

Power Point Presentation at the World Heritage Rose Conference at Chaalis,  
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## WILD ROSES IN INDIA AND THE HIMALAYAS

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All of us are aware of the world's biggest mountain chain, the Himalayas, which stretches for 2250 kms., from west to east in the extreme north of India, as also part of the neighboring countries like Pakistan, Nepal and Bhutan. The Himalayas are where most of India's wild roses are located. The distribution of these roses is significantly linked to the extreme variation in the Himalayan climate, from alpine desert in the extreme west, to Cherrapunji in the Khasi Hills in the eastern end, which has the world's heaviest rainfall.

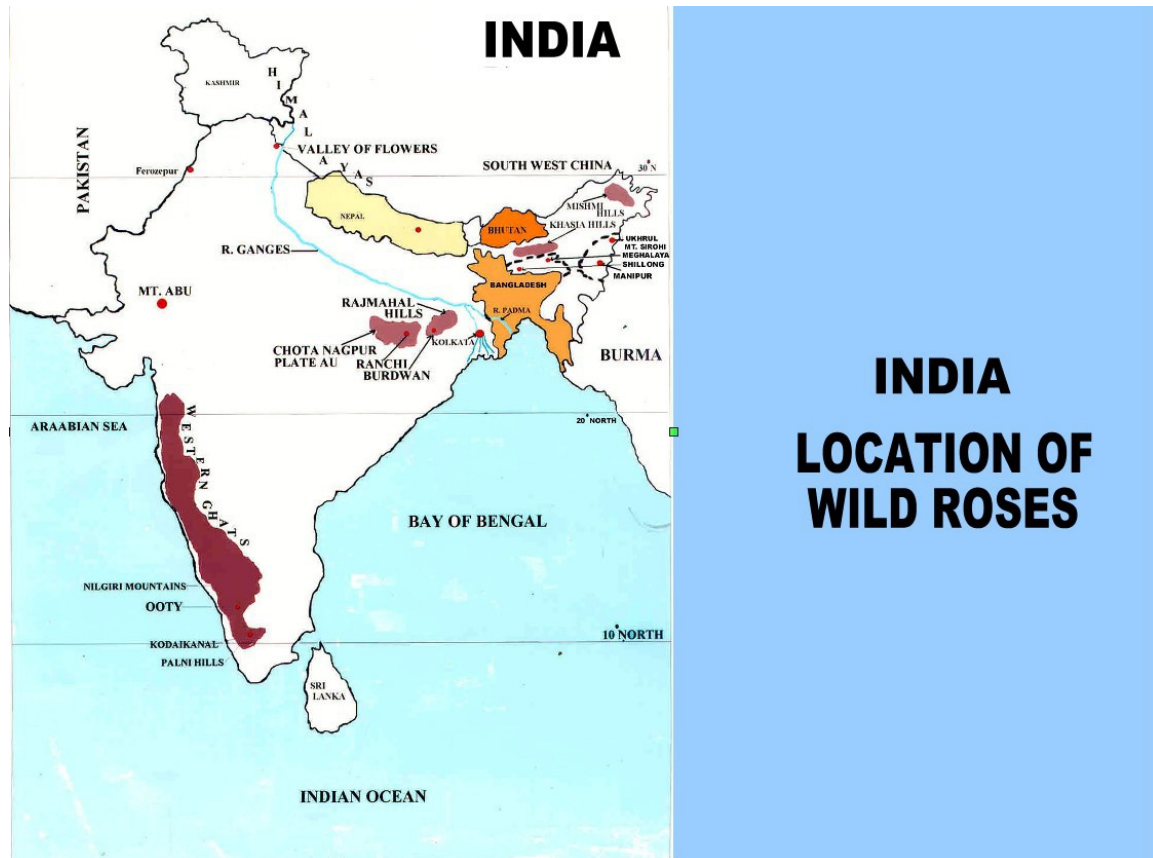
The non-Himalayan rose species include *R. gigantea* found most prominently in Manipur, *R. longicuspis* found in the Khasi Hills, as well as certain parts of the eastern Himalayas, *R. clinophylla* in the Rajmahal Hills and the Chota Nagpur Plateau in Bihar State, but also in many other places in the country.

*R. leschinaultiana* is the only other non-Himalayan species, found in the Nilgiri and Palni ranges of south India which are part of the Western Ghats, a mountain

range running north to south on the west coast of peninsular India for a length of over 1000 kms.

We will now consider the various rose species to be found in the Himalayas and in the rest of India.

The treatment is from the horticulturist's point of view, and taxonomic details are kept to the minimum.



### ***R. webbiana***

*R. webbiana* is the typical inhabitant of the semi-arid Western Himalayas. It is a shrub, reaching up to 2.5 meters with slender branches and straight prickles, leaves with small rounded leaflets and prickly leaf stalks. The flowers are borne in clusters of 1 to 3. It is a rose of unique, even fragile beauty, with lilac pink to dark pink flowers, contrasting admirably with the rugged rocky terrain of the region.

To quote Jack Harkness, it 'might be called the Fairy Queen of the wild roses for its sweetness and grace. The plant grows about head high, and trails its older shoots down to the ground, all neatly in the shape of a graceful lady in lacy crinolines. Lace is the right word too for an impression of the tiny leaves and dark

twigs. The little flowers are all delicacy in their pink petals and discreetly attractive perfume. Finally, the hips adorn the bush in the autumn, in the shape of pears held upside down. They are not large, for nothing about *R. webbiana* is aggressive; their size is sufficient to attract notice and hold admiration.'

The book, "The Family Rosaceae in India" by Ghora and Panigrahi refers to 2 additional varieties of *R. webbiana*, namely, *R. webbiana* var. *glandulosa*, a variant with red flowers found on the edges of the alpine zone in Kashmir, and *R. webbiana latifolia*.

Field studies are required to confirm the existence of these varieties at the present time.







**R. webbiana, lilac form**



**R. webbiana bush, Leh, Western Himalayas**





**R. webbiana  
in full flower,  
Lahaul,  
Western  
Himalayas**



**R. webbiana,  
painting by Alfred Parsons,  
in Ellen Willmott's "Genus Rosa"**

## ***R. macrophylla***

*R. macrophylla* is one of the largest flowered and most strikingly colored of the Himalayan rose species, with flowers ranging from dark pink to almost red. It forms an upright shrub reaching up to 5 meters with dark red or purple stems.

We had a dramatic introduction to this magnificent rose, in 1982, when climbing the footpath to the Valley of Flowers, an alpine valley in the Central Himalayas, at around 2700 meters elevation. Walking around a bend in the path, we were about to cross the icy cold waters of the River Pushpganga, (literally, 'flower Ganges') when we saw the reflection, in the waters, of the beautiful red flowers – a stunning sight indeed. It was a huge bush, covered with blooms.

The famous botanist, J. D. Hooker, called it 'the great red rose, one of the most beautiful Himalayan plants, whose single flowers are as large as the palm of the hand.'

Ghora and Panigrahi refer to 3 additional varieties of *R. macrophylla* in India. Apart from *R. macrophylla* itself, where the petals are pink to red, *R. macrophylla* var. *hookeriana*, with pink to white petals, var. *minor*, and var. *arguta* are mentioned. Here again contemporary field studies are required.



***R. macrophylla*, Central Himalayas**





**Hips  
of  
*R. macrophylla***



***R. macrophylla*,  
painting by Alfred Parsons,  
in Ellen Willmott's "Genus Rosa"**



### ***R. brunonii***

*R. brunonii* is the typical musk rose of the Himalayas, forming enormous climbing bushes at fairly low altitudes – around 1200-2400 meters, with hooked prickles and terminal clusters of many fragrant white to cream flowers. These are borne in tremendous bunches with that enchanting capacity of the musk rose, noted by the great rosarian, Graham Thomas, of wafting its fragrance in the air.

The foliage is also very handsome in some forms, especially the well know Brunonii 'La Mortola' where the leaves are a striking grey green.

We saw many bushes of *R. brunonii* on our 1982 trip, on the same footpath to the Valley of Flowers, at 1800 meters.



***R. brunonii*,  
Himalayas**



**R. brunonii,  
painting by Alfred Parsons,  
in Ellen Willmott's "Genus Rosa"**

### ***R. sericea***

This is the typical rose of the higher reaches of the Himalayas, quite widespread in distribution. It is a stiff erect shrub with leaves with small leaflets and solitary white to cream flowers. The plants can reach heights in excess of 4 meters. On the same route to the Valley of Flowers we could see bushes in large numbers, but only above 3000 meters.

It has the unique distinction of being four-petalled.

The large sized prickles – red and partly translucent, are a very attractive feature of the form *R. sericea f. pteracantha*.



**R. sericea,**  
**Central Himalayas**



**R. sericea,**  
**Himalayas**

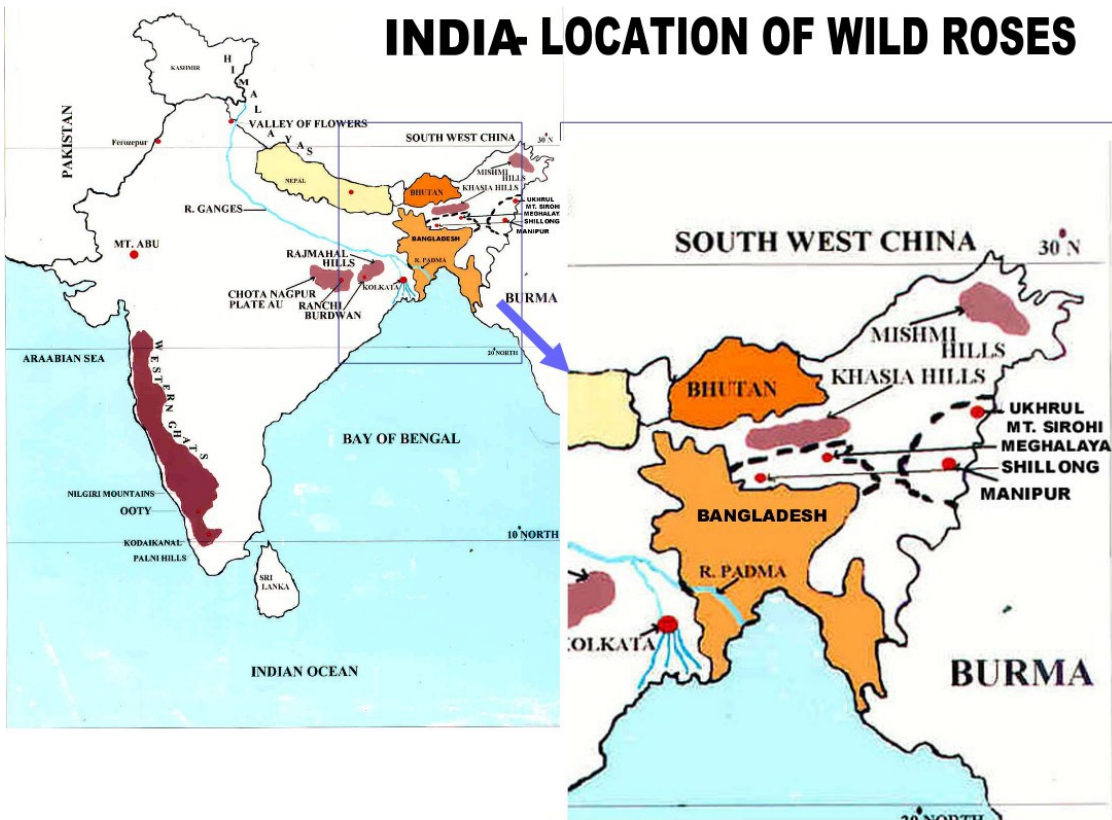




**Prickles of  
*R. sericea*  
*pteracantha*,  
Kumaon,  
Central  
Himalayas**

***R. longicuspis***

This is the typical musk rose of the Eastern Himalayas. We found it on the sides of a ravine on Shillong Peak in the Khasi hills around 2300 meters altitude. It is an extensive climber reaching well over 10 meters, with clusters of white flowers with a trace of pink and the most beautiful foliage – elongated and a shining dark green.



## ***R. gigantea***

This is perhaps the largest of all wild rose with the most extensive growth, up to 20 meters, the giant stems thicker than a man's arm, very large flowers up to 15 cms. across, and big round hips 2 ½ cms. across. The numerous prickles are also of giant size.

The five-petalled flowers are quite a deep yellow when opening, fading thereafter to ivory and cream. The yellow pigments seem dominant in the plant, as even the hips ripen to yellow rather than the more usual orange-red. And these hips are eaten by the locals. They are sold along with other vegetables and fruits in the bazaars in north-east India.

We found this plant at around 2200 meters on the footpath to Mount Sirohi, east of Ukhrul town in Manipur State, climbing into trees, which is their normal pattern of growth.

Sir George Watt, Surveyor General of British India, who first discovered this rose species in 1882, remarked that the flowers of the rose climbing through forest trees looked like golden magnolias, when seen from a distance! I like to think that the specimen we found was the same as did Sir George Watt !!!

Though Sir George Watt was the first to discover the species in Manipur, the name '*R. gigantea*' was first published by Sir Henry Collett, through M. Francois Crepin. Collett found the plant in the Shan Hills in Upper Burma, now Myanmar.

There has been some speculation whether there is any genetic difference between these two finds, arising out of the fact that the buds and flowers of *R. gigantea* Collett are white, whereas the plants from Manipur, to which the discoverer, Sir George Watt, gave the name *R. macrocarpa*, have flowers which tend more towards a creamy yellow, especially in the bud stage.

The location where the rose was found in Manipur, is about 5° further north, and altitude around 500 meters higher than the Burma specimen, which again may, or may not, be significant.

Interestingly, seedlings raised from seed collected in Manipur in the wild, show considerable variation in flower color especially in the bud stage. Some of plants bear buds of quite a dark shade of yellow, whereas others are cream. But these variations disappear at the fully open stage, where the flowers are cream. This perhaps indicates that speculation on whether the Manipur and Burma forms are genetically different are premature, in the absence of DNA studies.

Crepin himself considered the two to be the same rose. But we can hope that the Manipur type is at least marginally cold hardier.



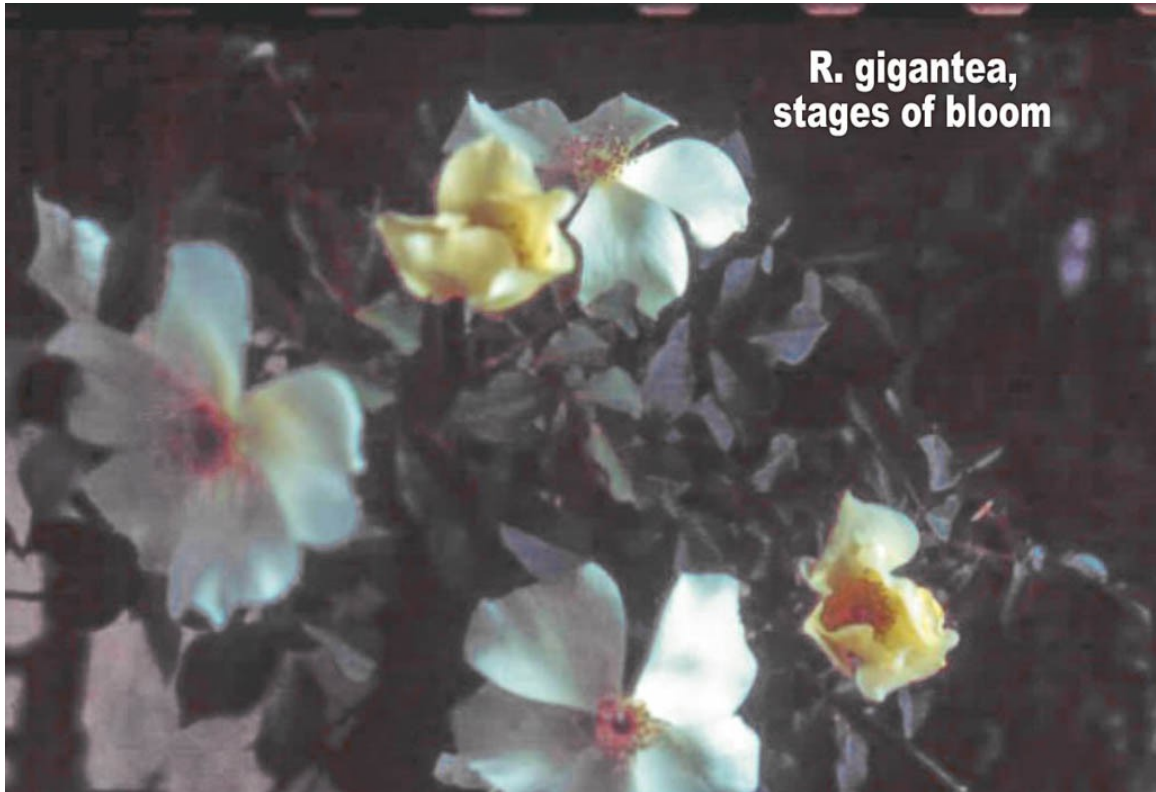
A feature of this rose, apart from the flowers, is the lovely foliage, evergreen but a compelling shade of bronze as it unfolds, maturing to a shiny dark green. Absolutely free of black spot or mildew.

In my garden, in Kodaikanal, *R. gigantea* has climbed the cypress trees, which are quite tall, 15 meters and more, and in the flowering season – which extends from November to February - makes a very attractive display indeed.









**R. gigantea,  
stages of bloom**



**R. gigantea, in full bloom**





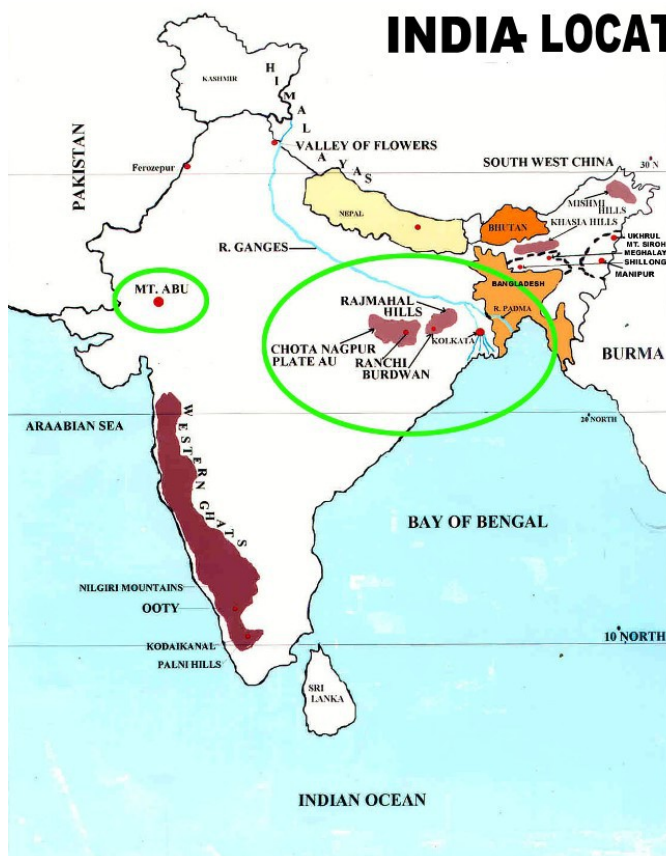
**R. gigantea, foliage**



**R. gigantea,  
on cypress tree**



**R. gigantea,**  
painting by Alfred Parsons,  
in Ellen Willmott's "Genus Rosa"



**R. clinophylla**  
Main endemic areas

## ***R. clinophylla***

In many ways *R. clinophylla* is one of the most distinctive of wild roses. First of all it is perhaps the **only** tropical wild rose, and found in India in places as far apart as the north-eastern states like Manipur and in the Kaziranga Wildlife Sanctuary in Assam; near Ranchi in the new Jharkhand State (earlier it was in Bihar State); in the Simlipal Wildlife Sanctuary in Orissa State; on the Eastern Ghat mountains in the border areas between Andhra Pradesh and Orissa states, as well as in Coorg area of Karnataka State in south India.

Sir George Watt has commented on how typically the species appears in fairly large numbers in restricted localities, and thereafter is nowhere to be seen for hundreds of kilometers, where conditions are apparently quite similar, and then it appears again quite suddenly.

The species is an upright semi-climbing shrub, reaching 4-5 meters with five-petalled white flowers and prominent golden anthers with the distinctive fragrance of acetone - nail polish remover!

Another unusual feature of this species is the fact that it is semi-aquatic and favors locations like the islands in the River Ganges, which are submerged under the flood waters for six months in the year, leaving only the tops of the plants visible, or the banks of streams.

We have grown it with water lilies in our garden. But the ideal location is where the plant is periodically flooded by flood waters which recede now and then.

There is an interesting account of the discovery of this rose by an Englishman, appropriately named Mr. Rose, who was Superintendent of Post Offices in British India, and who, while traveling in the course of his official duties, by boat, during the flood season, saw a rose coming out of the water. He collected the flower and some seeds, which later were identified as *R. clinophylla*.

We have two clones of this rose, one collected by my friend Mr. Narender Singh of Ranchi. He was on a hunting trip and had camped by a stream's edge and early the next morning, just as the sun was rising, he saw to his amazement, white roses at the water's edge.

The other form is the Bengal form, originally collected by the well known Bengal horticulturist, Mr. Shivaprasad Bannerjee. This was from an island on the River Padma which branches off from the River Ganges, near Murshidabad in West Bengal.

This species was carefully preserved by the late Dr. N.C. Sen and, at that time, was probably the only plant in cultivation.



The third form, also called *R. lyelli*, is found in the lower Himalayas around Kumaon, in Nepal, and in Mount Abu, a hill station at about 1200 meters in Rajasthan State, in western India.

We were able after much search to locate this plant growing in Oriya Village, in Mount Abu, at virtually the same point where it was originally located by G. King in 1888.

It differs from the eastern Indian forms in bearing flowers in corymbs, rather than singly.

From the taxonomic point of view, Ghora and Panigrahi indicate that apart from the type species, *R. clinophylla* is found in 2 other forms – *R. clinophylla* var. *glabra* and *R. clinophylla* var. *parvifolia*, where the leaflets are glabrous on both sides unlike the typical form where the leaflets are tomentose, woolly beneath. According to this authority, var. *glabra* has flower up to 5.5 cms. across, whereas in the var. *parvifolia* the flowers are much smaller – 2 cms, and the leaflets, as can be imagined, also smaller. The flowers of the typical *R. clinophylla* are in between in size.

As regards *R. lyelli*, which is treated as a separate species by taxonomists, the most striking differences are the prickles which point downwards, and the flowers being produced in corymbs 3 to 7 together unlike the solitary flowering habit of *clinophylla* which has prickles pointing upwards.

The great taxonomist, M. Francois Crepin was of the opinion that *R. lyelli* was a hybrid of *R. clinophylla* with *R. moschata*, in which he included the Himalayan *R. brunonii*.

A word on the hips of *R. clinophylla*. These are round and woolly (tomentose) outside, and quite light in weight, confirming that the distribution of these is through water, which correspond to the typical flood plain habitat.

The narrow, shining evergreen foliage as well as the involucre which surround the buds are a feature of *R. clinophylla*. The species is closely related to *R. bracteata*.

**Typical habitat of *R. clinophylla* in Bengal**



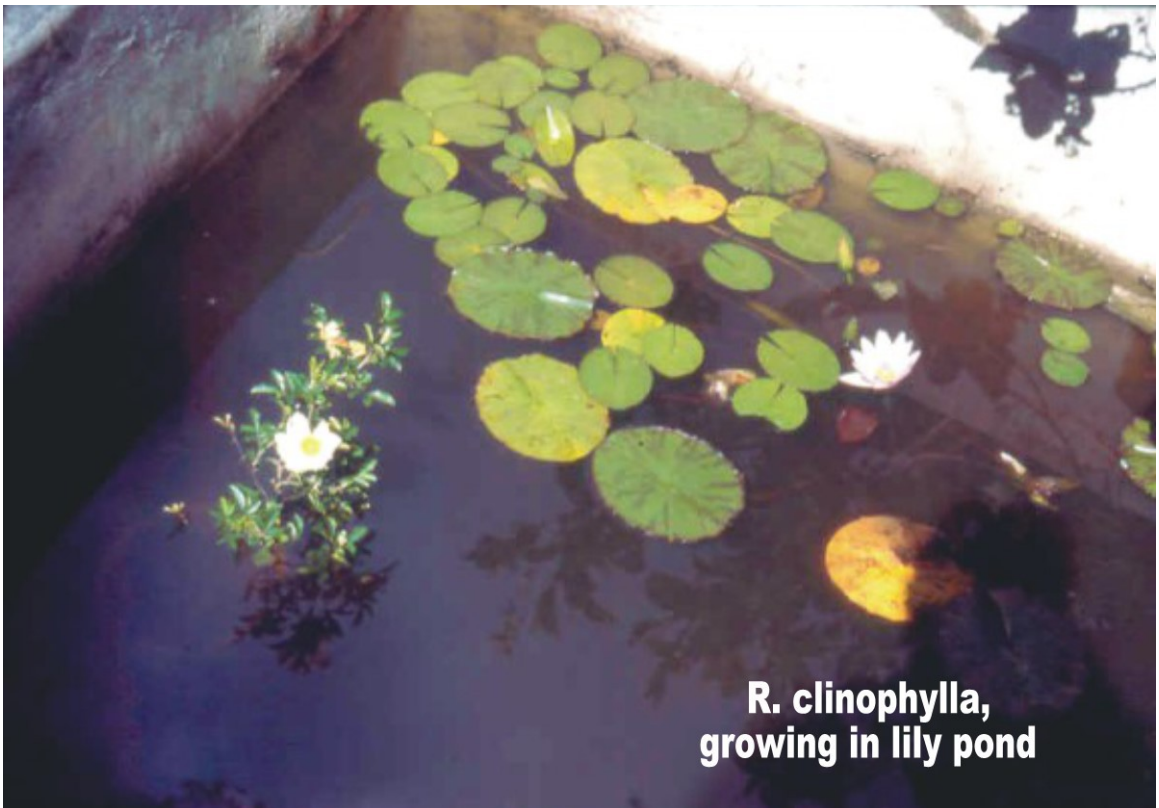
***R. clinophylla***







**R. clinophylla**



**R. clinophylla,  
growing in lily pond**









**R. clinophylla,  
from  
Chota Nagpur  
Plateau**



**R. clinophylla, from Bengal**



**R. lyelli / clinophylla,  
Mt. Abu, Rajasthan,  
at 1000 mts.**



**R. lyelli / clinophylla,  
fully grown bush,  
Mt. Abu, Rajasthan**





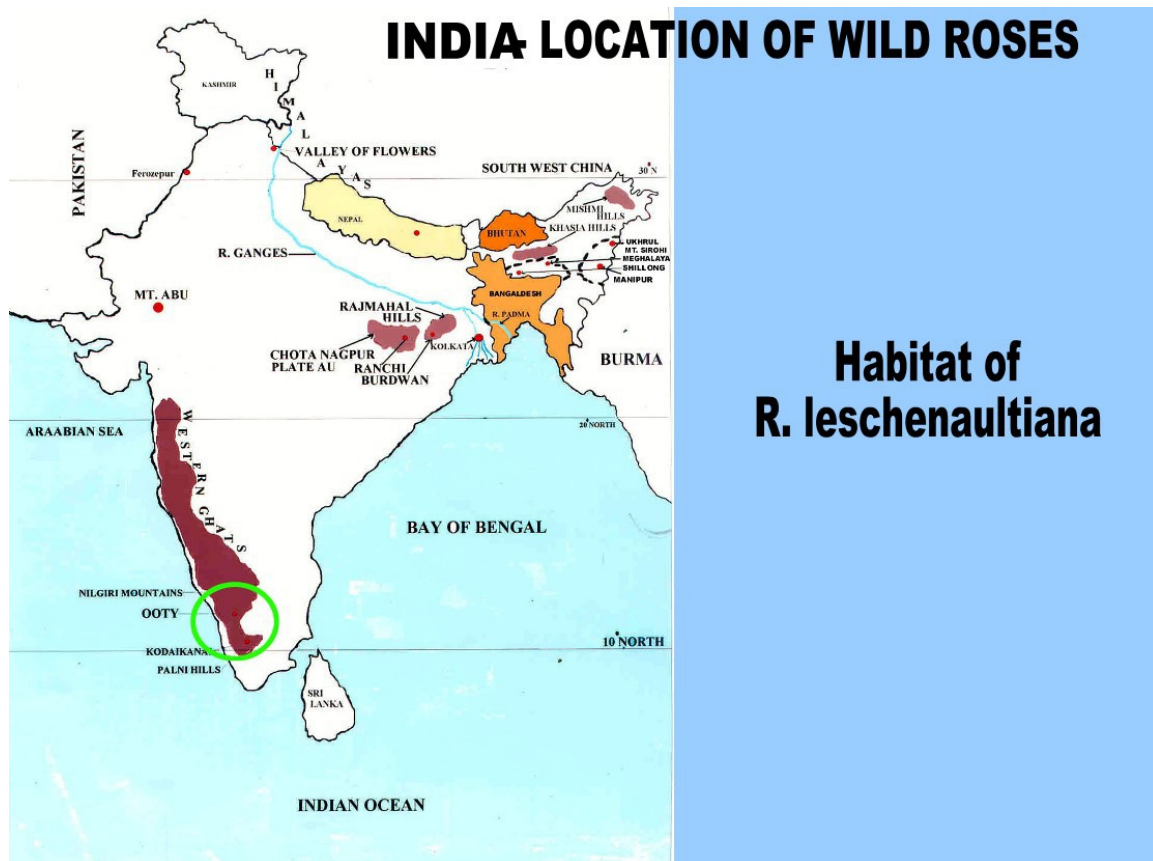
**R. clinophylla,  
painting by Redouté**

## ***R. leschenaultiana***

This rose species, one of the southernmost representatives of the musk rose clan (the alternate name is *R. moschata leschenaultiana*) is endemic to the Nilgiri and Palni Hills, which are part of the Western Ghats range. It is an extensive armed straggler reaching up to 10 meters, forming impenetrable thickets in the native forests. The flowers are quite large by musk rose standards and are very showy, 7 1/2 cms. wide.

A distinctive feature are the purple stems.

This species is named in honor of the French botanist, Leschenault de la Tour, who visited India in the 1810's, collected many plants, and sent them to the island of Reunion and France.





**Western Ghats landscape**



**Western Ghats landscape  
close up**







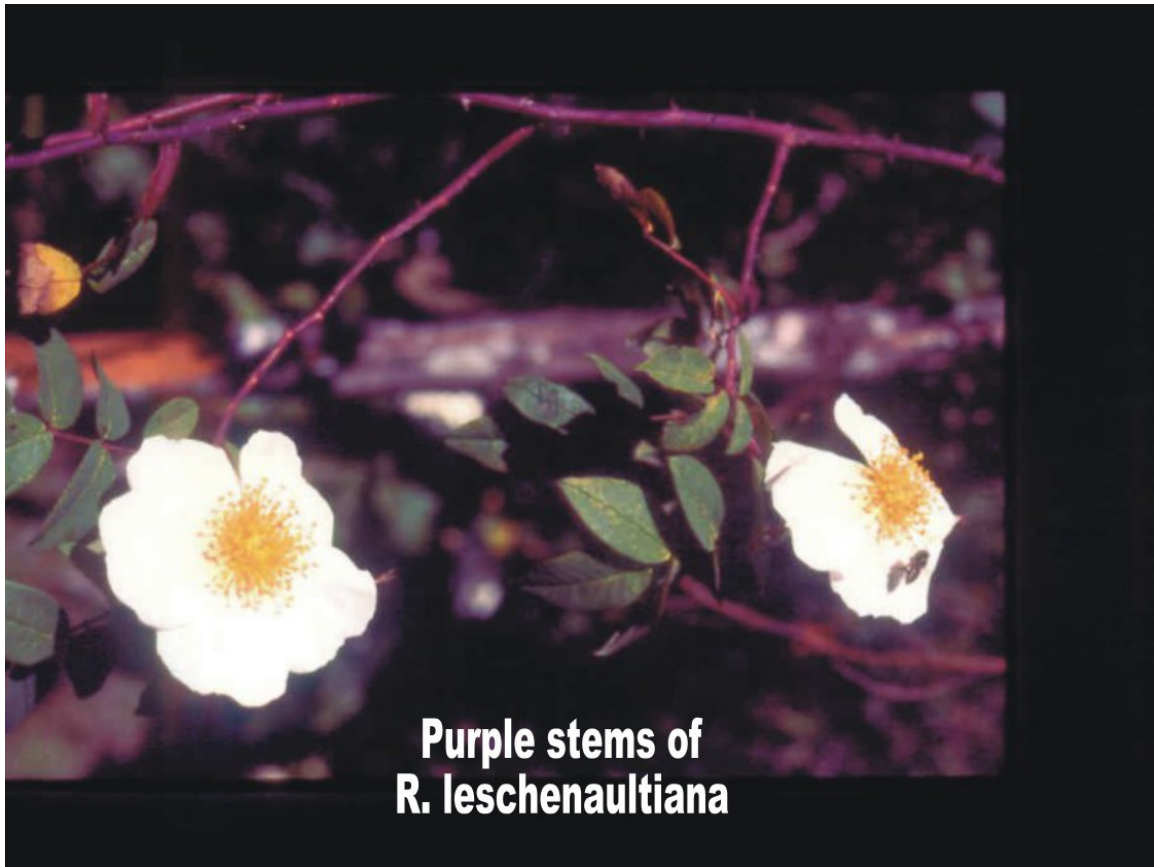


**R. leschenaultiana**  
close up



**R. leschenaultiana**  
blooms





### ***R. ecae***

So far I have dealt with roses which are typically to be found in India, but there are several others, where the Himalayas and India may not be the center of distribution but where the provenance extends into our country.

One such rose is *R. ecae*, the typical golden rose of Afghanistan, which extends into Kashmir and Ladakh.

This is a wiry bush with flowers of a most attractive shade of bright yellow.





**R. ecae,  
painting by Alfred Parsons,  
in Ellen Willmott's "Genus Rosa"**

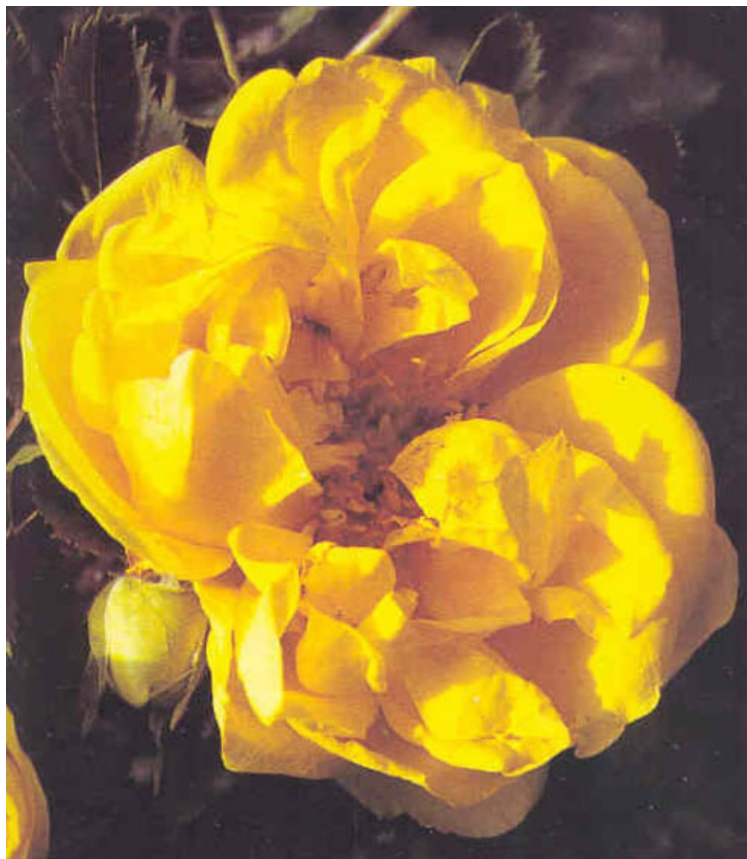
### ***R. foetida***

Kashmir and the higher reaches of Himachal Pradesh are also home to the golden rose of Persia, now Iran, *R. foetida*. The double flowered mutant of this rose, *R. foetida* var. *persiana* is, as you know, in the background of the golden and bi-color roses of today, through the pioneering work of the great French hybridist, Pernet Ducher.

Apparently *R. foetida* var. *persiana* may be a natural mutant, as Mr. Luciano Arcangeli reported sighting several plants in completely uninhabited parts of the extreme northern Himalayas, where a possible natural mutant with cerise red to crimson red flowers is also found.



**R. foetida,  
Lahaul,  
Western Himalayas**



**R. foetida persiana**





***R. foetida persiana*, pink, Gulmit Valley,  
Northern Kashmir, Himalayas**



***R. foetida persiana*, red, Gulmit Valley,  
Northern Kashmir, Himalayas**





*Rosa foetida*

**R. foetida,  
painting by Alfred Parsons,  
in Ellen Willmott's  
"Genus Rosa"**

### ***R. laevigata***

*R. laevigata* is probably an introduced rose as it is a native of southern China. But, curiously enough, also naturalized in southern U.S.A. One of the most beautiful of wild roses with large, up to 8 cms., white flowers with prominent golden anthers, it has perhaps the most beautiful of all rose foliage – trifoliate and a lovely shining green. A very healthy plant which is widely adapted to even the conditions of the plains of India, thriving in places like Kolkata and Delhi.







**R. laevigata in Nakanoshima Rose Garden, Osaka, Japan**



**R. laevigata foliage**

### ***R. banksiae***

This again is an introduced rose, native to southern China, but well adapted to Indian conditions. In the Himalayas it is common in gardens near towns like Shimla and is a very popular plant in the Palni Hills and Nilgiri Mountains of southern India.

It is an extensive climbing bush capable of reaching roof tops. The branches are unarmed.

There are two forms which are common. *R. banksiae* var. *banksiae*, with double white flowers and violet scent, and *R. banksiae* forma *lutea*, with clear yellow flowers.







**R. banksiae lutea clusters**



**R. banksiae var. banksia**

***R. moschata* (*R. glandulifera*)**

A fairly common cultivated rose in India, perhaps introduced by the Mughal Emperors, is the true *R. moschata*, as distinct from *R. brunonii*, the musk rose of the Himalayas. This was known as *R. glandulifera* in the past.



***R. glandulifera* (*R. moschata*),  
painting commissioned  
by William Roxburgh,  
Calcutta Botanic Garden,  
late 19th century**

***R. indica semperflorens***

The ever blooming form of *R. chinensis*,, *R. chinensis* var. *sempervlorens*, (Slater's Crimson China) is commonly cultivated in Indian gardens. Some authorities consider that this rose has been cultivated in India for several centuries. Giant bushes could be found, almost growing wild, in the past. A Mrs. Gore, who wrote 'The Book of Roses – The Rose Fancier' Manual' in 1838 and which seems to rely heavily on Monsiuer Boitard's "The Manuel Complet", 1836, says. "in vast thickets of the beautiful *Rosa semperflorens* (a native also of China) the tigers of Bengal and crocodiles of the Ganges are known to lie in wait for their prey".





***R. indica semperflorens*,  
painting commissioned by  
William Roxburgh in 1867,  
Calcutta Botanic Garden**



***R. chinensis*,  
painting commissioned  
by William Roxburgh,  
Calcutta Botanic Garden,  
late 19th century**

In addition to the species mentioned above, Ghora and Panigrahi list the following as also to be found in the Himalayan region:

1. *R. rubiginosa (eglanteria)*
2. *R. nanothamnus*
3. *R. beggeriana*
4. *R. hemispherica*
5. *R. platycantha*
6. *R. souleana*
7. *R. bracteata*

But as I mentioned earlier, while these roses occur, the Himalayas cannot be considered to be the center of their distribution and so I will not deal with them.

In conclusion it should be stressed that field work on the present status of rose species in the Himalayas is conspicuously lacking. There is every need to undertake these studies before the progress of civilization wipes out genetic diversity. Those who have the good fortune to look at our wild roses in the great mountains of the country will easily realize why I had called them "The Aristocrats of the Rose World" in a previous article.

Thank You.

**THE END**