



CONSERVATION AND HERITAGE COMMITTEE - ISSUE 23, MARCH 2021

FOREWORD

At first, just a small news item about a new virus detected in China. None of us at the 2020 WFRS Regional convention in Kolkata could have known how this would affect our lives and those of millions around the world. We can only wish good health to all, and together we will get through this.

We lead with Katsuhiko Maebara's very personal history of establishing the award-winning Sakura Rose Garden in Japan. Mireille Steil describes a concise and vivid history of the key rose breeders in the Grand-Duchy of Luxembourg. Rewritten for lay readers, we offer Pascal Heitzer's fascinating account of his twenty years of research into the genetics of *Rosa arvensis*. And Trevor Nottle, one of Australia's most versatile writers, tells us of the first decades of its settlement and introduction of roses. Charles Quest-Ritson gives his rave review of a new book on the roses of Luxembourg. And Brigid Quest-Ritson reports on current trends in conservation and heritage roses. Finally and sadly, we conclude with Homages to William "Bill" Grant and to Sergio M. Scudu, two well-known and much-beloved rosarians.

We want especially to remind all to renew our memberships in our local rose societies. They, too, need help in these difficult times. Our next, and the last issue as your Editors, will be in September, as BAON#24. Until then, we are Nimet Monasterly-Gilbert and Alan Gilbert at : alannimet@gmail.com

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PRESERVING HERITAGE ROSES: THE ROSE GARDEN IN SAKURA, JAPAN

By Katsuhiko Maebara

We are sincerely grateful to all the rose-loving friends of the world for their kind support and generous help in 2019 when a terrible typhoon hit our area and caused serious damage to our rose garden. Thanks to their help, the City of Sakura Rose Garden had almost been restored to its original state by October 2020. Despite the recurring corona virus crises, many rose lovers - - mostly volunteers—took care of the roses as usual every day. In December, we restarted the rest of the reconstruction work on the garden, hoping to complete everything by March 2021. The year 2021 is a special year for us, when our garden celebrates its 15th Anniversary, and it is my pleasure to report on the history of the garden as well as of the NPO Rose Culture Institute.

The Father of Roses

It was in 1996 when I received an urgent telephone call from Seizo Suzuki: “My precious species roses and old garden roses will soon be bulldozed and lost. Could you allow me to transplant them in your garden before they are destroyed?” It seems that the large horticultural company where Mr. Suzuki was a leading researcher had decided to totally renew all its facilities and had no space to plant all the precious roses Mr. Suzuki sincerely treasured.

Mr. Seizo Suzuki was once known as the father of roses in Japan. He devoted his whole life to roses, and created 128 new roses, 20 or so of which were awarded prizes at different trials around the world. From early in his life recognizing the importance of species roses and old garden roses as precious gene sources for introducing new varieties, he had preserved more than one thousand heritage roses in his research garden. Peter Harkness, who saw this collection in 1993, wrote in *The Rose*, the journal of the Royal National Rose Society in 1993: “For quality of growth and richness of variety I have never seen its like. The Polar Rose was rubbing shoulders with the tender *R. laevigata*. I could have stayed for days.”



Mr. Seizo Suzuki

His garden was truly a treasure trove, a secret garden for true rose lovers. While creating many gorgeous large-flowered modern roses, he often talked about the merits of species and old garden roses from early in his life. He used to say that the reign of modern roses was approaching its limits, and that we should remember the merits of old roses such as their complicated and delicate colours, their splendid fragrance, and the graceful look of their bushes, all being forgotten as modern roses held sway.

The Rose Garden Alba

The 450 roses of 200 different varieties I received from Mr. Suzuki were planted in the garden near my home for the time being. Then, thinking that those precious roses should be available to many people as well as improve the general environment of their village, I decided to open a new rose garden.



With the help of Mr. Suzuki, a preparatory committee was organized with several rose experts and researchers. They decided quickly on the name “The Rose Garden Alba” and the name of its non-profit operating organization “The Rose Culture Institute.” Its aims were to be: to focus on roses as plants with a long history of existence with humankind, to promote studies of roses and rose related culture, and to make the ties of nature and our daily lives a closer one. As we envisioned it, “The Rose Garden Alba” would:

Collect and preserve species and important old garden roses of the world; Research rose growing, publicizing the results; Create and improve roses suited to the natural and cultural features of Japan; Promote international friendship among rose lovers of the world; Collect and publish rose-related literature; Propose the creation of cultural urban communities and regional industries; and Pursue other projects for the further development of a gardening culture.

The work of creating the rose garden started from scratch. The basic concept we adopted was for a Japanese-style garden harmonizing well with the surrounding landscape. In order to provide examples of small home gardens for future visitors, we divided the land into small sections, each allocated for different types of species or old garden roses with their own unique features.

The Rose Garden Alba officially opened in 1996. At the beginning, it was a small and rather forlorn garden, but thanks to the effort of volunteer workers, its landscaping proceeded smoothly, and the garden gradually approached our imagined goal. However, we thought the number and the varieties of the roses---450 roses, 200 species and varieties --- seemed too few to attain our ideal, so we started also collecting different varieties from European rose nurseries and gardens by mail order. One of the volunteers even flew to Canada to obtain species and garden roses so far unknown in Japan.

In a few years, roses in the garden matured and started to draw the attention of rose lovers. This was also when the so-called “Old Rose Boom” started in Japan, and our garden came to be regarded as a leader of this “boom”. The rose garden with an area of only 1,800 m² attracted many thousands of rose-lovers every year. When the roses

were at their best, visitors came to the garden on tourist coaches. We knew then that our rose garden, started with the simple goals of featuring the pretty flowers and the fragrance of species and old garden roses, had come to be accepted by many rose lovers of this country.

(At about this time we were also engaged in a struggle with the local Prefecture to have our “Rose Culture Institute” recognized as a Non-Profit Organization, a concept that was just coming to Japan and did not yet include “agricultural” organizations. By chance, one of our members attending the Heritage Rose Conference in Lyon, France, in 1999, met Stephen Scaniello, from the American NPO “Old Rose Foundation,” who shared the relevant U.S. documents to determine what qualifies as an NPO with which our member upon his return to Japan was able to obtain NPO status for our group, a first in Japan!)

The roses in the garden were growing beautifully; the numbers of the species and varieties were increasing; and the supporters of our work were on the rise. And we knew then that The Rose Garden Alba was not large enough to carry out our original projects or to introduce new schemes. With many meetings lasting late into the night, we arrived at the outline of an ideal rose garden, and using various data we had collected, started negotiations with several local government offices and developers to find partners to support our project. Finally, we started to negotiate with our city Sakura to solicit its cooperation with our project, and in 2003 a plan was approved to open a new rose garden with the cooperation of Sakura City and the Rose Culture Institute. The 1,800 rose plants of 800 different species and varieties we had so far collected, and as many as 9,000 items of rose-related books and documents collected by Mr. Suzuki, were all donated to the city from the Rose Culture Institute. Besides the roses, the constructions in the Rose Garden Alba were also all donated to the city, and the garden was closed in 2004.



A few pictures of the countless volunteers who worked on both gardens.

The City of Sakura Rose Garden



By 2005, all the roses were transplanted to a section of the agricultural park the city owned. The name adopted for the new rose garden was the City of Sakura Rose Garden. This agricultural park had been opened in the city's forest as a place where school children could experience the outdoors. The city decided to use the park as a place for the recreation and relaxation of elderly people and welcomed the new rose garden. As in the case of creating the Rose Garden Alba, the work of planting the new rose garden was started by many volunteer workers. (The garden is also known in Japanese as *Sakura Kusa-bue-no Oka*, for "The Hill of Grass pipes," evoking a calm and peaceful ruralness.)

In the spring of 2006, the City of Sakura Rose Garden opened. Although at the time, the roses were not yet matured and work was still going on in parts of the garden, Sakura's garden was selected as one of the sites of the post-tours of the WFRS World Convention held in Osaka in May that year, and we were able to welcome many rose-loving guests from different countries of the world. Many commented, "this will be a wonderful rose garden in five years." Encouraged, we renewed our efforts to bring it to its full glory.

Odile Masquelier, the owner of the famous "La Bonne Maison" Garden in Lyon, France, who had already donated some 200 roses from her garden, encouraged our committee to consider hosting an international heritage rose conference in the near future. Also,

after Helga Brichet, of Italy and former WFRS President, donated a number of roses, it was evident that further expansion and improvements would be needed for a new section on Asian and Teas roses. This extension work was completed in 2011. Every year, more than 3,000 volunteer workers toiled strenuously in order to expand the garden and collect and preserve heritage roses. At that time the garden covered an area of 10,890 m², and the roses planted there had increased to 2,500 plants of 1,050 species and varieties. Thus, the preparations to host an International Heritage Rose Conference were making steady progress.

In July 2007, the Heritage Rose Conference was held at Fontaine de Chaalis, France. In 2008, our preparatory committee was organized to discuss the outline of the Heritage Rose Conference to be held in Sakura. In June 2009, the WFRS World Convention was held in Vancouver, Canada. There Dr. Yuki Mikanagi, a member of the preparatory committee, and I gave a lecture on the City of Sakura Rose Garden, noting particularly our rare roses from Japan and China, and outlined our plan of the heritage rose conference. The WFRS executive committee meeting on the last day of the convention approved holding the Conference in Sakura in 2011. In Sakura the preparations for the conference were pushed forward steadily.

The 12th International Heritage Rose Conference

The outline of the Sakura conference and its schedule were published in the WFRS newsletter, and more than 200 heritage rose lovers from different countries applied to attend the conference. We had completed the preview of the pre- and post-tours destinations, made frequent contact with the rose experts of different countries who we had requested to give lectures, and finished all the preparations for day tours in the city, and for dinners and parties, when, on March 11, 2011, unprecedented natural calamities struck Japan.

An earthquake of 7-plus on the seismic scale struck the north-east of the Japanese Archipelago, destroyed houses and public buildings, and took many human lives. Further, it caused *tsunami* (tidal waves) 30m high, which hit coastal cities and towns and washed away buildings and residents. More than 16,000 lives were lost, and 3,000 more missing. The tragedy did not end there. Because of the earthquake and *tsunami*, a nuclear power plant on the coast of Fukushima Prefecture exploded and spread radioactive contamination over a large area. Residents of cities and towns within a 20 km radius were forcefully evacuated.. Still today, nearly ten years after the accident, entry to most of these areas is forbidden.

After much discussion—whether to cancel or postpone the conference—we decided to postpone by one year to March 2012. We are very grateful to Dr. Gérald Meylan, the then the president of the WFRS, and Mrs. Sheenagh Harris, the next president, for all their kind consideration. We will also never forget the kind words of encouragement received from many rose lovers from around the world.

In May, 2012, we hosted the International Heritage Rose Conference in Sakura, welcoming 160 guests from 14 countries of the world. Though the scale of the whole program was reduced, all the events on the schedule—pre-conference tours, lectures,

committee meetings, parties, and post-conference tours—were held without incident. We believe that we were able to share valuable information on heritage roses in Japan with our guests from abroad. Though we were unable to obtain any financial support from the city, and had to depend on volunteers for all the work, we were able to host a Heritage Rose Conference enjoyed by all the attendees.



For the past 25 years, in accordance with the late Seizo Suzuki’s wish, we have exerted all our effort to collect and preserve important heritage roses. We now preserve and nurture more 2,500 rose plants of 1,250 different species and varieties in our garden, a truly internationally valuable rose collection, many of which have been donated, and are still being donated, from rose experts and rose lovers both inside and outside of Japan.

* * *



Dr. Yoshihiro Ueda

My concluding paragraphs are to offer brief homage to seven rosarians who contributed so much to the Sakura Rose Garden and to my appreciation of heritage roses, starting with **Yoshihiro Ueda**. Dr. Ueda has been an active supporter of our activities since the Rose Culture Institute was established in 1996. He is widely known as a researcher and has been actively engaged in the search of genetic resources of roses, starting with the Xinjiang Uighur Autonomous Region, Shichuan and Yunnan Provinces, thought-to-be the birthplaces of domesticated roses. Most of the roses he discovered are preserved in the City of Sakura Rose Garden. The total of *circa* 60 roses including those he obtained while he was teaching in Chiba University and in Gifu Horticultural Academy have been donated and planted in our rose garden. In 1999, guided by Dr. Ueda, I made a journey to Laos to investigate

rose genetic elements, the first of such research activities sponsored by our Rose Culture Institute. In Laos, we found ‘Hume’s Blush Tea-Scented China’, and a China rose, supposedly ‘Old Blush’, blooming on the fences and in the gardens of farm houses.



Yuki Mikanagi is a rose researcher representing Japan’s rose world, who has supported our activities since the beginning. Both her home and workplace are located not far from our rose garden. She frequently checks every nook and cranny of our gardens, holds rose study meetings, providing us with valuable botanical information on roses, and often surprising us with unforeseen new expertise.

In toto Dr. Mikanagi has donated more than one hundred precious varieties of roses to our garden. Through the substantial work of growing and preserving important heritage roses in our garden, and concomitantly sending out the information on them to the outside world, we hope to repay her kind help by providing something useful for her research.



**‘Blushing Yuki’
M.S. Viraraghavan~one of
several roses dedicated to
Dr. Mikanagi**



Odile Masquelier and I first met in 2003 when I made a rose viewing journey to Europe guided by Dr. Mikanagi and Mr. Akira Ogawa. Our main purpose was to attend the 100th anniversary events for the famed “Sangerhausen Rose Garden” in Germany, attend the WFRS Regional Convention in Europe, as well as the “Roseto Botanico di Carla Fineschi” in Italy which, had the the largest number of species and varieties of roses of any private garden. In December that year, on Christmas Day, I visited Mme Masquelier’s home, seeing for the first time her

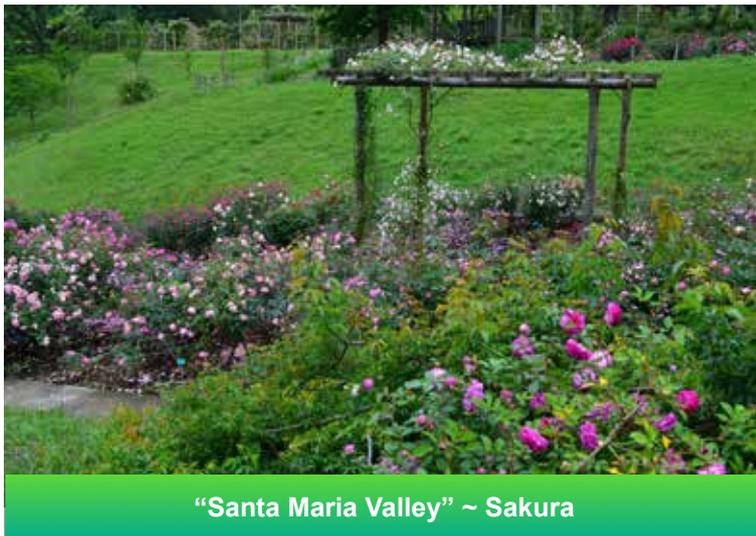
wonderful garden “La Bonne Maison,” and was presented with the cuttings of 180 varieties of roses. They were grafted in January the following year, and we were able to propagate 160 varieties to be planted in our garden. I often think back to the day when Mme Masquelier and I rushed around her garden collecting cuttings, putting labels on them, and wrapping them in wet paper and vinyl sheets so they could be safely taken to Japan. The varieties she presented to us are preserved with scrupulous care in the



“La Bonne Maison Garden” ~ Sakura

“La Bonne Maison Garden” section of the City of Sakura Rose Garden.

In 2007, when the course of action to host a Heritage Rose Conference in Sakura was taking shape, I visited the home of **Helga Brichet** in Santa Maria, Italy. Dr. Mikanagi had introduced her to me when I attended the rose event in Sangerhausen in 2003. In the early summer of 2006, Dr. Mikanagi visited her home, and received from her the cuttings of 40 or so different varieties of rare old roses. However, we wanted to add some more varieties to be planted in Sakura in preparation for the International Heritage Rose Conference.



“Santa Maria Valley” ~ Sakura

Her home, built of stone in the 15th century on a hill in Tuscany, is surrounded by olive groves and vineyards, and there in one corner is her China Rose collection. Mrs. Brichet used to say that to prevent the loss of rare and precious roses, they should be preserved in as many different gardens as possible, and very willingly agreed to present additional cuttings to us. Considering the best time for grafting, I visited her home toward the end of December. In the cold garden we collected

cuttings, while warming up our bodies with wine from time to time. Seventy varieties of roses donated by Mrs. Brichet are planted in Sakura in the section “Santa Maria Valley”, giving excellent flowers in every flowering season, leaving an indelible impression on all the visitors.



I met **Viru and Girija Viraraghavan** in Sangerhausen in 2003, and we exchanged e-mails on various trivial topics, but then I learned that they were famous rose breeders who had introduced several unique varieties, using for their parent species roses native to India and other Asian countries. In 2014, after attending the WFRS regional convention hosted by the city of Hyderabad, I visited their home in Kodaikanal, a city located in the southern highlands of India. On the premises, I found not just roses but camellias, rhododendrons, and many other flowering plants. I saw several elegant roses they had created — *R. clinophylla* hybrids with heat and humidity tolerance, *R. gigantea* hybrids giving delicate, elegant flowers--each reflecting their zeal for introducing unique, valuable varieties. We had cuttings of their roses sent to us several times, and gradually increased their number. In Japan the best month for grafting roses is January, while in India, roses give their best flowers then. Most of the cuttings

collected and sent to us in this month were not hardy enough, often turning black and were no use for propagation. Instead we obtained young bushes of their roses which are now planted in the section “Dream of India Garden”. Among them, there are roses named after their Japanese friends and after our garden: ‘Sakura Sunset’, to the pleasure of visitors to the garden. The number of the roses donated by Mr. and Mrs. Viraraghavan has now risen to 76, the largest collection of Viraraghavan roses outside India.



“Dream of India Garden”



In our early days, Mr. Yoshida, a member of the Rose Culture Institute, tasked with adding to our collection rare roses not available in other rose gardens in Japan, said that he found that many good candidates were available from the Vintage Garden in California. With an introduction from Dr. Mikanagi, we contacted **Greg Lowery**, the owner of this garden. The number of varieties sent from him has now reached 56, all very precious found roses he had collected, including some not found in any other collections.

When we ordered those precious roses from him through Dr. Mikanagi’s intermediation, he always sent them to us free of charge, saying that he would not demand any payment for the order from Sakura. When Dr. Mikanagi and I visited his garden in California, his calmness and serenity were most welcoming. Mr. Lowery has loved roses since he was a small child, collecting in 30 years no less than 3,000 rose varieties, and his profound knowledge of roses and his passion for protecting them led him to be a most active member of the Heritage Rose Foundation. For many years he served as the editor of its famous journal *Rosa Mundi*.

The City of Sakura Rose Garden was opened with the kind help of many rose-lovers of the world, and has been maintained by a large number of volunteer workers. We are certain that rose-lovers of the next generation are steadily improving their knowledge and skill to preserve precious heritage roses, and are continuing our efforts, so the garden will be handed over to them in good condition. Thank you, all the rose-loving friends who have kindly supported our efforts!

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‘Maebara’s Dream’

two of M.S. Viraraghavan’s creations

‘Rose Legend Akira Ogawa’

ROSES FROM LUXEMBOURG

By MIREILLE STEIL

Luxembourg, a beautiful small country, embedded in the middle of Europe, has been known as the “Land of Roses” since the mid-19th century. Today, there are no longer commercial rose breeders in the Grand-Duchy of Luxembourg, but our rose society “Lëtzebuerger Rousefrënn” is fascinated by this national rose history which began in 1855 and would like to preserve the memory of this historical past. Therefore, we intend to find as many as possible of the ancient roses, created in our country by our world-famous breeders.

Jean Soupert, who became one of “The celebrated Rose Kings”, was born in Luxembourg in 1834. At the age of 12, he started his apprenticeship in a nursery in Clausen, outside the fortress of Luxembourg. In those days it was mandatory for the Luxembourg trainee gardeners to go on a “Tour de France”. During his stay with a French rose breeder called Pastoret, Jean Soupert refined his knowledge about rose cultivation and breeding, and apparently it was at that time that he created his first Centifolia rose.

Returning to the nursery in Luxembourg, Jean Soupert met his future partner and future brother-in-law Pierre Notting, born 1825. Both had a dream to breed roses, and after their training, they decided to establish their own tree and rose nursery, called “Soupert & Notting”. The first rose they commercialized in 1856 was named ‘Tour de Malakoff’ after a tower of the fortress of Sevastopol, stormed by the French-English army in 1855 during the Crimean War. The color of this long lasting rose is a special purple violet changing throughout the day. The shape, color and size of the flower and the intensity of its fragrance was a great hit. Anyone who felt an ounce of patriotism wanted a Soupert “Malakoff” rose in their park or garden in France and England.

Their second creation, a pink rose, also from 1856, was called ‘La Noblesse’. Soupert & Notting were not only exceptional rose breeders, but also marketing geniuses. At that time, it was the aristocracy and the upper-class who regularly bought roses for their parks and gardens, not the common people. After a year in business, Soupert & Notting published their first catalogue which included 450 different rose varieties. Soupert & Notting had excellent contacts with the



Above: ‘Tour de Malakoff’

Below: ‘La Noblesse’



successful French breeders and multiplied their roses as well as creating their own new ones. They enlarged their nursery in Limpertsberg, a suburb near the city-center of Luxembourg. It is an airy site and the soil is sandy but clay-like, conditions which enabled them to grow healthy roses, very resistant to diseases. Thanks to their exceptional knowledge and unique experience, Jean Soupert and Pierre Notting won many first prizes and gold-silver medals in international trials. They were highly esteemed in the world of roses. Today their awards are preserved in the National Museum in Luxembourg.

Soupert & Notting printed one million catalogues twice a year in German, French and English, and shipped all over the world. They sold their roses throughout Europe, as well as to Argentina and the imperial court of Brazil. The Shah of Persia and the Russian Tsar were also among their clients. In those days, there were no photos in the catalogues, so every year a German rose painter journeyed to Luxembourg to paint the rose illustrations for the catalogues. Later on, Jean-Pierre Soupert, one of the next generation in the business, painted the roses himself.

Three hundred workers and growers were employed in Luxembourg rose cultivation at that time. In the northern part of the Grand Duchy, Soupert & Notting grew the wild root stock. In the villages, around the city of Luxembourg, were the many rose fields where the farmers grew roses for the nursery. As well as working in the fields, the employees grafted roses and were responsible for dispatching them. Jean Soupert and Pierre Notting were very inventive. For the long journeys to America and Brazil, they created special baskets made of willow branches (*Salix*), in which the roses were transported in humid conditions without rotting.



'Souvenir de Pierre Notting'

In 1895 Pierre Notting died, a very hard blow for Jean Soupert, who lost not only a brother-in-law, but also his best friend. In 1902 he created a rose called 'Souvenir de Pierre Notting'. In an old English catalogue, they describe this rose as: "very large, perfect shape, apricot yellow, shaded golden orange yellow, a grand rose". All the roses were named for famous people - European nobility and clergy, scientists, doctors and celebrities of the day. Soupert & Notting also created roses for their friends and colleagues in the international horticulture



'Eugen Fürst'

business. In 1875, a beautiful red rose with a very strong fragrance, called 'Eugen Fürst', was dedicated to the German editor of a successful garden journal. Thanks to these valuable relationships eleven roses were dedicated to members of the aristocratic family of Arenberg-de-Ligne.



'Mme Jules Gravereaux'



'Petite Léonie'



'Mrs. E. G. Hill'

The 'Madame Jules Gravereaux' rose was created in 1900. She was the wife of Mr. Jules Gravereaux who created the first rose-garden dedicated to conservation, the "Roseraie de L'Haÿ", near Paris. The rose 'Mme Jules Gravereaux' is very large, perfectly formed, chamois yellow, in the center rosy peach: a splendid variety. Jean Soupert also dedicated different roses to members of his family. He and his wife, Anne-Marie Notting had seven children, three girls and four boys. For their first communion, each girl received a rose named after her. The rose for 'Clothilde Soupert' dating from 1889, is a very full-petaled Polyantha, with pearly white outer petals and pale rose-pink centers - beautifully imbricated and exquisite. 'Petite Léonie' from 1892 is a small Polyantha rose named for Jean Soupert's first grandchild. And 'William Notting', from 1904, was dedicated to Pierre Notting's uncle, who lived in England.

When E. Gurney Hill, an American rose breeder, came to Luxembourg to visit his colleagues, he chose for his wife a remarkable Hybrid Tea in two different colors. The outside is deep coral-pink, the interior alabaster white, with a good fragrance. It was launched in 1905 and called 'Mrs. E. G. Hill'. In the same year, 'Reine Marguerite d'Italie', also a Hybrid Tea, was dedicated to Queen Marguerite of Savoy (Italy). Still available, this rose blooms here continuously from June till frost, a very beautiful and fragrant variety. In all, the company created 261 roses, many of which are still to be found in the national collection at Munsbach Castle.

Many other famous Luxembourg and German rose breeders emerged from their training with Soupert & Notting. In Luxembourg itself, the Ketten brothers and the nurseries of Gemen and Bourg and Jean Baptist Lamesch became very successful growers and breeders. Gemen & Bourg was mainly a grower of roses, creating only five roses of their own. Peter Lambert from Trier undertook his breeder's apprenticeship in the Soupert & Notting nursery and later married

the daughter of a Luxembourg breeder. Lambert was one of the main promoters of the world-famous collection of roses in Sangerhausen, Germany. The Ketten brothers (Ketten Frères) founded their company in 1867 at Limpertsberg. At first, they just propagated roses, but in 1896 their first creations came out. The Luxembourg Rose Society has so far identified 101 Ketten Frères introductions in old catalogs. Unfortunately, they only have names and descriptions - no pictures - and we have found only 30 varieties, including 'Asun Galindez de Chapa', a Hybrid Tea from 1923.



'General Th. Perschkoff'



'Vicomte Maurice de Melon'



'Grande Duchesse Charlotte'

Ketten brothers created two roses for members of the Grand Ducal Court: in 1930, 'Prince Félix de Luxembourg' a red Hybrid Tea that was dedicated to the husband of our beloved Grand Duchess Charlotte, and in 1938, 'Grande Duchesse Charlotte', also a Hybrid Tea, which won the Gold Medal at the New Roses Trials in Rome in 1938. Ketten sent it to the nursery of Robert Pyle in America, who commercialized it in North America. This rose received a Gold Medal at Portland in 1941 and an All-America Rose Selection in 1943. Mark E. Dixon at the time wrote: *"In 1941, when Grand Duchess Charlotte of Luxembourg arrived in the United States as a refugee after German armies rolled through her country, Pyle met her at a New York airport with a large bouquet of 'Grande Duchesse Charlotte' roses."*

During the best years of Luxembourg rose production, the "Belle Epoque", our breeders exported over six million roses a year all across the world. The First World War and the following trade blockades created a very difficult period for the rose business in Luxembourg. After it had begun to recover, Black Friday on the New-York Stock Exchange and the financial crisis in the 1930s brought the final blow to our rose production and thousands of bushes were burned in the fields.

Although there are no longer any rose breeders in Luxembourg today, there are still many rose lovers in our Grand Duchy. To keep alive the history of roses in our country, the Luxembourg rose friends are searching all over the world for the roses created in our country. By browsing in catalogues, we were able to find some of them in "Sangerhausen" (Germany) and "l'Haÿ-les-Roses" (France), the famous

conservatories of roses in Europe. We have had them reproduced and, so far, some 90 lost-and-found roses are planted in our gardens as a part of our Luxembourg rose-heritage. They are more fragile than the modern varieties and need a little bit more care, but seeing them bloom again, is a happy reward. Although, over the years we have collected many of these roses in private gardens, our aim has always been to display them in a public rose garden. In 2017 this dream finally came true with our “Roseraie Château de Munsbach”.



With the help of the Commune of Schuttrange, we created the garden on land provided by the State of Luxembourg. The rose garden, which is freely accessible to the public, accommodates an impressive collection of 650 roses in 145 varieties, old and new, created for our association over recent years by European breeders. This remarkable collection represents the rich unique past of roses in the Grand Duchy of Luxembourg, as well as the once flourishing rose industry. The garden is supported by the members and volunteers of the Luxembourg Rose Association undertakes its maintenance and improvements.

This concludes our short overview of the rise and fall of the breeding and cultivation of roses in the small Grand Duchy of Luxembourg. Today all the rose fields have disappeared and “Limpertsberg” is a charming suburb. The large Soupert family home has been included in the Luxembourg University campus. Students from all over the globe attend courses at the Luxembourg University, built in its former rose fields. However, together with my friends of the Luxembourg Rose Society, we will continue to promote the cultivation of roses in our gardens, public parks and open spaces. And we keep on collecting old roses created by Luxembourg breeders, who are still and now well-known by rose-experts all over the world.

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Editors’ note: “Lëtzebuenger Rousefrënn” rose society has prepared an 10-page annotated list of all the roses created by the major growers of the Grand Duchy: Soupert & Notting, Ketten Frères, Gemen & Bourg, and Jean-Baptiste Lamesch. This impressive list compiled by “Lëtzebuenger Rousefrënn” contains not only the name of the rose, date of release, variety and parentage, but those that can be seen at the Society’s garden at the Château de Munsbach are in a different color. Unfortunately, we could not include this supplement because of space limitations, but BAON readers can obtain a copy by email from the Society at; www.rousefrenn.lu simply ask for “Rose List” . We are certain they would enjoying hearing from readers worldwide.

REAPPRAISAL OF *ROSA ARVENSIS* BIODIVERSITY

By Pascal Heitzler

Breeding roses in France has been a long-established tradition for more than two centuries. However, despite the large number of varieties, the genetic biodiversity remains limited since only a few wild species or very few ancient cultivars have been used for creating the garden rose pedigrees. Among the common European wild species, *Rosa arvensis* has never been extensively used for rose breeding. Indeed, most of the known *arvensis* hybrids were generated in the 1800-1840s and only very few of them survive. As hardy floriferous ramblers, they derived from promising experimental crosses. Until the first decades of the 20th century, several wild varieties were described, enriching the botanical biodiversity of the species. Alas, most botanical competences and here again, the vast majority of plants, disappeared with time. In an attempt to reconsider the genetic potential of the species, I would like to partly recount my own experience, both in trying to restore the wild pool biodiversity and introducing new horticultural pedigrees. As a geneticist, I also intend to use *R. arvensis* as a new genetic model that could be useful in studying any biological process in roses including important genetic aspects of ecology and evolution.

Need for a genetic model in roses

Despite long-range breeding tradition, the rose remains poorly investigated at the level of formal genetics. Some mapping populations have been raised in the different institutions (Yu et al., 2015), but researchers dealt with hybrids rather than with wild species, and the described phenotypes were quite limited as they represented a very small fraction of the extant characters. Hence, a genetic model using a wild species is missing, one with reliable advanced pedigrees and consistent genetic material. Diploid species are more suitable for developing and understanding genetics in roses. When performed with accuracy, such studies can be extrapolated to tetraploid garden roses. *R. arvensis*, a common hardy rose from the synstylae group, is the only diploid species to be broadly distributed in Europe. *R. arvensis* was first used as a model to explore physiological aspects of achene germination and hip development at the University College of North Wales, Bangor, UK. These studies have been published in the journal "Nature" in 1959 (Prosser & Jackson) and 1965 (Jackson & Blundell).

Rosa arvensis is largely distributed throughout temperate Europe. This charming species, commonly called "field rose", is one of the very rare sciaphilous roses. The plants grow beneath shady trees in limestone forests, where their flexible canes run on the ground or over small hedges. Importantly, an ideal genetic model must be suitable for studying all kind of genetic challenges: pigments, fragrance, biochemical genetics, bioactive compounds, physiology, growth, development, reproduction, prickle and hairs, disease resistance, evolution and ecology. The success of a genetic model resides mostly in the long-range knowledge of the genotypes and on the historical-based and well-documented genetic resources. However, neither *Rosa arvensis* nor any other wild rose have ever before been explored genetically. Starting from scratch, the work presented here summarizes 25 years of investigations, creating substantial observations and reliable genetic material for a genuine genetic model in roses.

Rebuilding the wild-pool of biodiversity

In the wild, *R. arvensis* has distinctive traits, with apparently no or little variability (Graham and Primavesi, 1993). However, a few earlier reports described some varieties that differ from the standard description, the studies done by European rose specialists and taxonomists such as J. Sabine, J. Lindley (Lindley, 1820), J.B. Charbonnel, A. Felix and Fouillade, among others. The international journal "Le monde des plantes", constituted a huge forum for specialists with sharp observations and deep debates, mainly in the 1920-1930s (Charbonnel, 1925-1927, 1933; Felix, 1936-1937; Fouillade, 1927; Felix and Fouillade, 1920-1938). Most variants were described to affect subtle characters, such as leaf serration (*subbiserrata*), hips' form (*elipsoidea*), prickle density (*gallicoides*) or growth (*majus*, a lost giant form). Alas, many competences and the vast majority of plants have disappeared.

Rebuilding the intraspecific biodiversity of *R. arvensis*, seemed to be a rather unrealistic task. However, I attempted this using a botanical approach. During the last two decades, from field expeditions, I screened old and large wild populations for rare and/or exceptional variants and mutants by collecting samples with unusual phenotypes, mostly from northern regions of France. Cuttings from field-collected samples were grown outdoor under similar conditions and the resulting plants were compared with the first study rose named "Osenbuhr", as a control plant with classical standard traits.

The new mutants or variants were classified according to their phenotype or behaviour. As most of the newly presented strains have been found in new locations, they necessarily represent new mutations of independent origin with regards to the previously described forms. I will give some salient examples of the discovered variations. Often, for a given topics, antagonistic variants with opposite extreme phenotypes could be recovered behind the standard reference.

While leaf serration is rather intermediate in *R. arvensis*, one plant was found with simple (*crenata*) and another with complex (*biserrata*) serration. Forms with small hips or giant hips have been discovered. Beside the classical forms with globose to ovoid hips, some variants were found with bottle-shaped (*urceolata*), long elliptical (*ellipsoidea*) or depressed-globose hips. Antagonist growth habits were also recorded, such as dwarf (*pumila*) forms or giant forms with extreme vigor (*majus*). Among the dwarf forms, interesting differences could be observed in the branching architecture from the lateral secondary shoots. Preliminary results suggest genetically distinct forms with either short and prostrated, or straight, upright branches, in contrast to the intermediate standard growth habit.

Selected phenotypes affecting the flower shape in *R. arvensis*



a - Wild type



b - Semi-double
(2nd generation from
x pervirens 'flore pleno')



c - Leaflet tipped sepals



d - cristata sepals

Prickles and hairs are instrumental for rose taxonomy. A careful analysis allows to pinpoint antagonist variations for the density of glandular trichomes on stems, leaflets, sepals or hips, ectopic hairs on styles and even between stigmas, or glandular/hispid stems (*gallicoides*). Further traits were considered: leafy-tipped sepals, semi-double flowers, flowers with short styles (*non synstylae*-like), pink-tipped buds, scentless flowers, self-fertile plants... Altogether, 35 putative mutants, including the previously described chlorophyll lethals, were classified. As no genetics was performed previously for this species, and in order to test the nature of the inheritance of the different traits, extensive outcrosses were performed with the reference "Osenbuhr" control strain. The analysis is still in progress, but preliminary results support Mendelian transmission. As a consequence, I was able to progressively rebuild most of the intraspecific biodiversity that was lost from earlier times.

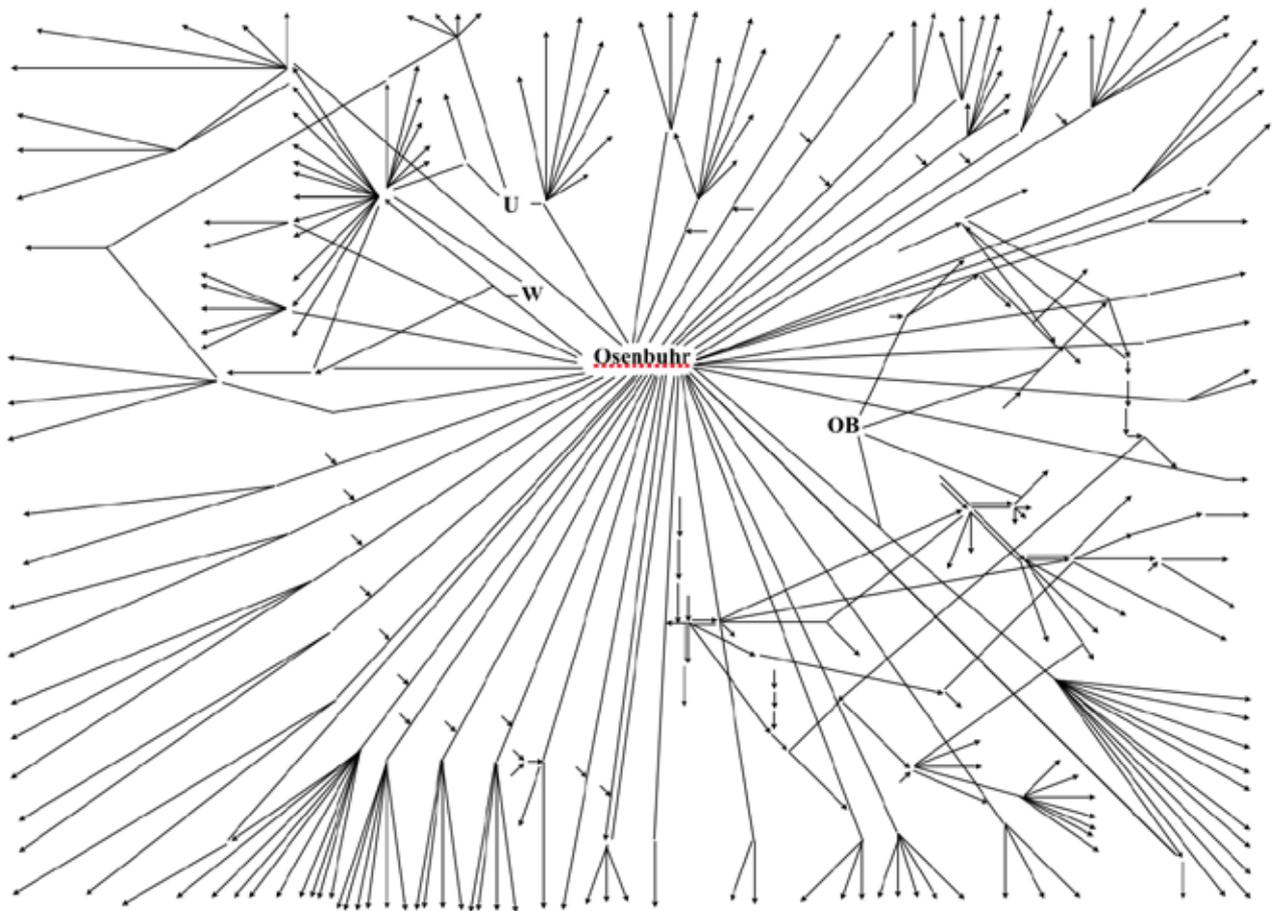
From the field expeditions, *R. x irregularis* (*R. arvensis* x *R. canina*) and *R. x polliniana* (*R. arvensis* x *R. gallica*) primary hybrids were found. It seems that *R. gallica* had disappeared for decades within the ancient station of *R. arvensis* where I found the relict *R. x polliniana*. The diploid *gallicoides* plant is more likely a glandular form of a true *R. arvensis*. Occasionally, in large sylvan populations, clusters of plants with a range of intermediate phenotypes between *arvensis* and *canina* were observed, suggesting introgression offsprings. The pentaploid dogrose (*Rosa canina*) is characterized by a unique meiosis system (De Cock, 2008; Nybom and Werlemark, 2015). However, when *canina* is the male parent and *arvensis* the female, the primary hybrids are expected to be diploid. I made crosses with the reference plant "Osenbuhr" and found that these hybrids are fertile. Despite the differences in the ploidy level, *R. arvensis* seems to be enrolled in gene reticulation with *R. canina* and this is fully consistent with the data of Katrien de Cock (2008). The present collection of hybrid taxons offers a unique material to study possible gene flow among European wild roses. Since *R. canina* rosehips are known to carry high levels of health-promoting compounds (Nybom and Werlemark, 2016), it will be of high interest to explore the inheritance of possible optimized alleles involved in the biosynthesis of such compounds.

Rebuilding a horticultural pool of *Rosa arvensis*

R. arvensis was never used extensively in breeding programmes. Most of the experimental breeding selections were produced in the years 1800-1840 when they were very popular (Quest-Ritson, 2003). The origin of the *arvensis* hybrids is rather obscure and their precise parentage is completely unknown. They were called the Ayrshire roses because one of the earliest hybrids thrives in southwestern Scotland. Nowadays, most of them have disappeared. The extant clones resemble each other and most of their allocated names remain doubtful, so that today there is no longer question of relying on an extant *arvensis* genetic pool. Hence, I choose to build *de novo* a complete set of *R. arvensis* hybrids with correct reliable pedigree data and names. For this, I decided to construct first a core collection of heritage roses, allowing me to choose the right founding partners for the crosses with *R. arvensis*.

More than 35,000 rose cultivars have been raised worldwide, representing awesome genetic resources. The vast majority of these cultivars derived from a limited number of old pioneer lines. Although few of these heritage roses are now extinct, I have steadily

accumulated a historic core-collection of 300 cultivars, through heritage rose nurseries or kindly received from public or private collections worldwide. Systematically, cuttings were made for all cultivars to be grown on their own roots. This collection comprises most early branches of the founding historic pedigrees. The cultivars were chosen according to their pioneer character, being mostly the first plants of their own lines, or carrying first an innovative mutation. Whether yet scientifically investigated or not, I was sure to introduce the original mutations and alleles that define independent and historic genetic events, either being commonly present today in numerous modern roses or belonging to forgotten or unique lines.



The original *R. arvensis* pedigree. Clockwise: 9-12h, the consanguineous standard *arvensis* using Widensolen (W) and Urlozenholz (U) as earlier partners; 7-9h, the crosses with *arvensis* mutants or variants; 6-7h sympatric interspecific hybrids; 0-2h, hybrids with non-native species; 2-6h, hybrids and introgression lines with the original cultivars, such as Old Blush (OB)

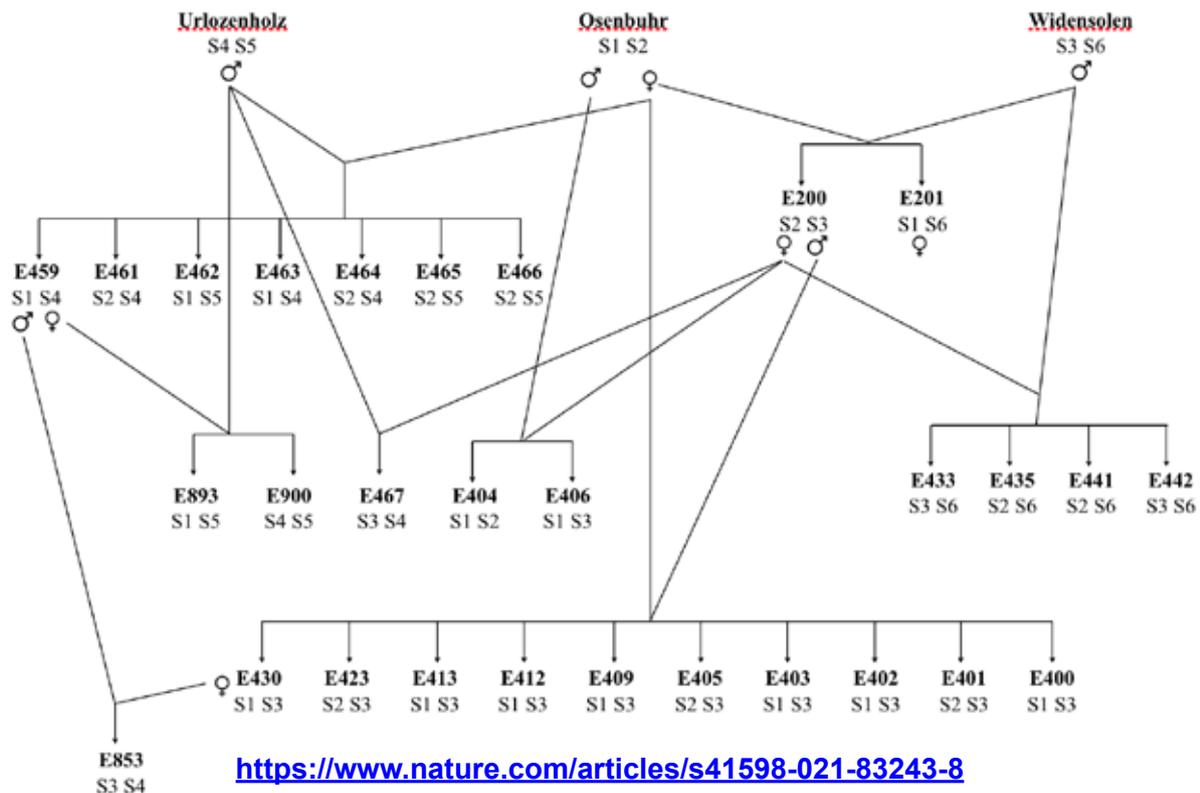
When I started in 1997, no genetic study had been done with *R. arvensis*. Investigating rose genetics using a wild species was a complete unexplored field. “Osenbuhr” was considered as the reference plant for the huge genetic program described earlier and its genome has been recently sequenced (Raymond et al., 2018). This unique plant was then crossed with maximal number of independent mutants and variants from *R. arvensis*, other species or cultivars. Crosses were done only using flowers that open within paper bags to prevent unwanted pollen contaminations through insect pollinators. Luckily, *R. arvensis* shows fine hybridity not only with the other species (*synstylae* and *indicae*), but also with cultivars (mainly the diploids). For each cross, a tight protocol was followed in order to dissect the precise nature of inheritance of the characters. The pro-

tocol revealed all possible genetic behaviors: dominant (1:1 segregation), recessive (3:1 segregation), co-dominant synergism through transhetero-allelic conditions, dominant synergism through digenic transmission (3:1 segregation). Moreover, it also allows the recovery of new unexpected recessive mutations, viable or lethal (iso-allelic homozygous conditions), revealing the exact contribution of every single alleles. I started crosses using most of the foundation horticultural strains, already representing around 100 distinct traits and sports. To realize which cultivar is a true founder and identify the genuine genetic novelties during the history of the varietal selection is complex. The data were so scant and scattered that it has taken me twenty years of efforts to rebuild.

The present contribution is concerned mainly with color traits and color patterns (35 independent color variations in leaves, shoots or flowers) but also mutations affecting the flower shape and the flowering time. A strict protocol of introgression with “Osenbuhr” as a mother (to deal with homogeneous organelle genomes), was put in place to introduce maximal number of the original characters by traditional breeding. Under temperate seasonal conditions, *R. arvensis* has a maturity time of two years and a seedling can flower for the first time at 14 months after germination. This can be reduced significantly, as I have now introduced the different *ksn* loss-of-function mutations for the reblooming trait (Iwata et al., 2012) in *R. arvensis*. As the result, the “Osenbuhr” pedigree could be completed accordingly (clock side 2-6h).

Inbreeding lines and self-incompatibility

Pedigree of *R. arvensis* S haplogroups



Pure homozygous strains constitute headstones for genetic models. As soon as they become available, they facilitate genetics, allowing the study of even subtle or quantita-

tive traits, including biochemical genetics. In 1997, I began an inbreeding programme using “Osenbuhr”, “Widensolen” and “Urlozenholz”, three clones of *R. arvensis*, all standard wild types with normal growing habit. They were named according to their location in Alsace (France), where they were gathered from non-overlapping wild stations. I first made tightly-controlled self-pollinations and found that no hips developed. Instead, while remaining small and thin, they turned yellow and fell off a few weeks after the pollination. In contrast, inter-crosses induced the full course of maturation and hips were filled with fertile achenes, five months after pollination. This suggests that the species is self-incompatible. In the next generation, I made consanguineous backcrosses between the first generation offspring and the three above-mentioned wild type clones. Through 2018, more than 50 progeny plants with reliable pedigree encompassing four generations, were raised (clock side 9-12h). It seems that self-incompatibility is the rule for most diploid rose species. Hence, the importance of bees and pollinators to prevent fruit abortion.

This self-incompatibility relies on a mechanism that prevents consanguinity and promotes genetic diversity. It depends on a gene called the S-locus that exist in multiple allelic forms. In diploid wild roses, a given S1 pollen cannot successfully pollinate a plant carrying also the S1 alleles. Two plants belonging to the same haplogroups, for example S1 S2, are inter-sterile. I allocated S-haplotype combinations to the three clones “Osenbuhr” (S1 S2), “Widensolen” (S3 S6) and “Urlozenholz” (S4 S5), and during 20 years, I could progressively attribute the different derivative haplogroups to nearly 50 descendants as partially illustrated. The whole advanced inbred pedigree presented here has served as the first reference case in roses for a formal evidence of the incompatible behavior and for the molecular characterization of the S-gene. This study will be published in the prestigious journal “Scientific Reports” (Vieira et al., 2021).

Conservation

In creating genetic biodiversity within a common pedigree and species, it is now possible to consider *R. arvensis* as an attractive model for genetics and suitable for a maximal range of research topics for roses. After two decades of investigations, a completely new network of genetic resources was established for these purposes. The roughly 500 accessions (the *arvensis* derivatives and the restricted heirloom core collection) belong to a vast and complex pedigree with thorough information on the parental relationships. Since a unique common parent was used for the introduction of so many strains and characters, it will now be much easier to allocate every single allele to a given phenotype. A programme of molecular characterization for the whole collection has now been set up at the Institute of Plant Molecular Biology of Strasbourg.

An experimental and conservatory garden was created in Colmar, (Alsace, France) to restore, maintain and develop *R. arvensis* biodiversity and to investigate the species genetically. The whole collection involves numbers of holotypes, unusual or unique natural variants, mutants and hybrids, that deviate from standard phenotypes of *R. arvensis*, with one or few characters. Some variants fit with earlier descriptions of now lost plants, whereas others are unrecorded in both science and horticulture, but altogether this work reconstitutes most of the intra-specific biodiversity that was recorded mainly between 1800 and 1940. Very recently, this material has been submitted for an evaluation by the scientific committee of the ‘Conservatoire des Collections Végétales Spécialisées (CCVS), the specialized French network that help to preserve botanical and horticultural biodiversity through specific patrimonial collections in France.

Altogether, combined botanical and genetic approaches allow a fine description of 160 independent characters and the nature of their inheritance. All the characters are now classified according to genes and alleles and this will be published in the near future as a repository with update annotated genetic data for the international community, scientists as well as breeders.

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Literature cited

- Charbonnel, J.B. 1925-27. Roses de France. Le Monde des Plantes, 157: 7-8, 158: 8, 159: 6-8, 160: 7-8, 161: 6-8, 162: 7-8, 166: 6-8.
- Charbonnel, J.B. 1933. A propos de quelques caractères méconnus de *Rosa arvensis* L. Le Monde des Plantes, 199: 2-3.
- De Cock K. 2008. Genetic diversity of wild roses (*Rosa* spp.) in Europe, with an indepth morphological study of Flemish populations. PhD Thesis, Faculty of Bioscience Engineering, Ghent University.
- Debener, T. and Linde M. 2015. Proceedings of the VIth international symposium on rose research and cultivation. Acta Horticulturae 1064. ISHS.
- Felix, A. 1936-37. Inventaire rhodologique d'une partie du bassin moyen du Cher, Vierzon et ses environs. Le Monde des Plantes, 219: 18-20, 221: 34-35, 222: 43-44, 223: 2-3, 225: 14-19.
- Felix, A. and Fouillade, A. 1920-38. Rosae galliae. Le Monde des Plantes, 122: 5-6, 123: 2-3, 124: 3-4, 136: 3-5, 146: 3-4, 147: 2-3, 152: 2-3, 153: 4-5, 154: 4-6, 155: 3-4, 159: 2-4, 163: 3-5, 164: 5-8, 165: 3-4, 174: 4-6: 200: 14, 229: 3-4.
- Fouillade, A. 1927. Propos sur des Roses. Le Monde des Plantes, 164: 3-5, 165: 5-7, 166: 4-5.
- Graham G.G. and Primavesi A.L. 1993. Roses of Great Britain and Ireland. BSBI Handbook N°7. Botanical Society of the British Isles. London.
- Iwata H., Gaston A., Remay A., Thouroude T., Jeauffre J., Kawamura K, Hibrand-Saint Oyant L., Araki T., Denoyes B. and Foucher F. 2012. The TFL1 homologue KSN is a regulator of continuous flowering in rose and strawberry. Plant J, 69: 116-125.
- Jackson G.A.D. and Blundell J.B. 1965. Germination of *Rosa arvensis*. Nature, 205: 518-519.
- Lindley, J. 1820. Rosarum Monographia; a botanical history of roses. Ed. James Ridgway. London.
- Nybom H. and Werlemark G. 2015. Beauty is as beauty does – culinary and medicinal use of rosehips. Proceedings of the VIth international symposium on rose research and cultivation. Acta Horticulturae 1064. ISHS. 137-150.
- Prosser M.V. and Jackson G.A.D. 1959. Induction of Parthenocarpy in *Rosa arvensis* with Gibberellic Acid. Nature, 184: 108.
- Quest-Ritson, C. 2003. Climbing Roses of the World. Timber Press. 310p.
- Raymond, O. et al. 2018. The *Rosa* genome provides new insights into the domestication of modern roses. Nat. Genet. 50: 772-777.
- Vieira, J., Pimenta J., Gomes A., Laia J., Rocha S., Heitzler P. and Vieira C.P. 2021. The identification of the *Rosa* S-locus: insights on the evolution of the gametophytic self-incompatibility system in Rosaceae. Scientific Reports (Nature). <https://www.nature.com/articles/s41598-021-83243-8>
- Yan, Z., Denneboom, C., Hattendorf, A., Dolstra, O., Debener, T., Stam, P. and Visser, P.B. 2005. Construction of an integrated map of rose with AFLP, SSR, PK, RGA, RFLP, SCAR and morphological markers. Theor. Appl. Genet. 110: 766-777.

THE FIRST ROSES IN AUSTRALIA

By Trevor Nottle

The identity of the first roses in Australia remains a mystery.

The first settlement in Australia was established as a penal colony, a remote and isolated prison which was intended to relieve a badly overstretched gaol system in Great Britain. As such, civilising interests like gardens were not part of the planning. All that was called for was a setting so far away that no prisoners could escape and make their way home; to support that expectation a small administrative group was set up, backed with guards, prison warders, a cohort of judges and lawyers, an escort of Marines and a Governor for the colony. The parliamentary committee that oversaw the necessary legislation and financing of the project made it very clear that the new colony would be supplied with only one year's essential supplies after which the colony was expected to be self-sufficient. The government had already too much experience and expense trying to maintain distant colonies and were determined not to be caught again

The site chosen for the colony was New South Wales at a spot on the coast named Botany Bay, and highly recommended by the very influential Sir Joseph Banks who had accompanied Capt. James Cook on his voyage to observe a transit of Venus over Hawaii twenty years before. The fleet then had sailed on to investigate the unknown lands further south during which Australia was first 'discovered' and partly mapped.

Departing from Plymouth in May, 1787 the First Fleet consisted of two naval ships, three supply carriers and a motley collection of six wormy old ships hired by the Admiralty for the purpose of transporting convicts to Australia. Between them the ships of the fleet carried 10 civil officers, 212 marines including officers, 28 wives and 17 children of the marines, 81 free people, 504 male convicts and 192 female convicts; making the total number of free people 348 and the total number of prisoners 696, coming to a grand total of 1,044. Noteworthy is the fact that not one of them knew anything about farming or gardening. Some of the gentlemen officers owned estates that were managed and run by agents, and one or two of the convicts had been field hands at some time, and no doubt some of the women aboard liked flowers, but practical experience in agriculture and horticulture was severely lacking.

The route to their destination was determined by the prevailing winds, and ports of call where large quantities of fresh food and clean water could be taken aboard. The fleet sailed first to the Canary Islands, then to Rio de Janeiro and on to Cape Town before taking the final leap of faith, based on very sketchy information and vague directions to the destination at Botany Bay. The voyage covered 24,000 km and took nine months.

At Cape Town, the final provisioning port, the officers and free settlers took the opportunity to purchase plants, stock animals and essential provisions to enable them to establish farms and homes on arrival. They purchased their needs from the Governor's Garden (commenced 1652) – an official staging post for plants run by the VOC (Vereenigde Oostindische Compagnie / United Dutch East India Company), and private farmer-suppliers inland from the town. Fruit and nut trees, grape vines and other productive plants were the prime objects to purchase but the diaries of several First Fleeters record the purchase of flowering plants and bulbs. In particular, Capt. Watkin Tench of the Royal Marine Corps describes a potted flowering geranium (*Pelargonium*) which he kept in his cabin. While roses were most certainly grown in the Governor's Garden for making an eye ointment necessary to treat eye diseases in the tropical colony of Dutch East India (Java), there are no surviving records that the settlers bound for New South Wales purchased any to take with them on the onward journey.

As things turned out, Botany Bay was hopeless as an anchorage. It was too exposed to the weather, had no fresh water source, and was surrounded by bare sand hills unsuited to establishing crops, so the First Fleet sailed further up the coast and entered Sydney Harbour, landed at Sydney Cove and established the first settlement on the banks of a rivulet that became known as the Tank Stream.

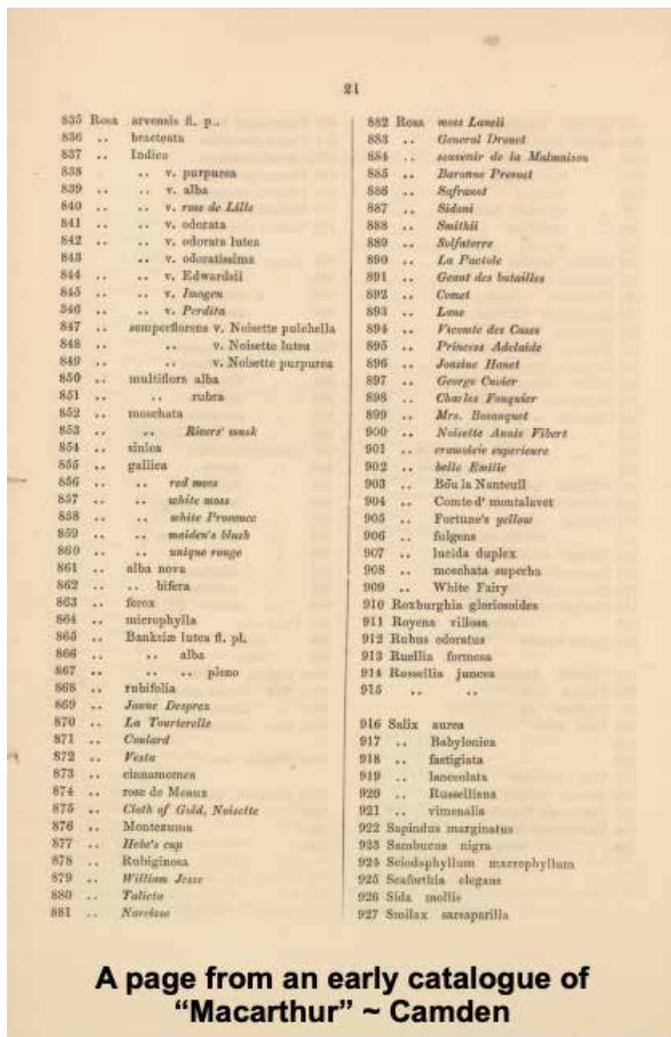
After a few years during which the colony struggled to survive, the situation began to improve, especially for the men and women who were free to take advantage of the opportunities the colony offered. Substantial land grants were made and rights to trade were approved enabling a small group of entrepreneurs to commence businesses. Among these were a few who used their money to finance trips to India, to Madras, Calcutta or Bombay (now renamed to Chennai, Kolkata and Mumbai) to purchase goods directly from manufactories there. Good quality household goods were available free of the taxes of the East India Company that applied to goods bought in Great Britain. Silverware, glassware, furniture and crockery in the best European taste were desperately needed in New South Wales and could be landed at much cheaper cost and with much shorter delivery times than similar goods could be brought from England. Hong Kong and Shanghai were also favoured ports of call to purchase costly luxuries like silk and porcelain for resale.

Foremost among these merchant venturers were William, Charles and Elizabeth Macarthur, Captain John Piper, Alexander McLeay, and William Wentworth. Of these, the men had connections through school friends and the military men of the East India Company army, who were similarly engaged in self-enrichment on the sub-continent. One of them was Nathaniel Wallich, Director of the Botanic Gardens at Calcutta and a friend of Alexander McLeay. In exchanges of correspondence

McLeay asked Wallich to send him plants for the gardens of his new mansion, Elizabeth Bay House. Among those sent were gardenias, camellias and several roses – ‘Hume’s Blush’, ‘Park’s Yellow’ and another abbreviated as ‘Bon...T...d’ which some Australian rose experts have agreed is most likely ‘Boutrand’. Recorded in a small notebook entitled ‘Plants received at Elizabeth Bay House’ these roses must be considered the first roses to have been brought to Australia. The note-book is for 1826-1840. It seems the spidery copperplate of the text has not been analysed for authorship. It could have been written by McLeay himself, his gardener Robert Henderson, or McLeay’s daughter Fanny (Frances Leonora) who was a noted botanical artist, naturalist and painter, and the principal family recorder.



**J.P. Redouté's
"Rosier des Indes jaune"
'Park's Yellow'**



**A page from an early catalogue of
"Macarthur" ~ Camden**

The first roses to arrive in Australia were, therefore, those imported for private pleasure by a few wealthy individuals working in *consortia*, or singly, to profit from importing goods for resale. The roses were simply extra cargo, but as usually happens between keen gardeners, cuttings were passed around and head gardeners saw opportunities to set up in business for themselves. The Macarthur family were prime movers in spreading roses from private pleasure grounds to nurseries. The records from their ‘Camden Park’ estate outside Sydney are not so detailed as the note-book kept for ‘Elizabeth Bay House’ but they do list various roses and the head gardener, Thomas Shepherd, included them in his stock offerings at his Darling Nursery. Commencing in 1827 Shepherd’s

nursery was able to print a catalogue that was advertising 61 roses by 1851. A nearby nursery, operated by Michael Guilfoyle, advertised 83 roses in the same year. It is known that some of these were obtained from the Sydney Botanic Gardens, the 'Elizabeth Bay House', and 'Camden Park'.

Colonial, and, later state rivalries have created some slight confusions about which nursery was established first. The first nursery list that survives is that issued by Daniel Bunce of Hobart in 1838, but the first comprehensive catalogue was published by James Dickinson, also of Hobart, in 1845. Dickinson was also in charge of the botanic gardens in Hobart, so it seems very likely that he got much of his propagating material from there. His catalogue contains roses including a number of old once-flowering European varieties that seem likely to have come from the Governor's Garden at Cape Town, but it has three Chinese roses that possibly came from Shepherd's Darling Nursery in Sydney or even Camden Park. The old European roses may have been sourced by official request made to the Governor's Garden from the Colonial Office in London, or by informal direct contact with the head gardener there. After the British took over Cape Town in 1795 the gardens became neglected for some time and the administration was more relaxed making informal exchanges more likely. There are no surviving records to show what really happened but those European roses arrived in Hobart Town from somewhere none-the-less, some being listed as 'medicinal'.



Bunce was a very peripatetic adventurer whose exertions in the nursery industry in Tasmania were short-lived before he moved to Victoria in 1839 to pursue other opportunities. It seems plausible that his list in 'Manual of Practical Gardening' is more of a prospectus than one of substance.

In South Australia in 1837 George Stevenson tried his luck at publishing a newspaper, 'The South Australian Gazette and Colonial Register,' but he also developed a garden-nursery in North Adelaide and later at a place called The Devil's Elbow, just outside the area of the Adelaide Plains. Later known as 'Leawood Gardens' it was a popular place for excursions and picnics. There was also a nursery



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On the graves of two little sisters who died in the diphtheria epidemic in 1860. Cherry Gardens churchyard.

on site but it was not a commercial operation. However, in 1843 Stevenson did issue a sales list of plants which included a selection of roses. As an entrepreneur with money to invest in his projects, and with his contacts as an editor, it seems likely that Stevenson's sources were 'Camden Park' or the Darling Nursery in Sydney. The plants were sold through his North Adelaide address.

John James Rule seems to have been another entrepreneur with interests in a number of ventures which he followed with other family members. Arriving from Argentina in 1840 the family went first to Tasmania but quickly decamped to Victoria where business prospects were better. Independently of his family John Rule established the Victoria Nursery, Church St., Richmond, Victoria 1857 but he placed it under the management of another, George Brunning, and operated it from

his father's builder's premises in the city, and later in partnership with his brother in a drapery business. There is debate about whether the plant list he issued was real, the suggestion being that he sourced the plants needed to fill his orders from other growers while his nursery manager focussed on conifers that were then becoming very popular and profitable.

From these beginnings the rose growing industry, and the nursery industry, were well set up to serve the huge increase in trade that resulted from the Gold Rushes in Victoria and elsewhere and which lifted the demand for homes and gardens across southern Australia for the remainder of the 19th Century.

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Luxembourg: Land of Roses

By Heidi Howcroft and Marianne Majerus

The Grand Duchy of Luxembourg is one of Europe's smallest countries--not exactly a micro-nation but certainly one that has always punched above its weight. Today it is the seat of the European Court of Justice. One hundred and fifty years ago, it was famed for its roses. This book tells the story of Luxembourg's roses, all of them, past and present. It is beautifully produced, with an excellent text and stunning photographs. It cannot be too highly recommended: every rose-lover should buy it.

The protectionism of the French, the Germans and the Americans dealt the industry a serious blow in the 1920s but, by 1960, the country's rose-lovers were busy hunting down their country's old varieties. This commitment to conservation continues: amateurs and professionals alike are still active in seeking, identifying and distributing Luxembourg's historic roses. And there is now a National Collection at Munsbach Castle in the east of the Grand Duchy. But the national interest in roses does not stop there - three major new public rose gardens have been made in the last ten years and a remarkable number of good private ones. People say that nowhere in Europe is a love of roses so evident among its citizens.

This book is well-researched and well-written by Heidi Howcroft, the Manchester-born garden-designer who lived for many years in Germany. Full accounts of the old rose-nurseries are supplemented by complete lists of all the roses they introduced. Boring? Not at all - you end up saying to yourself 'I never realised that *that* was a Luxembourg rose! And isn't it beautiful?' There are period illustrations from the glory days of the late-19th and early-20th centuries but the great joy of the book is the wonderful photographs by Marianne Majerus, a Luxembourger who married an Englishman and embarked on a career as one of England's greatest garden photographers. Older readers may remember her first book *The Rose Gardens of England*, which she published in conjunction with the late Michael Gibson as long ago as 1988. Her photographs of Luxembourg roses and rose-gardens are inspirational--light, colour, angle and focus are used to show the character of the roses to their best. Although quite incidental to the main theme, you will never find a book with so many pictures that show you how to mix roses with herbaceous plants.

How does a book dedicated to old roses and modern rose-gardens in a tiny country ever get published? This book had the full support of the Banque de Luxembourg, the national government and the council of the city of Luxembourg. Published in three editions--German, French and English--it deserves to sell a million copies. Editions Schortgen, 2020. ISBN 978-9995936952. Available through Amazon sites.

Review by Charles Quest-Ritson, who is one of the English-reading world's most prolific and versatile authors on all rose-related subjects, including the RHS Encyclopedia of Roses, co-authored with Brigid Quest-Ritson, to guides to the great gardens of Europe and many many reviews. His contact : questritson@aol.com

CONSERVATION AND HERITAGE REPORTS

AN OVERVIEW by the Chairman Brigid Quest-Ritson

When it became clear that the Heritage Rose Conference in Brussels could not take place because of the Covid-19 pandemic, I invited delegates from the Conservation and Heritage Committee to send me a report or a letter about heritage and conservation in their respective countries. I thought it was important to keep in touch with each other's experiences and activities, bearing in mind that we will not be able to have a formal meeting--nor the fruitful conversations we enjoy--until we meet again at the Adelaide conference, which has been postponed until Oct 27 – Nov 3 in 2022.

The majority of delegates did respond, for which I am grateful. Their reports made interesting and, in some cases, inspirational reading. These reports were sent to all 26 members of the Committee, but we were asked to give them a wider circulation. Some have already appeared in BAON #22 and more will follow in this issue. I have been asked to summarise the general position and highlight areas of particular interest.

There are many groups and individuals right across the spectrum of WFRS who are dedicated to the conservation of the roses. The nature of their activity varies, though there is no geographical pattern. While delegates to the C&H Committee struggle with indifference, others report a growing enthusiasm for old roses, their history and their cultivation. The delegate from Poland, for example, has noted a revival of interest in learning about heritage roses as well as growing them.

It is also encouraging that, all across world, there are rosarians working to collect and conserve the roses they regard as a part of their heritage. For some organisations and individuals, the focus is upon roses bred in their country or by particular breeders; others are recording and rediscovering roses that were once common in their gardens but seem now to have disappeared. Both approaches are equally valuable, as shown in the reports from Luxembourg (in BAON 23) and New Zealand (in BAON 22).

Heritage roses excite the interest of many members. There is less emphasis, so far, on *ex-situ* conservation or habitat preservation of rose species.

Several countries report (and others have mentioned separately) that the number of nurseries that sell heritage rose plants is declining, and that they have fewer cultivars on offer. This is a worrying trend, that has been reported by Australia, Belgium, France, Great Britain and New Zealand. In Great Britain, there is considerable concern about the future of Peter Beales Roses, which continues to drop the number of roses it stocks.

Private collections disappear, and nurseries close. It is therefore important to ensure that rose collections in public gardens ensure the continuing conservation and survival of our rose heritage. This requires more

cooperation between the private sector, the public authorities and individual rosarians who are knowledgeable and enthusiastic.

Unusual weather– and perhaps climatic changes – have also caused problems. Delegates mention the devastation wreaked by bush fires, storms and prolonged drought. Rose gardens in Australia and Japan have sustained considerable damage from freak weather. Fellow rosarians have been generous in providing help during and after the natural disasters in both countries, notably with labour and replacement plants.

Correct identification is a continuing difficulty. Countries such as France and Sweden make extensive use of scientific techniques to establish parentages and relationships of 'found' roses. Their databases, and websites like HelpMeFind, are invaluable resources. Early descriptions of roses tend to be brief, and colour depictions are variable; both are often too flattering. The archives of horticultural societies, nurseries and gardens have helped researchers in Argentina and Uruguay to identify 'found' roses that were once grown in those countries. Visits to other collections around the world are also useful for acquiring expertise that can then be shared in one's own country.

The pandemic prevented us from visiting gardens in 2020 - though it gave more time for those of us who have our own gardens to enjoy them – nevertheless we all hope to have the pleasure of visiting gardens and enjoying the company of fellow rosarians in 2021 and 2022.

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CORRECTION TO ARTICLE IN BAON #21: “The Rose Garden of Meise Botanic Garden”

We wish to record that, in BAON #21, the introduction to the article about the Rose Garden in Meise Botanic Garden was used with the permission of its original authors Sonja Deneve , Dirk De Meyere, and Kenneth Bauters , and was first published in 2019 as the introduction to the First International Salicaceae Symposium on the Meise Botanic Garden in the journal “Skvortsovia”. Used by permission of “Skvortsovia, the International Journal of Salicology and Plant Biology,” Russian Academy of Sciences, Ural Branch.

ADDITIONAL INFORMATION TO ARTICLE IN BAON #22: “Historical Roses in the Europa-Rosarium Sangerhausen”

In addition to commercial book sellers like Amazon, this excellent book, in its English version, is also available from Sangerhausen directly at:
www.historical-roses-book.com

IN MEMORIAM: WILLIAM ‘Bill’ GRANT

August 30, 1925 – December 24 , 2020

The death of Bill Grant on Christmas Eve will be a sad marker in the lives of his many friends around the world. He was a prolific writer of long letters, and a dependable correspondent on all manner of subjects: old roses, classical music, opera, food and wine, travel, gardens and gardeners, books, politics, family, relationships, society, history, and much more. Bill built his love of learning through studies at the University of San Francisco followed by two Fulbright Scholarships which gave him the opportunity for further studies in England and Sweden.

Speaking at and attending conferences throughout Europe, South Africa, Argentina, Australia and New Zealand, Bill Grant shared his enthusiasm for old roses and utilised his teaching skills at the same time. Always a teacher he sought to promote knowledge and understanding. Grant’s articles and photographs have appeared in numerous horticultural journals and magazines. His crowning achievement was serving as assistant editor of “Botanica’s Roses,” published by Random House in 1999, and as editor of the paperback edition published in 2001. At the time of his death Bill had two book manuscripts awaiting publishers. One was a comprehensive survey of Classic Hybrid Teas from the 30’s up to the late 60’s; a group he felt were not adequately dealt with in “Botanica’s Roses,” particularly those bred in the United States. The other book was a biography and travelogue with roses containing much of his wit and keenly observed personalities of the rosarians he met and knew. It is to be hoped that his manuscripts can be published in some form soon.



**This photograph was kindly provided
by Charles Quest-Ritson**

It seems right and fair to leave Bill to have the last words about his amazingly rich and wonderful life. *“I’m the luckiest guy in the world, no doubt about it,”* he concluded. *“I’ve made friends with people all over the world.”*

Contributed by Trevor Nottle, with acknowledgements to Thea Burns and the “Santa Cruz Sentinel” for additional information.

IN MEMORIAM: SERGIO MARIO SCUDU

The world of roses has lost a dear and valuable friend early in February. Sergio Mario Scudu, owner and creator of S'Orrosa nursery in Ardea Italy, near Rome passed away after a long illness.

Sergio was a true nurseryman; he established a magnificent nursery filled with Teas, Chinas, Noisettes and other old roses. His knowledge and understanding of these roses was immense as was his dedication to their preservation. This has not always been his career, after years as a lecturer in Mathematics at Sapienza University of Rome he fell in love with roses and as is often the way with roses, it eventually became too big of a passion to ignore. To begin with, he ordered roses for himself and friends but soon found the small garden at his house in Zagarolo would not be suitable for his dream of creating a nursery for roses that thrive in a Mediterranean climate.

About 15 years ago he had the fortune to meet Princess Taverna, owner of La Landriana, a beautiful garden just south of Rome at Tor San Lorenzo, Anzio which had been designed by Russell Page. She was happy to rent Sergio some of her land next to her garden on a long term lease. And here began the fulfillment of his dream at last. The nursery came first and then he set about creating a garden filled with the roses of his collection, both a labor of love, Saorrosa. In the ensuing years he established himself as a renowned rosarian and nurseryman. He would be in no hurry to sell a plant without ascertaining, to the best of his knowledge, by observation and consultation, the true identity of a rose.

Sergio produced splendid plants which were the envy of many at the plant fairs he attended throughout Italy, often winning first prize for his stand or the quality of his plants. This was what I was so impressed by when I visited him in 2014, his plants were the best I had ever seen. By now his collection was one of the most significant in Europe, if not the world. His garden, filled with roses of elegance, charm and perfume, the roses he loved, delighted many as did his enthusiasm and kindness.



The WFRS Heritage Rose Conference to be held in Bruxelles last June 2020 was forced to be postponed due to the Pandemic. Sergio was going to be a speaker but sadly we will never hear what he had to share, nor benefit from the fruits of his labor. He is greatly missed by many.

Contributed by Becky Hook, La Roseraie du Désert.