

Species Roses – An Introduction

Introduction I celebrate the Species Roses, how they have contributed to the roses of yesterday and today and what they might contribute to the roses of tomorrow.



When it comes to “heritage”, Species roses are the most ancient. They are the ones whose genes can be found in every other rose, old, new and unknown or found. They are the true heritage of roses. They are the alpha and omega of roses. I remember when we visited the collection of Species roses in the Timaru Botanical Garden in 2005 as

part of the pre-conference tour en route to Dunedin for the international conference, many whizzed through with a ho-hum attitude, but I was happy to spend a long time there wondering what some of these fascinating roses might bring to our world of roses. I was one of those weirdos, who revel in their intrinsic beauty and find them interesting plants in their own right.

The Genus Rosa: Roses are part of a large family of plants, the Rosaceae (which means its members are “like roses”), and includes almonds, apples, apricots, blackberries, cherries, cotoneaster, hawthorn, mountain ash, peaches, pears, quinces, raspberries, roses and strawberries...about 90 altogether. Blackberries I can believe, but strawberries???

Roses are one genus of this group of plants which are known as Rosa. Rosa is a family of plants which are generally shrubs or climbers with prickly stems. Their leaf stalks do not bear a single entire leaf, but several leaflets in an odd number, arranged in pairs with a single one at the top. Where the leaf stalk meets the stem is a pair of green growths known as stipules. Roses have many stamens and pistils, and form a fleshy seed pod. Their seeds are like little nuts, with a woody shell and an interior skin about the kernel...and there are many more things we could cite as defining characteristics.

Types of Roses: Roses can be divided into three broad groups, Modern, Old Garden and Species or Wild Roses.

It may seem as if the rose goes back to the first day of creation, but in fact the rose is a late bloomer. The Genus first appeared less than 35 million years ago and took time to diversify. Species or Wild roses are native to the entire

northern hemisphere (and so they are exotic plants here in Australia), but it is in Europe and the Near East that the love affair with roses really began. The plants of antiquity and the Middle Ages are known to us, but only through imprecise records. It was only beginning with the universal language of botany in the eighteenth century that reliable information has become available concerning hybridisation and extinction.

Species Roses: “Let’s start at the very beginning, a very good place to start” or so the song begins. Species Roses are the original roses occurring in the wild (they are also known as Wild Roses) as different from each other as lions and tigers, but having obvious common characteristics. They are each different and distinguished from each other Species by their ability to reproduce their unique characteristics from generation to generation, and should breed true from seed fertilised and borne by themselves. So writes Jack Harkness (UK, 1918-1984). (Having said that, we may note that M. S. Viraraghavan (India) has indicated he detected some variation in plants grown from seed collected from a plant of *R. gigantea* found in a forest where it was isolated by distance from other plants that could not have accidentally been crossed with it.)

At the time of writing his 1978 book, *Roses*, Jack Harkness considered there were most likely in the vicinity of 130 pure Species Roses. The latest thinking is more towards 180, of which I have been able to note at least 30 that have been used in the breeding of Modern Roses. That leaves a large number into whose genes we have not yet tapped. While Species Roses are the most ancient, the footprints from the past, they also are the keys of the doors to the future with respect to roses. Those that have been used have contributed something special to modern roses. The admired “HT form” came from the elegant, high-pointed buds of *R. gigantea* and repeat blooming from *R. chinensis* hybrids.

Some facts about Species Roses: Most Species Roses are single (referring to the type of bloom rather than the habit of blooming). A single rose generally speaking has 5 petals (not to be confused with a rose which flowers singly, meaning one bloom per stem). Species Roses are most often spring (or summer) blooming only, with only a few exceptions, *R. chinensis* hybrids and *R. fedtschenkoana* (which



is included in the background to **Autumn Damask**) being two which are remontant. It was not until the introduction of the China Roses into Europe in the 18th century that Europeans became aware of real remontancy (blooming more than once per season) with roses.

Most Modern Roses have 28 chromosomes...and are known as tetraploid, which is, having 4 sets of 7 chromosomes. Most Species roses have 14 (called diploid or having 2 sets of 7 chromosomes), although this may vary up to octoploid, or 8 sets, that is 56 chromosomes. These affect how readily the Species Rose may cross with one of the Modern Roses. They vary from small bushes to massive shrubs and ramblers, draping themselves from the branches of trees.



Left – unknown species rose growing into tree (NZ)
Above – *R. watsoniana* TRATT (Sangerhausen)

Discovering Species Roses: I became interested in Species Roses when I first encountered the whole world of roses in Australia and New Zealand Good Gardening's, *Roses*, bought from my local newsagent back in the 70's; it was my introduction to Old Garden and Species Roses. I wondered at *R. banksiae lutea*, the brilliance of *R. ecae*, *R. foetida bicolor*, *R. foetida persiana* (the parent of our modern brightly coloured yellows and oranges etc), *R. stellata mirifica* with its gooseberry-like foliage and prickly buds and hips, *R. omeiensis pteracantha*, with its 4 petalled blooms and "winged thorns", and the foliage and hips of *R. rugosa*. Who needs holly at Christmas time with such beauty? They began another adventure in the world of roses for me. Their unusual foliage, decorative thorns and large hips make them curiosities worth growing to excite the imagination about the possibilities they may bring into the genetic mix of Modern Roses in the future, not to mention disease resistance and the vigour an infusion of new genes may bring etc.



Above left – *R. ecae*; right - *R. moyesii*
Centre – *R. filipes*
Bottom left – *R. rugosa typica* hips; right - unknown