Summary. Rosa glomerata Rehder & Wilson (Rosaceae, sect. Synstylae) a rampant climber from western China, is illustrated and described. Related species are compared, and their cultivation is discussed.

The genus Rosa L., with 200 species and perhaps twice as many names and many apomictic species, presents a daunting prospect for taxonomists. Of this number, 94 are recorded in the Flora of China (Gu & Robertson, 2003), and are there divided into 8 sections. One of the most distinct sections is section Synstylae DC, whose species are easily recognized by having the styles exserted and united into a column, with a knob-like cluster of stigmas at the apex. The flowers are usually white and arranged in a compound corymb or pseudo-umbel. All the species are strong climbers, and look very much alike from a distance, but can be distinguished by differences in indumentum, leaf texture and by their hips.

Roses belonging to section Synstylae occur across Europe and Asia from western Ireland, where Rosa arvensis is found on the limestone of the Burren and around Lough Corrib (Webb & Scannell, 1983), to Japan, where species are found including the commonly planted Rosa wichurana, which grows on the sand dunes bordering the Sea of Japan. The Synstylae are nearly absent from North America, with only the pink-flowered Rosa setigera Michx., the prairie rose, found from Ontario to Texas, Nebraska and Florida. One species, Rosa abyssinica R. Br. is found in east Africa, in Ethiopia, Somalia, as well as in Saudi Arabia and Yemen (Glen & Hardy, 1987; Phillips & Rix, 2004).

In their account of Chinese roses in Plantae Wilsonianae, Rehder & Wilson (1916), recognised 12 species in section Synstylae, and of these R. glomerata, R. helenae, and R. filipes were described for the first time from the collections of E. H. Wilson.

Gu Cuizhi and Kenneth R. Robertson, the authors of Rosa L. in Flora of China (2003), recognise 26 species in section Synstylae: all the species recognized by Rehder & Wilson are included, with the exception of R. irridens Focke from near Dali, a doubtful species which is omitted altogether from the account.
The species can be divided into groups according to whether the stipules are laciniate, finely dentate or have a smooth edge (entire) and according to leaflet number and indumentum, and these groups are separated in both Rehder & Wilson’s and Gu and Robertson’s keys.

*Rosa* species with laciniate, pectinate or irregularly dentate stipules are easily recognised: *Rosa multiflora* is the commonest of this group of five species. Two additional, little-known species, related to *R. multiflora*, have been described from areas of China which were under-collected in the past: *Rosa langyashanica* D. C. Zhang & J. Z. Shao, from eastern Anhui, and *Rosa daishanensis* T. C. Ku, from northeast Zhejiang.

Six species of section *Synstylae* have finely serrate stipules: they are mostly from eastern China and include *Rosa luciae* which is mainly coastal, *R. sambucina* var. *pubescens* from Taiwan, and *R. maximowicziana* which grows in eastern Siberia and Korea, extending south into Liaoning and Shandong. The little-known *R. lijiangensis* T. T. Yu & T. C. Ku, from Yunnan, with few-flowered umbels of pink flowers, belongs to this group.

The remaining 15 species of the *Synstylae* have entire stipules; of these four have leaflets pubescent on both surfaces or beneath, while the remaining eleven have glabrous leaflets.

*Rosa glomerata* Rehder & Wilson, the subject of this plate, has leaves finely pubescent on both sides. It is recorded from Sichuan, Hubei, Guizhou and Yunnan. Its chief characteristics are its large leaves, with seven leaflets, rugose with impressed veins above and greyish or purplish beneath. Its large compound corymbs of small flowers, 2–3 cm across and its late flowering, usually in late June or July after the other species of the section have finished flowering make it easy to recognise and the small orange or orange-red hips are also distinctive.

Wilson made the type collection of *Rosa glomerata* (*W*. 1306) southeast of Tachien-lu (Kanding), at 1800–2300 m, in the valley of the Tung river (Tong jiang), in 1908 and collected fruit again at the same locality in 1910, but these introductions do not seem to have persisted in cultivation. More recently it has been collected in several places in the Baoxing valley (*MF* 97105, *Ogisu* 92388), in the woods near Gongga shan (*CD&R* 2388), and *SICH* 249 (illustrated here), *SICH* 915 and from Niba shan (*SICH* 1717) and Jia Fang shan (*SICH* 1212).
Plate 714  *Rosa glomerata*  

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The other Chinese species in this section with leaves pubescent on both surfaces are *Rosa rubus* Lév. & Vaniot, *R. brunonii* Lindl., and *R. helenae* Rehder & Wilson.

*Rosa rubus* is distinct in its fewer, larger flowers, usually five leaflets, glabrous above and dark, scarlet fruit on thick pedicels. It is the earliest to flower, usually open in May or early June in northern Sichuan; it is usually found below 1800 m. Its leaves are similar to those of a common bramble, hence the name.

*Rosa brunonii* was described from Nepal, but extends into China in Yunnan, Xizang and into Sichuan in the Tung river valley. It often has nine leaflets, silky-hairy on both sides, and its flowers are in a loose paniculate corymb. It flowers in June, before *R. glomerata*, when the two are growing in the same area.
**Rosa helenae** was described from western Hubei and eastern Sichuan, based on specimens collected by E.H. Wilson in Patung hsien (Badong xian, just south of the Yangtze dam) in June 1907. It has large fruit, usually seven to nine leaflets, glabrous above and greyish-hairy and sometimes glandular beneath. The flowers are 3–4 cm across; the hips 1–1.5 cm long. It is reported to be widespread from Thailand and Vietnam north to Sichuan, Gansu and Shaanxi.

**Rosa filipes** Rehder & Wilson from northwestern Sichuan, is similar to **R. glomerata** in having a large number of small flowers in a loose corymb, but differs in its smooth leaflets which are glabrous above and have a few glands beneath. Its pedicels are filiform and glandular, and the lower branches of the inflorescence have leafy bracts.

The habitat of **Rosa glomerata** is generally on the margins of woods or in scrub or by rocky streams, probably anywhere that there is sufficient light for the seedlings to develop.

**Cultivation.** Most species of **Rosa section Synstylae** are easy to cultivate, and the problem is where to site them in the garden, so that they can reach full size without becoming a nuisance. **R. glomerata** is one of the most vigorous of all roses, easily climbing to 10 m or more when climbing into a large tree (see Fig. 1). The sterile shoots can reach 6 m in a season and end in a thin and flexible, whip-like point, set with numerous recurved thorns to help it secure a hold on its support. It requires full light to flower well, but a cool and well-watered root area. The flowers are small, but well-scented, and this scent is carried on the air. The large sprays of bright orange hips are its most conspicuous characteristic in the garden, and are held well into the winter. Birds can sow the seed some distance from the parent plant.


**Description.** Scrambling or climbing shrub to 10 m or more. Branches glabrous, often reddish, with numerous, recurved thorns, especially near the tip of the current year’s long shoots. **Fertile side shoots** to 45 cm, reddish, glabrous with scattered recurved thorns. **Leaves** on fertile shoots with five to seven leaflets, to 23 cm long, the uppermost subtending the lowest branch of the corymb. **Leaflets** sessile or with 1–2 mm stalks, ovate, cordate, acute at the apex, rugose and with a few scattered hairs above, evenly and densely pubescent and greyish beneath, not toothed but with small gland-tipped prickles; the largest leaves to 11 cm long, 5 cm wide. **Stipules** reddish, entire, to 3.5 cm long, 5 cm wide,
Rosa glomerata. A, portion of leaf underside, × 8; B, leaf base, × 2; C, inflorescence in bud, × 2/3; D, sepal, exterior view, × 6; E, petal, × 3; F, portion of petal, exterior view, × 40; G, stamen, × 10; H, gynoecium, × 6; J, apex of fruit, × 4; K, l.s. of fruit, × 4; L, t.s. of fruit, × 3. Drawn by Christabel King from SICH 249 cultivated at Kew.

glabrous, the free apex 6 mm, curled back, with a few glands. Rhachis pubescent, with small recurved prickles and stalked glands. Inflorescence a many-flowered, compound corymb. Pedicels slender, densely pubescent, with a few scattered stalked glands. Flowers white, fragrant of cloves, 4–4.5 cm across. Hypanthium villous and with stalked glands. Sepals 12 mm, acuminate, mostly entire, villous inside and out, and with stalked glands. Petals obovate, rounded or emarginate, pubescent outside. Stamens numerous, unequal, filaments glabrous; anthers
orange-yellow, blackening after dehiscence. **Stigmatic column** 8 mm long, silky-hairy. **Hips** subglobose, orange-yellow to 1.2 cm long; sepals deciduous, style persistent.

**Habitat.** Thickets, rocky streamsides, margins of woods.

**Distribution.** Yunnan (Deqen); Sichuan, Guizhou, Hubei.

**Flowering time.** June to July.

**REFERENCES**


