

INDIAN ROSE FEDERATION MONTHLY ELECTRONIC - NEWSLETTER - VOLUME - 17.



Presidents Page

Dear Rosarians,

During the recently held meeting of the Governing Council of the IRF at Hyderabad we have inducted some members to the GC with the hope that new ideas, programmes and schemes could be adopted in the working of the IRF. I would welcome such innovative initiatives from all rosarian members. I assure you, efforts will be taken to implement them.

One such idea that we have accepted and decided to undertake is to try to establish rose societies where there are none. It is pertinent to note that many important cities in India, even states have no rose societies. With the help and participation of our members from such states we'll try to encourage founding of rose societies. Here my observation is that it is easier to target second tier cities instead of big and metropolitan cities as in big cities, citizens can't afford to have garden of their own while in smaller towns even middle class families have a small cottage with a garden attached to it. So I earnestly request all members to take this suggestion seriously and do efforts in that direction. We at Pune headquarter will be glad to guide and support you in this enterprise. We can provide you a model working constitution for such newly established rose society and also some secretarial help and guidance.

Pune rosarians are already planning to establish more societies in Maharashtra. Garden lovers and rosarians from certain towns such as Satara, Mahabaleshwar, Wai and Talegaon are contacted and hopefully soon we may have budding rose societies in some of these towns.

Warm regards,

Suresh Pingale

EDITORIAL.



Hello dear Members,

At the recently concluded meeting of the Governing Council at Hyderabad where 90% of the members attended the meeting followed by a lunch, with delicacies of Hyderabad laid out for the members, thank you Mr. Ahmed Alam Khan, for hosting the meeting and lunch, it was heartening to see the gathering.

One very important discussion was judging, finally it was decided that IRF will appoint judges and where ever Conventions take place IRF approved judges will take the responsibility of the judging the entries, those members who are interested in joining the panel may pleases get in touch with me, you will have to fill up the form and forward it to me, the same will be handed over to the technical committee for registration, a nominal fee of Rs.200.00 has been kept for registration as a judge.

For quite some time I have not been putting up cultural practices for zones, reason I have yet to receive full year charts from the experts, I had requested them to send me twelve monthly charts for maintenance, so that I do not bother them every month, I hope I get them soon.

One more important thing is breeders are yet to send me good photos of their bred roses, which has to be uploaded on the website, unfortunately the response has been very bad, one have obliged me with some photos and if I upload them, others will crib that I am promoting selected people, so please oblige send me info and good photos of high resolutions to be put up at our website, I sincerely hope you will agree and forward the same.

regards

Arshad Bhiwandiwala.

WFRS Regional Conference at Beijing. CHINA

Back home with happy and sweet memories of the wonderful WFRS Regional Conference hosted by the Rose Society China. We enjoyed every moment and minute of our stay to the fullest, to surmise I have yet to see such a elaborate and flawless Conference, Hats off.

A group of seven of us headed by Mr. Ahmed Alam Khan, President Emeritus IRF & Vice – President, WFRS (Central Asia) represented India in the above Conference. We landed at the Beijing International Airport at 12:30 am on 18th May. As we came out of the terminal we were greeted and welcomed by the members of the organizing committee who were waiting for us with a luxury vehicle to be transferred to the Hotel. The Conference venue and Hotel for our stay was in Daxin district, about 90 kms from the airport. As we drove to our hotel through downtown, we witnessed mass beds of roses in full bloom on the medians and road sides for a long stretch and as far as our eyes could view, on inquiring, we were told the the Government had planted 50, 00, 000 rose plants for the event. The city of Beijing and Daxin District was decorated with roses everywhere. It was a rare sight to behold and a feast for the rose lovers.

We reached the hotel at three am and checked into our respective rooms to relax after the long and tiring trip. Later during the day we collected our conference kits from the reception counters set up at the hotel, in afternoon we went to the city to visit some important places. The food served everywhere was par excellence, an interpreter and a luxury vehicle was at our disposal till we were seen off at the airport.

On the 19th morning we were taken to the Rose theme park to participate in the opening ceremony of the conference. At the entrance a big canvas wall was erected for all the visiting delegates to write down their names. A total 1000 registered delegates participated out of which 200 were from countries all over the World.

The arrangements made were marvelous. A stage was erected in the open for the warm - up and music / dance programme, before the commencement of the welcome speeches. The cultural dances performed by the Chinese trope were spectacular. After the music and dance, the President of the Chinese Rose Society delivered his welcome speech followed by the Chairperson of the Conference organizing Committee and the President of WFRS, who

later declared the Convention open.

The delegates were then taken around the beautifully laid out Rose garden and the Rose Museum, over here images of Rose Gardens of the World, awarded Garden of Excellence by WFRS are also visible in which the images of Ooty Garden and Green Valley Garden are also kept. At 12:00 noon we walked to the Cultural Exchange Centre where a sophisticated and mouth watering buffet lunch was arranged.

Post lunch the lectures were held at the Conference Centre located close by. Following were the speakers:

- 1. Greg Lowerly (USA) Chinese American Roses. How Chinese Species Roses and ancient Chinese cultivars transformed the Roses of America.
- 2. Gettong and Yang Shuhara (China) Evaluation, Innovation and Application of wild rose species in North West China
- 3. Girija and Viru Veeraraghawan (India) Conserving the Rose Heritage of Asia and other warm climates our way forward.
- 4. Patrica Toolan (Australia) The challenge of Identifying and preserving old Rose varieties.
- 5. Charles Quest Ritson (UK) The evolution of climbing rose in the 19th century.
- In the evening a grand reception was hosted for the opening ceremony at Beijing Joyful Rose International Hotel.

Pogramme for the following days were as follows:

20th May: Five lectures in the forenoon followed by lunch. Afternoon - visit to the Rose Show, Ancient China Rose Garden and Nabowan Rose varieties Garden.

Following were the speakers.

- 1. Lars Ake Gustavsson (Sweden) Sweden's National Programme for cultivated Plant Diversity.
- 2. William. A. McNamara (USA) Collecting Rose species in Asia and their Conservation at Quarry Hill Botanical Garden.
- 3. Thomas Hawel (Germany) Europe Rosarium Sangerhausen Collecting and Maintaining Heritage Roses Concept of a Genetic Rose Bank
- 4. Sun Wei (China) Wild Roses from Xinjiang and their potential values.
- 5. Wang Qigang and Jian Hongying (China) Development of cut Rose Industry and New Cultivar Breeding in Yunnan Province, China
- 21st May: Whole day was spent on lectures.

- 1. Pascal Heitzier (France) Solving problems of species classification and Old Rose Pedigrees using Molecular approaches, an overview.
- 2. Wand Guoliang (China) Tumi, A Flowery Cultural Symbol in Ancient China.
- 3. Daniel Boulens (France) LYON ROSES 2015, the Festival of Roses. How to Involve Local Population, Institutions, Associations, Politicians, Keys to Success.
- 4. Peter D. A Boyed (UK) Past, present and potential value of "Rosa spinosissima" in the Rose Industry.
- 5. Cui Jiaopeng and Zhao Shiwei (China) Investigation and collection of "Rosa Chinensis var, Spontanea" in Northern Sichuan
- 6. Nobuo Shirasuna (Japan) Designing Rose Gardens.
- 7. Future Convention and Conference Presentations to be held at Uruguay, Slovenia and Denmark.

In the Evening the Closing Ceremony dinner and awards were held, bidding adieu to the visiting delegates.

22nd Whole day was kept for Garden Visits, we visited the Beijing Ulugu Botanical Garden, Peach Blossom Garden, Rose Garden at the temple of Heaven, each garden had surprises for the visiting delegates, keeping them mesmerized with the colors of nature.

23rd: A Whole day City tour was organized as a farewell gift.

24th we departed with fond memories, in conclusion I must once more agree that this was the best WFRS Conference held and seen. I whole heartedly once more Thank the Organizers for the arrangements and the successful hosting of the event.

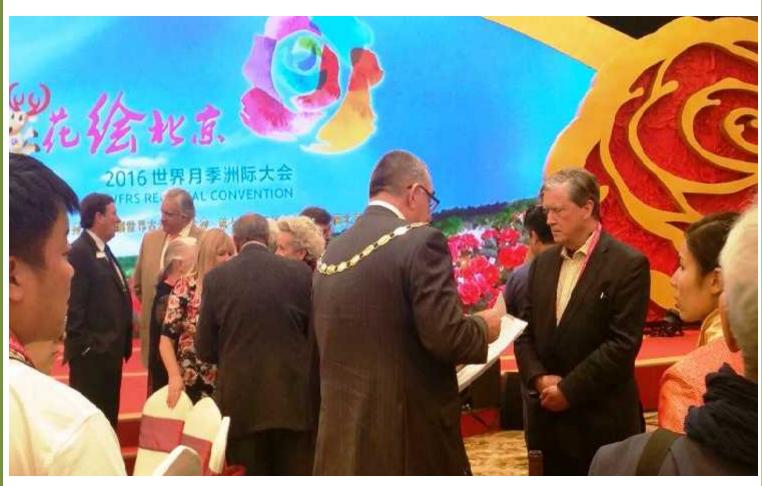
Vijay Kant.

Given below are photos of the World Regional and Heritage Conference held in Beijing, China, Ahmed Alam Khan, President Emeritus, Vice President WFRS (Central Asia) spoke to me and gave the account of his visit, as also obliged me by sending the photos to be shared with our esteemed members and rose lovers, according to him this was the best Conference, noteworthy and awesome, with beautiful gardens and flawless arrangements.









































Chinese - American Roses: How Chinese Species Roses and Ancient Chinese Cultivars Transformed the Roses of America,

Gregg Lowery (Heritage Rose Foundation)

Abstract: Many hundreds of years after the great age of roses during the Song dynasty in China, a few very old, re-blooming roses arrived on the shores of the young United States of America, American horticulturalists were among the first to experiment with crossing roses such as Old Blush China with old roses from European gardens like Rosa moschata, and with notable wild roses from North America, including Rosa setigera, the Prairie Rose.

The impact of this work, at the start of the 19th century, resulted in the sudden availability of remontant rose hybrids which could be grown in the continental European climate. The Noisette roses, born in Charleston, South Carolina in 1802, was the first race of Chinese - American roses. Thriving in the mild southern latitudes, the Noisettes redefined an American ideal of garden roses, and led to the planting of the Tea and China roses raised in Europe from seed of Chinese roses 700 years old and older.

This presentation explores the history of the influence that Chinese roses have had on the roses of America, on our rose gardens and on our gardening culture.

Key words: Chinese species roses; ancient Chinese cultivars; roses of America

The human attraction to color is surely the primary reason we grow roses in the first place. However History is often the compelling reason why we continue to grow roses, and the history of rose breeding, particularly the efforts of those breeders who have sought solutions to significant problems, compels our interest. Our own fascination with roses that have derived the place we live in can inspire us even more. But perhaps the most moving experience we may have is to discover roses from far distant places and to recognize the connection roses that is shared by human beings around the globe, and which unites us all as people.

After centuries of ignorance, Westerners have learned many things in recent years about the roses of China. Dr. Wang Gouliang has researched and catalogued a great many roses that date some 700 years to the Soong Dynasty and beyond. He has surprised and delighted the World with his careful study recently published in his book, Old Roses in China. In America, an extensive genetic study of Tea and China roses was performed at Texas A & M College, by Valerie Soules showing definitively the connection between wild roses of China and the cultivated that came to Europe in the 18th century. And worldwide, with each passing year we discover new evidence that the so-called 'Four Stud China Roses' were just a few of many rose Hybrid that reached Europe from China over the past thousand years.

For all of these advances in our knowledge I am grateful. My own searches for the answers to questions about the old roses have been rewarded by this progress. I feel deeply indebted to Dr. Wang for sharing his 30 years of study of the old roses of China; it is welcomed around the world by those who wish to know the full history of garden roses.

In the West the understanding of the story of garden roses – from wild plants to the modern hybrids of the 20th Century – has been simplified and misunderstood for decades. The story of the four stud China roses continues to confuse those who wish to learn more, and it continues to deny the significance of the development of the rose 1,000 years ago and longer by the Chinese.

I am neither a scientist nor a scholar, but I have spent the past 30 years tending a very large collection of old roses, including China and Tea roses, observing them and reading the literature of their past. What I hope to do here is offer a different perspective on those roses, and an appreciation for the fundamental way that roses native to and

hybridized in China altered our roses and gardens.

The first step towards "Chinese – American" Roses.

At the time that the United States declared its Independence from England, in the late 18th century, its European inhabitants were still discovering a new and strange continent. New plants arrived each day to cities like New York, Philadelphia and Charleston. They excited the imagination of the botanist, horticulturists and gardeners. Many of the plants were American native species, but many arrived on ships returning to Europe from Japan and China. And the wealth of Chinese plants that had been brought to England were propagated and sold by English nurseries to the American colonists.

One city in America played a significant role in the history of roses, Charleston, South Carolina. Located in the southeastern corner of the continent Charleston enjoys a nearly sub tropical climate with a very long growing season. It sits at the confluence of two larges rivers where they empty into a gentle harbor and the Atlantic Ocean.

the British colonies banded together to form a new, independent country a divide between North and South had already become well established. The colder northern colonies from Pennsylvania to Massachusetts were industrialized with an based on family farming, free of slavery. The warm, colonies from Virginia through Georgia had adopted the Plantation economy, with large landholdings maintained by slaves, and wealthy owners able to live in a style similar to the aristocracy of England. Large and elaborate gardens were common, rare plants Orient were sought after. Many of the plants brought from China by English botanists stopped first in Charleston, on their journey home through Bermuda to Britain. The earliest plantings of camellias and roses in America (not to mention of the agricultural plants, rice, and tea) were here, in the South.

These differences between the two Americans were significant for plants, for horticulture and for garden building in America. Most of the plants from China that were introduced to the young United States thrived in the South and not in the North. The significance for roses brought from China was great. From Virginia to Georgia the China and Tea roses grew outdoors and flourished. Even in France where breeders were raising and naming seedlings from them, they were not reliably hardy except in South of France. Most were grown in glass houses in France,

England and the northern states of the USA.

In Charleston, the most favored port of the South, the first American Horticulture Society was established. It became an important meeting place for plantation owners and merchants alike. John Champneys, an Englishman born in Charleston and Philippe Noisette, the son of a French nursery family, were each deeply engaged in the Charleston Horticulture Society.

In the first decade of the 19th century. John Champneys raised a rose seedling from a cross between the "Old Bush" and Rosa moschata. Both roses were by 1800 widely grown in the US. Rosa moschata, the "Musk Rose" of the medieval European herbals, survived the northern winters along the seaboard, and was an old and familiar rose to English colonists. Champneys seedling known as "Champneys Pink Cluster", created a great stir of excitement among plant lovers and nursery people in the young country. Champneys shared both rooted plants and seed collected from his pink cluster rose, a plant that bloomed with the regularity of the monthly China rose, but in very large clusters of small fragrant flowers, similar to those of Rosa moschata.

Philippe Noistte received a seedling plant from Champneys, or perhaps seed that Champneys had bred - the details are unclear from surviving documents. That rose Noisette sent to his family in France where it took on the name 'Blush Noisette', and thereafter this new group of roses, raised in America, came to be known as the 'Noisette Roses'.

Overlooked Details of the Early Noisette Roses

The Musk Rose is believed by most to be a hybrid of unknown parentage and not a wild species - no natural populations are known to exist in the world. Its long history as a rose cultivated for fragrance oils in Iran, and at one time all the way into the Mediterranean suggests the possibility that its wild parent roses have of China. The Musk known included species from parts Rose is one of three parents of the Damask rose, as genetic research in Japan has shown.

Much has yet to be learned about the origins of both the Damask and the Musk roses. Both played very important parts in the development of roses in Europe. How

very surprising it would be if the first American rose seedling, 'Champneys' Pink Cluster,' turned out to have been the mating of two ancient roses from China! Much has yet to be learned about the origins of both the Damask and the Musk roses. Both played very important parts in the development of roses in Europe. How very surprising it would be if the first American rose seedling, 'Champneys' Pink Cluster,' turned out to have been the mating of two ancient roses from China.

The impact that Champneys' new rose had in American horticulture was great. By 1846 other named introductions of this early, small - flowered Noisette rose included no less than 70 varieties in the catalogue of one nurseryman, William Robert Prince of New York. These fragrant, hardy roses were recognized as ideal parents to combine with wild American species roses to broaden the selection of garden roses for northern climates.

'Champneys Pink Cluster' and 'Blush Noisette' took European nurseries by storm as well. What the early Noisettes did to rose breeding in France is too often downplayed in modern writings. We will visit this later in the story, but suffice to say here that 'Champneys Pink Cluster' laid in the hands of breeders the very thing that they were trying to create, a reblooming rose of sufficient hardiness to survive the climates of much of Western Europe.

Rosa setigera and the First Chinese - American Hybrid Roses

A most intriguing wild rose from North America, Rosa setigera was first observed and described by the French Botanist, Andre Michaux, from plants found in South Carolina in the late 18th century. Known also as the Bramble Rose, or Blackberry Rose, and named Rosa rubifolia, by the later botanist, Robert Brown, it was distributed over a very wide region of North America from the Great Lakes region southward to Louisiana, Texas and the Carolinas, and through the North eastern states into New England.

Shortly after Michaux's publication of Rosa setigera appeared in 1803, the wild rose and many unusual forms began to be grown in gardens, and soon after became the subjects of curiosity by 'florists' of the day, those we would today call nurserymen and plant breeders. The rose held the promise of many valuable qualities as a plant for gardens. Its common name, the Climbing Prairie Rose, explains its

initial attraction to breeders who saw an opportunity to breed cold - hardy, disease resistant climbing roses.

It was the early Noisette roses, newly introduced, that were used to breed with R. setigera. Noisettes were grown and sold by William Prince's nursery on Long Island, and at the Baltimore, Maryland nursery of Samuel Feast and his brother, John. The Feasts grew many roses among them forms of Rosa setigera. And it was Feast who first experimented with combining the good qualities of that hardy wild rose and the Champneys Noisettes.

same time, in Washington D.C., an amateur flower breeder, Joshua Pierce At the followed line of experimentation which a similar lead to a similar, but smaller some of which were introduced by Samuel Feast. In New York, group of hybrids, William Prince may have been creating additional hybrids of Setigera, although none of his introductions appear to have survived for long.

Of some twenty Setigera hybrids introduced by Feast and Pierce, only a tiny handful have survived in commerce or in notable rose collections today. That they have all is remarkable, and to survived at some degree a testament to their cold hardiness. 'Baltimore Belle' is perhaps the most widely grown of these few survivors. It is one of the most prolific and beautiful old roses I grow. The small flowers of cupped form and palest blush coloring perfume the air with their fragrance. They appear in large clusters on a long-caned plant that is ideal for covering an arbor or fence. The old Noisette parentage is very evident in this variety, from the typical Musk Rose clustering of the small blooms, to the pale, apple - green tint foliage. It is the rose's propensity to re-bloom in the Autumn in climates with long growing seasons that marks it as a Noisette seedling.

At long last the genes of an ancient Chinese garden rose were joined with those of a wild American rose. Of Feast's hybrids two survive; 'Baltimore Belle' and 'Queen of the Prairies', and a third, discovered in two locations in California appears to be one of the lost Noisette - Setiger crosses, though which one, we may never know. No known likenesses of the early Setigera Noisettes were ever painted, and the descriptions in catalogues are brief and vague. It is known by two mystery names, "Arcata Pink Globe" and "Moser House Shed Rose".

The 'Hybrid Chinese' Roses of Europe

It was not by chance that the early 19th century in Europe saw the first great increase of new Hybrids of roses. The era of industrialization in Europe was well underway by the late 18th century, and with it followed an increase of population, urbanization of that population, and the growth of a middle class of merchants and managers with the means to create ornamental gardens. Gardens of roses had become a popular notion, made widely known by Josephine Bonaparte's garden at Malmaison.

Nurseries in France, in particular, began raising seed taken from the Chinese roses that were grown side by side with old once - blooming European roses, as well as alongside the Autumn Damask rose, its descendants the Damask Perpetuals, and the early Bourbon roses. These seedlings came to be considered a new race - showing traits of the China rose overlaid on the European rose style - known as the Hybrid Chinese roses or Hybrid Chinas.

It is often said that European rose breeders at the time wanted to recreate new roses that looked like old European types (Gallicas, Centifolias, etc.) but bloomed repeatedly like the roses from China. Yet the breeders themselves left behind little in writing to indicate what indeed were their objectives. It is equally likely that the styles of the roses from China appealed greatly to breeders. And it may well be that they simply hoped to find seedlings with the China flower form that had the hardiness of the Gallicas.

Conventional wisdom says that the Hybrid Chinas were crosses between various of the four stud roses from China and the once - blooming Gallicas, Centifolias, and Damasks. Nineteenth century authors like William Paul of England suggest that most of those crosses resulted in roses that look like Gallicas, Centifolias and Damasks, bloomed once like those parents and were sterile, until at last one or two proved fertile, most notably 'William Jesse', a rose with a strong affinity to the Damasks.

What is often over - looked in histories of this era is the fact that these new roses, the Hybrid Chinas, swelled the ranks of the traditional old Euorpean rose classes. Relatively small numbers of varieties of Gallicas, Damasks and Centifolias existed prior to 1800. Today it is only with careful observation that a Hybrid China can be

distinguished from the much smaller groups of the true old European roses.

The fact is that most of the progress toward re - blooming roses derived from the China roses came via old hybrids that were already remontant. One group known in Europe for more than 1000 years was the Damask rose that bloomed in the known under various names, commonly the Autumn Damask. The Autumn Damask in turn had produced a very old hybrid, or so it is believed, the Rose de l'Isle de Bourbon, in crossing, perhaps unaided, 'Old Blush', the monthly China rose. There is still great mystery surrounding the original may have come from India, and perhaps which before that China. 'Gloire des Rosomanes'a Bengali – Bourbon that strongly displays the influence of parent, is simply a mystery, and perhaps a red China rose was derived from a Chinese hybrid obtained in India. Supposedly 'bred' by Plantier in 1825 by the great French rose breeder, Jean - Pierre Vibert, is fully remontant, and reasonably cold - hardy. It is the ancestor of more than 12,000 rose hybrids, according to the Help Me Find Roses database.

What is in fact difficult to see is any strong connection between the Gallica roses and the Hybrid Perpetuals and Hybrid Teas of the latter half of the 19th century; the assumption of that connection seems to be taken for granted by many authors today. The Hybrid Perpetuals in fact appear to be the result of re-blooming Damasks and ever blooming, Bourbon roses, crossed again with the monthly China roses, red and pink. In fact there was so much China and Tea rose blood in these 19th century roses that it begins to look very much as though modem roses, are not the equal blending of European and Chinese roses, but simply Chinese roses, altered somewhat by the Autumn Damask rose - a rose parented by R. gallica, R. fedtchenoana and the ancient hybrid Rosa moschata. Only one quarter of the Damask ancestry is found in R. gailica.

The Noisette Rose in Europe

No group of roses underscore this concept of the replacement of old European roses with Chinese roses more than the Noisettes. Traditionally the story that is told is that the early Noisettes arrived in France to be promptly 'improved' by the addition of Tea roses to their makeup in France. Thus the first group of remontant climbing roses came to be - a beguiling and beautiful group of flowers in warm tones of peach, yellow, gold and citron, large of bloom and fragrant.

All of this is true, but the point perhaps is missed: this transformation of the old Noisettes simply made them even more Chinese in their makeup, and a small amount of hardiness was added to their genetics. The Tea - Noisettes were not very cold hardy, and were the epitome of the greenhouse rose of the wealthy European aristocracy.

The real story of the Noisette rose in Europe is fascinating, and reveals the degree to which it genetically permeates the world of roses. Arriving in France as they did, between 1810 and 1817, Champneys Pink Cluster and Blush Noisette were sought by most breeders of roses and used in all of the various efforts with the groups of roses being hybridized. Certainly crosses with Tea roses were exciting but other roses that were altered by the Noisettes are equally fascinating.

Many Hybrid Chinas have white or blush colored flowers. There are even a number of Gallicas and Centifolias with white blooms which defy the true colors normally found in those groups; reds, pinks, purples and maroons. These are in fact not purely of those classes but hybrids with Noisette roses in which most of the physical traits of the plants reflect the old European class. Perhaps one of the most notable example is Mme. Plantier, a Hybrid China and so recognized in its time, with pure white flowers, formed like perfect small Gallica roses. Others called Gallica roses like l'Ingenue and Mme. Zoetmans, or Damask roses like Mme. Hardy, should be considered Hybrid Chinas in which the old Noisette rose has played a part.

No where however have the old Noisette roses had a greater impact than in the Bourbon rose family where they parented many white varieties and led the movement toward the earliest Hybrid Tea roses in shades of white. The Bourbons, Comtesse de Rocquigny, Mlle. Blanche Lafitte, and even the pale blush blooms of Souvenir de la Malmaison, all hail back to the old Noisettes. And the small amount of progress in the 19th century toward creating white Hybrid Perpetuals are due to those advances in the whites of the Bourbon roses. To my way of thinking the Bourbons so affected by the old Noisette strain are the first Hybrid Tea roses.

A New World of Roses

The great explosion of new rose hybrids in Europe arrived on the shores of America

throughout 19th century. From that point forward the influence of the ancient hybrids from China guide the course of rose breeding. Roses are designed as flower factories to deliver the color humans cannot resist. Small in - roads are made with the admixture of wild roses for their cold hardiness or floral coloring - the arrival of strong yellow and orange pigments. But, on the whole little changes for the next century. They are plants adapted to warm - temperate climates, unable to withstand harsh winters. And over the same century human populations have shifted more and more into those 'comfortable' climates around the world.

The roses of China have become the roses of the world. But China with its impressive number and variety of rose species may still hold the answer to improvements to come. Rosa gigantea's potential to extend the rose's range into the tropics - the work of India's Viru Viraraghavan – is most exciting. One thing is certain, we have much to learn from the development of the rose at the hands of Chinese gardeners over a very long history. And we Westerners have still a journey to travel to rewrite our own history of the rose and to understand the global context of even our own native plants.

In my view preservation should be our primary goal. The habitats of wild roses should not be allowed to be destroyed. Our living history of plants, roses from 2000 years ago and more, roses from 100 years ago, is a history we should treasure and protect. Genetic material is priceless and not easy to preserve in a bottle. Better we should preserve it alive in the gardens we build and the wilderness we protect for as long as we are able.