

**The Orange Botanic Gardens are open daily from 7.30am till dusk**

**Admission is FREE**

- Off street car parking available
- Toilet facilities are available
- Dogs on leads are permitted
- Bike riding is not permitted in the gardens
- Guided tours for large groups are available on request
- Playground and BBQ facilities are available at the adjacent Orange Adventure Playground

**FOR FURTHER INFORMATION CONTACT**



**Orange Visitor Information Centre**  
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Orange Botanic Gardens .  
**the species**  
**ROSES**



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## ACKNOWLEDGEMENTS

1. Beales Peter, ROSES, 1992; Harper Collins.
2. McFarland Co., MODERN ROSES 8, 1980.
3. Phillips Roger and Martyn Rix, ROSES, 1988, Pan Books
4. Thomas Graham Stuart, ROSE BOOK, 1984, Saga Press/Timber Press
5. Piccin, THE ROSES OF THE BOTANICAL ROSE GARDEN "CARLA FNESCHI"

# introduction

## Orange Botanic Gardens | The Species Roses



Heritage Roses in Australia Inc held a conference in Orange in the Spring of 1995 and the theme for that event was 'Species Roses - In The Beginning'. It was a known fact then that few people were knowledgeable on the subject of heritage roses and that even fewer knew about the rose species, even amongst members of the Society. In order to introduce members to these roses it was decided that one of our members, who owned a heritage rose nursery, would grow a plant of each rose species available at that time in Australia and these plants, grown in pots, would be displayed at the conference venue. As it was unlikely that many, if any, of the roses would be in flower for the three days of the conference, the nurseryman, an amateur painter, volunteered to produce a botanical painting of each rose to be displayed alongside the plant and this was done, the plants and paintings being donated to the Orange Botanic Gardens on the completion of the conference.

Roses belong to the biological family Rosaceae, which includes most of the berry and stone fruit plants. The genus *Rosa* which includes all roses, is divided into four subgenera *Simplicifoliae*, *Hesperodos*, *Platyrhodon* and *Eurosa* (*Rosa*); in turn *Eurosa* is further subdivided into ten sections according to predominant characteristics and recognisable relationships. This follows the most widely accepted existing source 'Manual of Cultivated Trees and Shrubs edition 2. 1940 by A Rehder'.

The number of rose species in the world varies according to the authority being studied, but the generally accepted figure is around 120, any figure above that will probably include a number of natural and man made hybrids. As roses occur naturally in the northern hemisphere only, all of the species plants grown in Australia have been introduced following the landing of the first fleet in 1888. With that in mind, it is possible that there will be those who will dispute the authenticity of a particular rose in the Orange collection and this cannot be avoided. The plants were collected from the best available sources and considered by most to be authentic, although where a plant is thought to be a hybrid, closely related to the particular species, this is denoted by the title being designated R x . . .

To define a species of any genera, will depend upon who is consulted on the subject and *Rosa* is no exception. The definition that is generally accepted by most for roses is that the flowers shall be simple with 5-petals (or 4 for at least one species) and that the plant can reproduce true to form from seed; in modern gardens, crammed with so many roses of different classifications, this can sometimes

be a problem. A recent report in an English rose journal lamented that it is becoming impossible to obtain authentic plants of some of the species due to natural hybridisation occurring between garden roses and wild roses over the two to three thousand years that roses are known to have been cultivated. It should be pointed out that natural hybridising must have occurred over the millions of years that roses have been around in order to produce so many different species; which could be the reason for the natural vigour and widespread distribution of the genus. With the rose being a natural creation following the development of flowering plants around 150 million years ago, there must be many species that have died out over this prolonged time period and this protracted time could account for the hybrid vigour exploited today by rose breeders around the world; although the intense hybridisation of some classifications of roses over the last century is showing over exploitation in recent years and the need to return to the species parent plants, to reintroduce hybrid vigour.

In the wild, roses reproduced primarily through the production of seed, although there are some known also to increase naturally through suckering or layering, such as the *rugosa* roses and hybrids. When roses were introduced to cultivation and hybridisation it became necessary to produce clones of the original plants and this was done primarily by taking cuttings; this can be notoriously unreliable with roses bred from many of the species, but those species that layered or suckered readily also produced roots readily from cuttings and it was found that by grafting, or budding onto these rooted cuttings, new plants could be produced. Therefore in the text and on most of the paintings, the preferred method of cultivation of each species is noted. It is recommended that where a species plant is grafted or budded onto an under stock, unless it be from a strong suckering plant, the graft or bud be buried when planting out; this will encourage the species to form roots and to eventually grow independent of the under stock.

There may be discrepancies between the text on the paintings and the descriptive text accompanying it: the descriptive text will be the authority. It must be emphasised that the Orange collection of the species roses represents around half of the known species in the world and hence the text is not exhaustive and one subgenus *Simplicifoliae* is not mentioned.



## Subgenus Hesperhodos

### *R. stellata* var. 'Mirifica'

**Synonyms:** The Sacramento Rose, The Gooseberry Rose.

**Native to:** The dry country of SW USA

**Chromosome count:** 14

and are around 40mm across. The red hips are hairy and reminiscent of gooseberries.

This attractive small rose is unfortunately difficult to grow in anything but a warm, dry climate, with sporadic winter rainfall and it is very difficult to propagate. Heavy summer rains with water-logging will kill the rose and in east coast areas it would be best grown in a tub, with easy draining soil and only sporadic, light applications of fertilisers. It would be best grown in South Australia and the desert country in western Victoria or in southern Western Australia. Propagation should be from cuttings in a fairly dry atmosphere and with the minimum of water. The growth buds are too small to bud onto an under stock and it takes for ever to grow from seed.

(Page 2. Photo No 4)

This rose, together with the species *R. stellata* is a native of dry, rocky places up to some 2,000 metres elevation occurring in western Texas, southern New Mexico and northern Arizona, growing around the Grand Canyon [not Mexico, as stated on the Painting]. The rose was originally found growing in the Sacramento mountains and hence the synonym and the subgenus title Hesperodos is from the greek, meaning 'Rose of the West'. It was introduced to cultivation in 1916. This variety is stronger growing and less twiggy than the true species, it grows to around 1.2 metres in a compact bush and is well armed with long, fine prickles; the small wedge shaped leaflets in groups of 3 are deeply toothed towards the apex and generally less than 10mm long. The flowers occurring singly in late spring, are pale magenta, often deeper at the centre without bracts

## Subgenus Platyrhodon

### *R. roxburghii*

**Synonym:** *R. microphylla* also the Burr or Chestnut Rose

**Native to:** China and Japan

**Chromosome count:** 14

This rose was introduced to cultivation 1908 as *R. microphylla*, but was renamed *R. roxburghii* soon afterwards, when it was realised that it was the true species plant of the rose that was then sold under that species name; the original rose was then renamed *R. roxburghii* Plena, which is now known to be a garden variety originating from Canton and found growing in the Calcutta Botanic gardens c. 1814 [this rose is the subject of the following painting].

The rose forms a large shrub with angular growth to around 2.5 metres high and across. The stems have flaking, buff coloured bark (hence the subgenus title Platyrhodon from the greek meaning 'Rose with papyrus-like bark') with pairs of straight prickles below each leaf node, making it a plant to be handled whilst wearing strong gloves, to prevent injury. The foliage is most attractive with up to 15 small leaflets to a stem varying from 5 to 20mm long that gives the plant a delicate appearance and it is ever-green in the Australian climate. The mid spring flowers vary in colour from nearly white to deep lilac rose; they are around 60mm across and the stem and calyx are prickly, as are the resulting hips. The hips tend to remain green and drop off early (it is reported by some that the hips are edible).



The rose can be propagated from cuttings, but as it has a strong tendency to sucker and form a large thicket, garden plants are usually propagated by budding onto an under stock, suitable for the region and should be planted with the bud union some 50mm above the ground.

The rose will tolerate poor soils and shade.

(Page 3. Photo 23)



## Subgenus Platyrhodon

### *R. x roxburghii Plena*

**Native to:** The rose is known to be a garden rose originating in Canton and found growing in Calcutta Botanic Gardens.

**Synonym:** Burr Rose

period; in good seasons blooms can be seen for 9 months of the year, all borne singly and they have a strong, sweet fragrance. This rose is reputed to be less vigorous than the species, but in all other respects it has the same features; flaking bark, straight prickles, small multiple leaflets and prickly calyx and hips. It will grow to around 2 metres high and across and can make a very attractive hedgerow or controlled feature in the garden, as it is amenable to clipping. As a hedge it can be grown from cuttings, but feature plants should be on budded under stock, to avoid suckering. The sweet scented flowers are carried on short stems with pale pink outer petals framing a mass of small central petals of deep pink with a lilac tint.

The rose will tolerate poor soils

(Page 4. Photo 39)

Around 1814, [there is some confusion about this date and some quote 1824] when this rose was first introduced there was a tendency to endow all exotic plants with latinised names and the Burr Rose was no exception. Linnaeus's treatise 'Species Plantarum' had been published in 1753 and botanic novelties from Asia were all treated as species with wonderful sounding names. This rose was named after the Curator of the Calcutta Botanic Gardens, William Roxburgh and was to enjoy the title *R. roxburghii* until the true species was introduced in 1908. The title of the rose quoted above, which differs from that on the painting, should satisfy Linnaeus scholars, although we have no idea of the origins of the rose.

This double form of the rose makes a wonderful garden plant as, although it never exhibits a mass of flowers it does discreetly flower over a very long

## Subgenus Eurosa (Rosa) banksianae

### *R. banksiae normalis.*

**Native to:** Central and Western China

**Synonym:** None

**Chromosome count:** 14.

The rose was introduced to Europe in 1796 and planted at Megginch Castle garden on Tayside, Scotland where it seldom flowered and remained unrecognised; cuttings taken to Nice in 1905 flowered, the rose identified and the rose released for cultivation. The double white form of the rose was introduced to Kew gardens from Canton in 1807 and named after the wife of Sir Joseph Banks; the double yellow form was introduced from China in 1824 by John Parkes. The common names of these two roses respectfully: *R.x banksiae* 'Alba' and *R.x banksiae* 'Lutescens'. The yellow species form of the rose *R. Banksiae lutea* was introduced from Nice in 1870. The double forms and the single yellow are frost hardy in Australia, but the subject rose is reluctant to flower when planted in the cooler regions of the Great Dividing Range.

All forms of *R. Banksiae* are strong growers and can form rampant evergreen climbers up to 15 metres high, hence they will require heavy pruning in most garden situations. When pruning, bear in mind that the rose flowers on two year wood and heavy pruning of current season and last season growth will limit flowering in the spring. Graham Thomas recommends that when pruning it is best to concentrate on cutting back a percentage of five year, or older wood each



year, say 25% and so leave plenty of younger wood to flower in the spring. With all rampant climbing roses there is always a fair proportion of dead wood to be removed at pruning time and this can present a problem where the rose is growing on a pergola or wall, as the new growth will often come to be supported on the old dead wood and this can become a major operation to remove if left for a number of seasons.

*R. banksiae normalis* flowers in early spring in small umbels along the two year or older canes, the small sweet scented and delicate white flowers are around 30 mm across and can repeat randomly in the autumn. The smooth, slender leaflets, 3 to 5 on a stem are around 60mm long and with only slightly serrated edges; the leaf stems are without stipules at the cane junction. On young growth the bark is green, with older wood displaying heavy grey coloured bark which is often split, there are few prickles which are more usual on mature wood and the small round hips are 5mm across and mature to a dull red colour.

The rose is usually propagated from cuttings, taken in late spring, following flowering and it is best taken from canes of the previous season's growth, as the older wood can be reluctant to root.



## Subgenus Eurosa (Rosa) *Laevigatae*

*R. laevigata*

**Native to:** South China and Taiwan

**Synonym:** Cherokee Rose

**Chromosome count:** 14

up to 6 metres high and spread (in fact there used to be specimen in the Kiewa Valley in Northern Victoria that grew some 15 metres up a gum tree in a wooded garden and in late winter could be seen flowering out of the top of the tree canopy from the roadway), the other problem can be the hooked prickles, which occur in abundance along the canes. The rose also appears to be a host for powdery mildew, although this does not appear to affect the vigour or flowering ability of the rose. The rose is difficult to grow from cuttings and is best budded onto an under stock.

The pale green bristly hips, with retained sepals, persist on the plant and later turn light brown, they tend to be few in number, due to the early season flowering in most areas, are fairly large and elongated. The smooth dark green, mostly slender leaflets 40 to 50mm long are generally in groups of three, occasionally five, are evergreen and the stems are without noticeable stipules. The bark is light green and the reddish brown prickles tend to be hooked.

(Page 6. Photo 30)

The rose name *laevigata*, meaning smooth to the touch, refers to the upper surface of the leaflets. This tropical, evergreen rose is one of the first roses to bloom in spring, although it is frost tender and will not flower in the colder areas of South East Australia. The rose was discovered around 1759 and was grown primarily in Southern Europe, it being too frost tender to be grown in the north, including England. The rose was probably introduced to North America in the late 18th century by the Spaniards, where it naturalised in the Southern States and eventually became the State Flower of Georgia. If space is available this is a rose well worth growing for its fabulous display of flowers in late winter; the single, white flowers, up to 90mm across are produced on spur growth along the canes at each bud node at a time when little else is in flower in the garden. But there are a few draw backs to this rose; the first being the physical size that can be attained:

## Subgenus Eurosa (Rosa) *Laevigatae*

*R. x cooperi*

**Native to:** Myanmar

**Synonym:** Cooper's Burmese Rose

**Chromosome count:** 14

Not much is known about the origins of this species as seeds were sent back to Ireland by Roland Cooper in 1923 taken from a plant in a garden in Burma (now Myanmar) from which this rose was eventually produced and released in 1927. It was similar to *R. laevigata* but whether it was a natural or garden hybrid is unknown. The plant in Orange Botanic Gardens is from a cutting taken from a plant then growing in a rose garden at Macquarie University in the Northern Suburbs of Sydney in the 1980s and identified as *R. x cooperi* and not *R. laevigata*. The differences being that the rose has reddish brown and not green bark, softer leaves, often with 5 leaflets, looser flowers that become spotted pink as they fade, the rose flowers later than the species and often repeat flowers later in the season and also the hips are red and the plant is more frost tolerant.

Possibly using modern technology, the origins of this rose can be established, but for now the mystery remains. Like *R. laevigata* this rose is best propagated by budding onto an understock.

(Page 7. Photo 11)





## Subgenus Eurosa (Rosa) *bracteatae*

*R. bracteata.*

Native to: South East China and Taiwan

Synonym: The Macartney Rose

Chromosome count: 14

The single, white flowers are produced singly and in profusion; are around 80mm across, with heart shaped petals, highly fragrant and have a wonderful central array of golden stamens; the flowers being produced almost continuously throughout the flowering season, one of very few of the species roses that repeat flower. The stamens are retained on the top of the hips after the petal drop and turn red. The calyx is surrounded by numerous hairy bracts (see above) and the hip is also hairy and quite insignificant, falling off quite early.

In the garden the rose is often grown as an espalier against a wall or trellis or over some other support, where it can spread up to 6 metres; without support it will grow into a spreading mound. The growth is similar to that of a rambling rose and the twigs are covered with a grey, downy bark with pairs of stout, hooked, reddish brown prickles at each node, with smaller prickles along the stem. The foliage is unique, being glossy, dark green on the upper surface and grey green and downy on the under side; the leaflets are 5 to 11 to a stem often blunt at the apex, up to 25mm long and resistant to the common rose leaf diseases; the leaf stem has a small stipule and small prickles along the back. Being evergreen, even without flowers the rose is attractive in the garden.

(Page 8. Photo 35)

## Subgenus Eurosa (Rosa) *pimnellifoliae*

*R. ecae*

Native to: Central Asia from Afghanistan through to Northern China

Synonym: *R. x xanthina* var. *ecae*

Chromosome count: 14

The subgenus section name *Pimponellifoliae* is a latin-like word meaning- 'with leaves similar to those of the herb pimpernel'. The rose was gathered in Afghanistan and introduced to cultivation by Surgeon-Major Aitchison in 1880. It requires a sunny, dry situation to prosper and can be difficult to establish in the wetter areas of Australia, where it could possibly be grown in a tub in full sun but sheltered from the rain. The name reflects the Latinised initials of the finder's wife E.C.A.

A branching, suckering shrub, it grows to some 1.5 metres in the wild and perhaps 2.5 metres in a dry garden. The rose has a very angular growth with reddish bark and straight, flat prickles; the leaflets are small (up to 5mm long), 7 to 9 to a stem and greyish green, giving the rose a fernlike appearance, the stipules are long and slender. The spring flowers are intense buttercup yellow, 20-30 mm across, slightly fragrant, produced singly and with non-overlapping petals. The hips are 5-7mm across, round and dark red. The rose is usually propagated by budding onto a suitable under stock, although this can be difficult with the stems being fine and the buds small.

(Page 9. Photo 26)





## Subgenus Eurosa (Rosa) *pimponellifoliae*

*R. foetida*

Native to: Southwest Asia – Turkey to Pakistan

Synonym: Austrian Briar

Chromosome count: 28

From the above it is obvious that *R. foetida* will grow well on the drier parts of Australia and particularly in winter rainfall areas, where it will grow 2.5 metres high by 1.5 m across. The smooth reddish brown stems have few straight greyish, slender prickles, with leaflets 15 to 40mm long 5to9 to a stem, dull green on both sides and the leaf stem stipules are slender. The spring single flowers are produced singly, around 60mm across and the golden petals often suffused with red, the prominent stamens are the same colour as the fresh petals. The flowers grow on fairly long stems; to some the fragrance is heavenly but to others overpowering.

The true rose is rare in cultivation in Australia and a large flowered hybrid with blooms growing on short spurs along the cane is often passed off as *R. foetida*. In cultivation the rose is usually budded onto a suitable understock.

(Page 10. Photo 2)

The rose was introduced to cultivation prior to 1542 and is best known for its large, golden yellow flowers and sickly, sweet fragrance. The rose is fairly common in the British Isles but rarely grown in Australia. It is also well known for its double flowered hybrid known as The Persian Double Yellow Rose, which was used by French rose breeders to introduce the golden yellow colour into modern roses around the close of the 19th century. In the natural growing area of *R. foetida* the summers are very short and comparatively dry, requiring the rose to make new growth, flower and set seed in the space of around 3-4months, so that the foliage requires little protection against fungi and the cultivated plants are prone to defoliation due to black spot and mildew infection. Up until the late 20th century most modern yellow hybrid roses suffered from serious defoliation during periods of prolonged rain; more recent hybrids have been bred to overcome this deficiency.

## Subgenus Eurosa (Rosa) *pimponellifoliae*

*R. hugonis*

Native to: Central China

Synonym: Golden Rose of China, *R. xanthina*

Forma. *hugonis*, Father Hugo's Rose

Chromosome count: 14

This rose was raised at Kew Gardens from seed sent back from Western China by Father Hugh Scallon in 1899 and was named *R. hugonis* after the originator, but the rose has since reproduced variably from seed and is now thought to be a natural hybrid of *R. xanthina* x *R. sericea* and hence the second of the three synonyms should be the true name, although most authorities still list the rose under the original name. The name *xanthina* is from the greek meaning 'golden yellow flowers'.

The rose grows naturally in the dry river valleys of Central China, where it makes a bush up to 2.5 metres, here it flowers in early May, the colour varying from pale to bright yellow. In Australia the small, cupped, slightly fragrant flowers appear early to mid spring, singly on spur growth along the long arching canes, the flowers vary in size from 25 to 35 mm across; the small red hips are around 5mm across The reddish brown to grey canes have few prickles, which vary from slender to fairly wide and flat; the foliage is delicate and fern like with 5 to 7 pale green leaflets up to 10 mm long. The rose is tolerant of poor soils, where it will be slow growing, but can make a large shrub on good soil, where it can appear quite spectacular in spring and has autumn colouring later in the season. The rose is usually cultivated by budding onto a suitable understock.

(Page 11. Photo 34)





## Subgenus Eurosa (Rosa) *pimponellifoliae*

*R. primula*

Native to: Asia from Turkistan to Northern China

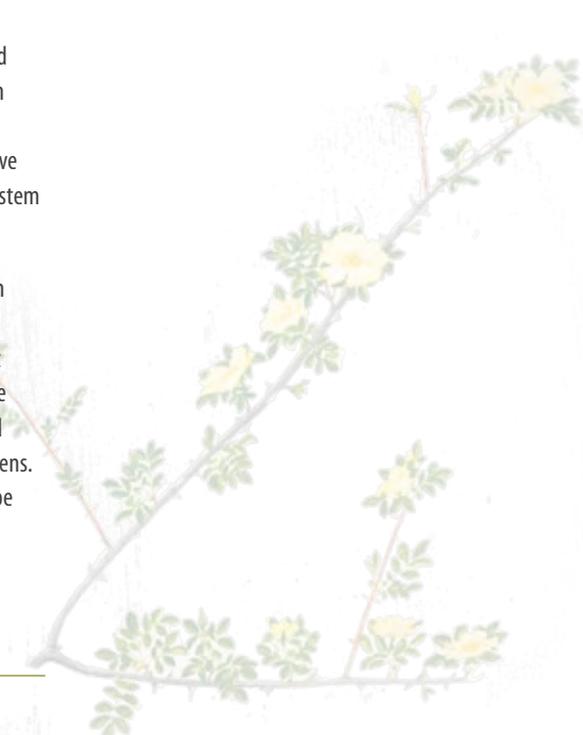
Synonym: Incense Rose

Chromosome count: 14

The name *primula* is from the latin meaning 'first to start' (blooming). This rose was originally raised in England from seed collected near Samarkand in Central Asia by F. N. Meyer in 1910. The synonym refers to the aromatic young foliage which can have up to 15 dark green leaflets around 12mm long to a stem and is rather fern like with long narrow stipules.

The plant is a tall shrub to 2.5 metres with reddish brown young canes with red straight prickles and silver grey mature wood with similar coloured flat prickles. The flowers are produced singly along the canes and are pale yellow, up to 30mm across and are strongly scented with prominent golden stamens. The rose can be propagated from cuttings or can be budded onto a suitable understock.

(Page 12. Photo 42)



## Subgenus Eurosa (Rosa) *pimponellifoliae*

*R. sericea pteracantha*

Native to: Western China

Synonym: *R. omiensis pteracantha*

Chromosome count: 14

'sericea' is from the latin meaning 'like silk' referring to the raw silk colour of the flowers and 'pteracantha' is from the greek meaning 'thorns shaped like wings'. There is much confusion about the correct nomenclature of this rose as many still list it under *R. omiensis*; also some list *omiensis* as a subspecies of *sericea*, but our title at the head of the page is the one most usually used. Also there are various forms of the rose growing in the wild, which only increases the confusion.

The main feature of this form of *R. sericea* is the translucent red wing prickles on red stems of the current season's growth, which becomes the silver grey prickles and stems of the mature growth. The young stems are much sort out by florists for flower arrangements and many plants are grown in plantations around the world for just this purpose.

The rose was introduced from China in 1890; it grows to around 3 metres tall and is an upright shrub, the foliage is smooth, dark green with up to 15 leaflets to a stem; the leaflets are 10 to 15 mm long and the stipules are small. The flat prickles vary from triangular with a sharp point to a flat wing up to 40mm long, again with a sharp point at the apex, there are also hairs and bristles along the stems. As with all the roses under this species, the



flowers have four petals, they are white, up to 40mm across and borne singly, with a slight scent; the hips are oval, red and quite attractive. The rose tolerates poor soils, has autumn foliage and is usually propagated by budding onto a suitable under stock.

(Page 13. Photo 3)



## Subgenus Eurosa (Rosa) *pimponellifoliae*

*R. pimponellifolia altaica*

Native to: Central Asia

Synonym: *R. spinosissima altaica*, *R. s. 'Grandiflora'*

Chromosome count: 28

'altaica' indicates that the rose originated in the Altai Mountains on the border of the old USSR and Western Mongolia. The rose was brought into European horticulture around 1818 and is a splendid garden shrub growing to 2 metres or more in good conditions and as much across. Botanically it is grouped with the Scots Briar Roses with its delicate foliage and maroon black hips.

The mature wood is dark brown with many bristles and slim prickles and the current seasons growth reddish brown with many slim prickles of the same colour. The foliage is small with up to 9 light green, round topped leaflets each between 5 to 10 mm long and the stipules insignificant, giving a good autumn show of colour. The shrub can become quite dense and is often used for hedging. The spring flowers are white with pale yellow on opening, borne singly around 40mm across and the small round hips around 8mm across are maroon black. The rose is usually propagated from cuttings.

(Page 14. Photo 25)

## Subgenus Eurosa (Rosa) *caninae*

*R. canina*

Native to: Throughout Europe

Synonym: Dog Rose.

Chromosome count: 35, 42 or 34

The Dog Rose was in cultivation prior to 1732 and is to be found in hedgerows throughout the British Isles and has also naturalised in parts of North America and Australia. The rose is claimed as a parent of the original Alba roses, which are known to have existed in medieval times, a probable cross with a Damask rose. Today it is quite variable in its flower colour and size, although the foliage, growth and hips are fairly consistent. Although not used very often these days, it was at one time the only under stock for rose growers. It is tolerant of shade and poor soils and is a good hedgerow plant.

The bush can be quite large growing with long arching canes up to 5 metres with a spread nearly as much; the young growth is pale green, aging to silvery grey and can be almost without prickles, although some plants can be well armed, the prickles are strong and curved. The smooth grey green leaflets are 5 - 7 to a stem and up to 25mm long; the highly fragrant flowers produced singly or in groups 2 - 5 are up to 50mm across and can vary in colour from pure white to pale pink with white centre and complete pale pink. The sepals reflex and fall of as the flower ages and the pink to red hips are oval, around 8mm across, and have been used as a source of vitamin C since antiquity. The rose is usually propagated from cuttings in summer using the current season's wood.

(Page 15. Photo 49)





## Subgenus Eurosa (Rosa) *caninae*

*R. glauca*

Native to: Europe

Synonym: *R. rubrifolia*, *R. ferruginea*

Chromosome count: 28

40mm long and tapered to a point; the stipules are red and pronounced. The spring flowers are fragrant, mid pink with white to cream centres up to 50mm across, with golden stamens and in sprays of up to 7 blooms; the sepals long and sometimes leafy are retained on the 8mm across elongated red hips. The rose is usually propagated by budding onto a suitable understock.

In poor soils, where this rose does not prosper a Canadian hybrid from 1930 named Carmenetta can be tried. The rose was crossed with *R. rugosa* and hence has more prickles but the general form and colourings are retained to a large degree, although the flowers are larger and more numerous.

(Page 16. Photo 31)

Painters and floral artists are attracted to this rose with its reddish brown bark, red hooked prickles, bluish green foliage and pink and white flowers. It is generally found in the mountainous parts of Europe, although it is not common. It was introduced to cultivation in England prior to 1830.

The rose forms a large, upright shrub up to around 4 metres tall, although it is often given support in the garden to prevent the arching canes overshadowing the rest of the plants. The current season wood is reddish brown with red hooked prickles and the mature wood dark brown tending grey but without prickles. The foliage is of a unique glaucous colouring; in shady places the leaves are usually broad, luxuriant and greyish green, with a hint of mauve, whilst in clear sun they are smaller and suffused with a rich coppery mauve tint. The leaflets are 5 to 7 to a stem and up to

## Subgenus Eurosa (Rosa) *caninae*

*R. rubiginosa*

Native to: Europe, naturalised in parts of North America and Australia

Synonym: *R. eglanteria*, Sweet Briar

Chromosome count: 35, 42

*rubiginosa* is from the latin, meaning 'of rusty colour' and referring to its bristles. The rose has been in cultivation over a long period of time and is mentioned by Shakespeare and other poets as 'Sweet Eglantine', so it was probably around in gardens prior to the 15th century; it has always been renowned for the apple aroma when brushed against (akin to the scent of Granny Smith apples in Australia). The plant is a noxious weed in some areas of Australia, where it is generally listed as 'Sweet Briar'.

The rose is tolerant of poor soils; being prickly it can be used for hedging as the bushes can become quite dense and in particular if trimmed regularly and it can make a good subject in a tub. It is a spreading bush and can grow to 3 metres high with stout hooked prickles, bristles and hairs. The leaflets are 5 to 7 to a stem, are rounded, up to 20mm long and well toothed, hairy below, are mid green and have long, narrow stipules. The flowers are produced in small clusters along the canes and have long leafy sepals on the buds, the petals are a mid pink, lighter at the centre and the flowers up to 50mm across with a strong scent. The oval hips are red around 12mm long and make a good autumn display well into winter. The rose is usually propagated from cuttings.

(Page 17. Photo 8)





## Subgenus Eurosa (Rosa) *carolinae*

*R. Carolina*

**Native to:** The Northeast States of USA and Southeast Canada

**Chromosome count:** 28; rarely 14

spread out behind the petals, the flowers are up to 60mm across, lilac pink with golden stamens, fragrant and often borne solitary. The round, red hips are up to 12mm across and carry the long sepals at the apex.

(Page 18. Photo 18)

This rose is normally found wild in the higher country of Eastern USA growing in poor soils, where it will not exceed 1 metre high; in cultivation it will grow to around 1.5 metres; it was brought into cultivation around 1826. Like other roses in this subgenus it has autumn coloured foliage. There is often confusion between this rose and *R. virginiana*, which flowers later in the season and has much lighter pink flowers.

The rose is free suckering grown on its own roots and will form a large clump if left unchecked, for most gardens it should be budded onto an under stock. The stems are upright and green, but they colour to reddish brown in hot sun; the pairs of prickles at the nodes are straight and fine; the leaflets, usually 5 to 7 to a reddish stem, are up to 40mm long, oblong with fine serrations and light green, with good autumn colours and the reddish stipules are long and slender. The early spring flowers have long leafy sepals, which

## Subgenus Eurosa (Rosa) *carolinae*

*R. foliolosa*

**Native to:** Southern USA - Prairies of Texas, Oklahoma and Arkansas

**Chromosome count:** 14

*foliolosa* is a latin adjective, meaning 'with lots of leaflets'. Most authorities list this rose as low growing to 0.5 to 0.9 metres, but the form available in South East Australia grows to around 1.5 metres - in all other respects it is in conformity (changed growing conditions?). The rose is free suckering and is best budded onto under stock. It was brought into cultivation in 1880.

It is an upright grower with green to brown stems and has few fine, straight prickles; the foliage with 5 to 7 leaflets to a stem is pale green, long slender leaflets are up to 30mm long by around 6mm across with autumn colouring and the stipules are long and slender. The spring flowers are borne singly or in sprays of 3 with long sepals, up to 40 mm across, vivid cerise pink with golden stamens. The red hips are round, about 4mm across; the sepals drop off when the petals drop.

(Page 19. Photo 29)





## Subgenus Eurosa (Rosa) *carolinae*

### *R. nitida*

**Native to:** North America, from Newfoundland and Quebec to Southern New England.

**Chromosome count:** 14

*nitida* is a latin adjective, meaning 'limpid looking' and refers to the leaflets. This rose grows naturally in bogs, wet thickets and the edges of ponds and will thrive in Australia under similar conditions, although it can be grown successfully in garden conditions if water is kept up and is a valuable garden plant for its other attributes. The rose was brought into cultivation in 1807. It is a suckering shrub up to 1 metre high and to control the spread of the plant under normal garden conditions will require budding onto an under stock.

The upright young canes of this rose are red and densely covered fine red prickles, bristles and hairs, which age to grey brown. The foliage is shiny dark green, with rich autumn colouring and the leaflets 7 to 9 to a stem are long, slender and pointed, up to 40mm long and 12 mm across and the stipules are long and slender. The flowers are deep rose pink, solitary or in small clusters and with a fragrance similar to lily-of-the-valley, up to 60 mm across and with golden stamens; the long 'slender sepals are retained on the hips, which are red and round and up to 15mm across.

(Page 20. Photo 10)

## Subgenus Eurosa (Rosa) *carolinae*

### *R. palustris*

**Native to:** North America, Florida and Arkansas north to Quebec

**Synonym:** The Swamp Rose

**Chromosome count:** 14 rarely 28

As the synonym suggests, this rose is to be found in bogs, wet thickets and on the edge of ponds and lakes, where it suckers readily (*palustris* is a latin adjective, meaning 'swamp dweller'). For the garden it can be budded onto an under stock and should be kept moist. It was introduced to cultivation in 1726. The rose flowers later in the season than most species, in Australia late spring and in cooler areas early summer, it will grow to 2.5 metre high and has good autumn colouring.

The wood is generally dark reddish brown and armed with slender, straight, sometimes hooked prickles at the nodes, bristles and hairs. The foliage is dull green, lighter beneath with autumn colouring, leaflets 5 to 9 to a stem, oblong or elliptic up to 60 mm long, the reddish stipules are long and slender; the late spring flowers solitary or in corymbs are pale pink with darker shading up to 60 mm across, with a faint scent and golden stamens and can be produced over an extended season. The hips are red, round and retain the long slender sepals.

(Page 21. Photo 54)





## Subgenus Eurosa (Rosa) *carolinae*

### *R. virginiana*

**Native to:** Eastern North America, from Newfoundland to Pennsylvania to Ontario and Arkansas

**Synonym:** *R. lucida*

**Chromosome count:** 28

Probably the best known of the subgenus and similar to the others, it is a suckering shrub, growing to around 2 metres high, so that the method of propagation may be important; it has good autumn colouring, some call it beetroot red and was brought into cultivation prior to 1807.

The synonym refers to the bright, shining green foliage, with the young growth and leaves being tinted red, there are 7 to 9 leaflets to a stem, with the leaflets being acutely pointed and up to some 60 mm long; the stipules are long and slender. The main growth is reddish brown fading to a grey brown and the new growth light green tinged red, with strong slender, sometimes curved, prickles in pairs at the nodes. The flowers appear later than most of the species, are up to 60 mm across, borne solitary or corymbs of around 5 blooms, flowering over an extended period. The red autumn hips are round, about 8mm across and retain their sepals.

(Page 22. Photo 1)

## Subgenus Eurosa (Rosa) *cassiochodon*

### *R. beggeriana*

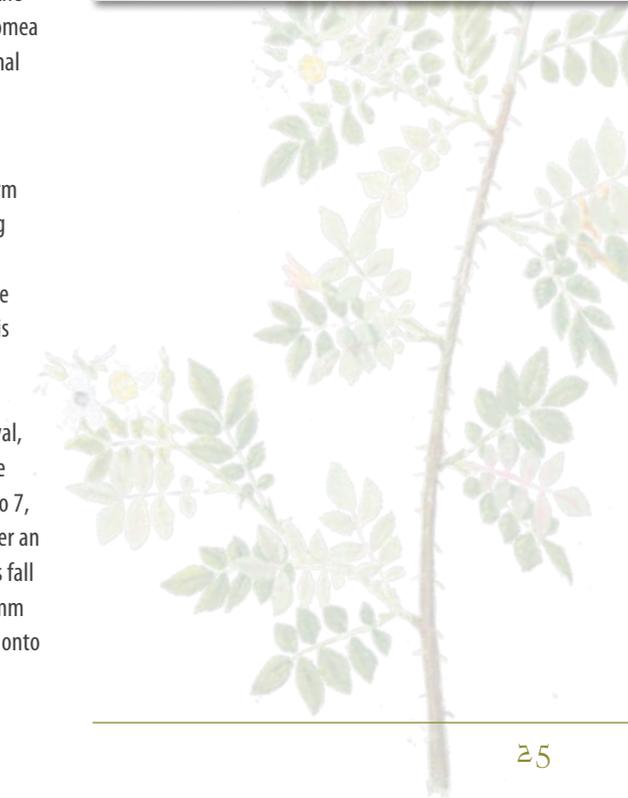
**Native to:** Central Asia from Iran and Afghanistan to Chinese Turkistan.

**Chromosome count:** 14

This Section of the Subgenus was for years known as Cinnamomeae and most of the literature concerning roses and published prior 1970 will have this reference. This subgenus contains over 60 rose species, which is over half of the total rose species recorded. The original Subgenus name reflected the colour of the bark of the cinnamon tree, which is reddish brown. *R. Cinnamomea* now *R. majalis* was the signature rose for the original subgenus Section; but more later.

*beggeriana* is the latinised name of the german botanist, H. Begger who introduced this species from central Asia in 1869. This rose is an open suckering shrub growing from 1-2metres high, with arching brown canes and pale green hooked prickles at the nodes, the young wood is pale green; the foliage is grey green, lighter on the reverse and somewhat dense, sometimes reddish on the reverse of new growth and the leaflets, usually 7 to a stem are oval, around 20 mm long, and fragrant. The small white flowers some 30 mm across, are in clusters of up to 7, are fragrant and with long, thin sepals. appear over an extended period starting in late spring. The sepals fall off the small, round, red hips which are around 5mm across. The rose is usually propagated by budding onto a suitable understock.

(Page 23. Photo 37)





## Subgenus Eurosa (Rosa) *cassiorhodon*

*R. blanda*

**Native to:** Eastern and Central North America

**Synonym:** Hudson Bay Rose, Labrador Rose

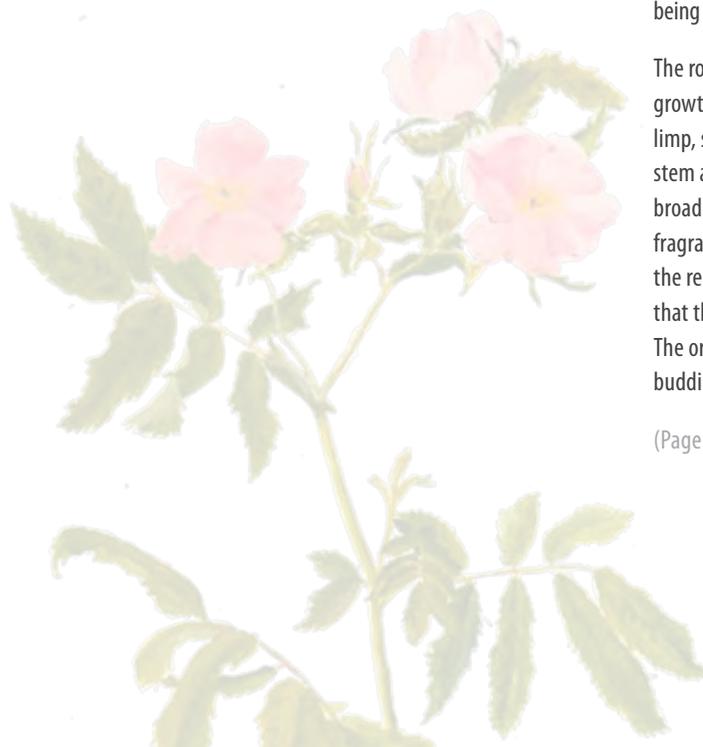
**Chromosome count:** 14 rarely 21, 28

spring flowers are pale pink with a strong fragrance, some 60 mm across in small clusters and the round, sometimes elongated, red hips are around 12mm across. The rose is very hardy and will tolerate poor soils and shade.

(Page 24. Photo 45)

It is unfortunate that this rose is not in the Orange Gardens, due to a mistaken identity; the rose in the gardens is *R. blanda carpoispida*, The painting of the subject rose, was completed from a book reference painting by Sir Alfred Parsons, with acknowledgement. The subject rose is so named as it has no prickles, 'blanda' meaning smooth, whereas 'carpoispida' means hairy, or bristly fruit, which refers to the hips, but the rose is also very prickly (and is the subject of the next painting, which was completed following the 1995 conference).

The subject rose was introduced to cultivation in 1773, probably due to it having smooth bark devoid of prickles, but is rarely found in gardens today. The rose grows to around 1.5 metres tall and has somewhat limp, smooth, pale green, slender leaflets, 5 to 7 to a stem some 50 mm long, with a well serrated edge; the stipules are very broad, can be over 20 mm across. The



## Subgenus Eurosa (Rosa) *cassiorhodon*

*R. blanda carpoispida*

**Native to:** Northeast America

**Synonym:** None

**Chromosome count:** 14

This form of *R. blanda* is not mentioned in most references and there is no reference to the origins of this rose in Australia, other than it is in the collection at the Ruston Rose Garden at Renmark SA, where was incorrectly named *R. blanda*. We have no information concerning when the rose was first cultivated, but in most respects is similar to *R. blanda*, the main difference being the hairy and prickly nature of the growth.

The rose grows upright to around 1.5 metres with the growth covered in prickles and bristles. the foliage is limp, smooth and pale green with 5 to 7 leaflets to a stem and well serrated edges, the stipules are fairly broad. The spring flowers are pale pink with a strong fragrance, around 60mm across in small clusters and the red hips are covered with fine hairs. It is presumed that this rose is also tolerant of poor soils and shade. The original rose in the gardens was propagated by budding onto an understock

(Page 25. Photo1)





## Subgenus Eurosa (Rosa) cassiochodon

### *R. x californica 'Plena'*

**Native to:** The single flowered wild form is native to California and Oregon USA

**Synonym:** None

**Chromosome count:** 14

This double form of the species was introduced to cultivation in 1894 and there is no record of the origin; it is the only form of the rose available in Australia. Please note that due to the rose being a hybrid the nomenclature is changed from that shown on the painting. The rose is very floriferous and repeat flowers, making it a useful garden plant.

It grows to around 3 metres high and across with long arching canes. The wood and straight, flat prickles are greenish when young, which matures to red-brown wood and grey prickles between the nodes. The leaflets, 5-7 to a stem are fresh green, often folded and hairy, up to 25mm long; the stipules are long and slender. The flowers are a rich, deep pink, semi double with around 10 petals, 40 mm across, fragrant and in corymbs with leafy bracts, with spot, repeat flowers well into the autumn. The red, round hips are around 8mm across. The rose in the gardens was propagated by budding onto an understock.

(Page 26. Photo 54)

## Subgenus Eurosa (Rosa) cassiochodon

### *R. davidii elongata*

**Native to:** Western China, Sichuan Province

**Synonym:** None

**Chromosome count:** 28

This rose was first introduced to cultivation by Wilson in 1908; the budwood for the rose was originally supplied under the name or *R. davidii*, but after the plant had set hips it was concluded that it was of the *elongata* form and the painting title amended, although the label on the gardens rose was not changed. The rose was originally discovered by Père David, flowering in July at between 600-3000metres in mountain scrub; although another authority has it that the rose was introduced by the french nurseryman A. David.

It is a large shrub growing to around 5 metres high; the new growth is light green which ages to greyish brown with long straight to slightly curved prickles. The leaflets are matt, dark green, 7-11 to a stem up to 50 mm long often oval in shape, with slender stipules. The buds have long sepals and the flowers in early summer are pale pink, strongly fragrant up to 60mm across, 4-12 in loose corymbs. The hips are red, flagon shaped up to 20mm long with the sepals retained. The rose in the gardens was propagated by budding onto an understock.

(Page 27)





## Subgenus Eurosa (Rosa) cassiochodon

*R. elegantula 'Persetosa'*

Native to: Northwest China

Synonym: *R. farreri persetosa*, Threepenny Bit Rose

Chromosome count: 14

It is a shrub, growing to around 2 meters high and across, with straight, branching growth covered with many prickles and bristles; the new growth is red as are the prickles, which matures to grey brown with grey prickles. The freshly emerging leaflets are reddish and colour to a matt, mid green, 5 to 9 to a stem with small straight stipules; the mature leaflets are generally oval and up to 6mm long. The small buds appear deep pink and open to paler pink flowers around 12 mm across, with small yellow stamens, singly or on groups of 3; the small red, oval hips retain their sepals and are around 10mm long.

The rose is best grown in partial shade, as hot sun will burnish the leaves a purple tint; as with many fine leafed ferns, the foliage makes a splendid display. The rose is usually propagated by budding onto an appropriate understock.

(Page 28. Photo 43)

Seeds of the species plant were sent back to Kew by Farrer and some plants released to cultivation in 1900 under the name of *R. farreri* in honour of the finder; subsequently, A. E. Bowles discovered a seedling amongst the group of remaining seedlings, one with exceptionally small foliage, flowers and hips and a remarkable array of prickles and bristles; this rose was released to cultivation in 1914 as *R. farreri persetosa*. Subsequently the species was renamed by Rolfe as *R. elegantula*, but this seedling also known as 'Persetosa', due to the dense covering of hair-like prickles, kept its original nomenclature until recently, when it was corrected; so that the title on the painting was correct when executed; the original species is little known today, whereas the seedling has become a popular garden plant.

As mentioned above this rose is unique in its features.

## Subgenus Eurosa (Rosa) cassiochodon

*R. fedschenkoana*

Native to: Central Asia

Synonym: None

Chromosome count: 28

This free suckering shrub will grow to around 2 metres high and if budded onto a suitable under stock will spread some 1.5 metres. It was discovered in Turkestan by Alexis and Olga Fedschenko and released to cultivation around the mid 1870s; Alexis was a geologist and naturalist, whilst Olga was an Artist and together they explored much of the wild, mountainous area of central Asia in the mid 1800s. The rose is similar to *R. beggariana* in most features, other than its flowers almost continuously throughout the summer and well into autumn and the calyx is hairy and the sepals persist on the hips.

The growth is upright with reddish brown wood which is green on the new growth and the straight prickles at the nodes are green aging grey. The grey green leaflets are generally 9 to a stem and lighter on the underside up to 30mm long and the stipules are long and narrow. The white flowers are produced from early summer through to autumn, in profusion early and singly through the rest of the season; they are around 40mm across and highly fragrant, with golden stamens. The red hips are some 20mm long and 8mm across often bottle shaped and covered with fine hairs.

(Page 29 Photo 40)





## Subgenus Eurosa (Rosa) *cassiorhodon*

*R. forrestiana*

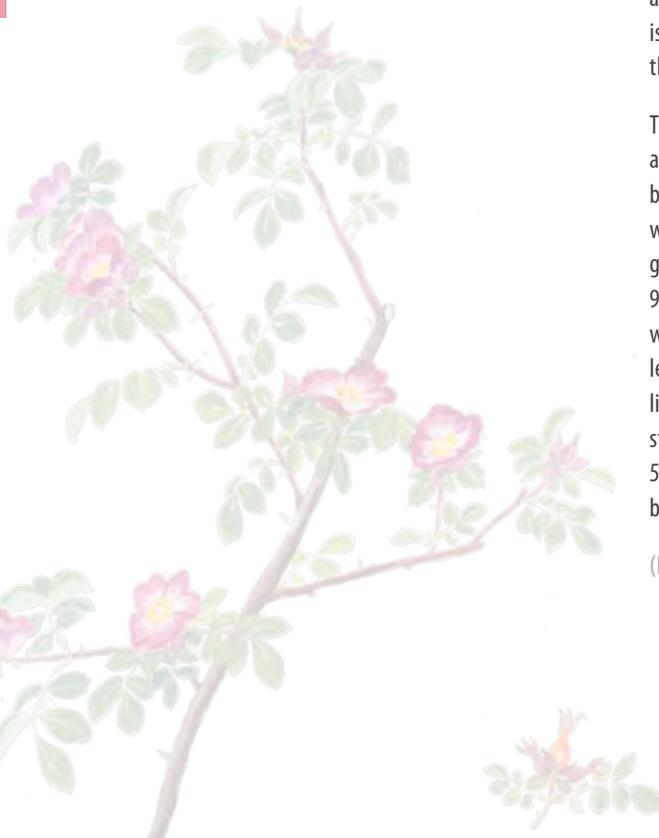
**Native to:** China - Northwest Yunnan Province

**Synonym:** None

**Chromosome count:** Unknown

This rose was collected by Forrest and introduced to cultivation in 1918. It is a spreading, upright shrub to 2metres high and about the same across, with reddish brown wood and straight prickles between the nodes. The leaflets are 5 to 7 to a stem, oval to round, smooth and mid green, lighter on reverse and around 20 mm long. The flowers are bright pink, with golden stamens, up to 35mm across and borne singly or in sprays of up to 5 on very short stems, with leafy bracts, the sepals are reddish brown long and slender and retained on the hips, which are bottle shaped, 5mm across and 10 mm long. The rose flowers mid spring and is fragrant. The rose is usually propagated by budding onto an understock.

(Page 30. Photo 32)



## Subgenus Eurosa (Rosa) *cassiorhodon*

*R. holodonta*

**Native to:** North Pakistan through to Western China

**Synonym:** *R. moyesii* 'Rosea'

**Chromosome count:** 28

The synonym for this rose is a misnomer, as it is related to *R. davidii* elongata not to *R. moyesii*. It was originally found growing in Western China in 1908, but recent explorers through the Hindu Kush have found the rose also growing there in the mountain valleys. *holodonta* is from the greek, meaning 'whole tooth', referring to the long leafy sepals

The rose is an upright shrub, growing to 3metres high and as much across, with long arching canes; the bark is reddish brown with no prickles, with the old wood at the base being greyish brown. The large, dark green leaflets are lighter green on the underside, 7 to 9 to a stem, up to 45mm long, oval, well serrated and with a pointed tip; the stipules are long, slender and leafy. The flowers are borne singly or in small clusters, lightly fragrant, mid-pink, 50 mm across, with yellow stamens, and long sepals which are carried on the 50mm long, red bottle shaped hips. The rose is usually budded onto an understock.

(Page 31. Photo 51)





## Subgenus Eurosa (Rosa) cassiorhodon

### *R. Majalis*

Native to: Europe, Northern and Western Asia

Synonym: *R. cinnamomea*, Cinnamon Rose, 'May'  
or 'Spring' Rose

Chromosome count: 14, 28

The rose was in cultivation prior to 1600 and is the signature species for this section of the subgenus; the bark being cinnamon brown, although the fragrance is not relative to cinnamon; it is often found growing in damp areas (it should be noted that Linnaeus detected a slight cinnamon scent from the leaves). The name was changed from *R. cinnamomea* in recent years to better reflect the origins of the rose.

The rose is an upright suckering shrub growing to 1.5 to 2 metres high with reddish brown bark and with slender slightly hooked prickles in pairs at the nodes. The leaflets are 5 to 7 to a stem, some 45mm long, elliptical, bluish green, lighter on the underside and with long, fairly wide stipules. The spring flowers are produced singly and are purplish pink with a sweet fragrance and are up to 45 mm across, with long, slender stipules that are retained on the oval, pale pink hips. The rose is usually propagated by budding onto an understock.

(Page 32. Photo 22)

## Subgenus Eurosa (Rosa) cassiorhodon

### *R. moyesii*

Native to: Western China

Synonym: None

Chromosome count: 42

This rose was originally found growing in mountain scrub between 2,000 and 6,000 metres in western Sichuan and Yunnan and was sent back to Kew by Wilson and introduced in 1894; the name *moyesii* is the latinised name of the missionary Moyes, who introduced the rose to Wilson. The red form of the rose is produced by cloning, as apparently seedlings mostly have pink flowers, which condition is also found in the wild [Phillips and Rix 'Roses' p. 23]. The rose thrives growing in limestone soils in its native habitat.

The rose is an upright shrub growing to 3 metres high or more, with many arching canes shooting from the base; the new wood is light green darkening with a brownish hue with age, the few prickles are straight and light grey, mostly towards the base of the of the canes. The leaflets are 7 to 13 to a stem, dark bluish green, lighter green on reverse, oval and up to 30 mm long; the stipules are broad and 'y' shaped. The late spring flowers are a dark, matt red (some call it blood red) up to 50mm across with dark gold stamens, they have a sweet fragrance and are borne singly or in small sprays of up to 5. The calyx is reddish and elongated, with reddish sepals, pale green on reverse, that just cover the bud and are retained on the hips; the hips being elongated, red and bottle shaped up to 35mm



long and can be a great autumn feature, although in dry spring they tend to fall off readily before maturing. The rose can be propagated from cuttings or by budding onto an appropriate understock.

(Page 33. Photo 13)



## Subgenus Eurosa (Rosa) cassiorhodon

*R. moyesii* 'Highdownensis'

Native to: England as a seedling

Synonym: None

Chromosome count: Unknown

A seedling grown in the garden of Sir Frederick Stern at 'Highdown' in Sussex, England in 1928. This is one of around six seedlings of *R. moyesii* grown in various places that illustrate the statement by Phillips and Rix quoted under the description of the species, that flowers of seedlings can be of varying colour. These plants have colours from pale pink to deep red, and have some other different features, that could have resulted from differing growing conditions; Highdownensis has pink flowers, but is otherwise similar to the *R. moyesii*. and can be propagated by budding or from cuttings.

(Page 34. Photo 14)

## Subgenus Eurosa (Rosa) cassiorhodon

*R. pendulina*

Native to: Central and Southern Europe

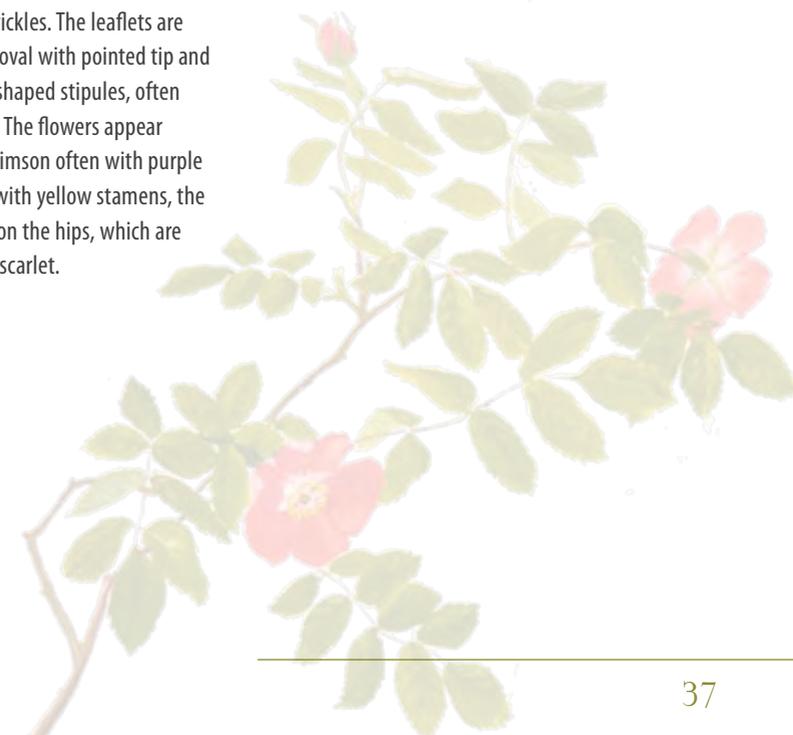
Synonym: *R. alpina*, Alpine Rose

Chromosome count: 28

The rose is to be found growing wild in the native wood and alpine scrub meadows from the Pyrenees to the Caucasus mountains; it was first cultivated in 1683. *pendulina* is from the latin, meaning 'hanging branches'.

The rose is a suckering shrub growing up to 2metres, but often less and makes an open shrub, if budded onto a suitable under stock; it has smooth reddish brown bark with usually no prickles. The leaflets are mid green, up to 30mm long, oval with pointed tip and 7 to 11 to a stem and with 'Y' shaped stipules, often showing good autumn colour. The flowers appear early in spring and are light crimson often with purple shading, lightly fragrant and with yellow stamens, the sepals are short and retained on the hips, which are oval, often bottle shaped and scarlet.

(Page 35. Photo 59)





## Subgenus Eurosa (Rosa) cassiorhodon

### *R. pisocarpa*

Native to: Western North America from California to British Columbia

Synonym: Gray Cluster Rose

Chromosome count: 14, 21



This rose grows in open woods below 1600metres; the synonym reflects the name of the discoverer, Gray, who introduced it around 1882; pisocarpa is from the greek, meaning 'pea shaped hips'.

It is a shrub with reddish brown, slender stems that age grey brown and will grow to between 1 and 2metres tall, with random, long, slender prickles. The leaflets are 5 to 7 to a stem, elliptic to oblong oval, bluish green, rough surfaced and paler on reverse, up to 30mm long. The spring flowers grow on very short pedicels, are sweetly fragrant, singly or in corymbs of 5, deep pink, around 35mm across with yellow stamens; the sepals are long and decorative and retained on the small, round, red hips some 8mm across, which, due to their short stems are in tight clusters. The rose tends to sucker and is best budded onto an appropriate understock for most garden situations.

(Page 36. Photo 52)

## Subgenus Eurosa (Rosa) cassiorhodon

### *R. rugosa alba*

Native to: Siberia, Northern China, Korea and Japan

Synonym: None

Chromosome count: 14



rugosa from the latin, meaning 'full of wrinkles' and refers to the leaflets. This form of *R. rugosa* was described by Thunberg in 1784 but not introduced to western rose culture from Japan until around 1870, like other wild forms, it flowers throughout the season and continues to flower when carrying hips. All of the rugosa, including hybrids perform remarkably well in sandy and poor soils, although they are less prolific in heavy clay soils; they are tolerant of most climates, but do not prosper under tropical heat.

It is a very vigorous, suckering rose, best budded onto an under stock for most garden situations and growing to around 2metres high by as much across. The stems are upright, very prickly and green to light reddish brown on new growth fading to grey brown with age, when the prickles fall off. The leaflets are shiny green with deeply impressed veins 5 to 9 to a stem, oval and up to 45mm long and the stipules are broad, the foliage fading golden yellow in autumn. The very fragrant white flowers are somewhat papery in texture with contrasting golden stamens and are large, up to 90mm across, cupped and reflexed and borne on very short stems, singly or in corymbs; the sepals are long and retained on the hips, which are red, flattened oval, similar to a tomato and some 30mm across.

(Page37. Photo 16)



## Subgenus Eurosa (Rosa) cassiochodon

### *R. rugosa typica*

**Native to:** Siberia, Northern China, Korea and Japan

**Synonym:** None

**Chromosome count:** 14

fragrant reddish-carmine flowers are carried on short stems, singly or in small corymbs, have golden stamens and tend to be cupped and some 75mm across. The long stamens are retained on the tomato shaped, red hips, some 25-30mm across, which are carried on the plant whilst it continues to bloom into the autumn. This is very good garden plant.

(Page 38. Photo 47)-

In its native habitat, *R. rugosa* is variable in colour from pale pink to a deep bluish red and soon after the introduction of the species to western gardens, around 1796 this variability did present a problem, which was solved by introducing a form that was considered to be typical, which was then cloned and called 'typica', which has deep reddish-carmine flowers and was not as vigorous in growth as most other forms, that can grow to over 2 metres high. The rose is tolerant of sandy soils, including heavy clay, although it will not stand tropical heat and is usually budded onto an under stock.

The rose is an upright shrub growing to around 1.5metres by as much across, with prickly pale green to reddish-green stems, which age grey-brown with smooth older wood. The 5 to 7 leaflets to a stem are shiny green deeply grooved by veins and around 30 mm long, oval, with fairly wide stipules. The very

## Subgenus Eurosa (Rosa) cassiochodon

### *R. sertata*

**Native to:** Central and Western China

**Synonym:** None

**Chromosome count:** 14

This rose is often sold in Australia for *R. setipoda*, which is much better known and it could be, that all roses named after the latter in this country are in fact our subject rose; it was introduced in 1904. This species is said to be related to *R. webbiana*.

The rose has long arching, slender and spreading reddish brown growth that ages to a grey brown and with few to no prickles; it can be around 2metres high and spread to 4metres across. The foliage is quite delicate with small, mid green leaflets 5 to 9 to a stem, smooth and oval with paler reverse and up to 15mm long; the young leaves are often coppery and the stems are red with small reddish stipules. The lightly fragrant flowers are solitary, pale lilac pink with white centres around 40mm across, on short stems and with reddish stamens; the sepals are fairly long and retained on the small, red bottle shaped hips. The rose commences flowering in mid spring and can flower over an extended period. The rose is best grown by budding onto an appropriate understock.

(Page 39. Photo 28)





## Subgenus Eurosa (Rosa) cassiorhodon

### *R. sweginzowii* 'Macrocarpa'

**Native to:** The species is from Northwest China;  
This rose is a garden form

**Synonym:** None

**Chromosome count:** The species 42

(Page 40. Photo 38)

This form of the species originated at Sangerhausen, Germany and was introduced by Kordes early in the 20th century; it differs from the species, having deeper pink flowers, larger hips and more pronounced prickles. *sweginzowii* is probably the latinised name of the botanist who introduced the rose originally and *Macrocarpa* means 'large fruit'.

The rose forms a spreading shrub to 2 metres high and more across, with reddish brown stems, flat red prickles and bristles, that age grey. The leaflets are 7 to 11 to a reddish stem, mid-green and oval, up to 25 mm long and the stipules are reddish and slender. The spring flowers are borne on short stems in corymbs and are a mid to deeper pink around 50 mm across; the sepals are fairly long and retained on the long, bright red bottle shaped hips. The rose is a popular garden plant and is propagated by budding onto an appropriate understock.

## Subgenus Eurosa (Rosa) cassiorhodon

### *R. webbiana*

**Native to:** Western Himalayas

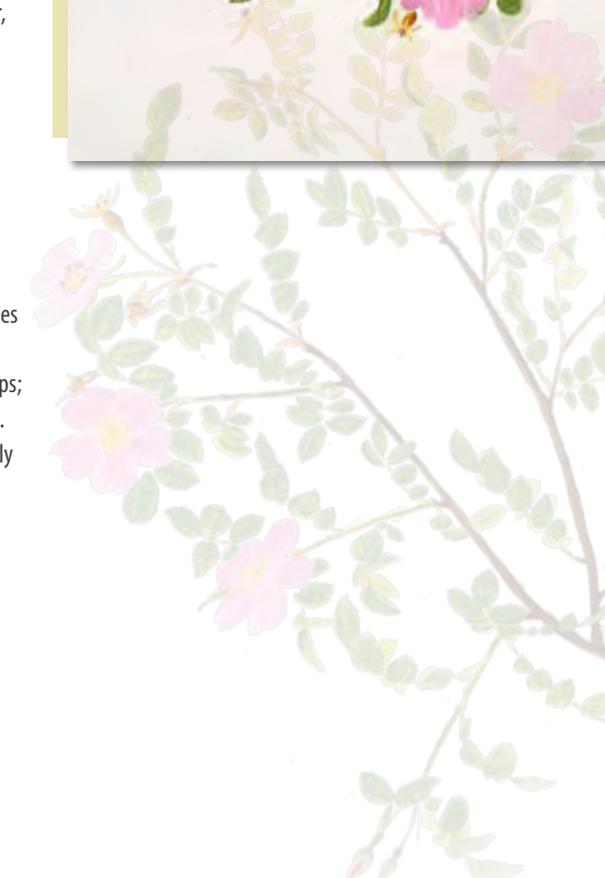
**Synonym:** None

**Chromosome count:** 14

The rose is found growing in the dry mountain valleys from the Pamir Mountains to Central Asia to Kashmir, Tibet and Afghanistan and north to Kashgar; it was introduced to western cultivation in 1879.

The rose is a shrub varying from 1 to 2 metres high, making a dense bush filled with arching, interlacing branches, reddish brown, with yellowish, straight prickles, mostly at the base. The leaflets are 7 to 9 to a stem, 10 to 25 mm long, oblong to almost round, mid-green and paler on the reverse, with slender red stipules and stems. The lilac pink flowers are borne singly in early spring and the long sepals are retained on the hips; the flowers have a light fragrance and yellow stamens. The hips are bottle shaped, shiny red. The rose is usually propagated by budding onto an understock.

(Page 41. Photo 5)





## Subgenus Eurosa (Rosa) cassiorhodon

*R. willmottiae*

Native to: Western China

Synonym: Miss Willmott's Rose

Chromosome count: 14

(Page 42. Photo 7)



The rose was found growing in dry river valleys in western Sichuan, from 2,000 to 3,000 metres and introduced to western cultivation in 1904 by Wilson. The rose was named for Miss Helen Willmott, who did much to sponsor the collection of wild roses and wrote the reference book 'The Genus Rosa'. There are a number of forms of this rose in cultivation, our form being from the original species.

The rose is a delicate upright shrub growing to around 3 metres high, with straight or arching light reddish brown canes, with straight pinkish prickles, between the nodes, the canes aging silvery brown. The leaflets are greyish green and small, being usually 9 to a stem and from 6 to 15mm long and are oval. The lilac pink flowers are lightly fragrant and with cream coloured stamens and are borne singly or up 3; the hips are red, oval to flagon shaped and up to 15mm long and 5 mm across. To propagate, bud onto an understock.

## Subgenus Eurosa (Rosa) cassiorhodon

*R. woodsii* var. *fendleri*

Native to: North America from Missouri to Minnesota and Ontario

Synonym: None

Chromosome count: 14

This was one of the early paintings done to 1.5 times full size and on a slightly narrower board.

A shrub growing to 2metres with upright growth, reddish brown wood with few red triangular prickles, the new wood and prickles are green. The leaflets are oval, 5 to 7 to a stem, dark greyish green often fringed purple and up to 30mm long, with fairly broad stipules. The flowers are borne early in spring and can repeat later in the season, singly or in threes, are soft lilac pink to almost white with cream stamens, are lightly fragrant and around 40mm across. The red hips are round, with sepals retained, some 8mm across. The rose is tolerant of poor soils and shade. The rose can be propagated from cuttings, or by budding onto an understock.

(Page 43. Photo 36)





## Subgenus Eurosa (Rosa) synstylae

*R. arvensis*

**Native to:** Southern and Western Europe

**Synonym:** Field Rose

**Chromosome count:** 14

The rose is a trailing Rambler with arching branches, often scrambling over hedgerows, up to 2 metres high. The wood is varying shades of green aging to a greenish grey, with hooked prickles. The leaflets are 5 to 7 to a stem, up to 35mm long and oval, mid green; the stipules are long and slender. It usually flowers later in the spring than the Dog rose and clusters of creamy white flowers 50mm across, either singly or up to 6 with rich yellow stamens are strongly fragrant; the short stamens are not retained on the small red hips, which are some 8mm in diameter. The rose can be propagated from cuttings or by budding onto an understock.

(Page 44. Photo 46)

The Synstylae section of roses is unique in that the stigma, which in all other roses is mounted on top of the calyx, is raised up on a style and hence the section name; also, all of the roses in this section are vigorous climbers or ramblers.

*R. arvensis* is the only member of this section that is native to the British Isles, being most common on the chalk and limestone hills of the south, where it grows in the hedgerows and rarely is it to be found in Scotland; it is also to be found from Iceland to northern Spain and eastwards to Germany and Greece. *arvensis* indicates the natural habitat at the edge of the fields, although the rose has only grown in this environment since agriculture developed some 2,500 years ago, prior to this the rose probably grew at the edge of the forest.

## Subgenus Eurosa (Rosa) synstylae

*R. brunonii*

**Native to:** The Himalayan mountains

**Synonym:** Himalayan Musk Rose, *R. moschata nepalensis*

**Chromosome count:** 14

This rose grows in the mountain valleys of the Himalayas from Kashmir and Afghanistan to west China at 1200 to 2400 metre elevation; it is named after the great biologist of the period Robert Brown, although Brown did not discover the rose and it was released to cultivation in 1822. The rose is somewhat similar to *R. moschata* (Musk rose) and hence the second synonym, which is no longer in use, but appears often in old reference books.

This is a very rampant climbing rose that will grow, if not controlled, to in excess of 10 metres high and 15 metres spread and particularly if grown over a structure or building. The new growth is pale green with purple hooked prickles growing randomly, both aging to shades of grey, with the prickles being quite large on the old wood; the leaflets are grey to bluish green, 5 to 9 to a stem and with small hooked prickles also on the back of the leaf stem; the stipules are small and broad at the base and reddish later in the season. The leaflets slender, well serrated, around 70 mm long and 30 mm wide and can be evergreen in the warmer areas of Australia, being displaced by the new spring growth. The white spring flowers are up to 40mm across, have golden stamens and with a central style, are in small corymbs of up to 7 growing on spurs along



the canes and are strongly fragrant. The orange hips are oval, 8mm across and around 20mm long and they turn red before dropping off in winter. The rose does not root readily from cuttings and is best budded onto a suitable understock.

(Page 45. Photo 27)



## Subgenus Eurosa (Rosa) *synstylae*

*R. filipes*

Native to: Western China

Synonym: Kiftsgate

Chromosome count: 14

mid-rib. The strongly fragrant spring flowers are white with yellow stamens, some 25mm across and borne on long, thin pedicels (from hence the name of the rose), in large corymbs that can be up to 250mm across. The hips are small and oval some 8mm across and most of the sepals are not retained. This rose does not root readily from cutting, so propagate by budding onto a suitable understock.

(Page 46. Photo 19)

From north western Sichuan and also Gansu, where it grows in thickets at 1300 to 3000 metres elevation; it was introduced to western cultivation in 1908 from seeds sent by Farrer to E. A. Bowles. The Kiftsgate form of the rose was obtained by Mrs Muir of Kiftsgate Court in 1938 from E. A. Bunyard, who is believed to have originally obtained a plant from Roseraie de l'Hay; from Kiftsgate Court the rose was distributed around the western world; the original is still growing strongly and is now some 30 metres wide and putting up 6 metre long shoots in a season.

The young shoots of this rose are tinted a coppery brown and can be up to 6metres long with many hooked red prickles, the mature wood being silvery brown, with grey prickles. The leaflets are 5 to 7 to a stem, bluish green and up to 75mm long with a lighter green reverse and a few small hooked prickles on the

## Subgenus Eurosa (Rosa) *synstylae*

*R. gentiliana*

Native to: China (but see below)

Synonym: *R. polyantha grandiflora*

Chromosome count: 14

The origins of this rose are obscure and it is thought by many to be a garden hybrid of *Rosa multiflora* and hence the name *R. gentiliana* is incorrect, but the synonym quoted above is also incorrect; in the absence of a corrected name, the title above must be used, or it can be referred to as *R. multiflora* var. 'Gentiliana', although this, as far as is known, is not confirmed by the taxonomist. This rose is also sold both in Australia and New Zealand as 'Wedding Day', which it is not; 'Wedding Day' is a hybrid of *R. sinowilsonii*. The rose was introduced to cultivation in 1907.

The rose is a vigorous climber that has been known to grow 20metres or more into trees, but in a normal garden situation will grow around 4 - 5 metres. The new growth is pale green with reddish brown tints to both the shoots and leaves, with the wood aging to a silvery brown and there are few prickles. The leaflets are 5 to 9 to a stem, with stipules deeply lacinate (fringed) - this being the prime feature that indicates a relationship with *R. multiflora* - the leaflets are deep green and with fairly deep veins, lighter on the reverse, slender and up to 50mm long and with hooked prickles along the spine at the back of the leaf. The white spring flowers are produced in large corymbs of up to 20 flowers, each flower around 40



mm across, with yellow stamens and strong sweet fragrance; the red hips are round and some 8mm across. The rose will propagate readily from cuttings.

(Page 47. Photo 21)



## Subgenus Eurosa (Rosa) *synstylae*

*R. helenae*

Native to: Central China

Synonym: None

Chromosome count: 14

This rose is a vigorous climber, requiring support of a pergola or wall, it has many hooked prickles and can also grow as a hedgerow plant. It was sent back to Europe in 1900 by Wilson and introduced to cultivation in 1907. It is to be found growing up to 1500metres in hedges and by streams in Shaanxi, Sichuan and Yunnan. *helenae* is the latinised form of Helen, wife of E.H. Wilson.

The vigorous green canes will grow up to 6metres or more and are well armed with a multitude of hooked prickles. The leaflets are 7 to 9 to a stem, up to 50 mm long, dark green, grey green reverse and with long slender stipules. The flowers are creamy white with yellow stamens and fragrant, growing on round topped, umbel like corymbs with up to 30 blooms or more; the small round hips later are red and around 6mm across. The rose will propagate readily from cuttings.

(Page 48. Photo 56)



## Subgenus Eurosa (Rosa) *synstylae*

*R. mulliganii*

Native to: Western China

Synonym: None

Chromosome count: 14

The bud wood supplied for this rose was listed as *R. longicuspis*, which is an evergreen rose, whereas as *R. mulliganii* is deciduous, otherwise these two roses are somewhat similar. The rose was introduced 1917-19 probably by Forrest from Yunnan; Phillips and Rix state that . . . 'This rose appears frequently in cultivation but it is not recognised in Chinese floras'.

The rose is a rampant climber up to 6metres high or more and with hooked prickles. The leaflets are smooth, dark shiny green 5 to 7 to a stem and up to 60mm long; the stipules are long and slender. The white, late spring fragrant flowers with yellow stamens are up to 55mm across and grow in large corymbs. The small red hips are around 6mm across, slightly oval and retain their sepals. To propagate bud onto an understock.

(Page 49. Photo 17)





## Subgenus Eurosa (Rosa) *synstylae*

*R. moschata*

**Native to:** Southern Europe to Asia and north Africa

**Synonym:** Musk Rose

**Chromosome count:** 14

metres high, the wood is light green to fawn, with few prickles and the flowering wood is downy on the stalks, stems and calyx; the leaflets are 7 to stem and up to 50mm long, elliptic with long slender tips, smooth, shiny green. The flowers are borne on branching stems, are 40-60 mm across, cream with pale yellow stamens and are sweetly fragrant (musk), usually in groups of 7. The hips are oblong and red, with retained sepals.

Phillips and Rix claim that the rose flowers from 'June to September, a month later than *R. brunonii*', whilst Thomas claims the flowers 'are not produced until late summer'.

(Page 50. Photo 20)

This rose is an enigma, many growers claim to have the rose, but invariably it turns out to be a hybrid or *R. brunonii*, so that this species was never grown in the Orange gardens. A claimed feature of the rose is that it flowers in late summer, as do the hybrids, but at Motisfont gardens in Southern England, *R. moschata* was flowering at the same time as was *R. brunonii*, which is spring flowering and the same feature was evident at the Timaru botanic gardens in New Zealand. It would appear that this species is now lost to cultivation. The hybrid rose 'Autumnalis' flowers from summer into early winter in Australia and this rose is often sold as the species here. The following description of our subject rose, as was the painting is based upon descriptions and photos by Phillips and Rix and G. S. Thomas.

The rose was introduced to cultivation in England in 1540. It is a vigorous climber growing to 4 to 6

## Subgenus Eurosa (Rosa) *synstylae*

*R. moschata* 'Autumnalis'

**Native to:** The rose is a hybrid

**Synonym:** Princesse de Nassau

**Chromosome count:** 14, 21

This rose is on the record as being a cross *R. chinensis* x *R. moschata* by Champney around 1812 and could be classified as a noisette. Some in Australia sell it for *R. moschata*, which is incorrect.

The rose is a good garden plant and will grow to around 2.4 metres high with straight green canes with few prickles; the foliage is small and light matt green. The flowers do not appear in most areas of Australia until mid summer and are carried in large sprays of small semi double flowers right through to the end of autumn, opening from pink tinted, yellowish buds, fading to creamy buff silky petals and yellow stamens, the fragrance is very strong.

(Page 51. Photo 24)





## Subgenus Eurosa (Rosa) sϋnstϋlae

*R. moschata* 'Nasturana'

Native to: The rose is a hybrid

Synonym: *R. pissartii*

Chromosome count: 14

Gardens in England with this name in the summer of 1999 had single white flowers, somewhat similar to the flowers on their version of *R. moschata*.

(Page 52. Photo 33)

The rose is listed as a shrub or climber and a probable *R. chinensis* x *R. moschata* hybrid from 1879. This rose is not in the Orange gardens, as the budwood provided turned out to be *Autumnalis*; it is grown in New Zealand, but roses cannot be imported from there into Australia. The painting was based on a photo in 'My World of Old Roses' by Trevor Griffiths. *Nasturana* is the probable persian name given to the rose by botanist named Christ.

Peter Beales describes the rose. . . 'Similar in many respects to *R. moschata* but more vigorous in growth and with more numerous, smaller leaves. Flowers, although similar to those of the species, are semi double and touched with pale lilac-pink, they can also be fractionally larger in some ideal situations. Flowers are provided well into the autumn. . . 3 x 1.8m'. It should be noted that a plant growing at Mottisfont

## Subgenus Eurosa (Rosa) sϋnstϋlae

*R. multiflora*

Native to: Japan, Korea and China and Taiwan and naturalised in parts of North America

Synonym: *R. japonica*, *R. polyanthus*

Chromosome count: 14, 28

This is a species rose that has many forms as it has been used as an under stock in Europe, North America and Eastern Australia since late 19th century. The true wild form of the rose is described as having numerous hooked prickles, but the rose in the Orange gardens is smooth and devoid of prickles; the flowers can vary from white to cream to pale pink, but our specimen has pale cream flowers, fading to white, as does the true species. The rose has become a parent of many modern rose hybrids and can be identified from the deeply lacinated stipules that persist in the offspring; it was introduced into Europe prior to 1868.

The long, arching green canes can grow up to 5 metres long from the base of the rose and become an impenetrable tight thicket. The leaflets are mid-green, deeply veined and downy on the reverse, oblong and pointed, with 7 to 9 to a stem and up to 50mm long and with small prickles along the back of the leaf stem; the stipules, as stated above are broad and deeply lacinated. The spring flowers are strongly fragrant, white with yellow stamens and some 25mm across, they are carried in large, tight pyramid shaped corymbs. The red hips are round about 5mm across and without sepals. This rose is used as an understock and hence roots readily and does not sucker.

(Page 53. Photo 48)





## Subgenus Eurosa (Rosa) *synstylae*

### *R. multiflora Watsoniana*

**Native to:** The rose is probably a chimera originating in Japan

**Synonym:** None

**Chromosome count:** 14



This rose will not reproduce from seed and must be grown from cuttings; G. S. Thomas describes it as a 'chimerical mutant or sport'. It was first recorded from a garden near New York in 1870. Watsoniana is the latinised form of Watson, who imported the rose from a garden in Japan to America.

It has thin prickly, arching or trailing stems, with long, very narrow distorted leaflets, around 3 to a stem up to 60mm long and 6mm across, mid green with lighter reverse and often speckled grey. The flowers are minute in small clusters, white and around 12mm across, the hips are very small, red and 3 to 4 mm across.

(Page 54. Photo 12)

## Subgenus Eurosa (Rosa) *synstylae*

### *R. setigera*

**Native to:** North America

**Synonym:** Prairie Rose

**Chromosome count:** 14



The rose is to be found growing from Ontario to Nebraska, Texas and Florida and was introduced to cultivation in 1810. This is the only member of the Synstylae native to America. setigera is from the latin, meaning 'covered in bristles' referring to its branches and twigs.

The rose can be recumbent and will readily layer and cover a considerable area or it can have arching canes growing to 4 or 5 metres long, and it will grow over a wall or pergola; the canes are reddish brown with straight prickles. The leaflets are 3 to a stem, up to 50mm long, dark green with paler reverse, well serrated and with deep veins, the stems are red as are the long, narrow stipules. The flowers appear in late spring, crimson at the edges and lighter pink at the centre and this can be variable, with white colouring being recorded from the wild, the stamens are yellow and the flowers are lightly fragrant. The small red, round hips are around 5mm across. Propagate from cuttings or layer (it can also be budded).

(Page 55. Photo 6)



## Subgenus Eurosa (Rosa) *synstylae*

*R. soulieana*

Native to: Western China

Synonym: None

Chromosome count: 14

The rose grows wild in western Sichuan on rocky hillsides; it was discovered by the French missionary Abbé Soulie and sent back to France in 1895, where it was introduced the following year.

This is a very dainty climber that will grow up to 4 metres high, with lax shoots and numerous curved pale prickles. The leaflets are 7 to 9 to a stem and pale bluish green, they are oval and rounded at the apex, up to 15 mm long and the stipules are small. The flowers are yellow in the bud and fade to white on opening, in corymbs along the stem, they are fragrant with pale orange stamens and are around 40 mm across. The hips are orange, oval and up to 10 mm across, the sepals are not retained. The rose is usually propagated by budding onto a suitable understock.

(Page 56. Photo 44)

## Subgenus Eurosa (Rosa) *chinensis*

*R. gigantea*

Native to: Northeast India to Western China

Synonym: *Rosa odorata gigantea*, The Giant Rose

Chromosome count: 14

The rose grows at the edge of the forests from 1300 to 2600 metres elevation from Manipur through Myanmar (Burma) to Yunnan. The rose was first introduced from Burma in 1888 and it has since been shown that there are three forms of the rose: one with large white flowers, another with smaller white flowers and a third from India, which has yellow flowers. The rose is of tropical origins and can be evergreen in some areas of Australia and although it will prosper in most parts of the country, it could have problems in the higher regions of the southeast. In good growing conditions the rose will flower in early spring and set hips, which will drop off in late summer and it can then flower again in autumn and often set more hips.

The rose in the Orange gardens is the white large flowered form which can grow 15 metres up a tree, but which will grow to 2 metres above the top rail of a pergola and spread; it has long arching canes and strong, hooked prickles. The leaflets are usually 7 to a stem, dark green and shiny on the upper surface and often crinkled, elliptical with pointed apex and up to 80 mm long and with long slender stipules; the new leaflets are often tinged reddish purple. The buds are long and slender opening pale yellow and fading to white when fully opened, the flowers being from 100



to 140 mm across, with golden yellow stamens, the petals are often reflexed; the sepals and calyx are dark green tinted purple. Most will tell one that the rose has no fragrance, but this is subtle, as with many of the Tea roses, which are descended from *R. gigantea*, the scent is of green tea leaves, which only those who enjoy green tea will have experienced. The hips are yellow and oval, with no retained sepals and up to 25 mm long. Propagation is by budding onto a suitable understock.

(Page 57. Photo 16)

# Artist peter cox

It is the accepted science that botanical paintings be executed in water colour paints on paper, but the framing and exhibition of such paintings would present many problems and additional costs at the conference venue and so the paintings were done in oil paint on primed hardboard and varnished. To suit the commercial size of hardboard sheets (2.4 x 1.2 metres) it was found that by sizing each painting at 600 x 400 millimetres, twelve boards could be obtained from each hardboard sheet, requiring 5 sheets for the 55 paintings. The unframed paintings were eventually displayed each on an easel beside the rose plant. Later, the Society framed the paintings in order to protect them whilst in storage.

