539. ROSA CHINENSIS f. SPONTANEA

Rosaceae

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Summary. The wild form of the commonly cultivated *Rosa chinensis* Jacq., f. *spontanea* Rehder & Wilson, is illustrated and described. The history of its discovery and introduction to cultivation in western gardens is given. The typification and synonymy of *R. chinensis* are discussed.

Until the late 18th century, European trade with China was restricted to the caravan routes across Asia, and very few Chinese garden plants reached northern European gardens. Increasing trade with China following the setting up of the East India Company, with trading posts on the Indian coast, notably at Calcutta, enabled garden plants be introduced, kept alive with some difficulty because of two crossings of the tropics and the long voyage round the Cape.

The Chinese had cultivated roses both for ornament and medicine for over a thousand years, and had developed double-flowered forms of many species, as well as repeat-flowering dwarf forms of wild climbers (Needham, 1986, Bunyard, 1936). Chinese repeat-flowering roses were one important group of cultivated plants which was introduced to Europe in the late 18th century; they appear to have been based mainly on two species, now called *R. chinensis* Jacq. and *R. gigantea* Collett. These two are the only species in sect. *Indicae* Thory, now commonly know as the Chinensis group, or sect. *Chinenses* DC.

In *Species Plantarum* (1753) Linnaeus described one rose from Eastern Asia, *Rosa indica* L. This name has also been attached to cultivated roses of the Chinensis group, but Linnaeus's description of *Sorbus*-like fruit and the illustration to which he refers in Petiver's *Gazophylacium* (1702), show that he was describing, at least in part, the rose now commonly called *R. cymosa* Tratt., so Jacquin's *Rosa chinensis* is generally considered the oldest name in the Chinensis group.

N. J. Jacquin (1727–1817) described and illustrated *Rosa chinensis* in 1768. It is not clear from Jacquin's drawing, which shows a single shoot with a bud, nor from his description, whether the flower of his plant was double or single. The nearest to it which remains in

Rosa chinensis f. spontanea CHRISTABEL KING

cultivation is probably that now called 'Slater's Crimson China' or *R. semperflorens* Curtis, a double deep red repeat-flowering rose, plants of which were brought from China in 1790 and described and illustrated in *Curtis's Botanical Magazine* in 1794 (t. 284). It was imported and grown by Gilbert Slater, of Knots-Green, near Laytonstone. In many parts of China and Japan, this is still a commonly-cultivated variety, where it is known as ZI UE JI, 'monthly', alluding to its repeat-flowering. In 2004 we saw a single-flowered but otherwise similar variety growing in village gardens near Baoxing in Sichuan. Single-flowered cultivars long grown in Europe include 'Sanguinea' also called 'Bengal Crimson' and 'Miss Lowe'. These are the closest cultivated roses to the subject of this plate, the wild *Rosa chinensis* f. *spontanea*, of which they appear to be repeat-flowering mutants. Whether any other rose species are involved in their ancestry has yet to be determined.

Rosa chinensis f. *spontanea* was described by Rehder & Wilson in *Plantae Wilsonianae* (1914), which consists of accounts of genera and new species based on E. H. Wilson's specimens from his expeditions to China between 1904 and 1910. It was first collected by Augustine Henry near the Ichang gorges in western Hubei in 1902, and Henry (1902) described his discovery of the wild form of *R. chinensis* in The Gardener's Chronicle, where it is illustrated by a line drawing by Matilda Smith. It was flowering in April in the San-yu-tung glen, which leads off the Ichang Gorge.

Augustine Henry has already been mentioned above under *Saruma henryi*. In 1910, Wilson collected specimens of f. *spontanea* in fruit in north-central and north-western Sichuan, but does not appear to have seen it in flower nor introduced the plant into cultivation. There is also a specimen in K, collected by Rock in Gansu. It was not seen again by foreign botanists until Mikinori Ogisu found it in 1983, flowering in SW Sichuan near Leibo (Phillips & Rix, 1988). In this area the plants formed large shrubs with arching and scrambling branches and the flowers were pale pink on opening, becoming dark red as they aged. A few years later Mr Ogisu found it again near Pingwu, and here the flowers were more variable in colour, some showing the typical colour change, others opening and remaining pale. Again the habit was variable, the plants becoming tall, robust climbers where they could ascend into trees, but forming shrubs with arching branches in open scrub, or even compact bushes where they were heavily grazed. Familiar

plants growing with the roses were *Rosa banksiae* var *normalis, Lonicera nitida, Photinia davidiana* (Phillips & Rix, 1988, 2004). It is from this area that the flowering plant illustrated here originated. The hip and seeds illustrated in the line drawing were from a herbarium specimen collected by W.P. Fang in August 1928 on Omei-shan; 3500–4000 ft, in thickets (*Fang* 2404). Ogisu (pers comm.) has also seen the species in other parts of Sichuan, including in warm temperate forest at the foot of Omeishan. Mikinagi (2002) reported great variety of colour from pale buff to dark red, with and without colour change.

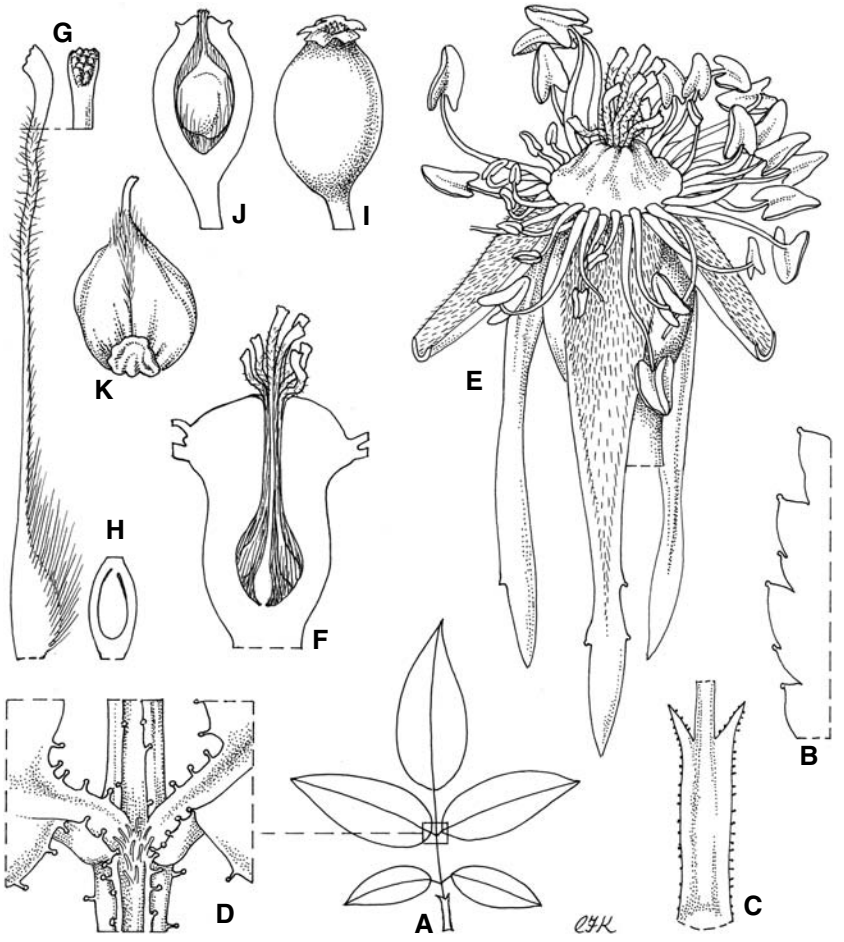
The colour change, from pale to dark, shown by the flowers of this species is very unusual if not unique in roses. The character is absent from many cultivars, but very striking in a few, such as the China rose, 'Sophie's Perpetual'. In other varieties, such as 'Sanguinea' and many Tea roses, the change is associated with temperature, winter flowers being pale, those produced in summer dark red.

Both Rehder & Wilson (1914) and Flora of China (Gu & Robertson, 2003) refer to *R. lucidissima* Léveillé in Fedde Repert. 9:444(1911). Rehder & Wilson (l.c.) say that it is conspecific with *Rosa chinensis* f. *spontanea*. Rehder (1932) says that it is "probably a hybrid" between *R. laevigata* Michx. and *R. chinensis*. Boulenger (1936), says that the type specimen *Cavalerie* 990 in E, is *R. laevigata* and that the flower colour is unimportant. Lauener (1970), also considers this specimen to be *R. laevigata*. There is also a specimen of this collection, *Cavalerie* 990 from the province of Kwei-Chou, in K, and it is red-flowered, but otherwise similar to *R. laevigata*.

The authors of the account of *Rosa* in Flora of China (Gu & Robertson, 2003) consider *R. lucidissima* a distinct species in section Chinenses, recorded from Guizhou, Hubei and Sichuan and distinguished by having prickly, setose branchlets, leaves pale green on the underside with three or rarely five leaflets and flowers with a setose receptacle and purplish-red petals.

I have examined the specimens labelled *R. lucidissima* in K, *Cav.* 990, *Cav.* 3927 and 3942. The first, mentioned above, is *R. laevigata*, and this is the type. The other two specimens are *Rosa chinensis* f. *spontanea* in a form in which all leaves have only three leaflets. Most specimens of f. *spontanea* contain plants with both three and five leaflets, e.g. *Henry* 1151, but a form with three leaflets only is also represented in Henry's collections e.g. *Henry* 4131, from near Ichang.

Fig. 3. Part of a large population of *Rosa chinensis* f. *spontanea* on rolling, scrub-covered hills north of Pingw in NW Sichuan. Most plants in this area form large arching shrubs.



Rosa chinensis f. **spontanea**. A, leaf outline, × 1 □; B, leaf dentition, × 4; C, leaf base, with stipule, × 2; D, leaf petiole detail, × 6; E, flower with petals removed, × 4; F, l.s. gynoecium, × 4; G, achene with detail of stigmatic surface, × 8; H, l.s. achene, × 8; I, fruit, (from *Fang* 2404), × 1; J, fruit, l.s. (from *Fang* 2404), × 1; K, seed, (from *Fang* 2404), × 2. Drawn by Christabel King.

The hybrid between *R. laevigata* and *R. chinensis* is called *R.* × *anemonoides* Lindl. Two clones of this are now cultivated; 'Anemone' which has pale pink flowers and 'Ramona' with flowers of a deeper pink. These are generally considered to be hybrids between *R. laevigata* and a tea rose and have large pale flowers not the dark red flowers mentioned by Léveillé.

There remains the question of what is the best rank for the wild type, *forma* following Rehder & Wilson, *varietas* following Yu and Ku, or some other rank. At present it seems best to keep the original rank proposed by Rehder.

CULTIVATION. *Rosa chinensis* f. *spontanea* is easily cultivated, and will thrive on a warm wall or in the open garden. Because of its very early flowering and leafing, in March and early April in China, in February or March in England, it requires shelter from late frosts, snow or heavy rain which damages the young shoots. Flowering takes place on two year old and older shoots, so it is important not to prune the stems either until they have flowered, or until they are three years old or more. The leaves become affected by blackspot, but not seriously enough to cause defoliation. Propagation is possible by cuttings or by budding; seed is slow to germinate, often taking three or more years at outdoor temperatures.

Rosa chinensis f. **spontanea** Rehder & Wilson in Plantae Wilsonianae 2:320(1914). **Type**: (China, Hubei) San-yu-tung glen, Ichang. *Henry* 1151(K).
Rosa chinensis var. *spontanea* (Rehd. & Wils.) T.T. Yu & T.C. Ku in T.T. Yu, Fl. Reipub. Pop. Sin. 37:423(1985).

DESCRIPTION. *A large shrub* with arching branches or a climber to 8 m. Young shoots with recurved, hooked, red to brown thorns, without bristles or glands. Side shoots smooth or with scattered small recurved thorns. *Leaves* with 3, 5 or 7 leaflets, somewhat coriaceous, shining green above, paler and glabrous beneath, finely and sharpely toothed, the teeth tipped with red glands; the terminal leaflet largest and often acuminate, 4.5–6 cm long, 2–2.5 cm wide. Rhachis with small, hooked thorns, and scattered, red-tipped glands; stipule very narrow, 0.5–2 mm wide, adnate to the rhachis for most of its length, edged with red glands, the free part 1–2 mm long, spreading. *Flowers* usually solitary, on short side shoots, generally cupped, 5–6 cm across. Receptacle and pedicel glabrous. *Sepals* 5, more or less equal, 2.5–3 cm long, linear-lanceolate, with appressed silky hairs on the inner surface, pale edges and often with somewhat leafy tips, reflexing as the flower opens, soon falling after flowering. *Petals* 5, broadly ovate, 3–4 cm long and wide, opening pale pink, buff or cream with red lines, usually becoming red to purple on exposure to sunlight; otherwise opening red or purplish. *Stamens* numerous, yellowish. *Styles* red, silky, exserted but not fused. *Hips* round, *c.* 2 cm across, green becoming orange-yellow. Seeds few and large, 2–3 per hip, with a hard, thick seed-coat.

DISTRIBUTION. NW China; Sichuan, Gansu, Hubei, Guizhou.

HABITAT. Rocky slopes and hills, usually on limestone and shales, 500–1950 m.

FLOWERING TIME. March–May.

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