Lecture at Intach Indian National Trust for Art and Cultural Heritage, Chennai 2014

Tales of a Plantsman

M.S. Viraraghavan



This talk focuses on two aspects of my fascination for roses and other flowers – a plantsman's progress, and India's natural and cultural heritage of roses.

How did an administrator get involved with roses, is perhaps a question many of you have. To put it briefly, I was always a somewhat reluctant civil servant. But in those days when I joined the I.A.S., parental preference reigned supreme. Yet it is difficult to leave what appears materially secure, or generate escape velocity from being bound to the chair with red tape, a variant perhaps of the Stockholm Syndrome.

I am eternally grateful to a rugged freedom fighter of Vijaywada who had migrated to Hyderabad after Independence, integrity intact, but with a new passion for raising roses. He became my good friend and noting my fascination for roses, he advised me, mind you after several years of friendship, as he was a

true representative of the old world culture, 'Viraraghavan, you are wasting your time in the civil service'. Curiously enough, this same opinion was echoed by a very corrupt politician, indeed a Minister, but one firmly attached to the welfare of farmers.

These opinions catalyzed my leaving and when friends remarked that it took courage to leave a permanent job and make a leap into the unknown, I used to reply half in jest, that it took more courage to remain in government than to quit.

India's heritage of roses is perhaps not as well known as it should be, which is disconcerting. Even more disconcerting is the fact that the outside world still thinks of India in terms of maharajas and tigers. I remember an earnest roseloving lady asking me, in California, whether roses grew in India.

Of the two aspects of India's rose heritage, the natural and the cultural, I will take up the natural heritage first. India has a stunning range of wild roses, which are called species roses, mainly in the Himalayas where there are as many as 8 typical Indian species, as well as many other migrants from Iran and Central Asia. As you know, the Himalayas represent an extensive range of climates, from the arid west, on the borders with the Hindu Kush mountains, to the lush green eastern Himalayas. I will mention briefly some of the most beautiful of the Himalayan wild roses.



In the extreme west, in the arid higher reaches of Ladakh and Himachal, grows a rose of astonishing delicate beauty, *R. webbiana*, among the stony outcrops of the alpine desert, with beautiful lilac pink flowers. Described by an eminent rose authority as 'the Faerie Queen of Roses'.



Proceeding eastwards into an area of heavier rainfall we have *R. macrophylla*, with very large flowers of pink to red. I still recall our gasp of astonishment when we came across this rose, first seen as red reflections in the still pool of icy water of the Pushpganga River, on the way to the beautiful alpine valley, called the Valley of Flowers, near Badrinath.

One widespread rose of the entire range is *R. brunonii*, white flowered, set off by lovely brownish-purple green foliage. This is the Himalayan musk rose, endowed with that captivating feature of all musk roses, the ability to waft its fragrance in the air over great distances.



I may clarify that there are many musk roses in the world and in India, collectively called 'the musk rose complex'.



Two other musk roses are *R. longicuspis*, again white in colour, which we found climbing into trees just above Shillong in the Khasi Hills, and *R. leschenaultiana*, with extra large ivory white flowers, which adorns Kodaikanal and the Palni Hills, as well as other high altitude areas of the Western Ghat mountains.



One other widespread wild rose of the entire Himalayan region is the creamy flowered *R. sericea*, with a most unusual characteristic of having only 4 petals, as opposed to the usual 5 petals of other species.





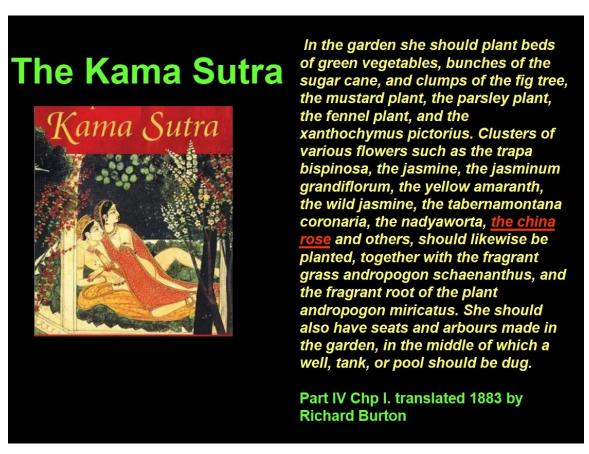
In the most eastern part of the Himalayas and especially in the mountains of Manipur is to be found what is arguably the most beautiful of all wild roses - *R. gigantea*, which is a giant in every way- it is probably the largest growing of all roses. Climbing to nearly 20 metres into trees with enormous yellow to cream flowers, 15 cms. across, followed by huge fruit (called hips) of the size of plums. More on this later when I talk of our adventures in search of this rose.



So much for some of the typical roses of the mountains, but other areas of India are not entirely bereft of wild roses. In the plains there is a most unusual rose, perhaps the only wild rose of the tropical areas in the entire world, which still fascinates botanists. This is called *R. clinophylla*, which has the extraordinary habit of inhabiting swamps and flood plains of rivers and lakes from Bengal, Bihar and Assam to as far south as Coorg. I am able to grow it in my garden pond, as you can see. I will give more details on this unique rose while recounting our searches to locate this plant in the wild.

While on the general subject of India's natural heritage of roses it should be stressed that we are dealing not only with the specific species mentioned. There are within each species many variants, each distinctive and valuable. Sadly, this glorious heritage is in grave danger of extinction by misguided development efforts and the ever increasing conversion of forest land to farming.

I now proceed to take up the historical and cultural heritage of the rose in India. It has proved difficult to obtain precise information on the subject in the face of almost complete absence of written records, arising no doubt from the practice of passing information by word of mouth from guru to sishya. We are therefore left with certain legends which obviously pertain to very ancient times. In one, Vishnu and Brahma have an argument on whether the lotus or the rose is the most beautiful flower of all, and after Vishnu showed Brahma a rose bower in Vaikunt, Brahma was forced to agree that the rose was the fairest flower that grows. One of the earliest written records is the chapter in the Kamasutra (4th to 2nd century B.C.) titled 'Duties of a Virtuous Wife' where, one of her duties was to plant roses in the home garden.



There is thereafter an enormous gap in authentic written information, though we have discovered references, which could pertain to roses in Ayurvedic Charaka Samhita and other such works, as also the discovery of rose oil by Nagarjuna.

The first recorded reference is in 1287 when a prashasthi, an edict was issued by King Sarangadeva of the region near the original Somnatha temple in Gujarat, now submerged under the sea, which stated that the gardeners guild would be allotted land subject to the condition that it supplies 200 white roses and 2000 white oleanders everyday to the temple. This important edict carved on 2 stone

pillars was removed by the Portuguese Governor of Daman and Diu, and is now to be seen on the steps leading to a chapel in the garden of the heritage property called Penha Verde, in Sintra near Lisbon, Portugal. Girija and I visited Sintra last year and saw the two pillars with the Sanskrit writing heavily covered with lichen.



This edict is of great importance for the simple reason that it points to continuous flowering roses being grown in India much before the advent of the Mughals who are usually credited with bringing roses into India. Only a continuous flowering rose could yield flowers throughout the year. Since continuous flowering roses are invariably of Chinese origin, the white roses mentioned in the edict should have reached India from China much before 1287.



Another interesting written record is the diaries of two Portuguese travelers Domingo Paes and Fernaz Nunis, who visited the Vijayanagar Empire in 1537. They describe how the king is welcomed with white roses during the festival of Dussera. This is an old painting of a temple mandapam of the Vijayanagara era, re-touched recently.

The white roses, mentioned by travelers, which if they flowered around Navaratri time, in October, would have had to be continuous flowering kinds, of Chinese origin.



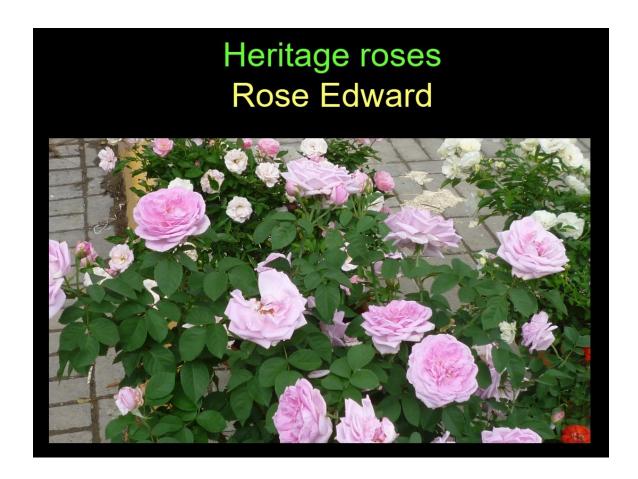
In the Mughal period we have of course many references to roses, starting with the Baburnama, Babur's autobiography where he speaks of bring in musk roses from central Asia to India.

Documents and books pertaining to the British colonial period also have many rose references, including a fascinating mention by a Mrs.Gore, in her book "A Rose Fanciers Manual", 1838, of tigers lurking in the shelter of giant bushes of red roses in the forests of Bengal.

This much on roses as part of India's cultural heritage from ancient times.

I will now describe 3 heritage roses which have been cultivated for several centuries and are still being grown. The first is 'Rose Edward', a pink, highly fragrant rose, a favourite for making garlands.

This is also called the 'Thanjavur Rose' as it was extensively cultivated in that area. It is quite widespread in India, we were delighted to see lovely specimens of the rose in the little town of Srinagar, the ancient capital of the kingdom of Tehri Garhwal, on the way to the valley of Flowers and Badrinath.



The origin of this rose has been traced to the island of Bourbon, now called Reunion, near Mauritius, in the Indian Ocean. Apparently hedges of 2 kinds of roses planted close together, one a highly fragrant damask-scented rose, and the other a continuous flowering, pink rose from China, resulted in a natural cross, and produced the Edward Rose, which is continuous flowering. Sadly the cultivation of this extraordinarily fragrant rose is slowly declining, even in Thanjavur.

One other rose, also popular for making garlands is what is called the 'Kakinada Red Rose'.

This is extensively grown in large areas of south India. There are similar roses grown in southern United States, in Bermuda, in Thailand and Malaysia. A DNA analysis of the US and Bermuda roses and our Kakinada Red shows that the three are identical which is a very exciting discovery and leads to many questions.



A third heritage rose is clearly of Chinese origin which I have nick-named 'Telengana Pink' as we came across it for the first time in Nizamabad District of Telengana.



Subsequently we found this rose in many parts of India and also, surprisingly, in Thailand, on a visit two years ago. A careful study of this rose by our Californian botanist friend, showed that this was a rose unknown to the western world, probably a direct import from China. One speculates that it could have reached south India in days of the Pallava dynasty, as there were close links between them and the countries bordering China.

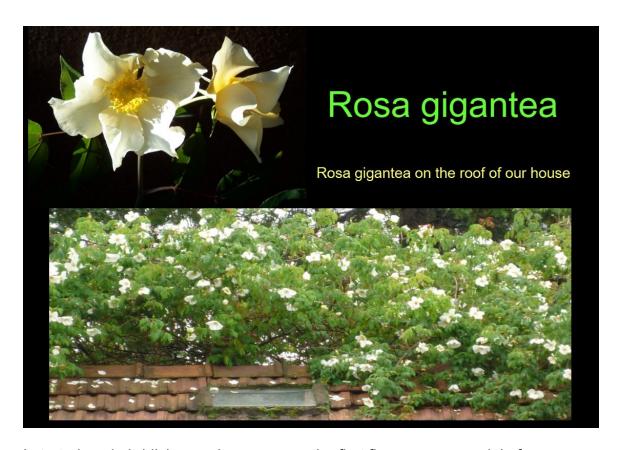
While these three are typical of the heritage roses which are still grown in India, there are numerous others .The important issue is, that, as in other countries, there is need to be aware of our own heritage roses, and take steps to conserve them. Otherwise, this aspect of our cultural heritage is likely to be lost. I have already mentioned how the area under the Edward rose has declined sharply.

Conserving India's heritage roes depends on Indian rose lovers recognizing their importance as they have stood the test of time, and can be grown easily in all parts of our country.

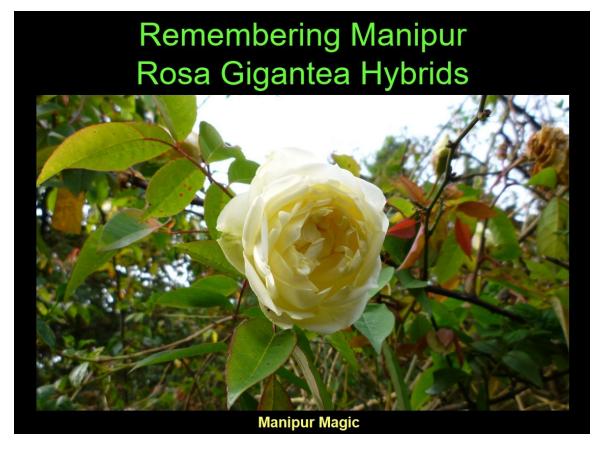
But there is another way of conserving heritage roses- the way of the famous English rose grower, David Austin, who has, over the years, raised a large number of modern roses which are closely related to the heritage roses of Europe. These roses, called English Roses, are very popular and those who grow them become aware of their origin from the ancient roses of Europe.

In the same way, Indian heritage roses, not only garden roses of the kind mentioned earlier, but India's wild roses could be utilized to produce a new range of roses suited for growing under Indian conditions. If we are to produce new roses of the heritage type it is necessary to bring in fresh genetic input, and the obvious way to do this is to use India's own wild species roses. Two of these species are eminently suitable in reaching this objective. They are *Rosa gigantea* and *Rosa clinophylla* mentioned by me earlier.

Taking up gigantea first I should clarify that getting the rose to start my work was not a simple matter of just ordering a plant from a rose nursery. The Indian form of gigantea (it grows in China and Burma too) is the most beautiful and has remained relatively obscure. So the only way to get a plant, was to collect it personally in the wild. The diaries of Sir George Watt, written in the 1880's, who had been in charge of surveying India's boundary with Burma in the Manipur region, spoke of his discovering this rose. He was rapturous in his description – growing to great heights in the Manipur forests, and flowering above the forest trees, and looking from a distance like golden magnolias (champakas). So to Manipur we went, in 1990. We started climbing a footpath on the slopes of Mt. Sirohi, which rises to a height of 5000metres. After traversing a distance of several kilometers we suddenly came across large plants of this rose, full of golden hips (fruits). This was the month of January, the dew lay frozen on the ground even at 11 in the morning. We collected some hips and some stems and a year later we had several plants growing in our Kodaikanal garden.



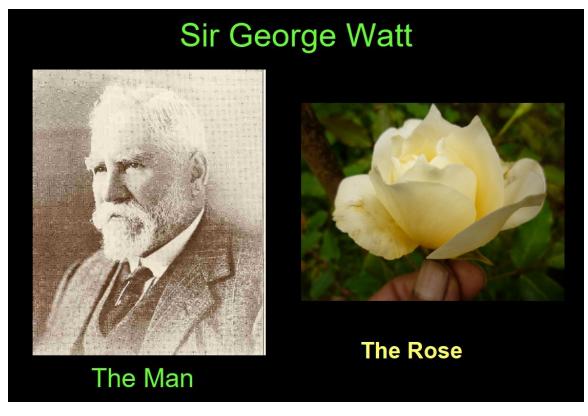
I started my hybridizing work as soon as the first flowers appeared, in four years time. Several rather nice roses resulted and I show you some of them.











I must tell you the story of the Sir George Watt rose. It all began when I decided to name one of my hybrids after Sir George Watt, who, apart from discovering the species gigantea in Manipur, had contributed greatly to India's development with his monumental 9 volume Dictionary of the Economic Products of India, published in 1906, still a work of reference today. He also curated the magnificent 1903 Delhi Durbar Art Exhibition.

We felt that it would be a most appropriate tribute, if the rose we had named for him be planted in the Dumfries area of Scotland to which he belonged and where he had settled and worked after returning from India. So a plant was sent with all documentation and planted in the Logan Botanic Garden in south west Scotland, in Dumfries region. We had got in touch with his descendants - 3 great grandsons, one in Scotland, one in New Zealand and one in the Caribbean, and a great granddaughter in Scotland. Two doctors who had worked with Sir George's grandson were also located. All this was possible because, through the Internet we got in touch with Morag Williams, the archivist of the Royal Crichton Hospital Dumfries, where Sir George had worked.



Last year we went on a sentimental journey to Scotland and taking along the Watt descendants, and the other friends, we drove to Logan to see the 'Sir George Watt' rose growing happily on a brick wall. Morag and we have also

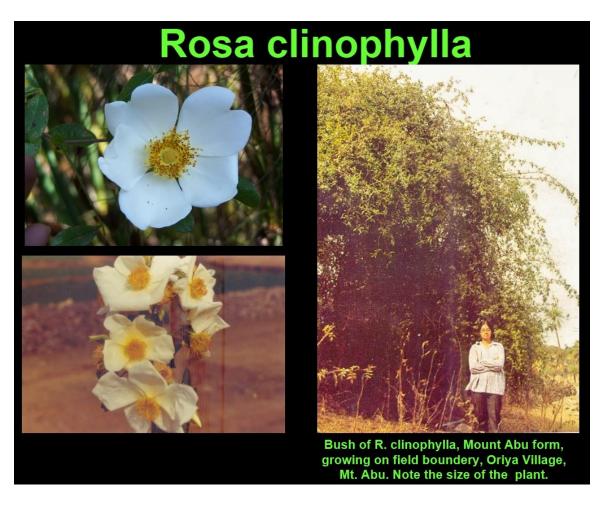
persuaded Mrs. Frances Wilkins, a well known writer with an interest in history to write the biography of Sir George Watt.

Apart from this rose, two other plant explorers, General Sir Henry Collett of the British Indian Army, who discovered *Rosa gigantea* in Burma, also in the 1880's, and Frank Kingdom-Ward who explored Manipur in the 1950s, looking for the same wild rose, have also had hybrids named for them by me.



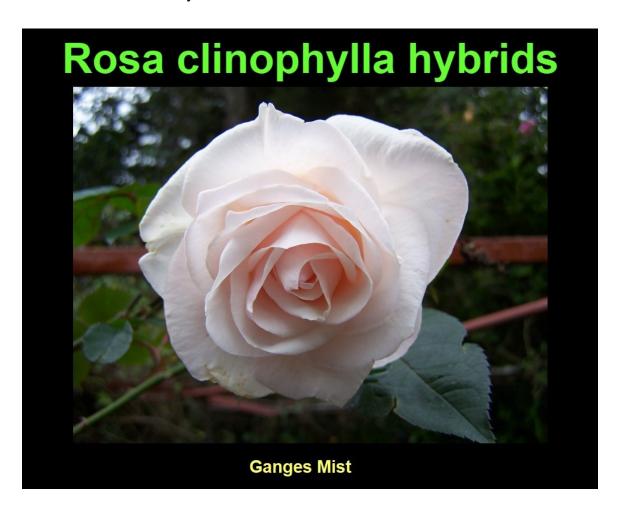
The search for the other rose species I am working with, *R. clinophylla* proved much more difficult. It was by sheer accident that we got our first specimen. A good friend, the late Narender Singh of Ranchi, was on a hunting expedition and had camped near a forest stream. Early in the morning he noticed a rose growing at the edge of the water and guessed that this must be the rose species we were looking for. He sent us some material and we were able to make some plants. We call this the Bihar form of clinophylla. Another clone, called the Bengal form came to us from Dr N.C.Sen of Asansol. He had got it from a well known horticulturist Shiv Prasad Bannerjee who had collected it from the banks of the River Padma, which branches off from the main River Ganga, near Murshidabad in Upper Bengal. The specimen in Bannerjee's garden was perhaps the only one in cultivation in the entire world. The species is now safe from extinction as we have ensured that it is grown in several countries around the world.





Apart from these Bihar and Bengal forms of this species, a more sub-tropical variant grows in Mount Abu in Rajasthan. Determined to secure this, an expedition was undertaken to Mt Abu in 1992. After several disappointing days of fruitless searches, when we decided to give up the quest, we suddenly came upon long hedges of this rose, near a lake, being used as field boundaries.

Working with this species was much more difficult than with gigantea, as clinophylla is genetically far removed from modern roses, but ultimately I have released several new hybrids.



I would like to say a few word about the plant heritage of the Palni Hills. I live in Kodaikanal, which is located on these hills. The Palnis are an unique eastward extension of the western Ghats, joining the main Ghats near Munnar in Kerala., and stretching into some of the driest parts of Tamil Nadu. Our hills have the highest rainfall in what is otherwise a very dry rain shadow area of Tamil Nadu. The southern slopes are an important catchment for the Vaigai River, the great river of Tamil folklore, now hardly recognizable as a river. The northern slopes

are the catchment for the Amaravathi, an important tributary of the Cauvery River within Tamil Nadu.



The great botanist and environmentalist, my good friend Fr K.M. Matthew always used to describe the Palnis as a giant overhead tank supplying water to some of the driest areas of south Tamil Nadu. After the Palni Hills Conservation Council was established in 1985, we coined a slogan 'the health of the hills is the wealth of the plains' keeping Fr. Matthew's observations in mind.

But my purpose is to highlight only the plant wealth of our hills. The range of species varies from typical tropical species in the foot-hills to typical temperate climate species on the upper plateau at 2000+ meters.

In the foothills is that most glorious plant of the lily family, Gloriosa Superba, sacred to Muruga, Lord of the Palnis.



This plant is under grave threat because of over-collection for medicinal purposes.

On the upper plateau we have, apart from *Rosa leschenaultina* mentioned earlier, a most unexpected plant – a rhododendron, something we associate with the Himalayas, rather then Tamil Nadu. This is *Rhododendron arboreum* with beautiful flowers.



On the same logic of preserving heritage plants by creating modern hybrids, I have bred several new rhododendrons

I must point out how lackadaisical is our approach to preserving the rhododendron, one of the jewels of India's range of ornamental plants. When I started this work I required pollen of some of the 80+ species which are to be found in the Himalayas. There was no Indian source for the plants or the pollen. But these plants were available in Scotland, grown from the collection of the eminent botanist Sir J.D. Hooker, about 165 years ago, mainly in Sikkim. Pollen from these rhododendrons in Scotland had traveled to the American Rhododendron Society, and I got the pollen from there. So, from India to Scotland to the USA and back to India.

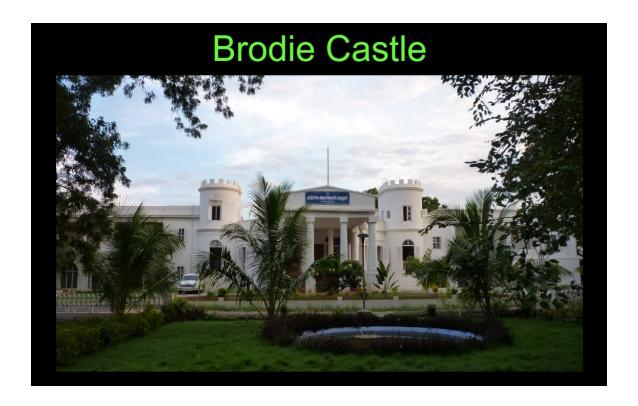




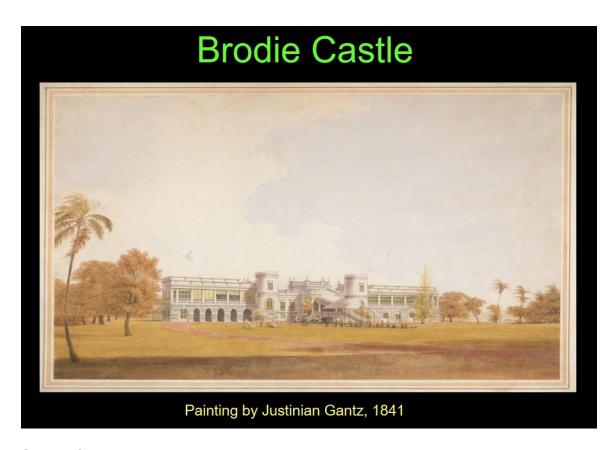




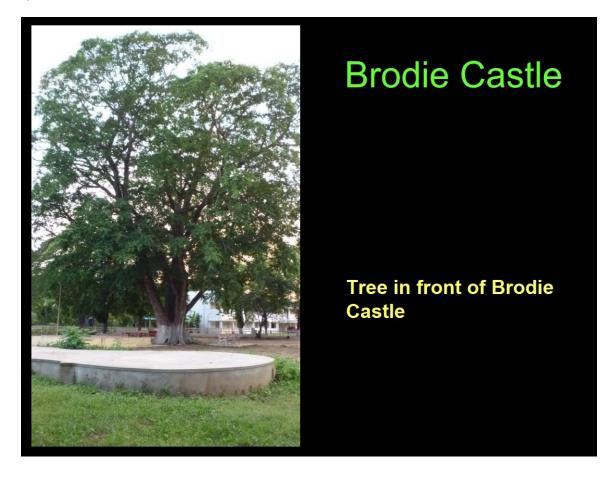
My last tale relates to a heritage building in Chennai. My interest in lilies brought me in contact with a world authority on lilies - Mr. Iain Brodie of northernmost Scotland. He is the Head, called Shennacie, of the Brodie Clan, an ancient historical family. We suddenly wondered whether the building called Brodie's Castle, on the banks of the Adyar River, which is now the Government College of Music, would have any connection with him.



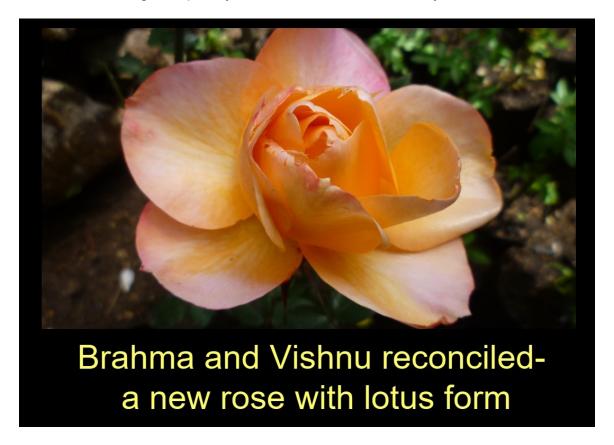
We sent him information taken from Mr. S. Muthiah's book on the heritage buildings of Madras. He was absolutely delighted as his records showed that one of his clan had worked in Madras. Step by step we unfolded the history of the building. Brodie Castle was built by James Brodie in 1798. He drowned or committed suicide in the Adyar River, perhaps due to the debts incurred in building this mansion.



Some of the trees, a mahogany and an Indian elm may possibly have been planted, when the castle was built.



We have a chapter of INTACH in Kodaikanal too and we have been busy the last two years in bringing out a book on the heritage of Kodaikanal, both natural and man-made heritage. Hopefully the book should be out this year.



I end by showing you a photograph of a new rose bred by me – perhaps the debate between Brahma and Vishnu has been answered by this rose which looks like a lotus!

Thank you.