1827. It was a semi-double form collected by J. D. Parks, a member of the London Horticultural Society in 1824. Before this introduction, in 1820 Capt. R. Rawes had also brought a garden form from Canton, S. China and named "Capt. Rawes" and in 1857 an English botanist Mr Robert Fortune, in the exploration of the China tea industry, collected another more formal flowered variety, grown in Kew Gardens, which has the name "Robert Fortune" or "Pagoda". In 1912-14, the Royal Botanic Garden at Edinburgh organized an expedition to Yunnan and sent George Forrest to collect plant specimens and seeds. From his collection of seeds in the hills around Tengehun, the type of C. reticulata var. simplex was grown. It purported to be the truly wild form of the Yunnan camellia, and has received an Award of Merit from the Royal Horticultural Society. Most of the Camellias that were planted in the greenhouse of several European Botanic gardens probably originated from such a source.

The first introduction of garden varieties of the Yunnan Camellia to America was done in 1948-50. Due to the effort and enthusiasm of late S. Peer and the great interest in Yunnan Camellias of W. E. Lammerts, a world famous hybridizer and former research director of Descanso Gardens in California. They have had correspondence with late Prof. H. T. Tsai, Director of Yunnan Botanical Institute, and he delivered several potted plants of garden varieties by air mail. It was a rather difficult job during the Sino-Japanese war. They were soon distributed to different parts of the world and used quite extensively in the hybridizing program of several camellia enthusiasts in America, Australia, England, Japan, New Zealand and other countries. According to

the records of Camellia Nomenclature in 1974, the total number of *C. reticulata* & hybrids with reticulata parentage was 155 named cultivars, in 1976 there were 211 **C. reticulata** named cultivars, in 1978 there were 243 named cultivars.

The botanical garden of Kunming Institute of Botany, Academia Sinica, has also carried out a series of intraspecific and interspecific hybridizations. There are more than 105 named varieties published in the "Illustrated Book of Yunnan Camellia (1981)". It is about 6 times the number of varieties compared with my record in the Camellia & Magnolia Conference in 1950. They do not include many intraspecific hybrids which have not yet flowered, so that it will be some years before their merit can be ascertained.

# B. Suggestion on the Future Development of Yunnan Camellia

In the last few years, the Yunnan Camellia, by the elegance of its aspect, the persistency of its beautiful foliage, the size and the brilliant colouring of its blossom, has won the favour of all lovers of ornamental plants. However, compared with C. japonica, the Yunnan Camellia exhibits some weak points or shortcomings. For example, they are rather tender and not cold-resistant. The range of flower colours of Yunnan Camellia is rather limited being predominantly red and with very few variegated or whitish forms. No C. reticulata cultivars have yellow or blue flowers, and all are devoid of any fragrance. Although at present the flowering season is limited to the late winter and early spring, we hope in the future to have new varieties with longer blooming periods. Furthermore, there are still many wild species and varieties discovered and reported in some parts of Yunnan and neighbouring regions that will be potential breeding material. There are still many possibilities for camellia breeding that will result in future cultivars now only dreamed about by camellia breeders.

# 1. Creation of Yunnan varieties with greater cold hardiness

Yunnan camellias are mostly distributed in the subtropical and warm temperate regions, but there may be some wild varieties grown in the higher altitude of remote mountain parts with greater cold-resistance. Beside several relative species such as C. pitardii, C. saluenensis, C. taliensis, C. japonica, C. oleifera, etc. they usually prefer lower temperatures. It might be found that interspecific crosses have less cold tenderness or hybrid vigour of frost resistance. The relative intolerance of the Yunnan Camellia to severe cold is a definitely limiting factor in its cultivation and it is a problem that has not received the attention it deserves. In England the introduction of *C. reticulata* into hybrids has produced some very surprising improvement in hardiness. A combination of *C.* × williamsii and *C. reticulata* has proved a very hardy and consistent performer. Crosses between *C. reticulata* and *C. japonica* have not proved very useful to them out of doors (Gallagher J. T. 1977).

# 2. Extension of the colour range of the Yunnan Camellia

As the colour range and floral form of *C. japonica* cultivars are very variable, there might be greater variation in the Yunnan Camellia. For several years many Camellia enthusiasts have been feverishly anxious for a yellow one. In 1962 Mr. & Mrs. M. J. Whitman, Georgia, U.S.A. through intergeneric hybridization of *Tutcheria spectabilis*, have made several successful crosses resulting in seedlings with clear yellow flowers. (Threikeld J. L. 1962).

Since the discovery of *C. chrysantha*, in Kwangsi province, a true yellow Camellia variety will be produced before too long. It will be a good start leading to new colour breaks not only in yellow but also in a range of coral tones. In these few years more than twenty species with yellow and greenish yellow flowers have been reported in South China and North Vietnam.

At this conference, Prof. Chang Hung-ta will give a report of Revision of the Genus Camellia. His monograph recognizes 196 species of Camellia and describes 91 new species and 6 new varieties, which will no doubt be of great interest not only to botanists but also to Camellia growers and breeders.

# 3. Development of notable fragrance in Yunnan Camellia

In the genus Camellia there are several species and varieties with nice fragrance. There are already several fragrant strains and all varieties of *C. sasanqua* are scented. Then the recent introduction of *C. fraterna, C. kissii, C. lutchuensis, C. miyagii, C. oleifera, C. tsaii* are scented species, especially *C. lutchuensis* with rich pleasing scent and apparently compatible with several popular camellias. Besides there are several slightly fragrant hybrids of *C.*  japonica e.g. 'Fragrant Pink', 'Fragrant Pink Improved', 'Mrs Bertha A. Harms', 'Pink Perfume', 'Salab', 'Virginia W. Cutter'. All these might be useful parentage to breed the fragrant varieties of Yunnan Camellias (Ackerman & Dermen, 1972, Hallstone 1978).

# 4. Extension of the blooming season of Yunnan Camellia

There are three seasons of bloom in Yunnan Camellias. Early varieties flowering in December to January, medium varieties in January to February and late varieties in March to April.

Some authors speculated that early blooming hybrids of the reticulata type could be developed by crossing C. sasanqua with C. reticulata, back crossing the resulting  $F^1$  hybrid to C. reticulata and selecting for earliness in the backcross progeny. Most workers have observed that hybrids bloom halfway between the flowering date of the parental varieties. Thus making it possible for the plant breeder to select an early or late bloom season. (Lammerts 1961; Savige 1969).

### 5. Selection of dwarfed Yunnan varieties for Bonsai plants

Most cultivars of the Yunnan Camellia are tree forms. Only one dwarf variety, "Hsu-tianko" or Dwarf Rose, is very popular in the local market. The typical dwarf exhibit has slow growth, smaller leaves, shortened internodes of stems and dense bushy habit. It may originate as seedling variations or as bud mutations. In both instances, the altered growth may be propagated true to type by own-rooted cuttings or by grafting. It is worthwhile to make interspecific hybridization between C. pitardii, C. oleifera, C. sasanqua, C. taliensis to examine and select a group of dwarf seedlings. Another experiment on the influence of different stocks to Yunnan Camellia; cuttings of C. japonica, 'Alba Plena' and seedling of C. reticulata, generally used will grow into tree form, if so try another bushy species of Camellia such as C. sasanqua, C. pitardii, C. yunnanensis, etc. which may have a different result.

# 6. Improvement of propagating method of Yunnan Camellia

In this country all the garden varieties are propagated by vegetative methods. Cuttings are very difficult to strike and only a low percentage of layers become established. It will take a long time, at least 3-4 years, to grow young grafted plants. Tissue culture or micropropagation has rapidly evolved into one of the major research tools in biology and medicine. It has adaption to large-scale industrial use in some areas of agriculture, horticulture and drug manufacturing.

Availability of selected garden varieties will increase the general popularity of the Yunnan Camellia and give new dimensions to landscape design of our country (Benneth, W. D. 1978, Hammerslag F. A. 1981).

# 7. Development of Cytological and genetic studies

Cytology and genetics are the fundamental sources for the plant breeders. The availability of genetic background information allows the breeder to plan realistic goals and to expedite them in a reasonable amount of time. The study of cytology, especially the chromosomes, is essential to an understanding of the relationship and hybridizing potentials between different species. Chromosomes are the carriers of the genes which in turn determine the inheritance of all plant and flower characteristics. Hybridization has become the principal method for the improvement and innovation of the garden varieties. Either intraspecific, interspecific or intergeneric hybridization should be put into practice to breed new varieties. We have plenty of wild species and varieties of Camellia also numerous cultivars in the garden. The cytogenetic studies of the Yunnan Camellia have shown convincingly that the breeding potentiality is rather great. Through the cooperation of specialists and amateurs, much more outstanding cultivars of the Yunnan Camellia will be blooming in the gardens of the world. (Kondo, K., 1977, Ackerman W. L. 1978, Feathers, D. L. 1978).

### I.C.S. Ties

Society ties in maroon and bearing the Society emblem are now available from John Tooby at the following prices: In the British Isles - £3.75 post free In Europe - £4.00 All other countries - £4.50

# The "Cutting Graft" Method of Propagating Camellias

La méthode de "greffe de bouture" des camélias de bouturage
Método de 'injerto de púa' para propagar camelias
Il metodo a "inesto di talea" di propagazione delle camelie

### A. E. CAMPBELL

As a commercial undertaking Camellia Grove Nursery endeavours to produce the best possible plants for its customers.

We do, in fact, produce plants that are stron<sub>i</sub> and vigorous and free of pests. These objectives are obtained by a programme of fertilising and spraying. However, there are two diseases which can affect some Camellias in our Sydney climate Sydney climate is similar to that of Shanghai but not so humid in summer. Annual rainfall is about 48" well spread over the year.

The two diseases which affect some Camellias in Sydney are:

1. Glomerella cingulata which attacks some japonicas and reticulatas but almost never sasanquas. All our plants are checked for this before sold and, if affected, are destroyed. This disease can attack plants in customers hands.

2. *Phytophthora cinnamomi* which can affect the roots of most *japonicas* but almost never the roots of *sasanquas*. This disease can occur in customers' hands if the plants are over watered or planted in a badly drained position.

So far we have not succeeded in eliminating No. 1 above but it occurred to us that if we could graft all our *japonicas* and *reticulatas* on *sasanqua* stock we could eliminate No. 2 on the Nursery and make it very unlikely to affect plants in customers hands even if over watered.

We have been using four year old plants of C. hiemalis 'Kanjiro' as a stock for quickly producing large plants of new varieties of *japonicas* and for all *reticulatas* with great success by the cleft graft method. Over the years it had been noticed that 'Kanjiro' was very compatible with everything we grafted on it, that its root system remained vigorous, unaffected by phytophthora and produced excellent plants. Various other *sasanqua* and *sasanqua* like stocks had been tried but 'Kanjiro' proved to be the best. However this is an expensive way of producing big plants.

It was therefore necessary to discover a method of producing the equivalent of a cutting grown plant on 'Kanjiro' roots as we sell our plants in all sizes from those in 5" pots and approximately 18" high as second year plants and so on to 4th and 5th year plants in large containers.

My partner, Steve Clark, is a very competent plant propagator and he started experiments about 12 years ago and, after a little trial and error, came up with the procedures as detailed.

The operation takes place in December, the recent spring growth being then firm enough to be worked.

Firstly we get a supply of 'Kanjiro' cuttings 5 to 6 inches long. These come in varying thickness, the thicker cuttings being used for those varieties which produce thick scions and the thinner cuttings for the thinner scions. Leave three leaves at the top of the 'Kanjiro' cutting. It does not seem to matter if the base of the cutting is cut square or sloping or at a leaf node or between nodes.

The scion should be prepared as for a cleft graft, i.e. about 3" long with two leaves and a growth bud left at the top. They should, as near as possible, be matched with the cutting for thickness, but as many of the scions will be thicker than the cutting, one side of the scion can be pared down to make a better matching fit.

A long sloping cut should now be made in the cutting about  $\frac{3}{5}$  of the way from the bottom and the scion inserted as for any normal side graft. The two pieces must now be tied quite firmly together, we use two ties of sticky paper packing tape about  $\frac{1}{6}$ " wide, one at the graft itself and the other higher up to prevent any sideways movement. The cutting graft can now be treated as any normal cutting. It should be inserted into the medium to a depth of about 4" which will cover the graft point and probably the top tie.

It usually takes about four months for the graft to callus and the cutting to make roots. When removed from the cutting bed the top of the original cutting of 'Kanjiro' must be carefully cut off and the struck cutting can now be potted up in the usual way. Some varieties of japonica will make roots at the base of the scion, these should be removed, the variety noted and 2 ties used at the graft point in future. Check the little plant regularly for the first year as about 5% will grow some suckers from the 'Kanjiro' stock. These should be removed. In our experience no further suckering should occur.

Plants obtained by this method grow just as well, perhaps better, than those on their own roots. After 3-4 years the graft point, usually just at or below ground level, disappears, the paper ties have decayed and disappeared long before. We also note in the case of *reticulata* that there is very little 'bottle necking'.

Though we originally developed this method of producing japonicas and reticulatas to overcome any phytophthora problems there are additional benefits. The rate of success varies between 95-98% so we need rather less material than we would require under the old method when the percentage of failure was often quite high and also we need rather less space on the cutting bench.

Plants produced this way cost a little more to produce as we need some temporary staff for a few weeks. We engage a couple of girls from the local high school as the young have keen eves and steady hands. With a well trained team we can produce up to 1500 cutting grafts in a day of  $7\frac{1}{2}$ -8 hours.

The other essentials are very sharp knives and good lighting. In our experience 'Kanjiro' is compatible with everything we have tried including many species and hybrids except the species crapnelliana.

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### Camellia reticulatas

Extracts from a paper presented by MILTON H. BROWN Executive Secretary, American Camellia Society

First, I want to thank our Chinese friends, such scholars as Professor Tang, Professor Yü, Professor Zhang, who are hosting this historic horticultural event. I also wish to thank Madam President Violet Lort-Phillips and Harold Fraser, for asking me to do the almost impossible presenting a paper on *Camellia reticulata* here in the beautiful home of this flower. It is my hope that international gatherings like this will do much to bring the peoples of the world together which, in turn, will bring the governments together and that we can gain the everlasting peace that passes all human understanding. I am also deeply humbled by a group of such distinguished guests from around the world.

#### Introduction

In his chapter "The Interrelationships of the Species in Camellia", J. Robert Sealy of the Royal Botanical Gardens in Kew lists twelve sections, one of which is section Camellia. Four species of this section, namely *C. japonica*, *C. saluenensis*, *C. pitardii* and *C. reticulata*, are very closely allied.

In his A Taxonomy of the Genus Camellia, Chang Hung-ta (Zhang Hongda) more than doubles the number of species in Sealy's book. Nevertheless, Chang also lists *reticulata* as a subsection of the section Camellia under the genera Camellia L. This paper does not propose to go into the technicalities or cytological studies and other highly technical studies of the C. *reticulata*. It proposes to put the Camellia *reticulata* into proper prospective for those of us who are laymen in the field of horticulture.

#### History

Professor T. T. Yü reported in 1950 "The Early History of the Cultivation of this camellia in China is rather obscure". The *Cha-hua-pu* which is a genealogical record of Chinese camellias written by P. Chao, a literary naturalist of the eleventh century, listed 72 varieties. Unfortunately, the original work was lost, but reference to it was made in a complete list of Chinese literature, which was compiled and published early in the Manchu dynasty. The Chinese name of *C. reticulata* is *Nan-shan-cha* which means camellia of the South Mountain.

It was written earlier that the Yunnanese are so fond of this camellia that they have planted it extensively in gardens and parks, and they also use it as a pot plant in almost every courtyard. There are several very big trees, more than 300 years old, growing in the temple courtyards near Kunming, the capital of Yunnan Province. Since the camellias flower in spring, at the time of the Chinese new year, which is a popular season for making excursions to the countryside, it is natural that the flowers should have become an object of great admiration by the local people. Their love of the flower has resulted in the development and preservation of the superior varieties, and its culture is the favourite amusement of the nobility, the literary, and the rich. Consequently it is the most important plant in the local horticultural trade. The beautiful evergreen foliage with red flowers is regarded by the Chinese as a sign of fortune and wealth, and in olden times several pairs of camellia plants were given as a portion of marriage dowries. During the Chinese new year, a vase of red camellia flowers is one of the offerings every family presented to its ancestors. In the art and literature of Yunnan, this camellia also occupies a prominent place and it has appropriately become the floral emblem of the province.

The Camellia reticulata was probably one of the best-kept horticultural secrets of the world for many centuries. It, or probably its hybrids, dates back to the ninth century A.D. and might go back to the T'ang dynasty A.D. 618-906. In the eleventh century P. Chao in **Cha-hua-pua** described many cultivars of the *reticulata* and there are many references to them in subsequent Chinese literature. One of these cultivars that many of us know as 'Lion Head' was imported into Japan between 1673 and 1681. Near where we are meeting today,

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you can see a *Camellia reticulata* tree that is said to have been planted during the Ming dynasty some 500 years ago. I have seen photographs of *Camellia reticulata* trees in China said to be a thousand years old.

It is interesting that of all the missionaries and plant explorers who crisscrossed China in the 1700's and 1800's none reported on the beautiful *Camellia reticulatas*. Some must have seen them, else the 'Captain Rawes' *Reticulata* would never have been sent to England. The Shan-cha-hua had won the love and admiration of the Chinese people as early as in the Ming dynasty when it was quoted as "the most beautiful flower on earth".

Colonel Tom Durrant of New Zealand, who along with the late Ralph Peer and Walter Lammerts of the United States and Walter Hazlewood of Australia were the first to obtain Yunnan *reticulatas*, wrote the following in 1959:

"It is, perhaps, a sidelight on Chinese character and attitude to the beautiful, that so much mystery has surrounded the reticulate camellias. We are apt to overlook the fact that China had a very highly developed culture which antedated western civilisation by many centuries and that some of the ancient and learned oriental scholars were not only keen gardeners but, also, highly skilled and patient plant breeders. It must have been some of them who selected, hybridised and raised the many wonderful *reticulata* camellias which are only now becoming known to the world.

"Many famous botanists have visited China to search for plants to transfer to the parks and gardens of the world; their success is indicated by the fact that so many of our most beautiful flowering shrubs and trees are of Chinese origin."

Robert Gimson of Spain wrote an excellent article on the *Camellia reticulata* in 1975. He said —

"During the first quarter of the 19th century many Chinese plants were introduced to England by Mr John Reeves, who was employed by the East India Company. He constructed small portable greenhouses to be carried on board the East India Company's ships, and gave the ships' masters instructions regarding the care of the plants during the voyage, which in the days of sailing ships, took about 4 months round the Cape of Good Hope. It was probably Reeves who gave a camellia in 1820 to Captain Richard Rawes, the captain of an East India Company ship, to take to England. Rawes gave it to his friend Mr Thomas Palmer who planted it in his conservatory at Bromley, Kent, where it flowered for the first time in the spring of

1826. In 1824 Mr John Parks sent to the Horticultural Society of London, now the Royal Horticultural Society, a similar plant, and it is possible that this is the old tree still growing in the temperate house of the Royal Botanic Gardens, Kew, London, where it is now about 7 metres high.

"Reeves retired to England in 1831, and in 1843 he persuaded the Horticultural Society to send Robert Fortune to China to collect plants and seeds. Fortune sent another form of Camellia reticulata to England in 1850, and this bore formal double flowers and so was known as Camellia reticulata 'Flore Pleno'. In the **Botanical Magazine** of 1 April 1857 there is a colour plate and a description which said 'Unlike other really fine specimens of reticulata we have seen, the present one does not form a straggling bush, with leaves and flowers so sparse that the branches may everywhere be seen: but its beautiful and ample foliage, and its still more beautiful, and, for a camellia, almost gigantic flowers (eighteen to twenty inches in circumference!)' constitute this unrivalled plant. In the beginning of October. 1848, the multitude of flower buds was so great that it was necessary for the health of the plant that 2600 should be removed; and assuredly, though it was difficult to count them, nearly an equal amount (say 2000 were allowed to remain: and these were in the perfection of blossom in April 1849! So at least we know that one or more plants of 'Flore Pleno', had been sent to England before Fortune's."

It is difficult to say precisely when the Camellia reticulata came into the United States whereas there is documented evidence that the Camellia iaponica came into the United States in 1797. We do know that in a treatise called "Observations on Camellia and its varieties" by the noted Botanist, M. P. Wilder of Boston, Massachusetts, in 1834, he mentioned the species C. reticulata along with 5 others. On January 2, 1836 he exhibited a Camellia reticulata plant in a camellia show held by the Massachusetts Horticultural Society in Boston. A year earlier he wrote "The reticulata". This is by far the most splendid of the genus that has been introduced." This is a feeling that virtually all amateur and professional botanists and horticulturists have agreed with since that time. It is interesting to note here that this early and popular reticulata was 'Captain Rawes', a garden variety. This is the same magnificent species that first flowered in England in 1826 and was featured in the Botanical Magazine No. 2784. and in the Boston Register, plate 1878.

An interesting observation is that the initial description of a *Camellia reticulata* was of a garden variety and not of the wild form which was not seen in the western world until some seeds of wild specimens were collected by George Forrest, a Scottish plant hunter, in the 1930's.

Now let us move on to the importation of the Yunnan reticulatas into the United States through the efforts of Dr. Walter E. Lammerts and the late Mr Ralph Peer. Lammerts read an article by H. H. Hu, a very reputable Chinese botanist, concerning Camellia reticulata and related species. In the fall of 1946, Dr Lammerts wrote to many botanists throughout the world including Dr Hu. In answering the letter on April 16, 1947, Dr Hu said, "Yunnan Province is famous for numerous varieties of reticulata. These are all obtainable in Kunming, the capital of that Province. I suggest you write to Professor T. T. Yü for more information as he is in charge of the Yunnan Institute at Black Dragon Pool, Kunming, China."

It wasn't until January 15, 1948 that Lammerts received a letter from H. T. Tsai of The Yunnan Botanic Institute in which he described the *Camellia reticulata* and said there were more than 20 varieties. It was in early 1948 that he received word that *reticulatas* were on their way.

He was thrilled when they arrived as two of the plants actually had flowers on them and they were different from anything he had seen.

Independently of Mr Lammerts, the late Mr Ralph Peer had established contact with Professor Tsai and had imported 19 varieties of *C. reticulata*. Most of his died following Air Express shipment and fumigation. Between him and Dr Lammerts, they successfully established 15 varieties. In 1952 complete sets of these 15 original varieties were released to camellia growers in the United States for \$1,000.00 per set.

In these early days of obtaining these new Yunnan *reticulata* camellias Walter Hazlewood of Australia and Col. T. Durrant of New Zealand also obtained up to 14 or more varieties.

The new and exciting *Camellia reticulatas* of Yunnan had finally been seen and greatly admired by camellia growers in the western world. Shan-cha-hua had finally become a vital part of the camellia world outside the confines of Yunnan Province, China.

In November 1978 Professor Bartholomew was in touch with Professor Wu Cheng-yih. He mentioned that a recent issue of the Magazine, **Foreign Trade**, indicated the plants of 39 Yunnan camellias were available from the Yunnan Institute of Botany. In January 1979 Professor Wu informed Bartholomew that 40 *C. reticulata* cultivars could be sent. Some of these were those that had been obtained by Lammerts and Peer, but 25 were ones that were previously unknown in the U.S. In August 1979, he received an additional seven. In May 1980, Bartholomew listed 27 new ones both in the Chinese and English translation.

### Nomenclature and hybridization

This paper does not in any way wish to address itself to the technical aspects of nomenclature of the 105 varieties of the Yunnan camellias. In 1952, Lammerts listed the 15 Yunnan camellias that he and Feathers had imported according to English name, Chinese name and synonyms. This list was copyrighted at that time.

In May 1980, in an article for the American Camellia Journal Mr Bao Chen-chang of the Kunming Institute of Botany listed 105 forms of Shan-cha-hua according to their various forms. This is, to my knowledge, the first time that these 105 had been printed in the western world. In his paper at the 1950 Camellia and Magnolia Conference of the Royal Horticultural Society, Dr Yü listed an index of common names and scientific names for 18 Yunnan garden camellias.

Dr Bruce Bartholomew of the University of California – Berkeley, was able to obtain many additional new varieties of the Camellia reticulata from China as a result of his plant exploration expeditions there. In an article by him and Professor T. T. Yü in The American Camellia Yearbook - 1980 entitled "The Origin and Classification of the Garden Varieties of Camellia reticulata" they described and named each of 105 varieties. A few years previous to the larger number that Dr Bartholomew received in 1980, the late Mr Kinhachi Ikeda had received several of the "Newer" reticulatas from Yunnan during 1973-1975. Mr Ikeda was forever grateful to Dr Wu Chen-y and the staff at the Yunnan Botanic Institute for providing him information and scions with which to do his propagation.

### Hybridization

It seems strange to me that despite its vast beauty 'Captain Rawes' was not used early on for serious hybridizing attempts. I know that some people said that it was sterile or that you could not make intrageneric crosses. Actually, it was not until the arrival of the *reticulatas* in the United States and New Zealand and Australia in the late 1940's and early 1950's that the hybridizers began serious work. Again, this is not a technical, scientific treatise and, therefore, I will make no efforts to describe the problems involved in the intrageneric crosses.

Probably the first-known hybrid with *reticulata* was the camellia 'Salutation' which bloomed in England prior to 1932 and which was said to be a hybrid between *C. saluenensis*  $\times$  *C. reticulata*. While this has been questioned, the weight of evidence would suggest that it was, indeed, such a cross.

Actually, there are many who still argue that almost all of the Yunnan **reticulatas** are, indeed, hybrids of one sort or another. To my knowledge there have not been sufficient cytological studies of all the various *reticulatas*. This is something that we hope will be done over the coming years to settle once and for all whether the wild form collected by Forrest is the true *reticulata* and all others are hybrids. I just toss this out for what it is worth.

The eminent camellia hybridizer and expert, David L. Feathers of California, reported succinctly the history of hybridising with the reticulata in America in 1974. I think it best to quote his remarks, "In hybridisation, it was for some time thought that *reticulata* could not be crossed with *japonica* due to the great difference in chromosome composition (the count being 90 and 30 respectively). Experimentation has proved that this is no bar and as early as 1960 the first *japonica* × *reticulata* hybrid was offered in America commercially under the name 'Royal Robe'. A single white seedling from a cross of 'Waterloo'  $\times$  'Debutante' was the seed parent and 'Crimson Robe' the pollen parent of this hybrid.

"Subsequent work on the hybridisation of C. reticulata has demonstrated that it is possible to cross this elegant species with many others. Howard Asper of Escondido, California, has had notable success using reticulata with japonica and sasangua (examples 'Howard Asper', 'Valentine Day', 'Dream Girl' and others) and many other camellia hybridists have crossed reticulata with these and a number of species other than the better known ones. A very interesting documentation on the results of hybridising C. reticulata with a number of other species is set forth by Dr William Ackerman in his "genetic and cytological studies with camellia and related genera" (Technical Bulletin No. 1427 of the U.S. Department of Agriculture).

"It is particularly interesting to note that the successful plant production reported was three times as great when *reticulata* was pollinated by *japonica* as when *japonica* was pollinated by *reticulata*. The same indication is shown when crosses of *reticulata* and *pitardii* are examined — there were twice as many successes when *reticulata* was used as the female parent.

"The foregoing is merely a brief sketch of the history of the *reticulata* and what has been done with it in a comparatively short period of time, and this report is in no sense an attempt to be all-inclusive. Although authorities seem to be in general agreement that the glamorous varieties that were first obtained in quantity only about 25 years ago are hybrids, which records indicate have actually been grown in China for a thousand years, we can only guess whether they originated in the wild or were actually developed by the Buddhist monks. The prevalent opinion today that they are actually hybrids, however produced, seems to be confirmed by the fact that very similar flowers are appearing here from open-pollinated seed of the so-called wild form, an unimposing single first introduced into England in 1935.

Most of the hybridising with *reticulata* in America has been done with *Camellia japonica* in an effort to obtain the beautiful blooms of *reticulata* on the more attractive bushier plants of the *japonica*. Mr J. Howard Asper, then director of Descanso Gardens, and others in California, also are interested in working with some of their newer crosses with *C. lutchuensis* in the effort to obtain some fragrance as well.

### The Future

The small number of original hybridisers working with Camellia reticulata has continued to grow and many capable ones are currently working with reticulata as a parent in an active hybridising programme. Indeed, there were probably as many reticulata hybrids registered with the American Camellia Society in the last two years as there were *japonicas*. Many will also be using the pollen of C. chrysantha at such time as it becomes available to them. Thomas Perkins III, will give you more details on what these hybridisers are thinking of in their programmes for coming years. He will also show you coloured slides of varieties of reticulata hybrids, which we have brought from America for the International Garden of Friendship in Kunming. While not germaine to this paper but because of the wide interest in the yellow C. chrysantha, I do wish to point out that the American Camellia Society now has some pollen at hand from a friend in Japan to carry out its programme of hybridising C. chrysantha and C. japonica. I have taken this position because in our country the area where *reticulatas* can be grown, except in greenhouses, is extremely limited.

### Conclusion

In closing, I would like to quote two short poems, one written in the middle of the Ming dynasty and the other at the end of the Ming dynasty.

Yang Shen wrote:

"With green foliage and red flowers, its blossoms against the snow;

The yellow bees and powdered butterflies did not come,

The pearl trees by the sea have lost their brightness,

They are ashamed to light the jade terrace with their coral branches."

Pu Ho at the end of the Ming dynasty wrote: "Fighting for the spring the cold beauty is so splendid

According to the record camellia is best in Yunnan

At the top of the tree ten thousand flowers are spitting out fire,

Reflected against the lingering snow, they make half the sky burning red."

Finally, being in Kunming once again I would like to use a sentence from a poem by playwright Tien Hen, writing about a bird's paradise in Xinhui but I say it about Kunming.

"Paradise does exist in the world of man."

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2 	Les camélias en Chine			
	 Camelias en la China	.*		
	 Le camelie in Cina		_	

#### T. J. SAVIGE • See colour section Wirlinga, N.S.W., Australia

In March 1984 forty members of the International Camellia Society journeyed through Yunnan, Sichuan, across to Xian, back to Chungking, down the Yangtse to Nanjing and Snanghai. Wherever possible, visits were made to Botanic Gardens and private gardens in search of Camellias.

At Kunming, the first town visited, a convention was held with members of the Sinica Academia at the Kunming Botanical Institute, after which Camellias were planted in an International Friendship Garden. Due to a very severe winter and cold spring, very few camellias were in bloom. However there were enough to give colour to the Institute's garden of *reticulatas* In these gardens were growing some Camellia species of interest in *Camellia grijsii, C. forrestii C. saluenensis* and *C. pitardii.* 

Unfortunately the propagating and experimental areas of the Institute were not open to inspection by the delegates so that it was not possible to see *C. chrysantha* and its hybrids developed at the Institute. However a plant of *C. gigantocarpa* was brought to the convention. This had recently been equated with the Hongkong species *C. crapnelliana*\* by the Chinese taxonomist and botanist, Dr Zhang Hongda. The only *C. japonica* seen in flower in the Gardens was 'Alba Plena', known in Kunming as 'Yupei'. (Jade Cup).

A few days later about half of the group of delegates drove by bus to Dali. On the way some areas of *C. saluenensis* scrub was seen by the roadside. A large Camellia garden by Lake Dali produced a number of *C. reticulata* in bloom, including 'Liujiao Hentiangao' or Hexagonal Dwarf Rose, a beautiful deep pink formal. A *C. japonica* with the name 'Meizicha' or 'Rose Camellia' was the only one out. According to Yu's list of 1958 this is probably the same as 'Meiguicha' or 'Rugosa Rose'.

On return to Kunming, the group then travelled by train to Emei near Chengdu in the Sichuan Province. The train line between Kunming and Chengdu is about 1000 kilometres long and passes through many hundreds of tunnels and over many hundreds of bridges through very scenic mountain terrain.

At Émei the party split in two, one climbing the lower slopes of Emeishan to the 'Myriad Years Monastery' where a planting of camellias was made where they stayed overnight, while the second group visited local areas of interest including the 'Crouching Tiger Monastry', where an extensive planting of Camellias was found to include 'Alba Plena', 'Baozhu Cha' ('Precious Pearl Camellia'), a large red paeony Camellia and 'Meirenhong' (Beauties Red).

The party, again complete, moved on to Chengdu where a visit was made to the Zoological Gardens to see the Pandas, particularly a cute three months old baby, and then to the brand new Chengdu Botanical Gardens of which Dr Kung Dashing is the Director. More Camellias were planted here in what was to be a sizeable Camellia garden, which already held a collection of plants supplied by the Kunming Botanical Institute. It was with some surprise that stock survival shoots on some of these were identified as *C. forrestii*. Apparently seedlings of this species make satisfactory grafting stock.

Cultivars of *C. japonica* seen in Chengdu included 'Zhaohongyang' (Shining Red), 'Qixinghong' (Seven Hearts Red) and 'Zhuiyangfei' a previously unknown variety.

The party then flew to Xian to see the excavation of the terracotta army of Emperor Qinshi Huang and then back to Chungking, the old terminus of the aerial supply route from Burma "over the hump" during the war and a base for General Chenault's 'Flying Tigers'. In this area Camellias were common. Our hotel had beds of them and many others were seen in the parks and gardens visited. These included 'Daqiu' (Large Ball) and 'Dongyang', both unrecorded varieties: 'Simianjing' (Alround View) a pink formal; 'Baiwubao' (White Jewel); 'Qixiangqiu' (Seven Star Ball); 'Baibingzi' (White Cake) and 'Zinbingzi' (Purple Cake).\*

A visit to the Hot Spring Park on the Jiling River, a tributary of the Yangtse, revealed many more Camellias. A particularly beautiful, soft pink, paeony with a halo edging of white was named 'Fengxian' (Fairy Wind); there was also a soft, pearl pink, formal thought to be 'Baimainzhu'\* and a red striped, soft pink, formal double called 'Hua Chang'e Cai' (Variegated Moon Goddess Splendour\*) as well as 'Fenshiba Xueshi' (Pink Eighteen Scholars), 'Alba Plena' and 'Otome'.

The party then travelled three days by boat down the Yangtse River, through the three river gorges and the Ship Lock in the Great Yangtse dam, to Wuhan with its parks and pavilion around East Lake with its large water area. In the Hubei Municipal Museum is the exhibition of the Chime Bells from the Zenghouyi Tomb of the Warring States Period (about 433 B.C.) unearthed in 1978. This chime of about 70 bronze bells is well preserved and can play both Western and Chinese music of wide sound range.

From here a plane ride down to Shanghai and a visit was made to the Botanic Gardens which are under the able directorship of Dr Wang Dajun. This botanic garden contains the largest collection of dwarfed trees in China. Known as "Penjing" their history dates back to the Tang Dynasty, 1200 years ago and probably predates the Japanese Bonzai. Some are hundreds of years old.

The gardens are relatively modern; started in 1974 on the site of the former Longhua Nursery, they now cover 67 hectares. One of their objects is to introduce garden plants from abroad and they have reciprocal arrangements with overseas botanical and horticultural organisations for the exchange of plant material. As the old Longhua Nursery included Camellias amongst its plants the Shanghai Botanic Gardens have what is probably the largest collection of *Camellia japonica* cultivars in China. They number in the region of 100 and include some of the ancient varieties imported into England early last century by Clipper Ships.

Amongst these were 'Incarnata' under the Chinese name of 'Liujiaobai' or 'Hexagonal White'; 'Alba Plena' under the name 'Baiyang Cha' or 'White Foreign Camellia' and 'Pomponia' as 'Sanxueshi' or 'Three Scholars'. This last camellia bore on it the sport 'Paeoniflora' or 'Hongsan Xueshi'. The Chinese name is probably an allusion to the three sports that can occur on this camellia' the white 'Paeoniflora Alba' (Baisan Xueshi); the soft pink 'Paeoniflora Pallida' (Fensan Xueshi) and the deep pink 'Paeoniflora' (Hongsan Xueshi).

Many of the camellias were in glasshouses

and were in flower and included some quite beautiful varieties. Amongst them was the old 'Hedinghong' (Stork Crest Red) a red anemone type; 'Yangzhilian' (Rouge Lotus), a red semidouble; 'Jixianghong', (Lucky Red), a red paeony form; 'Zhenpei' (Genuine White) a rose form, double white; 'Fenfurong' (Pink Hibiscus), a pink semi-double; 'Hongmudan' (Red Paeony), 'Zhuapolian' (Scratched Face) a white, roseform double with a thin red line on some petals; 'Huabingling' (Variegated Betel Nut) a red, white variegated formal and 'Hongfurong' (Red Hibiscus) a large red semi-double. There were also many others that time did not permit the opportunity of identification.

From Shanghai the party journeyed back up the Yangtse to Nanjing by train. One of China's four ancient capitals, it was here that the famous Ming Dynasty originated in 1368 A.D., before the third Emperor moved the capital to Beijing. Nanjing is also the site of the mausoleum of Dr. Sun Yat Sen and the Purple Mountain Observatory with its fantastic collection of ancient cast bronze astronomical instruments as well as its modern telescopes and other equipment for astronomical observation.

Well managed parks and gardens in the city included many varieties of Camellias which also were used to decorate the railway station.

The city of Wuxi was the next visited. It is situated on the ancient Grand Canal and its interlacing waterways make it somewhat of a Venice. Situated on Lake Taihu it has many beautiful parks and gardens with names like Ecstasy Garden, The Second Spring Under Heaven, Tortoise Head Garden and Spring Rains Garden. Again many varieties of *Camellia japonica* were obvious, in particular 'Alba Plena'. 'Otome' and 'Tarokaja'. It was an experience to travel on the Grand Canal in a Dragon boat and observe the teeming canalside life and the amazing melange of floating craft used for water transport.

From Wuxi to the historic city of Suzhou, we made our way by boat across Lake Taihu and up an extension of the Grand Canal. Suzhou is famous for its gardens. The Humble Administrator's Garden; the Master of Fishernet's Garden and the Lion Grove Garden have been restored in the unique Suzhou style of garden with terraces, winding corridors and waterside pavilions, laid out with ponds, grottoes, gazeboes and rockeries. They bear witness to the characteristics of the Chinese landscape architecture of the Sung, Ming and Qing Dynasties and include many pines, maples, magnolias and camellias in their plantings.

There is an old Chinese saying: "Above there is heaven; below there is Suzhou and Hangzhou" so the next stop was Hangzhou. Used during the days of the foreign concessions at Shanghai as a resort by the Westerners, there is some European influence in the extensive parks and gardens around the beautiful Western Lake which is such a feature of the city. On an island, called Solitary Hill, in this lake, which has pavilions, terraces and gardens, there are some plantings of camellia species and a few large specimens of C. japonica. The species included C. chekiangoleosa in flower. With its large flower and interesting stamen cluster it would appear to be a useful species for hybridization.

The Hangzhou Botanic Gardens, which were first opened to the Public in 1965 now cover an area of 260 hectares and include, amongst their 3500 taxa, special collections of Acer, Camellia, Cinnamomum, Magnolia, Osmanthus, Rhododendron and Rosa. The Camellia collection is quite extensive and included the species Camellia japonica, C. sasanqua, C. reticulata, C. semiserrata, C. polyodonta, C. chekiangoleosa, C. hiemalis, C. fraterna and others. The planting of C. japonica cultivars seems quite comprehensive but, as very few were in flower, the only ones identified were the ubiquitous 'Alba Plena' and 'Otome'.

The distribution of the horticultural cultivars of the Genus *Camellia* in China followed what probably was the natural distribution of the species. Cultivars of *C. reticulata* predominated in the Yunnan Province while in the Sichuan Province the horticultural varieties were substantially those of *C. japonica* but of limited kinds. Travelling down the Yangtse the number of varieties increased so that the largest number appeared to be around Shanghai. While this is not a particularly large number compared with those grown in the Western World, there are some very good cultivars amongst them that have not reached the outside.

It is interesting to speculate that the thirty or so varieties brought to Europe 150 or more years ago from China are the progenitors of many thousands of the modern *Camellia japonica* now grown around the world.

### The Camellias sent from Europe to China

Expédition en Chine de camélias européens Las camelias enviadas de Europa a la China Le camelie inviate in Cina dall'Europa

#### H. J. TOOBY

Vice President

As a Vice-President of the International Camellia Society I am greatly honoured to take part in the planting of the Friendship Garden in Kunming. I sincerely hope that this will prove to be a contribution, however small, in helping to increase friendship and mutual understanding between the peoples of China and those of Western Europe.

I refer briefly to the origin of the camellias sent from Western Europe, most of which descend directly from plants sent from China. They are among the most popular and widely grown and I hope they will be equally successful at Kunming and on Mount Emei.

'Eximea' and 'Elegans' are two of the outstanding introductions of Chandler and Buckingham of Vauxhall, London. They used 'Anemoniflora' ('Po Chu Cha') freely as a seed parent from about 1819. 'Eximea' (1826) has medium-sized flowers of dark blood-red which fall from the plant while still in good condition. It may not be very impressive as a young plant but an old tree can be spectacular. 'Elegans' (1831) with large pink anemone-form flowers is a wonderful plant, fairly hardy but not really suited to the coldest districts.

Hybridisers in Belgium and Italy then took the lead. One of the most successful Belgian raisers was Mathot of Ghent. In 1858, not long before he died, he produced 'Mathotiana Alba', a large white formal double of vigorous growth, equally as beautiful as the Chinese 'Alba Plena' ('Pak Cha') but with a higher centre to the flower. Like 'Elegans' this maintains its popularity but is similarly unsuited to cold situations. Two years later Maggi in Italy introduced 'Lavinia Maggi', sometimes called 'Contessa Lavinia Maggi', a spreading grower with medium-sized formal double pale pink flowers with bold streaks of deep pink. This cultivar maintains its popularity as the most popular striped cultivar in Europe.

French nurseries then played their part; the most popular and arguably the best cultivar of C. japonica with us is 'Adolphe Audusson', which produces many large semi-double red flowers on a vigorous upright bush which does well almost everywhere. This was introduced by Audusson of Angers in 1877. In 1895 Guichard of Nantes, whose famous nursery is now run by I.C.S. Director Claude Thoby, produced 'Gloire de Nantes' a tough semidouble pink and very early flowering. A few vears later a sport arose on a plant of 'Mathotiana Alba' with flowers of a lovely soft pink. This was introduced in 1908 by Bahuaud-Litou, also of Nantes as 'Souvenir de Bahuaud-Litou'. In its turn this sometimes sports to a deep salmonpink – 'Mathotiana Rosea'. About 30 years later a batch of plants from the same nursery, by then run by Cormerais-Bahuaud, was bought by Victor de Bisschop of Ghent in Belgium. He found an excellent, hardy, semi-double white as a sport on one of these plants and named it for his wife, 'Madame Victor de Bisschop'. This nursery is now run by his son, Roger de Bisschop, whose wife is I.C.S. Director for other regions. About the same time de Rothschild of Exbury near Southampton in England raised a very free-flowering single white which was named 'Charlotte De Rothschild'.

Meanwhile George Forrest made a number of visits to Yunnan between 1905 and 1932 to collect wild plants; he appears not to have been very interested in camellias but he sent back seed of several species including C. reticulata (1913-14 and 1924-25) and C. saluenensis (1917-19 and 1924-25), C. taliensis and C. tsaii. Initially the first two presented some difficulty to the botanists and the situation was not helped when it was found that a batch of plants, said to have been raised from Forrest's seed showed clear signs of being hybrids with C. japonica. Incidentally Forrest noticed plants of C. japonica growing semi-wild in thickets in southern Yunnan. C. reticulata and C. saluenensis were soon recognised as good garden

plants though rather tender. J. C. Williams of Caerhays near St. Austell in Cornwall found that C. saluenensis set seed freely and started hybridising. His success was soon followed by others and his first introduction 'J. C. Williams', a very free-flowering pale pink single introduced in 1940 was only a year in front of Clarke's 'Donation', a fine semi-double pink and again very free. These came to be known as  $C. \times$ williamsii hybrids and are not only much hardier than C. saluenensis, the flowers are much more resistant to frost and wind than similar coloured C. japonica cultivars. 'Donation' is deservedly the most popular camellia in Britain today. Charles Williams followed at Caerhays with two more in 1950 and 1951. 'Cornish Snow' (C. saluenensis  $\times$  C. cuspidata) is extremely free with small white single flowers while 'Charles Michael' is a "williamsii" with pale pink single flowers. Then in 1954 Francis Hanger introduced 'Inspiration' (C. reticulata  $\times$  C. saluenensis) a hardy plant with a narrow upright habit and semi-double flowers of bright rose-pink; and in 1958 Mrs Messel introduced 'Leonard Messel' named for her husband (C. reticulata  $\times$  "C.  $\times$ williamsii" 'Mary Christian') with large flowers of light salmon pink, another hardy plant though the larger flowers are more prone to winddamage. Also in 1958 Williams produced 'George Blandford' (C. saluenensis  $\times \tilde{C}$ . japonica 'Lady Clare') similar in colour to 'Inspiration' but with some anemone- to paeony-form flowers on a spreading bush. 'Mary Larcom' and 'Rosemary Williams', two deep pink singles followed from Williams in 1961; both are considered to be better than the earlier and still popular 'Mary Christian' and 'St. Ewe'. A year or two later Gillian Carlyon of Tregrehan near St. Austell started hybridising and two of her plants introduced in 1972 are gaining wide acceptance; these are 'Cornish Spring' (C. *japonica*  $\times$  C. *cuspidata*) very free with small pink flowers and 'E. T. R. Carlyon', named for her father ('J. C. Williams'  $\times$  'Adolphe Audusson) a splendid late-flowering semi-double white.

The 1.C.S. Congress will be held at the Old Ship Hotel, Brighton, East Sussex, England from 9th to 14th May, 1985 Delegates will gather at the OLD SHIP HOTEL, BRIGHTON on the afternoon of THURSDAY 9th MAY. 1985. for Registration, and on the evening of that day His Worship the Mayor of Brighton will hold a Reception for them. FRIDAY 10th MAY Visit Leonardslee in the morning, taking a packed lunch, and in the afternoon Heaselands. After dinner, Mr Archie Skinner of The National Trust Gardens, Sheftield Park, will show slides about Sheftield Park. SATURDAY 11th MAY The morning will be given over to Lectures, with simultaneous translation, and in the afternoon the delegates will visit Sheftield Park, to be guided round by Mr Skinner. In the evening there will be a "Baron of Beet" dinner at the Hotel, after which there will be a Slide Show

will be a Slide Show. SUNDAY 12th MAY The morning will be devoted to Lectures, and in the afternoon there will be a choice of Garden Visits. After dinner at the Hotel there will be a Slide Show and Lecture. MONDAY 13th MAY Visits to the Savill and Valley Gardens. In the evening there will be a Banquet at The Old Ship Hotel. TUESDAY 14th MAY The Conference will disband, and those delegates who have booked for the Tour which has been organised will DESDAY 14th MAY The Conference will disband, and those delegates who have booked for the Tour which has been organised will commence.

The cost of the Conference, including all accommodation, meals, garden visits and gratuities, will be £335 per person — twin-bedded rooms. There will be an additional supplement of £50 for a single room. (All members of the Royal Horticultural Society and National Trust are asked to bring their cards with them). BOOKING FORMS are available from Miss C. E. Perring, 47 Havelock Road, East Sussex, England.

# **Reticulata in America 1984**

<u> </u>	Les reticulatas en Amérique, 1984	
	Camellia reticulata en América, 1984	
	La Reticulata in America, 1984	

#### **THOMAS PERKINS III**

I have been given the task of summarizing the influence of the C. reticulata in America. Rather than call it a summary, let me label this effort as a report on the current status of hybridizing of the *reticulata* by the most active people in the U.S., and their outlook, aspirations and needs as of today. I must point out that there is very little institutional effort on the reticulata at this time. I have called on the most active people and have received short papers and slides from Ken Hallstone of Lafayette, California, Dave Feathers of Lafayette, California; Frank Pursel of Oakland, California; Meyer Piet of Arcaida, California; I will present excerpts from their papers first, the first report is from Ken Hallstone:

# The *reticulata* in the Fragrance Program in America

Early hybridizers of the fifties and sixties were looking for and crossing fragrant *japonica* cultivars. With the advent of the alluring fragrance of *C. lutchuenensis*, a species introduced from Okinawa in the early sixties, hybridizers turned to interspecific crosses using *lutchuenensis* and the several other not so fragrant species.

The first use of the species reticulata in a fragrant hybridization using C. lutchuenensis was made here in America by Frank Pursel in 1969. His cross of the reticulata 'Crimson Robe' with C. lutchuensis bloomed in 1974, but it showed only a very slight transfer of the lutchuensis fragrance. Since that time the *reticulata* and its hybrids have been used more and more and gradually good show flowers, with a reasonable amount of desirable fragrance are beginning to appear on the scene. Dave Feathers has developed three such flowers; two unnamed seedlings and one he has named after his friend, the late 'Harry Bloom'. I have two fragrant reticulata seedlings and undoubtedly there are others. (See colour section, 'Feathers Darling' ('Buddha' × 'Fraterna'  $\times$  'Saleb').

Thanks must go to the Chinese people for sharing with the camellia-loving people of America, their beautiful *reticulata* and the enchanting yellow *Camellia chrysantha*. The hybridizers are drooling with anticipation of producing the first fragrant peach, apricot, orange or yellow show flower.

My aspiration is to secure pollen or scions of C. chrysantha, C. euphlebia, and the fragrant C. yuhsienensis, and the reticulata cultivar 'Hexangular Dwarf Rose' for use in my game plan of hybridizing for fragrance and also new colors.

**Dave Feathers** comes up with the following paper:

Accomplishments to date in the field of camellia hybridization would seem to establish that the most desirable results obtained have been from combinations of the species C. reticulata, with both C. japonica and C. saluenensis. In this evaluation, personal preference is bound to exert considerable influence, but, when considered from the standpoint of both flower and foliage improvement as well as current popularity, this appraisal would appear to be justified. Yet one cannot speak too broadly on the subject, for success with camellias is so dependent upon performance under a wide range of climatic conditions. Until we have developed really cold-tolerant camellias, therefore, our work is still incomplete and must be continued. The recent availability of the vellow camellia from China, with its interesting colour potentialities further emphasize this point, while the possibilities with fragrance care only recently becoming evident.

It is the purpose of this paper to present' some interesting examples of hybrids arising largely from crosses of *C. japonica* with *C. reticulata* because of the fact that, as of the year 1980, there were only some 14 named varieties of this cross listed, whereas, almost 200 of the reciprocal cross (*C. reticulata*  $\times$  *C. japonica*) had been named. In the hybridization efforts with these two species, this appears to be the more difficult cross. Why, I really do not know. However, I took that approach because throughout I have been motivated by the desire to produce better plants and foliage in preference to concentrating on the flower. It is generally believed that it does not make any difference which way the interspecific cross is made; however, I just had the feeling that the mother plant might exert the greater influence on the offspring and there appears to be valid reasons why this is so, insofar as the camellia is concerned.

Another reason for using C. japonica as the seed parent was because of its much greater efficiency as a seed producer. On 5-foot plants of C. japonica 'Lady Vansittart', and C. japonica 'Rosary', I had counted as many as 200 seed pods in a normal year. These plants, as well as single-flowered seedling from a cross of 'Water $loo' \times 'Debutante'$  were selected because they were also extremely bushy. I also used 'Lady Clare' for its similar habit and good foliage, while Jack Osegueda used 'Adolphe Audusson' as the seed parent, with C. reticulata 'Crimson Robe' to produce the very outstanding hybrid 'Harold L. Paige'. (See colour section, 'Satan's Satin'  $\times$  'Crimson Robe'). There are interesting discussions of the pros and cons of seed parents in our book 'The Camellia' for further viewpoints on this matter.

Where hybrids have *C. japonica* as the female parent, some of them bear seeds but almost as many appear to be sterile. In general, the plant habit is much improved.

My plant of *chrysantha* failed to bloom this season and - at age 84 - I would dearly love to secure pollen of the yellow cultivars as I have hybrids on which I would want to use it.

Frank Pursel, our most active worker with *reticulatas*, has the following paper to present his game plan:

#### Hybridizing With Reticulatas FRANK PURSEL

When a person crosses *reticulatas* with *reticulata* ('Crimson Robe'  $\times$  'Cornelian'), the seedling flowers are inferior to either one of the parents. If you go one step further and use the seedling flower pollen back on to one of the parents, the offspring are even more inferior than the flowers made by the original cross. Many of the plants are so weak they become very susceptible to disease (root rot and dieback). It is this person's opinion that the chance of obtaining worthwhile flowers is not good.

Crossing reticulata with japonica one gets

the best out of both parents. Be sure and use the *reticulata* as the seed parent when making these pollinations. When one uses the *japonica* as the seed parent, the flower form changes very little. Most of the seedling flowers look like the *japonica* flower. If a hybridizer wants a large flower, use a *japonica* that has large flowers ('Coronation', 'Drama Girl', 'Mrs. D. W. Davis'). Most of these very large *japonica* flowers have a chromosome count of 45. Using a *japonica* with a very small flower ('Tinsie', 'Kuro-Tsubaki'), the flowers, as a rule, will be twice larger than the *japonica*, but still smaller than the *reticulata*.

The pollen from the *reticulata japonica* seedlings seem to get the best results when the pollen is used on the *reticulatas*. (See colour section 'Santa Clara').

As for my aspirations at this time, I must state that I am awaiting pollen from the yellow cultivars with a multitude of crosses planned. My plants of *chrysantha* dropped their buds, so I am left at the starting gate.

Meyer Piet offers a very detailed report on his work:

#### Hybridizing MEYER PIET and LEE GAETA

The entire hobby of hybridizing by Lee Gaeta and myself is a two man effort that is done in our spare time. It does require more time than most people think. Lee and I unusually work at **least** one day a week the year round on our Camellia hybridizing program. We have been at "it" for about 15 years.

New flowers that **add** to the enjoyment of Camellias are very hard to come by. It is easy to obtain seed and eventually see flowers similar to the original Yunnan *reticulatas*, but it takes a great deal of effort to obtain a different flower, perhaps a formal, or paeony shape with exciting vivid colours.

We process about 400 new known crosses a year. We use a method of "selective breeding" which means, use the best parent plants possible if you expect to see good offspring. All of our 400 seedlings are usually grafted about four months after they are picked. From the time we make the cross we figure by speeding things up it still takes an average of three years to see a new seedling bloom.

If we know that the seedling (of a known cross) needs backcrossing for perhaps more vivid red or higher bloom, we will keep the seedling and do additional work with it. This will take an additional three or four years. Of the 400 seedlings, only about twenty survive the first blooming. This number eventually ends up as three or four plants.

It is not unusual today to have four or five known plants. We have excellent flowers that have two parents *sasanqua reticulata* and one parent *japonica*. By selective breeding you do tend to obtain the more complex flower forms.

What are some of the good crosses or working material? Two of the best original Yunnan *retics* are 'Crimson Robe' for the dark rich red colours and 'Cornelian' for form and much larger, rabbit-eared flower.

Much to my surprise I have obtained excellent very large, full flowers from 'Willow Wand'. The seedling to be named after Yoshiaki Andoh is a cross of the two; a cross of two parts *retic* and one part *japonica*. Subsequently, it has excellent foliage. It is a very bushy plant, one bud to each branch terminal, never debudding, or any other attention, but still produces its very vivid six inch higo-type flowers. When you see eight or ten flowers in bloom at the same time you will understand what constitutes a new worthwhile plant.

When you cross the saluenensis into the retics, with perhaps one part japonica you obtain excellent full flowers with unusual pastel colors that are beautiful. Our saluenensis  $\times$  'Ruby' (japonica  $\times$  retic 'Crimson Robe') cross

is the best example of this. Our white *retic* is a cross of a white *salueneneis* and *retic* 'Crimson Robe'. Evidently the white in the *saluenensis* flower, which was about  $2\frac{1}{2}$ ' in diameter and of simple form, completely dominated the color of *retic* 'Crimson Robe'. We ended up with a six inch wide white flower with a touch of pink in the back petals. There are two different crosses, therefore, we have crossed them into each other and expect to see some flowers in another year or so.

We have crosses that have two parts fragrant *jap.* and one part *retic.* (for size), but as soon as the *retic* enters we lose the fragrance. This season we finally have set seed for fragrance using four different *jap.* plus one part *retic.* 

Contrary to most belief and written data, we do not use many seeders. I believe this is one of the basic mistakes that most people make. Use the more complex forms even though they are harder to seed; as they will usually set seed, and when they do the seeds will be worthy.

To summarize at this point, most of our work is done with five species: *japonica*, *sasanqua*, *saluenensis*, *reticulata* and *granthamiana*. (See colour section 'Spirit of Troy' ('Narumi-Gata'  $\times$  'Crimson Robe').

Any help you may extend we would greatly appreciate, and of course would gladly exchange new materials with you.

Les camélias à Hong Kong	
Camelias en Hong Kong	
Le camelie a Hong Kong	

#### THOMAS J. SAVIGE

Wirlinga, N.S.W.

Hong Kong lies on the S.E. Coast of China at about 23° latitude. The area consists of a small part of the Chinese mainland and about 200 small offshore islands, making up a total area of 1,052 square kilometres. The terrain is rugged and mostly covered by hills up to 900 metres high.

Although the population is close to 5,000,000 the rough topography has ensured the survival, in its natural state, of a relatively large area of countryside. However, regular burning of the brush on the hillsides during the dry period has confined the native flora largely to the protected gullies and ravines.

There is considerable seasonal weather

variation due to the winter monsoons from the north, September to March, and the summer monsoons from the south, April to September. Mean daily temperature is from  $15^{\circ}$ C in February to  $28^{\circ}$ C in July. The mean annual rainfall is about 2,170mm, falling mostly from the end of March to November.

Although small in area, Hong Kong has a most diverse flora containing numerous species. Over 1900 species and varieties of native plants have been recorded, and about 530 introduced species.

In order to check on species of camellias and related genera, a visit by a group of I.C.S. members was made to the Hong Kong Herbarium, which was first established in 1878. Herbarium material of the following species was examined:

C. assimilis; C. caudata; C. crapnelliana; C. granthamiana; C. hongkongensis; C. oleifera; C. salicifolia; C. sinensis and C. waldenae since reduced by Zhang Hongda to C. sinensis var. waldenae. Another local species, not in the herbarium is C. kissii. The particular Hong Kong form being designated as C. kissii var. trigona by Zhang. Imported species in the collection were C. japonica, C. reticulata and C. sasanqua. Mrs Wong Siu Tak-ping, the Herbarium Assistant, kindly produced herbaria of most of these species for our study.

Of particular interest were the species C. caudata; C. granthamiana and C. crapnelliana. In all cases there were many examples, collected at various locations and illustrating the variations, particularly in leaf dimension ratios and sizes, which can occur in a wide-spread indigenous population.

In Australia these species are represented by only one to two very similar clones and the comparison with the wide natural variation was a lesson in the effects of large gene pools against restricted ones.

In the case of *C. caudata* represented in the West only by two divergent forms, one with long narrow leaves like *C. tsaii* from David Feathers' collection in California, the other with wider shorter leaves, somewhat like *C. rosaeflora,* from the Nuccio Nursery, the herbarium collection illustrated a wide range of forms in between, but all characterised by the typical "cauda" or tail, which gave the leaves a long fine apex and the species its name.

We learned that *C. granthamiana* was no longer the lonely species, as over 30 plants have been located in the wild and considerable plantings of seed have been made, which have illustrated substantial variety in vigour, plant growth and leaf size, colour and veination.

The material from *C. crapnelliana* was a source of considerable interest. In Australia all the material comes from "pod-mate" seeds sent to the late Walter Hazelwood by Ralph Dean, when Director of Urban Services in Hong Kong, about 25 years ago. Three plants survive; one, belonging to the author, in Wirlinga; one in what was the Riddles' garden in Pymble and the final one in the E. G. Waterhouse garden Miranda. Despite many efforts, none of these plants (now trees) have set seed, either by selfing or crossing, and they will not graft satisfactorily on the usual root stocks.



Tai Lung farm

However, in the wild and cultivated populations in Hong Kong they set seed readily and form large seed pods up to 100mm in diameter, containing up to 24 seeds. They have also set seed in America in mixed population of the species. It would appear that the species may be self sterile. Certainly the Australian clones appear to be so. When asked if there was any trouble grafting *C. crapnelliana* in Hong Kong, we were told they were only grown from seed.

Another point of interest was that the Chinese botanist Professor Zhang Hongda had reduced the species C. gigantocarpa Hu, 1965, and C. latilimba, Hu et Huang, to synonyms of C. crapnelliana. Plants of C. gigantocarpa, seen at the Kunming Botanical Institute, showed substantial variation to the C. crapnelliana as grown in Australia. However, some of the herbarium material exhibited considerable similarity and its diversity could well have included both forms. We were informed that Dr. Zhang had spent some time in the Herbarium examining this material, which no doubt led to his decision that they were one and the same species.

The only point we could not determine was

if C. gigantocarpa, as mature trees, also exhibited the charming, smooth brick-red trunks of C. crapnelliana. There was no indication of this on the 5 foot pot plant at Kunming.

After the visit to the herbarium, we were guided by Mr Lai, the officer concerned with plant seed collections, to a park where a large *C. granthamiana* grew. This was the first one propagated from the original tree by aerial layering. After this the party was taken to two nursery facilities, including the Tai Lung Farm, where beds of seedling *C. granthamiana*; *C.* hongkongensis and *C. crapnelliana* were rowed out and illustrated the variations in leaf shape, colour and growth vigour that can be expected in large wild populations of these species.

#### Kadoorie Gardens

In the afternoon the group drove to the Kadoorie Experimental and Extension Farm and Botanic Gardens, where we were met by the charming and expert supervisor of the Gardens, Mrs Gloria Barretto.

This area was acquired by the Kadoorie brothers, Laurence and Horace, in 1951 to set up an experimental and training farm to assist the refugees in re-establishing farming under Hong Kong conditions. An Agricultural Aid Loan Fund was established with the backing of the Hong Kong Government. The Botanic Gardens were established at Paak Ngau Shek, on very steep hillside slopes running up a valley between two ridges, with the land rising from 1000 feet above sea level to over 3000 feet.

The area included considerable native plants in its protected gullies and in the years since its establishment, closed off from the annual brush fires, many other native plants have regenerated. Only recently a hitherto un-noticed small tree came into bloom. It turned out to be a very rare species, *Tutcheria microcarpa*, a camellia relation. Wild plants of *C. salicifolia* and *C. assimilis*, of some size, were growing in the gardens in beautiful conditions, while on the higher levels on the ridges and hilltops, were populations of *C. kissii* growing amongst the huge boulders.

Specimens and plantings of cultivars of Camellia japonica were growing in protected positions. It was a thrill to identify the old Chinese cultivar 'Linjiao Dahong' (Red Hexagonal) which had been brought to England in a clipper ship about 1804 and named 'Myrtifolia' in Curtis's Botanical Magazine, 1814, and to see it still growing in its land of origin, although now rare in the western world. Due to the late season, very few camellias were in flower, however a red paeony somewhat like 'Blood of China' was probably an old Cantonese variety, 'Wuse Mudan' (Colourful Paeony). We were informed that there were about 15 different cultivars in the garden, all old Chinese varieties from Shanghai and Canton.

Other camellias were seen in gardens around Hong Kong and in the Botanic Gardens. 'Alba Plena' and 'Otome' were in bloom and a white paeony form with one pink line across it with the Chinese name, 'Baishiba Xueshi' or "Scratched Face".

A ferry trip across the harbour to the island of Lantou and a bus ride up the Ngong Ping mountain to the Po Lin Monastery brought us to a courtyard of tubbed camellias with more in a garden on the right side of the main temple.

Again, these were all old Chinese varieties such as 'Xue Mudan' (Snow Paeony), 'Meizuizi' (Purple Rose) and 'Qixinhong' (Seven Hearts Red).\* Unfortunately, most were not in flower and could not be identified.

*Camellia japonica* cultivars grow and bloom quite well in Hong Kong, particularly on slopes, gullies and hills over the 300 metre margin, and there appears to be no reason why some of the modern hybrids could not be introduced.

\* See colour section

#### THE BRIGHTON CONGRESS

The organisers of the I.C.S. Brighton Congress 1985, together with the U.K. Society Members, look forward to welcoming as many as possible of their Camellia friends from the other regions of the Society. Come and 'talk Camellias' and at the same time enjoy the visits that have been planned to many world famous gardens.

Details of the Congress have been circulated to all Members in the latest newsletter but if you wish to refresh your memory, please refer to the foot of page 35 of this journal.

# A letter of appreciation and a post script to the China Tour

Lettre de reconnaissance et post-scriptum à l'excursion en Chine

Carta de agradecimiento y posdata a la gira de la China

Lettera di apprezzamento e un poscritto al viaggio in Cina

May 11, 1984

Mr John Tooby Worcester England, WR6 5JG

Dear Mr Tooby,

Little did I dream when I entered China as part of a worldwide delegation to help plant an International Friendship Camellia garden in Kunming that I would end my trip in an entirely different situation with little thought of flowers on my mind.

Trying to cure myself of a stomach bacteria picked up sometime during the first three weeks on the tour proved useless. So upon reaching Shanghai where the medical facilities are some of the best in China, I was quickly taken from the hotel to a nearby hospital by a Chinese Doctor and nurse who had been called in to help me. Even though critically ill by that time, with other side effects, I remember thinking to myself that I could imagine how Moses must have felt as the Red Sea parted to let him pass. The people everywhere opened a path to let us through, in the hotel, on the street, and in the hospital. I cannot speak highly enough of the hospital and the staff. There was no procrastination in the administering of tests, treatments, and medicine. The nurses, dressed totally covered in white with only their eyes and hands visible, looked like tiny angels floating in and out of the room. The Doctors were very attentive and liked to talk to practise the little English they knew. The only person who was upset with me was the cook who could speak no English and could not understand why I had trouble in eating. He thought I was unhappy with his food and one night, even called the Doctor back to the hospital to see what my problem was. So at 9.30 p.m. he and the Doctor prepared fresh hot stewed apples for me and stood by to watch me obediently eat every last bite. After three days, I was well enough to return to the hotel and on back to Hong Kong. We were disappointed in missing the ten days of our tour. However, the concern and love shown to me by the staff of Huadong hospital will remain a vivid, fond memory long after the sights and sounds of places visited have grown dim.

The total cost including the Doctor's visit (Dr Zhang Bo Sung), hospital, four bottles of drip, many injections, laboratory, medicines, etc. was \$61 US dollars. These services in Texas would have cost at least \$1,000.

Come visit with us, but don't get ill.

Boyd and Lorena McRee Conroe, Texas.

# **Problems of Oriental Nomenclature**

Problèmes de nomenclature orientale

Problemas de la nomenclature oriental

Problemi di nomenclature orientale

#### T.J. SAVIGE

International Nomenclature, Wirlinga, N.S.W.

The International Nomenclature Code accepts names originally published in character form as valid, if they conform to the general requirements for validity.

The Code also states that a transliteration or translation can take the place of the characters for western use and it is in the matter of transliteration that problems arise.

#### **Chinese transliteration**

In transliteration from the Chinese, the matter has been clarified by the Chinese Government nominating the "Pinyin" method as the only officially accepted transliterated system. The only problem has been reaching agreement on how the name would be written. It was decided that, in most cases, it would be written as one word but where the word was too long for ease of pronunciation, it would be split into associated groups. Wherever the word "cha" for camellia was used, this is written separately. No hyphens are to be used and each word (where there is more than one word in the title) is to be written with a capital letter.

Examples of the single word names are:

'Fenyu'; 'Qinhong'; 'Dayunpian' and 'Kunmingchun'.

Examples of names split into associated groups are:

'Luanye Yinhong'; 'Liuye Yinhong'; 'Meihong Guiye' and 'Taohong Zhaoyang'.

Examples of names including 'Cha' = Camellia: 'Hongwan Cha'; 'Yulan Cha'; 'Yunhua Cha' and 'Pingban Dali Cha'.

For greater detail on this method, consult the article "The Origin and Classification of the Garden Varieties of Camellia Reticulata" by Te-Tsun Yu and Bruce Bartholomew in the American Camellia Yearbook 1980, pp. 1-29.

#### **Japanese transliteration**

There are three main transliteration systems that have been used in Japanese. These are the 'Nippon", the "Kunrei" and the "Hepburn". Also, in the approximately 1800 Chinese characters used by the Japanese, most have two accepted pronunciations, the "on" or Chinese and the "kun" or Japanese, and hence two different transliterations.

Most camellia names in Japan are largely given in Chinese characters. This has produced a proliferation of differently spelt and differently written transliterated names for Japanese camellia cultivars, as can be seen from the following examples of the ways in which the name of the variegated form of 'Akashigata' (Lady Clare) has been written.

The characters for this cultivar are  $\pm \mathfrak{AI}$ and its name has been variously written as:

Ōniji, Ō-niji, Oniji, O-niji

–Ohniji, Oh-niji, Oh-Niji

Ooniji, OO-niji, Oo-Niji

Dainiji, Dai-niji, Dai-Niji, Daiko, Dai-ko Tainiji, Tai-niji, Tai-Niji

The translation is "large Rainbow".

The first character  $\star$  is written "Tai" or

"Dai" in the Chinese pronunciation and  $\bar{O}, Oh$ 

or OO in the various Japanese transliteration systems, and means "large" or "great".

The second character  $\Re I$  is written "Ko" in the Chinese pronunciation and "niji" in the Japanese way.

Due to the decision to use the "Hepburn" system, the name written as 'Ōniji' is the preferred one, all the other names are nominated as "different readings". This is done as, according to Japanese authorities, all are equally correct. However, only one way of writing the name can be considered as internationally valid according to the Code.

Lists including Japanese names that have recently been published still contain different ways of writing these names, and this includes lists in the latest issues of the "International Camellia Journal" and "Camellia News". It is obviously highly desirable that one way only be considered valid, and a strong effort on standardisation is recommended, particularly on the spelling used in official publications by the various camellia societies.

Basically all names should be written as one word, with the four exceptions as published in the article "Some Nomenclature Errors" in "Camellia News" and the article "Camellia Nomenclature" in the "International Camellia Journal". (1983)

In the case of these exceptions hyphens are used to connect the separate parts of the name, but only the first part carries a capital letter. There is only one exception to this, and that is when a place name is included in the cultivar name as in the final example below. Some examples follow:

Correct	Other ways of writing the name
Nishiki-gasane	Nishiki Gasane; Nishiki-Gasane
Hoshihime	Hoshi-Hime; Hoshi Hime
Hikarugenji	Hikaru Genji, Hikaru-Genji
Iwai-no-sakazuki	Iwai-No-Sakazuki
Iromokamo	Iro-Mo-Ka-Mo
Hi-otome	Hi-Otome, Hi Otome
Beni-osaraku	Beni-Osaraku, Beni Osaraku
Hi-no-mihata	Hi No Mihata, Hi-No-Mihata
Kanzaki-aka-wabisuke	Kan-Zaki-Aka-Wabisuke
Shirakawa	Shira-Kawa
Takeshimakasuri	Take-Shima-Kasuri
Hanamiguruma Nagoya	Hanami-Guruma-Nagoya

The multiple use of capitals seems largely a western addition, as most Japanese authorities use an initial capital only, although some Japanese authors write the whole name in capitals in their books, as also does "Camellia Nomenclature". Otherwise, for uniformity, it is recommended that all Japanese camellia names be written with the initial capital letter only, the rest being in lower case.

# Thirty years of camellia growing

Trente ans de production de camélias

Treinta años dedicados al cultivo de las camelias

Trent'anni di coltivazione della camelia

#### **DR. ANTONIO SEVESI**

Milan

First of all I apologize for I'm often going to speak about myself in writing this account. I should have liked to have some collaborators, but, at least for the first part of my work, I couldn't have any. Just thirty years ago, I had the luck to have at my disposal a garden in rather bad condition. But there were five big camellia trees. To tell the truth, at that time. I didn't know camellias. In the first months of my life, I had been living near trees, but they were fruit trees and a large vegetable plantation. There were a few flowers: rose, hydrangeas, oleanders and others. My first contact with camellias left me perplexed. They were big trees, but neglected and covered with cochineal. On the other hand I could devote myself to them only for a short time because I was working about 150km. from this garden and so I could take care of it only on Sundays. First of all I tried to know more about camellias and the best environment conditions for their growing. To tell the truth, in the gardens nearby, there were other camellia trees, but all in very bad condition. Advice asked of local gardeners and floriculturists didn't assist me. They were vague and seemed to be wrong. Then I started to contact English, American, Australian and Japanese Camellia-hobbyists and to buy foreign books because in Italy there weren't any really good ones. After having learned something about camellia growing and its best environment I realized that the garden I had at my disposal was situated in a proper place to grow this kind of tree: by the side of Lago Maggiore in a quite sheltered place.

Of course the big worry was how to leave the trees for six days a week. Also the special operations of manuring and disinfecting were difficult to carry out. So I was determined to grow camellias in the best environment and in the most simple way, requiring the minimum of care. At the same time I realized that there were many varieties in the world, a lot of them completely unknown to me. I decided to import one hundred varieties. They were little trees. I transplanted and I took care of their growing with a lot of attention, compatible with my position. The peculiarities of the ground were good or even the best. Intentionally I didn't want to use particular manurings and, keeping in mind that the wild camellia is an undergrowth tree, I tried to create the same environment. I think that the big trees with their roots growing in the ground are dangerous for camellias because they absorb a big quantity of water; on the other hand the garden was situated one hundred metres from the lake and so the atmosphere was constantly damp. This dampness was increased by a brook crossing the garden. Limiting to a minimum the big trees which, in my opinion, were dangerous for camellias, I decided to cover the ground where the camellias were planted, with layers of leaves about twenty cm. thick. I read that some cultivators change these layers of leaves every year because they think that some infesting fungi can grow and become dangerous for camellias. In thirty years of camellia growing, I have never had this trouble. On the contrary I have to state that in the place where I have planted the camellias, there were many big infesting weeds. I extirpated them every year and now, under the layer of leaves, there are just a few, which can be extirpated very easily. This method turns the ground and the air can pass through plentifully, creating the transformation in humus of the above mentioned leaves. The growing of the trees isn't so exceptional as where vegetation is forced, but is very good and the trees are particularly sound. In these thirty years I have cultivated thousands of camellias, but only three or four of them died and for a precise reason, not because of an illness. This happened either by the rejection of the graft or for mistakes in transplantation. The layer of leaves helps to overcome both dry weather periods and very cold ones even in the ground. Then with the decomposition of the leaves, nourishing elements and also useful microelements can grow in the ground. I have never found a deficiency of certain elements which are absolutely necessary for the feeding of the trees.

After thirty years the care I have for my camellias, which are now several hundreds, comes down to the elimination of the weeds once a year. In the same moment in which I stir up the ground to take away the weeds, I wet it plentifully and as the old layer of leaves has become humus, I prepare a new one.

These operations are made on an area of about 4,000 mq. Another operation I do for my big plants is pruning which permits the growth of new leaves. And so having at my disposal only one day a week to care for my camellias, I believe I'm giving them a nice and easy existence and they thank me, once a year, with their beautiful flowers. The garden where I grow my camellias has a particularly good soil and microclimate but also in many other places in Italy you can find a good environment for camellia growing. I must also say that, nowadays, camellias are particularly asked for both as garden plants and as container plants. In this second case the growing is more difficult, but not impossible. Even in cities like Milan, the camellias growing in containers on the balconies have unexpectedly increased, thanks to the camellia show taking place every year in this city.

# Trent'anni di coltivazione di camelie

#### **DR. ANTONIO SEVESI**

Mi scuso innanzitutto se in questo scritto debbo parlare spesso di me stesso.

Avrei molto desiderato avere dei collaboratori ma questi, almeno per la prima parte del mio lavoro, mi sono mancati.

Solo una trentina di anni or sono ho avuto la fortuna di avere a disposizione un giardino in condizioni piuttosto disastrose. Vi erano però, cinque grandi camelie.

Per la verità, a quel tempo, non conoscevo le camelie. Ero vissuto fin dai primi mesi di vita a contatto con piante, ma si trattava di alberi da frutta ed, inoltre, vaste piantagioni di verdura. I fiori erano pochi: rose, ortensie, oleandri ed altri.

Il mio primo contatto con le camelie mi lasciò perplesso. Erano grandi piante coperte, però, di cocciniglia, trascurate. D'altra parte il tempo che io potevo dedicare loro era piuttosto modesto, perchè il mio lavoro si svolgeva a 150km. dal punto in cui era situato questo giardino per cui potevo curarlo solo la domenica.

La mia prima preoccupazione fu di conoscere le camelie per risalire alle condizioni ambientali più adatte per la loro crescita.

Per la verità nei giardini dei dintorni vi erano altre piante di camelia tutte però in condizioni pietose e trascurate. Notizie chieste sul posto a giardinieri e floricultori non mi persuadevano. Erano vaghe e davano l'impressione di essere erronee.

Ho cominciato, quindi, a mettermi in contatto con cameliofili inglesi, americani, australiani e giapponesi ed a rifornirmi di libri, pure essi stranieri in quanto in Italia non ne esistevano di veramente validi.

Acquisita qualche notizia sulla coltivazione delle camelie e l'ambiente più adatto, mi resi conto che la località in cui avevo a disposizione il giardino era particolarmente adatta per coltivare questa pianta. Il giardino era sulle sponde del Lago Maggiore in località piuttosto riparata.

Naturalmente il grande problema rimaneva quello di abbandonare le piante per sei giorni alla settimana. Anche le speciali operazioni di occimazione, disinfezione, erano difficili da realizzare. Mi sono prefisso, quindi, di coltivare le camelie nell'ambiente ilu adatto a loro e nel modo che richiedesse il minimo di cure. Nello stesso tempo mi resi conto che le varietà disponibili nel mondo erano molto numerose e la maggior parte, in Italia, assolutamente sconosciute.

Decisi di importarne un centinaio di varietà. Erano piccole piantine che io misi a dimora con la massima cura e ne seguii la crescita con grande attenzione, compatibilmente con le mie possibilità.

Le caratteristiche del suolo erano buone se non ottime.

Cosù cominciai la coltivazione delle camelie. Non volevo di proposito usare delle concimazioni particolari e tenuto presente che la camelie allo stato selvativo è una pianta da sottobosco ho cercato di creare un ambiente simile.

Le grosse piante con le loro radici che si diffondonoe nel terreno ritengo siano dannose per le camelie in quanto assorbono una notevole quantità d'acqua, d'altra parte essendo il giardino a poche centinaia di metri dal lago faceva si che l'atmosfera fosse costantemente umida. Tale unidità era accresciuta dal fatto che il giardino è attraversato da un ruscello.

Limitando al minimo le grandi piante che, a mio parere, distrubavano le camelie, ho ritenuto coprire il terreno, in cui sono piantate le camelie, con strati di foglie per uno spessore di una ventina di centimetri. Ho letto che tale pacciamatura viene da alcuni coltivatori di camelie cambiata ogni anno, perchè ritengono si formino nella stessa dei funghi infestanti che danneggiano le camelie. In trent'anni di coltivazione non ho riscontrato alcun inconveniente di tal genere. Anzi, devo precisare che dove ho piantato le camelie vi erano molte erbe infestanti di notevoli dimensioni. Pazientemente tolte ogni anno, ora sotto lo strato di pacciamatura se ne formano molto meno ed inoltre si estirpano molto facilmente.

Questa operazione smuove il terreno e l'aria penetra abbodantemente creando un ambiente che facilita la trasformazione in humus delle foglie utilizzate per la pacciamatura.

La crescita delle piante nonn è eccezionale come nelle floriculture dove la vegetazione viene forzata, però è ottima e le piante si presentano particolarmente sane.

Delle migliaia di camelie che ho coltivate in questi trenta anni, ne sono morte tre o quattro e per cause ben defintite, mai per malattia. Si trattava o di rigetto dell'innesto o di errori di trapianto.

La paccimatura permette di superare i periodi di siccità ed i periodi forte gelo anche nel terreno. Inoltre con la decomposizione della pacciamatura stessa, nel terreno si vanno accumulando elementi nutritivi ed anche microelementi utili.

Non ho mai riscontrato deficienze di certi elementi che pure sono indispensabili per la nutrizione delle piante.

Dopo trent'anni le cure ho per le mie camelie, che sono parecchie centinaia, si riducono all'eliminazione delle erbacce una volta all'anno. Nel momento stesso in cui si sommuove il terreno per togliere le erbacce bagno abbondantissimamente e siccome la vecchia pacciamatura si è in parte trasformata in humus, faccio una nuova abbondante pacciamatura.

Tali operazioni vengono fatte su una superficie di circa 4.000 mq.

Altra operazione che faccio sulle grosse piante è la potatura che mi ha permesso di ringiovanirle.

E così pur avendo a disposizione un solo giorno e non sempre alla settimana per curare le mie camelie, ritengo di dar loro un'esistenza piacevole e facile ed esse mi compensano dandomi una volta l'anno degli splendidi fiori.

Certo che il giardino in cui coltivo le camelie gode di un suolo e di un microclima particolarmente favorevole, ma in Italia molte sono le località dove si può trovare un ambiente particolarmente favorevole alla coltivazione delle camelie.

Debbo aggiungere che oggi le camelie sono particolarmente richieste sia come piante da giardino, che come piante in vaso.

In quest'ultimo caso la coltivazione è più difficile, ma non impossibile.

Anche nelle grandi città come Milano, la coltivazione delle camelie in vaso sui balconi ha preso un incremento del tutto imprevisto, grazie anche alla mostra di camelie che ogni anno vi viene organizzata.

# The cultivar names of Camellia japonica in the first half of the 17th century

Noms des cultivars du *Camellia japonica* dans la première moitié du 17ème siècle Los nombres de las variedades cultivadas de *camellia japonica* durante la primera mitad del siglo XVII I nomi delle varietà coltivate di *Camellia japonica* nella prima metà del Seicento

#### **YOSHIAKI ANDOH**

Kobe

*Camellia japonica* found its first great vogue in the initial half of the 17th century which roughly corresponds to the Genna and Kan'ei eras. With the fall of Osaka Castle in early Genna (1615), the entire country came under the rule of the Tokugawa and long years of peace followed, generating a tendency toward indolence and decadence. The nominal Emperor, Go-mizuno'o (1611-1629) tried to drown his political dissatisfaction in the pursuit of arts and culture. Against such a background, a unique culture called Kamigata-bunka was born in the Kyoto-Osaka area. The cultivation of *Camellia japonica* was one of the characteristics of Kamigata-bunka, and that floriculture of 350 years ago reached a surprisingly high standard.

The fashion of camellia cultivation spread all over Japan, from the northeastern Hokuriku region to the southwestern corner of Kyushu, from the Emperor to humble citizen. Court nobles set up full-scale camellia gardens, princes and daimyos (feudal lords) jealously guarded rare varieties, and priests lovingly cultivated camellias, joined by doctors, professional Renga poets, merchants and gardeners all avidly collecting Camellias — a vogue that engulfed the nation.

A versatile priest and writer, Sakuden Anraku'an was a particularly zealous collector, amassing a hundred cultivars in 17 years. He compiled a book titled "Hyaku-chin-shuh (The Hundred Camellias)" in 1630, in which he named and described each cultivar, and recorded in a dilettantish style the reasons for the names, the places of origin and the means of acquisition. Sakuden's camellia garden was situated in the Chikurin'an of the Seiganji temple in Kyoto, but today there is no trace of the garden itself.

Giving beautiful poetic names to his Camellias was a purely personal pleasure for Sakuden, and we can presume that most of the names did not spread beyond his garden limits. Fortunately for identification, however, he also used several widely-accepted names in his reference work. These include: 'Sankoh', 'Kikyoh-tsubaki', 'Sazanka-tsubaki', 'Yawatatsubaki', 'Genna', 'Koshimino', 'Rankei-tsubaki', 'Suminokura-tsubaki', 'Hino(dono)-tsubaki', 'Kannonji-tsubaki', 'Hon'inboh', and '(Hiroshima)-Ohusuiro'.

'Yawata-tsubaki' with very large red in paeony form was also called 'Botan-tsubaki'. 'Suminokura-tsubaki' was said to have been acquired by a wealthy merchant, Yoichi Suminokura of Saga, Kyoto, and also named 'Yoichi-tsubaki'. Sakuden's 'Koma-nishiki' might be the same cultivar as the 'Kohrai-tsubaki' which was given to Enshuh Kobori, a noted garden designer, as a gift from an acquaintance, but there is no conclusive evidence. 'Korai-tsubaki' appears as 'Kaurai' in the "Kadan Kohmoku" compiled in 1681. Again 'Kara-nishiki' in the "Hyakuchin-shuh" is not likely to be similar to the popular one in later days, but is presumed to be Sakuden's private naming.

In his book, Sakuden referred to the thenpopular names of some of his original names. Those occurrences are listed below with the prevalent names in parenthesis.

Oboro-zuki (Owari-tsubaki) Katsura-no-hana (Sumiya-tsubaki) Iroteruyama (Ise-tsubaki, Yamato-sangai) Shirafu-no-taka (Shiro-ise) Irihi-no-kage (Tsutsuji-tsubaki) Hana-no-sakari (Aka-Owari-no-chiritsubaki) Kiku-no-sakazuki (Mokichi-tsubaki) Takukinkoh (Tsuruga-tsubaki) Hahasono (Toh'an-tsubaki) Someya-no-teishu (Tonda-monogurui) Shimo-no-momiji (Shibori-tsubaki) Takigi-no-noh (Ashihara-tsubaki) Asane-no-toko (Akasaka-futae) Wagamama (Bukkohji)

'Aka-Owari-no-chiritsubaki' would be the 'Aka-Owari' of later days. From some of the unfootnoted names in the "Hyaku-chin-shuh", we can surmise their popular names from Sakuden's description. 'Semi-no-hagoromo', which Samanosuke Tokunaga had acquired in Gifu and treasured, would be the popularly called 'Tokunaga'. The uniquely formed 'Shizuya-no-chasen' with Ichijoh' in temple in Nara as its historic place of origin would be the 'Chasen'. 'Asane-no-toko' which, according to Sakuden, was rumoured to be the famous 'Akasaka-futae' of Mino would be the 'Akasaka' of later years, or possibly known 'Mino-tsubaki'.

In addition to the above-listed popular names, "Hyaku-chin-shuh" includes two widely-known cultivar names without specific description: 'Kikutoji' and 'Mokkoh'. 'Kuro-tsubaki' also appears, but this should be considered as a term of classification rather than the name of an individual cultivar. We can find a parallel example in 'Murasaki-tsubaki' which Sakuden used as a taxonomic term in a section titled "Murasaki-tsubaki no Bu (Murasaki-tsubaki Section)".

The vogue was certainly not limited to wealthy persons, but the most enthusiastic amateurs were the court nobles who possessed sufficient garden space for camellia cultivation. Moreover, they could use the privileges of a noble family in acquiring rarer plants, and had better opportunities to expand their collections through exchanges among themselves. And at the top of the camellia-loving nobles was the ex-Emperor Go-mizuno'o-in. There was a flower garden in his Sentohgosho palace and he enjoyed a fine collection of camellias which had been offered to him either as gifts or at his request. Hidetada, the 2nd Shogun of Tokugawa line, was said to have had a penchant for flowers, and his daughter, the Empress Tohfukumon'in to the Emperor Go-mizuno'o also had many camellias planted in her garden. The situation of those days is described in detail in Dr. Yoshiaki Morisue's "The Interest in the Camellias Shown in Kyoto of the Early 17th Century" (1970).

Among the court nobles, a Gon-Dainagon (councillor of state), Sukekatsu Hino was as enthusiastic a camelliophile as Sakuden. 'Hinotsubaki' which was named after him was originally one of the seedlings in Sentoh-Palace,

which ex Emperor Go-vohzei'in had planted. Prince Hachijoh-no-miya Tomohito gave him a graft of 'Chiri-tsubaki', a scattering camellia which the prince had never allowed to be propagated. These episodes show that Sukekatsu was deeply trusted as an accomplished camellia authority. His name was known even in Edo (present-day Tokyo). A Sangi (councillor of state) Jikei Nishi-no-toh'in who was the father-in-law of Sukekatsu's younger sister was also an extraordinary camelliophile. The Udaijin (minister) Nobuhiro Konoe had many camellias planted in his back garden, and the Sesshoh (regent) Kenka Ichijo also had a fine camellia garden which he proudly showed to his guests. Another devotee was Dainagon Hidetsugu Yotsutsuji, who presented Sukekatsu the grafts of 'Kaga-botan' and 'Shirakumo-tsubaki'. There might be some connection between him and the 'Yotsutsuijdono' which is one of the 23 camellia cultivars recorded in Engelberto Kaempfero, D.'s "Amoenitatum Exoticarum" (1712). Sukekatsu presented a big plant of a large-flowered 'Ohtobiiri' to a Chuhnagon (councillor of state) Mitsuhiro Karasuma who wrote a preface to the now destroyed "Hyaku-chin-zu", a picture of one hundred Camellias, vague as it is shows how much he was really devoted to Camellias. Johshin Oda, who was not a court noble but a member of an influential family, had nearly a hundred Camellias planted in his flower garden. A 'Johshin-oh-shiratama' included in a group of Camellias Sukekatsu transplanted collectively in his garden might have some connection with Johshin Oda, though Sukekatsu used a homophonous but different character for "shin" in his record.

The two Camellia fanciers of nobles, Sukekatsu Hino and Jikei Nishi-no-toh'in were both meticulous journalists, and their respective diaries, "Sukekatsu-kyoh-ki" (Sukekatsu kept another diary titled "Ryohgen'in-ki" which was a record of his official life) and "Jikei-kyohki", tell us how they enjoyed their private hours fully preoccupied with camellias. Their diaries vividly describe the refined ways the court nobles treated camellias.

We could even learn something concerning the histories in the widely-spread Camellia vogue. The cultivar names and the years of their first appearance in these two diaries, along with those in Sakuden's "Hyaku-chinshuh" (see List 1), are invaluable data in understanding Camellias of Japan in the first half of the 17th century. Based on Dr. Morisue's study, the cultivar names of camellias in the two diaries are listed in List 2.

The 64 names in the List 2 seem to comprise nearly all the then-popular camellias. The names in circulation which appear only in "Hyaku-chin-shuh" are: 'Shiro-ise', 'Yawatatsubaki', 'Aka-Owari', 'Koshimino', 'Rankeitsubaki', 'Toh'an-tsubaki', 'Tonda-monogurui', 'Shibori-tsubaki', and 'Ashihara-tsubaki'.

A priest of Rokuonji temple, Hohrin (a son of Jun-Daijin, an associate Minister, Harutoyo Kanshuhji) also kept a diary which covers much the same period. Referring to his diary (1636-1645), we could add the following cultivar names to the list.

Oh-suka-tsubaki (1639) Oh-shiratama (1642) Hitoe-boshi (1645) Awamori-tsubaki (1645) Hitoe-jishi (1645) Kimura (1639) Gorohzaemon (1642) Yae-jishi (1645) Sanemori (1645)

'Gorohzaemon' was a camellia cultivar owned by flower enthusiast, Gorohzaemon Minakuchi of Zaimoku-cho, Kyoto, being presumably identical to 'Taki-no-shiraito' by Sakuden.

Sakuden's historical description of each plant provides important clues in tracing the spreading routes of popular cultivars. Some were carried from remote regions to the Capital Kyoto, such as the above-mentioned 'Semino-hagoromo' which Samanosuke Tokunaga obtained in Gifu: 'Katsura-no-hana' or 'Sumiyatsubaki' which Dohkei Sumiya of Kyoto who devoted in quiet taste acquired in Sanuki, Shikoku; 'Kara-nishiki' originally planted in the front garden of Shohsuke Okamoto, a vassal of Ii-Kamon-no-kami, the Lord of Sawayama, Gohshu; 'Kiki-no-sakazuki' which Sakuden received from the Lord of Owari, Yoshinao Tokugawa; 'Koshimino' possessed by Kida Awa-no-kami who was a vassal of Maeda Hizen-no-kami, the Lord of Kaga, Noto and Etchu. 'Kaeru-yamabito' which was treasured by the Lord of Takatsuki, Osaka, Matsudaira Kii-no-kami; 'Seta-no-nagahashi' which was jealously kept by the Lord of Zeze, Johshu, Suganuma Oribe: 'Shimo-no-momiji' which was said to be originally planted in the front garden of the Lord of Bingo and Aki, Asano Tajima-no-kami; 'Asane-no-toko', the alleged 'Akasaka-futae' of Mino which was planted in the garden of the magistrate's office of Okada Ise-no-kami; 'Kannonji-tsubaki' which was said to come out from Kannonji temple in Ashiura, Gohshu; 'Hon'inboh' with Mikawa

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as the alleged place of origin; and 'Oh-usuiro' or 'Hiroshima-oh-usuiro' which was secured by a merchant and ardent plant explorer, Sohzen Susukiya.

Some were found in and around Kvoto. such as 'Tonasegawa' which grew naturally in a garden of Tomohiro, a plant hunter and skilled cultivator in Matsubara street. Kvoto: 'Rankei-tsubaki' which a convert offered to a priest of Daitokuji temple; 'Yawata-tsubaki' originally was owned by a flower-loving monk who lived in Hashimoto at the foot of Otokovama hill: and 'Shiba-onkoh' was found in a person's private residence in the western hill. Yamashiro. Some of the cultivars found in and around Kyoto might have been originally imported from remote regions, but there were a number of cultivars evidently raised in Kyoto. such as 'Genna' which Doh'en Kameya grew from seedlings sown in the early Genna Era; 'Hinodono-tsubaki' which had its origin in the seedlings sown by Go-vohzei'in; and Takano-tsume' which was sown by Sohwa Katsutani in Ava-no-kohij street. Kvoto and first flowered after five vears.

The places of origin of some of the recorded plants are surmised from their very cultivar names, such as the following:

Aka-Owari-no-chiritsubaki	Echizen	Higo-sangai
Hiroshima-oh-usuiro	Hiroshima-shibori	Isahaya
Ise-tsubaki	Ishiyama-dera	Kaga-botan
Kamakura-tsubaki	Mino-tsubaki	Ohmura
Owari-tsubaki	Owari-sangai	Seki-no-tsubaki
Seta-no-nagahashi	Shiro-ise	Shiro-Ohmura
Shiro-Owari	Tsuruga	Usa-tsubaki
Yamato-sangai	Yoshida-Ohmura	

'Tsuge' of 'Tsuge-no-Sanshiroh' and 'Toyota' might also be place names, but further study is necessary. In the case of 'Koma-nishiki', meaning Korean Brocade, the flower appearance of red anemone form having a mass of petaloids mixed with vellow and white turning red at their base seemed to suggest the idea of naming to Sakuden. Thus, "Koma" does not necessarily mean the place of origin. But if we could establish that his 'Koma-nishiki' and the popularly known 'Kohrai-tsubaki' meaning Korean Camellia actually referred to two different cultivars, then the latter might really be an imported species from Korea. List 3 shows the cultivar names grouped according to their respective places of origin.

As noted above, the native places of Camellias grown in Kyoto were widely distributed, but naturally there were several regions which were better suited for their growth and cultivation. Some 19 out of 55 cultivars of known origin, or 35 percent, came from the Hokuriku region, the Nohbi region, and Shiga and Mie of the Kinki region, showing that these areas were the main Camellia suppliers. It also demonstrates that, even in those days. the introduction of Camellia rusticana. that is Snow Camellia strain, had become an important factor in improvement of camellia flower. Six out of 55 cultivars, or 11 percent, came from Kyushu. The figure itself is not large, but it might suggest the possibility of the crossing of Thicket Camellia with its varieties and subspecies, or even with other species. For instance, 'Kikvoh-tsubaki' meaning Chinese Bellflower Camellia and 'Sasangua-tsubaki' seemingly of Camellia vernalis were supposed to be the interspecific hybrids and their existence is best explained by the Kyushu influence.

Though there are less than a dozen cultivars which retain the names used in our days and many of the names left today are mere homonyms, there should be some cases of synonyms under which the cultivars of the first half of the 17th century have survived.

Note: When the Japanese rendering of Chinese characters in a person's name is not certain, the characters are read phonetically, e.g., "Jikei" as in "Jikei-Kyoh-ki".

List 1 其自先遅結:比妥與後)筆氏內百結乎, 1630 The list of camellias in the "Hyakuchinshu" 1630 by Priest Ren-õ Kijjitsuan namely Sakuden Anrakuan

Amewafure	
	商ハフレ 朝 月山(木にのよう)
Asahiyama (sim. Mokko)	朝年1年(人花)
Asane-no-toko (syn. Mino-tsubaki)	
Chiriwata	▲ 埠 ▲ 徫
Chúkin	& 12
Daishi-no-chóshi	第四/拥于 富士/岛很
Fuji-no-takane	省 實
Fukki	- D / 月
Futsuka-no-tsuki	源、 氏
Genji	たわ
Genna	A Res
Gesshoku	江告ノ汇
Goi-no-sato	柳東ノアレ
Gomenare	A. 41 - 1-
Gozan-no-ue	染义而装
Gyofu-no-amamino	株 肚(朱庭梅)
Hahasono (syn. Tóan-tsubaki)	4 , B (8.8 th all the A. R. S. E. )
Hana-no-sakari (syn. Akaowari-no-chiri-tsubaki, Akaowari)	
Hanshoyo	斑缝好
Hanso-ga-kuchi	使到口
Haru-no-iro	备,鱼
Hatsuhanazome	かんぞ
Hinodono-tsubaki (syn. Hino-tsubaki)	日外核转合(日 蚌 仔)
Hi-no-tamagaki	制之王恒
Hitomoto-no-shigure	ーキンリカ
Hon-inbo	本国访
Hoshihitotsu	星ーツ
Ikuyo-no-shimo	张永/指
Irihi-no-kage (syn. Tsusuji-tsubaki)	入日,彭(浙祸格)
Iroteruyama (pert. Ise-tsubaki, syn. Yamatosangai)	老 ····································
Ishiyamadera	るめう
Kaeruyamabito	海山人
Kaesutamazusa	E E A
Kan-ga-haha	(Ru 1 - 4
Kannonji-tsubaki	(花) / · · · · · · · · · · · · · · · · · ·
	使し140° 軍犯/民
Kanya-no-tami Karanishiki	唐佛
Kasumerutsuki	カスメル月
	NO. INT
Katsugi-no-onkata	FLIK (Rivite)
Katsura-no-hana (syn. Sumiya-tsubaki)	)前,面(次も裕)
Kiku-no-sakazuki (syn. Mokichi-tsubaki)	F6 F2 F6
Kikyó-tsubaki	金形紅盤(作終始のよう)
Kinpaikoban (sim. Ise-tsubaki)	· ···································
Kitsune-no-shúgen)	本 枯
Kogarashi	高麗(は(高麗)ないわか)
Komanishiki (dub. Koma-tsubaki, Korai-tsubaki)	
Koshimino	<b>些</b> 美
Koshin-no-tomo	灰中、伏
Koya-no-ike	14/10
Koyasan	高野山
Kumoka	索 敗
Kuroboshi	馬峯
Kyo-no-kure	今日ノ春
Mine-no-shirô-yuki	年,白客

Mukashiotoko		List 2 資酵研究をらいに時餐研究に見われん	-17#122120000
Naniwagata	苜 男 斑 蚬 闫		
Nanzezare (sim. Kikutoji)	· 不 随(到用n+5)	The camellias in the first half of sev	enteenth century
Nishiki-no-kirehashi		occurred in the diaries of "Suke	entenkuoki" of
Nishki-no-kirenasni Nóisho	1第1日行1-	occurred in the diaries of Suke.	Katsukyoki ol
	紀衣裳	Lord Sukekatsu Hino and "Jikeikyo	oki" of Lord Jikei
Oborozuki	<b>此</b> 月	Nishinotoin respectiv	
Osomomiji	運江東		ciy.
Ousuiro (syn. Hiroshima-óusuiro)	天海也(友易大自色)		
Rakuchúrakugai	语中活外	Akamakuri S 1632	あまくり
Rankei-tsubaki	感法硷	Bukkóji S 1632 (H 1630)	はたち
Roshukuomin	建石肥胶	Chasen S 1637 (syn. in dub. Shizuya-no-chasen H 1630)	歩 ( BN1~赤登+ )
Sangoshi	ELD	Chiri-tsubaki S 1628	** 64-
Sankó	- t	Echizen S 1637	<u>+ 4</u>
San-no-shina	E 120	Enseki S 1632	円石
Sasangua-tsubaki	いたれた	Enzantogyó S 1632	le une on
Semi-no-hagoromo (syn. Tokunaga)	蛘/月衣(隐永)	Genna S 1637 (H 1630)	ñ. 10
Sese-no-shiranami	1월~1自浪 液田 佳藤	Hachinomiya-tsubaki S 1632	八百時
Seta-no-nagahashi	·探切 /表示。	Higosangai S 1637	肥悦王潜
Shibaonkó	司马温兴	Hino-tsubaki J 1628 (syn. Hinodono-tsubaki H 1630)	0 94 +5-(0934.26b-)
Shizumuariake	没人有吗	Hiroshima-óusuiro S 1632 (syn. Ousuiro H 1630)	<b>な馬大海と(大海と)</b>
Shika-no-koe	度-1 声 战径・李肇(答筌×同じゅ)	Hiroshimashibori \$ 1637	太禹 版
Shizuya-no-chasen (syn. in dub. Chasen)	殿屋,発陸(曇崖・同じの)	Honeya S 1632	旁 1
Shimo-no-momiji (syn. Shibori-tsubaki)	·····································	Hon-inbó-tsubaki J 1621 (H 1630)	本目访路
Shinobu-no-koromo	思,天 台片,唐(白行琴) 6秒/动	Hyakuman S 1632	<b>б</b> <i>Х</i>
Shirafu-no-taka (syn. Shiroise)	白丹、鹰(白竹琴)	Isahaya J 1632	 址
Shirotae-no-sode	6 49 / 20	Ise-tsubaki-kawarimono S 1632	
Sonata-no-mine	* 5 / 2	Joshin-óshiratama S 1637	伊勢略追い/Lの 常住大白王
Someya-no-teishu (syn. Tomitamonogurui)	SRISE (SUIDIE)	Kagabotan S 1637	加省社具
Suminokura-tsubaki (syn. Yoichi-tsubaki)	直介(キー 1名)	Kakezaemon S (syn. in dub. Kageyusaemon) 1632	为今左【新门(艺力杯山石は打门。)
Surusumi (pert. Kuro-tsubaki)	伯 王(王祐nds) 仓,化 屛,經	Kamakura-tsubaki S 1637	<b>结. 9: 1</b> 5
Taka-no-tsume	AL IN	Kannonji-tsubaki J 1628 (H 1630)	韵音子石
Takigi-no-nó (syn. Ashihara-tsubaki)	No. , 35	Keivutobi-iri S 1637	唐施恶入
Taki-no-shiraito		Kikutoji S 1632 (H 1630)	15 (F)
Takukinkó (syn. Tsuruga-tsubaki)	医结正(致变病)	Kumagai-tsubaki J 1632	熱谷椿
Tókaba	逸/自永 (毘飾に(敦賀社) (肥ん-島)	Machi S 1637	• <b>7</b>
Tonasegawa	≥ 11.24L <sup>m</sup>	Matsumushi S 1632	71 V.
Tsumekósai	A 16 #3	Mino-tsubaki S 1628 (syn. Akasakafutae, Akasaka	美遗福(东欧二生、乐砚)
Udonge	使是充	Mokichi S 1632 (H 1630)	发 5
Umehóshi	杨伟	Mokkó-tsubaki S 1633 (H 1630)	* - = = = = = = = = = = = = = = = = = =
Wada-no-hara	in 10 / 4	Nishiki-Isubaki S 1637	73 14
	和旧·华. 我力信(从光音)	Nukijiro-chiri-tsubaki S 1628	黄白胶料
Wagamama (syn. Bukkóji) Yakumotatsu	八雲之		上 村
rakumotatsu Yawata-tsubaki (syn. Botan-tsubaki)	八路路(任丹陆)	Omura S 1637 Oshidori-tsubaki S 1632	驾为格
	官门局	Oshiro-tsubaki J 1621	大白椿
Yoinimonsasu Yoru-no-nishiki	R 14	Ushiro-Isubaki J 1021	
	A. M. M.		
Yusen-no-makura	~ -		

17世紀新 ギニキがない ないせん The local origin of the camellias in the first half of seventeenth century

m 13	油 龙							\$¢.
Region	Prefecture			<u>Va</u> rieta	l Name			Number
京、法 Capital	章 約 Kyoto	Bukkóji Hachinomiya-tsubał Joshin-oshiratama Keiyutobi-iri Mokko Sangoshi Taki-no-shiraitoi Yoichi-tsubaki		Chiri-tsubaki Hino-tsubaki Kangahaha Kikutoji Mukashiotoko Shibaonko Tonasegawa	散野心 野心 新婚 一 開 男 (1) (1) 男 (1) (1) (1) (1) (1) (1) (1) (1) (1) (1)	Genna Honeya Kasumerutsuki Kitsune-no-shugen Rankei-tsubaki Taka-no-tsume Yawata-tsubaki	元,而是 加之月 孤八現百 在 月 九 代 橋 橋 橋	22
近载 Kinki	ن <sup>ی</sup> د مح Shiga ت کے Miye	Ishiyamadera Seta-no-nagahashi Ise-tsubaki-kawarim	鞭癌病	Kannonji-tsuba 1553:50/150	ki 创乐于楼_	Karanishiki	信/串	4
	不成 Nara 大院 Osaka	Chasen Kaeruyamabito	<b>荣 笙</b> 场山人	Yamatosangai	天和三階			2
家关条(油)		Kaeruyamabito	лрил					1
Mino, Owari & Tokai	من من Aichi مح ف	Hon-inbo Owari-tsubaki	不因 叻 尾銀碼	Kiku-no-sakazu		Owarisangai	<b>先装</b> 418	5
	Gifu	Asane-no-toko Tokunaga	朝麻/东 儒 永	Mino-tsubaki	美濃祐-	Seki-no-tsubaki	图•碚:	4
北尼 Hokuriku	≀ես գ Fukui	Echizen	越前	Tsuruga	致貧			2
	™ "I Ishikawa	Kagabotan	加賀壯丹	Koshimino	腰袋	Shiro-koshimino*	白腰装	3
ポモアウ Setouchi	ため Hiroshima <sup>劣 川</sup>	Hiroshima-ousuiro		Hiroshimashibo	ori 左馬絞	Shimo-no-momiji	霜/仁荣	3
	Kagawa	Sumiya-tsubaki	商庄稼	_		_		1
	Nagasaki	Isahaya	辣旦	Omura	天 村	Shirokimura	白木付	4
≁ н¦ Kyushu	姓。 Kumamoto C.ta - ホケ	Yoshidaomura Higosangai Usa-tsubaki	諌 早 吉田大村 肥殘三階 窄 佐 硌					1
ie nice	御奈川		鎌倉栋					1
and Others	Kanagawa	Kamakura-tsubaki	30.16118-					1
∕s st Total		「ん 10多 済 、 (a 「4を 芝 、 」 1)					<u> </u>	55

治腰蹇」# 路幕」 \* 国色日径として 石川・ 偽入 ·
\*put in Ishikawa Pref. looking upon as a related variety to 'Koshimino'.

人格哈
几次工作
六分死入
三九柄
いたれた
侧口体
insing
白川海西
白川岳入禄
ú K
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したび
白腰黃
口儿肤

Shishi-tsubaki S 1637 Sumiya-tsubaki S 1632 (H 1630) Tokunaga S 1637 (syn. Semi-no-hagoromo H 1630) Toyota S 1637 Tsurga S 1637 (H 1630) Tsurga S 1637 (H 1630) Usa-tsubaki S 1632 (H 1630) Usa-tsubaki S 1632 Yamaij S 1632 Yamaiga I S 1632 Yamaiga I S 1632 Yamaiga I S 1632 Yamaiga I S 1632 Samaiga I S 1632 Jamaiga I S 1632 Yamaiga I S 1632 Samaiga I S 1632

· > 秭 人格 \_\_\_\_\_ 秋(郑小州衣) 回 Ŷ お へき 四月日 si. 大和工階 F-格(肖倉格) おぼちだ

# **Camellias in Northern Ireland**

Les camélias en Irlande du Nord	
Camelias en Irlanda del Norte	
Le camelie nell'Irlanda Settentrionale	

#### **JOHN MATTHEWS**

Ballymena, N. Ireland

The growing of camellias in Northern Ireland is dominated by one all-important fact, that for very many years almost the only camellias grown out-of-doors in the British Isles were *japonicas*. In only a few favoured gardens and localities in our province have any of these been a reasonable success, and people have been very slow to learn of the revolution that was set in motion when the williamsii group was launched.

The expansion of the growing of camellias in the National Trust garden at Rowallane in County Down is a perfect example of this. In the walled garden there are several old japonicas which remain virtually flowerless. I admit that they are against a north wall in accordance with the advice commonly given for conditions in Southern England. About fifteen years ago bushes of the williamsii varieties 'J. C. Williams', 'Donation' and the reticulata hybrid 'Inspiration' were planted in full sun in the open woodland of this garden' they are now fine plants which flower profusely and could vie with anything I have seen in Southern England. After this success about five years ago more williamsiis and the reticulata hybrid 'Leonard Messell' were planted in open parts of the walled garden and they are rapidly making free-flowering plants.

I must not give the impression that *japonicas* are out of the question. Gardens in the warmer and more sheltered south-eastern areas can do quite well with them, but full sun and very good shelter have to be the invariable rules. I can think in particular of one huge bush of what I take to be 'Apollo' at the National Trust garden at Mount Stewart; it flowers most freely and would be an asset in any planting. On the

other hand all smaller plants that I have noticed in that garden are either 'Donation' or 'J. C. Williams'. One gardening friend who lives near Belfast has done well with *japonicas*. He has a very sheltered garden and does not hesitate to plant on south walls; he also gives first class cultivation in the form of heavy mulching and attention to watering.

My own garden is further north in County Antrim and about twenty years of experience there has made me lean much more heavily towards the williamsiis than the *japonicas*. Some years ago in full sun and backed to the north by a high thorn hedge, I tried 'Jupiter', 'Elegans', 'Lady Clare' and 'Hatsu-zakura', but even though I waited what seemed a reasonable number of vears the result was not encouraging: today williamsiis flower well in the same area. On the other hand against a west wall I have freeflowering plants of 'Adolphe Audusson' and the old 'Lady de Saumarez', but then I think they are naturally floriferous varieties. Backed to the north and east by some dense old shrub roses 'Leonard Messel' puts up quite a good show, but apart from that it is williamsiis all the way. I have large bushes of 'J. C. Williams', 'Donation' and 'Inspiration' which I cannot fault; indeed I think of them as the 'holy three'. They are so good that even in my small garden with many other types of plants to be catered for I have planted another bush of each. Other new williamsiis such as 'Wilber Foss', 'Water Lily', 'Rose Parade' and 'Rose Court' are under trial but I must reserve judgement on these.

Here I would like to make a serious appeal to what I will call generally 'the trade'. Would it not be possible to exercise more thought and discretion as to the types and varieties of camellias that are sent to garden centres in the north? Time and again I am approached by someone who says: "I have a camellia which hasn't flowered for five years. What should I do?" When I enquire further, or go to see it, it turns out to be an unfavourably sited japonica bought from a garden centre proprietor who as yet knows little about camellias and just takes what is sent to him. In the same place a williamsii would have been flowering freely and spreading its fame in the eves of all who saw it. Sadly but firmly I have to say "Dig it up and plant a williamsii in its place". But what a waste of time! Very recently I visited the garden of a personal friend and found that through the same channel he had got hold of plants of 'Lady Clare' and 'Donckelarii'. I have never seen good bushes of these varieties any where in Northern Ireland.

I am satisfied that more camellias are being planted steadily here, and that the banner is being carried forward by the williamsii hybrids. About fifteen years ago a very well-known Ulster professional gardener came to see my collection which were flowering quite freely in comparative youth. He had been told about them but obviously did not believe what he had heard. He looked at them somewhat sceptically and said "Can you do that three seasons out of four?" I replied "No, four out of four." He remained silent and continued to look sceptical, but today he has camellias in his garden and sings their praises. The last time I saw him he was wearing a camellia in his button-hole!

### Camellia japonica in South Korea

Le Camellia japonica en Corée du Sud	
 Camellia japonica en Corea del Sur	
La Camellia japonica nella Corea del Sud	

JOHN T GALLAGHER

Dorset, U.K.

Filled with enthusiasm about the wonderful wild camellias I had just seen in Japan, my Korean friends dismissed my ravings in a patronising, but polite manner. "There are thousands of wild camellias in Korea. The west coast is littered with hundreds of islets and islands — many populated by *Camellia japonica*, at the northern extremity of its range."

Returning for a longer visit in the Fall, I determined to check this out for myself. National pride is one thing, but proper observation of the plants growing in the wild leaves no room for dispute! My host, Mr Ferris Miller, formerly an American, is now a naturalized Korean and has lived in Korea for over thirty years. Bitten by the plant bug some 15 years ago, he acquired 350 acres on the west coast, together with a small island of 12 acres and began to create the Chollipo Arboretum (figure 1). Four and a half hours drive south of the capital city of Seoul, Chollipo is a dream. It is astonishing to look out over the Yellow Sea, watching some of the most beautiful sunsets in the world, a mere 80 miles across from the coast of the Peoples Republic of China.

Travelling extensively through South Korea, Mr Miller has gathered an outstanding collection of indigenous plants. In addition, through his world contacts, vast numbers of foreign plants have been imported for trial in the Arboretum. Chollipo has an interesting climate. Unlike England, winter and summer are clearly defined and after the last frost, winter has gone for good. High sunlight ripens the wood and the flowering performance of many a genus is exceptionally good.

The Arboretum is at  $36^{\circ}46'$  north latitude and  $126^{\circ}08'$  east longitude. Most of the plants listed zone 8 according to the U.S.D.A. hardiness scale do well. The village itself relies totally on fishing and farming, having a population of around six hundred. The tides in this area are some of the highest in the world, with a maximum spread of over 10 metres (30ft.). The island named 'Blue Rock Thrush Island' at low tide becomes a peninsula. The Koreans collect oysters from the rocks when the tide is out — a never ending crop, the collecting seemingly finely balanced between the oysters being washed in with the fresh tide.

Outstanding amongst all the plants so far, magnolias grow to perfection. The collection of magnolias is really extensive and even at this early stage in the life of an arboretum, many of the plants are flowering well. Even more interesting is the fact that they seed freely,

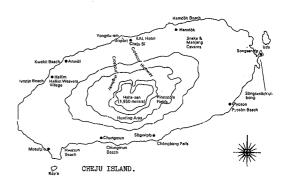
51



and I was fascinated to see *Magnolia cylindrica* covered with long red cylindrical seed pods.

Although camellias are well represented in the Arboretum, as yet they can hardly be called a feature. Modern American *japonica* cultivars and Japanese *japonicas* are represented and it will be interesting to observe their performance as they mature.

Returning to Seoul, I met up with Kim un Cho,\* President of The Korean Horticultural Society, who had volunteered to accompany me to Cheju Island (figure 2), a large island about 150km south of the mainland of Korea itself. The flight from Seoul was fascinating, good visibility enabling us to see the hundreds of islands off the mainland coast. Landing at Cheju City on the north coast of the island, Korea's highest mountain, Mt. Halla, 1,950 metres revealed herself for the first and last time during our trip! This 'Island of the Gods' has only developed into a thriving tourist ground during the last twenty odd years. The black lava soil reminded me of south Japan and contrasted with the reddish brown earth of the mainland. Our Korean friends met us at the luxury K.A.L. Hotel, a great favourite of \* See colour section



Japanese honeymooners! Driving around Mt. Halla to the south side of the island, we stayed at the home of another Korean friend and his family and slept soundly to the gentle sound of the sea lapping against the shore. An early breakfast of rice, soup and of course Kimchi, without which Koreans can hardly live! Red peppers, garlic, cabbage and white radish, with raw seafood such as crab or oysters, all stored in thick earthenware jars out on the flat roof tops or even buried in the back yard. Certainly an acquired taste, accompanying each meal however large or small.

It was a very dull humid morning when we set off for Sogwipo. With so many huge exotic trees – previously only known to me as shrubs, it was a surprise to realise that the street was lined with dozens of great camellia trees. Single stemmed, over 25ft high, having trunks of up to two feet in diameter. Obviously, flowering and seeding well, we collected seed and cuttings from various trees, the altitude being 450m. Driving on to Nam Won, the earliest single flowered red, at an altitude of 170m vielded seed and cuttings. The Koreans were very anxious that I should collect everything and we were rushed off to a Mr Yang's house at Shin Hyori to collect the 'largest flowered red single — very old tree!'. I expressed surprise that the variation of colour of C. japonica is so rare in the wild. Not to be outdone, we were rushed off to the playground at Shinye School. It was Sports Day and amid crowds of Korean children, running races and demonstrating their gymnastic skills, we caused a major diversion by climbing a single weak looking plant reputed to have white flowers, which was in the middle of the playground. My main fear was that it would collapse under our weight, to our eternal disgrace!

Next, on to a four and a half acre farm near Nam Won. The family received us cordially. Their great grandmother 103 years ago started to collect camellia seed as she went to fetch water from the well some distance away. She planted the seed and at first she had many failures. Poor germination and children damaged the seedlings. Her persistence was rewarded as now the farm is surrounded by 600 camellias, 17 metres high, which serve as an excellent wind break and as a source of oil for hair tonics, also easing a rough throat after excessive smoking! A wide variation of leaf forms is very obvious and I hope to return some day to investigate these camellias in more detail.

Trying to fit as much as possible into a limited time, we hired a taxi to take us into the countryside to see camellias completely in the wild. At an altitude of 250m. at Sun Hul Cho Chom, great thickets of *Camellia japonica*<sup>+</sup> in full exposure were seeding as freely as the mosquitoes bit! It was an astonishing experience and after collecting cuttings and seed, we finally returned to Cheju City.

My interest in plants is not confined solely to camellias and the rest of my trip was devoted to an attempt to climb Mt. Halla to collect. The weather really was against us and although I did get some very interesting material, you can be so easily stranded on Cheju when the weather closes in. We were fortunate to make our way back to Seoul just in time. Plant material and seed were duly despatched to Dr. Clifford Parks at Chapel Hill, N.C. for his collection of genetic material and seedlings are growing out of doors here in Dorset quite happily.

See colour section

# Report on the camellia scene in New Zealand

 Rapport sue les camélias en Nouvelle-Zélande
 Informe sobre el cultivo de camelias en Nueva Zelanda
 Relazione sulla situazione della camelia in Nuova Zelanda

#### JIM HANSEN

It is pleasing to be able to report that the New Zealand Camellia Society is in good heart and very active at the present time. Membership has continued to grow steadily over the years with new branches appearing, so that we now have nineteen branches extending from the Bay of Islands in the North to the Canterbury branch, centred in Christchurch, in the South. Membership extends even further with members as far south as Dunedin. The total membership is approaching 2700 individuals including well over 200 overseas members in a dozen different countries.

In September, 1982, the New Zealand Camellia Society passed an important milestone in its history when it celebrated its 25th Anniversary with a Silver Jubilee Convention and Show held in Rotorua. A record number of just on 400 members registered for this Convention, and the Show was supported by some 90 members who staged nearly 4000 blooms for the occasion. A Tour Party of American members and a number of Australian members added interest and enjoyment to the gathering. The Show was packed with visitors during the two days it was open to the public and a number of new members joined up on the spot.

The one opportunity for all members in New Zealand to gather together each year is at the National Convention and Show, traditionally held for three days between late August and mid September. The Convention is held in a different centre each year with the local branch acting as host and arranging the programme and activities, with some guidance and assistance from the New Zealand Council of the Society. This means that each Convention has its own character and attraction.

Apart from the National Convention and Show, each branch organises its own programme for its members, with members of other branches always most welcome to join in. It is interesting to compare the various and varied programmes dreamed up by the branches.

Of recent years there seems to be a growing feeling of nostalgia for things past, which appears to be worldwide. In New Zealand interest has arisen in locating and naming the many old camellia trees scattered about the country, and the Society has been asked for assistance on more than one occasion to help with the reestablishing of old gardens with the varieties of camellias in existence in the nineteenth

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century. Of particular note is the restoration of Mansion House, Sir George Grey's former residence on Kawau Island, by the Hauraki Gulf Maritime Park Board. Sir George Grey served two terms as Governor of New Zealand. The residence was opened to the public in 1979, and since then the Department of Lands and Survey has been working on recreating the gardens and grounds as nearly as possible as they existed in Sir George Grey's period on Kawau Island – 1862-1888. The Department has enlisted the help of the Society in obtaining plants of the cultivars they know, or suspect, were planted in the gardens at that time. Fortunately, a number of the required varieties have been found and plants grafted for Kawau Island.

The Society also received a similar request from a lady in Hawkes Bay who purchased an old cottage, and, after a protracted wrangle with the local authorities, moved it to a new site and restored it. Her intention is to have it open for school children to inspect to give them some idea of the type of dwelling our pioneer families lived in. She also wishes to establish a suitable garden with plants of that era and is receiving assistance from members of our Hawkes Bay branch, of which she is now a member.

A number of local authorities have asked for help in selecting suitable varieties for public plantings. An excellent example of this type of project is the Hammond Camellia Garden in Hamilton, an extremely well designed public garden which has been developed and is being maintained by the Hamilton City Council Recreation and Welfare Department with the advice and help of our Waikato branch. Other branches have also been able to assist in the development and planning of public plantings throughout New Zealand. All of this activity helps spread the interest in camellias.

A number of our branches hold shows or displays each year in their local areas, some in halls, but an increasing number in shopping malls, and these attract large numbers of people to these malls, making the shows very popular with the shop keepers concerned. It is also a very effective way to increase the popularity of camellias with the public and has the added advantage of being a good method of attracting new members.

One blessing we can be very thankful for in New Zealand is that we have, in most areas of the country, extremely good growing conditions for camellias. We do not suffer the extreme range of climatic conditions that some countries are faced with, and generally speaking, camellias thrive out in the open garden with the minimum of attention. We also seem to have less to worry about serious diseases. Undoubtedly the excellent growing conditions, together with the active promotion by the Society and its members, has, to a large degree, been responsible for the large number of good camellias that have been planted throughout New Zealand.

The New Zealand Camellia Register confirms that a number of our members have been active in producing new cultivars. The list of new registrations in the latest New Zealand Camellia Bulletin (April-June, 1984) brings the number of registered camellias in New Zealand up to 218. Many of these camellias have become well known and popular overseas, with cultivars like 'Elsie Jury', 'Anticipation', 'Craig Clark' and 'Jean Clere' winning awards in America. I feel sure that several of the newer registrations will also become popular overseas – such cultivars as 'Mona Jury', 'Jubilation', 'Margaret Hilford' and 'Glowing Embers' to name but a few. Perhaps a feature of New Zealand registrations is the tendency in many cases to produce cultivars that are more inclined to be floriferous. compact garden plants with smaller blooms rather than the large "show" bloom. There are also many plants ideally suited for the small garden, the rockery and pots; such varieties as 'Baby Bear', 'Nicky Crisp', 'Prudence', 'Snippet' and so on are suitable for this purpose.

Yes, the New Zealand Camellia Society is thriving at present but this does not mean that we should be content to relax and drift along, but rather we should be looking to the future. Our Patron, Colonel Tom Durrant, addressed the meeting of the Council of the New Zealand Camellia Society in November, 1982, the same vear as our Silver Jubilee celebrations, and the title of his address "Towards the Future". In Colonel Durrant's words, "there is a very obvious need to begin to plan for the future", and he emphasised the constant need to replace annual wastage, making a particular effort to recruit younger members and to involve them in the organisation and running of the Society. Colonel Durrant also touched on public relations, branch co-operation with secondary schools with horticultural classes and with other horticultural societies, and the importance of making sure that our new members are made welcome. A timely address indeed by our Patron.

From our present strength, it is now over to the Executive, the New Zealand Council members, the branches and all members to give serious thought to the future of our Society and to ensure that interest in the New Zealand Camellia Society and in the Genus Camellia does not wane in the future.

# The Camellia and the Sword

(Another version of "the Chrysanthemum and the Sword" written by R. Benedict)

Le camélia et l'épée	
La camelia y la espada	
La camelia e la spada	

#### **PROFESSOR KAORU HAGIYA**

Niigata University, ICS Director for Asian Region

Last March I had an opportunity to attend the ICS Congress at Sacramento, California, and at that time I was given a very valuable experience of being appointed as one of the judges for the Camellia Contest. What I learned there is how different is the appreciation people have as to beauty of flowers although everybody loves flowers alike. If I could speak English fluently and be bold enough to express my opinion to camellia enthusiasts from various countries, I would have spoken out at the Congress in this way:

"Ladies and gentlemen. It was my great honour to have been appointed as one of the judges for the Contest. To be frank with you all, however, I was embarrassed and felt some resistance to acting as a judge in the contest. Here in Sacramento, flowers only were for the contest. Such a contest looked strange for a Japanese, who usually judges a whole beauty of flowers with leaves and twigs in a vase or a whole tree in a pot.

In Japan, beauty contests are often held as an event just as in America. In such a contest, ladies with bathing suits on a stage will be compared with each other, not only their appearance but bust-wise, hip-wise, total proportion-wise, etc. As its originator, the American way of such contests may be just the same. Nevertheless, why don't Americans appreciate twigs with foliage, but flowers only? In Japanese contests, a cut twig with flowers and foliage is a necessary form for entry in the contest.

Taking this occasion, I would like further to ask the reason why such size classifications of flowers as extra large, large, medium, small, and extra small are needed. This is another point of my question. For a beauty contest, do you take a class system by height and weight? Since I had believed that only fighting games like boxing and wrestling would take the class system, I was really surprised with the flower size class contest. Even the Japanese traditional fighting games as judo and Sumo wrestling do not take the class system. A small player can often fling away a big and heavy player with technique, and we consider it as a real technique, which is called "Waza" in Japanese. In this sense, large flowers are not always regarded more beautiful than small ones because the latter also have their own beauty. In case of a cut twig, the well-balanced sizes of the flowers, the leaves, and the twig itself are an important point of appreciation for beauty."

Now I cannot help sweating on my brow, supposing I would have made such a big speech as above. Quite a few people would have applauded my opinion, but all others would have objected, saying "You are wrong. We cannot discuss camellias and human beings on the same level. We love beauty of flowers themselves. Leaves and twigs are out of the question. It's a flower contest. To judge them as fair as possible, we take a size class system, and no question about them". To these counter punches, I must become dumb.

Let's close a hypothetical discussion, and start analyzing the difference of appreciation for beauty of flowers from the Japanese view point so that camellias will be loved more worldwide.

I should say that a very basic difference is as follows:

Japanese consider flowers as one of natural symbols while western people take them for a part of decoration. A good example is observed in the different manner of flower arrangement between the Japanese and others. So-called western flower arrangement or design is regarded as one of room decorations or accessories by means of flower layout or design. For such a purpose, flowers as materials should be splendid and gorgeous. On the other hand, Japanese flower arrangement (Ikebana) may be called a technique of bringing nature into a room in a form of twigs. In other words, by means of symbolizing a scene of nature with flowers and leaves of a twig, people can show their own ideal world. In this sense, Sen-no Rikyu, a great tea ceremony leader, said that flowers should be put in a vase as seen in nature.

As you note from the above, there may exist a vital difference in appreciation of flowers. ! would like to state my view further in the points as follows:

#### 1. Flowers and Leaves

Western people seem to disregard leaves and twigs because their main object is decorative flowers, while Japanese regard that twigs, leaves, and flowers are indivisable for appreciation purpose. For Japanese, even though the flowers may be good, if the shape of the leaves or a formation of the twig is poor and not wellbalanced, the cultivar will not be worthy of appreciation. Japanese do not display camellia flowers only. Western people often make a corsage in shaping camellia flowers, but Japanese do not have such a custom. This fact must be further supporting information that verifies the difference in appreciation of beauty.

#### 2. Flower Form – Single and Double

Camellia among many cultivated plants has the most variety of flower forms, and the preference for forms is different between Japanese and western people. You will notice it from the comparison in numbers of camellias classified by the flower forms as follows:

Ratio of flower forms of Japanese and western cul
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Flower form	Japanese cultivars %	Western cultivars %
Single	42.5	1.4
Semi-double	18.6 (13.3)	8.1
Anemone	5.1	9.7
Loose Paeony	10.7	18.2
Full Paeony	4.2	7.4
Rose Form Double	11.9 (17.2)	36.6
Formal Double	7.0	18.6
Total	100.0	100.0

*Note:* Figures in parenthesis indicate each ratio in case classified by the Japanese Standard

Source: the "Nihon-no-tsubaki Hinshu Ichiran" (the List of Japanese Camellia Cultivars) published by the "Garden Life" 1976, and randomly sampled 1,000 cultivars from the "Camellia Nomenclature" 1976

As shown above, in Japan, most cultivars are of the single form, and more petalled forms as "rose form double", "loose paeony form",

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and "full paeony form" are very few. On the contrary, in Europe and the United States single forms are scarce, and more petalled ones are popular. This means that Japanese prefer single forms but others like showy ones. This tendency is also found in the classification of flower forms. European and American classify so: "simple - single", "semi-double", etc. – because they may not take fewer petalled forms for beauty. Japanese, however, classify very precisely. "Single" will be further divided into cylindrical form", "cup form", "globular form", "Higo form", etc. in accordance with the curve or the opening degree of the petals. For "Semidouble", an "incurved form", a "magnolia form", etc. will be included. Some forms, which are defined as "semi-double" in other countries. are called a "rose form double" in Japan. This indicates that Japanese positively find beauty in the single forms. I believe that Ikebana (Japanese flower arrangement) has affected Japanese preference for a single form. As I mentioned previously. Ikebana is a technique to take nature into a room in the form of twigs. For this reason, such twigs should mainly be taken from wild species. In the case of camellia, its flower must be in a single form. Japanese, who see a lot of wild camellias here and there. have a fixed image of wild camellia, and may have a sense of incompatibility on showy rose form double through breeding, and a far different one from the wild camellia although its beauty can be appreciated. On an occasion of the American Camellia Show, a Japanese passed by a gorgeous row of camellias commenting, "Beautiful indeed. Just like artificial flowers". This episode represents Japanese behaviour towards flowers. The same sentiment will be found in cherry blossoms as well as azaleas, which also exist as wild species throughout the country. However, for such carnations, roses, etc. as imported flowers, Japanese may not show special preference for any form because these were introduced in rose form double as cultivars from the beginning.

#### 3. Flower Size

Large size flowers also grow in Japan such as Akashigata and Mikenjaku, but in general they are not highly regarded. It seems that Japanese have an established idea of what the size of a wild species camellia should be, and an extremely large flower, one bigger than the established idea might be regarded as a monstrous one. It might be for this reason that large petal reticulata has not become popular in Japan. As pointed out in the book "Japanese with Intention to Scale Down" (Chijimi-shikono Nihonjin) written by a Korean author, Mr Lee O-Young, most Japanese cherish smaller flowers such as 'Wabisuke' characterized by their cuteness and loveliness. On the other hand, in western countries, the gorgeousness of flowers must be counted first, and in this sense larger flowers are welcome. Especially in American Camellia Contests, only flowers compete with each other, which seems to promote the tendency for larger and more petalled eye-catching flowers.

After the Camellia Show at Sacramento, thanks to the kind arrangement of Sacramento Camellia Society, our members were guided to some members' gardens, where I was impressed by their technique of cultivation and efforts of care. In one of the gardens, the owner lifted some flowers upward, using laundry clips, for our better observation because the stems were not endurable enough to hold firmly the heavy flowers. I really appreciated his hospitality, but I must say that such a weak point might stem from breeding for larger and more petalled flower of cultivated species.

Above all, it is very interesting and astonishing to know that the camellia of Japanese origin has created entirely different images in western people and Japanese respectively for some two hundred years because of having been planted in the different culture and soil.

(Translated by Mr Yoji Sato)

# Luteoflora A New Section of Camellia

Luteoflora Une nouvelle variété de camélias	
Luteoflora Una neuva categoría de camelias	
Luteoflora Una nuova varietà di camelia	
<u>Luteoflora</u> Una nuova varieta di camelia	

#### CHANG HUNGTA Sunvatsen University

ZENG FANAN Quizhou Sylviculture Institute

Published in "Acta Scientiarum Naturalium Universitatis Sunyatsensi", 1982; No. 3, pp. 72-73

Description translated from the botanical latin by Thomas J. Savige. Notes translated from the Chinese characters by Richard Kwan, University of Queensland.

This species Camellia was found and described following the publication of "A Taxonomy of the Genus Camellia" by Chang Hungta and has been fitted into the hierarchy as set out therein by adding a new section *Luteoflora* to the sub-genus Camellia and is another yellow flowered Camellia species.

Luteoflora Chang; Sect. nov.

Subgenera: Camellia.

Flowers deep yellow, small, axillary or terminal, sessile; bracts and sepals indistinguishable, somewhat coriaceous, semi-persistent; petals, bases connected; stamens, two rows with outer row joined at the base; ovary, 3 locular; style almost free, short; seed, single in each locule.

Type: Camellia luteoflora Y. K. Li. Camellia luteoflora, Y. K. Li, nov. Subgenera: Camellia, Section: Luteoflora, Chang

This species forms a shrub or small tree from 1.2 to 5.5 metres tall; the bark is grevish to dark grey with smooth branches, dense and somewhat white. The leaves are coriaceous, oblong to elliptic, 6.5-12 cm long by 1.7-5.4 cm wide, apex acuminate or abruptly acute; base, broadly cuneate; upper midrib, impressed; lateral veins, 6-8 on both sides, upper side impressed, margins rolled back, widely spaced serrations with irregular teeth at 2.5-8 mm pitch; petioles 6-12 mm long, greyish-pubescent; flowers solitary in leaf axils or terminals, sessile, deep vellow, 1-1.8 mm in diameter; bracts and sepals indistinguishable, 8-10, subcoriaceous, semiorbicular to widely elliptic, 4-10 mm long, sparsely pubescent, semi-persistent; petals, 7-8, yellow, 11-15 mm long, bases joined for 4. mm, broadly elliptic to obovate-elliptic, apex rounded, glabrous or ciliate; stamens in two rows, 13 mm long, outer row united to form a tube for 8 mm; anthers glabrous, yellow, attached by the base; ovary ovoid, white, pubescent, 3 locular; seed capsule globose to ovoid, 1 cm in diameter; seed single in each chamber.

The type specimen collected at Quizhou in 1981 by F. A. Zeng and F. Z. Yang is No. 81056 in the Herbarium, Quizhou Sylviculture Institute.

The small, yellow Camellia luteoflora is close sectionally to Paracamellia. However the flowers of C. luteoflora are yellow, the petals are joined at the base and the flower does not fully expand, the stamens form a small, short column. The species shares the common yellow of its flowers with C. chrysantha differing in all other characteristics. With C. chrysantha the flower petals are not joined at the base and have long lasting substance and good texture; its flowers are relatively large and open fully; both anthers and filaments are longer and it is close to the Section Thea.

Apart from these there is also *C. xanthochroma* Feng et Xie, which also has a yellow petalled flower and its short anthers and filaments seem to indicate that it also is close to Section Paracamellia.

C. luteoflora is native of the North-West of Quizhou in altitudes of 900-1000 metres where it is found scattered in forests on cliffs and gullies.

# The United Kingdom Regional I.C.S. Conference, 1984

La conférence régionale de l'I.C.S. au Royaume-Uni, 1984	
 Conferencia Regional de la I.C.S. en el Reino Unido en 1984	_
 La conferenza regionale del Regno Unito dell'I.C.S., 1984	

#### MARGARET PERKINS • See colour section

Devon, England

The magic of Cornwall is best epitomised in its early display of Spring flowers — magnolias, camellias, rhododendrons, daffodils, primroses and the wonderful soft air.

This year's setting for the Camellia Conference April 5th-9th was the Great Western Hotel, Newquay where nearly 100 members gathered from such differing parts of the world as Australia, the Channel Islands, Germany, Holland and Ireland. The weather was kind to us but unhappily the previous week there had been a severe frost and we were to see considerable damage particularly to magnolias, on part of the tour. Nevertheless the hotel was beautifully decorated by Mrs Mary Chapman with startling pyramids of camellias in the foyer and each one of us had a very pretty arrangement in our bedroom.

Dinner was served at 7.30 and the evening passed quickly in an atmosphere of great cordiality.

Our first excursion the following morning was to Trehane, the home of David & Joan Trehane, who are held with great esteem and affection in the society and known to a great many members. We travelled in two buses specially hired for the group and as we approached through the narrow lanes, we passed fields of golden daffodils at their best.

Naturally, since our last visit we were to note a big increase in growth and an even

better display of camellias. Trees play an important part in this garden and the whole layout is packed with interest. There were many coloured and wild primroses underplanting the camellias.

We noticed, round the lawn fronting the house, the largest group of camellias containing 'Glenn's Orbit' from Trewithen, 'Mary Larcom', 'Mary Jobson', 'Caerhays', 'Cornish Snow', 'Charles Colbert' and 'Spring Festival' whose pyramidal growth is so distinctive. Further on we noted a group of *Camellia reticulatas* flowering profusely including 'Lasca Beauty' and 'Dr. Clifford Parks' and then an outstanding bush of camellia hybrid 'Mary Phoebe Taylor'\* rivalled by another 'Dreamboat' and one of the best whites — a japonica 'Lily Pons'.

The ground cover here was that invasive but attractive weed *Montia sibirica* previously called *Claytonia* and further on the dog's tooth violet or *Erythronium*, was displaying its distinctive leaves though the flowers were not quite out. We passed a very good bush of Cam. 'Freedom Bell' and the closely knit rectangular hedge of Cam. 'Tiptoe' looked very promising.

We then came to a group of plants on trial and were told the relative merits of 'Gwenneth Morey', 'Brushfields Yellow' and hybrid 'Jury's Yellow'. Unfortunately, there was evidence of honey fungus in this part as so often in old gardens.



John Tooby and group members inspecting camellias at Trehane

The next plant of note was an enormous *Pieris japonica* whose scent filled the air and whose presence dominated the whole area. There were *Abies koreana* and lovely plants such as *Raphiolepis delacourii, Edgworthia papyrifera, Clianthus* and *Berberidopsis* to mention but a few.

Established in one corner was a remarkable patch of Ramondas which seed themselves naturally and both *Leucojum vernum* 'Wagneri' and 'Carpaticum' multiply themselves in great numbers as also does that little gem of a bulb *Scilla hyacinthus*. The wall nearby was planted with C. 'Royalty' and 'Clifford Parks' and the north aspect 'Elegant Beauty' and 'Francie L'.

This garden has a very extensive collection of camellias and a very wide range of rare plants making it indeed a garden for all seasons and a wonderful place to come to meet the Spring.

Our hosts most kindly provided us with refreshment at the end of our visit and after farewells we were taken to Truro for the 70th Annual Spring Flower Show in the City Hall, run by the Cornwall Garden Society.

This is an extremely comprehensive show with competitive classes for ornamental trees and shrubs, magnolias, camellias, rhododendrons, narcissi, herbaceous, rhizomatous and bulbous plants, pot plants and flower arrangements.

There were scientific demonstrations and trade stands, also a display of rare plants advertising the NCCPG and the hall was packed to capacity with a wonderful gathering of professional and amateur gardeners whose enthusiasm seemed to permeate the whole building. Needless to say there was a great deal of focus on camellias and they are displayed here to a very high standard indeed. No show in the U.K. has as many classes for sprays ten in all and they were truly a remarkable and unforgettable sight. We in England like to see them displayed as they grow rather than as individual blooms.

There were not as many rhododendrons on show as usual but this, I think, was partly due to frost and also the previous dry summer when many failed to set flower buds. However, we saw magnificent blooms from Trengwainton and the more southern gardens and many interesting and less familiar shrubs. The nurseries attached to Tresco and Trewidden had most interesting stands and the crowds surrounding Trehane's stand were impenetrable!

The Abbiss Memorial Trophy was won by Nigel Holman, a past president of the Cornwall Garden Society, with a superb vase of C. 'Salutation'.

His home Chyverton was our next venue. The sun was shining, and we received the usual warm welcome. This garden has been developed since 1925. At our point of assembly was the finest and most remarkable *Stachyurus* I had ever seen in full flower and on the opposite side a *Magnolia grandiflora* whose leaves were unscathed by wind and looking extremely handsome.

We saw in the walled garden to the north of the house C. 'Arch of Triumph' a past gift from the Society looking very happy — but unfortunately not the magnolias which had been victims of the frost. We noted a good 'Spencer's Pink' and 'Mildred Veitch'. The *Myrtus luma* with their decorative trunks are superb in this garden and seed themselves freely and *Laurelia serrata* from Chile thrives. It has such a deliciously scented leaf.

We also saw the very beautiful *Dacrydium franklinii* remembered from previous visits and I would wish it were planted more often. Near here we also saw the unique silver tree-fern



Dacrydium franklinii at Chyverton



The President presenting C. 'Garden Glory' to the British Prime Minister

from New Zealand (Cyathea *dealbata*). There were a few rhododendrons beginning to show colour and the lake as usual caught the eyes of the party with its masses of *Lysichitum americanum*. The whole glade is a most beautiful setting for a garden and extensive new planting amongst the more mature trees assures its future. As we came to the main drive we found many more older camellias flowering under a canopy of trees and crossing the bridge, the house and its setting can really be appreciated. Our President thanked Mr. & Mrs. Holman and presented them with camellia plant 'Dr. Clifford Parks' as a memento of our visit.

That evening some of us returned to Truro to the Chapter House for a most interesting and instructive lecture by Miss Margaret Scott of the Efford Experimental Horticultural Institute and a well known member of the Society.

The first part of the lecture was on the recent I.C.S. tour of Japan illustrated by a succession of magnificent slides showing life and conditions in Japan, their cultivation of camellias and bonsai camellias which were most fascinating.

This was followed by a lucid account of the methods being pursued to improve the technique of growing camellias from cuttings commercially at the Efford Experimental Horticultural Station and Miss Scott told how the cuttings are taken in July, induced to branch in the first season and bud in the second to provide a marketable plant full of bloom. She had us all listening intently and many of us will be following her methods in the coming season.

After the lecture a raffle was organised by the Cornwall Garden Society and some members won plants as prizes. Finally the new President of the Royal Horticultural Society, Mr Robin Herbert, gave a vote of thanks.

Saturday April 7th dawned bright and sunny and considerably warmer. We reached Trereife about 10.30. This is a classic early Georgian Manor House with a distant view of Mount's Bay. It is approached by a long drive and is the home of Mrs. Le Grice, an expert on daffodils. She welcomed us warmly and we were told to wander where we liked. The upper part of the garden had a very large, old fashioned, striped camellia and a new planting of modern ones including 'Julia Hamiter' which caused a sensation amongst members. It was perfection and as it was unlabelled just had to be identified. Below the house and under a canopy of trees growing in woodland conditions were 100 different varieties all displaying excellent quality blooms, 'Yours Truly', 'Elizabeth Arden', 'Mariorie Magnificent', one with the label Tres. 77, 'Woodville Red', 'Francie L', 'R. L. Wheeler', 'Tom Knudsen', 'Grand Jury', 'Countess of Orkney', to name but a few, while in a charming dell nearby were planted a host of azaleas earlier than any we had seen before and above. a very good M.  $\times$  'Soulangeana'. The entire garden was so well cared for and it was a great pleasure for us to see it under such excellent conditions.

Dr. Smart finally presented a camellia plant 'Annie Wylam' to Mrs. Le Grice as our parting gift.

Next door was Trewidden where we were greeted on arrival by Major and Mrs. Simon Bolitho and in two parties we toured the garden. Michael Snelgrove who cares for it and the nursery led one - there was so much to see and so much information to assimilate that it is difficult to report accurately, I would need many more visits. The rate of growth must be phenomenal. Camellias seed themselves freely even reticulatas. We saw flowering hedges of saluenensis in flower and clipped each November. There were beautiful bushes of Rhododendron neriiflorum, 'Crossbill', grande, 'Cornubia', etc. Also fine magnolias well advanced in their flowering season, and a wonderful group of Dicksonias planted in an open tin mine 100-150 years ago and reputed to be the best examples in the country. We made the acquaintance of many new and rare plants including Mangletia insignis and Telopea oreades and a wonderful Michelia doltsopa and several Camellia taliensis which produces its flowers in the Autumn, Laurus canariensis was a very large tree as also were the examples of the Chilean nut and Drimys winteri with its red stems and loaded with flower heads. There were large *Eucryphias* of every kind and *C. tsaii* in flower.

An enormous Magnolia oboyata dominated one section. It had been planted in 1897 and first flowered in 1911. Later in the year it must be most dramatic. We saw Podocarpus salignus. Magnolia nitida and a good example of C. 'Captain Rawes' in bud. Myrtus lechleriana was beginning to flower and Leonotis leonurus winters outside against the house. Unfortunately, we were pressed for time and our full tour was not completed leaving us all determined to visit again some other time. We bade farewell to Trewidden and its owners with arms full of plants from the excellent nursery and proceeded to Queens Hotel, Penzance where our Prime Minister was also taking lunch in another room. They provided an excellent meal and firstclass service. The Committee decided to present a C. 'Garden Glory' to Mrs. Thatcher which was most graciously accepted and we all joined the waiting throng to catch a glimpse of the great lady. It was a delightful and unexpected interlude

Thereafter in bright sunshine to Trebah, the home of Major and Mrs. Hibbert near Mawnan Smith. As we arrived there were gasps of wonderment at the spectacular view from the main lawn in front of the house. We looked over a wooded glade and the colourful tops of *Rhododendron arboreum* to a dazzling blue estuary.

This was a famous garden with a past glory and speedily being restored by the present owners. They have cleared and planted some 500 trees and shrubs and redeveloped the garden round the house with sub-tropical planting Phoenix canariensis, Metrosideros, etc. A large spread of Dimorphotheca 'Tresco Purple' caught the eye with its vivid colour. As we proceeded down the steep glade we passed tree ferns, gunnera, etc. beside a lively stream with ferns, echiums, and calthas. There is a superb Eucalyptus gunnii over 115 feet high and the largest in England and some splendid examples of Rhododendron 'Trebah Gem', a Laurelia and Podocarpus totara – Magnolias. Drimys winteri, Cornus kousa and many Acers, and, as you approach the beach is an enormous planting of very healthy looking hydrangeas all perfectly deadheaded. In summer it must appear as a blue pool penetrating the 25 acres of garden.

There were, of course, new plantings of camellias as well as many old ones rescued from neglect.

Our hosts kindly gave us tea in a garden



Presentation to Mr. Petherick by Mrs E. (Bunty) Kitson

room decorated by fascinating collage pictures executed locally, and, so ended after the usual presentation, a most memorable and inspiring visit.

Next day after an hour's drive we came to the South Coast near St. Austell to Mr. Petherick's garden where camellias and primroses literally 'sweep down to the sea'. It was most encouraging to see here how well camellias grow in spite of coastal winds. These kindly and remarkable brothers have a very fine collection of quite large camellias and many of them are very uncommon.

Particularly noticeable were 'Dear Jenny', 'Warrior', 'White Nun', 'Nobilissima' and 'Campsis Alba'. There was an excellent sales area and members spent some time inspecting and purchasing plants. We were very kindly offered sherry and saffron cake and biscuits which we partook of in the dining room or on the sun-drenched terrace and the presentation concluded a very interesting and enjoyable visit.

Only a short drive brought us to the Britannia Inn at the gates of Tregrehan. Here we had an excellent cold lunch and walked up the drive to Miss Carlyon's home. We were met by her and Mrs. Lamb and Major Walter Magor who came over from Lamellen to help the gardeners conduct parties round the estate. The visit to the conservatory where C. 'Kings Ransom' was looking beautiful was most interesting, and on to the enormous area of camellias specially grown for the landscaping market. Much has been written recently on this garden. See R.H.S. yearbook 1983/4 p.25 and John Gallagher's article Carlyon Camellias, R.H.S. yearbook 79/80 p.20. We all know and appreciate how much Miss Carlyon has done for camellias and anything I can say is superfluous.

In contrast our next visit to Mrs. Martin's garden at Coleraine, Menacuddle Hill, St.

Austell. This was relatively small and had been developed from a field in the last 30 years. Well designed and beautifully planted one saw modern camellias, many of Les Jury's hybrids and some of the older kinds such as 'Blackburniana' flowering at their best. Rhododendrons particularly the Loderi Group looked most promising, and well chosen trees provided dappled shade. Everyone much enjoyed strolling in this colourful 5-acre garden and we were all most appreciative of the relays of tea and biscuits provided by our hostess and helpers. I think most of us felt that here was a splendid example of what we might all aim for without employing full time gardeners. Mrs. Martin was congratulated on her achievement and presented with the very nice red camellia 'Bright Buoy' which it was said should have been 'Bright Girl'!

Back at the hotel that night we had our traditional banquet. The tables were artistically decorated with bowls of mixed camellias and at the high table with our President sat those who had hosted us in the preceding days. A toast to H.M. the Queen and a few speeches including outline plans for next year's Conference at Brighton concluded an excellent meal thanks to the efficiency of the hotel staff. Members adjourned to the bar and so concluded a pleasurable evening.

The visit to Mount Edgcumbe was a revelation - Most of us had been there before - Its situation needs no description from me but it

was with amazement I noted the vast improvement and changes since last time. The magnificent setting for the National Collection of Camellias could not be bettered and the Council, Society and the gardeners are to be congratulated. It is an inspired idea and deserves the backing of all of us.

After a picnic lunch the tour began to break up and members bound for London caught the 3 o'clock train from Plymouth and those that remained proceeded to Antony where once again we received the warmest of welcomes from Sir John Carew Pole and his family. The groups here were smaller and all had personal attention. It was so interesting to hear his anecdotes on the countryside and his comments on his camellias. The walk along the top path to the camellia grove looking down on the many splendid blooms and seeing across to the magnificent flowers of the magnolias was most memorable - On through the woodland and back across the splendid lawns we noticed the Tulip trees, the enormous cork oak, mimosas in flower and the summer house cut into the vew tree.

Finally, there was the most delicious tea organised by the Women's Institute who must win prizes for their varieties of sandwiches and cakes and so ended another delightful tour – and our grateful thanks go to the organisers Mrs. Freeman and Mr. Trehane for all their hard work beforehand.

# Yellow Camellia japonica

Le Camellia japonica jaune			
<i>Camellia japonica</i> amarilla	.*		
La Camellia japonica gialla		_	

#### WILLIAM W. DONNAN Pasadena, California

For the last fifty years Nuccio's Camellia and Azalea Nursery, in Altadena, California, has been planting camellia seeds and making interspecific cross pollination of camellia species in an attempt to develop a yellow- or a bluecoloured camellia cultivar. It is estimated that they have propagated over 500,000 chance camellia seedlings and brought them to bloom stage; and that another 2,500 specific crosses have been made and brought to bloom in their efforts to develop new and unusual camellia cultivars.

This spring, in the first week of April, 1984 they have succeeded in producing a yellow formal double, C. japonica. This is not a C. chrysantha species, several of which have bloomed this year in California. Nor is it a cross using C. chrysantha pollen. The seed was harvested in 1981 from a specific "lost label" cross. After the seedling had grown, two scions were cut and grafted on 2-gallon understock. This spring one of the grafted plants has produced two buds. The bloom is a 3 to  $3\frac{1}{2}$ inch yellow formal double with swirlled petal conformation. The bloom is a true formal double with no stamens apparent in either bloom. The plant has the characteristic bushy, vigorous, *C. japonica* growth and the foliage also indicates a *C. japonica* origin.

Nuccio's Nursery has a policy of never naming a new camellia cultivar until extensive tests, over a period of three or four years, has proved it to be worthy of propagation and release. However, since this cultivar was brought to blooming stage in 1984, the 50th year of the advent of Nuccio's Nursery, and since it is indeed a yellow cultivar, the new camellia has been named 'Nuccio's Golden Anniversary'.

# The Melbourne camellia scene

 Les camélias à Melbourne	
El cultivo de camelias en Melbourne	
La situazione della camelia a Melbourne	

#### **RAY GARLING**

For the past decade, camellias have enjoyed an unprecedented popularity in Melbourne. This is undoubtedly due to the many magnificent new releases that have become available, combined with the fact that the general public is now more aware that camellias are, indeed, hardy plants. The state of Victoria experiences very high temperatures and severe droughts from time to time resulting in water restrictions. It is the experience of most growers that under such harsh conditions, camellias continue to survive and in the case of 1983, produce blooms of a very high standard.

Melbourne is very well served by specialist camellia nurseries whether it be for good garden varieties for the general home gardener or that special new release which is always sought after by the connoisseur. "Camellia Lodge" in particular, is not only Australia's biggest camellia nursery but also carries a greater number of varieties than any other nursery. During the flowering season the display tank at this nursery is a mini show in itself.

Although, as mentioned earlier, droughts can be experienced, under normal conditions Melbourne's climate is conducive to good camellia culture. Soil conditions vary from sandy to heavy loams to which local growers obviously adapt extremely well. Our water supply is of excellent quality unlike the harsh mineral-laden supplies of several other Australian states.

The Victorian Branch of the Australian Camellia Research Society is an extremely active organisation which presents camellias to the general public at every opportunity. Whilst several competitive shows are conducted each year, the trend of recent times has been to conduct competitive shows and displays in shopping centres. This has proven to be a most popular exercise which reaches a very large audience. In one instance the show is conducted in conjunction with a fashion parade. The models carry baskets of flowers which at the conclusion of each parade are distributed amongst the audience.

We have found that fashion and camellias go very well together.

Over a number of years statistics have shown that if an exhibitor had grown approximately forty camellias to perfection, he could have won every section of every show. Included in that list would be:

Single: 'Fiona Capp' (white seedling of 'The Czar') and 'Spencer's Pink'.

Semi-Double: 'Grand Prix', 'Fashionata', 'Jeanette Cousins', 'Drama Girl', 'Guilio Nuccio' and 'Mrs D. W. Davis' (the last two varieties can also produce flowers of other forms).

Informal Double: 'Elegans Supreme', 'Champagne' and 'Splendor' and 'Margaret Davis'.

Incomplete Double: 'Easter Morn', 'Mrs D. W. Davis', 'Guilio Nuccio' and 'Grand Slam'. Formal Double: 'Desire' – probably the most popular and successful camellia to become available in many, many years. Others are 'Nuccio's Gem' and 'C. M. Hovey'.

Boutonniers: 'Ave Maria', 'Pink Perfection', 'Miniata'.

Miniature: Possible the most open of all' sections with the list of names widespread. The most successful come from the following - 'Pearl's Pet', 'Bon Bon', 'Sugar Babe', 'Fircone', 'Little Red Riding Hood' and 'Grace Albritton'.

#### Hybrids with other than Reticulata parent-

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age: No one variety has dominated any section such as 'Water Lily' has this one, a truly magnificent flower that is represented from the very beginning to the end of the flowering season. Other successful varieties are 'Debbie', 'Anticipation', 'Julia Hamiter' and 'Elsie Jury'. **Reticulata and Reticulata Hybrids:** 'Dr Clifford Parks', 'Howard Asper', 'Purple Gown' and 'Lasca Beauty'. Australian raised cultivars — 'Wandin Sebire', 'Overture'\* 'Samantha', 'Elizabeth Astles'\* and many others from the Sebire garden have proved to be very popular with the judges and have left their mark in this section.

The species are proving very popular, particularly rosaeflora, lutchuensis and pitardii — not only do the flowers have appeal but the small foliage is most attractive. Lutchuensis and rosaeflora in particular are in great demand when grafted on tall standard understock.

Sasanquas have a definite place in many gardens whether they are espaliered on otherwise drab fences, used in rockeries, or because of their sun tolerance, grown in more exposed positions. 'Bert Jones', 'Yuletide', 'Mine-No-Yuki', 'Bonanza', 'Hiryu' and 'Peerless' seem to be among the most popular. Much discussion is centered on whether the very large *reticulata* hybrids are retaining the popularity that they have enjoyed over the last ten or so years. Many feel that there are far too many that are so very similar being registered. How often do we read the description of a variety "Large red semi-double"? It is felt that because of this similarity these large blooms are perhaps losing their popularity. However, there are many magnificent large blooms such as 'Howard Asper', 'Dr Clifford Parks' and many of the Sebire family, just to mention a few that are really lovely flowers and will forever have great appeal.

Mr Edgar Sebire, one of Australia's greatest camellia authorities has a property just outside Melbourne. Edgar is particularly well known internationally for the many fine blooms that he has registered over a number of years. He has set himself a very high standard and any new seedling has to be exceptionally good and unlike anything else before it is considered for registration.

To illustrate his point, Edgar has planted out in a paddock very many *reticulata* hybrid seedlings. It would be fair to say that every single plant produces blooms of a very high

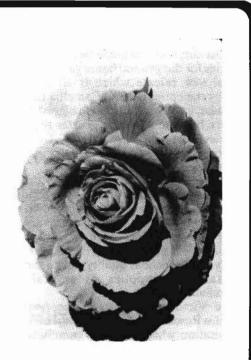
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standard, yet they remain unnamed simply because Edgar does not consider them sufficiently distinct.

Edgar is now concentrating his efforts on crossing the smaller non-*reticulata* hybrids and species and is having much success. Some of his more recent registrations in this direction have been 'Pink Cameo',\* 'Sprite',\* 'Adorable',\* 'Fairy Bouquet' (all seedlings of *pitardii* var. *pitardii*) and 'Snowdrop'. (*pitardii* var. *pitardii* × *fraterna* seedling). These smaller compact varieties are proving very popular with the public. Edgar is obtaining some spectacular results with seedlings of 'Snowdrop' in particular and we are sure to hear more of this in the near future.

A point of interest is that if Edgar wants a specific cross he does it by hand, but if just concentrating on growing seed he lets the bees do the work. It is his opinion you can't beat nature and to this end he has installed bee hives amongst his camellias. You don't know the exact cross but the results are excellent.

On present indications camellias look set to hold their popularity for a long time. Whether it be large flowers or small, *japonicas* or *reticulata* hybrids, most average Melbourne home owners grow some camellias in their gardens.

It is difficult to forecast exactly what direction camellias will take. Certainly the introduction of *chrysantha* has caused great excitement. Quite a number of people now grow *chrysantha* but as of this time, no one in Australia has flowered it. Let's hope we soon do and that the time is not far off when the "elusive yellow" and its varying shades will be with us.

The 'Girls' updated	ţ.	
Les "Girls" au goût du jour		
Las 'Girls' modernizadas		
L'aggiornamento delle 'Girls'		

SIR PETER SMITHERS \* see colour section

Morcote, Switzerland

It is five years since I praised the performance of 'Show Girl' in this garden, expressed indifference towards 'Flower Girl' and the greatest disappointment in the failure of 'Dream Girl' to bloom. All three are hybrids of the beautiful and fragrant *C. sasanqua* 'Narumigata' with *C. reticulata* cultivars. In the case of 'Show Girl' and 'Flower Girl' the *reticulata* parent is 'Cornelian' and in the case of 'Dream Girl' it is 'Buddha'.

'Show Girl' has continued to give great satisfaction, regularly providing a display of large broad petalled strong pink flowers from early December to March. In 1975 it became apparent that the original plant, established in 1971, would ultimately be overgrown by Magnolias, so a second plant was put out in a situation in which the blooms are somewhat sheltered. This is not because of any tenderness of petal — they are remarkably weatherproof — but nevertheless they prefer not to suffer winter gales and snow more than is necessary. This plant now stands about 20' high and astonishes all who see it at Christmas and the New Year and into early March.

'Flower Girl' has a bloom almost identical

with 'Show Girl', but the growth and performance of the plant is poor. I must qualify this by saying that of course this is not a trial — I have but one plant — there may therefore be some circumstance not to its liking. However, in this garden this hybrid has failed to satisfy me once in the thirteen years since planting.

It is 'Dream Girl'\* which, after all, has provided the sensation. The plant grew vigorously for ten years, with a strong central leader, into a small evergreen tree, without ever showing a single bloom. I ceased to dream about the day when it might bloom, and the statutory warning was read to it "- flowers next year or else ...."! In 1981 it burst into bloom all over the tree. The flowers are slightly larger than those of 'Show Girl', of a good rather flat form, and a colour which is markedly redder than the strong pink of its rival which has flowered regularly every year since planting. At thirteen years from planting this tree now stands at 26' and is a magnificent spectacle in the garden. It is in a fully exposed position, flowers about a month later than 'Flower Girl', and continues for about a month later. This season its duration was from mid-December to mid-March. Because

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of the steep slope of my garden it is impossible to obtain a picture of the whole tree, but perhaps I can best describe its effect by saying that it provides a great pillar of brilliant colour at a time when no other of our 250 Camellia varieties except 'Show Girl' can even stand in the same class of magnificence. The dream, long abandoned, has been worth waiting for. Perhaps in a drier climate than this, 'Dream Girl' might consent to bloom in less than a decade? It would be helpful if other growers of these magnificent winter-flowering trees would give us the benefit of their experience.

# And Some Further Up-Dating on These 'Girls'

Y nueva información actualizada sobre estas 'Girls' E qualche ulteriore aggiornamento su queste 'Girls'	-	Et autre modernisation sur ces "Girls"	
E qualche ulteriore aggiornamento su queste 'Girls'		Y nueva información actualizada sobre estas 'Girls'	
	· .	E qualche ulteriore aggiornamento su queste 'Girls'	

#### JOHN ALPEN

Bayview Garden Village, Bayview, N.S.W. Australia

The *I.C.S. Journal* No 9 (1977) pp 40 & 41, included Sir Peter Smithers' first contribution on the *C. reticulata*  $\times$  *C. sasanqua* 'Narumi-Gata' hybrids. His plant of 'Show Girl', then six and a half years old and eleven feet (3.5m) high, "... opened in late October, a splendid clear bright pink flower of good size. On New Year's Day it was a column of blossom, and there were still some flowers left in March."

His further comment in early 1978: "The great profusion of flower buds, which open in succession, enables this plant to maintain a spectacular display for more than three months" was accompanied by a photograph showing the profuse bud setting. This led me as I.C.S. editor at the time, to seek the opinions of growers around the world on this group of hybrids which was opening up a whole new set of horizons. Reference to *I.C.S. Journal* of 1978 pp 56 to 58, will show the range of opinion and comment which came from Trevor Lennard (New Zealand), Bill Donnan and another United States grower, and Annette Riddle, Ray Garling and Bob Savell, all of Australia.

Sir Peter Smithers' enthusiastic observations of the performance of 'Show Girl' in Switzerland were unabated when, in 1979, (*Journal No 11*) he told us what had happened during the severe winter of 1978/79. "When I left here on 7 November last, 'Show Girl' had opened her first flowers, and four months later she was still in bloom ... making nearly five months in all. But we have had the worst winter for many years with several snowfalls and a temperature of  $11^{\circ}F(-12^{\circ}C)$ . Yet 'Show Girl' displays not the slightest damage and has put up a good show of bloom whenever there was a fine spell."

My own experience of "The Girls" has been

much more recent with a plant of 'Show Girl' only acquired last year. Still in a tub, it was one of the first batch of camellias which came with us when we moved, last March, some couple of miles or so across Sydney's northern peninsula from Newport Beach on the ocean front to this retirement village on the Pittwater side. Along with 'Weroona' and two other sasanguas, 'Show Girl' immediately set about showing our neighbouring villagers that the instant plants which had appeared around Villa No. 128 were not only glossy green but that they were capable of producing a handsome profusion of colour. Villa 128 was soon dubbed "Camellia Cottage" and it was certainly 'Show Girl' which convinced us that the camellias would be happy here.

I felt obliged to tell Sir Peter and to ask him if he had any further observations to pass on to the I.C.S. editor. I am delighted that he responded with the article printed above, just as we should all be delighted at his news about 'Dream Girl'.

BILL DONNAN. Pasadena. California. in the notes he sent us in 1978 referred to the massive hybridizing programme then being undertaken in California by the redoubtable team of Meyer Piet and his two mates. Lee Gaeta and the late Mel Gum. These enthusiasts. inevitably have produced a host of fine hybrids but they have been most discerning and to date have only been satisfied enough to name seven of them. The first, 'Arcadia' which also has sasangua ('Bonanza') in its bloodlines, has already been honoured with the prestigious Frank L. Storment Award in 1983. The other six passed the exacting requirements of Meyer and Lee and the interesting point in the context of this up-dating is that one of them registered as 'U.S.C.-Fight On' is of 'Flower Girl' parentage. The other component in the cross is *C. reticulata* 'Crimson Robe'. This takes me back to Bill Donnan's final comment in his 1978 notes: "All of which leads me to say that "The Girls" and particularly 'Flower Girl', seem destined to become the key to an improvement within hybrid species here in Southern California".

TREVOR LENNARD of Te Puke, N.Z., gave 1978 readers a run-down on his own hybridizing work. After some twenty five years of breeding Auratum lilies his experience had proved that the greater prospects of success lay with patient and persistent "criss crossing" i.e. careful selection of the hybrids for the desired characteristics and then crossing back with the parents and also with similar hybrids.

I was delighted when Trevor wrote giving me an up-date on his 1978 writings. He had then mentioned having just received a parcel of *C. reticulata*  $\times$  *C. sasanqua* plants from Dr Clifford Parks in the U.S. He now says that although these produced quite good seedlings none proved to be better than 'Show Girl' or 'Flower Girl'. He is only retaining two of these seedlings, one being a *C. sasanqua* 'Narumi-Gata'  $\times$  *C. granthamiana* which flowers very early, is semi-double, white shading to pink, and the bush is quite striking. Of the others he specially mentions the 'Flower Girl'  $\times$  'Nuccio's Ruby' seedlings as being of very good colour.

Trevor's broad line of intention with his first crosses is, at this stage, to:

- 1. Breed them back to *reticulata*, paeony form, e.g. Dr. Clifford Parks, Harold L. Paige, Miss Tulare, and
- 2. Cross to the *C. granthamiana* crosses, i.e. 'Lois Shinault', 'Pop Homeyer'. Trevor

speaks very highly of the latter. He has a very good plant of 'Flower Girl' which is setting seed nicely to 'Lois Shinault'. Both flower at the same time, in mid-May.

He goes on to say: "By chance, i.e. the bees, we have several good C. rosaeflora  $\times$  'Dream Girl' plants. The flowers are 55mm, deep pink semi-double, and very early." Mrs Lennard has one in a basket, flowering now in its second year with over 120 buds. One is named 'Emma Lennard' and the other 'Emma Two'. More attention is being given to the miniature and small flowered varieties, especially the species crosses.

An interesting new New Zealand hybrid is reported, 'Sugar Dream' being 'Dream Girl'  $\times$ *C. oleifera.* In view of the work in the United States with *C. oleifera* for cold hardiness (*A.C.S. Yearbook* 1983), crossing with any of "The Girls" might bring up something valuable for the very cold climates.

Mr Lennard's final comment is that he now believes that once the "criss-crossing" has brought in the early flowering attribute it is better not to use any more of the *sasanqua* influence but to introduce varieties which have longer lasting flowers.

We should all be grateful that enthusiasts like Sir Peter Smithers and Trevor Lennard are so ready to give us the benefit of their latest observations. I know that both Sir Peter and your I.C.S. editor would be grateful if other knowledgeable growers were to tell them of their latest experiences and observations. Let us look forward to a whole batch of interesting snippets for inclusion in next year's *Journal*.

# I.C.S. Exhibits at the R.H.S. Shows 1984

Exposition de l'I.C.S. aux Floralies R.H.S. 1984

Exhibición de la I.C.S. en las exposiciones de la R.H.S. en 1984

Esposizione dell'I.C.S. alle Mostre dell'Associazione Britannnica di Orticultura (R.H.S.), 1984

#### The March Show JOYCE WYNDHAM (See colour section) (London Organiser)

For the first Spring Show at the R.H.S. Hall, a display was put on by Efford Horticultural Station by Miss Margaret Scott, in conjunction with the I.C.S.

This took the form of showing in stages, the propagation of camellia cuttings through their

initial growth, potting on, and pruning back to develop a mature plant at two years, for growing outdoors, or in pots or tubs. Emphasis was on tub growing to show that a camellia can be a healthy plant, with pruning to keep a good shape for many years. One of the examples on the stand was 'Lady Vansittart Red', growing happily in a tub at nine years old.

The first stage showed cuttings under mist in July, and under polythene in November. Next was the rooted cutting after seven or eight months, followed by the repotted plant, after a certain period, ready to be cut back to encourage steady and shapely growth. Plants were shown in bloom at the two years stage, ready for selling or planting in tubs. Much interest was shown in the beautifully shaped examples of 'Pink Perfection', 'Magnoliaeflora' and 'Francie L' in full bloom. An open window created in a walled background, showed potted camellias, and an artistic effect was a pond surrounded by flagstones with blooms floating on the surface of the water, which were able to last several days in this way.

Margaret Scott put much thought and enterprise into this project, with the assistance of Mr. R. Clements, director of the E.H.S., and our thanks are due to them for the success of the show, which was reflected in the great numbers of the public who thronged the exhibit each day. It was awarded the Lindley Medal.

#### The Second Show

The theme of the second I.C.S. Show was a display of old-established camellias and their sports. Some of the former were scarce, but thanks to the co-operation of members of the I.C.S., they were brought from all over England.

The blooms were grouped under Parent Camellias, and showed the variation of their 'sports' which are now established as well known in their own right. We were able to show: to name a few:

'Elegans' — sports: 'Elegans Supreme', 'C. M. Wilson', 'Hawaii', 'Elegans Splendor', and 'Shire Chan'.

Aspasia' — sports: 'Margaret Davis', 'Lady Loch', 'Can Can', and 'Strawberry Blonde'. Hikaru-genji' — sports: 'The Mikado', 'Look Away', and 'Spring Sonnet'.

Tricolor' – sports: 'Fred Sander', 'Tricolor pink', 'Lady de Saumarez'.

<sup>'</sup>Betty Sheffield' – sports: 'Betty Sheffield Blush', 'Betty Sheffield Coral', and 'Betty Sheffield Variegated'.

'Lady Vansittart' – sports' Lady Vansittart Red', 'Yours Truly' and 'Lady Vansittart Variegated'.

The collection of these parents and their 'sports' were banked on either side by large vases containing sprays of the relevant blooms, and no other camellias were allowed to intrude into this pattern of design.

My thanks are due to Mr. J. Bond for his assistance in what he called 'a good idea', and to Mr. & Mrs. Glass, Mrs. B. Kitson, Stonehurst Nurseries, and Mrs. P. Eunson for their enthusiasm and help in making the 'good idea' take shape, and achieve such a success.

<b>Camellias in North Wales</b>
Les camélias dans la Galles du Nord
Camelias en Gales del Norte
 Le camelie nel Galles Settentrionale

#### LADY CYNTHIA POSTAN

Cambridge

Any account of camellia growing in a particular part of the British Isles must be set against the background of climatic conditions that prevail there. The northern half of Wales as a geographical entity shares many features with the rest of the western seaboard of the British Isles but has certain peculiarities of its own. What these are will be briefly described.

Wales itself lies between the two great river estuaries of the Severn to the south and the Dee to the north. The northern half of the country, the ancient principality of Gwynedd (including the Isle of Anglesey), with its two peninsula-like extremities, has an extensive coastline, facing north, west and south, and is wrapped around a high mountainous landmass. As the crow flies, it is approximately 40 miles from north to south and 55 miles from west to east. Within this rocky region lie no less than 14 peaks above the 3000 foot contour, and the best-known, Snowdon (or, as the Welsh call it, Eryri, the home of the eagles) rises to 3560 feet above sea level, the highest point in England and Wales. The mountain ranges bear a roughly north-east to south-west trend, and one trough is the spectacularly beautiful sunken lowland now called the Menai Strait. It separates the mainland from the Isle of Anglesey.

Not surprisingly, a region with such diverse aspects and altitudes exhibits many variations of climate. First of all it is a windy country, and the prevailing wind is from the south-west bearing relatively warm air saturated with water vapour from the Atlantic. As the warm air meets the mass of high ground it is cooled and precipitation occurs, so the annual rainfall is considerable. This is, of course, the main reason why the rainfall everywhere on the western seaboard of the British Isles is high, but it also explains why average rainfall in North Wales at places often no more than a few miles apart can differ so widely. For instance, in the heart of Snowdonia the rainfall is well in excess of 100 inches yet a mere 15 miles away at Caernaryon it is no more than 40, and in many of the other coastal areas even less. The maximum rainfall is on the side of the mountains that intercepts the south-west wind as it leaves the sea. Winds from other directions also blow, those from north and east being dryer and colder than those from the south-west, so naturally the north-facing coasts and valleys are less sheltered than the west- and south-west-facing ones.

The variation in temperature between winter and summer is much less than in more easterly parts of the British Isles; it is higher on average in winter and lower in summer. Roughly the average January temperature is between  $40^{\circ}$  and  $42^{\circ}$ F while in July it is between  $59^{\circ}$  to  $60^{\circ}$ F. These are of course only averages: naturally there are exceptions between one year and another — some very hot summers with prolonged droughts and some freezing winters with daytime frosts and cold drying winds have been experienced recently.

This brief account of the climate of North Wales shows that conditions are very favourable for the cultivation of camellias, especially as the soil almost everywhere is highly acid.

Perhaps the most outstanding collection of camellias is to be found at Bodnant, at present owned by the National Trust of Great Britain, but for well over a century designed and planted by the McLaren family, whose present representative is Lord Aberconway, until 1984 the President of the Royal Horticultural Society. This garden lies on a steep hillside overlooking the valley of the Conway river. The main aspect of the garden is west. although the valley itself is open to the north. The rainfall is in fact low for the region and there is little protection from cold northwestern winds, even though clever planting and design has provided many small corners in the garden where favourable micro-climates shelter the more tender shrubs and plants. The garden naturally specialises in camellias and contains many thousands of individuals mostly planted on the steep banks of a ravine down which flows the old mill stream and which is shaded by some of the most magnificent specimen conifers to be found anywhere in the British Isles. To single out the cultivars would be no more than to quote a long list of familiar and not so familiar names. and the Bodnant garden centre always has in stock a bewildering variety of small plants available, all propagated from the garden itself. In its season the camellia display is dazzling and rivals the somewhat later display of species and hybrid rhododendrons and azaleas. However, as I have already hinted, gardening in this apparently favoured spot is not without its hazards, as the winter of 1981/82 so wickedly revealed. Conditions at Bodnant that winter were quite exceptional, even by standards accepted by gardens further east. Early in January 1982, for six days and nights succession, the in temperature remained below freezing, while a force 8 gale blew from the north west, a direction from which the garden has so little protection. The rhododendrons suffered terribly, the sap freezing under the bark, and more than 5000 plants over 6 feet tall (and including the precious long-leaved Himalayan species) succumbed. The great surprise, however, was that the camellias, thought by our grandfathers to be subjects for the stove house, in fact fared better than the rhododendrons. They proved quite remarkably tough, much more so than even those experienced guardians of Bodnant, the Puddle family, had believed possible; although some were cut back, the williamsii and japonicum hybrids in particular all recovered well and rapidly sent up new shoots. One reason for their apparent hardiness put forward by Mr Martin Puddle (the present superintendent and son of the famous Mr Charles Puddle) is that the glossy surface of the camellia leaves allows little transpiration of moisture - a contrast to the leaves of the rhododendron family.

Not many miles away, in a quite different setting, some old camellias flourish in another

garden under the care of the National Trust. This is in the beautiful walled garden at Penrhyn Castle, a few miles from Bangor, the university town on the Menai Strait. The castle, a gigantic pile in the architectural style known as the Norman Revival in which the local slate has been used in many bizarre and unexpected ways, stands on an eminence looking north-west to the sea, but the garden lies on the south-west slope of a shallow valley beautifully terraced and sheltered by tall trees and walls. After a period of neglect it is being replanted and restored to its former charm. The camellia plantings are not, of course, on the lavish scale of Bodnant, but they clearly feel themselves at home and there are one or two magnificent old shrubs with huge trunks which betoken a long and honourable career. There is a lovely white one (unidentified) which is always in flower before Christmas. There is unfortunately no record of the early camellia plantings at Penrhyn, so individual shrubs are not named but as one member of the Douglas Pennant family (to whom the castle formerly belonged) married in the early years of this century the Lord Falmouth of the day, the theory that some of the camellias might have been brought to Penrhyn from the Cornish garden of Tregothnan is at least plausible.

Across the Menai Straits is another remarkable garden, also now in the care of the National Trust, but planted by the then owners. This is Plas Newydd. Many of the trees in the garden are of a great age, but the ornamental shrubs and smaller trees were largely planted by the sixth Marquess of Anglesey, whose son the present Marquess is a

knowledgeable camellia enthusiast and who has done much to continue his father's work and to extend the camellia plantings in situations where they clearly thrive. The garden itself faces mainly towards the east looking back over the water towards the mountains of the mainland. Most of the camellias are planted on a steep bank well sheltered from the cold east winds as well as the buffeting of the south-west gales. The soil is all the plants could desire - greensand to a depth of two feet. Many of the older plantings were in full sun and it is Lord Anglesey's experience that the flowers suffer rapid browning of the petals from too much sunshine. The flowers of those more recently planted under a tree canopy last much longer, especially the free-flowering williamsii hybrids. That this is so was quite evident on a recent visit and the fine display was not marred by prematurely browned flowers. Some of the camellias were brought to Plas Newydd as long ago as 1912 from Lord Anglesey's garden at Beaudesert in Staffordshire when that house was demolished.

The three gardens described here are, of course, the larger ones, fortunately accessible to the public through the generosity of the former owners and they are under the excellent care of the National Trust. There are many other private gardens all over North Wales whose owners grow camellias, even though it may be no more than three or four plants, and it should be obvious from these few lines that the climate, soil and aspect of North Wales all help to provide those conditions that camellias in particular and ericaceous plants in general crave if they are to give of their best.

# The first Oporto Camellia exhibition

La première exposition de camélias à Porto

La primera exposición de camelias en Oporto

La prima Mostra della Camelia di Oporto

#### SENORA CLARA DE SEABRA \* See colour section

The first Oporto Camellia exhibition, which was held on the 16th, 17th and 18th March, was a complete success. This exhibition sponsored by the Oporto City Hall, attracted hundreds of Camellia lovers and, as the result were far beyond all expectations, the official authorities were encouraged to repeat this initiative next year.

Mr. Valdemar Cordeiro, one of the promoters

of the exhibition and an I.C.S. member, wrote an article in the brochure of the exhibition under the title "Camellia — The Queen of the flowers" from which I quote: "Despite its asiatic origin, the camellia is nevertheless, the most Portuguese of the flowers since it is always a component of the Portuguese gardens especially in the Northern part of the country."

## Camellia chrysantha

Judge Paul Harkey of Dallas, Texas, has sent the following notice of the Imogene Fitzgerald Award.

"The Dallas, Texas Camellia Society has announced a special award for the best specimen bloom hybridized from the yellow *Camellia chrysantha*. Carol Greenberg, President, stated the award was established in the memory of Imogene Fitzgerald through the generosity of Mr and Mrs Waller C. Boedeker.

Imogene Fitzgerald was a retired Court Reporter for the Federal Government and one of the outstanding amateur oil painters of the Southwestern United States. Four members of the Dallas Camellia Society own pictures she painted of their winning blooms.

Waller Boedeker, a prominent Dallas automobile dealer and civic leader, is a horticulture hobbyist. Sarah Boedeker is the sister of the late Miss Fitzgerald. Their contribution to the Dallas Camellia Society consisted of a "Camellias Forever" membership in honor of her memory.

President Greenberg stated that until 1994, the Imogene Fitzgerald award, which will be made at the Annual Camellia Show of the Dallas Camellia Society, is designed to stimulate the development of new hybrid camellia flowers. It will be for the best specimen bloom hybridized from the *Camellia chrysantha* or which was developed by Frank Pursel of Oakland, California.

In creating this award, the Boedekers said they hoped it would stimulate hybridization and speed up the infusion of the melon, peach, orange, lemon, apricot, etc., hues in camellia blooms."

On receiving the above Notice the Editor replied to enquire if the award was limited to members of the Dallas Camellia Society and for clarification of the reference to Frank Pursel hybrids. The relevant parts of Paul Harkey's reply are as follows:

"The Dallas Camellia Society is one group that believes in open competition. The only awards which are not completely open are the "Novice" awards. Other than that restriction, the show is open to every person, regardless of membership or non-membership in any society. The Boedekers were of the opinion that it would probably be at least a second or third generation hybrid of the *Camellia chrysantha* before it had an acceptable bloom. My own opinion is that the first two generations will have the size and form of the *chrysantha* pollen parent and the color of the seed plant. The condition: "or which was developed by Frank Pursel of Oakland, California" is to permit the award to be given to a Pursel developed hybrid until there is an acceptable *chrysantha* hybrid bloom.

Frank Pursel is undoubtedly the foremost hybridizer in the United States at this time. He has registered some 72 new hybrids with the American Camellia Society in the past decade".

A letter of enquiry about *Camellia chrysantha* to **Julius Nuccio** of Altadena received the following helpful reply:

"Enclosed are slides of *C. chrysantha*, by Bill Goertz and Grady Perigan. Please feel free to use them. (\*See colour section).

The C. chrysantha plant that produced the blooms of the enclosed slides belonged to a Mr Sergio Bracci. The moment he saw buds, he was kind enough to bring the plant to us so we could use the pollen for hybridizing. We had six fine blooms, and it was most exciting to them and to our local friends, as it was a first time for all of us.

This was not the first *chrysantha* to bloom in the U.S.A.; a Mr M. Piet had the same variety bloom a month earlier".

The notes from *Eric Craig* set out below help to complete the picture.

Is This the Answer ... To Elusive chrysantha?

Today, July 22, I saw an exciting development in the yellow camellia odyssey at Camellia Grove nursery, Sydney, Australia. Exciting, because, as far as we in the South Pacific are concerned, we had had no report of *C. chrysantha* flowering outside China except one instance at Nuccio's nursery, Altadena, Southern California. Steve Clark of Camellia Grove showed me his healthy, three-years-old grafted plants of *chrysantha*, well over one-metre high. Attractive, lush foliage — but not one bud to be seen! But alongside were a number of *eight-months-old* cutting grafts of *chrysantha* 10cm high the scions having been taken last December (midsummer here) from the grafted bushes. All of the cutting grafts had round, unopened flower buds almost 2cm in diameter, and brilliantlyyellow across the crown.

On August 17, exactly seven years after the death of Prof. E. G. Waterhouse, the first fullyopen *chrysantha* bloom grown in Australia was shown on Sydney television news (Channel 7).

It was grown by Camellia Grove Nursery of St. Ives, Sydney in company with several other plants carrying flower-buds at various stages of opening.

I saw them for myself at Camellia Grove. The fullopen bloom was only 4.5cm across, but a very rich golden-yellow, with bright orange stamens.

Official statistics supplied by Steve Clark, joint proprietor of Camellia Grove, are:

- 12 Dec 83: 68 cutting grafts made, using sasangua Kanjiro as the host.
- 21 Mar 84. 51 out of 68 grafts successful. Kanjiro removed from above union, and rooted cuttings separately potted.
- 17 Aug 84: First *chrysantha* bloom fully open. Could it be that Camellia

Grove's cutting graft technique (ICS Journa 1976) is the key to the golden treasure? In any event, Steve wants to make it clear that Camellia Grove won't be commercially releasing *chrysantha* for at least two years. The species still has to supply one or two answers for example, said Steve, why are his three-yearold plants making new growth in Australia's mid-winter?"

<b>Book Review</b>	
 Critique littéraire	
 Reseña de libros	
 Rassegna libraria	

**Camellias** by Chang and Bartholomew

This book is certain to be one of the landmark publications in the Camellia literature, if not the gardening literature, of the second half of this century. Professor Chang has devoted 50 years to identifying and locating the Camellia species in their Chinese heartland. As an outcome of this life-long study, Dr Chang has discovered 92 new species of Camellia. As a result of this man's single-handed work, the number of Camellia species has been virtually doubled.

But the book is noteworthy not only for the extraordinary number of new species Dr Chang has described. Many of these new species hold the potential to markedly expand the number of garden-worthy species. Furthermore, some of the new species possess the potential to make it possible to breed entirely new, heretofore unattainable Camellia cultivars. The several species discovered in quite cold habitats hold the promise of breeding a new family of hardy Camellias. Several other species display unusual flower colours and configurations which promise to enhance the flowering characteristics of this splendid genus.

It can be said, without fear of contradiction, that this book must be in the library of every Camellia grower, every breeder, and every plantsman with an interest in woody plants. It promises to revolutionize the world's understanding and perception of Camellias.

The book is translated and augmented by Dr Bruce Bartholomew of the California Academy of Sciences in San Francisco, himself a noted authority on Camellias. Dr Bartholomew has undertaken numerous extensive botanic collecting tours in China where he became acquainted with Dr Chang's work.

In addition to the compelling text, the book is illustrated with 92 line drawings, executed in an exquisite Chinese style to provide the reader with a clear picture of all the new species first described in this book. It is 240 pages long with 92 line drawings and priced at \$29.95. The book can be ordered from Timber Press, P.O.Box 1631, Beaverton, OR 97075.

submitted by THOMAS PERKINS III

Les camélias en Allemagne	
 Camelias en Alemania	
Le camelie in Germania	

### **PETER FISCHER** Wingst, Hoden, Germany

It is no exaggeration to speak about a German tradition of Camellias, because more than 100,000 plants were already being cultivated in about 1850 (Seidel). Even today a plant over 200 years old still presents its splendour of blooms in Dresden — Pillnitz every spring. To survive the German winter the plant however needs the heated glasshouse which surrounds it in the coldest season.

Nearly every botanical garden is able to exhibit special specimens of Camellias which are more or less splendid. These however exist only as under-glass plants. Between Christmas and March it is possible to see Camellias at special German flower markets. Very famous flower shops make it possible for a private person to buy this attractive and exotic plant.

Unfortunately, the delight in such an exotic plant is not long lived because they don't sell enough knowledge together with the beautiful plant, and automatically it will fail miserably in homes which are much too warm. However, I still believe in the future of Camellias in Germany!

My personal enthusiasm for this plant encourages me to collect and to analyse all the information I can get. Wherever one can expect some knowledge of Camellias, contacts will be made. A German professional association, the ACERCA (Azaleas Ericas Camellias) deals with the breeding Camellias in a small measure; grows about 90,000 plants every year, (almost all Camellia jap., 'Elegans') and even exports and imports them at the same time. By the way, it is curious to note that Karl Glaser, near Frankfurt, grows about 40,000 Camellias and exports them to Italy, Switzerland and France, which are countries, which logically should be better able to grow Camellias. Up to now in Germany, Camellias are almost exclusively sold at the pot-flower markets.

Recently special tree nurseries have become interested in Camellias and are offering them within their sale collection. The reason could be the international trend of the market, therefore a bigger collection is necessary. Nevertheless, it could also be the result of different publications about Camellias by the German dendrologist Krüssman, although the botanical aspect is well to the fore in his publications.

Hellmut Vogel, a known expert on Camellias, thinks that there are favourable future prospects for Camellias in Germany, especially by expansion of the collection. Although there is a large interest in Camellias, there are only a showing few exhibitions Camellias (Palmengarten Frankfurt or Bremen for example). In this way a demand for Camellias is created but it can't be satisfied enough. All the German fanciers of Camellias still have to travel far if they want to see these beautiful plants outdoors. The south of England and Cornwall, the south-west of France, Italy or Portugal are paradises of Camellias for the German. But nevertheless a German alternative is perhaps growing up quietly and slowly. At my home in the north of Germany, not far away from the mouth of the Elbe, for example, for many years special Camellias have resisted the German winter, in not very sheltered positions outdoors. Not infrequently the temperature reaches  $-20^{\circ}$ C. There are setbacks, of course, sometimes even total losses. Sometimes only the flowerbuds die, sometimes the whole shoots of the year or even the whole plant. No one winter is like any other. In Germany there are tracts with a climate suitable for viticulture, but my advantage is to live near the sea and this maintains my courage in planting Camellias in the outdoors. The youngest plants which have a place in the garden are three vears old at least. In the meantime the oldest one has come up to 1.50 metres; its an 'Alba Simplex'. Several Camellia japonica have turned out to be very resistant against the winter. Unfortunately there is only a short summer in Germany and the setting of flowerbuds doesn't prove very satisfactory. It looks better with the hybrids. 'Anticipation', 'Donation', 'Freestyle' and 'Freedom Bell' have eminent flowerbuds. What does it matter if many flowers are damaged by the belated frosts of spring - There is almost no spring when the bloom of the Rhododendron Praecox, which is very liked and common in Germany, isn't killed by frost, but nevertheless it's in the garden. After that

how incomparably more beautiful are 'Anticipation' or 'Freestyle' with excellent blooms as if there had never been any winter!

### Editor's Note:

The British members of the Society were happy to welcome Mr Peter Fischer to the U.K. Conference in Cornwall, England this year and wish him all success in growing camellias in difficult conditions. An example of what can be done in spite of cold and snow is shown by a picture of a camellia in snow, supplied by Mr W. Fritschi of Zurich. \*see colour section.

# Nomenclature report

Rapport concernant la nomenclature	
Informe sobre la nomenclatura	
Rapporto sulla nomenclatura	

### **THOMAS J. SAVIGE**

International Registrar

As the first phase of the compiling of the International Camellia Nomenclature List is now completed, this report covers the situation at the moment.

A preliminary list based on inserting new and various early names not previously available into the Philbrick List had been completed by last March. However, due to a considerable influx of oriental names from China and Japan it was decided to rewrite the complete list to make it more comprehensible for typing into a "word processor". Therefore the complete list was re-checked in the light of further information and re-written. This task has now been completed and comprises 1780 foolscap pages covering 22,960 entries and includes the 1983 registrations.

Three sets have been photo-copied and these are being sent:

1 set to the Bailey Hortorium, Cornell University, to be put on disc in a word processor,

1 set to Goro Iimure of Japan to check the method of romanization of the Japanese cultivars.

1 set to Mr Charles Puddle who has agreed to check the European cultivars against his extensive records.

It is envisaged that this last copy will be available to the Registration Committee of the I.C.S. in the United Kingdom while waiting for "print outs" from the Bailey Hortorium. The Bailey copy will be sent airmail, but the others by seamail due to cost.

Considerable correspondence with Dr Antonio Sevesi, Mr John Tooby, Mr Yoshiaki Andoh and Mr Robert Gimson in particular, have been of considerable assistance and these gentlemen have my heartfelt thanks.

The Japanese nomenclature problem is not

yet completely resolved and it is doubtful if complete agreement with all the Camellia Societies in Japan will be possible. In the meantime, an attempt at stabilizing the transliteration is being made by applying the methods outlined in the paper "Japanese Camellia Cultivar Names".

In the International Camellia Nomenclature List in the many cases of doubtful identity and synonymity, decisions were made based on the available evidence. It is hoped that this will stimulate those who may disagree or have further evidence to enter into correspondence which may help, eventually, to clarify some of the doubtful areas.

Following the visit to Dr Ralph Philbrick at Santa Barbara, correspondence with Professor Bates confirmed the offer of the research material. Professor Bates made one proviso that, when the I.C.S. had completed its nomenclature research a suitable permanent home should be found for the material, where it would be available for future researchers. This offer was made as it was felt that the Bailey Hortorium would not want to be put to the expense of its return to the U.S.A. and it was a terminating project.

In the meantime, Dr Ralph Philbrick sent the first consignment of data by parcel post as a test run. This parcel of approximately 15kg. left Santa Barbara about 20th July. It finally arrived at Albury on the 21st October, taking three months by surface mail, I wrote to Dr Philbrick advising him of it's arrival, but on 29th October received a telegram enquiring on its whereabouts. The telegram was 8 days in transmission. So much for modern communication and transport. The mailing cost of this parcel was \$85.00 and it was estimated that altogether the parcel post would be about \$700.00. The Santa Barbara Botanic Gardens wishes to be refunded the postal costs.

Regarding an eventual repository for the nomenclature records, the "Eryldene Trust" has been approached on the possibility of its inclusion in the Research Library envisaged to be established at "Eryldene" (the old home of Professor Waterhouse). This is being set up round the material from the libraries and records of the late Professor Waterhouse and Walter Hazlewood, two of the founders of the I.C.S. and the A.C.R.S. If the Directors of the I.C.S. are agreeable, this suggestion will become a concrete proposal.

In the meantime it is proposed to complete a bibliography of all publications and references consulted in the formation of the International Camellia Nomenclature List. These are estimated to be over 3000 and would make a small book on their own.

Finally, a cultivar registration system is being organised by the I.C.S. and hopefully will shortly be available for the registration of camellia names in areas without national registration authorities.

# Miniature hybrids

Hybrides miniatures

Híbridos enanos

Ibridi miniatura

### T.J. SAVIGE

Wirlinga, N.S.W., Australia

In the development of various hybrids from camellia species, as a reaction to the giant C. reticulata  $\times$  japonica forms, some hybridists have turned to the small camellia species.

The results have filled in a blank area in the camellia spectrum and resulted in the production of numbers of cultivars which combine the appeal of small, dainty, delicately coloured flowers on a range of interesting and varied fine leaved plant forms. Even scented forms are included and the plants, being only shrub sized, are suited to the small garden and container culture.

While many of these hybrids have quite a "fruit salad" of species combining in their background, at present they can be loosely classed into four main species in their make up.

For convenience they can be put into one of the four following categories:

- 1. The pitardii group
- 2. The cuspidata group
- 3. The fraterna group
- 4. The lutchuensis group

The basis of the pitardii group is *C. pitardii* Cohen-Stuart, designated *C. pitardii* var. *pitardii* in Sealy's Revision of the Genus. This is a diploid and fairly close to *C. saluenensis* with which it hybridizes freely. It is likely that some of the breeder material is so contaminated.

Two people who have introduced cultivars from open pollinated plants of these species are Mrs Betty Durrant, of Rotorua, New Zealand and Mr Edgar Sebire, Victoria, Australia. In both cases the parent plants were growing in large gardens surrounded by hundreds of camellias of great diversity in species and hybrid, and it is only possible to speculate on the pollen donor.

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Amongst the Durrant cultivars are 'Grace Caple', 'Prudence', 'Snippet', 'Garnet Gleam', 'Nicky Crisp' and 'Persuasion'. 'Grace Caple' is a *C. pitardii*  $\times$  *C. japonica* and 'Nicky Crisp' is a *C. pitardii*  $\times$  (*C. pitardi*  $\times$  *japonica*) hybrid. The vivid garnet red single flowers of 'Garnet Gleam' show evidence of 'Fuyajo' genes, while the last one of the group 'Persuasion' is one of the deepest (blackish red) coloured camellias, from a cross of *C. pitardii*  $\times$  *C. japonica* 'Fuyajo'.\*

The Sebire cultivars include 'Adorable', 'Fairy Bouquet', 'Gay Pixie', 'Pink Cameo', and 'Sprite'; all open pollinated but obviously hybrids from their great diversity.

'Adorable' with bright pink, formal double flowers and erect compact growth is a magnificent container plant. 'Fairy Bouquet' is a similar plant with soft pink paeony form flowers. 'Gay Pixie' has a larger loose paeony flower of deeper striped, light orchid pink on a larger, more spreading plant. 'Pink Cameo' a silvery pink paeony, but 'Sprite' a small, rose form, salmon pink, is a particular delight.

\* See colour section

Sebire has also produced a dainty scented miniature hybrid in 'Snowdrop'\* a cross between *C. pitardii* and *C. fraterna*.

A recent pitardii hybrid from America is 'Sara Ritter', a pink semi-double C. pitardii  $\times$ C. japonica raised by C. D. Cothrem of California.

Hybrids from the species C. cuspidata were amongst the earliest developed as the veteran 'Cornish Snow' was raised by the father of C.  $\times$  williamsii, the late Mr J. C. Williams of Caerhays Castle, Cornwall in the 1940's, so that this particular hybrid cross is called a "Caerhays' Hybrid". It is C. saluenensis  $\times$  C. cuspidata and received the R.H.S. Award of Merit in 1948. The original seedling still grows in Cornwall, a 20 foot vision of delight in flowering time.

Two others of this cross were released about the same time in 'Charles Michael' and 'Winton' although little grown these days.

Second generation hybrids were developed in two areas; Mr Fred Tuckfield, Victoria, Australia and Dr Wells of California, U.S.A.

The Tuckfield hybrids were all from open pollinated seed of 'Cornish Snow' growing \* See colour section amongst a group of Waterhouse  $C. \times$  williamsii cultivars such as 'Lady Gowrie', 'Margaret Waterhouse' and 'Clarrie Fawcett'.

Those named included 'Bellbird', 'Harem', 'Lollypop', 'Turkish Delight', and 'Muriel Tuckfield'. 'Bellbird' has small pink single flowers on a low spreading bush, while 'Lollypop' and 'Turkish Delight' are both open bushy plants, the former a pink stippled, deeper pink, rose form double and the latter a light, lavender pink, semi-double. 'Muriel Tuckfield' has the  $C. \times$  williamsii 'Lady Gowrie' in its make-up and its fuchsia cast, ivory white flowers are a vision of chaste elegance.

Dr Wells received an un-named hybrid of C. cuspidata from England which he named 'Sylvia May'. This also has been the source of a number of second generation hybrids although, through crosses with the large C. japonica cultivars, they are mostly out of the miniature range. A popular one is 'Sylvia May Wells' a loose paeony lavender pink and Dave Feathers' seedling of 'Sylvia May' named 'California Snow' is a cascade of small white single flowers. The first C. japonica  $\times$  C. cuspidata hybrid was raised by Dr Lammerts about 1950, while at Descanso Gardens, California, and named 'Lammertsii'.

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\*

It is an erect growing, miniature, white single with strong C. cuspidata characteristics. This particular interspecific combination has been designated as "Lammerts Hybrids" by Dr Hilsman.

Nuccio's of California released a C. cuspidata  $\times$  C. japonica hybrid in 1980 called 'Candle Glow' and Dr James released a 'Sylvia May' seedling 'Carousel' a pink striped, orchid pink, still popular.

An interesting cuspidata hybrid was raised by Dr Hilsman who crossed it with C. fraterna and named one of the union 'Milky Way' because of its floriferousness.

The fraterna group was led off by the American nurservman Sawada with 'Tiny Princess', a cross between C. japonica c.v. 'Akebono' and C. fraterna. This has proved useful for second generation crosses. C. rosaeflora hybrids have been included in the fraterna group because of their morphological similarities.

Hybrids from this group have originated in most camellia growing areas as they have proved particularly popular. Quite a number come from New Zealand. Neville Hayden has produced 'Baby Bear', 'Mother Bear' and 'Baby Willow' by crossing C. rosaeflora with C. tsaii. The result is a slow growing dense bush with the wavy leaf margin of C. tsaii coming through.

Trevor Lennard of New Zealand recently released a *C. rosaeflora* open pollenated seedling named 'Emma Lennard' while Sebire named a similarly produced camellia, 'Rosabelle'. They are more vigorous and better furnished plants than the species with improved flower forms.

The author crossed C. rosaeflora with an un-named  $C. \times$  williamsii and named one of the seedlings 'Wirlinga Belle'. Then crossed with C.  $\times$  hybrid 'Tiny Princess' to obtain

'Wirlinga Princess' and 'Wirlinga Gem', all heavily flowering. The last two make attractive standards as they naturally develop an umbrella form and flower on the underside of the branches in every leaf axil.

Dr. Parks has brought out an interesting little hybrid in 'Yoi Machi' (Evening Wedding) which is a C. sasanqua c.v. 'Narumigata'  $\times C$ . fraterna and has soft pink bell-like flowers.

By crossing a C.  $\times$  williamsii with C.  $\times$ hybrid 'Tiny Princess', O. Blumhardt of New Zealand came up with 'Gay Baby', a deep orchid pink semi-double of open upright growth. He also raised 'Tiny Star' a cross between C.j. c.v. 'Berenice Body' and 'Tiny Princess'. Another from New Zealand is 'Esme Spence' a soft pink miniature anemone form  $\tilde{C}$ . fraterna  $\times$  C. japonica.

In California A. H. Krueger has just named 'Captured Enriches' a pinkish white semi-double with clustered flowers; a C. rosaeflora  $\times$  C. fraterna cross, while 'Witmans'; C.j 'Elizabeth Boardman'  $\times C$ .  $\times$  hybrid 'Tiny Princess' named 'Christmas Daffodil' has been most popular for the past 12 years with its white tipped blush petals and an anemone form flower.

Members of the final group, based on C. lutchuensis, are mostly scented, as are many of the fraterna hybrids, but with a stronger and more pleasant aroma.

The species has been the basis of a 20 year old breeding programme for scent in which many well known camellia researchers were involved, such as Dr. Cutter, Dr. Parks and Dr. Ackerman. The programme is now lead by Ken Hallstone of California.

It was found that in the cross between C. hutchuensis and C. japonica the resultant hybrid was usually totally sterile. By using the colchicine method, Dr. Ackerman was able to produce

No. 8 C. reticulata c.v. 'Höraku'. Applicant: Mr. Yoshiaki Andoh, 9-11 1-chome. Yawatacho, Nakaku, Kobe, 657 Japan. Propagator: Dr. Akito Noguchi, 7-6 Nishi-Noguchicho, Beppu, Japan from seed supplied by Col. T. Durrant of New Zealand in 1969. Parentage: Kunming reticulatas. Putative female parent 'Willow Wand'. Flowers; First bloomed 1975. The flower is a large semi-double with three rows of heavy textured waved and fluted petals of rose pink surrounding a group of yellowish filaments with golden anthers. The flower size is up to 13cm across and 12cm high. Form is somewhat like 'Lasca Beauty'. Blooms mid-season to late. Leaves: About 9.5cm long by 6.0cm wide. Dark green. Habit: Compact, upright and of medium growth rate. No. 9 C. japonica 'Elizabeth Fox'. Applicant and originator: Mr. D. B. Fox, Bullwood Nsry. 54 Woodlands Road, Hockley, Essex. Parentage: Unknown. Flowers: A medium size formal double averaging 75mm in diameter, of about 5-7 petals; colour R.H.S. 50B red group with some white stripes at base of outer petals. Buds intermediate in shape. Midseason blooming. Flowers open flat and shatter and are similar to 'Jouvan'. Leaves: Flat, oval with fine serrations and matt green colour with faint regular veining. Habit: Growth is upright and medium in rate. The parent plant is eight years old and first flowered in 1978. Registered 17.8.84. No. 10 C. × williamsii 'Fiona Colville'. Originator: The late Lt. Colonel N. R. Colville, M.C. Applicant: Mrs. D. Colville, Penheale Manor, Egloskerry, Launceston, Cornwall. Flowers: Colour Neyron Rose; R.H.S. Colour chart 55B.

**Camellia Registrations** 

Habit: Identical characteristics of plant, habit, leaf and flower form as 'Donation' except as to flower colour.

This is a mutant of C. × williamsii c.v. 'Donation' first noticed in a batch of rooted cuttings about 1960. The cultivar has flowered true for 20 years. Registered 17.8.84.

pollen fertile tetraploids. The first hybrid so treated was 'Fragrant Pink'.\* Its colchiploid was named 'Fragrant Pink Improved' and has been used to develop an F2 generation. It is a small deep pink paeony with a good lutchuensis fragrance.

By using its pollen on C.j. c.v. 'Kramer's Supreme', Dr. Ackerman obtained 'Ack-Scent', a larger paeony form, a little out of the miniature hybrid range. Also his 'Cinnamon Cindy' a C.j. c.v. 'Kenyotai'  $\times C.$  lutchuensis has small paeony flowers with a white centre, the outer petals having a pink edge and reverse and a sweet cinnamon aroma.

Another Ackerman registration is 'Fragrant Joy' a dark lavender pink, rose form double from a cross between *C. rusticana* and *C. lutchuensis*.

Dr. Longley and Dr. Parks in their breeding for fragrance programme have recently registered a *C. japonica*  $\times$  *C. lutchuensis* miniature with the name 'Spring Mist', a blush pink semi-double with spreading growth.

In New Zealand a hybrid between C.j. c.v. 'Tiffany' and C. lutchuensis named 'Scentuous' has pink, flushed white semi-double flowers with a good scent, while Darcy O'Toole has produced a cross between *C. lutchuensis* and *C.j.* c.v. 'Helen Metson', which he named 'Nymph' a flushed ivory miniature semi-double with perfume.

Outside the above four groups Dr. Ackerman has recently registered some cold-hardy *C. oleifera* hybrids in 'Frost Prince' and 'Frost Princess'.

The interest in the miniature hybrid is growing and some unique forms can be expected in the future. The author has some hundreds of miniature seedling hybrids with genes of the species sinensis, fraterna, tsaii, rosaeflora, cuspidata, saluenensis, japonica and salicifolia in many different combinations and is at present experimenting with the recently available C. forresttii and C. yunnanensis.\*

In America the perfumed C. yuhsienensis has been included in the search for scent programme, while in New Zealand the 'Fuyajo' form of C. japonica is being used in many combinations to bring in the very deep red colours and producing such hybrids as 'Black Domino' and 'Joyful Bells'.

\* See colour section

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		ife	Ordinary		Total
	Single	Family	Single	Family	Members
Argentina			1	<del></del>	1
Australia	5	3	150	66	293
Belgium			2	1	4
Canada			2		2
Channel Islands	5		31	9	54
China			22		2
Denmark			2	·	2
France			39	18_*	75
Germany		·	3		3
Isle of Man	1			·	1
Hong Kong			2		2
Italy	4		15	3	25
lapan	20	2	151		175
Korea			2		2
Malta			11		1
Netherlands		· .	3	2	7
New Zealand	5	1	18	22	69
Portugal		<u> </u>	2	8	18
Rep. of Ireland	1		9	11	12
South Africa	33		19	2	26
Spain	1	<u> </u>	28		29
Switzerland		· · · ·	5		5
U.K	13		188	57	315
U.S.A.	10		130	64	268
FOTAL	68	6	804	253	1391

### INTERNATIONAL CAMELLIA SOCIETY Income and Expenditure Account for the year ended 31st December 1983

INCOME	•		EXPENDITURE		
By Subscriptions	3,767.39		To Printing and Stationery		
Congress in California			1982	75.50	•
— surplus	213.25		Printing and Stationery		
Advertisement in			1983	433.75	
Journal	86,75		Postage and Telephone	244.95	
Donation to Journal			Hire of Hall for		
from UK	200.00		Meetings	12.00	é
Interest on Special			Journal: Printing	2,968.15	
Deposit Account	24.81		Postage & Carria	ge 610.58	
Total Income		4,292.20	Total Expenses		4,324.93
Balance of Expenditure					
over Income	_	32.73			
	_	£4,324.93		_	£4,324.93
	-			-	

### Balance Sheet as at 31st December 1983

LIABILITIES			ASSETS		
Accumulated Funds transferred from: Australia	6,286,36		Cash: At Bank Special Deposit Account	3,000.00	
	0,20000		Deposit Account	1,514.01	
Less Balance of Expenditure over			Current Account	1,739.62	6,253.63
Income for year	32.73	6,253.63			
	=	£6,253.63			£6,253.63

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