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INTERNATIONALE KAMELIENZEITSCHRIFT
INTERNATIONAL CAMELLIA TUDSCHRIFT**

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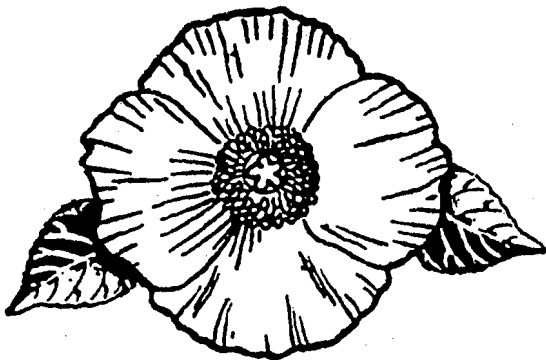
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Front Cover: Mrs. D. W. Davis, ICS Official Flower

*Back Cover: Scenes from Maizuru, Japan, Upcoming 1990 Congress,
Photo by Dr. Wm. L. Ackerman*



International Camellia Journal

No. 21 October 1989

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Visit to Jersey Island by Thomas Perkins and party in April of 1989. The ICS group is pictured outside of La Pigeonerie the home circa 1762 of John and Marian Smith. From the left are Pat Jacobs, former President Vi Lort-Phillips, Charles Jacobs, Bill and Betty Ann Perkins, Mayda Reynolds, Thomas and Jean Laborey of Paris, France and Director of ICS. The Jacobs and the Perkins are all from Brookhaven, Miss.



Visit to Jersey Island by Thomas Perkins and party in April of 1989. Shown with Thomas outside "Westward" the estate of Mrs. Mayda Reynolds are Mayda, Thomas and Mrs. Ann Bushell. Mayda is the Director of the Jersey Island area and Ann is the Membership Representative of the Area.

A Message From The President

Un message du Président

Un mensaje del Presidente

Un messaggio del Presidente

Botschaft des Präsidenten

Many thanks to the members who have sent to me their good wishes and offers of help in the move of the Society's headquarters to America. As you might have read in the Mid-Year Newsletter I visited England and Jersey and found almost electric enthusiasm for the Society. I had a chance to speak to them of the prospects for the future. I detect a new awakening in the appreciation of our older camellia varieties in many of our Regions. This fits in nicely with the up-coming publishing of the Check List of Camellias. I look at the increase in membership in countries such as Germany and South Africa and the formation of new Regional efforts such as the French in the Brittany section of France as evidence of this new interest.

In a recent conversation with Tom Savage I learned that he has finished the alphabet and is completing the bibliography and other headings. Tom has had extensive cooperation of many of our experts in all Regions. He will shortly send to us his choices of a committee to help him in the publishing and distribution of his remarkable publication. He estimates that the effort will be in two volumes with a total of 2500 pages. Shortly we should be able to determine the costings of the twin volume work so that we can take prepaid orders and determine the size of the printing. Booksellers have already made inquiries as to distribution of our unique Check List.

As can be determined from our financial statements there are some funds available to initiate publication but we



will probably need outside help to accomplish our publishing goal. The Longwood Foundation which has already contributed much to our work has indicated that they would probably help when the viable project is presented to them. Perhaps other Trusts and Foundations in Europe and Japan would come along with aid in the publishing and distribution.

I am happy that this marvelous work by Tom Savage will be issued during the American Watch. I hope everyone gets behind our project and that all local, national societies, research institutions and individuals will want to possess the books. I look forward to greeting those who are able to travel to Maizuru Japan in Spring of 1990.

Note from The Editor

Notes du Rédacteur en Chef

Nota de la redacción

Nota editoriale

Anmerkungen der Redaktion

I have been very apprehensive taking this job after the great job Jo Freeman has done in the past and the editors before her. It has been a big challenge and I hope that I measure up to it in some way. I could not have done this without the cooperation of the camellia friends all over the world. Thanks to all who have contributed to this issue. Special thanks to all.

Let's start thinking about the next issue and please start sending me articles as you think of them or see interesting things in the camellia world. My deadlines this time varied—because of my inexperience but hopefully I can stick to one for the next issue. The deadline for the 1990 issue will be 15 July 1990.

We are asking the authors of the articles for the ICS 1990 Journal to please include a small picture to be included with the articles. Thanks for all the help and cooperation.



Obituaries

Nécrologie

Obituarios

Necrologi

Nachrufe

An International Loss

DR. JOHN PATON OF AUSTRALIA

John Paton of Sydney, an accomplished Doctor of Dentistry, was an Australian who gained immense pleasure and cultural benefit from his membership of the International Camellia Society.

Sad to say, he died most unexpectedly just before Christmas 1988.

Earlier that year, John and his wife Freddie had attended the ICS Congress at Naples, Italy, where they greatly enjoyed their reunion with camellia friends from around the world.

The Patons' second-eldest son, Andrew, came down to Naples from Rome, where he was teaching English, and had become engaged to a charming young Italian lady, Antonella.

After the Naples Congress, John and Freddie, with the Australian Group, had a happy meeting with French ICS members at St Jean de Luz, and also met Spanish Director Juan Diez de Rivera Armada at Madrid.

The marriage of Andrew and Antonella drew John and Freddie back to Italy in September last year, but on the way home, John showed signs of being unwell.

Yet his death in his early 60s, not long after returning home, was a great shock to his many friends, at home and overseas.

His love of beauty in all the arts, especially in painting, sculpture, music and language, remained with him until his last moments.

He was frequently moved to express his innermost feelings in poetry. After attending the Sacramento Congress in 1983, the Australian Group's visit to Vancouver Island's Butchart islands drew these words from John Paton's pen:

How this peace-fill'd garden stills
The throbbing of Life's deepest ills.
What a joy beyond compare
To wander in the shining air
Of that wondrous garden fair,
Bathed in perfumed atmosphere.

Freddie and John Paton were amongst the most enthusiastic of Australian supporters of ICS Congresses.

They accompanied the very first Australian Group Tour of ICS members, which attended the January 1975 American Camellia Society congress at Pensacola, Florida.

After the Florida celebrations, the Australians had the great pleasure of being invited to stay with Georgia camellia-lovers at Fort Valley, when visiting A.C.S. headquarters.

John and Freddie were the guests of The Peterson's, a Fort Valley pharmacist, who subsequently became Mayor of Fort



Dr. John Paton at Madrid, Spain, April 1988, after enjoying tour of the incomparable Prado Gallery with friends — Immaculada Alonso and Ana Espana, sister-in-law of Spanish ICS Director Juan Diez de Rivera Armada, with Rowena Craig wife of ICS Vice President Eric Craig.

Valley, I'm told. It was a very, very happy occasion for the Patons; a gesture of hospitality the whole Australian Group will never forget.

Subsequently, the Patons attended other ICS Congresses at Nantes, France, in 1977 Spain & Jersey in 1981; Sacramento, USA, in 1983; Sydney, Australia, in 1986; Naples, Italy, in 1988.

John spoke French, Italian and some

Japanese, so his contribution to the objectives of the ICS—especially “togetherness” of its members, were quite notable in practical terms.

But all who had the good fortune to meet him realised that it needed no interpretation of language to know that John Paton was everyone's concept of a gentleman... and a great I.C.S. Ambassador.

Eric Craig

ICS Congress Japan (Maizuru/Kyoto)

April 3, 1990 - April 7, 1990

Congrès ICS Japon (Maizuru/Kyoto) du 3 jusqu'au 7 avril 1990

Congreso - ICS Japón (Maizuru/Kyoto) 7 abril, 1990

Congresso ICS Giappone (Maizuru/Kyoto) dal 3 al 7 aprile, 1990

ICS Kongress in Japan (Maizuru/Kyoto), 3 April 1990 - 7 April 1990

GENERAL INFORMATION.

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 Sunshine City Bldg.
 Ikebukuro, Toshima-ku
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Climate and Clothing

During the beginning part of April, Kyoto/Maizuru weather is normally pleasant, with temperatures ranging between 15 C(77 F). Light clothing plus a jacket for certain evenings should suffice. Usually there is little rain. When at higher altitude, as in Nikko or Hakone, or on visits to northern Japan, lower temperatures will make warmer clothing welcome. Formal evening attire need not be worn at ICS functions.

Currency Exchange and Payments

All payment relative to ICS JAPAN and its events, such as registration, Pre/Post Tours, must be remitted in Japanese Yen only.

At present, you can exchange for Yen at any authorized exchange bank or major hotel in Japan US\$, Belgian Fr., Canadian \$, Hong Kong \$ (travellers cheques only), UK £, French Fr., W. Germany DM, Swiss Fr., Danish Krone, Norwegian Krone, Swedish Krone, Dutch

Guilders, Italian Lira, Australian \$ and Austrian Shillings.

REGISTRATION FEES

Y80,000 per participant (around \$600)
 Including: Accommodation 5 nights and 5 breakfasts.
 Congress sessions, with coffee/tea breaks.
 Transfer from Maizuru to Kyoto.
 Lunches Friday and Saturday
 Fullday tour to EXPO '90 in Osaka.
 Fullday Kyoto City tour.
 Welcome Cocktail Reception,
 Tuesday.
 Saturday night Farewell Banquet.

TRAVEL AGENCY

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BRIEF INFORMATION ABOUT HOST CITIES.

MAIZURU: Maizuru is located at northern part of Kyoto Prefecture, facing the Japan Sea. The city is known as a trade port with Russia. This area used to be called Tanabe. In 1580, Fujitaka Hosokawa built Tanabe Castle which was called Maizuru Castle - literally means Dancing

Continued on Page 13

1990 I.C.S. CONGRESS

Pre- and Post-Congress Tours (Tentative Plan)

Pre-Congress Tour Plan

[stay]

30th March (Fri)	Arrival at NARITA	[TOKYO]
31st March (Sat)	TOKYO → MIYAZAKI (Children's Land, Cactus Park) → BEPPU	[BEPPU]
1st April (Sun)	BEPPU → ASO (National Volcanic Park) → KUMAMOTO KUMAMOTO Castle, Suizenji Park	[KUMAMOTO]
2nd April (Mon)	KUMAMOTO → KURUME (Nursery) → FUKUOKA	[FUKUOKA]
3rd April (Tue)	FUKUOKA → OSAKA → MAIZURU	[MAIZURU]

Post-Congress Tour Plan

8th April (Sun)	KYOTO (Free)	[KYOTO]
9th April (Mon)	KYOTO (sight-seeing)	[KYOTO]
10th April (Tue)	KYOTO → ODAWARA → NINOMIYA (Camellia garden) → KAMAKURA → TOKYO	[TOKYO]
11th April (Wed)	TOKYO (Free)	

REGISTRATION FORM

* Please print or type.

Participant Name:

(Family Name) Mr./Mrs./Miss

(First Name)

Address

Phone

Telex (if available)

Facsimile (if available)

#####

REMITTANCE:

1. Registration Fee	Y80,000	x	()	=	Y
2. Single Supplement	Y20,000	x	()	=	Y
3. Pre-Tour	Y145,000	x	()	=	Y
4. Single Supplement	Y17,000	x	()	=	Y
5. Post-Tour	Y158,000	x	()	=	Y
6. Single Supplement	Y17,000	x	()	=	Y

Total amount of remittance _____

Y

Payment by

() Bank transfer to the account:

ICC in MAIZURU. Account No. 1382444
Ikebukuro Branch (192).

Bank THE DAI-ICHI KANGYO BANK, LTD.
JAPAN

() Bank Check payable to "ICC in MAIZURU"

TOUR ITINERARY

I.C.S. PRE CONGRESS TOUR

DATE	CITY	TRANSPORT	TIME	ACTIVITIES
MAR. 29 (THU)	KYOTO			Individual check in your hotel. Accommodation at Kyoto Royal Hotel
MAR. 30 (FRI)	KYOTO LV KYOTO AR HIROSHIMA AR HIYAJIMA LV HIYAJIHA AR HIROSHIMA	MOTOR COACH BULLET TRAIN LOCAL TRAIN MOTOR COACH	08:00 08:43 10:45 11:31 16:47 17:14	Breakfast at the hotel. Transfer to Kyoto Station. Leave Kyoto by bullet train. Change train to local line to get Hiyajima. Upon arrival, start sightseeing in Hiyajima. Leave Hiyajima for Hiroshima. Upon arrival, Transfer to your hotel. Accommodation at Hiroshima Grand Hotel.
MAR. 31 (SAT)	HIROSHIMA LV HIROSHIMA AR HATSUYAMA	MOTOR COACH FERRY BOAT MOTOR COACH	AM 15:00 16:00	Breakfast at the hotel. Halfday Hiroshima City Tour. Cruise Inland Sea to Hatsuyama. Upon Arrival, the hotel. Transfer to your hotel. Hot springs tour to Dogo Onsen Spa is available in the evening. Accommodation at Haysuyama ANA Hotel.
APR. 01 (SUN)	LV HATSUYAMA NIHAMA TAKAMATSU	MOTOR COACH		Breakfast at the hotel. City tour of Haysuyama Proceed to Hiihama. Visit Hirose Park and Busshin Temple. Drive to Takamatsu, arriving in the evening. Transfer to your hotel. Accommodation at Takamatsu Keio Plaza Hotel.
APR. 02 (MON)	TAKAMATSU LV TAKAMATSU AR OKAYAMA	MOTOR COACH	AM PM	Breakfast at the hotel. Halfday sightseeing, visit Ritsurin Park. Leave Takamatsu by coach, through Seto Ohashi; the bridge over Inland Sea, for Okayama. Transfer to your hotel. Accommodation at Hotel New Okayama.
APR. 03 (TUE)	OKAYAMA LV OKAYAMA AR KYOTO LV KYOTO AR MAIZURU	MOTOR COACH BULLET TRAIN TRAIN MOTOR COACH	AM 13:30 14:53 15:30 17:37	Breakfast at the hotel. Visit Korakuen Garden. Leave Okayama by bullet train. Change train at Kyoto. Leave for Haizuru by local train. Upon arrival, Transfer to your hotel. Continue ICS program

ICS Congress Japan

Continued from Page 9.

Crane - because its feature was so graceful. When the city was formed by merging several towns in 1943, they chose "Maizuru" as a name of city.

KYOTO: Kyoto is Japan's fifth largest city with a population of somewhat more than 1.5 million, and it holds a very special place in the hearts and minds of the Japanese people. The capital for more than a thousand years (794-1868), Kyoto has been the stage for much of the country's history. Modern Kyoto retains many of the structures and much of the charm of that area, and is today the home of more than 200 Shinto shrine, 1,500 Buddhist temples, and many other buildings of historical significance such as Nijojo Castle, Kiyomizudera Temple, Sanjusangendo Hall, Ryoanji Temple and the old Imperial Palace.

ABOUT CITIES ON ICS PRE-TOUR

HIROSHIMA: Hiroshima was destroyed by the world's first atomic bomb on August 6, 1945, but the city has been completely rebuilt and is now the commercial center of the Chugoku Area. At the center of the city, the Peace-Memorial Park was created and is dedicated to world peace. The park has the former Industry Promotion Hall, called "Genbaku Dome".

MIYAJIMA: Some 20km (12 miles) west of Hiroshima lies the island of Miyajima. The island, one of the three most scenic places in Japan. The Itsukushima Shrine on the island was established in 593.

MATSUYAMA: Matsuyama, with a population of 428,000 is Shikoku's largest city. It is the capital of Ehime Prefecture, and its educational, cultural and commercial center. Dogo Onsen Spa, located in the eastern part of the city, is one of Japan's oldest hot springs. Unlike many spas, this one has a public bath house of extraordinary proportions, and has been frequented by many of Japan's celebrities. The imperial family visited it in 1989 and had a bath house of their very own carved out of stone.

TAKAMATSU: Takamatsu is Shikoku's principal link to the main island of Honshu. Before the spring, 1988, it was

just a one hour trip across the inland Sea to Uno on Honshu by JR ferry, but now the Seto Ohashi Bridge allows for JR's new direct train services between Takamatsu and Okayama, as well as coach traffic. The city is the home of Ritsurin-Koen Garden, renowned as one of Japan's most beautiful gardens, Takamatsu today is the capital and cultural center of Kagawa Prefecture.

OKAYAMA: Okayama, a metropolis of 570,000 is a principal city of the Chugoku region, and the capital of Okayama Prefecture. The city is known for its Bizen-yaki stoneware, cotton textiles, matting and peaches, and best-known as the location of one of the three most celebrated gardens in Japan, Korakuen.

KORAKUEN GARDEN: It was laid out at the order of Tsunamasa Ikeda, the feudal lord of the area, and was completed in 1700. It features several fields, ponds, waterfalls and tea pavilions, including one that even has a stream flowing through it. The garden is famous for its vistas: its wide open spaces are a special treat in Japan.

ABOUT CITIES ON ICS POST-TOUR

KANAZAWA: During the long Edo Period (1603-1868), Kanazawa was the home of Japan's second most powerful feudal family, the Maedas (The most powerful was, of course, the Tokugawa). To avoid confrontations with the Tokugawas, the Maedas stressed cultural activities rather than military affairs. Kutani pottery, Kaga Yuzen dyeing and other crafts were developed to high standards here and they still flourish today. Kanazawa is a modern city, but its many historical and cultural sites still testify to the area's unique historical background.

KENROKUEN GARDEN: Kenrokuen literally means "a refined garden incorporating six different features." The Garden was originally built in the 1670's by the fifth lord of the Maeda family. This Garden is popularly known as one of Japan's three best gardens. From the top parts of the Garden, visitors can command a good view of the city, and can even see the Japan Sea in the distance.

KAMO: Kamo is located some 40km south

**PROPOSED DAILY SCHEDULE FOR
INTERNATIONAL CAMELLIA CONGRESS
IN MAIZURU, APRIL 3-7, 1990**

DATE	MORNING	AFTERNOON	EVENING
TUES APR 3		REGISTRATION	WELCOME RECEPTION hosted by the Mayor of Maizuru City
WED APR 4	3 SESSIONS	1 SESSION STUDY TOUR to Camellia Gardens in Maizuru Farm	
THU APR 5	3 SESSIONS	1 SESSION MOVE TO Kyoto via Obama and Lake Biwa	
FRI APR 6	STUDY TOUR (EXPO '90 in Osaka)		
SAT APR 7	STUDY TOUR to Kyoto Botanical Garden, Heian Shrine, Kyoto Imperial Garden, etc.		FAREWELL PARTY

**Proposed Congress Period
Tuesday, 3rd to Saturday, 7th April, 1990**

**Proposed Congress Site
Maizuru Convention Centre**

of Niigata. It is known as the home of snow camellia (yuki-tsubaki). In the middle of April, the city celebrates Yuki-tsubaki Festival. As the post-tour is planned to meet the Festival duration, Miss Yuki-tsubaki may welcome you.

NIIGATA: The sprawling city of Niigata, the largest port on the Japan Sea coast, is very industrialized. In 1964 a major submarine earthquake was followed by extensive flooding, as a result of which many of Niigata's larger buildings are conspicuously new. Niigata was one of

the first ports in Japan to be opened to foreign trade after the fall of Tokugawa Shogunate in 1868. It is now known for its chemical industry, based on oil and natural gas in the area.

OMIYA: Omiya, situated some 40km north of Tokyo, is known as home town of dwarfed trees, Bonsai. Bonsai-mura (Bonsai village) is a unique place where nursery owners moved after Tokyo's earthquake in 1923 and established the village. You can appreciate the traditional dwarfed-trees there.

Notes From Eric Craig, Australia

Notes d'Eric CRAIG, Australie

Notas de Eric Craig, Australia

Note d'Eric CRAIG, Australia

Anmerkungen von Eric Craig, Australien

The 1989 camellia-flowering season started about one month earlier than usual along Australia's eastern coast regions. Sasanquas have been in great bloom around Sydney, and yesterday I was able to take a good-sized boxful of gibbed japonicas to a friend in hospital.

The month of March registered 185mm of rain (about 7.5 inches) in the north-western suburbs of Sydney, and yesterday, April 1, we had a solid 89mm (3.6 inches), so our seasonal peak flowering period of mid-June to mid-August should produce a wealth of good blooms.

Sydney's First Camellia Show of the Season will take place on June 17 and 18. One week later, on June 24 and 25, the historic home of Professor E G Waterhouse at Gordon, in Sydney, will host an Exhibition of Ikebana with camellias, and a companion exhibit of "Camelliana".

This will be along the lines of an exhibit which was much admired at the Kyoto Botanic Garden during the 1980 ICS Congress. The Eryldene hopes to attract members of Sydney's Japanese community to this twofold presentation.

Sydney members of the ICS had the pleasure of two visits from Japanese members recently: Gorou Iimure, formerly ICS Membership Representative for Japan, and now Vice President of the Japan Camellia Society, spent several February days in the harbour-city following a business visit to New Zealand,



Eric Craig

where he made time to contact Richard Clere, New Zealand's ICS Director. Opportunity was taken for Mr. Iimure to renew friendships with some of Australia's ICS members who toured Japan in 1987, as well as to discuss Western Pacific relationships and communications. In March we welcomed Mrs. Kiyomi Shinoda of Tokyo who was making her first overseas journey. She was accompanied by her daughter, Fumika, who had been an

overseas exchange student and was making a return visit after graduating from University of Tokyo.

Australian members have made an enthusiastic response to information from Japan concerning the 1990 Congress at Maizuru-Kyoto-Osaka. Dr. Terry Pierson,

past-president of the Australian Camellia Research Society and now one of Australia's ICS Directors, has offered to speak during the Congress.

Australia wishes to challenge all other overseas regions for top participation numbers at Maizuru next year.

Question And Answer

Question et réponse

Pregunta y respuesta

Domande e risposta

Frage und Antwort

Wally Freshwater, a recent transplant from Ft. Valley, Ga., USA to Shropshire, England has suggested the ICS Camellia Journal carry a "Question and Answer" column and has submitted the following — Wally wrote that after his move to England, he wrote for a Camellia Catalog to start his camellia collection at his new home. He ordered a Ville De Nantes and the nursery wrote that since Ville carried a virus, they tried to stay away from it. Wally writes that he has grown camellias over 40 years and to the best of his knowledge, he has never had any reason

to believe that the virus that causes variegation is in no way debilitating to the plant it infects or obnoxious to those who see it. He asks if international camellia growers should be deprived of the opportunity of seeing and growing for themselves the many beautiful varieties that have been seen and enjoyed in the U.S.A. for many years. He also questions the U.S.A. show rules that state only one flower or bud on a stem.

Do you have any questions or answers? Please submit them to the editor.

Minutes

First Meeting Of Directors And Incorporator Of International Camellia Society, Inc.

Compte rendu des premières réunions des directeurs et constitution
en société de l'International Camellia Society, Inc.

Agenda de las primeras asambleas de directores y oficiales de la Sociedad Internacional de Camelias

Processo verbale delle riunioni di direttori e della costituzione della Società Internazionale della camellia

Protokoll der ersten Sitzung von Direktoren und Korporation der internationalen Kamiliengesellschaft

The first meeting of the directors and the incorporator of International Camellia Society, Inc. was held at Baton Rouge, LA, U.S.A. at 3 p.m. on the 7th day of January, 1989.

A majority of the directors and the incorporator were either present in person or executed proxies.

Thomas E. Perkins, III acted as temporary Chairman and was unanimously elected permanent Chairman as the first order of business. Arthur Landry acted as Secretary.

A certified copy of the Articles of Incorporation was read to the meeting, and thereupon, on motion duly made, the following resolution was unanimously adopted:

RESOLVED, that the Articles of Incorporation granted to the incorporator by the Secretary of State of Georgia, dated the 2nd day of August, 1988, be, and the same hereby are adopted as the Articles of Incorporation of the International Camellia Society, Inc. The secretary of this meeting is directed to place a copy of the Articles of Incorporation and the certificate of the Secretary of State in the front of the minute book of the corporation.

The Chairman then requested Mr. Gregory E. Davis to read a proposed set of bylaws. Mr. Davis read the bylaws, section by section, and they were unanimously adopted as the bylaws of the cor-

poration. The Secretary was instructed to place them in the minute book of the corporation.

The Chairman called for nominations for officers of the company. The following officers were nominated and unanimously elected to serve in accordance with the provisions of the bylaws:

President	Thomas H. Perkins, III Post Office Box 750 Brookhaven, MS 39601
Vice-President	William Stewart 912 Roeder Way Sacramento, CA 95822
Vice-President	Eric D. Craig 4Lowther Park Avenue Warrawee NSW 2074 Australia
Vice-President	Miss C. E. Perring Watermill House Watermill Lane Pett, E. Sussex TN354HY United Kingdom
Secretary	Arthur Landry 10522 Ferncliff Avenue Baton Rouge, LA 70815
Treasurer	Gregory E. Davis 7815 Burgoyne Houston, TX 77063

Discussion as to salaries to be paid to officers of the corporation followed, and it was decided that no salaries would be paid.

Mr. Davis pointed out that the officers of the corporation and the law firm Watson, Spence, Lowe and Chambless in Albany, Georgia had already taken certain steps toward activating the corporation and in anticipation of the organization of the corporation. These preliminary activities of the incorporator, G. Stuart Watson, were reviewed in detail, and it was then unanimously decided that the corporation should ratify the actions of the incorporator in the name of and on behalf of the corporation.

The Chairman stated he felt the minutes of the meeting should show when the corporation would begin doing business, and, after discussion, it was unanimously decided to begin business as a corporation immediately.

Discussion of a depository was the next order of business and it was unanimously decided that Texas Commerce Bank would be the depository for the corporation and that the President, Thomas H. Perkins, III, and or the treasurer, Gregory E. Davis, would be authorized to sign all checks and other documents in connection with the bank account of the corporation. The officers of the corporation were instructed to execute on behalf of the corporation the standard signature card and corporate resolution prepared by the bank reflecting the action of the Board. The Secretary was instructed to attach a copy of that resolution to the minutes of this meeting.

The President was authorized and directed to file the necessary informational tax returns. It was reported that G. Stuart Watson, as registered agent for the corporation in Georgia, had already filed the 1988 annual report with the Secretary of State of Georgia.

The President was directed to be responsible for all hiring and firing of any employee in the corporation, including setting salaries for such employees, subject to approval of the Board. No employees were contemplated at this time. It was decided to authorize the payment of bills incurred in connection with incorporation, etc. as revenues

are received. We have not yet received the ICS monies from England. President Perkins and Treasurer Davis will continue in their efforts to get the treasury transferred to the U.S.A.

JOURNAL PUBLICATION

A discussion was held on a publisher for the Journal. The various bid proposals made by several publishers were discussed in detail. It was decided (motioned by Davis, seconded by Stone) to print the 1989 Journal with both covers in color and to reduce the inside color pages to one-fourth that of the last two journals. Additional color pages can be added before publication if finances permit.

OTHER ITEMS

Other discussions included the possibility of publishing records by region for membership revenues and expenses based on information furnished to the Treasurer, G. Davis. It was agreed that a supply is needed of invitations to join the ICS. It was decided to proceed with getting some stationery printed for use by the officers of the society.

Members Present: Thomas Perkins, Greg Davis, Vi Stone, Jean Comber, Edith Mazzei, Boyd McRee, Art Landry

Represented by Proxy: Leslie Riggall, John Pedler, Miss N. J. Swanson, Jean Laborey, Klause Hacklander, Richard Clere, Mrs. J. Wyndham, Mrs. Mayda Reynolds, William Stewart, Eric Craig, G. Kranen, Mrs. D. M. Freeman.

There being no further business to come before the meeting, same was adjourned.

Submitted:

Arthur Landry, Secretary

Approved:

Thomas H. Perkins, III, President

Annabelle Lundy Fetterman Educational Museum

Musée éducatif Annabelle Lundy FETTERMAN

Museo educacional de Annabelle Lundy Fetterman

Museo educativo Annabelle Lundy FETTERMAN

Annabelle Lundy Fettermann Bildungsmuseum

It was like a dream come true when the beautiful Annabelle Lundy Fetterman Educational Museum was dedicated during the American Camellia Society Convention at headquarters on 8 April 1989.

The Fetterman Family gathered with the ACS Members and friends for the dedication Saturday morning. The beautiful portrait of Annabelle was unveiled and will adorn the new building. Mrs. Helen Boehm was the dedication speaker and said that the

Boehm collection at the ACS Headquarters was the largest in the world. The priceless porcelain are beautifully displayed. An education program was presented Saturday afternoon and the meeting was closed with a banquet in the beautiful new building. Everyone is so excited about the new Annabelle Lundy Fetterman Educational Museum.

Below:

Lew and Annabelle Fetterman



New Zealand Camellia Society

J. A. Hansen, New Zealand

Société du Camellia de Nouvelle Zélande

Sociedad de Camelias — Nueva Zelanda

Società della Camellia di Nuova Zelanda

Neuseelaender Kamiliengesellschaft

From time to time overseas friends have expressed an interest in the activities of the New Zealand Camellia Society - how our branches operate; how we organise our programmes, shows, conventions, etc.

It is important to remember that there is only one Society in New Zealand, and although we now have 21 branches, all our members belong to that one Society and pay subscriptions direct to the National Body. The overall administration of the Society is under the control of the N.Z. Council, headed by the National President. The Council is made up of the officers of the Society, plus a representative from each branch, plus 10 additional councillors elected by members at the Annual General Meeting. The Council is therefore a large one, but it does ensure that branches and individual members have a say in the decision making and the policy of the N.Z. Society.

Members are encouraged to join in the activities of their nearest branch, and all branches organise their own affairs under the overall umbrella of the N.Z.C.S. Branches arrange their own programmes and each branch operates in its own way under its chairperson and officers. The number and type of meetings arranged by each branch varies considerably. Some branches find that it is necessary to hold all meetings during the day, and this seems to apply particularly where members are spread over a wide area. Others find that evening meetings are more popular, combined with several day

time activities such as garden visits, visits to other branches or weekend field trips.

Not all branches hold a show each year; a few of them do hold regular shows of their own; several hold a show as part of a local horticultural show; a number have displays only, in shopping malls; but most branches hold some form of public display every year.

Branches are encouraged to become associated with colleges in their districts which have horticultural classes and to take an active part in the school activities by supplying speakers on camellia culture and by planting camellias in school grounds. In some cases the branches pay the subscription to the N.Z.C.S. on behalf of the schools and invite the horticultural teachers and the pupils to attend branch meetings. Most areas also have some form of additional camellia plantings in the grounds of hospitals, reserves, public gardens, and so on.

Once a year the Society holds a National Show and Convention combined with the Annual General Meeting. This gathering is held in a different centre each year with the local branch arranging the programme and hosting the event with the assistance and guidance of the National Council. The convention is very popular, with attendances normally in the region of 350 to 500 members, and the shows produce entries of between 2000 and 3000 blooms, the numbers being largely dependant on the weather as the majority of blooms in New Zealand are grown

outside with little or no protection.

The New Zealand Society enjoys one big advantage due to the fact that New Zealand is a small country. With distances between centres being comparatively short, it is easier to maintain direct contact between branches and, as a result,

many members frequently visit one another. This is probably one of the reasons why the New Zealand Camellia Society has gained such an enviable reputation for its friendliness and good fellowship.

Notes From Richard Clere, New Zealand

Notes de Richard CLERE, Nouvelle Zélande

Notas de Richard Clére — Nueva Zelanda

Note da Richard CLERE, Nuova Zelanda

Anmerkungen von Richard Clere, Neuseeland

In June in New Zealand, camellias are well into the flowering season. Taupo is in the center of the North Island of N.Z. and at a high altitude, consequently outdoor plants suffer some stress in winter.

So far it has been fairly mild and damp and although snow fell on two days, but no hard frosts that do so much damage to the blooms.

New Zealand 1990

Ray Lauridsen, New Zealand

Nouvelle Zélande 1990

Nueva Zelanda 1990

Nuova Zelanda, 1990

Neuseeland 1990

The National Camellia Show, Convention & Seminar will be held in Palmerston North N.Z. 25th - 27th August, 1990. A warm welcome is extended to Camellia Members from overseas to join us in our 'Special Show.'

1990 is New Zealand's Sesquicentennial year. The Camellia Show is one of the official projects in the year of celebrations. Palmerston North, with a population of 64,000, is centrally located in New Zealand. Our visits to lovely gardens containing camellias will take us through

some of our best sheep and dairying country as well as a trip to an area very typical of our backcountry areas.

A post tour of gardens in New Zealand is being organised. This two-week tour will finally arrive in Auckland for a visit to the "World Orchid Show" before your departure.

If you are interested would you please contact Mrs. Blanche Lauridsen, Aranui Road, Rural Delivery No. 5, Palmerston North, NEW ZEALAND.

Channel Islands Republic of Ireland & Western European Region.

MRS. MAYDA REYNOLDS, JERSEY ISLANDS

République irlandaise d'îles de la Manche et Région Europe Occidentale

Isla Canal de la República de Irlanda y la región de Europa occidental

Repubblica irlandese d'isole del Canale della Manica e Regione Europa Occidentale

Kanalinseln, Irische Republik, und Westeuropaisches Gebiet

Our membership continues to increase and we are fortunate to have Mrs. Ann Bushell as our Membership Representative and Mrs. Vi Lort-Phillips, Past President. We three and several of our members also belong to the Jersey Gardening Club, the Garden History Section of the Societe Jersiaise, the Jersey Flower Club and the Royal Jersey Horticultural Society. Through these associations we are able to communicate our love of the Camellia and to encourage others to join the International Camellia Society.

Last year, Ann Bushell and I attended the Naples Congress in March, the U.K. Conference at Lyndhurst in April and with Vi Lort-Phillips led a party of 34 members to Rouen in May.

Most of us are busy in our gardens during the summer months and our main meeting in Jersey is in November when we discuss events of the year and the health of our Camellias and the next International Congress and U.K. meetings.

In April this year, twelve Channel Island members took part in the U.K. tour in Ireland, centred in Waterford and Cork. We visited many lovely gardens and enjoyed the scenic tours and Irish hospitality.

Also in April, Vi Lort-Phillips gave a

Lecture with slides to the members of the Guernsey branch of the NCCPG (National Council for the Conservation of Plants and Gardens). About a hundred persons attended this lecture on Camellias. Indeed, much of our local interest in Camellias stems from the work of Mrs. Lort-Phillips who celebrated her 80th Birthday in February by travelling to Australia for a family reunion in Melbourne, touring Belize and Guatemala en route and encouraging friends there to grow more Camellias. We are always pleased to welcome overseas members and this year we are greatly honoured to have our new President, Thomas Perkins III with Bill and Betty-Ann Perkins, Chuck and Pat Jacobs. Also here is our French Director M. Jean Laborey and in March, our Germany/Austria Director, Dr. Klaus Hacklander came to take photographs of Camellias in Jersey for a new book he is writing.

Many gardens in the Channel Islands were devastated by the 1987 Storm but most of our Camellias survived and after a mild winter they have bloomed very well this year. We are therefore encouraged to plan a Camellia Show for Spring, 1990 and we hope members from other parts of our region will join us.

News From Germany And Austria

DR. KLAUS HACKLANDER, Germany

Nouvelles d'Allemagne et d'Autriche

Noticias de Alemania y Austria

Notizie di Germania e d'Austria

Meldungen aus Deutschland und Oesterreich

On March 18, about 50 members met at the Nursery of Mr. Peter Fischer in Wingst. This meeting was held there instead of Frankfurt because of the distances. Mr. Fischer and his wife showed us their rich camellia treasures in the greenhouses and in the open, also their own cultivations of "Jutta" and "Wingster Olymp". The newly laid ground of the Japanese Garden was shown. This garden will show its full charm in a few years.

That evening 35 members met at the hotel. Dr. Hacklander greeted the members and the members exchanged camellia experiences and knowledge.

Dr. Hacklander stated that since 1986, Mr. Ra Dr. Balthes, Trier, audits the accounts to this region and has approved the handling and spending of the money. In March '89, 2,262-DM were deposited

into the treasury of ICS which is about 80% of the dues. The remainder is needed for the newsletter and other materials.

This has been an exciting year. From the first 15 members of the ICS that met in September 1985, it has grown to 175 people. This is a respectful beginning, also a beginning for around the world recognition. In February 1986 we met in Frankfurt, 1987 we founded a botanical study guide in oberitalien state. In March 1988, our members of the ICS Congress in Neapel attended a wonderful program. At that spring time, we met in Wingst.

The next meeting for our region will be in April 1990 in Locarno, possibly with the opening of the show "Camellia A Locarno." Confirmed are some of the visits to greenhouses of the state parks of Locarno and sightseeing tours to a few Italian gardens with good camellia stock.

News From Brittany

JEAN MICHEL MADEC, France

Nouvelles de Bretagne

Noticias de Bretaña

Notizie di Bretagna

Meldungen aus Bretagne

I never thought, about 12 years ago, when I was trying to grow my first camellia cuttings in the shadow of an apple tree, that this magnificent shrub would one day take me so far from my native Brittany to California, England, New Zealand and Australia. Brittany is located at the western end of France. It has 4 departments: to the east, L'île et Vilaine; to the north, the north coast; to the south, Le Morbihant; to the west, Le Finistere. The population is about 3 million inhabitants. The maritime climate — mild and humid and is perfect for camellia growing.

These journeys have taken me, slowly but surely from "white," "rose," and "red" to the majesty of "chrysantha" which is understandable, but what I had not foreseen is that they would cause me to found the first regional society of camellia amateurs in France: La Societe Bretonne Du Camellia.

Everything started in earnest in 1982. Until then I had, of course, with much obstinacy bettered by technique of using cuttings and even had started some nice seed beds but still, I had a desire to know more about the subject. That desire took me to Nantes, a city renown in France for being the "greenest" and with, notably, an important camellia collection.

Mr. Plantiveau, garden and green spaces director of Nantes, received me with kindness, told me of his own enthusiasm for camellias and informed me of the existence of the ICS. He put me in

touch with a program designed for my needs and taught by a master gardener.

Mr. Plantiveau died prematurely in 1986, shortly after his retirement in October of 1984. I felt a deep sense of personal loss for, although he was not quite a friend yet, he had been very kind to me in every way encouraging my nascent passion.

In the matter of camellias, in this department of finistere, located at the end of the world, here is the situation: (1) The old camellia bushes in our castle gardens do not reveal their history, (2) The nurserymen, very discreet, consider they alone possess the secret, (3) The retailers for the most part tag them - "white" - "rose" - "red" and nothing more.

As a result, one only whispers about camellias here. We are assured that they are fragile, slow growing, sensitive to cold and to diseases, have delicate blooms that the first rain is likely to spoil, etc. and as for its propagation — it's a thing of mystery.

All this profoundly intrigued me since my work and experiments seemed to prove all these statements wrong. Furthermore, my belonging to ICS, since March 1982, followed by three congresses (Sacramento, Brighton, Sydney) showed me what a fantastic thing a camellia can be, a glorious science of shared communications and information. A true passport of friendship.

This friendship has manifested itself through some wonderful people who

never stopped encouraging me. When I think of Sacramento, I think of Eric Craig, Maurice Vervalle, Alain Stervinou and Jean Morel. Brighton brings to my mind Sir Alec Beattie and Peter Campbell. Remembering Jim and Dorothy Hansen transports me to Waikanae and Sydney makes me dream of the beautiful nursery of Roger Nancarrow at Middle Dural.

During those long voyages, my enthusiasm keeps growing. I get more determined. Back home, I try everything I have seen and learned concerning seedlings, cuttings and of course the end to all ends — the grafting. I do not even ask myself the question why do all of this? For example to gather each season hundreds of seeds, to cull them, to sow them under different conditions in different beds in order to understand and even manipulate the germination. All this takes me one step further to another gratifying activity - that of the camellia bonsai.

During this time also, the nurserymen begin to organize and to show more interest in camellias and this especially here in the department of finistere which is considered one of the most forward thinking in Europe in agricultural and fishing matters. Now the seed catalogs grow thicker and one begins to see names like Hybrids, Reticulatas, Sasanquas and new Japonicas.

The year 1983 is marked by a local event of great importance — the Domaine De Trevarez, property of the Consul General of Finistere, becomes the centerpiece for a camellia festival to be held yearly. The exhibitors are all mostly professionals. The steering committee was headed by Mademoiselle Barre. This event has profoundly marked my career as camellia amateur - Ms. Barre having asked for my help at the festival (and here I must introduce Denise, my wife). We showed slides taken at the Sacramento Congress. At the second festival we showed all our work in progress, in the garden and in the hot house (seedlings, cuttings, grafts) as well as blooms. A room of 30 meters square was reserved for us in the old horse stable of the castle and we received in three afternoons a crowd of 9000 visitors. The Madec family show was born and public interest

demands that we keep it going.

Since then, our annual presentation has grown by leaps and bounds. We now require 100 square meters of space for our display. These events are very good for establishing contacts and dialogs. They have also allowed us, without any great surprise, to measure the ignorance of the public in all matters concerning camellias. To remedy that situation, I presented the idea at the 87 festival to create a group of amateur camellia fanciers. Fifty people joined. The following Nov. 22, I organized a meeting entitled "The Camellia And The Amateur In The World." Pictures and slides were shown at that conference. In March '88 we visited the beautiful and rich nursery belonging to our friend, Alain Stervinou located at Gipronvel, north of Brest. Face to face with a multitude of magnificent flowers, our group became even more enthusiastic thus encouraging me to continue my sacred mission. With the help of a good and serious crew, we defined the aims, functions, statutes and interior rules of our society. Even the membership card is not forgotten and we decided on the Celtic emblem, the famous triskel, for its decoration.

Everything is ready on Dec. 11. Our society is born in the library of the Trevarez Castle. My secretary, Georges Le Gall, signed up 40 new members. The statutes became official on Jan. 9, 1989, fifty years after the inception of her bit American sister.

The SBC is evidently present at the '89 festival; the Madec family is no longer alone. We now number 60, scattered in 4 departments and even further. We have four meetings a year, three at Trevarez and the fourth a visit to a park or nursery or a private garden. It was with much pleasure that we made our first visit to the beautiful garden of Jean and Jacqueline Morel at Larnor Place, near Lorient. They are faithful members of the ICS and our society.

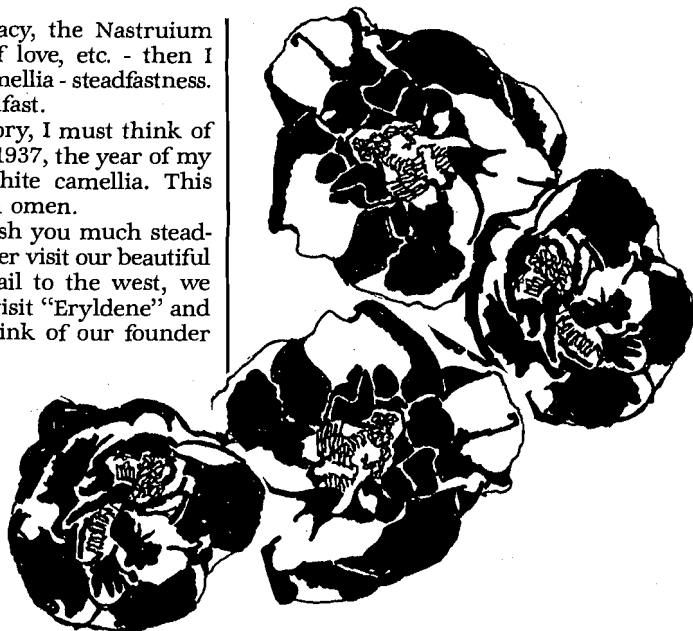
The societe Bretonne Du Camellia could not have come to existence without the presence of the international society and we sincerely thank its past and present directors for their help and encouragement.

If in the language of flowers, the corn-

flower means delicacy, the Nastrium means the flame of love, etc. - then I prefer that of the camellia - steadfastness. It's good to be steadfast.

On ending this story, I must think of my mother who in 1937, the year of my birth, planted a white camellia. This might have been an omen.

Dear friends, I wish you much steadfastness and if you ever visit our beautiful Brittany, set your sail to the west, we await you. We will visit "Eryldene" and together we will think of our founder E. G. Waterhouse.



Societe Bretonne Du Camellia

AIMS

Société bretonne du Camellia

Sociedad Bretona de la camelia

Società britannica della camellia

Bretagner Kamiliengesellschaft

To promote the love of camellias in our region; to maintain and enlarge their popularity, to make them better known.

To propagate information - locally, nationally, internationally. To teach members how to identify camellias and how to multiply and nurture them as well as how to utilize their beauty in the arts, such as landscaping, flower arrang-

ing and painting. Encourage friendly exchanges.

To develop and maintain friendly relations with foreign societies in the framework of ICS.

To maintain good relations, to cooperate with camellia professionals.

To take an inventory of the camellias in Brittany; to start local historical research.

Societe Bretonne Du Camellia



Camellia Bonsai Display



MME. D. Madec, M. Andro, MME. Mahe,
M. Madec, MME. Furic, M. & MME.
Charles

THE NAPLES CONFERENCE

The Business Of The Society

THOMAS H. PERKINS, III, U.S.A.

Le Congrès Naples - Les Affaires de la Société

Conferencia de Nápoles - negocios de la sociedad

La Conferenza di Napoli - Gli Affari della società

Die Konferenz zu Neapel

Seldom has the business of the Society been reported to the membership. I think the time has come when a peek into the guidance of the Society is warranted especially since the subscription rates have been raised again. At the Naples Conference the meeting of the Directors was divided into two main sessions on separate evenings. This was caused by the discovery that deficit operation of the Society was continuing from 1986 and 1987. A committee was formed to look into the scale of dues return from the Regions. I am listing the approved committee report which shows their recommendations and new dues schedule which is in operations at this time.

The I.C.S. Board of Directors which met on Tuesday, 22nd March, were concerned that the 1987 Accounts showed a deficit of L2908 and set up a committee to which all Regions were invited to attend with a delegate.

This Committee met on Thursday, 24th March, 1988 and submits the following recommendations to the Board for Approval.

1. All Regions and The Executive will make all possible savings consistent with

maintaining the quality of service to members.

2. The principal expense is the Journal which, however, is recognized as a quality publication whose color section is valued by members but economics must be found.

3. The size should be reduced to about 120 pages so that the weight with all inserts will be less than 250 grams.

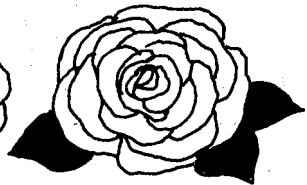
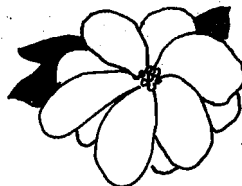
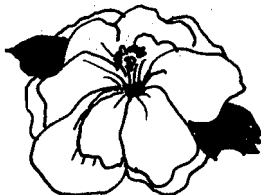
4. This reduction should be made largely by including less news from the U.K.

5. If advertising is confined to the back cover and inside covers it would save 50. The Editor must have therefore at least 1 page more than this amount to justify advertising in the body of the Journal.

6. Translations should be the responsibility of the Regions.

7. Cheaper methods of rapid transport to the Regions are to be investigated, including the possibility of direct mailing to Japanese members.

8. It is recognised that the most expensive copies of the Journal are the first 1,000. Every effort should be made therefore to increase membership this year and to hold it next year when the subscription rate rises.



9. After taking into account the differing requirements and differing capabilities of each Region, the following rates are recommended from 1st January, 1989:

	Single	Husband & Wife
Africa	R13	R15
America	\$13	\$16
Asia	Y2400	Y3300
Australia	\$12	\$16
France	Fr80	Fr100
Germany/Austria	DM30	DM35
Italy/Switzerland	L20,000	L25,000
New Zealand	\$16	\$17
Portugal	E1000	E1200
Spain	F1300	P1500
UK & Other Regions	8.50	11.00

10. All Regions would encourage members who wished to assist the Society by making donations to do so.

11. The Executive should revive the Life Membership Reserve as a matter of urgency.

12. In addition, the President would like all Regions to look into the possibilities of Commercial sponsorship which, apart from its obvious advantages, might provide a way of increasing our membership in Communist countries such as East Germany and China.

Please look over these adopted recommendations and help us apply them for the survival of the Society. We cannot continue deficit operation the Executive is attempting to lower the cost of the Journal and other expenses. There were a few agitated moments at the sessions

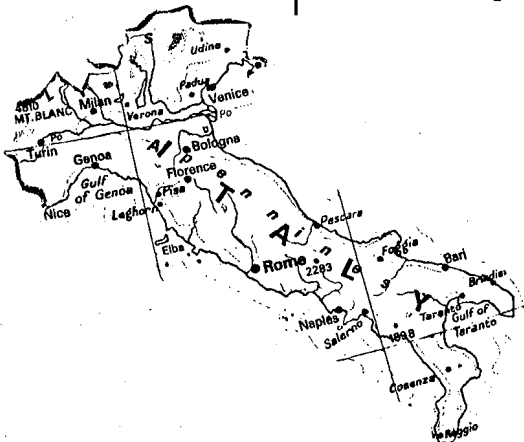
but I think that most points of controversy have been smoothed over since the meetings.

Other business of the two sessions included approval of the financial reports of 1986 and 1987, and the approval of the next Conference Venue of 1990 in Maizuru, Japan supported by the Japanese Camellia Society and a large private sponsor, the Seibu Corporate Group. The American Group had previously asked for the Conference of 1990 to be held in New Orleans, Louisiana but agreed to move its bid to 1992 as the Japanese were anxious to have theirs in conjunction with their World Class Greenery Exhibition in the Kyoto-Osaka Area.

The Directors elected Thomas Perkins, III as its new President and Eric Craig, Miss Cecily Perring and William Stewart as Vice-Presidents. This election transfers the Executive to the U.S. This Journal includes a listing of the Honorary Executive, the current Directors and Membership Representatives approved by the Board.

The Board in previous meetings had assumed the responsibility of publishing the Savige Check List of Camellias and had voted to start funding it by using the Surplus generated by the Brighton Conference. Continued deficits caused the Board to reconsider and halt the total commitment of these funds temporarily.

Delegates from South Africa proposed a Conference in their area in the Autumn of 1993. Details will be presented at the Conference in Japan for approval.





Conference visitors in Naples, at the Naples Conference.

PHOTO BY WLADIMIRO ABBATE

Magic Hours Of Camellias In Galicia

SANTIAGO SANCHEZ
ESPANA

Heures magiques du camellia en Galice

Horas mágicas de camelias en Galicia

Ore magiche della camellia nella Galizia

Zauberhafte Stunden der Kamilien in Galizien

The incomparable Juan Pascau said that a master artist might be able to blend colors so that Galicia appears in different forms. There is one hue for the silent and shady valleys, another for the tranquil fields, the mountain ranges and the forests where the last native woodcocks fly. And, also, there are coastal zones, a seacoast of serene and harmonious estuaries in contrast to the cliffs and promontories in the north.

How can one explain to someone who does not know us that this is a land of subdued light and continual mists where participants dressed as pagan witches and elfish little devils are compatible with Christian devotions and pilgrimages to shrines in which saints always have a kindly smile? Next to country homes are Roman arches and estates of the 18th century, immersed in a dazzling and baroque vegetation through which still beats with a firm pulse a sense of almost medieval existence. To a great degree in Galicia one can talk about the ubiquitous irony whereby the inhabitants, continually tempted by the call of the "great winds", become pilgrims throughout the world to live eternally longing for their native land.

There are intimate ties between the human mind and nature which surrounds us. And often, but not always, these are invisible. This is easily observed when one examines the evolution of Hellenic culture in light of the climate of Greece. Or Teutonic mythology and the

cold climates of Europe. Perhaps the effect of the southern lights goes unnoticed in the works of the ancient Italian masters? Or the leaden skies of Holland in the paintings of Dutch interiors? Or in the essence of Zen, in the art of Ikebana, the everpresent sensitivity to nature that permeates all aspects of Japanese life?

Here in Galicia where even a girl named Rosalia came to realize as well as anyone that we live bound to a thing "that lives and is not seen", are we not aware that our existence is tied to our native region, to a deep feeling for the countryside and the lush greenery of the roadsides?

Veneration of trees and love of flowers is common to all lands of Breogan, perhaps because of the common thread of the Celtic Druid culture, similar to the Finnish "sampo" or to the "fu-sang" of Chinese thought. This is well understood by us who harbor special affection for the ancient oak of Santa Margarita and who honor the camellia each May.

In the 19th century, the renowned forestry engineer Rafael Areses left us an exhaustive collection of foreign species adapted to this land, enriching the previous compilation of Colmeiro and botanical works of Padre Sarmiento.

Again we celebrate the blooming season of the delicate and impressive camellia, its happy ritual return to Mother Galicia, when we can spend months enjoying its flowers. A torrent of human emotion senses the deep and close relationship, strange and also intimate,

between the diverse greenery of the countryside and the pleasing company of our camellias - next to a silo, to the homes and footpaths of the villages, beside the shadow of medieval stone ruins, in the semi-abandoned cloisters of the large monasteries, around the castles, in the gardens of our cities.

In the 18th century camellias arrived in Europe from China and Japan. They came disguised among the tea plants on board clipper ships of the East India Company. It could hardly have been imagined that camellias would make themselves at home with us and that each year, with much anticipation, we would celebrate this camellia festival in their honor. They are our happiness in the long, gray, dull days, a blend of color along the byways of eternal and tranquil Galicia.

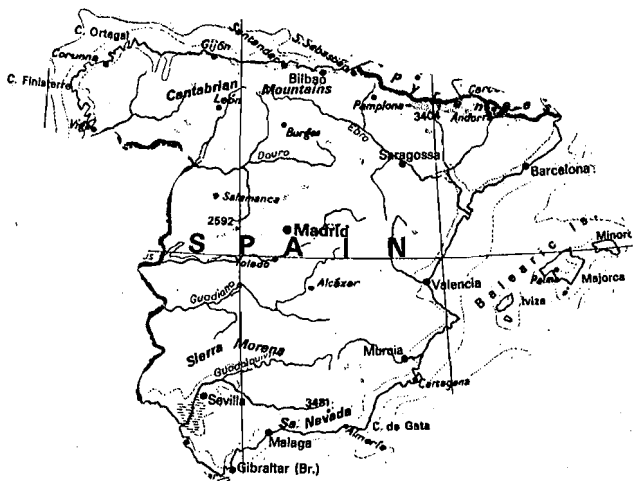
It is well known that the camellia is a member of the family Theaceae, named by Kamel and catalogued by Linnaeus. Its shiny and evergreen leaves contrast with the flowers, white, red, pink, and variegated and with some of exotic colors and varying forms. But how can it be said that the camellia is part of the spirit and landscape of Galicia?

In its expansive and affectionate adoptive embrace by the land of Galicia, where everything is dominated by harmonious ties with nature, the camellia is an integral part of the landscape, an expression - perhaps the most beautiful of the entire year - of this old alliance with the eternal seasonal cycle.

Here, where man is closely linked with the land, how could we not love the camellia? Do we not love the pines of which Pondal sang? The forests of chestnuts? The oak groves? The rows of birches along the rivers?

This year Antonio Odriozola will not be with us. But his spirit, along with that of Cruz Gallestegui, Jose Pita, Carlos Valencia, Cunqueiro, Enriqueta Lopez-Ballesteros, Robert Gimpson, and so many others, will not be very far from the Reticulatas and Alba Plenas.

These dawns with soft gray, diffused light are excellent for arising early. Along the roadways are camellia blooms dotted with drops of dew among the dark gold of the mimosas. One feels he is participating in the profound experience of the Prophet Daniel as he viewed the Glory of God through the Portals of Heaven.



Novel New Format For Camellia Shows

ERIC CRAIG, Australia

Format neuf des expositions de camellias

Nuevas planes originales para exposiciones de camelias

Nuovo formato per le esposizioni di camellie

Allerneuestes Format fuer eine Kamilien-Schau

The camellia show held in April last year at Locarno, in southern Switzerland, at the northern end of Lake Maggiore, featured a surprising innovation for easier inspection of blooms:

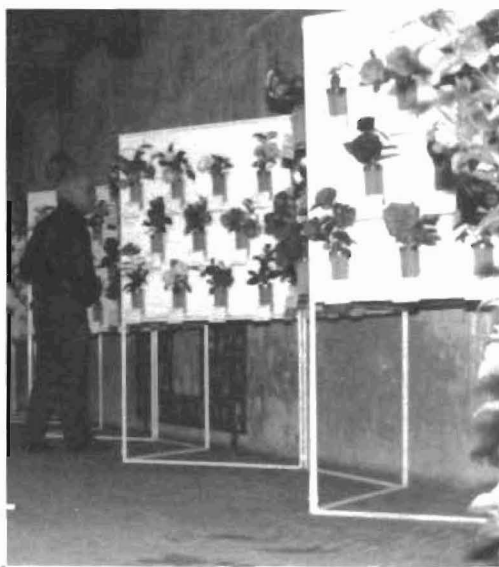
Instead of the flowers sitting in cups or vases on a flat table, they were presented in vases which were fitted onto upright display boards. Standing erect on metal feet, the display boards were arranged either in straight rows, indented in pairs, or in curves.

The great benefit of this unusual format was the positioning of every bloom in the show at or about eye-level.

Werner Fritschi, who headed the team of Swiss members responsible for the new approach, said it had been greatly appreciated by Locarno people and visitors.

Whilst the innovation had been intended as a surprise for ICS members from various countries, who were visiting Lake Maggiore as a post-congress tour-group after the Naples program, an overstretched luncheon that day led to their non-arrival at Locarno.

Herr Fritschi and his colleagues hope that their photographs will encourage other regions to try their idea, and will gladly supply any constructional details which may be required.



A Frenchman's Answer To American Friends Who Wonder Why So Few New Strains Are Produced In France.

JEAN LABOREY, France

Réponse d'un Français aux amis américains

Respuesta de un francés a amigos americanos

Riposta d'un Francese agli amici americani

Antwort eines Franzosen auf die amerikanischen Freunde

This question was asked of me during the ICS Congress in Naples and the way I answered may be of interest to some:

Several reasons, you will see, explain the very small number of new strains produced in France by *homologation*.

First and foremost, our climate is not favorable to a good pollenization of the blooms, the temperature being often much too low at flowering time.

Further, we do not raise camellias in greenhouses as do our English friends who, by doing so, have the necessary warmth for successful pollenization and producing novelty blooms.

French horticulturists and amateurs alike have tried to introduce to France the many new camellias they have discovered during the ICS Congresses in the USA, Australia and Japan, but mainly they have oriented their efforts to things that Frenchmen deem more important: the eradication of viruses and the selection of plants which are more cold-resistant: as an example of the latter, I told my audience that though we were unable to cultivate a hybrid of the *Camellia Reticulata* (not hardy enough here), we did marvellously well with the *Camellia Williamsii* in France as well as in Great Britain.

We differ also from the amateurs of America, New Zealand and Australia because, if I dare say it, we are more "gardeners" than they are; I mean that nowhere in France will you see a garden planted only in camellias as we saw in the



U.S. and in Australia. We plant our camellias among other shrubs whose flowering either precedes or prolongs their flowering season.

I also directed the attention of my American audience to the fact that even though the *côte d'Azur* has a Mediterranean climate, its soil, but for a small portion, is not acid enough; camellias must be container-grown and protected from too much and too hot sun.

Another way of being different from our overseas friends is that we do not use grafting as a mean to propagate; this, since we have no plants grown from seeds. Instead, the amateurs and the professionals almost always use cuttings.

Lastly, we singularize ourselves by showing the whole plants rather than cut flowers, and as the Japanese do, by giving preference in France to the mid-size bloom rather than the large one and, more and more to showing camellias with simple (*) flowers, the blooms never

treated with giberelline since we have the good fortune of not being acquainted with petal blight.

(*) (Translator's note) I think here he means "simple" as an opposite of "double" or "frilly".

Report On Royal Horticultural Shows: 1989.

JOYCE WYNDDHAM, United Kingdom

Rapport des Expositions royales d'horticulture: 1989

Informe de exposiciones horticulturales reales 1989

Rapporto sulle esposizioni reali d'orticultura

Bericht ueber die koeniglichen Gartenschau 1989

This will be the eleventh year I have presented displays at the two shows in March and April of each year.

These two shows are an important factor in the promotion and advertising of the I.C.S. Visitors attending from many countries make themselves known at the stand, are interested and new members are made.

Camellia exhibitors know that it is a worrying time before a show, in that the blooms are ready and at their best. At the R.H.S. shows we have to rely on contributions of camellias from various sources, and these are not known until the very last day before the show opens. Before the judging takes place on the first morning, there is a rush to assemble blooms given at the last minute, and to make sure the labelling is correct and in place before the judges come around.

In March of this year, after a very mild winter we were presented with very fine camellias from such famous gardens as Windsor, Stonehurst, Chatsworth, and

members of the I.C.S. Contributions included fine sprays of Inspiration, Golden Spangles, and Elegans, and a magnificent arrangement of Margaret Davis with Cornish Snow were received with much admiration and many photographs. My thanks to my helpers for the display which was awarded the Flora Silver Medal.

The second show in April suffered from lack of blooms as they were nearly finished, but with a more formal display incorporating pillars encircled with moss and camellias, and a large central arrangement of mixed blooms made a very attractive show. One of the camellias on display was a new bloom named after Robert Strauss, the late owner of Stonehurst, causing much interest, but still to be registered. With the assistance of helpers to whom I am indebted for their hard work, and the flowers from the nurseries and members of the I.C.S., we were awarded the Banksian Silver Medal.

First Regional Camellia Society For France

ERIC CRAIG, Australia

Première société régionale pour la France

Primera sociedad regional de camelias para Francia

Prima società regionale della camellia per la Francia

Die erste regionale Kamiliengesellschaft fuer Frankreich

The influence of the International Camellia Society has resulted in formation of the first regional Camellia Society in France:

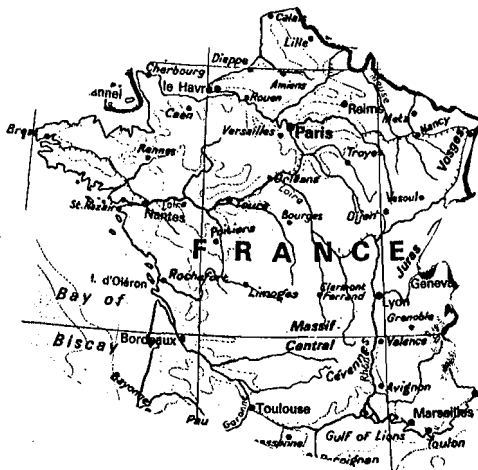
It is LA SOCIETE BRETONNE DU CAMELLIA, and was launched on 11 December 1988. Its President, M Jean-Michel Madec of Brest, has advised me that the Camellia Society of Brittany has an initial membership of 35 persons. His wife, Denise Madec, is the secretary of the society, which, to my knowledge, is the first and only Camellia Society in France.

As with the United Kingdom, France does not yet have a national camellia society — as has America, Australia, Japan, Italy and New Zealand.

Mr. and Mrs. Madec were attracted to

the beauty of camellias through the efforts of M Jean Laborey, the organisational ICS Director for France, and consequently attended ICS Congresses at Sacramento, USA, and Sydney, Australia. They also met with Australian members of the ICS in France, following the 1988 Naples Congress.

M Madec has written to say that the Camellia Society of Brittany has been modelled on the Australian Camellia Research Society. Its formation is highly newsworthy from the international viewpoint, I believe, and therefore suggest the background story should come from M Madec himself, rather than second-hand from me.



Camellias In New Zealand

NEVILLE HAYDON

Camellias en Nouvelle Zélande

Camelias en Nueva Zelanda

Le Camellie nella Nuova Zelanda

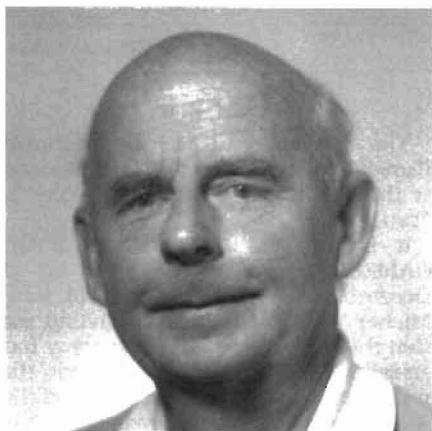
Kamilien in Neuseeland

Camellias continue to be a standard ingredient of the New Zealand garden. A trade publication last year listed more than 50 nurseries now producing camellias. Nearly all of these nurseries are growing a limited range of well known varieties as part of a general offering of shrubs and trees for sale to garden centres, but in total the annual production must total several hundred thousand to service our population of three million.

As a specialist grower, selling direct to the public, I have a much wider range, and must continually try to assess any shifts in public preferences, so that we will always be striking cuttings for plants that we are reasonably likely to sell in 3 years time. In a country where home gardeners have such a wide selection of plant material, both flowering and foliage, which will grow with relative ease, preferences - or fashions - in plants probably change more quickly than in more difficult conditions.

Most of our sales are to home gardeners with little detailed knowledge of camellia varieties or growth habits. Our catalogue is designed for their benefit rather than for the experts, and is divided into sections headed;

1. JAPONICAS AND HYBRIDS OF SIMILAR APPEARANCE This includes the *saluensis* hybrids, and also any registered *reticulata* hybrids such as Black Lace and Betty Ridley which lean heavily towards the japonica part of their pedigree in appearance and performance.



Neville Hayden

2. SPECIES This section is being expanded as we can obtain new species, and I am pleased to report that many of our Botanical Gardens are now establishing large collections of the species as we can make them available. *Transnoekoensis* is easily our most popular species, and our display plants are looked at with astonishment by the many who think of camellias only as japonicas and sasanquas.

In Australia last year I had the opportunity to see different clones of several species which have only recently become available to us. The leaf variations between clones of the same species was a surprise, and will merit a great deal of future study, firstly to establish which may be the best clones in their own right as garden plants, and secondly which if any will show superior potential as hybridising parents.

3. HYBRIDS BASED ON THE SMALL

LEAFED SPECIES This is the most rapidly expanding section of our catalogue, and covers the range of very free flowering hybrids which have appeared mainly in the last ten years. Apart from the flowering habit, this group has added new dimensions to the variety of plant types that can be grown. We have the compact *pitardii* group, so useful for smaller gardens, the slender up right types such as Spring Festival and Cinnamon Cindy, through to the tall Wirlingas with their graceful arching branches. This variation in plant appearance is encouraging gardeners to include more camellias in the very mixed shrubberies which generally constitute a New Zealand garden.

4. **RETICULATAS AND LARGE FLOWERED RETICULATA HYBRIDS** My nursery would account for a considerable percentage of the production of these, because the wholesale nurseries do not find it practical or profitable to produce grafted plants. Even so they are the smallest section of our production, which is strange considering how well and spectacularly they grow and flower here.

5. **SASANQUAS** After years of neglect these are again receiving the attention they deserve for their autumn display. Recent articles published in America have classified sasanquas as very prone to dieback, but I feel that this must vary entirely according to climatic conditions. After growing many thousands here I have yet to see a dieback canker on one, although we are familiar with the problem on weaker varieties of other species.

With the increased interest in the small flowered hybrids, something had to lose in popularity, and for the present it is the large flowered japonicas which have lost ground. Only exceptionally beautiful varieties such as *Elegans Champagne* seem to be wanted in this category.

As I have written in other publications, our customers ask continually for plants which will not grow very tall. We continue our search for good new varieties of this type. Any logical search for camellias will start with *Nuccio's* catalogue, and I have been very grateful to obtain from it in recent years several excellent slower growing plants - *Mini Mint*, *Reigyoku*, *Rosaeflora Cascade*,

Sasanqua Compacta, *White Doves Bente* and the new *Domoto* seedling *Dwarf Shishi*.

White japonicas continue to be very popular in New Zealand, even though our windy growing conditions make it difficult to obtain unmarked flowers. At the other end of the colour scale, *Mr. Os Blumhardt's* black red *Night Rider* has become instantly accepted as a top variety, the bronze to very dark green leaves setting off the flower perfectly.

The *Chrysantha* plants which we have now had for several years continue to frustrate. A few more flowers than previously are appearing, but some very large plants have yet to have any flowers.

My first three plants of *Chrysantha Hu Tuyama* on the other hand have set pairs of buds down the main stem on second year grafts.

I can think of only two possible reasons for such a varied response.

1. That *Hu Tuyama* is an older seedling which has reached full flowering maturity, while the seedlings germinated about 1980 and cut and recut for several years thereafter for propagating material are still in a semi juvenile state.

Or 2. That *Hu Tuyama* with its narrower leaf is adapting more easily to our climate than the larger leafed seedlings. If this proves to be the case will we have any chance of flowering *Euphlesia*? Leaves on the first two year old graft measured 22cm by 11.5cm.

I still favour the first possibility, noting that the *Hu Tuyama* plants start growing at the same unusual times - main growth run autumn - as the other seedlings, but have still set their buds with apparent ease. Only time will give the answer.

Operating from Auckland, N.Z.'s largest city *Neville Haydon* occupies a unique place in the camellia scene in the country. As a camellia specialist/nurseryman, with world wide connections, it is to him that camellia enthusiasts turn in our quest for new releases. A former accountant in an industry concerned with *Camellia Sinensis*, he spent 18 years in the tea trade. He grew camellias for a hobby for 15 years before giving up his accountancy to start commercial production of his chosen flower.

His expertise has assisted I.C.S. and the N.Z.C.S. in many ways and his knowledge as a Senior Judge has been invaluable.

Camellias Of Japan.

LESLIE RIGGALL, AFRICA

Camellias au Japon

Camelias de Japón

Le Camellie nel Giappone

Kamilien in Japan

As the next Congress of the I.C.S. will be held in Japan, some advance information on the camellias of that country should be helpful to many delegates from overseas. It may be useful to know of some varieties to seek out, with a view to collecting scions or arranging for them to be sent from Japan after the Congress.

Although at first glance it might seem more appropriate for a Japanese member to write such an article, this is not so, because Japanese taste in flowers and plants is quite different from Western taste. With this in mind I propose to deal only with varieties which I believe would be attractive to non-Japanese camellia growers.

I have some beautiful and/or interesting Japanese camellias in my own collection and would like to recommend these from experience.

"Shuchūka" is actually the type of small, delicate and somewhat informal flower which appeals to Japanese taste, but I am sure I should recommend this one. I have admired it ever since I first saw it in the private garden of Koichiro Wada, an internationally famous nurseryman of Yokohama, about thirty years ago. It is the rarest of all camellia types, a picotee which always flowers true to type. It was many years later that I acquired this charming variety from another Japanese friend, and it is a miniature semi-double to peony-form white with a red margin.

There is no need for me to recommend

"Otome" (misnamed "Pink Perfection" in America, and "Frau Minna Seidel" in Europe) or "Bokuhan" ("Tinsie" in America), they are already popular, but "Hanafūki" is more uncommon, with large globular pink buds, opening to an unusual cup-shaped soft pink flower.

That very adaptable plant in all climates and situations "Akashigata" ("Lady Clare") is popular, but I prefer the variegated form "Ōniji", because sometimes the white variegation is beautifully moired, an improvement on mere splashes of white. Having a weeping tendency, they would both be good for large baskets or window boxes, or to grow down a wall or a steep bank.

"Akebono" is a lovely single with large blush pink flowers. Flowering early, it makes an elegant plant without pruning. "Ezonishiki" is a white camellia with pink and red stripes, having an open funnel-shaped flower, good in all climates. In 1831 Dr. Siebold brought "Ezonishiki" to Antwerp, where it was misnamed "Tricolor"; and another of his introductions was a camellia re-named "Donckelarii". I believe that this now famous variety was "Masayoshi", and I would like to obtain this from Japan, and test this theory by growing them together.

"Hagoromo" ("Magnoliiflora") is a blush-pink medium sized semi-double with waxy petals. It has a quiet touch of class, (the Japanese word is "Shibui") dif-



Leslie Riggall

ficult to define, and has been a favourite for at least three centuries.

"Iwane Shibori" is a brilliant red variegated with white, whereas "Kitizo Shibori" is a striking white splashed with pink and red. In my Japanese collection these two always attract attention and are recommended.

"Kakure-Iso" has wine coloured single flowers with a clear white border to each petal. Japanese flower names are often obscure and highly imaginative. This name means, "Rock under crushing waves". Perhaps the person who named it visualised a dark rock and a stormy sea flinging white foam over it.

Another with an imaginative name is "Kokinran", which means, "Ancient Golden Brocade". A large semi-double or peony form, it has white petals spotted and striped with red, and rich orange-yellow anthers.

"Koshi" has single crimson flowers with a decidedly blue cast and sweet fragrance. This one would be a must if some optimist decided to try to breed a fragrant blue camellia. I will never forget the way I acquired this variety. At the last I.C.S. Congress in Japan we visited Oshima, an island famous for its camellias south of Tokio Bay. We had a most enjoyable Japanese style barbecue, where we sat each side of a long table and cooked the food on a grill running down the middle of the table. By the window was a pot plant of "Koshi" which I was

invited to smell. I said I liked the fragrance and would like to grow it, but thought no more of it. Later just as my bus was leaving for the harbour a Japanese gentleman came running to my window and handed the "Koshi" plant to me. It is easy to understand that I am looking forward to the Japanese Congress next year.

"Ringo-tsubaki" (meaning "Apple camellia") is the Japanese name for *C. japonica var. macrocarpa*, which is a subspecies originating from Okinawa, and bearing very large fruits like red apples. The manner in which I acquired the seed is an amusing story of another Congress. A Japanese delegate was allowed to bring in a fruit to the Congress on the condition that it was destroyed immediately after his speech. Seeing an opportunity, I offered to destroy it for him. It was unbelievably hard, and took half-an-hour to destroy little by little with my pen knife. All that remained were six small seeds, which went to two other countries, so the undertaking to completely dispose of the fruit was carried out.

"Momozono-nishiki" is a semi-double with soft pink flowers finely streaked all over with red. "Soshi Arai" is similar and I prefer the latter variety, because the variegation is very delicate and pretty.

"Murasaki-tsubaki" (meaning Purple camellia) is a formal double for those who like to include flowers with a purple tinge in their collection. For me, the more colours the better. "Shibori" added to a name means "variegated", and there is a variegated form of this one.

There are other camellias with a bluish cast but I know them only from photographs, which cannot be relied upon for colour. "Sumizome" seems worthy of mention, a purplish-crimson formal double with incurved petals, white "Juraku" seems to be a real beauty, a striking single with wide overlapping blush-lavender petals emphasised by a distinct lavender-pink border around each petal.

"Shikibu" is a variety which would appeal to both Japanese and Western growers. It is a miniature red anemone-form with red petaloids edged white. "Shiragiku" (the name derives from "Shiro" (White) and "Kiku" (Chrysan-

themum) has no special quality. Misnamed "Purity", it appeals to those who like a formal white. There are not many formal doubles in Japan, where singles are much preferred, including many with very small flowers.

"Shun-shokkō is a semi-double to formal double with soft pink petals shading to white at the centre. For those who like soft pink flowers "Furōan" is a charming single with wavy petals which open wide. For a single white, I would recommend the superb "Yukimi-no-sakazuki". "Tzure-nishiki" is a beautifully shaped semi-double with wavy brilliant red petals, variegated white.

There is a current fashion for Higo (pronounced "Heengaw") camellias in some quarters. These are wide-open singles, often misshapen, with a prominent boss of stamens, often flaring in a quite unnatural manner. They were also a great fashion during the era of the Samurai, the ancient knights of Japan. But I am cynical where fashions are concerned, and as with ladies' fashions, I do not enthuse over flowers which do not appear to me to be elegant or well formed. The two serious faults characteristic of many Higos are the flaring of the stamens to a degree which is completely out of proportion to the flower, and misshapen petals which look equally unnatural.

An example is "Osaraku", which in Japan was considered the most beautiful in past centuries. To western taste few of the flowers produced are acceptable, especially as the misshapen petals are too small for the large cluster of stamens. But there are some Higo varieties which should be attractive to non-Japanese growers, and the first I ever possessed was the early-flowering large pink Higo "Dewatairin", which in England was known as "Hatsu Sakura" in those days. It travelled with me to Portugal, and later to South Africa, and has performed equally well in three different climates. Japanese camellias have the great virtue of adapting to a wide range of climates.

"Kumagai" is a large dark red Higo with a good form and attractive stamens. "Mikuni-no-homare" is reasonably well proportioned but less attractive than "Kumagai" because the stamens are too widely spaced.

One of my Higos which I consider to be worth growing is "Nioi-fubuki". All the single medium-sized wavy-petalled flowers are scented, and occasionally we get a really pretty one.

Mention must be made of the "black" camellias (actually black-red), which I enjoy almost as much as any camellias. Of these the best known is "Kuro-Tsabaki", and I have others such as "Eiraku" (or "Heiraku") and "Kon Wabisuke", and a very black one which was named *C. iodina*. It is the colour of iodine but this name does not seem to be used now. The pigments which comprise these flowers include deep purple, and therefore these might be used to work for a blue camellia. Les Jury of New Zealand claimed that he got a blue camellia from another "black" camellia, "Fuyajo", but it died from neglect. "Eiraku" seeds well and even produces natural seedlings under the plant, so perhaps the optimist mentioned earlier should put "Koshi" pollen on this one, and later bring in a fragrant white such as *C. rusticana* "Mizuyoshi".

The Japanese appreciate camellias with unusual foliage and Japan is the best country to look for these. "Benten" has leaves variegated yellow, but it is slow growing and not for impatient or elderly people. Perhaps the best of these is "Reigyoku". The patch of colour in the middle of each leaf is pink at first and later changes to light yellow. "Myojo" is excellent in this group, showing more and deeper yellow. This is one I have wanted for a long time. Another is "Mangetsu", which should not be confused with the white Higo with the same name. There are many more foliage-variegated camellias in Japan and one wonders whether they are related to each other, as so many have similar small red flowers.

Other foliage plants which I find intriguing and attractive are the fishtail-leaved camellias. I have three, "Kingyo tsubaki", which differs from that depicted in Macaboy's colour dictionary, and may be the one he regards as "Quercifolia"; "Nishiki-sakana", which has the most pronounced division of the leaf-ends, and my favourite, a fishtail I found in an old family nursery in Guernsey, one

of the Channel Islands between Britain and France. This was imported from Japan so many years ago that the record was lost, and the nursery no longer propagated it.

Among these which I am very anxious to acquire is, "Shokko-nishiki". I saw this for the first time in the Higo collection at Kumamoto Castle. It was outstanding and I cannot understand why no nurseryman is distributing this one. One needs to be careful in collecting it, because there are two other varieties with the same name. One is a white, striped deep pink single closely resembling "Ezonishiki", and the other is a poorly shaped Higo single white with a few pink stripes. The "Shokko-nishiki" I am recommending has a large wide-open red moired white flower, with beautiful golden stamens not too exaggerated.

"Kujaku-tsubaki" ("Peacock camellia" - from a resemblance to the closed tail of a peacock), is very different. The semi-cascading growth and narrow drooping leaves and flowers give a willowy effect. We have top-grafted this variety onto a sasanqua to achieve the best effect.

Another unusual camellia is "Unryu", in which all the stems zigzag, changing direction literally at every leaf. The beautiful fruits like red plums are a bonus.

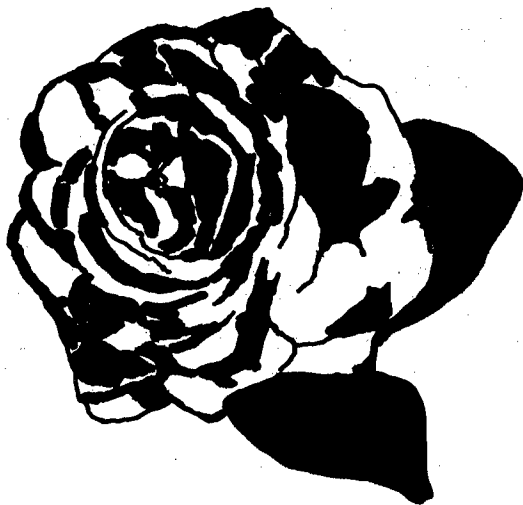
Among the star-shaped flowers are "Koshi-no-yosooi", the blush-coloured round petals arranged in six rays, and "Ayatori", another formal double with six rays of pink petals.

"Kasugano" I know only from a photograph, but I surely would like to grow it. The large white moired-red double flower appears to have waved white petals and looks very distinguished.

"Uzushio" is another which I know only from two photographs, one of a large bush and the other a flower and two pretty buds. A large plant carries thousands of flowers in astonishing profusion, each one like a soft pink rose.

There are a thousand more interesting forms of *Camellia japonica* in its native land, and of course there are the sasanquas and rusticanas, (Yuki-tsubaki) which are the "snow camellias" which lie completely buried in snow in northern Japan, and which open their flowers immediately as the melting snow uncovers them.

But I think I have given enough examples to arouse keen interest in any lover of camellias, and I urge every member who can possibly do so, to seize the coming opportunity of seeing the fascinating camellias of Japan.



Italian Camellia Scene

ANTONIO SEVESI, Italy

Situation du camellia en Italie

Escena italiana de camelias

Situazione attuale della camellia in Italia

Zur Situation der Kamilien in Italien



With the appearance of the camellia in the West around the end of the year 1700, Italy assumes an important place in the cultivation of this plant.

With the camellias of Caserta, second to that of Berlese, one-half of those produced were sent to all of Europe—those camellias from Sacco to Milano, those from Saltarelli, Franchetti, Luzzatti to Firenze, and those cultivated above the region of Lago Maggiore by the Rovelli brothers.

Towards midway of the last century, the interest in camellias lessened and almost disappeared completely up to the

beginning of this century. Toward 1950 it was ascertained that camellias were completely neglected, many uprooted and only those hidden in the far corners of the gardens were saved. In the zones that I knew more about, those of Lago Maggiore, every area was most favorable for camellia cultivation, as for soil, climate, precipitation, etc., etc.

Therefore, I began to search for camellia plants. Unfortunately, the variety at my disposal was very few in comparison to those I had come to know about through literary discussions of the Americans, Australians, English, Japanese and others. I began to import certain varieties known. I organized, with other friends, a display of camellias which was a notable success. In 1965, I founded the Italian Camellia Society and organized a showing of camellias at Cannero Riviera which resulted very successful. From this period a rapid growth and interest developed in Italy. From the first imported camellias, scions were secured which resulted in hundreds of camellia plants. Some 10 years later worldwide varieties were imported into the country. What is the actual situation?

The number of camellia strains has been growing and from there even the cultivation of camellias has been greatly expanded. In Italy the zone where today we find the most camellias are: that of the area around Lago Maggiore, that around Lago d'Orta, that around the central part of Lago di Como in Toscana, especially

around the Lucca area. Even in Southern Italy there are camellias, but for the most part they are not of the new varieties.

Around Lago Maggiore important collections of camellias have been carried out, suffice it to cite that of Villa Anelli di Oggebbio, that of the floriculture of Lago Maggiore belonging to Giovanni Piffaretti. Around Lago d'Orta, and precisely at Orta, I saw the Villa Motta where an important camellia garden is being created. Around Lago di Como, especially in the upper part, there is being planted many camellia gardens. In the villas around Lucca they are caring for the old camellias, of which there are many, and in the other villas there have also planted new varieties.

In Campania, especially in the villas around Vesuvius, and around the Amalfi coast, the old camellias are objects of particular care, and they are planting again. There will be camellias, but it will take some 10 years for them because the strains are those of Lago Maggiore. In order to ascertain how the interest in camellias has spread, some professional floriculturists have imported plants from abroad.

Many visitors who are enthusiastic seeing the different varieties of our camellias exhibited, quickly buy a plant, but after some year or so, and with the passing of their enthusiasm, they abandon this marvelous hobby. It's a bitter fact that 10 percent of those who truly continue to interest themselves in this flower do not always go deeply into its study. Another great deficiency of the Italian camellia is that of not creating new varieties, something on the contrary was very widespread in the past century.

Even the hybrids in which the English, Australians, Americans, New Zealanders have made great strides, the Italian camellias have remained more or less static. However, we must recognize that today every variety of camellias is known by its own name, contrary to what occurred some 20 years or so ago.

I believe that the future of the camellias in Italy will be brilliant, because the gardens require a modest amount of care, and this is an advantage because of the present-day cost of labor.

CAMELLIA PERSONALITIES IN ITALY

To list the Italian camelliophiles would truly not be an easy task. There are some who develop their hobby almost in secret and with certain evasiveness. Therefore, I have to content myself to pointing out only some of them. I ask you to pardon me if for the moment I forget the names of some of them, however, they also have contributed in the rekindling of interest in camellias.

I will begin mentioning the spouses Giovanni and Marta Piffaretti, who have a large floriculture at Cerro di Laveno Mombello, and who are specialists in camellia cultivation. In general, the relation between the amateur camelliophile and the professional are not pleasant. There is an exception in the case of the Piffaretti spouses. They are always ready to place their blossoms grown in their hothouse at our disposal and they have all of the up-to-date studies made in Japan and United States.

The spouses Mirella and professor Mario Motta have at some time been occupied with camellias. In the park of their villa in Orta, above Lago d'Orta, very near Lago Maggiore, they have a few old camellias. They have remained out of action, so to speak, and now they have begun the planting of a new variety. And, too, they have succeeded in having hundreds of specimens, and have the intention to have a good deal more in cultivation.

Around Lago di Como, at Gravedona, Dr. Giuseppe Motti has, for more than 15 years, organized a camellia exhibit. At Gravedona, in his garden, he and his friends have planted hundreds of camellias.

In Toscana, the awakening of interest for camellias had begun in some years, however, it is progressing rapidly, especially in the Lucca region where professor Giorgio de Meo and his grandson, Dr. Guido Cattolica, have restored the camellias of Villa Borrini, and they are making great plantings of the most modern camellias while they work to uncover, in the villas of the area, old varieties that were thought to have disappeared, and they reproduce them.

We recall professor Osvaldo Buosi di

Treviso, who has secured from New Zealand half of his camellia strains and now has obtained his own related plants. Besides, Signor Luigi Terranova was the first in Italy to have successfully caused the *Chrysantha camellia* to bloom in 1986. We cannot forget that between the "camellia personalities" those who are very modest with camellias when these were completely forgotten.

We also recall the floriculturist Mario Carmine di Cannero Riviera who, when finished with the work which he now does, would go to the Lago Maggiore gardens to search for the old camellias from which he obtained layers of shoots so that he would later sift through them

at the opportune time hereby preserving the variety.

And even it always recalls that around Lago Maggiore, Signora Mary Caroni who has always been very active in prodding the farmers of Canton Ticino to participate in the exhibition who, she herself, cultivated many varieties of camellias.

In Rome, Dr. Mario Del Sera has dedicated much of his free time towards the study of camellias. It was a surprise at the beginning of the Italian Camellia Society to find in him a very precious source of news concerning the Italian camellias.

The International Camellia Register

THOMAS J. SAVIGE, Australia

Le Registre international du camellia

Registro de Camelia Internacional

Il registro internazionale della camellia

Verzeichnis der internationalen Kamilien

When I received a note from Thomas Perkins, our new President of the International Camellia Society, asking for an article about the "International Camellia Register" that would "clearly bring out why we (the ICS.) should be squarely behind me". This has caused me to sit down and re-appraise the whole venture.

This re-appraisal has made me more convinced than ever, of the considerable desirability of there being available to all gardeners, botanists, horticulturalists, horticultural writers and, in fact, everyone who uses fancy plant cultivar names, a reference of international standard and origin, to refer to for concise information on the names and history of each valid cultivar of a plant Genus. That this is desirable and necessary, for uniform and proper cataloging, as well as to clearly specify plant cultivars, particularly for

the international exchange of plant material and all the activity that goes with it, is strongly evidenced by the amount of time and concern that has been put into this requirement, particularly over the last 50 years by so many eminent scientific and lay persons.

At a certain stage in the development of horticulture, it became plain that cultivar names should be closely controlled. This eventually lead to the "International Code of Nomenclature for Cultivated plants" being formulated by a section of the "International Union for Biological Sciences". This document, familiarly known as the "Horticultural Code", was first introduced in 1953. It has gone through a number of changes and modifications, leading to its present form published in 1980.

This Code has caused the formation of

a number of "International Registration Authorities for various plant Genus of horticultural merit, with the consequence that plant names in these Genus have become more stable and accurate.

In the case of the Genus *Camellia*, its development as plants of horticultural merit probably started long before the 16th Century as there is first evidence in that century of cultivar names being given to camellias in China, and, shortly afterwards, in Japan. The early horticultural forms were from the larger flowered species, such as *C. japonica*, *C. reticulata* and *C. sasanqua*. There was little, if any, deliberate interspecific hybridization, although rare examples may have been culled from the wild.

Then the Western World discovered the camellia and, from 1800-1900 AD, literally thousands of cultivars were produced and named. They soon spread to all parts of the globe suitable for their culture. There then followed, in the Western World, a period of hiatus on camellia culture for a period of about 40 years. This led to consequent loss of identity, so that, when they became popular again, their nomenclature was in a state of total confusion. Thus, from about 1935 to 1955 there occurred a sorting out period, when many lists and catalogues were published, such as Vanderbilt's "Camellia Research" and Fendig's "American Camellia Catalogue", endeavouring to stabilize camellia nomenclature. There was great activity in this area of camellia culture for some time, but it finally quietened down, due largely to various national camellia societies being formed and, in the English speaking world, to the regular publication of the Southern California Camellia Society's "Camellia Nomenclature".

However nomenclature has never been cleaned up on an international level, for example oriental cultivars were largely disregarded, so that some confusion in nomenclature still remained. This led to the funding of a grant for international research into camellia nomenclature in 1958, by the Longwood Foundation of America, acting through the L. H. Bailey Hortorium, Cornell University. From this eventuated 5 years of dedicated work by Ralph Philbrick and the amassing of a

considerable volume of data in extracts, photocopies and slides. It also led to the formation of the "International Camellia Society", based on the panel of international experts formed to assist Ralph with his task, then to this society being entrusted with the task of International Registration Authority for the Genus *Camellia*, and finally to my acceptance of the office of International Register.

According to the "Horticultural Code" it is incumbent upon the Registration Authority of a Genus to publish and maintain an International Register of the cultivar names and histories of the Genus concerned. At the time it was thought that all that had to be done was to knock a heap of data into shape and publish, but, after 6 years of dealing with it on a daily basis, it has become far more than that, as material has continued to flow in, much of it from Chinese and Japanese sources, and an amount on the old European varieties. There also have been hundreds of new registrations and the development of interspecific hybrids in a big way from the dozens of camellia species becoming available.

The influx of material on the old varieties is slowing down and further evidence is mostly on orthographic variations of names published, but the amount of new oriental material is growing considerably. However, what is becoming more and more evident is the poor nomenclature that still occurs in nursery catalogues and other publications. In some quite modern lists there is up to 8% incorrectly spelt names and what some catalogue can do with Japanese names defies belief. Rare are the nurseries like Nuccio's of California, Camellia Lodge and Camellia Grove of Australia, Camellia Haven of New Zealand and Trehanes of England, in whose catalogues it is rare to find an error. Some of the worst examples occur in publications including list of cultivar names from garden collections. The author has taken down the badly pronounced names or copied misspelt names from plant labels or garden lists and published them without adequate checking. Reference to an international list of valid names would reduce this to a minimum.

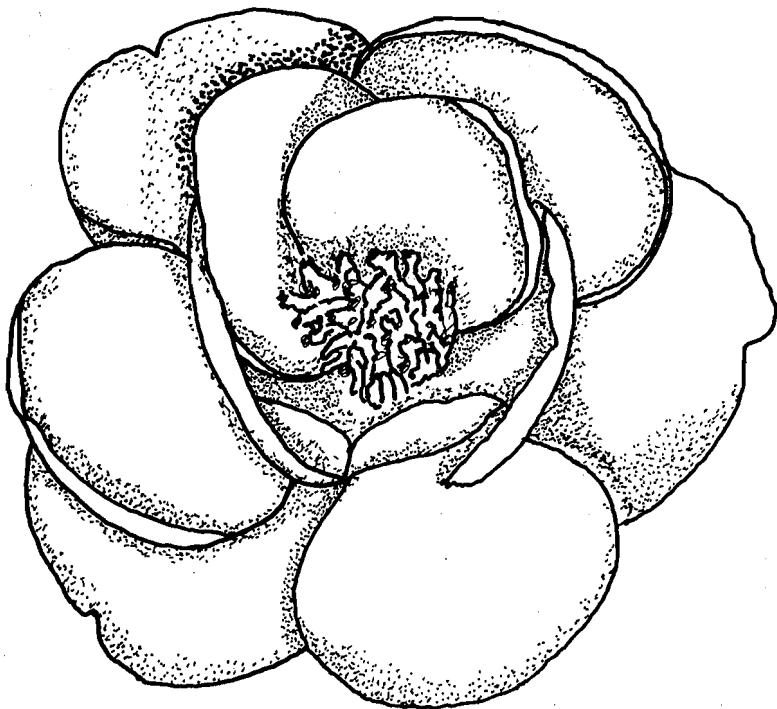
In the selection of new names the

Register would prevent duplication. Most of the National Registration Authorities refer their lists of new registrations to me before publication, and duplicate names are not uncommon in these lists. To render this problem minimal without a International Registration List would mean each registration authority would need to employ, on an almost full time basis, a person to research all horticultural literature where camellia names are mentioned, catalogues from nurseries the world over and all Camellia Society publications, and record them in a retrievable form, so that they would have as complete a reference file as possible.

A further purpose of the Register is to straighten out the various synonyms that remain in popular use. It is common for different camellia growing areas to retain the use of synonyms for various reasons, and this is particularly so in America where many Chinese, Japanese and old European varieties are more commonly known by their local synonyms than their prior valid name. This is permissible where original names are unsuitable for commercial purposes, due to being

difficult to pronounce, or having an undesirable connotation, etc. Such synonym should be properly approved by the registration authority and included in the Register. As it stands this use of synonyms has caused some confusion when plants are exchanged internationally, particularly when the recipients are unaware of any nomenclature history.

Finally let me say that my purpose is to produce an International Camellia Register which will be a list of all names and varietal histories that have been located from the catalogues and literature from every country where camellias are grown and from all source that have been located, back to the "Bencao Gangmu", (Materia Medica with commentaries) of Li Shizhen, 1590 and up to the latest registrations of 1990. This would then be a bench mark, or point of reference for the future. The sourcing and listing of modern cultivars is a snap compared with dredging through mountains of old papers, book and publications, extract of which have gone into the Register, and I would wish a repeat of the task on no one.



The International Camellia Register

THOMAS H. PERKINS, III, U.S.A.

Le Registre international du camellia

Registro de Camelia Internacional

Il registro internazionale della camellia

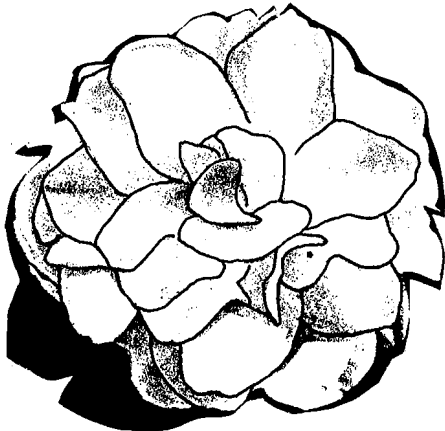
Verzeichnis der internationalen Kamilien

We at headquarters have just received word that the work on the International Camellia Register has been completed. As you know this massive undertaking has been done by our past President, Tom Savige. It is our duty to see to the publication of this important botanical, horticultural and historical record. The Society has voted to support Tom Savige's work. The Society has also voted to provide from our excess funds of the Treasury to begin publication. We are in the process of securing bids on the 2-volume, 2500 page work from as many printers as possible in the U.S., U.K., Australia and perhaps Hong Kong and Singapore. We are under the promise of further aid from the Bailey Hortorium and the Longwood Foundation to complete this Register.

We shall have to set up a Register Publication Fund and appeal to foundations in the U.S., U.K. and Japan for help. We also have to appeal to Camellia Societies, various libraries and research institutions and individuals for pre-publication pledges to see to the world-wide distribution. We hope to have a printing of 2000 sets and at a price that most of us can and will afford.

We expect our members and societies to bring this up and generate the vital support. Remember that this Register has evolved from a check-list of nomenclature into a historical record with details on the cultivars of Camellia around the globe.

Yes, we will need help in the coming year!



A Visit To Southern Ireland

JOHN TOOBY, United Kingdom

Visite en Irlande du Sud

Una visita al sur de Irlanda

Une visita in Irlanda del sud

Besuch in Suedirland

The 1989 Garden Tour arranged by the British and Channel Island Directors and Members of the I.C.S. was set in Southern Ireland and lasted a week, April 20th. to 26th., instead of the usual four days. The abiding memories of the tour are of a series of splendid gardens, each one of them different, but each delightful in its own way; of elegant 18th. and 19th. century houses where our hosts dispensed generous hospitality; and between the gardens, miles of emerald green countryside enlivened by large patches of richly fragrant golden gorse.

Unfortunately for us, the winter had been unusually mild and many camellias had finished flowering or were practically over. However we saw enough to realise that the Irish have soils and climate very suitable for Camellias and we saw many fine plants.

About 40 of us, including a couple from The Netherlands and another from New Zealand, started from Waterford, where some looked in at the home of Waterford Crystal, whose beautiful hand-crafted models are still made in the traditional way.

The whole of Friday was spent at Mount Congreve; this has been described as one of the three best gardens in Europe - and who am I to disagree? Our host, Mr. Ambrose Congreve, has given the property to the Irish nation, subject to his use during his lifetime. He was unable to be with us until lunchtime so we were taken round by the Director of the Garden, Mr.

Dool. Together with a small farm and nursery, the property extends to 120 acres (48 ha.) of which the garden accounts for perhaps half. It is laid out on a large scale on a moderately acid soil (pH 5.6) on a sloping site running down to the River Suir, part of it in woodland under a canopy of oak trees. Since 1965, Mr. Congreve has carried out replanting on a grand scale with Buddlejias, Clerodendrons, Hebes and Hydrangeas following on for summer effect, but Rhododendrons and Camellias stand out, and indeed the Camellia collection is one of the best in the British Isles. Of those still flowering, 'Elizabeth Rothschild' was still doing well with single pale pink flowers; 'Elegans' had a few blooms and 'Freedom Bell' lived up to its name with a fine show of red flowers. A group of 'Mattie Cole' still held some of its lovely single pink flowers, with flared stamens, Higo-fashion. 'Bowen Bryant', 'Charles Colbert' and 'Alexander Hunter' were still looking good while 'Elsie Jury' and 'R. L. Wheeler' still retained a few good flowers.

After a superb lunch in the house, we were welcomed by Mr. Congreve, who had flown in from London to meet us. Then, refreshed, we returned to the garden to see more fine plants. 'Inspiration' - the best of all for the garden and for cutting, we were told - and 'Donckelaeri' were admired, as was 'Joshua Youtz' with some nice white flowers, though others were somewhat marked.

Nearby 'Crinkles' was looking good near a plant of the excellent South American *Myrtus lechleriana*, so much more free-flowering than *M. luma* and apparently hardier too. Further on, 'Royalty' was coming to the end of its season but still making a good show; 'Joseph Pffingstl' was near the end too, but had some fine formal double flowers; the Irish summers are cool and a number of camellias produce flowers with a different form to what they do even in England. In central and northern Ireland, as also in Scotland, few forms of *C. japonica* produce enough flower buds to be worth growing, while many hybrids flower freely. One such is 'Leonard Messel', with very large flowers of a good, almost salmon pink, which was doing well at Mount Congreve.

On Saturday morning we went to the John F. Kennedy Arboretum at Campile. This has been developed as a memorial to the late President Kennedy. It extends to 623 acres (252 ha.) and is sited about four miles (6 km.) from the Kennedy family's ancestral home. The first shelter belts were planted in 1966 and the first trees two years later. The soils vary somewhat, with the pH ranging from 6.2 to 7. The site slopes gently towards the south so the main problem in growing Camellias is providing shelter from wind. A few plants of *C. japonica* planted close to the buildings near the entrance were looking less well than the examples of *C. cuspidata* (a very tight-growing form), *C. saluenensis* and *C. reticulata* lower down. These were in an open site and the *C. reticulata* seemed to dislike their exposure to wind.

After lunch in the Cafeteria we went on to Kilmokea, the garden of I.C.S. members Col. and Mrs. David Price; they came to Ireland 40 years ago, when the garden consisted of two apple trees and half an acre of potatoes. After rehabilitating the old garden they turned their attention to a boggy area in the corner of a field just below, and found themselves excavating a 7th. or 8th. century mill-pond - which is now a feature - and below it flows a small stream which now runs through a little valley with tributaries fed from springs. All is now well planted with a varied collection of trees and shrubs - including some very nice

Camellias. Amongst them we noticed a plant of *C. tsaii* about 8 ft. (2.5 m.) high and several shades of pink but all standing up well to the weather. Most Camellias were over but 'Brigadoon', 'Jupiter', 'Donation' and 'St. Ewe' all looked good, and a young plant of 'Anticipation' held several perfect flowers.

After tea in the house, we returned to the hotel, where we learned that the flowers - mainly camellias of course - had been arranged by members of the Waterford Flower Club which includes both Protestants and Roman Catholics; they were going on to arrange a Flower Festival at the Protestant Church with the proceeds to be divided between the two denominations. It was nice to know that religious harmony is possible in Ireland.

Next day, Sunday, we drove to Glountaune near Cork, our first call being at Lismore Castle, the Irish home of the Duke of Devonshire. As we approached, we saw a splendid Magnolia, perhaps 60 ft. (18 m.) high, probably of hybrid origin and covered with ruby-red flowers. This was in the Lower Garden, which is the spring garden and includes a good collection of camellias, mostly forms of *C. x williamsii*, planted by the present Duke and which were doing well. In the absence of the Duke, we were taken round by the Agent, Mr. Peter Barber. The soil of the Upper Garden is near neutral so it has been developed as a summer garden devoted to herbaceous plants with a sprinkling of shrubs. The far side is bounded by a high wall, part of the old ramparts. From here we walked through the courtyard - with two fine trees of the New Zealand *Sophora tetraptera* is full flower - to the castle, where we enjoyed coffee and light refreshments. The castle had been remodelled in the mid 19th century by Joseph Paxton for the 6th. Duke, and commands fine views over the valley of the River Suir.

After lunch at Ballyvolane House, which has been adapted for use as a delightful hotel and restaurant, we went on to the garden of Mr. and Mrs. Brian Cross at Glanmire. In contrast to the others, this is a relatively young garden with very varied planting and an emphasis on alpine and rock-garden plants.

Of the Camellias, 'Donation' was looking good, while a plant of 'Mary Phoebe Taylor' about 4 ft. (1.3 m.) high held a few nice flowers; 'Margaret Davis', about the same height, was carrying one last lovely flower. 'Jupiter', about 8 ft. (2.5 m.) had a good display, but 'Inspiration' had nearly finished and 'Francie L.' had no flowers left. Mr. Cross, who took us round, had been particularly helpful in making arrangements for our visit as had our next host, another I.C.S. member, his neighbour Finbarr Dowdall who had planted the sides of a dingle with camellias. These, too, had mostly finished flowering after a good display earlier on. Rosemary Dowdall then invited us into the house for a welcome cup of tea etc. And so we came to Ashbourne House Hotel nearby, with camellias in the garden, including a tea-plant, *C. sinensis*.

That evening we visited one of the Cork schools to join the Cork Men's Flower Club to hear an excellent lecture given by one of our party, Jennifer Trehane of the Trehane Nurseries, on Camellias and Camellia growing.

Monday was another lovely day and we started by visiting Annesgrove at Castle-townroche, the home of Mr. and Mrs. Grove-Annesley. This is a large old garden, through the bottom of which runs a small river, which is bordered by generous plantings of Primulas, Podger-sias, Irises etc. The garden is mostly on a limestone soil, with a pH of about 7, but a peaty area marks the line of an old watercourse. Part of this was planted with Rhododendrons etc. about 1902 and these have been added to since. As in some of the other gardens most of the Camellias had finished flowering but 'Bow Bells' was still giving a good display with flowers that stood up well to wind and weather. There is a wealth of fine old trees here and other plants of interest. After a splendid buffet lunch in the house, presided over by Mrs. Grove-Annesley, we rejoined our bus for the drive to Fota. This is an outstanding garden, which has recently come into the ownership of University College, Cork. It stands on an island in Cork Harbour and contains a marvellous collection of specimen trees and shrubs. Here again we were impressed with *Myrtus lechleriana*,

several large bushes of which were laden with flowers and scenting the air for yards around. Several Camellias were still flowering here, 'Anticipation', 'Elsie Jury' and 'Edith Linton' being outstanding as was a large bush labelled 'Anemoniflora Alba'. A collection from Portugal was planted in 1961, but the labels had been lost and the only one that we could identify with anything like certainty was 'Portuense' with variegated leaves. Our New Zealand friends were happy to recognise several New Zealand trees, which thrive here due to the mild climate.

The weather held again on Tuesday when we went to Glengarriff at the head of Bantry Bay, where we had coffee before embarking on the ferryboat to take us to Ilnacullin the fabulous Italian Garden on Garnish Island made in the early years of this century by Harold Peto for members of the Bryce family, and now the property of the Irish state. Here we had our picnic lunch and spent a delightful afternoon wandering around, led by the head gardener Mr. Finbarr O'Sullivan. 'Donation' was about over but 'Jupiter' was still flowering well, as was a nice striped one called 'York and Lancaster'. On the other side of the garden close to the jetty 'Captain Rawes' was flowering well against a wall and there were still a few flowers left on 'Lionhead' nearby. 'Elizabeth Rothschild' was also doing well and a young plant of *C. tsaii* looked promising.

That evening we had a fascinating lecture by Dr. Charles Nelson, the Director of Glasnevin Botanic Gardens, Dublin, on the flowers of the Burren, illustrated by some very fine slides. The Burren is an extensive area of limestone pavement close to the coast of County Clare which at first sight looks very barren, but on closer inspection is seen to hold a rich flora and a number of interesting plants.

On Wednesday the weather started to change as we drove to Killarney and it was raining when the bus arrived at Muckcross House in the Killarney National Park. Some of the party went to the greenhouses, and others to the house with its fine 18th. century furniture and cellars converted into craft workshops. A few enthusiasts braved the elements to

the camellias, quite recently planted in woodland in groups of six or so of each cultivar. Quite exceptionally for this part of Ireland there had been a frost the previous night and few good flowers were to be found.

After lunch we went on by Kenmare and part of the "Ring of Kerry" to Rossdohan on an island in Kenmare River reached by a lane too narrow for buses and by a bridge over the sea. The weather had now cleared and we enjoyed wonderful views over Kenmare River as we wandered through groves of tree-ferns, cordylines, eucalyptus and other exotics to the house, now an empty shell

after a disastrous fire some years back. Unfortunately the camellias were practically over and the highlight was a group of very large plants of *Rhododendron grande*, *Rh. macabeanum*, and *Rh. sinogrande* all of them in full flower.

It is ironic that on my last visit to southern Ireland (in late May) there were many more camellias in flower than on this trip in late April, due to the unusually mild weather of January and February, but the fine plants and fresh plantings that we saw suggest that camellias will become increasingly popular in that country.

Camellias In South Australia

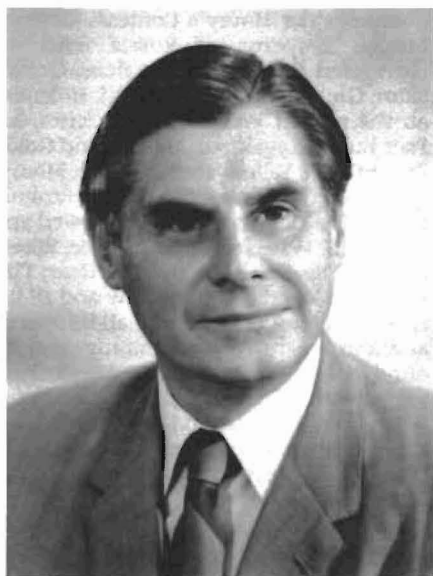
JOHN PEDLER, Australia

Camellias en Australie du Sud

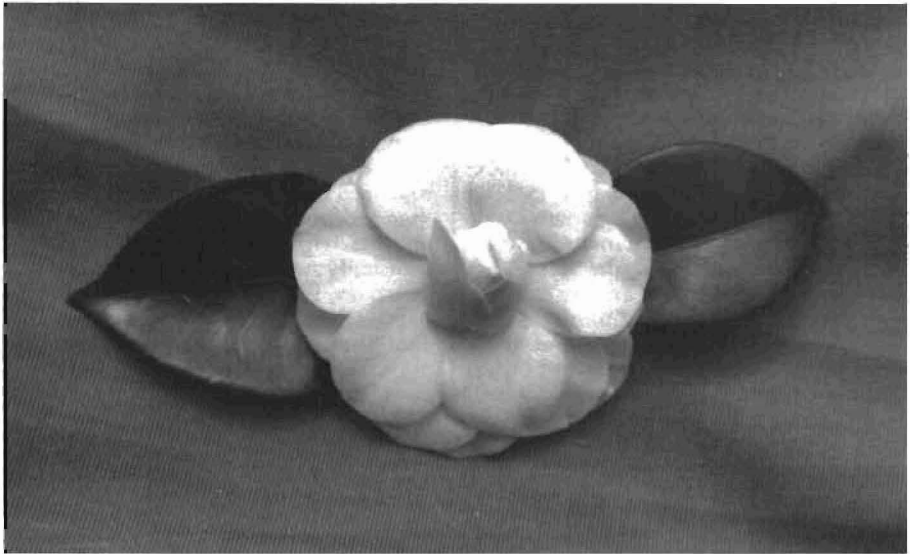
Camelias en el sur de Australia

Le Camellie in Australia del sud

Kamilien in Sued-Australien



Australia has had a very varied weather pattern in the first four months of 1989 with floods in Brisbane and Sydney, good rains in Melbourne, but a terrible drought in Adelaide. If we do not receive any rain for the next week (and it seems very unlikely that we will) it will be the worst drought we have experienced for 100 years. Naturally this has caused some problems for us with our camellias and has necessitated constant watering, especially important in January and February when flower bud formation is occurring. Our water supply contains a very high salt content, as much of the water is drawn from the River Murray where the salt content increases steadily as the river flows down from the snow fields of New South Wales to its outlet to the sea at Goolwa in South Australia. I, therefore, have installed a large number of rain water tanks and I use this by watering can for *all* my camellia watering. This is



Nan Pickering (registered 1979-C.P.J. Pickering, Oldgate, South Australia)

necessary as I live on a limestone hill and all plants are in pots or tubs. In spite of the necessary high levels of energy output which hand watering causes, flower bud setting was quite good. At present (mid to late April) the Sasanquas are in full bloom and making a very fine showing. Yuletide, Setsugekka, Plantation Pink and Betsy Baker are giving me nice splashes of colour in the garden and a couple of seedlings grown from seed collected in David Feathers' garden many years ago are good flowers - a single dark pink and a pure white.

The first Japonicas are just showing colour and will soon be in bloom. Earliest varieties with us are Wildfire, Spencers Pink, Debutante and Speciosissima. These are old varieties, taking almost full sun, and are very prolific bloomers. South Australia generally is well known for its formal double camellias. These seem to do better in our climate than in any other part of Australia. Great Eastern is another early-flowering garden variety which does particularly well. The Reticulatas also do well. Elegans and all its sports, Dainty Maiden, Aspasia and all its sports, Alba plena, Fimbriata, Dona Herzilia de Frietas Magalhaes (and a very attractive sport with prominent white markings

which has recently been found by our Hills Branch of the A.C.R.S.) are all prominent in our gardens. We are a little backward in growing the newer American varieties, I'm afraid, although they are usually well represented on our show benches. Our gardens are mostly filled with the older formal and informal doubles - the Hovey's Contessa Lavinia Maggi, Emperor of Russia (and its variegated form), Grand Sultan, Grand Slam, Guilio Nuccio, Hana Fuki, Helenor, all the named Waterhouse varieties, La Pace Rubra, Leviathan, Maroon and Gold, Brushfield's Yellow and Gweneth Morey (probably the same camellia) Paolina Maggi, Prince Frederick William, Red Ensign, R. L. Wheeler, Red Red Rose, Rosea Superba, Sawada's Dream, The Czar, Tiffany, Tom Knudsen, Tomorrow and all its sports, Virginia Franco and all its sports and Zambo are very commonly seen in our gardens. We are rather more garden-variety minded, I think, than our American friends and don't tend so much towards the large show bench blooms. However, we get as much satisfaction and love of the beauty of our camellias I'm sure as all our camellia friends in other parts of the world seem to do.

Annual Tutorium

ART LANDRY, U.S.A.

Colloque international

Tutorium anual

Colloquio annuale

Jaehrliche Studiengruppe

In 1980, the Baton Rouge Camellia Society established a local workshop on camellia culture and decided to call it a "Tutorium" as a unique identifier. The workshop has become an annual project of the Society and has been most successful in promoting local interest in camellias and obtaining new members. This article is provided to share our experiences and procedures with other groups who might want to have similar workshops in their areas to increase interest in camellias and sign up new members for their local organization or the International Camellia Society.

TIMING

We have our Tutorium each year on the second Sunday of February from 2 to 5 p.m. at the Baton Rouge Garden Center.

We have found that scheduling the Tutorium for the middle of February appears to be an ideal time to have the workshop in Baton Rouge. It is in the middle of the normal grafting season, the flowers are usually at their peak blooming season, and the interest from our camellia show in January is still strong. It is also a good time to plant or transplant new plants and the local nurseries usually have some plants in stock. The combination of the show being held in mid-January and the Tutorium being held in mid-February seems to work well for us.

LOCATION

Garden Clubs in Baton Rouge are very fortunate to have available for their use the Baton Rouge Garden Center. The building contains about 3000 square feet and has kitchen facilities, an ample supply of folding tables and chairs and a large parking lot. It is located near the geographic center of the community and is convenient to get to from any section of town. We have had the workshop in the same location each year and this facilitates repeat visits and our publicity each year.

A membership covered dish lunch has been held at the last six workshops. These lunches have been found to be a very effective way to get together, review



the flower show we had in January, share experiences and enjoy ourselves. After the lunch, we arrange the Garden Center for the various activities planned for the workshop.

PUBLICITY

A very essential element to the success of a workshop is the nature and extent of good publicity. We advise the local newspapers of the event and provide a descriptive notice for their calendar of coming events. We also send press releases to the local cable television bulletin board and the educational television community event notices. Radio stations are also sent releases describing the workshop and are asked to help us publicize the event.

Another very important aspect of our publicity is the printing of a descriptive circular in advance of our flower show in January for distribution to visitors at our show. Club members circulate among visitors at the show and point out that the emphasis at the show is on enjoying the blooms. Emphasis at the Tutorium is on cultural practices, grafting, and specific problem solving or individual questions. We urge all who are interested in learning more about camellias to take the circular home and keep it as a reminder of the Tutorium. The publicity in the papers, television, radio etc. prior to the Tutorium serves as additional reminders. Our experience is that most of our Tutorium visitors had found out about the Tutorium at our show in mid-January through the members and circular.

RECEPTION

We have a reception desk at the entrance where we greet the visitors, register them for a door prize (a nice grafted plant), give them a brief idea of what's available and perhaps identify a specific interest the person might have. The Garden Center is arranged so that the visitor can browse by the flower display, the ICS Membership table, demonstrations of air layering, rooted cutting propagation, grafting demonstration, and the plant sale. We also have coffee and snacks for their enjoyment. Members wear identifying name tags and some circulate

among the visitors while others are conducting the demonstrations.

FLOWER DISPLAY

We provide an informal display of a representative number of blooms so that visitors can get an idea of the variety available, forms, colors, etc. We try to have a bloom available for as many of the grafting scions as we can. This way the individual can select the camellia they like by looking at the bloom, take one of the scions to a member to graft and be assured that the resulting plant will be a variety which they like. Many visitors have brought with them a list of varieties which they liked at our show in January, noted on the back of our show schedule. One year, when our regular January show was cancelled due to hard freezes, we had a flower show with judging of the blooms on display. This was appreciated very much by our visitors, but it does require additional work by the members.

Baton Rouge Camellia Society Member Mattie Duvic (R) demonstrates grafting to a visitor





DEMONSTRATIONS

Most of the visitors are interested in grafting and we have several members conducting grafting demonstrations at the same time and continuously as long as there is interest or as long as the understock lasts. We will demonstrate grafting on the visitor's own understock if he has brought it or we use some of our own understock. We obtain about 50 (one-gallon size) sasanqua understock for use in the grafting and request a donation from the visitor to cover the cost of the understock. The visitor then takes the new graft home, with written instructions on how to care for it. The name and telephone number of the member doing the grafting is provided so that questions can be answered later. Other demonstrations proceed at the same time as the grafting. Air layering techniques, gibbing procedures and propagation by cuttings and seeds are included. Unknown blooms brought in by visitors are identified by our members. Members also help with identification of diseased limbs, leaves, plants, etc. brought by visitors. Questions or problems are answered by members in small groups or individually. Descriptive material on the various

**Baton Rouge Camellia Society
Tutorium Member A. M. Talbot (R)
described the process of grafting to
interested visitors**

procedures is reproduced in advance and copies are made available to our visitors in addition to the individual discussions or demonstrations.

Demonstrations include use of plant material and actual plants whenever possible. Specific cultural requirements and seasonal timing of the procedures are described. For example, air layering in this area seems to be most effective when done in March and April when the sap starts to flow well. They are then removed from the parent plant in late August or September and potted up in good soil. They should be kept out of direct sun and watered frequently for several weeks while new roots are forming and the new plant gets over the shock of being removed from the parent plant. After about two months, they can be treated as any other container plant.

MEMBERSHIP

A table is set up for local society, ICS,

and ACS memberships. Publications are displayed, questions answered, dues collected, etc. The advantages of membership in the local society are emphasized, copies are available of past issues of the local member newsletter and Member Handbook, and the enthusiastic help of local members is described. Publications of the ACS and ICS are on display and advantages of membership and publications are presented. ACS and ICS Membership application blanks are given to prospective members. A new member packet is given to all new local society members (includes past issues of the newsletter, Handbook with membership list, meeting dates, area show dates, etc., and several fact sheets on camellias). Copies of the current issue of SCCS Camellia Nomenclature are available for sale to interested attendees.

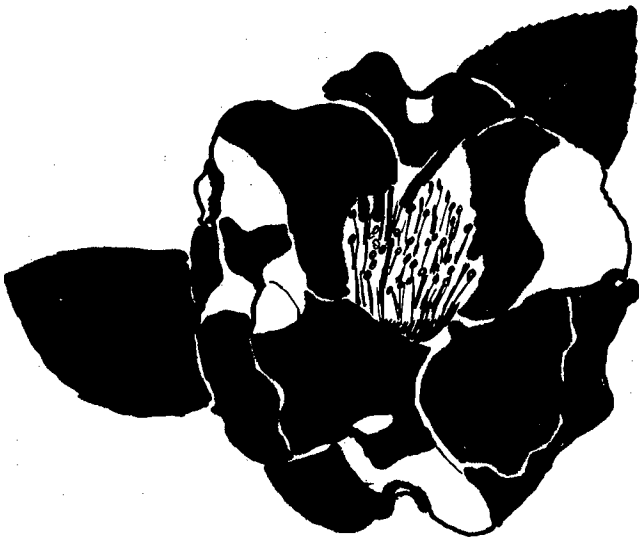
PLANT SALE

We have obtained starter camellia japonica plants for the past two years for sale at the Tutorium. We purchased a group of rooted cutting plants in one-gallon size pots from a wholesale nursery. The plants were well-branched with numerous buds and we were able to sell

them for \$5.00 each. This low price encourages beginners to try one or more plants at a very low initial investment. We hope to develop some future growers (and potential club members) in this way. Printed handout material on basic camellia culture practices is given to each purchaser to improve his chances of a successful planting.

SUMMARY

The annual workshop produced each year by the Baton Rouge Camellia Society has become our most successful community service project in promoting interest in Camellias. The enthusiastic hard work of our dedicated local society members is a key to our success. Publicizing the Tutorium at our camellia flower show in January is another key factor. Other clubs who are interested in developing a similar program should concentrate on these elements: hardworking local members, good location and facility, and good publicity, including individual circulars distributed at a show before the workshop. Interested clubs or ICS members are welcome to contact the author or any other Baton Rouge Camellia Society member for more information.



Blue, Green and Yellow Camellias

COLLEEN & GEOFF SHERRINGTON, Australia

Camellias bleus, verts et jaunes

Camelias azules, verdes, y amarillas

Camellie blu, verdi, e gialle

Blaue, gruene, und gelbe Kamilien

Five years ago, there was much speculation in Camellia circles about the potential impact of the yellow-flowered *C. chrysantha*. Today, in spite of intense hybridising effort, it remains true that most Camellia blooms are white, pink and red. There are some rare, yellow-flowered species which seem reluctant to impart their colour to hybrids with other Camellia species.

There is a group of Camellias which are, to some extent, yellow. The group includes the japonicas 'Brushfield's Yellow', 'Gwenneth Morey', 'Elegans Champagne' and the hybrid 'Jury's Yellow'.

Another departure from common colours is typified by the reddish-purple of the japonica 'D. Herzilia de Freitas Magalhaes' here named 'D. Herzilia' for short. The colour of this cultivar and several others can vary from deep red to purple for reasons commonly attributed to soil acidity.

It is well-known that the chemicals which are the pigments of many flowers are responsive to acidity or pH changes when studied in the test-tube. Just as the litmus paper used in laboratories changes from red in acid to blue in alkali, we assumed that the dominant pigment in blooms of 'D. Herzilia' was sensitive to pH inside the flower itself. Accordingly, we sought a simple way to chemically modify the pigments inside the bloom.

METHOD

We used fresh-cut whole blooms of normal, mature Camellias. Such blooms have

a natural weatherproofing which protects their internal chemistry from outside influences. (It is the passage of oxygen through this protection which causes blooms to go brown).

We wished to react this internal chemistry with an alkali, in this case ammonium hydroxide. Several solvents were tested, with ordinary ether (diethyl ether) being most satisfactory, acting in a few seconds.

Equal parts of ether and 20% ammonia solution were placed in a wide-necked glass jar. The quantity of liquid used and its composition is not critical. The bloom was dipped in the solution and shaken for a few seconds, until colour change was observed.

Thereafter, browning of the blooms was rapid. In a few minutes they started to become ugly. Blooms treated by this method are not suitable for exhibition, nor should they be.

For this preliminary report, about forty blooms were tested in the course of an hour. As many species and hybrids as were available were tested. The work was done at Sydney's Camellia Grove Nursery in mid-May of 1989. At this time of year, *C. sasanqua* is blooming well, the earlier *C. japonica* are starting to bloom, but there are few *C. reticulata*. It is intended to do more testing in August to catch the *reticulata* peak.

RESULTS

The table with this report summarises

Colour Changes to some Camellia Blooms Caused by Strong Alkali.

normal colour alkaline colour

C. JAPONICA

Lovelight	white	white
Nuccio's Gem	white	white
Dixie Knight Supreme	red, white varieg	blue, white varieg
Betty Foy Sanders	pink, red stripe	blue, dark blue stripe
Wildfire	deep red	deep blue
Moshio	deep red	deep blue
Great Eastern	rose red	deep blue
Frances Butler	deep coral rose	deep blue
Lady Clare	deep pink	deep blue
Laurie Bray	soft pink	mid blue
Debutante	light pink	blue/grey
D. Herzilia de Freitas Magalhaes	red/purple	deep blue/grey
Bokuhan (Tinsie)	red, cream centre	blue, yellow centre
Mrs. D. W. Davis Descanso	pale pink	pale pink, yellow centre
Elegans Champagne	white, cream centre	white, yellow centre
Brushfield's Yellow	white, cream centre	white, yellow centre

MISCELLANEOUS HYBRIDS

Snow Drop (pitardii x fraterna)	pale pink-pink	bright yellow-green
Donation (saluenensis x japonica)	orchid pink	mid green
Freedom Bell (parentage unstated)	bright red	deep blue
Tiptoe (japonica x williamsii)	Silver-cherry pink	grey-blue
Wyrne Rayner (parentage unstated)	lavender pink	apple green
Wirlinga Belle (rosaeiflora x williamsii seedling)	soft pink	grey-blue

C. RETICULATA (AND RETICULATA HYBRIDS)

Shot Silk (Yunnan reticulata)	pale pink	green-grey
Lois Shinault	orchid pink	lettuce green
(‘Crimson Robe’ x granthamiana)		
Vi Henderson	red	deep blue-black
(‘Crimson Robe’ seedling)		
Betty Ridley	pink	blue-green
(japonica x (sasanqua x reticulata))		
Massee Lane	pink	pale blue-green
(seedling of (saluenensis x reticulata))		

C. SASANQUA

Mine-no-yuki	white	lemon yellow
Setsugekka	white	lemon yellow
Pure Silk	white/pink	yellow
Edna Butler	silver pink	apple green
Plantation Pink	pink	light green
Jennifer Susan	pale pink	greenish yellow
Bonanza	deep red	greenish black

HYBRIDS WITH C. SASANQUA

Dream Girl (sasanqua x reticulata)	salmon pink	apple green
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C. HIEMALIS

Hiryu (Australian)	rose pink	greenish black
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C. VERNALIS

Star Above Star	white/pink	greenish yellow
Egao	deep rose	pale green/blue

C. ROSAEFLORA

Rosaeiflora	pink	pale green
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C. CUSPIDATA

Spring Festival (cuspidata seedling)	light pink/pink	yellow
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C. LUTCHUENSIS

Lutchuensis	white	yellow
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C. SINENSIS

Sinensis (variety unknown)	white	pale yellow
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C. CHRYSANTHA

(variety unknown)	yellow	bright yellow
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the preliminary results. Each main species is now commented upon.

CAMELLIA JAPONICA

There were two broad classes of behaviour.

In one class, white blooms remained white, pink blooms turned to light blue and red blooms turned dark blue. Variegated and striped blooms gave the impression that one main pigment accounted for their colour variations, the pigment being at different concentrations at different places in the bloom. We did not observe the light parts of a variegated bloom turning a different hue to the dark parts.

The other class of behaviour, on our limited results to date, seemed to affect some blooms of the *elegans* form. Typically, the guard petals retained their original colour, but the central petaloids turned yellow (see table for examples). The yellow colour was very bright and it gave us the impression that it was a pigment, and not a residual colour of the structure of the bloom after it had been leached by the strong chemicals used.

CAMELLIA SASANQUA

The results give the impression that more than one type of pigment is involved as one moves from one *sasanqua* cultivar to the next.

The normally white 'Setsugekka' and 'Mine-No-Yuki' turned bright yellow. 'Jennifer Susan', white fringed pink, became greenish yellow. Progressively darker pinks to reds gave light to dark green changes.

MISCELLANEOUS HYBRIDS

Saluenensis parentage may impart a green alkaline colour. On the other hand, 'Freedom Bell' gave a deep blue resembling the red *japonica* response.

MISCELLANEOUS SPECIES

All of those tested gave a marked colour change with alkali. *C. lutchuensis* gave a good yellow, *C. sinensis* and *C. cuspidata* a pale yellow. The few *C. reticulata* tested here gave startling colour changes.

DISCUSSION

To the extent that the chemistry of colour pigments in *Camellia* blooms can

assist in the classification of species, the simple test described might be a useful accessory. It is not likely to give definitive indications of missing parentage or wrongly-assigned parentage, but it might provide a useful screening method to highlight cultivars or species of interest for more detailed studies.

The more detailed studies usually involve extraction of pigments, separation and purification of them and measurement of their properties, such as light absorption spectra. This can be tedious and expensive, so a screening method may be of benefit.

The bright yellow petaloids of 'Brushfield's Yellow' and 'Elegans Champagne' when treated this way, plus the unexpected (to us) appearance of yellow in white *C. sasanqua* and *C. lutchuensis*, lead to speculation about paths to the highly-sought yellow *Camellia*. It is insufficient to grow these cultivars in alkaline soil and to hope for good, yellow blooms. The more likely result is a sick plant with poor blooms - or a dead one. Our limited experiments at infusion of ammonium hydroxide via the stem of the developing bud have led to bud drop before maturity, but our efforts were rudimentary.

In the longer term, there may be scope for genetic engineering to change the acidity of the fluids within the blooms during bud development. It might also be found that the buds do not develop at these new acidities, because of effects on other biochemical reactions.

However, it seems tantalising that such attractive blooms can be made, somewhat synthetically and somewhat fleetingly. Are we but a drop of alkali from a breakthrough in *Camellia* colours?

ACKNOWLEDGEMENTS

We thank *Camellia* Grove Nursery for their kindness and patience in donating test blooms and coping with the strong odours of ether and ammonia.

The authors are not botanists and are not well-read on the science of flower pigments. We acknowledge that other work of a similar type may have been reported without our knowledge. In any event, we hope that this note will stimulate correspondence, which we are pleased to enter into.

Wabisukes And Their Roots

YOSHIAKI ANDOH OF KOBE

Les Wabisukes et leurs racines

Wabisukes y sus raíces

I Wabisukes e loro radici

Wabisukes und deren Wurzel

The Wabisukes seem to capture the heart of the tea-ceremony artists and many Japanese because of its modest blooming shyly in the coldness of early spring away from the brilliant performance of common Camellias. Herein lies the philosophy of taking life simply and quietly as the most desirable and ideal way to live. This state of mind might communicate with world of "Plain living and high thinking" of Wordsworth (1770-1850).

The oldest plant of 'Wabisuke' existing in Japan is found in the Daitokuji temple in Kyoto, and is estimated to be around 400 years old.

It is in Sannojo Ito's "Kadan Chikin Sho" 1695 where 'Wabisuke' first appeared in a record describing as "Rose red, mottled White, small, tubular form, another name 'Kocho'". Apart from this, there is an old plant of 'Tarokaja' popularly had been called 'Wabisuke' or 'Momoiro (pink) Wabisuke' in the Tojiin temple of Kyoto. An identification tag declaring it a 'Uraku Tsubaki' has been set up since around 1960. This change arose from the achievements of Dr. Shiro Kitamura who gave the name of 'Uraku' (1952) to 'Tarokaja'. Previously, when informations on Camellias in China were insufficient all types of Wabisuke were classified in *Thea reticulata* by Dr. Tomitaro Makino (1910). Dr. Kitamura asserted them in the peculiar species, *C. wabisuke* and *C. uraku*. Later on, he revised the latter to *C. wabisuke* f. (*rosea*) Makino Kitamura

(syn. *C. uraku* Kitamura) on the understanding that 'Uraku' too, belongs to *C. wabisuke* (1970).

The plant of his so called 'Uraku' grows without arousing peoples attention to say nothing of record and legend of the Temple, at the gate-side in the Gassinin temple in Kyoto besides the Tojiin temple. This 'Uraku Tsubaki', the lesser one is size and oldness was designated by himself after a historical connection that the Gassinin temple was located near the ancient site of "Urakusai Oda", one of the prominent master of Sado, an art of tea ceremony.

I can not find any persuasive reason to place *C. wabisuke* on the same level with *C. japonica* etc. Horticulturally speaking, I think that it is nothing but a hybrid which origin had been vague for a long years.

'Tarokaja' first appeared in Jukyū Ito's "Honzo Hanamakiye" 1739 describing that "Pot form, medium, single, Light Purple, early. They say that it is a spring call as it blooms from mid January O.S. very good for flower arrangement."

As mentioned in "The Enigma of Tarokaja", International Camellia, October 1978, I have assumed that this unusual Camellia was imported from China in the early 15th century or so and that the name of 'Wabisuke' possibly originated in the Chinese "Wei-bi-su-hua" meaning the purplish flower with subtle fragrance or the small scented flower with blue tint. The ovary of the flower is thickly

sericeous which character shows it *C. japonica* and presumably *C. saluenensis* hybrid. If this is the pure dual crossing, 'Tarokaja' might be the oldest *Cx williamsii*.

I happened to notice that there was a *Camellia* plant which was quite similar to 'Tarokaja' among those transplanted to the Shanghai Botanical Garden being under preparation for opening in 1979. This *Camellia* is called 'Yangfei' (name of a beautiful Empress of the 8th century) in China. They say that old plants of this *Camellia* type are not seldom in central China. In Wangxiangjin's "Qunfangpu", an old Chinese gardening book 1621, the 'Yangfeicha' is described as "Single, blooms early and Rose Pink". It seems to be a plain, moreover an exact description for this flower. I suppose it must be the original plant of 'Tarokaja' in Japan.

The definite condition for producing flowers of abnormality, the retrogression of genital organ as well sometimes sets germinative seeds should the parents be a hybrid of *C. japonica* with a certain species in a limited scope, furthermore it being possible to backcross with *C. japonica*. It is not too much to say that the roots of the Wabisuke are in 'Tarokaja' and that whole Wabisukes have developed from 'Tarokaja'. Actually, some of F_1 and F_2 of 'Tarokaja' suggest this assumption.

The only thing that lies at my mind is the fact that no *Camellia* similar to the Wabisukes was ever produced, I hear, from either F_1 or F_2 of accurate *C x williamsii*. Therefore, it is highly possible that 'Tarokaja' might be a product of multiple cross in ancient China, including some other species such as *C. kissi* or *C. pitardii* for instance, with *C x williamsii* as its dominant basis.

Mototaka Ono identified the old Chinese *Camellia* of 'Hailiucha' with Wabisuke in his work "Honzo Komoku Keimo" 1803, but there is at present some unreasonableness in the comprehension. The ground of the Japanese legend that 'Wabisuke' ('Kocho') was introduced from Korea is based on the Chinese description that there are plenty 'Hailiucha' in Korea.

We have a lot of confusion in the Wabisukes from old times. Adjusted

names of the traditional varieties are as follows:

'Tarokaja' syn.	another 'Wabisuke' 'Momoiro Wabisuke' 'Uraku', 'Uraku-tsubaki' 'Yangfeicha (China) 'Judith (U.S.)
'Wabisuke' syn.	'Kocho', 'Kocho Wabisuke' 'Shibori Wabisuke'
'Shiro Wabisuke'	sports 'Hina Wabisuke' syn. 'Akizaki Pink Wabisuke'
'Aka Wabisuke' 'Beni Wabisuke'	sim. 'Owari Wabisuke' syn. 'Kanzaki Aka Wabisuke' (in Kansai)
'Sukiya' 'Hatsukari'	sim. 'Mikawa Wabisuke' syn. 'Sukiya Wabisuke' 'Showa Wabisuke' 'Saotome' (U.S.) 'Apple Blossom' (U.S.) 'Little Princess' (Aus.) sports 'Fukurin Wabisuke'
'Shibenashi Wabisuke'	syn. 'Nyogogashima' sim. 'Shinkuri'

(Note) Syn. and sim. are indicated only the important ones.

- In recent years, many new seedlings with the name of Wabisuke have appeared. Some of them were grown from the seeds raised by the hybridizers and the other more often found by chance in a temple, private backyard and thicket. The following list of the new face of Wabisukes include some old ones which parentage are vague. It also shows some representative names only.

Putative Wabisuke:	'Hime Wabisuke' 'Eishoji Wabisuke' 'Sagami Wabisuke' 'Gomangoku'
'Tarokaja' F_1 :	'Uraku '64' 'Kotobuki Wabisuke' 'Azuma Wabisuke'
'Tarokaja' F_2 :	'Funatsu-shibenashi' 'Ogawa Wabisuke' 'Katsura Wabisuke'
Wabishin-tsubaki (C. japonica having underdeveloped stamens):	'Ichiko Wabisuke' 'Sado Wabisuke' 'Tenrinji Gakko'

Pseudo Wabisuke (*C. japonica* with the name of Wabisuke):

'Kon Wabisuke'

'Kuro Wabisuke'

'Koiaka Wabisuke'

It will be natural course of inference to have an idea that a group of true Wabisukes have never imported from China or Korea, but propagated from the sole *Camellia* around us. The name of this interesting parent is the very 'Tarokaja'.

Chain Saw Pruning

TREVOR LENNARD - Te Puke, New Zealand

L'élagage à la scie articulée

El podar con sierra de cadena

Il taglio a motosega

Wie man mit Kettensäge beschneidet

New Zealand is probably the most favored country in the world for growing camellias or indeed most other plants. A well distributed rainfall of some 70 to 80 inches a year, few frosts, a free draining soil and you have all the ingredients for luxuriant growth.

Our problem is what to do with our trees when they have outgrown the garden space available. Last year we bought a small chain saw and now we are able to do some drastic pruning.

Just inside our garden gate is growing a *reticulata*, *Limelight*, a N.Z. cultivar. Planted in 1972, the tree was some 15 feet high and 12 feet wide. Last October (N.Z. Spring) we reduced it to 3 feet and waited. Four months later the new growth was most prolific and approximately 36 inches long and is still growing rapidly. Some judicial thinning of the shoots is being done and we would expect flowers again in 18 months time.

Some of our other trees have been pruned differently. We cut back half of the tree to about 2 feet, the front half will be done the following year. This way we lost little flowering, but have a lot of beautiful new growth. Our *Elsie Jury* has never been a vigorous plant, the leaves were always yellow and the flowers poor. The edict was given 'that plant must go.'

As it was easier to cut her down than to dig her out, a compromise was reached and *Elsie* was reduced to about 2 feet. The result—vigorous growth and vastly improved flowering and everybody happy.

Our *Gullio Nuccio* cutting grown was another good example. It had outgrown its space. A sucker had grown from the base so the whole tree was cut off at ground level. Today we have a very good, well shaped tree and we can reach all the flowers.

With our experience to date, we now have no hesitation in drastically pruning camellias. I would make one plea, as we prune in the spring the spores of *Glomerella Cinqualata* are floating around about this time, so to prevent dieback, cover the cut surfaces. We either use a water base paint with a heaping tablespoon of *Benlate* to a gallon of paint. Or a mixture of powdered clay plus 25 to 30% green manure and a little water plus 1 tablespoon *Benlate* to a gallon of mixture. *Captan* can be added but as we keep the mixture for sometime, we prefer only *Benlate*. This mixture does not smell and is very manageable. It is now used for all cut surfaces when grafting. Healing and callusing has been very good.

What to do with the large amount of branches? It makes beautiful fire wood

for our wood burning space heater. Cut in the spring and stored under cover, the wood is completely dry by the winter. The smaller branches are stacked and cut for kindling.

We have several wood turning friends who are very interested in the larger pieces. Camellia wood has very high density and doesn't split. Many attractive ornaments can be made so don't waste camellia wood. Another use for camellia wood would be in the smoke house. Have just smoked a batch of fish with really excellent results. The product was equal

to or better than the fish smoked from the N.Z. favored native titree wood (*Leptospermum*). Use dry camellia wood to keep the fire going and some green wood to produce smoke.

One last thought. The best time for drastic pruning is undoubtedly early spring (October in N.Z.). An experiment in U.S.A. by Dr. Luther Baxter on when to prune showed quite definitely early spring pruning was best, followed by summer pruning. Autumn pruning was not recommended. New Zealand would agree with this experiment.



TEA

TJ. SAVIGE
Wirring, N.S.W.
Australia

Thé

Té

Il tè

Tee

This is by way of being a short introduction to the following article which is a translation by Professor Wang Dajun, Honorary Director of the Shanghai Botanic Gardens, of the original publication in Chinese of 17 new *Camellia* species and one new variety in the *Camellia* subsection *Thea*, resulting from the investigation by the Tea Research Institutes of the Chinese Academy and the Yunnan Academy of Biological Sciences from 1981-1983 and published in the "Tea Research Journal" of 1983.

Thea was first mentioned by Kaempfer in his "Amoenatatum Exoticarum", 1712 and by Linnaeus in "Species Plantarum", 1753 as *Thea sinensis*. Since then various botanists have given names to different forms such as *Tea bohea*, *Thea viridis*, *Thea Oleosa*, *Thea stricta*, *Thea cantonensis* etc. but these are now all regarded as synonyms for *Camellia sinensis* var. *sinensis* or China tea.

Robert Sweet was perhaps first to use the generic term *Camellia* in place of *Thea* in "Hortus Suburbannus Londinensis", 1818 although the name *Thea* continued to be used, on and off, until *Thea macrophylla* (Siebold), Makino in "The Journal of Japanese Botany", 1918. However the name *Thea* as a Section of the Genus *Camellia* was first used by Dyer in 1874 and Sealy, in "A Revision of the Genus *Camellia*", accepted this division, and included in it the species *C. irrawadiensis*, *C. pubicosta*, *C. gracilipes*, and *C. taliensis* while *C. sinensis* was divided into two varieties, var. *sinensis* and var. *assamica*.

In 1981, Chang Hung Ta revised the hierarchy of the Genus *Camellia* into Sub-genus, Sections and Series. He nominated Sub-genus *Thea* and the Section *Thea*.

This section was, in turn divided into four series: Series I, *Quinquelocularis*; Series II, *Pentastylae*; Series III, *Gymnogynae*; and Series VI, *Sinenses*.

In Series I Chang placed, *C. quinquelocularis*, *C. kwangsiensis* and *C. tachangensis*. In the new work, "New Species and New Varieties of Tea-Trees in Yunnan China", Tan Yong-ji et al. (1983) added: *C. kwangnanica*, *C. grandibracteata*, and *C. remotiserrata*.

In Section II Chang placed *C. pentastylae*, *C. crassicumna*, *C. taliensis*, *C. irrawadiensis* and *C. crispula*. To these were added by Tan et al.: *C. makuanica*, *C. haaniensis*, *C. rotundata*, *C. multiplex*, *C. atrothea*.

In Series III, Chang placed *C. gymnogyna*, *C. costa*, *C. yangkiangensis*, and *C. leptophylla* and the new species added to this by Tan et al. are: *C. dehungensis*, *C. gymnogynoides*, *C. manglkaensis*, and *C. parvisepaloides*.

In Series VI, Chang included, *C. pubicosta*, *C. augustifolia*, *C. sinensis* var. *sinensis*, *C. sinensis* var. *assamica*, *C. sinensis* var. *pubilimba*, *C. sinensis* var. *waldenae*, *C. fangchensis*, *C. ptilophylla*, and *C. parvesepala*. The new species added to this Section by Tan et al. are *C. multisejala*, *C. polyneura*, *C. purpurea*, *C. yunkiangica*, *C. arborescens* and *C. assamica* var. *kucha*.

Chang Hung-ta in "A Taxonomy of the Genus *Camellia*", (1981) had treated *C. assamica* as *C. sinensis* var. *assamica* (Mast.) Kitamura. Apparently it has been upgraded to a species in the case of *C. assamica* var. *kucha*. It had been classified as *Thea assamica* by Masters in the "Journal of Agricultural et Horticultural Society, India", 3:63, 1844.

NEW SPECIES AND NEW VARIETIES OF TEA-TREES IN YUNNAN, CHINA.

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Summary.

Nouvelles espèces et nouvelles variétés d'arbres à thé

Nueva especies y variedades de árbol de té

Nuove speci e varietà d'alberi a tè

Neue Spezien und neue Varietaet von Teebaeumen in Yunnan, China

According to Professor Chang Hung-ta's "A Taxonomy of the Genus *Camellia*" (1981), the beveragial tea-trees of the Genus *Camellia* were classified in Subgenus *Thea* (L.) Chang and Section *Thea* (L.) Dyer. Until the beginning of 1981, there were 17 species and 3 varieties of *Camellia sinensis* (L.) O.Kuntze that had been classified in Section *Thea*. Amongst them, only *Camellia pubicosta* Merr. has been found in Vietnam, and all the others originated in the south-western and southern part of China. During the Years 1981-1983 the Tea Research Institute of the Chinese Academy of Agricultural Sciences and the Tea Research Institute of the Yunnan Province have united to investigate the resources of tea-trees in 46 districts or counties of the western, southern and north-eastern parts of Yunnan. They have collected and identified 339 specimens of tea-trees originated in that part, and have discovered 17 new species and 1 new variety of *C. sinensis* (L.) O.Kuntze of the Section *Thea* that have never been reported before.

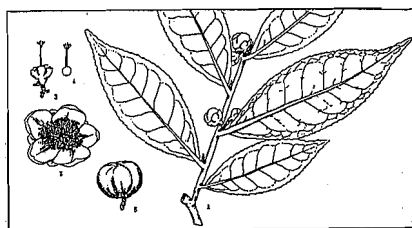


图1 大苞茶 *Camellia grandibracteata* Chang, T. Y. W*, sp. nov.

1. 枝的一部分和叶、花蕾 2. 花 3. 花被、萼片和花冠

4. 萼片和花冠 5. 果 (2:1)

Fig. 1 *Camellia grandibracteata* Chang, T. Y. W*, sp. nov.

1. A part of the branch, leaf and flower bud 2. Flower 3. Floral tube, calyx and style 4. Ovary and style 5. Fruit. (2:1).

1. *Camellia grandibracteata* Chang, T.Y.W*, sp. nov. Subgen. *Thea* Chang, Sect. *Thea* Dyer, Ser. *Quinquelocularis* Chang.

Species *C. kwangsiensi* Chang sub-similis, a qua differt bracteae 2-4 majoribus, calycibus brevioribus, ramulis et costis petiolis que puberulis.

Tree 12.1 meters tall, crown 5 meters in diameter, erect, branching moderate, branchlets sparsely pubescent. Leaves lanceolate, 12.3-16.4 cm long x 4.8-6.1 cm wide, apices acute or acuminate, bases cuneate, both sides of mid-veins sparsely pubescent, lateral veins 7-9 pairs, margins shallowly and obtusely toothed, teeth separation 3-5 mm, leaves comparatively soft, elevated on upper surfaces, petioles sparsely pubescent, 5-7 mm long; buds

abundantly pubescent, scales purplish and pubescent. Flower terminal or axillary, white, 4.1-5.3 cm in diameter; pedicels 6-7 mm long, 3 mm thick, glabrous; bracts 2-4, large, 6-7 mm long, sometimes persistent, moderately pubescent; sepals 5, exterior glabrous, interior pubescent, 5 mm long, obovate; petals 7-9; ovaries 5-locular, glabrous; styles 1.5-1.6 cm long, sparsely pubescent, apices 4-5-cleft for $\frac{1}{4}$ their length, sparsely pubescent, styles as tall as, or taller than the stamens. Capsules elliptic or oblate, about 3 cm in diameter; fruit pedicels thick. Seeds globose or elliptic, about 1.7 cm in diameter. Peak flowering period October.

Yunnan: Yunxian, Chafang, Majie, Lijiacun, elevation 1805 meters, 18 Oct. 1981. Y.J. Tang, F.L. Yu, P.S. Wang, A10001.

The main differences from *C.kwangsiensis* are that the bracts are larger, more numerous, sepals shorter, branchlets and leaf petioles pubescent.

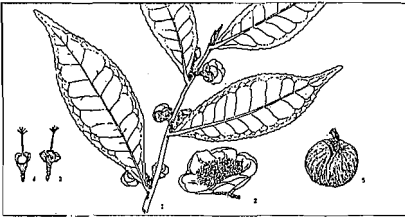


图2 广南茶 *Camellia kwangnanica* Chang, W. C, sp. nov.
1. 枝条一部分和叶、花蕾 2. 花 3. 花枝、萼片和花枝

4. 子房和花枝 5. 果 (2:1)
Fig. 2 *Camellia kwangnanica* Chang, W. C, sp. nov.
1. A part of the branch, leaf and flower bud 2. Flower
3. Floral shoot, calyx and style 4. Ovary and style 5. Fruit (2:1)

2 *Camellia kwangnanica* Chang. W.C., sp. nov. Subgen. *Thea* Chang, Sect. *Thea* Dyer, Ser. *Quinquelocularis* Chang.

Species *C.kwangsiensis* Chang sub-similis, a qua differt bracteis interdum persistentibus sepalis minoribus et densius pubescentibus, pericarpio tenuiore, a *C.quinqueloculari* Chang et Liang differt sepalis majoribus pubescentibus, petalis paucioribus, pericarpio crassiori.

Tree 3-6 meters tall, erect, branching sparse, branchlets glabrous. Leaves elliptic or long-elliptic, 13-19 cm long x 5-7 cm wide, apices acuminate or caudate, bases cuneate, leaves thick and soft, lateral

veins 8-12 pairs, glabrous, shallowly and obtusely serrate, teeth separation 3-5 mm; petioles glabrous; buds extraordinarily densely tomentose, scales abundantly pubescent in the middle. Flowers terminal or axillary, cream white, 4.5-6.5 cm in diameter; pedicels 7-11 mm long, about 4 mm thick, sparsely pubescent; bracts 2-3, persistent or semi-persistent; sepals 5, exterior extraordinarily densely pubescent, 6-7 mm long, sub-orbicular; petals 9-11, 3 cm long, obovate, abundantly pubescent, nearly free at bases; stamens glabrous, nearly adnate; ovaries 5-locular, glabrous; styles 1.6-2.1 cm long, sparsely pubescent, apices 5-cleft for $\frac{1}{4}$ their length, taller than or as tall as the stamens. Capsules sub-globose or oblate, about 4 cm in diameter, pericarps 3-6 mm thick, scabrous; fruit pear-shaped or semi-globose, about 1.7 cm in diameter. Peak flowering period from October to November.

Yunnan: Kwangnanxian, Zhuji, Maoyi, Huangudaging, elevation 1790 meters, 26 Oct., 1982, B.H. Chen, A20001, A20002. Same Xian Prefecture, Geyong, Jiulongshan, elevation 1865 meters, Nabel, elevation 1550 meters, 27 Oct. 1982, H.S. Wang, A20006, A20007, A20008, A20009. The leaves collected for tea making by the local people.

The differences from *C.kwangsiensis* Chang are that the bracts are semi-persistent, the sepals smaller, exterior extraordinarily densely pubescent and pericarp thinner. The differences from *C.quinquelocularis* Chang et Liang are that the sepals are larger, more abundantly pubescent, petals fewer and pericarp thicker.



图3 坡密茶 *Camellia rehoterrata* Chang, Y. W., sp. nov.
1. 枝条一部分和叶、花蕾 2. 花 3. 花枝、萼片和花枝

4. 子房和花枝 5. 果 (2:1)
Fig. 3 *Camellia rehoterrata* Chang, Y. W., sp. nov.
1. A part of the branch, leaf and flower bud 2. Flower
3. Floral shoot, calyx and style 4. Ovary and style (2:1)

3. *Camellia remotiserrata* Chang. Y.W.*, sp. nov. Subgen. *Thea* Chang, Sect. *Thea* Dyer, Ser. *Quinquelocularis* Chang.

A *C. tachangensis* F.S. Zhang differt gemmis densius pubescentibus, remotiserratus 5-7 mm, stylis apice (3-4)-5-fidis.

A small tree, 3.5 meters tall, crown 1.8 meters in diameter, erect, branching sparse. Leaves long-elliptic, 12.5-16 cm long x 5.2-5.8 cm wide, apices caudate, bases cuneate, mid-veins and under-surfaces glabrous, lateral veins 11-12 pairs, margins shallowly and sparsely serrate, teeth separation 5-7 mm; petioles 5-11 mm long; buds extraordinarily abundantly tomentose, midribs of scales abundantly pubescent. Flowers terminal or axillary, white, 4.5-6 cm in diameter; pedicels, 8-17 mm long, glabrous; bracts 2-3, early deciduous; sepals 5, exterior glabrous, interior pubescent, 5-10 mm long, elliptic; petals 8-11, 2.3-3.3 cm long, long-elliptic; ovaries glabrous; styles (3)-4-5-cleft, glabrous, 1.5:1 cm long, cleft for $\frac{1}{4}$ - $\frac{1}{3}$ their length, as tall as the stamens, a few styles being taller. Capsules and seed not seen. Peak flowering period early October.

Yunnan: Weixinian, Jiuchengnao, elevation 1170 meters, 11 Oct. 1983, F.L. Yu, P.S. Wang, A35005. Collected for tea making locally.

The differences from *C. tachangensis* F.S. Zhang are that the buds are more abundantly tomentose, leaf teeth separations remoter, (5-7 mm), styles variously cleft (3)-4-5-cleft.

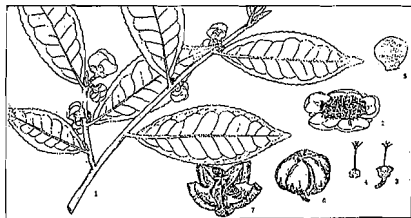


图4 马关茶 *Camellia makuanica* Chang. T. W., sp. nov.
1. 枝的一部分和叶、花蕾 2. 花 3. 花瓣、萼片和花托
4. 雄蕊和柱头 5. 花柄 6. 果 7. 果实 (2:1)

Fig. 4 *Camellia makuanica* Chang. T. W., sp. nov.
1. A part of the branch, leaf and flower bud
2. Flower 3. Petal 4. Filament
5. Ovary and style 6. Ovary and stigma 7. Fruit case (2:1)

4. *Camellia makuanica* Chang. T.W.*, sp. nov. Subgen. *Thea* Chang, Sect. *Thea* Dyer, Ser. *Pentastylae* Chang.

A species *C. crassicolumna* Chang affinis, a qua differt petiolis brevioribus, sepalis minoribus, petalis pluribus.

A tree or small tree, 2.3-17 meters tall, crown 1.7-6.4 meters in diameter, erect, branching moderate, branchlets glabrous. Leaves lanceolate, long-elliptic or elliptic, 10-22.3 cm long x 4.1-7.9 cm wide, apices acuminate or acuminate obtuse, bases cuneate, both sides of mid-veins sparsely pubescent, lateral veins 9-14 pairs, margins shallowly and sharply serrate, teeth separation 3-5 mm. Leaves soft, upper surfaces flat or slightly elevated; petioles 7-11 mm long, sparsely pubescent; buds densely tomentose, scales pubescent. Flowers terminal or axillary, cream white, 5.2-6.5 cm diameter; pedicels 6-9 mm long, glabrous; bracts 2-3, sometimes persistent; sepals 4-5, exterior pubescent, interior abundantly pubescent, 4-7 mm long, elliptic or sub-orbicular; petals 8-13, 1.8-2.6 cm long, abundantly pubescent; stamens nearly adnate, glabrous; ovaries 5-locular, extraordinarily densely tomentose; styles 1.5-2.3 cm long, apices 4-5-cleft for $\frac{1}{3}$ their length, abundantly pubescent, slightly taller than, or as tall as the stamens. Capsules globose or oblate, 3.1-3.7 cm in diameter, pericarp 4-7 mm thick; columellas 2 cm long, 1.3 cm thick, 5-angular. Seeds pear-shaped, deep brown or brown, 1.4-1.6 cm in diameter. Peak flowering period late October.

Yunnan: Maguanxian, Bazhai, Xizhuxiazhai, elevation 1660 meters, 16 Oct. 1982, Y.J. Tan, P.S. Wang, A17002; same locality, Guolingqing, Qjashang, elevation 1720 meters, 17 Oct. 1982, Y.J. Tan, P.S. Wang, A17003; Wenshanxian, Xiaojie, Laojunshan, the fork of a road between Maobazi and Yaorendi, elevation 2110 meters, 10 Oct. 1982, Y.S. Tan, P.S. Wang, A16001, A16002; Same Prefecture, Xiaojie, Yaodian, Lanbayaqing, 21 Oct. 1982, Y.S. Tan, P.S. Wang, A16005; Gwangnanxian, Zhetus, Geyong, Jiulongshan, elevation 1865 meters, 27 Oct 1982, H.S. Wang, A20005. For tea making locally.

It is similar to *C. crassicolumna* Chang, except that calyxes are smaller, the leaf petioles shorter and the petals more numerous.

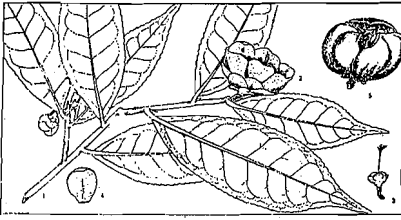


图5 哈尼茶 *Camellia haaniensis* Chang, W. C., sp. nov.
1. 枝条一部分和叶、花蕾 2. 花 3. 花梗、萼片和柱头
4. 花解 5. 开裂的果 (2:1)
Fig. 5 *Camellia haaniensis* Chang, W. C., sp. nov.
1. A part of the branch, leaf and flower bud 2. Flower 3. Floral
shoot, calyx and stigma 4. Petal 5. Disintegrated fruit (2:1)

5. *Camellia haaniensis* Chang, W.C., sp. nov. Subgen. *Thea* Chang, Sect. *Thea* Dyer, Ser. *Pentastylae* Chang.

A *C. crassicolumna* Chang petalis pluribus, fructibus majoribus compressoglobosa, columnella brevior, valvis tenuibus differt, a *C. crispula* Chang foliis crassis, sepalis sparsis puberulis, fructibus majoribus, columnella crassa differt.

A tree 17 meters tall, erect, branching moderate, branchlets glabrous. Leaves elliptic or ovate, coriaceous, 13.3-18.1 cm long x 5.8-8 cm wide, apices acuminate or auate, bases cuneate, both sides of mid-veins sparsely pubescent, lateral veins 8-11 pairs, margins shallowly and sharply serrate, teeth separation 2-3.3 mm; petioles 7-10 mm long, glabrous; buds and scales pubescent. Flowers terminal or axillary, white, 4.5-6 cm in diameter; pedicels about 9 mm long, 3 mm thick, glabrous; bracts 2, early deciduous; sepals 5, exterior sparsely pubescent, interior pubescent, about 9 mm long, elliptic or reniform; petals 10-11, 2 cm long, obovate, abundantly pubescent, nearly basally adnate; stamens glabrous, nearly adnate; ovaries 5-locular, abundantly pubescent; styles 1.7-1.8 cm long, abundantly pubescent, apices 5-cleft for $\frac{1}{3}$ - $\frac{2}{5}$ their length, taller than the stamens. Capsules large, 5.5-6.5 cm in diameter, oblate, pericarps about 7 mm thick; fruit pedicels 9 mm thick; columellas 9 mm long, 9 mm thick, 5-angular; coccuses 8-10 mm long, 2 mm thick. Seeds mainly globose, a few pear-shaped 1.6-1.8 cm in diameter; persistent calyces 1.2 cm in diameter. Peak flowering period October.

Yunnan: Jinpingxian, Hanitian, inside

Yunping forest, elevation 2220 meters, 14 Nov. 1982, H.S. Wang, B.H. Chen, A2205. For tea making locally.

The differences from *C. crassicolumna* Chang are that the petals are more in number, fruits are larger, oblate, columellas shorter and coccuses thinner. The differences from *C. crispula* Chang are mainly that the leaves are thicker, sepals sparsely pubescent, fruit larger and columellas thicker.

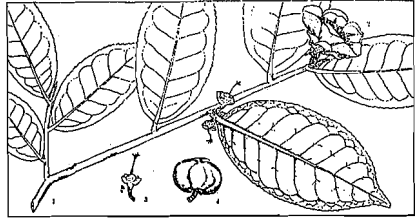


图6 圆达茶 *Camellia rotundata* Chang, T. W., sp. nov.
1. 枝条一部分和叶 2. 花 3. 花梗、萼片和柱头 4. 果 (2:1)
Fig. 6 *Camellia rotundata* Chang, T. W., sp. nov.
1. A part of the branch and leaf 2. Flower 3. Floral
shoot, calyx and style 4. Fruit (2:1)

6. *Camellia rotundata* Chang, T.W., sp. nov. Subgen. *Thea* Chang, Sect. *Thea* Dyer, Ser. *Pentastylae*.

A species in Ser. *Pentastylae* ramulis pubescentibus, basi foliorum rotundatis, margine superiore serrata subtus inconspicuis, stylis basi pubescentibus, sepalis extus et intus puberulis.

A tree 7.8 meters tall, crown 3.8 meters in diameter, trunk 42 cm in diameter, erect, branching comparatively dense, branchlets pubescent. Leaves ovate, 12.7-16.4 cm long x 6.3-7.8 cm wide, apices acuminate-obtuse or acuminate, base sub-orbicular, coriaceous, both sides of mid-veins pubescent, lateral veins 8-13 pairs, lower half of margins entire, upper half shallowly and sparsely serrate, teeth separation 5-7 mm; petioles 7-11 mm long, pubescent; buds and scales abundantly pubescent. Flowers terminal or axillary, 4.5-6.3 cm in diameter, white; pedicels 8 mm long, pubescent; bracts 2-3, early deciduous; sepals 5, 5 mm long, elliptic, exterior and interior abundantly pubescent; petals 9-10, pubescent, 2.8 cm long, bases nearly adnate; ovaries 5-locular, abundantly pubescent; styles 1.2-1.5 cm long, bases abundantly pubescent, apices 4-5-cleft for $\frac{1}{5}$ their length,

taller than stamens. Capsules triangular, quad-globose or sub-globose, averaging 3 cm in diameter, pericap 2.5 mm thick; fruit pedicels 11 mm long, 5 mm thick; columellas 1.4 cm long, 1.1 cm in diameter, 4-angular. Seeds globose or semi-globose, 1.5 cm in diameter; calyxes persistent, 1.2 cm in diameter. Peak flowering period October.

Yunnan: Honghexian, Langdi, Yuanfanxiashai, elevation 1850 meters, 5 Nov. 1982, Y.J. Tan, P.S. Wang, A240001. For local tea-making.

The differences from other spp. of Ser. *Pentastylae* are that the branches are pubescent, the bases of the leaves rounder, the lower half of the leaf margin is entire, the bases of the styles abundantly pubescent and both interior and exterior of calyxes abundantly pubescent.

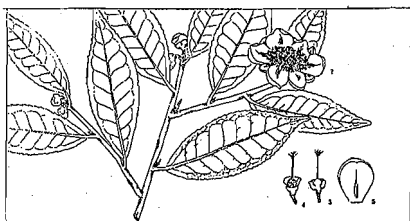


图7 多瓣茶 *Camellia multiplex* Chang, T. W., sp. nov.

1. 枝条一部分和叶、花蕾 2. 花 3. 花梗、萼片和花柱
4. 子房和花柱 5. 花瓣 (2:1)

Fig. 7. *Camellia multiplex* Chang, T. W., sp. nov.

1. A part of the branch, leaf and flower bud 2. Flower
3. Floral shoot, calyx and style 4. Ovary and style 5. Petal (2:1)

7. *Camellia multiplex* Chang, T.W.*, sp. nov. Subgen. *Thea* Chang, Sect. *Thea* Dyer, Ser. *Pentastylae* Chang.

A *C. pentastyla* Chang differt foliis opacis, floribus majoribus, petalis pluribus 13-16, stylis longioribus, a *C. irrawadiensis* Burua differt petalis majoribus et pluribus, stylis puberulis.

A tree 16 meters tall, crown 3 meters in diameter, erect, branching sparsely, branchlets glabrous. Leaves long-elliptic, 10.3-12.4 cm long x 3.9-4.7 cm wide, apices acuminate or acute, bases cuneate, both sides of mid-veins sparsely pubescent, lateral veins 9-10 pairs, upper surfaces flat, comparatively soft, margins sharply serrate, with nipples, teeth separation 3-5 mm; petioles 7-11 mm long, glabrous; buds abundantly tomentose, scales pubescent in the centre, margins glabrous. Flowers terminal, a

few axillary, white, 5.7-7.2 cm in diameter; pedicels 5-6 mm long, glabrous; bracts 1-2, early deciduous; sepals 5, exterior glabrous, interior pubescent and ciliate, 5 mm long, sub-orbicular; petals 13-16, 2.8 cm long, goabrous, nearly adnate; stamens glabrous, nearly adnate; ovaries 5-locular, extraordinarily abundantly tomentose; styles 1.6-2 cm long, bases abundantly pubescent, apices (4)-5-cleft for $\frac{1}{4}$ their length, taller than stamens. Capsules unseen. Peak flowering period mid- and late October.

Yunnan: Wenshanxian, Xiaojie, Laojunshan, Erhegou, Duonongshu Forest, wild plants, elevation 2210 meters, 20 Oct. 1982, Y.J. Tan, P.S. Wang, A16003.

The differences from *C. pentastyla* Chang are that flowers are larger, petals more in number (13-16), styles longer, apical cleft shallower. The differences from *C. irrawadiensis* Burua are that flowers are larger, petals more numerous, bases of styles abundantly pubescent.

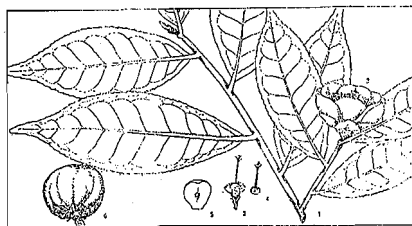


图8 耑尖茶 *Camellia atrothea* Chang, W. C., sp. nov.

1. 枝、叶一部分 2. 花 3. 花梗、萼片和花柱 4. 子房和花柱
5. 花瓣 6. 果 (2:1)

Fig. 8. *Camellia atrothea* Chang, W. C., sp. nov.

1. A part of the branch and leaf 2. Flower 3. Floral shoot
calyx and style 4. Ovary and style 5. Petal 6. Fruit (2:1)

8. *Camellia atrothea* Chang, W.C., sp. nov. Subgen. *Thea* Chang, Sect. *Thea* Dyer, Ser. *Pentastylae* Chang.

A *C. crassicolumna* Chang nervis lateralibus pluribus 11-13 jugis, petalis pluribus 11-14 pericarpio et columnello tenuiore differt.

A tree 13 meters tall, erect, branching sparse, branchlets glabrous. Leaves coriaceous, elliptic or long-elliptic, 16-18 cm long x 5.7-6.1 cm wide, apices acuminate or caudate, bases cuneate or sub-orbicular, upper surfaces flat, mid-veins protruding with both sides sparsely pubescent, lateral veins 11-13 pairs; petioles 6-8 mm long, glabrous; buds and scales abundantly pubescent. Flowers terminal

or axillary, white, 5-7.3 cm in diameter; pedicels 8-10 mm long, 4 mm thick, abundantly pubescent; bracts 2-4, early deciduous, a few persistent; sepals 5, both exterior and interior abundantly pubescent, 5-7 mm long, elliptic; petals 11-14, 1.8 cm long, obovate, pubescent; stamens glabrous; ovaries 5-locular, abundantly pubescent; styles 1.8-1.9 cm long, abundantly pubescent, apices 5-cleft shallowly for $\frac{1}{5}$ their length, taller than the stamens. Capsules sub-globose, 4.4 cm in diameter, pericarps 5 mm thick; fruit pedicels 1.2 cm long, 5 mm thick, club-like; columellas 1.3 cm long, 10 mm thick 4-5-angular; coccuses elliptic, 10 mm long, 2 mm thick. Seeds sub-globose, 1.6-1.8 cm in diameter; calyxes persistent, 1.2 cm in diameter. Peak flowering period from October to November.

Yunnan: Pingbianxian, Guzubei, inside bamboo thicket, wild plants, elevation 1900 meters, 17 Nov. 1982, H.S. Wang, B.H. Chen, Y.J. Yang, A21002. Not utilized.

The differences from *C. crassicolumna* Chang are that the lateral veins and petals are more numerous, pericarps thinner and columellas smaller.

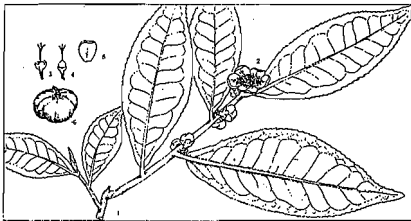


图9 勐腊茶 *Camellia mongolicensis* Chang T. W*, sp. nov.

1. 枝条一部分和叶、花蕾
2. 花
3. 花被、萼片和花柱
4. 子房和花柱
5. 花瓣
6. 果 (2x)

Fig. 9 *Camellia mongolicensis* Chang, T. W*, sp. nov.

1. A part of the branch, leaf and flower bud
2. Flower
3. Floral shoot, calyx and style
4. Ovary and style
5. Petal
6. Fruit (2x)

9. *Camellia manglaensis* Chang. T.W*, sp. Nov. Subgen. *Thea* Chang, Sect. *Thea* Dyer, Ser. *Gymnogynae* Chang.

Species *C. sinensi* (L.) O. Kuntze et *C. assamica* (Mast.) Chang subsimilis, a quibus differt ovariiis glabris, a *C. dehungensis* Chang, W.C., differt remulis, gemmis et costis petiolique puberulis.

A tree or small tree, 4-11.7 meters tall, crown 3.6-6.2 meters in diameter, semi-spreading or erect, branchlets

abundantly pubescent. Leaves elliptic or long-elliptic, 13.6-17 cm long x 5.4-6.7 cm wide, apices acuminate or acute, bases cuneate, a few semi-orbicular, mid-veins abundantly pubescent, lateral veins 9-15 pairs, under surfaces pubescent, upper surfaces flat or slightly elevated, leaves comparatively soft, margins teeth separations 2-3.5 mm; petioles pubescent or abundantly pubescent, 6-9 mm long; buds extraordinarily abundantly tomentose, scales abundantly pubescent. Flowers terminal or axillary, greenish white, 3.1-5 cm in diameter; pedicels glabrous, 5-9 mm long; bracts 2-3, early deciduous; sepals 5, 3-4 mm long, exterior glabrous, interior abundantly sericeous; petals 5-8, glabrous or sparsely pubescent; stamens glabrous; ovaries 3-locular, glabrous; styles glabrous, 10-13.5 mm long, apices 5-cleft for $\frac{1}{5}$ - $\frac{1}{6}$ their length, as tall as, or taller than the stamens. Capsules tri-globose, 2.8-3.3 cm in diameter. Peak flowering period November.

Yunnan: Manglaxian, Yiwu, Manluo, Luoshuidong, elevation 1430 meters, 4 Dec. 1982, Y.J. Tan, P.S. Wang, A31005; Mangla, Xiangming, Manzhuang, Tea Plantation at Yanlanguocun, elevation 1040 meters, Y.J. Tan, P.S. Wang, A31001; Channing, Wenguan, Lianxi, Poshitou, elevation 1988 meters, 4 Nov. 1981, Y.J. Tan, F.L. Yu, P.S. Wang, A03014; Ruili, Dengjia, Longdaomanzhai, elevation 1100 meters, 26 Oct. 1981, H.S. Wang, B.S. Chen, A05005.

The differences from *C. sisensis* (L.) O. Kuntze and *C. assamica* (Mast.) Chang are that the ovaries are glabrous. The difference from *C. dehungensis* Chang, W.C. are that the branchlets, buds, leaf petioles and under surface of the leaves tomentose. Grown for tea-making.

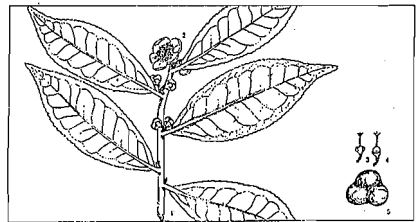


图10 拟细萼茶 *Camellia parvisepaloides* Chang, W. C, sp. nov.

1. 枝条一部分和叶、花蕾
 2. 花
 3. 花被、萼片和花柱
 4. 子房和花柱
 5. 果 (2x)
- Fig. 10 *Camellia parvisepaloides* Chang, W. C, sp. nov.
1. A part of the branch, leaf and flower bud
 2. Flower
 3. Floral shoot, calyx and style
 4. Ovary and style
 5. Fruit (2x)

10. *Camellia parvisepaloides* Chang, W.C., sp. nov. Subgen. *Thea* Chang, Sect. *Thea* Dyer, Ser. *Gymnogynae* Chang.

S. *C. sinensis* (L.) Kuntze differt sepalis minoribus, ovariis glabris, petalis 9-11 pluribus, a species *C. parvisepala* Chang ovariis glabris, a *C. dehungensis* Chang et W.C. Foliis minoribus, gemmis pubescentibus, petalis pluribus recedit.

A tree 9 meters tall, semi-spreading, branching moderate, branchlets sparsely pubescent. Leaves membranous, long-elliptic or elliptic, 10.3-13.7 cm long x 3.7-5.3 cm wide, apices acuminate, bases cuneate, both sides of mid-veins pubescent, lateral veins 9-12 pairs, margins moderately serrate, teeth separation 2.5-3.3 mm; petioles glabrous, 7 mm long; buds and scales sparsely pubescent. Flowers terminal and axillary, greenish white, small, 2.3-2.8 cm in diameter; pedicels glabrous, 5 mm long, slender, bracts 3, early deciduous; sepals 5, exterior glabrous, 3 mm long, 2.5 mm wide, elliptic; petals 9-11, 1.1 cm long, obovate, glabrous; stamens glabrous; ovaries 3-locular, nearly glabrous, bases sparsely pubescent only; styles 9 mm long, apices 3-cleft for $\frac{1}{5}$ - $\frac{1}{3}$ their length, glabrous, as tall as the stamens. Capsules tri-globose, 2.6-2.8 cm in diameter, pericarps comparatively scabrous. Seeds globose or semi-globose, 1.4 cm in diameter. Peak flowering period October.

Yunnan: Luxixian, Mangjia, Sanjueyan, behind the house of Guo Xing-Guang, elevation 1630 meters, 17 Oct. 1981, H.S. Wang, B.H. Chen, A04003.

The differences from *C. sinensis* (L.) Kuntze are mainly that the ovaries are scabrous, petals more numerous (9-11). It is similar to *C. parvisepala* Chang as both have small calyxes, but there are many differences. The difference from *C. dehungensis* Chang, W.C., are that the leaves are smaller, buds pubescent and petals more numerous.

11. *Camellia dehungensis* Chang, W.C., sp. nov. Subgen. *Thea* Chang, Sect. *Thea* Dyer, Ser. *Gymnogynae* Chang.

Species *C. sinensis* (L.) Kuntze et *C. assamica* (Mast.) Chang subsimilis, a quibus differt remulis, gemmis ut sepalis et ovariis perfect glabris.

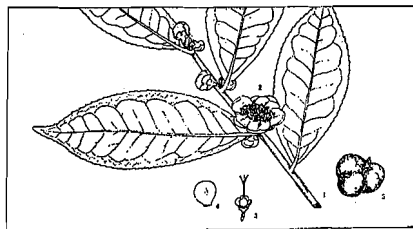


图11 德宏茶 *Camellia dehungensis* Chang, W.C., sp. nov.
1. 枝条一部分、叶、花蕾 2. 花 3. 花被、子房和花柱
4. 花瓣 5. 果 (21x)
Fig. 11 *Camellia dehungensis* Chang, W.C., sp. nov.
1. A part of the branch, leaf and flower bud 2. Flower 3. Floral
socket, ovary and style 4. Petal 5. Fruit (21x)

A tree or small tree, 3-6 meters tall, erect or semi-spreading, moderate branching, branchlets glabrous. Leaves elliptic or long-elliptic, 12-17 cm long x 4-7 cm wide, apices acuminate, a few acute, bases cuneate, upper surfaces shining after drying, under surfaces glabrous, lateral veins 11-15 pairs, glabrous, margins moderately serrate, teeth separation 3-3.5 mm; petioles glabrous, 6-9 mm long; buds and scales glabrous, easily becoming blackish brown after drying. Flowers terminal or axillary, greenish white. 2.5-4.3 cm in diameter; pedicels glabrous, 5 mm long; bracts 2-4, early deciduous; sepals 5-(6), 3-4 mm long, sub-orbicular, exterior glabrous; petals 6-7-(8). 1.4-1.7 cm long, glabrous, obovate; stamens glabrous; ovaries 3-locular, glabrous; styles 9-16 mm long, apices 3-cleft for $\frac{1}{4}$ - $\frac{1}{2}$ their length, glabrous, taller than the stamens. Capsules are similar to those of *C. assamica* (Mast.) Chang, tri-globose, 2.8-3.4 cm in diameter. Seeds sub-globose or semi-globose, 1.4-1.5 cm in diameter. Peak flowering period from October to November.

Yunnan: Longchuanxian, Bangwai, Ximaguanynshanzhai, elevation 1300 meters, 2 Nov. 1982, H.S. Wang, B.H. Chen, A06012; Same Prefecture, A06011; Luxi, Manjia, Sanjiaoyan, behind the house of Guo Xing-Guang, elevation, 1630 meters, 7 Oct. 1981, H.S. Wang, B.H. Chen, A04004; Ruili, Longdao, Danjia, Nanmodong, elevation 1060 meters, 26 Oct. 1981, H.S. Wang, B.H. Chen, A05004, A05005.

The differences from *C. sinensis* (L.) Kuntze and *C. assamica* (Mast.) Chang are that branchlets, buds, sepals and ovaries are glabrous.

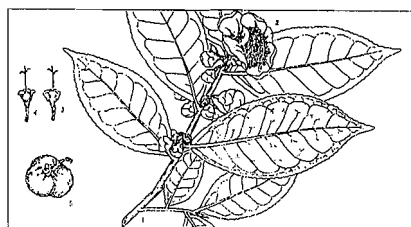


图12 拟雀舌茶 *Camellia gymnogynoides* Chang, W. C, sp. nov.

1. 枝条一部分和叶、花蕾 2. 花 3. 花托、萼片和花柱
4. 子房与花柱 5. 果 (2:1)

Fig. 12 *Camellia gymnogynoides* Chang, W. C, sp. nov.

1. A part of the branch, leaf and flower bud 2. Flower 3. Floral
shoot, calyx and style 4. Ovary and style 5. Fruit (2:1)

12. *Camellia gymnogynoides* Chang, W.C, sp. nov. Subgen. *Thea* Chang, Sect. *Thea* Dyer, Ser. *Gymnogynae* Chang.

Species *C. gymnogyna* Chang affinis, a qua differt petalis (7-11), pedicellis tenuioribus, pericarpio tenuiore, nervis lateralibus pluribus, a *C. arborescens* Chang, Y.W., ovaviis glabris differt.

A tree 4-17 meters tall, crown 2.5-6 meters in diameter, trunk 14-90 cm in diameter, erect, branching comparatively sparse, branchlets sparsely pubescent. Leaves thick and crisp, long-elliptic or elliptic, 10-20 cm long x 5-8 cm wide, apices caudate or acuminate, bases cuneate, both sides of mid-veins pubescent or sparsely pubescent, under surfaces glabrous, lateral veins 8-13 pairs, margins shallowly and sparsely serrate, teeth separation 3-7 mm; petioles 6-12 mm long, glabrous; buds extraordinarily abundantly tomentose; midribs of scales abundantly pubescent. Flowers terminal or axillary, white, 4-6.6 cm in diameter; pedicels 6-15 mm long, glabrous; bracts 2-4, early deciduous; sepals (4)-5-(6), exterior glabrous, 6-7 mm long, sub-orbicular; petals 7-11, 2-3.5 cm long, bases nearly adnate, glabrous; stamens glabrous, nearly adnate; ovaries 3-locular, glabrous; styles 1.2-2 cm long, apices 3-cleft for $\frac{1}{4}$ - $\frac{1}{5}$ their length, glabrous, as tall as or taller than the stamens. Capsules tri-globose, 3-3.5 cm in diameter, pericarps 1 mm thick; fruit pedicels 1-2 cm long, 2-3 mm thick, columellas 10-16 mm long. Peak flowering period mid and late October.

Yunnan: Yanjinxian, Xinglongerpingshan, inside secondary forest of Cunninghamias, elevation 980 meters, 17 Oct.

1983, H.S. Wang, B.H. Chen, X.M. Lin, A38006; Same prefecture, Niuzhai, Baolongdadiwan, elevation 1045 meters, 17 Oct. 1983, H.S. Wang, B.H. Chen, X.M. Lin, A38003; Same Prefecture, Xinhua, Baiyan, elevation 920-950 meters, 17 Oct. 1983, H.S. Wang, B.H. Chen, X.M. Lin, A3808; Daguanyan, Qinglongzhazhi, elevation 1160 meters, 11 Oct. 1983, B.H. Chen, H.S. Wang, X.M. Lin, A36005, A36006; Suijiangxian, Banli, behind Chen's house at Zhongxin, elevation 1200 meters, 8 Oct. 1983, H.S. Wang, B.H. Chen, X.M. Lin, A37003; Zhenxiang-xian, Sanshu, Dabao, on raised border of paddy fields, river valleys and gullies, elevation 1025 meters, 5 Oct. 1983, F.L. Yu, P.S. Wang, A34002; Weixinian, Jiucheng, Tianpeng, small elevated plains besides riverlets and sandy banks, elevation, 1000 meters, 10 Oct. 1983, F.L. Yu, P.S. Wang, A35002; Same Prefecture, Jiucheng, Maan, elevation, 1100 meters, 10 Oct. 1983, F.L. Yu, P.S. Wang, A35007. Used locally for tea-making.

It is similar to *C. gymnogyna* Chang, except that the petals are more numerous (7-11), pedicels slenderer, pericarps thinner and veins more in number. The differences from *C. arborescens* Chang, Y.W. is mainly that the ovaries are glabrous.



图13 多萼茶 *Camellia multisejala* Chang, T. W., sp. nov.

1. 枝条一部分和叶、花蕾 2. 花 3. 花托、萼片和花柱
4. 果 (2:1)

Fig. 13 *Camellia multisejala* Chang, T. W., sp. nov.
1. A part of the branch, leaf and flower bud 2. Flower.
3. Floral shoot, calyx and style 4. Fruit (2:1)

13. *Camellia multisejala* Chang, T.W., sp. nov. Subgen. *Thea* Chang, Sect. *Thea* Dyer, Ser. *Sinenses* Chang.

Species *C. ptilophylla* Chang subsimilis, a qua differt foliis lanceolatis, floribus axillaribus, petalis glabris, sepalis minoribus circ. 3 mm longis et pluribus (8).

A small tree 2.7 meters tall, crown 1 meter in diameter, erect, branching sparse, branchlets abundantly pubescent. Leaves lanceolate, 8.6-11.3 cm long x

2.9-3.5 cm wide, apices acuminate, bases cuneate, under surfaces and mid-veins abundantly pubescent, lateral veins 8-12 pairs, margins shallowly and sharply serrate, teeth separation 2-2.5 mm; petioles abundantly pubescent, 4-8 mm long; buds extraordinarily abundantly tomentose, scales abundantly pubescent. Flowers terminal or axillary, greenish white; bracts 2-3, early deciduous; sepals 8, 3 mm long and also wide, orbicular, exterior glabrous, interior pubescent; petals 6, glabrous; ovaries 3-locular, abundantly pubescent; styles 9 mm long, glabrous, apices 3-cleft for $\frac{1}{5}$ their length, shorter than the stamens. Capsules triglobose, globose or elliptic. Seeds globose or semi-globose.

Yunnan: Manglexian, Xiangming, Manzhuang, Yanlan, elevation, 1050 meters, 3 Dec. 1982, Y.J. Tan, P.S. Wang, A31002.

It is similar to *C. ptilophylla* Chang, except that the leaves are lanceolate, flowers axillary, petals glabrous, calyxes small (3 mm only), and sepals more numerous, up to 8. Used locally for tea-making.

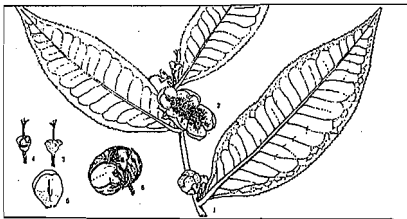


图14 多脉茶 *Camellia polyneura* Chang, T. W. C., sp. nov.

1. 枝条一部分和叶、花蕾 2. 花 3. 花萼、萼片和花托
4. 子房和花柱 5. 花瓣 6. 果的鳞片 (2×1)

Fig. 14 *Camellia polyneura* Chang, T. W. C., sp. nov.

1. A part of the branch, leaf and flower bud
2. Flower
3. Floral shoot, calyx and style 4. Ovary and style
5. Petal 6. Scales of the fruit (2×1)

14. *Camellia polyneura* Chang, TW*, sp. nov. Subgen. *Thea* Chang, Sect. *Thea* Dyer, Ser. *Sinenses* Chang.

A *C. cassamica* (Mast.) Chang multinervis 13-19 jugis, floribus majoribus differt.

A tree 6.3-15.3 meters tall, crown 3.8-5 meters in diameter, branching moderate or comparatively dense, branchlets sparsely pubescent. Leaves long-elliptic or lanceolate, 14.9-23.7 cm long x 5.5-9.2 cm wide, apices acuminate or caudate, bases cuneate, a few sub-orbicular, leaves soft, mid-veins and under surfaces sparsely pubescent, lateral veins 13-19 pairs, upper surfaces elevated or slightly elevated, margins densely serrate, teeth separation

2-3 mm; petioles 5-10 mm long, sparsely pubescent; buds extraordinarily abundantly tomentose, scales abundantly pubescent. Flowers terminal or axillary, greenish white, 4.8-6.1 cm in diameter; pedicels 9 mm long, glabrous; bracts 2, early deciduous; sepals 5, exterior glabrous, interior abundantly pubescent, 6 mm long, elliptic; petals 6-8, 2.3 cm long, glabrous; ovaries 3-locular, extraordinarily abundantly tomentose; styles glabrous, 12 mm long, apices 3-(4)-cleft for $\frac{1}{3}$ their length, shorter than the stamens. Capsules triangular, elliptic, 2.8-4.3 cm in diameter. Peak flowering period mid-November.

Yunnan: Luchunxian, Qimaba, Mayicun, elevation 1400 meters, 18 Nov. 1982, Y.J. Tan, P.S. Wang, A26001, A26002, A26003.

The differences from *C. cassamica* (Mast.) Chang are that the lateral veins are more numerous (13-19 pairs), and the flowers larger. Used locally for tea-making. Fine quality.

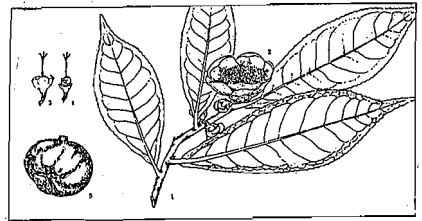


图15 紫萼茶 *Camellia purpurea* Chang, W. C., sp. nov.

1. 枝条一部分和叶、花蕾 2. 花 3. 花萼、萼片和花托
4. 子房和花柱 5. 果 6. 果的鳞片 (2×1)

Fig. 15 *Camellia purpurea* Chang, W. C., sp. nov.

1. A part of the branch, leaf and flower bud 2. Flower
3. Floral shoot, calyx and style 4. Ovary and style 5. Petal 6. Scales of the fruit (2×1)

15. *Camellia purpurea* Chang, W.C., sp. nov. Subgen. *Thea* Chang, Sect. *Thea* Dyer, Ser. *Sinenses* Chang.

A species *C. cassamica* (Mast.) Chang petalis pluribus 11, floribus et fructibus majoribus, pericarpio purpureo differt.

A tree or small tree 3-4 meters or more tall, erect branching sparsely, branchlets glabrous. Leaves coriaceous, thick and crisp, elliptic, 15.8-20.4 cm long x 6.6-7.9 cm wide, upper surfaces strongly elevated, apices caudate, bases cuneate, mid-veins and under surfaces glabrous, lateral veins 12-14 pairs at right angle to mid-veins, margins shallowly and sharply serrate, teeth separation 2.5-3 mm; petioles glabrous, lateral veins 12-14 pairs

at right angle to mid-veins, margins shallowly and sharply serrate, teeth separation 2.5-3 mm; petioles glabrous, 5-15 mm long; buds and scales abundantly pubescent. Flowers terminal or axillary, white, 4.5-5.7 cm in diameter; pedicels glabrous, 9 mm long; bracts 2, early deciduous; sepals 5, exterior sparsely pubescent, interior abundantly sericeous, 9 mm long, sub-orbicular; Petals 11, 2.2 cm long, glabrous; stamens sparsely pubescent; ovaries 3-locular, abundantly pubescent, 1.5-1.7 cm long, apices 3-cleft for $\frac{1}{5}$ their length, much taller than the stamens. Capsules triangular or oblate, 4.1-5.7 cm in diameter, pericarp in 2 colours, green and egg-plant purple, 4 mm thick; pedicels 2-2.5 cm long, 4 mm thick; columellas 1.8 cm long, 8 mm thick, triangular; cocuses elliptic, 1.5 cm long, 2 mm wide. Seeds pear-shaped or triangular, 2 cm in diameter; Calyces persistent, 1.9 cm in diameter. December is peak flowering.

Yunnan: Pingbianxian, Yupingzhen, Hongqi, virgin forest near reservoir, elevation 1500 meters, 8 Nov. 1982, H.S. Wang, B.H. Chen, A21003. Wild plants in large numbers. Not utilized.

The differences from *C.assamica* (Mast.) Chang are that the number of petals are almost double, flowers are larger, fruits larger, pericarps thicker and the egg-plant purple colour.

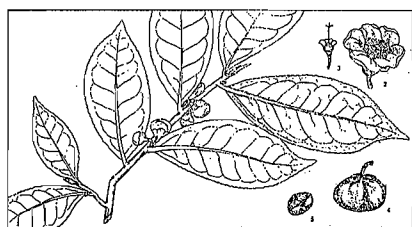


图16 元江茶 *Camellia yunkiangica* Chang, W. C. sp. nov.

1. 枝的一部分和叶 花蕾 2. 花 3. 花被、子房和花柱
4. 果 5. 种子 (2:1)

Fig. 16 *Camellia yunkiangica* Chang, W. C. sp. nov.

1. A part of the branch, leaf and flower bud 2. Flower 3. Floral
shoot, ovary and style 4. Fruit 5. Seed (2:1)

16. *Camellia yunkiangica* Chang. W.C.,
sp. nov. Subgen. *Thea* Chang, Sect.
Thea Ser. *Sinenses* Chang.

A *C.assamica* (Mast.) Chang differt ramulis densius pubescentibus, petalis pluribus, sepalis densius pubescentibus; a *C.sinensi* var. *pubilimba* Chang differt floribus majoribus pedicellis longioribus.

A tree or small tree, 2.3-9.7 meters tall, crown 1.55-5 meters in diameter, trunk 15-48 cm in diameter, semi-spreading, moderate branching. Branchlets abundantly pubescent. Leaves membranaceous, elliptic, 9-16 cm long x 4-7 cm wide, apices acuminate, bases cuneate, both sides of mid-veins abundantly pubescent, lateral veins 8-14 pairs, under surfaces abundantly pubescent, margins moderately serrate, teeth separation 2.5-3 mm; petioles, 5-8 mm long, pubescent or abundantly pubescent; buds extraordinarily abundantly tomentose, scales abundantly pubescent. Flowers terminal or axillary, greenish white, 4-5.5 cm in diameter; pedicels 7-12 mm long, 2 mm thick, sparsely pubescent; bracts 2-4, abundantly pubescent; sepals 5, exterior abundantly pubescent, 4-5 mm long, elliptic; petals 6-10, 2.3-3.2 cm long, glabrous, nearly basally adnate; stamens glabrous, nearly adnate; ovaries 3-locular, pubescent; styles 8-14 mm long; 3-cleft for $\frac{1}{5}$ - $\frac{3}{4}$ their length, as tall as, or shorter than the stamens. Capsules triangular, apices protruding, 3-4 cm in diameter, pericarps 1.5-4 mm thick; fruit pedicels 2-3 mm thick; 10-13 mm long; columellas 10-14 mm long, 7-11 mm thick, triangular. Seeds globose or elliptic; persistent calyces, 8-15 mm in diameter. Fine for tea-making.

The differences from *C.assamica* (Mast.) Chang are that the petals are more numerous, the exterior of the calyces are abundantly pubescent and the branchlets abundantly pubescent, and the differences from var. *pubilimba* Chang are that the flowers are larger and the pedicels longer.

Yunnan: Yuanjiangxian, Yangjie, elevation 1755 meters, 4 Nov. 1983, H.S. Wang, B.H. Chen, A44005; Same Prefecture, Nanuo, Zhuji, elevation 1750 meters, 4 Nov. 1983, H.S. Wang, B.H. Chen, A44006, A44007; Xipingxian, Zhelong, Emaowafangzhai, elevation, 1710, 10 Nov. 1983, H.S. Wang, B.H. Chen, A45004, A45005.

17. *Camellia arborescens* Chang. YW*,
sp. nov. Subgen. *Thea* Chang, Sect.
Thea Dyer, Ser. *Sinenses* Chang.

A *C.sinensi* (L.) Kuntze differt floribus majoribus, petalis pluribus, species *C.pur-*

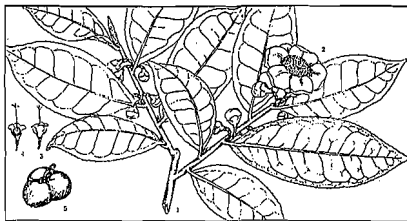


图17 高脚茶 *Camellia arborescens* Chang, Y. W., sp. nov.

1. 枝条一部分和叶、花蕾 2. 花 3. 花被、萼片和花柱
4. 子房和花柱 5. 果 (2x1)

Fig. 17 *Camellia arborescens* Chang, Y. W., sp. nov.
1. A part of the branch, leaf and flower bud 2. Flower 3. Floral
shoot, calyx and style 4. Ovary and style 5. Fruit (x1)

purea Chang et W.C. differ sepals glabris, fructibus minoribus, pericarpio tenuiore.

A tree or small tree 2-5 meters tall, trunk 15-38 cm in diameter, erect, moderate branching or sparse, branchlets sparsely pubescent. Leaves elliptic or long-elliptic, 10-15 cm long, 4-7 cm wide, apices acuminate, a few caudate, bases cuneate, both sides of the mid-veins sparsely pubescent or glabrous, lateral veins 8-10 pairs, margins comparatively obtusely serrate, teeth separation 3-4 mm, petioles glabrous, 7-11 mm long; buds and scales abundantly pubescent. Flowers terminal or axillary; white, 4.5-6 cm in diameter; pedicels 9-13 mm long, glabrous; bracts 2, early deciduous; sepals 5, exterior glabrous, interior abundantly pubescent, 6 mm long, obovate; petals 7-11, 2.4-3.1 cm long, nearly basally adnate; stamens glabrous, 3-cleft for $\frac{1}{4}$ - $\frac{1}{3}$ their length, as tall as the stamens. Capsules tri-globose, 3-4 cm in diameter, pericarps 1 mm thick; fruit pedicels 7-14 mm long, 2-3 mm thick, triangular; coccuses 1.2 cm long, elliptic. Seeds sub-globose, 1.3-1.4 cm in diameter; persistent calyxes 9-14 mm in diameter. peak flowering period mid- and late October.

Yunnan: Weixinxian, Jiucheng, Tianpeng, Shanheba, elevation 1000 meters, inside forest, 10 Oct. 1983, F.L. Yu, P.S. wang, A35003; Same Prefecture, Maan tea plantation, elevation 1170 meters, 11 Oct. 1983, F.L. Yu, P.S. Wang, A35004, A35006, A35008; Daguaxian, Qinglongzhai, elevation 1190 meters, 11 Oct. 1983, H.S. Wang, B.H. Chen, A36003, A36005; Yanjinxian, Niuzhai, Baolongdadiwan, elevation 1043 meters, 16 Oct. 1983, H.S. Wang, B.H. Chen, A38004, A38005; Same Prefecture,

Niuzhai, Xinhua, elevation 900 meters, 17 Oct. 1983, H.S. Wang, B.H. Chen, A38007. Used for tea making.

The differences from *C. sinensis* (L.) Kuntze are that the flowers are larger, petals more numerous; from *C. purpurea* Chang, W.C. are that calyxes are glabrous, fruits smaller and pericarp thinner.

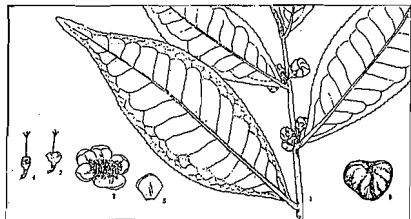


图18 香茶 *Camellia assamica* var. *kucha* Chang, W. C., var. nov.

1. 枝条一部分和叶、花蕾 2. 花 3. 花被、萼片和花柱
4. 子房和花柱 5. 花 6. 果 (2x1)

Fig. 18 *Camellia assamica* var. *kucha* Chang, W. C., var. nov.
1. A part of the branch, leaf and flower bud 2. Flower
3. Floral shoot, calyx and style 4. Ovary and style
5. petal 6. Fruit (x1)

18. *Camellia assamica* var. *kucha* Chang, W.C, var. Nov. Subgen. *Thea* Chang, Sect. *Thea* Dyer, Ser. *Sinenses* Chang.

A type habitu arboribus, ramulis sparse pubescentibus, nervis lateralibus pluribus pericarpio 2-3 mm crasso differt.

Tree 8 meters tall, erect, branching sparse, branchlets sparsely pubescent. Leaves long-elliptic or elliptic, 21-25 cm long, x 7.7-9.5 cm wide, apices acuminate or caudate, bases cuneate, a few roundish, both sides of mid-veins sparsely pubescent, lateral veins 11-14 pairs, under surfaces sparsely pubescent, margins shallowly serrate; petioles sparsely pubescent, 6-10 mm long; buds extraordinarily abundantly tomentose, scales pubescent. Flowers terminal or axillary, greenish white, 3.5-4.5 cm in diameter; sepals 5, exterior glabrous, 5-7 mm long, sub-orbicular; petals 5-6, 1.2 cm long, obovate; stamens glabrous, nearly adnate; ovaries 3-locular, abundantly pubescent; styles 1.3 cm long, taller than the stamens, apices 3-cleft for $\frac{1}{4}$ their length. Capsules triangular, pericarps 2-3 mm thick, scabrous; fruit pedicels 10 mm long, club-like, 2.5 mm thick; columellas 1.5-1.7 mm long, 7 mm thick, triangular; coccuses 10 mm long, elliptic, 2 mm thick. Seeds sub-globose, 1.7-1.8 cm in diameter. peak flowering period December.

Yunnan: Jinpingxian, Tongchang, Yaoshan, inside sparse wood at Hanizhai,

elevation 1371 meters, 1 Nov. 1982, H.S. Wang, B.H. Chen, Y.J. Yang, A22003. Very bitter flavour, not utilized.

It is a new variety, and the differences from *C. assamica* (Mast.) Chang are that branchlets are sparsely pubescent, lateral veins are more numerous, pericarp

thicker and the very bitter flavour.

Note: The abbreviation of nominators are:

T. (Tan, Yong-ji), W. (Wang, Hai-si), C. (Chen, Binghuan), Y. (Yu Fu-lian), W* (Wang, Ping-sheng).

The Hybrids of *Camellia Chrysantha*

CLIFFORD R. PARKS, U.S.A.

Les hybrides de camellia chrysantha

Híbridos de camelia crisanta

Gli ibridi della camellia chrysantha

Hybriden der Kamilien Chrysantha

From the time *Camellia chrysantha* was discovered, camellia growers and fanciers have written volumes on the prospects of yellow garden camellias, but to date the results of the numerous attempts to carry out breeding programs with the yellow camellia have not been encouraging. The first publication on *C. chrysantha* hybrids (*C. reticulata* x *C. chrysantha*) was by Xia (1984), in which he reported that the interspecific hybrids had colors similar to the *C. reticulata* parent, and yellow pigmentation did not transfer to the hybrid offspring. In a personal communication (cited by Parks and Scogin, 1987), Dr. Shunpei Uemoto of Kyushu University, Japan stated that a hybrid between 'Hatsu-yuki' and *C. chrysantha* had slightly yellow petals, but lacked the yellow flavonoid pigmentation characteristic of *C. chrysantha*. Other breeders have pointed out in conversation that while a trace of yellow can be seen in the petals of some hybrids with a *C. chrysantha* parent, no truly yellow-flowered offspring have yet been obtained.

As Dr. Ron Scogin and I discussed in 1987, there are two components of yellow coloration in *Camellia chrysantha*. One is the yellow flavonoid, quercimeritrin, and the other is yellow-colored carotenoids

(pigments responsible for certain flower, fruit and leaf colors in many plants). The two different classes of pigments interact to produce the yellow color in the petals of *C. chrysantha*, and it is difficult to determine which component is more important.

Nothing is known about the inheritance of the two components of petal color in *C. chrysantha*, but there is growing evidence that some of the *C. chrysantha* color determining genes are completely recessive (inactive) in combinations with other species. Dr. Shunpei Uemoto first observed this in studying the hybrid between 'Hatsu-yuki' and *C. chrysantha*, previously mentioned, which has none of the yellow flavonoids characteristic of the yellow-flowered parent. In order to further investigate the possible transfer of the yellow flavonoids to hybrids, we chromatographically separated the pigments of 4 individual hybrids. We selected the two individuals with the most yellow petal pigmentation from several hybrid progenies, and a photograph of the petal coloration of one of these is pictured in Figure 1. For comparison we also selected a hybrid with only a visible trace of yellow and another with no visible yellow color at all. A

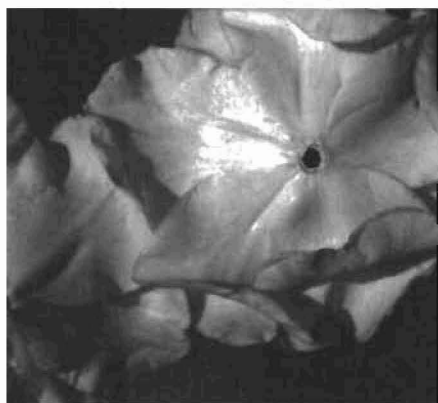
strain of *C. reticulata* was also run for comparison. The results were very straight-forward. No hybrid, with or without visible yellow pigmentation in the petals contained even a trace of the yellow flavonoid pigment quercimeritrin, so abundant in the flowers of the *C. chrysantha* parent. The results from a very large number of studies done on a great range of plant species indicate that the flavonoid constituents of both parents are usually transferred to the F_1 offspring; so the complete absence of the *C. chrysantha* yellow flavonoids in its F_1 hybrids is unusual. However, this extreme recessive behavior, while rare, has been documented in other plants.

Since some of the first-generation hybrids with *C. chrysantha* do contain a small, but clearly detectable yellow coloration (see Figure 1), it is clear that a small amount of the carotenoid pigment is transferred to interspecific hybrids. So far, *C. chrysantha* has been extensively hybridized with *C. reticulata* and *C. pitardii* and much less extensively with *C. japonica*; however, among all of the hybrids that have been produced from these crosses, at best, only traces of yellow color show in the hybrid offspring. Both of the seedlings with noticeable yellow color in our hybrid progenies were produced from the same *C. reticulata* parent. This result suggests that some individuals will serve as better parents than others in producing yellow offspring; nevertheless, there was no trace of yellow flavonoid even in the two best seedlings.

What are the implications of these results? Where do we go from here? It seems unlikely that it will be possible to obtain good yellow coloration in F_1 hybrids between *C. chrysantha* and the common large-flowered *Camellia* species, *C. reticulata* and *C. japonica*. While it is always possible that someone will have the rare good luck of hitting upon a good combination by chance and obtaining a yellow hybrid, the probability of this is low since no trace of yellow flavonoid has been observed in any hybrid offspring. Since dominance patterns often change in combinations with different species, it is possible that combinations between *C. chrysantha* and different *Camellia* species may yet yield yellow-flowered



a. Front view of the flower



b. Rear view of the flower

Figure 1. Petals color details of a hybrid between *C. reticulata* and *C. chrysantha*.

progeny; however such hybrids, even if yellow, may not be horticulturally superior to the *C. chrysantha* parent. Nevertheless, these crosses should be tried.

The F_1 hybrids between *C. reticulata* and *C. chrysantha* range in growth from very weak to vigorous. Since they are expected to be unbalanced tetraploids, it is unlikely that they will be seed fertile; however, some do produce a lot of pollen, and we might be surprised at their fertility. It is probable that they could be used as pollen parents in crosses with fertile stocks of a variety of species, but one would expect the yellow trait to remain recessive in crosses of the hybrids to

either *C. reticulata* or *C. japonica*. Last season I did try to cross some of the *C. reticulata* x *C. chrysantha* hybrids to *C. japonica*, and while I did obtain a few seeds with embryos, none germinated. Intercrossing the hybrids to each other should produce some progeny homozygous for the *C. chrysantha* "yellow-flavonoid" gene, and these individuals should produce yellow flowers, but unfortunately, it is unlikely there will be adequate fertility to do this. However, we must try because in *Camellia* hybrids we often find fertile individuals where they are not expected. Thus, despite the small chance of success, we should cross the available *C. chrysantha* hybrids with their parent species and each other.

The other obvious cross to try with the *C. chrysantha* hybrids is the backcross to *C. chrysantha* itself. With dose of the yellow determining genes in both the hybrid and the *C. chrysantha* parents, the possibility of yellow individuals in the backcross progeny from *C. chrysantha* is much greater. Also the backcross approach opens up the possibility of combining the yellow of *C. chrysantha* with the improved floral traits of the *C. reticulata* grandparent. As collectors have larger and larger specimens of *C. chrysantha* available for crossing experiments, this approach should become a reality.

Next we must incorporate other yellow-flowered *Camellia* species into our breeding programs. This is something of a problem because most of these species are not available for use; but, we must assume that these will become available one by one. *Camellia euphlebica* (*C. chrysantha* var. *macrophylla*) is available, yet as far as I know, its use as a hybridizing parent for the development of yellow-flowered hybrids has not been explored. It seems to be very closely related to *C. chrysantha* var. *chrysantha*, but while its petal coloration is a little more intense than var. *chrysantha*, it will only be possible to determine its performance as a parent by attempting to make experimental hybrids. Last year I hybridized the two forms of *C. chrysantha* (*C. chrysantha* var. *chrysantha* x [*C. chrysantha* var. *macrophylla* = *C.*

euphlebica]), and vigorous hybrid seedlings were easily obtained. The inter-*chrysantha* hybrid should be fertile, and either it or *C. chrysantha* var. *macrophylla* might serve as a better parent than *C. chrysantha* var. *chrysantha*. As pointed out previously, these questions can only be answered by experiment. It is too early to make any comment whatsoever about species not available for research, but if a yellow-flowered species with pigments different from *C. chrysantha* can be located, it might be a better breeding parent.

There are two other approaches that can be explored in the effort to develop yellow-flowered garden camellias that we discussed in the earlier article (Parks and Scogin, 1987), but I will mention them again here. The attempt to develop a yellow-flowered *C. japonica* by intercrossing cultivars which have a trace of yellow pigmentation in the flowers has been explored by a number of workers, particularly Dr. Walter Homeyer. He has progressed to the degree that he has selections which have a marked yellow cast, and the best of these he has named and introduced as 'Dahlohnega'. Continued intercrossing of these "yellow" japonicas and crossing them with *C. chrysantha*, if that is possible, will gradually produce hybrids with yellower flowers. It is here that the use of *C. chrysantha* might be of greatest use because some of its hybrids do pick up carotenoid pigment from *C. chrysantha*, and apparently carotenoid is the type of pigment in the petals of the yellower japonicas. There is the possibility that an additive effect might be observed in the combination of the *C. chrysantha* and the *C. japonica* carotenoid pigments.

Another "long shot" that I consider worth pursuing is the possible use of the species *Camellia yunnanensis*. This is a white-flowered species, but the petals usually have some bright yellow streaks radiating out from the deep yellow filaments. It occurs to me that hybrids with this species might pick up general yellow pigmentation from the streak and filament color patterns, as hybrid interactions of this sort have been observed in other plant groups. At first I used *C. yunnanensis* as the female parent in the

attempt to make hybrids, and I only obtained hollow seeds; but more recently, I tried *C. japonica* as the seed parent in combinations with *C. yunnanensis* and obtained healthy seedlings which are progressing nicely. If this approach has any merit, it likely will be useful in making combinations with the yellowish japonicas since the amount of color that can be obtained from *C. yunnanensis* will not be great.

In summary, I have commented on the first discouraging results that have been obtained in the efforts to breed yellow hybrids using *C. chrysantha*. But, I have also listed a number of approaches that should also be tried before we completely give up on *C. chrysantha* as the yellow-donating parent in *Camellia* hybrids. We must try to cross *C. chrysantha* with every other available *Camellia* species.

Further, the available F₁ hybrids of *C. chrysantha* should be intercrossed and crossed with other species and their parents, particularly the *C. chrysantha* parent. Furthermore, we must make every effort to use new species in crossing programs as they become available, and finally we should continue to explore the possibilities of the faint yellow coloration sometimes apparent in the flowers of our most common *Camellia* species, *Camellia japonica*.

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Camellia Growth Cycles (How to Grow the Big One)

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Cycles de croissance du camellia

Ciclos de crecimiento en camelias

Cicli di crescita di camellie

Entwicklungsgaenge der Kamilien

When one plans ahead it is usually possible to accomplish feats that are amazing. Camellia flower exhibitors quite often observe that a few growers seem to consistently produce premium quality flowers year after year. This is an example of planning ahead, or it could be, understanding the growth patterns of the Camellia.

It would be helpful in understanding what is going on in a plant if the actual cell activity was examined over a year's time. Growth in woody plants can be divided into three phases. First, cell division produces new cells that contribute

to new stems, leaves and buds. All growth in stem length, formation of new growth, and flower buds and leaves originate in this way from the previous season's terminal growth bud. Secondly, after cells are produced they increase in size up to 20 or more times than original length or volume. Third, once cells have gained their maximum size they specialize and mature. However, cells forming different plant parts are activated in different ways and at different times. For example, growth buds are completed by cell division in September and October, but the cells don't enlarge and

 Camellia Growth Cycles and Nutrition

	Formation	Cell Enlargement
Growth Buds	May - October	April - June (Following year)
Flower Buds	May - August	September - March
	Times to Act	
Fertilizer	February - June	August - September
Water	At all times, especially during flowering.	

Table 1. Combined growth activities are coordinated with the timing of fertilizing and watering.

mature into stems and leaves until the following March and April. The embryonic stem and leaf parts have been formed several months before the final growth spurt.

Flower buds are stimulated to form as day length increases during May. By the first part of July, the very small flower buds can be seen developing at the stem tips. The major number of embryonic parts are present in some Camellia cultivars by August. Flower buds of other cultivars continue to develop on into October. A comment here on a different topic: The variable flower bud growth rates may explain the failure of gibberellic acid to stimulate early flowering of some cultivars. Buds apparently must be at some stage of maturity before responding to gibb treatment.

Fitting growth into the picture with fertilizers and water is a way to consider the year-round care of these plants. Nutrition should be available before the cell division and other growth activities begin. Early spring application should make nutrition available. Another application would be of value later on in the summer. (See table.)

Water is of greatest importance in growth cycles, especially when cells are enlarging. Cell enlargement as mentioned above consists of a rapid uptake of water,

swelling the cell to a size 20 or more times its original size. This can happen over a period of hours as in flower opening, or days, as growth buds develop into stems and expanded leaves. Remember that most of the cells and embryo parts are present in well formed buds. Cell expansion, and some cell division for finishing touches, is the major event occurring during these growth explosions. So, the plant required maximum water available. Even high humidity around the leaves and flowers is helpful during this expansion, helpful in stimulating greatest cell expansion; therefore, helpful in stimulating greatest flower size!

There seems to be a cumulative effect over time with good nutrition and plenty of water. A vigorous plant already has more cells and "growth potential" the following year. Keeping up the vigor should increase quality of growth over a season or two until a maximum efficiency of growth is achieved. At this point the big winners are being produced.

In order to envision growth cycles and the needs for fertilizers and water, a table has been included. Times are suggested that best fit North Florida Gulf Coast climatic conditions. Daylength considerations as well as climatic changes will have to be allowed for as latitude decreases or increases.

History & Progress On Cold Hardiness With Camellias In Northeastern United States

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Histoire et progrès en résistance au froid au Nord-est des Etats-Unis

Historia y progreso en resistencia al frio con camelias en el noreste de Estados Unidos

Storia e progresso nella resistenza al freddo con camellie negli Stati Uniti del nord-est

Geschichte und Fortschritte in der Widerstandsfähigkeit der Kamilien bei Kaelte
im nordoestlichen Teil der USA

The metropolitan area of Washington, DC has always been considered to be the marginal northern fringe of the U.S. Camellia belt. Here, it is required not only that growers know good camellia culture, but that they also must have some gambling spirit. In the years before the 1980s (the decade of the 'great freezes'), we were more concerned with leaf burn and the occasional loss of some branches. Rarely would any of our japonica or sasanqua cultivars be killed outright. At the time, the 1960's and early 1970's, we were actually growing some of the reticulata hybrids without too much trouble. Our friends to the south occasionally spoke of cold hardiness, but they were referring to flower bud injury; damage to the plants themselves was almost unheard of.

It was in 1970 that I introduced my first cold-hardy camellia 'Frost Queen,' a *C. japonica* seedling selection. It was followed by 'Frost Queen Pink' and 'Frost Queen Red,' all of which stood up well over a series of winters compared to other japonicas.

Our whole concept of cold hardiness changed following the winters of 1977-78 and 1978-79. Of the nationally recognized camellia collection of over 900 specimens at the U.S. National Arboretum, most *C. sasanquas* were killed that first winter, and the japonicas very badly injured. The second winter finished off the rest, with but few exceptions.

Camellia growers in the Washington-Baltimore area, since the early 1980's, have been resorting to the use of Microfoam⁽¹⁾ to protect their plants, until we can develop truly cold hardy strains that will withstand our winters without protection.

New sources of cold-hardiness were needed. Even those *C. japonica* cultivars long thought to be our most hardy (Kumasaka, Bernice Boddy, Governor Mouton, Lady Clare, Pink Perfection, etc.) were devastated. The National Arboretum's once outstanding camellia collection was reduced to a few sprouting stumps. There was a single exception, a specimen of *C. oleifera* introduced from northern China in 1948. It came through all the past winters completely unharmed. This was to be our new source of cold hardiness. Fortunately, I had a series of 48 hybrids from crosses involving this particular *C. oleifera*, made in 1969. These were planted out during the spring of 1979 for testing. From this group, two selections, 'Frost Prince' and 'Frost Princess,' were made in 1981.

Also in 1979, a series of 1,800 inter-specific hybrids involving *C. oleifera* crosses with various sasanqua and hiemalis cultivars were developed. This was followed in subsequent years

¹Microfoam - DuPont trade name for 1/4" thick plastic foam insulation blanket. Comes in rolls 6' wide by 120' long, and costs approximately \$0.600 per running foot.

(1980-85) by 1,200 more *oleifera* hybrids, but here involving such other species as *C. vernalis*, *C. x Williamsii* and *C. japonica*.

Beginning in 1982, and following each year since, these hybrids have been planted out for field testing at 14 locations in four northeastern states and the District of Columbia. Annual evaluations on plant condition regarding winter damage were made which was followed by flowering records as the plants matured. Details about this procedure were reported in a previous ICS article².

Selections were made of hybrids which have come through the past five winters without injury during which time temperatures have ranged from -20°C to -27°C, depending upon the location. During 1987 and 1988, six selections were named, registered with the American Camellia Society, and propagational materials distributed to a group of eight nurserymen for increase and sale to the public.

Progress toward the development of truly cold hardy fall flowering hybrids has far exceeded my grandest expectations. I believe we now have a rather respectable group of cultivars that provide a good representation of various flower forms and colors. These include white, shell pink, lavender pink, single, semi-double, peony, anemone form, and formal double.

The above-mentioned hybrids are the result of crosses involving *C. oleifera* with either *C. sasanqua*, *C. hiemalis*, or *C. vernalis*, and perhaps more importantly, second generation backcrosses. The F₂'s involve 'Frost Prince' and 'Frost Princess', themselves *C. oleifera* x *C. hiemalis* hybrids, backcrossed with *C. oleifera*. Thus, three-quarters of their makeup is *C. oleifera* germ plasm and only one-quarter *C. hiemalis*. As might be expected, most of these hybrids possessed rather poor quality single flowers. However, among the large number of seedlings evaluated, there were several, such as 'Snow Flurry', 'Winter's Hope', and 'Polar Ice', that possess commercial quality blooms.



Figure 1. 'Snow Flurry', *C. oleifera* x 'Frost Princess'.



Figure 2. 'Winter's Hope', *C. oleifera* x 'Frost Princess'.

Descriptions of the six cultivar releases are as follows:

1. 'Snow Flurry' - *C. oleifera* x 'Frost Princess' (*C. hiemalis* x *C. oleifera*). Flowers 2-3/4", white, peony form, 12 petals, 18 petaloids. Oct.-Nov. (Figure 1).
2. 'Winter's Hope' - *C. oleifera* x 'Frost Princess' (*C. hiemalis* x *C. oleifera*). Flowers 3-3/4", white, semi-double, 12 petals. Oct.-Nov. (Figure 2).
3. 'Winter's Charm' - *C. sasanqua* 'Takara-awase' x *C. oleifera*. Flowers 3-1/2" lavender pink, peony form, 14 petals, 14 petaloids. Oct.-Nov. (Figure 3).
4. 'Winter's Star' - 'Frost Prince' ('Shishigashira' x *C. oleifera*) x *C. hiemalis* 'Showa-no-Sakae'. Flowers 3-1/4", lavender pink, single, 6 petals. Oct.-Nov. (Figure 4).
5. 'Winter's Rose' - *C. oleifera* x *C. hiemalis* 'Otome'. Flowers 2", shell pink, formal double, 28 petals. Oct.-Nov. (Figure 5).
6. 'Polar Ice' - 'Frost Princess' x *C. oleifera*. Flowers 3-1/2", white, anemone form, 12 petals, 89 petaloids. Oct.-Nov. (Figure 6).

² Ackerman, W. L. 1986. Cold Hardiness Studies with Camellias in Northeastern United States. *International Camellia Journal* 18:84-89.



Figure 3. 'Winter's Charm', *C. sasanqua* 'Takura-awase' x *C. oleifera*.



Figure 4. 'Winter's Star', 'Frost Prince' x *C. hiemalis* 'Showa-no-Sakae'.



Figure 5. 'Winter's Rose', *C. oleifera* x *C. hiemalis* 'Otome'.

Progress on cold-hardy spring blooming hybrids has been much slower and more complicated than that of the fall blooming forms. To start with, crosses between *C. oleifera* and *C. x Williamsii* and *C. japonica* are more difficult to produce. Thus, one must take considerably more caution in placing them out for field testing. Here, it appeared prudent to replicate each precious hybrid and hold at least one representative of each cross under protection while its propagations



Figure 6. 'Polar Ice', 'Frost Princess' x *C. oleifera*.

were being field tested. This delayed the field testing for several years. Thus, *C. oleifera* hybrids, including *C. x Williamsii* and *C. japonica*, have been out for tests three winters now, with temperatures down to -21°C . This low temperature was of rather brief duration so one must consider that past two winters as being relatively mild and providing little survival information. Perhaps prematurely, I went ahead and registered 'Pink Icicle', a *C. x Williamsii* x *C. oleifera* cross. Although it still looks good to me, I continue to have some nagging doubts about its ability to withstand a really severe winter (like the episode of January 1985 when temperatures went to -27°C). As a result of self doubts, I have withheld naming any other spring flowering types until I can convince myself that they will stand up over the long haul. At the present time, there are four in particular, that look good, have very nice commercial quality flowers, and are among those field tested for three years. I would like to see these subjected to at least one severe winter before progressing further with them.

Following a completely separate approach to cold-hardy spring blooming camellias is the testing and evaluation of wild forms of *C. japonica* collected in Korea by Barry Yinger, formerly of the U.S. National Arboretum. Seed and cuttings were collected from a series of islands off the west coast of Korea at the northern-most limits of the natural range of this species. Plants in this region are subjected to frigid weather conditions from westerly winds across the Yellow Sea from Manchuria. Thus, they should

show considerable cold hardiness. However, as island communities, they would also be subject to the modifying conditions typical of most maritime environments. Although conditions may get very cold, the open water of the Yellow Sea would be expected to modify any abrupt changes in temperature. Also, winds traveling over such a wide expanse of water would normally be heavily moisture laden. Winter conditions in the Northeastern U.S. would differ in two main aspects from these Korean islands: (1) We do have very abrupt changes in temperatures. A graphic example was that experienced in many areas the third week in January 1985. (2) We do have periods of very low humidity and excessive drying winds during some winter periods. Here, plants may be killed from desiccation rather than the accompanying low temperatures.

During the spring of 1987, a group of several thousand seedlings from the Korean collection were planted out in a test block at the Arboretum. A review of these during the summer of 1988 showed

a wide range of condition from those showing no physical injury, to others in close proximity which had been killed to ground level. It will probably take several more winters, including one or more severe ones, before any valid selections will be possible. Assuming a number of truly cold-hardy selections can be made, these will then form the parental foundation for a breeding program. Since the flowers are basically the pinkish-red wild type singles, they will need to be used to develop hybrids that possess commercial quality flowers while retaining the cold-hardy characteristics. I am at present collaborating with the National Arboretum on this project.

As I have mentioned many times before, breeding new characteristics into any woody ornamental, including camellias, is not a short-term project. It takes many years and a great deal of patience. It is only for those who have the fortitude and endurance to stick with it, that any real degree of success will be attained.

The Scourge Of The Camellia World

BILL DONNAN, U.S.A.

Le fléau du monde du camellia

Azote del mundo de camelias

Il flagello del mondo della camellia

Die Plage der Kamilienwelt

Who has not heard of AIDS - the acronym for Aquired Imune Disability Syndrome? AIDS is a virus which, so far, seems to be incurable and which has set the medical and social world on it's ear. Today there is a great hue and cry aimed at getting rid of this virus. Tons of money and wagon loads of heart ache will be expended before this scourage to mankind is brought to heel. Well, dear reader, I maintain that we have an Aquired Imune Disability Syndrome, an "AIDS" if you

will, right here in our camellia hobby. It is called, for want of a better term - VARIGATION. It is a virus which, in some respects, is just as deadly, just as incurable, and perhaps, just as threatening to the camellia world as AIDS is to the human race!

What is this virus and what does it do to our camellia cultivars? Everyone knows that it causes variegation in the leaves of plants and also in the color of the blooms, but let's set the record

straight. Variegation in camellia leaves and in the color of the blooms may be traced to several different causes. It may be genetic or hereditary and originate from the seed. Examples of this would be 'Hikaru-Genju' or as we call it 'Herme'; 'Tama-no-ura'; 'Betty Sheffield'; and 'Aspasia Macarthur' to name a few. It may be a chimera caused by two different kinds of genetic cells originating in the growing plant and producing tissue of different colors. Examples would be mutants such as any of the 'Elegans' family or 'Jean Clere'; 'Betty's Beauty'; 'Tomorrow Park Hill' and hundreds of other sports. However, what I am talking about is a virus, an infectious chlorosis, a disease brought on by the presence of one or more virus strains which destroys the chlorophyll in the plant leaves. Examples of this area: 'Adolphe Audusson Special'; 'King Lear'; 'Eleanor Martin Supreme' etc. While one or more of these factors can cause variegation in the leaves or in the flowers of camellia plants, it is the virus which presents the danger and it is this virus which we are so concerned about.

Virus infection is indicated by a yellowish green mottling of all or part of the leaf. There may be only a few light yellow spots or dots or, in others, a large part or all of the leaf may be yellow. When all of the leaf is yellow all of the chlorophyll is absent. Thus the "Manufacturing Element" of the plant, the "Chemical Bond" between sunlight and enzymes in the leaves is no longer there. It's kinda like turning off the electric current and the plant is going to suffer.

Early on camellia hobbyists did not know what caused the yellowing of the leaves and the mottling color of the flowers. However, an interesting article was published in the 1946 American Camellia Society Yearbook which described this virus and its dangers. The article is entitled "Yellow Mottle Leaf, A Virus Disease Of Camellia" by J. A. Milbroth and F. P. McWharther. These researchers proved that the variegations in leaves and flowers could be caused by a virus, and, more importantly, that the virus could be transferred from one plant to another by bringing affected cells in contact with healthy ones as in grafting.

If a scion is grafted onto a virus infected under stock the scion may become infected with the virus. If a virus infected scion is grafted onto healthy under stock the under stock may become infected. Furthermore, it has been shown that virus infected grafts are much slower growing and more subject to death of the scion.

If you have read this far you are going to come to the conclusion that I am against all variegated flowers. Hey! I like some of the variegated flowers! 'Adolphe Audusson Special' is on my "Ten Best" list! All that I am trying to do is call attention to the danger posed by this virus. I submit, that if we are not careful, we here in the United States Of America are going to find ourselves in danger of having nothing but virus infected plants! Some of the other camellia growing areas of the World are not as inamored with virus variegation as we are. England; France; New Zealand; and Australia all regard virus infected plants as being sick plants and they discourage the importation of any of them. France destroys all virus infected camellias. New Zealand will not allow virus variegated scions to be mailed into the country. If there is any variegation in the leaves the scion will be destroyed. England does not allow virus infected plants to be exhibited at the Chelsea Show.

One could maintain that virus infection has been with us since the camellia hobby was first introduced into the Western World. This is true. Many Chinese and Japanese introductions have been shown that their variegation was virus induced. The C. japonica 'Donckelarii' which came to Europe in 1834 is thought to have virus. 'Cornealean', one of the best of the Yunnan C. reticulatas has a virus induced variegation. The cultivars have been around for a long time. Why should we worry about virus? The worry comes from the fact that the virus is so easily spread. The worry comes from the fact that so many hobbyists are out to "varigate" each and every new camellia bloom that is registered! The worry comes from the fact that all one has to do to spread the virus is to go out into his camellia patch and cut a few blooms for the next camellia show! If the hobbyist

should cut a bloom from a virus infected plant and then cut the next bloom from a healthy plant he runs the risk of infecting the healthy plant. Large camellia nurseries are finding it difficult to keep healthy plants from becoming infected with the virus. How long has it been since you have seen a non-infected 'Adolphe Audusson'? This cultivar, in it's healthy condition has a beautiful dark dusty red bloom with darker red veins. It is a knock-out! Yet it is so easy to become virus infected that all one sees is the 'Adolphe Audusson Special'. This virus infected cultivar is so vulnerable that it is used widely as an "infecting agent" in trying to get variegation in other cultivars. Here in California 'Adolphe Audusson Special' is used almost exclusively to infect other cultivars. In the East and the South East 'King Lear' (or as they say in the Carolinas - 'King Leah') is used as the infecting agent in attempting to get variegation.

Some camellia cultivars such as, 'Blood of China', 'Kramer's Supreme' and 'Te Deum' are difficult to virus. On the other hand, *C. sasanquas* are the most easy species to become infected with the virus. It occurs to me that we should be ex-

tremely careful in handling camellias to be sure that we do not infect health plants. Why should we induce this disease in all of our camellias? Why do we rush to be the first to virus each new camellia cultivar when it is introduced? Why infect a white camellia? Why try to infect a sweep pea color camellia? Or a blush pink one? Some "variegation freaks" are making the attempt. Why not use a little common sense? Here are some rules which should be followed by all camellia hobbyists:

(1) Never cut the root tip of a new seedling with contaminated shears.

(2) Grafting shears and grafting knives should all be dis-infected to prevent the spread of the camellia virus.

(3) Use two pair of shears when cutting blooms for a camellia show. One pair should be dis-infected for cutting healthy camellia blooms. The other shears could be used to cut variegated blooms.

(4) Dis-infect your pruning shears before using them to prune your bushes.

If we all used a little care we can guard against the spread of this virus and we can all be assured that we will have healthy, disease-free camellias.



The Yellow Hour Glass

MEYER PIET, California, U.S.A.

Le sablier jaune

El reloj de arena amarillo

Il clessidra giallo

Das gelbe Stundenglas

For those that have not read our articles in the SCCS Review for the past 15 years or so, I would like you to know that Lee Gaeta and Meyer Piet have been actively devoting a great deal of our time in an attempt to produce yellow camellia flowers. We started about 15 years ago, crossing and back-crossing the Japonicas that had some yellow color such as Brushfield Yellow, Botanuki, Lee's Yellow, Ki-Karata etc. We then embarked on the difficult program of hybridizing, one phase used camellia species *Granthamiana* as the mother plant. Because it is extremely difficult to set seed on the *Granthamiana* species or it's hybrids (they are all very poor seed setters), we redoubled our effort with the simple logic that what we were looking for in yellow color was extremely difficult to obtain, so why expect "easy" results. I might add that *Granthamiana* has some "yellow" streaks in the back of it's white petals.

In about 1976 or 13 years ago, we had the "bright" idea of using another species of flower as the pollen parent. This flower has bright yellow and orange flowers. After two seasons and hundreds of attempts to pollinate without success, we finally had a cross that "took" and resulted in a viable seed that we were able to graft. The following seasons we continued to be successful adding a few new seeds each year to our special collection, which we called our mystery plants (*Granthamiana* mother plant - pollen plant not disclosed). The late Hody

Wilson, plant pathologist encouraged me to continue this program.

On March of 1980 we received a single seed of Yellow Flower Camellia *Chrysantha* through the generosity of my good friend Yoshiaki Andoh of Japan. Lee and I successfully germinated it and started grafts on good grafting understock.

About this time the SCCS had a "fund" raiser going for the Camellia Nomenclature, so Lee and I soon had about 150 plants of our original *Chrysantha* seed growing in the green house. (130 plants were donated to SCCS and raised about \$4,000.00.) I took a picture of about 6 new seedlings of *Chrysantha* with one of my "Mystery plants" amongst the group and it was impossible to tell one new plant from the other. This was an interesting early observation that gave us a small hint that perhaps we were heading in the correct direction. I, then, did a foolish thing, which was to let up on my effort of crossing my mystery plants for about two seasons since all of the camellia talk at this time centered around the new seedlings of *Chrysantha*. When I finally realized this I wrote to a camellia friend and told him that with the introduction of Yellow *Chrysantha* I had probably made a big mistake by *not* concentrating on my original program of continuing to cross my "Mystery Plants". It's fortunate, but all too often we take the path of least resistance when the real opportunity may lie in a different direction, but requires much more hard work.

Well, as you all know, Lee and I were the first to bloom our seedling of *Chrysanthema* in the United States, on February 1, 1984. We named it Olympic Gold. Since then, we have seen many (hundreds) of pink, red and white offsprings using Olympic Gold Pollen.

Let me try and bring you up-to-date on what we have accomplished as we closed the 1989 season.

1. By continuing to back cross "Olympic Gold" pollen seedlings, using those that show signs of yellow, we now have several flowers that are white or pink with signs of yellow or yellow stripes in the flower color. At the present time we have one or two seed pods that are back-crosses using yellow striped flowers with the mother plant "Olympic Gold" pollen. These seed pods have an excellent chance of producing a yellow flower.
2. Our crosses of Yellow Caste Japonicas (this work was started about 15 years ago), has produced a small 2 1/2" semi-double light yellow flower. It has bloomed for 3 or 4 seasons.
3. Our crosses of Yellow Caste Japonicas when pollinated by Olympic Gold have produced a 2 1/2" inch peony flower with the same basic color and shape of Ki-Tsubaki, a slide that Andoh sent to me of a picture of a yellow petal Japonica dated about 1832.
4. Our first cross where the seed parent was Olympic Gold and the pollen parent a *Salunensis* x Chinese *Chrysanthema* pollen (one of three plants we developed using yellow pollen from China). The leaf of this plant is different than Olympic Gold. Lee and I expected a different flower but the flower turned out to be almost identical to that of Olympic Gold. Since we know the parents we both feel that next season we *must* try and set seed on this new plant. We will have plenty of plants since we grafted up about a dozen plants well before we ever saw the flower. We still have about 10 dif-

ferent seeds using Olympic Gold as the mother plant, that have not bloomed. In all cases the leaves or plants are definitely different. We have high expectations that yellow does exist in these offsprings, but we must be patient, hopefully will see results in another two years.

5. Our effort using yellow pollen from our mystery plant has finally produced a 3 1/2" sulphur yellow single flower. These parents were second or third generation plants. The original first generation crosses were made in 1976, the seeds picked in 1977 or 12 years ago. When several different plants bloomed white flowers, we wisely back-crossed them and finally saw our yellow flower.

In addition to the above 5 items, we have many many other interesting crosses that could produce a yellow flower. The Granthamiana - Ville de Nantes X Olympic Gold seedlings, there are several different ones, have the most beautiful Japonica-*Chrysanthema* leaves that you have ever seen. The plants are slow growers, therefore next November-December Lee and I plan to graft them on to large camellia understock and grow them outside the green house on root stock already established in the ground. We grafted two such plants last season and they look beautiful, already reaching two feet or more in height.

Continuing further we have hundreds of seedlings of Olympic Gold pollen that we did not graft, but show the *Chrysanthema* type leaf that will probably bloom in the next few years. In addition we have all types of back-crosses, many with at least one part "Yellow Flower" in it's heritage.

Lee and I plan to continue our work and hopefully will come up with the yellow-orange flower we are looking for.

It is not easy, but if you are the type of person that likes to explore new ideas for plant development this just might be your Cup of Tea - Join us!

1989 Camellia Registrations

TOM SAVIGE, Australia

Enregistrements de camellias 1989

Registros de camelias, 1989

Registrazioni di camellie 1989

1989 Kamilienregistrierung

- NO. 17. *C.x. williamsii* cv. 'Porthpean
 Originated by Maurice Petherick Esq.,
 Porthpean House
 St. Austell, P126 6AX,
 United Kingdom
 Applicant Mrs. C. Petherick
 Tredeague, Porthpean
 St. Austell
 United Kingdom

Flower;; Semidouble, Fuchsine Pink, (RHS.CC. Red Group, 55A-B) with 14 fluted petals, veined in the manner of 'Donation' but of a deeper color; with a centre column of stamens and petaloids; anthers yellow, filaments salmon pink, petaloids same colour as petals. Size 10.5 CM across. Flowers fall complete. Blooms mid season. Buds pointed, pale green.

Leaves: Ovate, flat with a matt surface, 13 cm long x 6.5 cm wide; petioles 10-15 mm long. Plant growth is upright and medium in rate. Original plant 8 years old.

INCOME AND EXPENDITURE ACCOUNT YEAR ENDED 31ST DECEMBER, 1988

	NOTE	31/12/88				31/12/87	
		£	\$US	£	\$US*	£	£
INCOME							
Subscriptions	1			3259	5312		5260
Sale of:							
Ties				—			98
Notelets				—			65
Advertising				100	163		292
Sundries				60	98		93
Refund re Naples Congress				262	427		—
Deposit account interest		968	1578			1795	
Less U.K. Corporation tax		86	140	882	1438	660	1135
				4563	7438		6943
EXPENDITURE							
Printing, stationery, postage & telephone		397	647			455	
Room hire		42	68			18	
Journal:							
Printing		5381	8771			6140	
Postage		1572	2562			6140	
Membership lists		—	—			672	
Membership forms		—	—			144	
Subscription envelopes		146	238			—	
Accountancy including underprovision for V.A.T. in previous year		260	424			200	
I.C.S. Register expense		—	—	7798	12711	360	9852
EXCESS OF EXPENDITURE OVER INCOME				3235	5273		2909

*\$US=\$1.63£

BALANCE SHEET AT 31ST DECEMBER, 1988

	NOTES	31/12/88		31/12/87			
		£	\$US	£	\$US	£	£
ASSETS							
Debtors	2	2000	3260			1946	
Cash at bank:							
Current account	3	1490	2429			815	
Business reserve accounts		12354	20137			15952	
		<u>15844</u>	<u>25826</u>			<u>18713</u>	
LIABILITIES							
Creditors	4	514	838			234	
Provision for U.K. Corporation tax		746	1216			660	
		<u>1260</u>	<u>2054</u>			<u>894</u>	
NET CURRENT ASSETS				14584	23772		17819
				<u>14584</u>	<u>23772</u>		<u>17819</u>
REPRESENTED BY							
LIFE MEMBERSHIP FUND							
Being subscriptions carried forward	6			3240	5281		
ACCUMULATED FUNDS							
Balance at 31st December 1987		17819	29045			20728	
Excess of expenditure over income		3235	5273			2909	
		<u>14584</u>	<u>23772</u>			<u>17819</u>	
Less Life subscriptions carried forward		3240	5281			—	
Balance at 31st December 1988				11344	18491		17819
				<u>14584</u>	<u>23772</u>		<u>17819</u>

YEAR ENDED 31st DECEMBER, 1988

NOTES:

- 1 *Subscriptions:* Other income has been separated from subscription income where the information is available and subscriptions received have been stated net of expenses as follows:

	Note	Subscriptions	Expenses	Net Remittance
		<u>£</u>	<u>£</u>	<u>£</u>
Africa		200	—	200
Australia	(a)	—	—	—
France		433	—	433
Germany and Austria	(b)	—	—	—
Italy		161	—	161
Japan	(b)	—	—	—
New Zealand		332	85	247
Spain	(b)	—	—	—
United Kingdom	(c)	1312	—	1312
U. S. A.		1118	212	906
				<u>£3259</u>

N.B. It has not been possible to verify the subscription income or to reconcile it with the membership register.

- (a) The Australian subscriptions amounting to £790-15 have been remitted directly to America and do not appear in these accounts.
- (b) No subscriptions have been received for 1988 from Germany and Austria, Japan or Spain.
- (c) No details have been seen for the amount of £312 received from the United Kingdom which is believed to include sales of ties and notelets.
- 2 *Sundry debtors* comprise:

	<u>£</u>
U.K. and Western European Region (1987)	688
U.K. and Western European Region (1988)	1312
	<u>2000</u>

This amount has been received since 31st December, 1988.

- 3 *Bank:* Deposits totalling A\$2402 (£1151 approximately) which are held in a Special Congress Bank Account in Australia towards the nomenclative publication costs, have not been included in the Balance Sheet.
- 4 *Sundry creditors* comprise:

	<u>£</u>
Reynolds & Co. - Accountancy	230
Quintrells - Subscription envelopes	146
L. Riggall - Postage costs re journal	32
J. Freeman - Expenses	106
	<u>514</u>

- 5 *Stocks*: Stocks of 311 packets of notelets, approximate value £27 and 55 Society ties approximate value £206 are held and have not been included in the accounts.
- 6 Subscriptions received from life members have been included as income. As at 30th June, 1988, the Society had 90 life members. At 31st December, 1988, there is a liability to provide future services for these members for which there will be no receipts.

The committee has decided to provide the sum of £3240 against this future commitment. In the absence of any details concerning the dates when the subscriptions were paid or the age of the life members it is not possible to comment on the adequacy or otherwise of the amount carried forward.

- 7 The Society is committed to the production of an International Camellia Register and funds to finance this have been set aside in a business reserve bank account, although the total cost is unknown.

The Register, which is being compiled in Australia, may attract a grant from an American horticultural institution.

US FINANCIAL REPORT THROUGH 07/31/89

- (1) Tax-exempt status has been received for the ICS in the USA
- (2) Membership Receipts — US Dollars

For 1988 Subscriptions

	<u>Subscriptions</u>	<u>Expenses</u>	<u>Net Remittances</u>
Australia	?	?	1429
Germany	1617	406	1210
Spain	354	54	300
Japan	1747	534	1213
			4152

For 1989 Subscriptions

New Zealand	569	62	507
Italy	276	—	276
U S A	2127	122	2005
			2788

- (3) Current Assets

Bank Account (drawing 5.5% interest)	8214
Time Deposit (drawing 9.0% interest)	25,030
	\$ 33,244

Report of the Membership Registrar

WALTER KRZYMOWSKI, U.S.A.

Compte rendu du responsable des Membres

Informe del Secretario del Registro de Socios

Relazione del segretario del registro dei soci

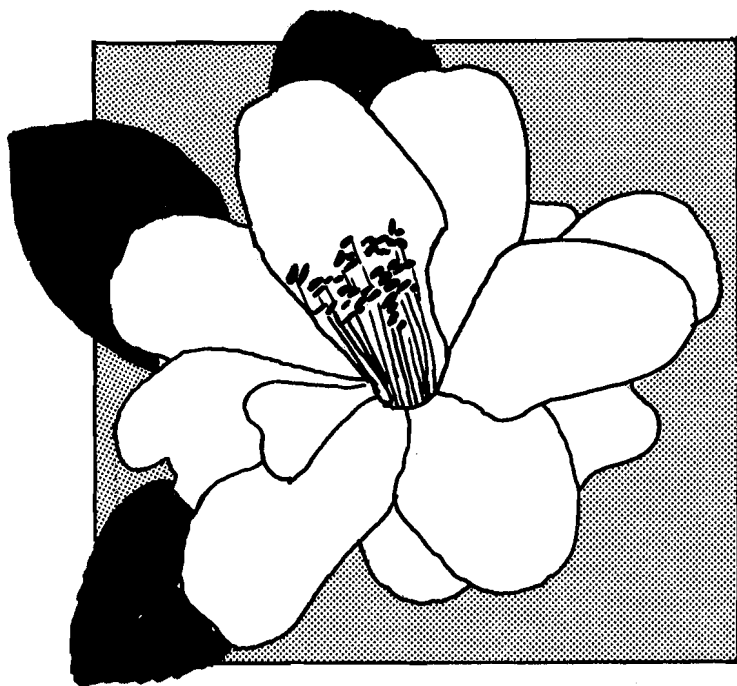
Bericht des Mitgliedschaftsregistrars

Subscriptions fall due on the first of January each year. The Board of Directors has set the subscription rates for 1990, noted elsewhere in this journal, the same as for 1989.

Membership representatives are asked to report by the first of June, the names and addresses of all members with a notation for new members, single, family, life,

etc. A more specific request will be sent to membership representatives by this membership registrar in the spring of 1990.

I too am asking that each member endeavor to seek camellia lovers to join the International Camellia Society in 1990.



ICS Members' Subscription Rates in 1989 and Membership Representatives to whom payable:

AFRICA (R 13.00, or Husband and Wife R 15.00) Mr. Leslie Riggall, Fern Valley, Igwababa Road, Kloof, 3610 Natal, S.A.

ASIA (Y 2400, or Husband and Wife Y 3300) Mr. Hiroshi Tsushi, 33F Sunshine Bldg., 3-1-1, Higashi Ikebukuro, Toshima-Ku, Tokyo 170, Japan

AUSTRALIA (\$ 12, or Husband and Wife \$ 16) Miss N. J. Swanson, 43 Wellington Road, East Lindfield, NSW 2070

FRANCE (80.00 Frs, or Husband and Wife 100.00 Frs) M. Claude Thoby, Le Vieux Grand Chemin, B. P. 3 Rue de Paris, 44470 Carquefou

GERMANY (30.00 DM, or Husband and Wife 35.00 DM) Herr Dr. Klaus Hacklander, Simeonstrasse 5, D5500, Trier

ITALY (L. 20,000, or Husband and Wife L. 25,000) Arch. Franco Giorgetta, Via Fiori Chiari, 8-20121, Milano

NEW ZEALAND (\$ 16.00, or Husband and Wife \$ 17.00) Mr. R. H. Clere, 8 Chesham Avenue, Taupo

PORTUGAL (E 1000, or Husband and Wife E 1200) Senhora Clara de Seabra, Praceta Prof. Egas Moniz, 167-4^o Esq, 4100 Porto

SPAIN (P. 1300, or Husband and Wife P. 1500) Don Juan Armada Diez de Rivera, Paseo de la Castellana 213-4^o, 28046, Madrid

UNITED KINGDOM & ISLE OF MAN £ 8.50, or Husband and Wife £ 11) Mr. Geoffrey Yates, Stagshaw, Amblesied, Cumbria, LA220HE

CHANNEL ISLANDS & REPUBLIC OR IRELAND with BELGIUM, DENMARK, FINLAND, MALTA, NETHERLANDS, and OTHER REGIONS (£8.50, or Husband and Wife £11.00) Mrs. Ann Bushell, Lower Hall, Rue de la Pompe, Augres, Trinity, Jersey, C. I. via U. K.

UNITED STATES (\$ 13, or Husband and Wife \$ 16) Mrs. Edith Mazzei, 1486 Yosemite Circle, Concord, California 94521

Annual subscriptions fall due on the 1st January each year, and Members are requested to pay them to the appropriate Membership Representative before the 1st June at latest, or to notify their wish to discontinue membership.

1989 I.C.S. MEMBERSHIP

AS OF JUNE 30, 1989

	New Members	Life		Ordinary Total		Members
		Single	Family	Single	Family	
* Argentina				1		1
* Australia	12	8	2	126	79	296
* Austria	3			7		7
* Belgium				1	2	5
* Canada				1		1
* Channel Islands	3	8		43	23	97
* China		1		2		3
* Denmark				4		4
* Finland	1			1		1
* France	7			65	11	87
* Germany	27			110	21	152
* Hong Kong				2		2
* Isle of Man		1				1
* Italy	5	1		17	2	22
* Japan	25	19	1	192		213
* Korea				2		2
* Malta				1		1
* Netherlands				1	1	3
* New Zealand	4	3	2	25	39	110
* Portugal	2			4	12	28
* Republic of Ireland		1		8	4	17
* South Africa	6	10		10	2	24
* Spain	1	1		32	2	35
* Switzerland				3	3	9
* United Kingdom	29	27		217	63	370
* U.S.A.	16	9	1	89	58	216
* Zimbabwe		1	1			3
* Luxembourg		1				1
* Germany DDR	2			4	1	6
* Swaziland	1				1	2
* TOTAL	144	107	7	968	322	1719

At the time of going to press, returns had not been received from some membership representatives so previous year figures were used.

New Members of the International Camellia Society 1989

At the Brighton Congress in 1985, the Board of Directors decided that a complete list of members of the Society would only be published every third year. A full list had been published in the Journal in 1984 and again in 1987. This year only the names and addresses of new members and changes are being published.

In view of the fact that changes in the Executive are likely to occur after intervals of three years, or multiples of three years, the next full list of members will be published next year and thereafter triennially.

At the time of going to press, only the following new members and corrections have been received.

AUSTRALIA

New Members

- BATTY, Mr. & Mrs. Leslie, "Mornmist" Kangaroo Valley, NSW 2577
 CRAIG, Dr. & Mrs. Ted, 31 Murrivier Rd., Nth. Bondi NSW 2026
 DONNELLY, Mr. & Mrs. R., 18 Browning Rd., Turramurra NSW 2074
 EATHER, Mr. & Mrs. Roland, 73 Rose Ave., Wheeler Hts., NSW 2098
 EUNSON, Mrs. Pat, 24 Tudor Pl., St. Ives, NSW 2075
 HOLT, Mrs. Thelma, 70 Alexander Cres, Bayview NSW 2104
 JONES, Mr. & Mrs. Ray, "Glen Cush," Belbora Via Gloucester NSW 2422
 KILPATRICK, Mr. & Mrs. L., 10 Wren Pl, Lugarno NSW 2240
 MICHELMORE, Mr. J. M., 43 Ivy St., Indooroopilly Qld., 4008
 POLLOCK, Mr. & Mrs. Ian, 25 Burdekin Cres., St. Ives NSW 2075
 SMITH, Mr. & Mrs. Doug, Azalea Glen, Darkwood Rd., Thora, NSW 2454
 WARD, Mrs. Nancy, 9 Loquat Valley Rd., Bayview, NSW 2104

Changes and Corrections

- BLACKLEY, Mr. & Mrs. J. H., P. O. Box 78, Hawker Act 2614
 PATON, Mrs. F., Unit 30 Hadley Wood, 578 Pacific Hwy., Killara NSW 2071
 ACRS TASMANIA BRANCH, C/O Mrs. P. W. Fredriksen, 563 Sandy Bay Rd., Sandy Bay TAS 7005
 ACRS VICTORIA BRANCH, C/O Mr. F. Hawkins, K 1 Laurence Grove, Riverwood E. VIC 3135
 HUGHES, Mr. & Mrs. M., 2 McKays Rd., Langwarrin, VIC 3910
 NEWMAN & SON PTY LTD., C. F., P. O. Box 10, St. Agnes, S. A. 5097
 O'SHEA, Mrs. D. P., Unit 6, 99 Darling Pt. R., Darling Point NSW 2027
 ROBERTS, Mrs. M., 7/6 Coonanbarra Rd., Wahroonga NSW 2076
 WESTBROOK, Mr. M., 16 Milton Rd., Turramurra NSW 2074
 WITHERS, Dr. & Mrs. R., 23 Melissa St., Donvale, VIC 3111
 FREW, Mrs. A. A. - Deceased
 HAMILTON, Mr. N. C. - Deceased
 RIDDLE, Mr. & Mrs. J. G. - Resigned
 SCOTT, Mr. J. T. - Resigned
 SHEPHERD, Mr. F. W. - Resigned
 STOREY, Mrs. Joan - Resigned

CHANNEL ISLANDS

New Members

- ALLAN, Mrs. Betty M., Lapetite Seigneurie, St. Pierre Du Bois, Guernsey
 BROMLEY, Mr. & Mrs. P. G., La Chesnai, St. Lawrence, Jersey
 BURKHARDT, Mrs. Joan Mary, Le Filage De Haut, Rue De La Bataille, St. Saviour, Guernsey
 BUSWELL, L.C.C. & The Hon. Mrs., Le Petit Feugerele, Rue Du Feugerele, St. John, Jersey
 DE LA MARE, Lady, Havre De Grace, Rue De Fontaine, Trinity, Jersey
 EATTORINI, Mr. & Mrs. Joseph, Saumarez Lodge, Queen's Road, St. Peter Port, Guernsey
 MACMICHAEL, Dr. Ann C., Les Ruettes, St. Lawrence, Jersey
 MARRYAT, Mr. R. A. & Mrs. D. W., La Chanterelle, Vaus Du Varclin, St. Martin, Guernsey
 MILLER, Mr. & Mrs. David Antony, Le Jaonniere, Bouillon Road, St. Andrew, Guernsey
 PRESTWICH, Mr. & Mrs. J. R., Bras De Fer, Trinity, Jersey
 RAZZAK, Dr. David & Elizabeth, Bas Sejour, Ruette Des Fries Cobo, Guernsey
 SETH-SMITH, Brian & Jennifer, Les Merriennes, St. Martin, Guernsey
 STEVENS, Mrs. Joan Patricia, Brackens, Park Estate, St. Brelade, Jersey
 THOM, Mrs. M. M., 6 Dene Court, Route Orange, St. Brelade, Jersey
 WAITE, Mrs. Claire H., Le Port, St. Pierre Du Bois, Guernsey
 WILLIAMS, Mrs. Elizabeth, Otterington, La Rue Cauchee, St. Martin, Guernsey
 WILSON, Miss D.C.G., Queen's Hotel, Queen's Road, St. Helier, Jersey

Changes And Corrections

- JAMISON, Dr. & Mrs. D., C.I. - Rejoined
 REYNOLDS, Mrs. M. G., C.I. - From Single to Life
 BUSHELL, Mrs. Ann, C.I. - From Single to Life
 ROXBURGH, Air Vice Marshall, C.I. - Moved U.K.
 TRENCHARD, Mrs. V., C.I. - Deceased
 CONINCK, Mr. & Mrs. M. De, Belgium - From Single to Couple

FINLAND

New Members

- VALTONEN, Mrs. Sirkka, Lemmentie 3, 21530 Paimio, Finland

GERMANY AND AUSTRIA

New Members

- SCHWENK, Herr Peter, Parnemannweg 10, 1000 Berlin 22
 BELITZ, Frau Ruth, Kotthausang 16, 4300 Essen 16
 MAIR, Herr Peter, Am Knanenberg 18, 8950 Kaufbeuren
 HECHTELHAMMER, Herr Dr. Peter, Hauptstr.38, CH 8832 Wollerau
 WYSS, Frau Dr. Gabriela, Artherstr. 29, CH 63AA ZUG
 WAGNER, Herr Michael, Danzigerstr. 81, 6368 Bad Vilbel
 SCHIRRA, Herr Josef, Im Waldtal 10, 5500 Trier
 TROSSEN, Herr Joe, 25, Rue De Strassen, L 2555 Luxembourg
 DEMMING, Herr Wilhelm, Bismarckstr.80, 4047 Dormagen 11
 HEYNTZ, Frau Marta, Im Wiesengrund 3, 7859 Efringen 6
 WAGNER, Frau Anneliese, R. Breiteheid-Str.6, DOR272A, Sternberg
 RECKNAGEL, Herr Werner & Frau, Auf Der Gest 38, 4100 Duisburg 74
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 ROLFE, Mr. & Mrs. L. R., 408 Devon St., West, New Plymouth
 YOUNG, Mr. & Mrs. D., 105 Pohutukava Ave., Whakatane

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 BARRY, Mr. R. (Family)
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 BERRIDGE, Mrs. H. L. (Dr. H. L. Deceased) - Single
 CARROLL, Dr. & Mrs. Emil - Joint
 GRODEN, Mrs. Helen - Single
 PINHEIRO, Mrs. Mary Jo - Single
 RANDALL, Mr. & Mrs. Jas. M. - Joint
 SMITH, E. Huly - Single

Errata

Page 17, 3rd Paragraph, 4th line — should read: A Vice Chairman of the Jersey Flower Club, not Vice President.

Page 3 of Colour Section: The captions for C. 'Mrs. Charles Cobb' and C. 'Wokan' should be transposed.

Notes



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Conference visitors in Naples, at the Naples Conference.

PHOTO BY WLADIMIRO ABBATE



‘WINNER’S CIRCLE’

Retic hybrid.

Very loose salmon pink semi-double
to loose peony form M.L.

First bloomed 1981.

Developed and propogated by Nuccio’s Nurseries.

Released 1984.



'BETTY'S BEAUTY'

C. Japonica Sport of 'Betty Sheffield'.

Developed by Franklin B. Moore
at The Huntington Gardens 1975.

Propogated and released by Nuccio's Nurseries 1985.



'CHERRIES JUBILEE'

Chance seedling *C. Japonica*.

Burgundy red with white petaloids.

Medium to large semi-double to loose peony.

Developed and released by Nuccio's Nurseries 1987.



‘BUTTONS & BOWS’

Non-retic hybrid *Saluenensis* x *Japonica*.

Small formal light pink shading to deeper pink at edge.

Compact growth early to medium.

First bloomed 1981, released 1985.

Developed and released by Nuccio's Nurseries.



‘SPRING FORMAL’

C. Japonica seedling of ‘Kumasaka’ #7956.

Deep pink, medium formal double with pointed petals.

Vigorous compact growth blooms late.

Developed and propagated by Nuccio’s Nurseries.

Released 1986.



‘PRIMA BALLERINA‘

Chance C. Japonica seedling.
Developed by Nuccio's Nurseries.
Released 1987.

NUCCIO'S 1983

'TWILIGHT'

'RUDOLPH'



'DONNAN'S DREAM'

'NUCCIO'S CAMEO'

