

THE GENUS ROSA

BY

ELLEN WILLMOTT, F.L.S.



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ALFRED PARSONS, A.R.A.



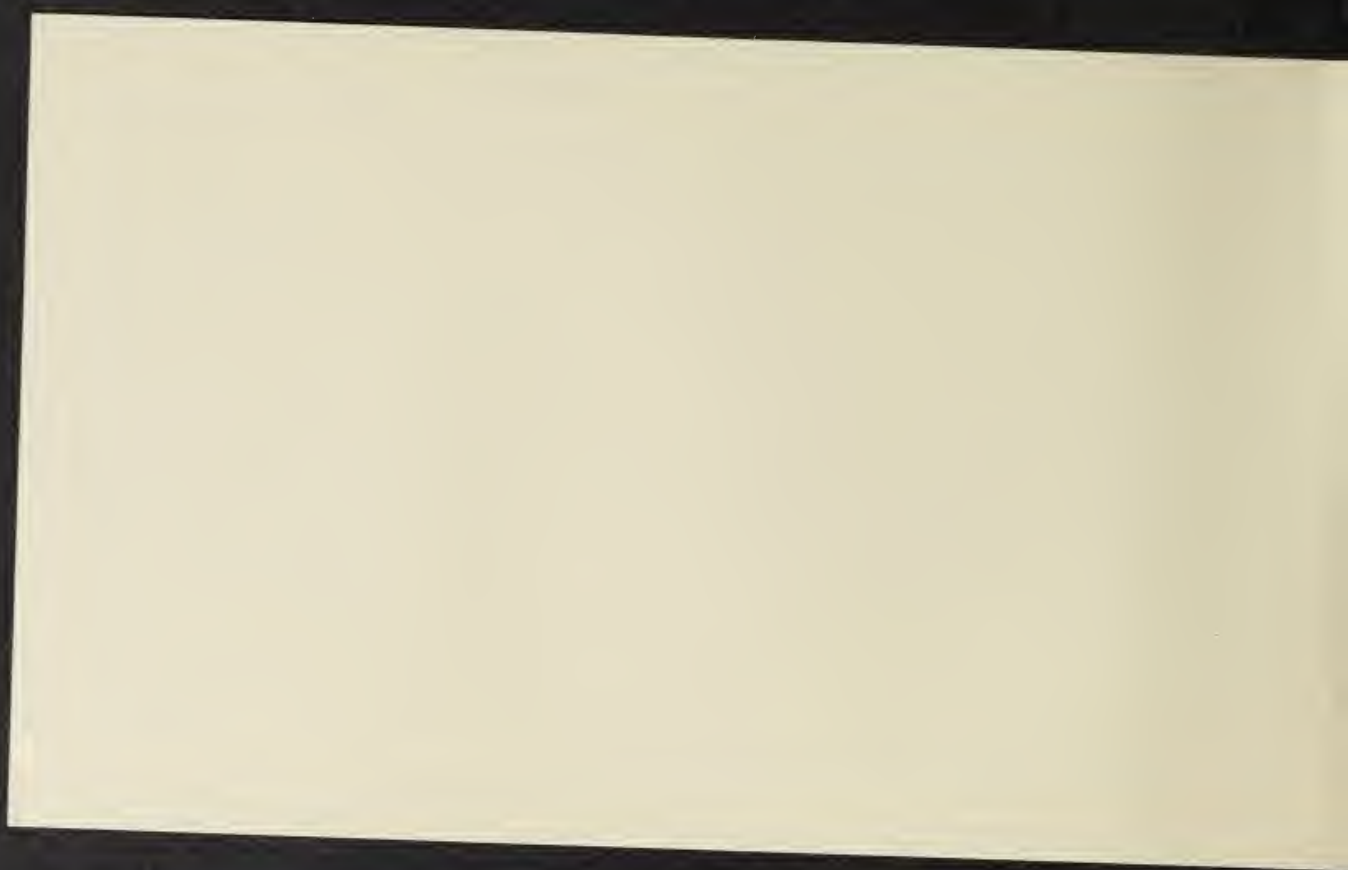
LONDON

JOHN MURRAY, ALBEMARLE STREET, W.

1910

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TO HER MAJESTY QUEEN ALEXANDRA

MOST GRACIOUS LADY,

Herewith I lay at Your Majesty's feet a Book of Roses, wherein I have striven to set down, with such poor skill and diligence as has been vouchsafed to me, all that I have learned of that most Royal Family of the Kingdom of Flowers. For as there are many races and colours of men, so are there many hues and diversities of Roses; but whereas, by the imperfection of our nature, the beauty of men fails to reach that of the Divine Image, being indeed too often turned even to that which is vile, yet shall you never find a Rose that is not most lovely, sweet and perfect, full of that grace which comes only of purity, and abounding in that beauty which dwells only in God's own handiwork.

And albeit such a task might appear too high for such an one as mine own self, and albeit I might seem unworthily and presumptuously to vie with that Greek poetess of old, of whom it was said that "she hath left little, but all Roses"; yet, being mightily encouraged thereto by Your Majesty's gracious countenance and protection, I have to the best of my power endeavoured to accomplish it. And forasmuch as mere words must needs fail to give just meed of praise to the beauty of Roses, I have been beholden to the skill of a cunning limner, who has striven so to portray each leaf and blossom that all may readily know and love the same. Wherefore, most Royal Lady, it remains only for me to dedicate, according to Your Majesty's gracious permission, my Roses to our own peerless Rose, my Queen of flowers to the Queen of our English hearts; beseeching you herewith to accept the humble and dutiful devotion of

Your Majesty's most faithful and obedient servant,

ELLEN WILLMOTT.

January, 1910.

PREFACE

THE book which is here offered to the public is the outcome of many years' study of the genus *Rosa*. Originally it consisted of notes put together for my own use which, but for the encouragement of friends, might never have grown into a book.

Two works are pre-eminent among the many which have been written on *Roses*: these are Redouté's *Les Roses*, published in 1802–1820, and John Lindley's *Rosarum Monographia*, published in 1820: the former is in the main a collection of beautiful drawings of *Roses* chosen for their beauty; the latter is a systematic study of the genus.

Redouté's *Roses* is the most beautifully illustrated book which I know. In delicacy of drawing, in excellence of colouring and in fidelity to nature, it surpasses every other flower-book. The drawings are portraits, at once precise and artistic, of the most beautiful of the *Roses* at that time grown in French gardens. They are not intended to illustrate a systematic account, though the text, written afterwards by Thory, who was a botanist, in addition to descriptions of the *Roses* drawn, deals to some extent with the genus as a whole.

John Lindley, on the other hand, was a laborious writer, of vast botanical attainments and of unwearying patience. Most of the books on *Roses* before his time contained more or less vague and inadequate accounts of the genus, with little or no attempt at systematic treatment. Lindley was the first to perceive the true proportions of the subject, and his work has lightened the labours of all subsequent students.

It is not a little remarkable that this careful and erudite monograph was the production of a youth who had not completed his twentieth year, a circumstance which seems to me greatly to increase the admiration due to a work in itself so excellent.

PREFACE

It might be thought that there was hardly room for another book on Roses, but it is now eighty years since the latest edition of Lindley's work was published, and during that time many new Roses have been discovered, and our knowledge of others has greatly increased.

I have aimed principally at giving all the evidence I could collect from every available source, advancing my own opinion as rarely as possible, for the subject is of very great botanical complexity, owing partly to its inherent difficulty, and partly to the mass of literature, adequate and inadequate, which has accumulated during the many centuries in which it has been studied. I can hardly hope to have presented many facts not mentioned by previous writers, but I have at least taken great pains to ensure accuracy, and to verify and give references for every statement I have made. I have had the inestimable advantage of criticism, of help and of encouragement from several competent authorities, and especially from the Rev. Canon Ellacombe of Bitton, who has given much kindly encouragement throughout, and helped on many occasions; Mr. J. G. Baker, F.R.S., late Keeper of the Royal Herbarium at Kew, who has been of especial service in drawing up the specific characters; Professor Sargent of the Arnold Arboretum, Harvard University, U.S.A., who has read the whole book and given much valuable criticism and advice; the late Rev. Charles Wolley-Dod of Edge Hall, Cheshire, who encouraged the work at its inception, and made many useful suggestions; Major A. H. Wolley-Dod, Sir George Watt, Lord Redesdale, and Lieut.-Colonel Prain, Director of the Royal Gardens, Kew, who has been so good as to read the final proofs, and the work thus owes much to his courtesy. To all of these my grateful acknowledgments are due. But for the first I should never have undertaken the book at all; but for the last it might never have reached the stage of publication.

ELLEN WILLMOTT.

July, 1910.

I
SIMPLICIFOLIAE



1—ROSA PERSICA Michx.

Rosa persica : caule gracili, debili, sarmentoso ; ramulis pubescentibus ; aculeis pluribus, aequalibus, gracilibus, flavis ; foliis sessilibus, simplicibus, lanceolatis, simpliciter serratis, pubescentibus ; stipulis abortivis ; floribus solitariis ; pedunculis aciculatis ; calycis tubo globoso, hispido ; lobis simplicibus, lanceolatis, dorso setosis ; petalis parvis, luteis, macula rubro-brunea prope basim praeditis ; stylis liberis ; fructu parvo, globoso, hispido ; sepalis persistentibus, erectis.

R. persica Michaux in Jussieu, *Gen. Pl.* Apx. p. 452 (1789).—Gmelin, *Syst.* vol. i. p. 855 (1796).—Koehne, *Deutsche Dendrol.* p. 274 (1893).—Rehder in Bailey, *Cycl. Am. Hort.* vol. iv. p. 1549 (1902).—C. K. Schneider, *Ill. Handbuch Laubholzsk.* vol. i. p. 547 (1906).

R. berberifolia Pallas in *Nov. Act. Petrop.* vol. x. p. 379, t. 10 (1792).—Roessig, *Die Rosen*, No. 53 (1802-1820).—Thory in Redouté, *Roses*, vol. i. p. 27, t. (1817).—Lindley, *Ros. Monogr.* p. 1, No. 1 (1820).—Ledebour, *Icon.* vol. iv. t. 370 (1833).—Crépin in *Bull. Soc. Bot. Belg.* vol. xi. pp. 101, 102 (*Primit. Monogr. Ros.* fasc. ii. pp. 216, 217) (1872).—Regel in *Act. Hort. Petrop.* vol. v. p. 381 (*Tent. Ros. Monogr.* p. 97 [1877]) (1878).—Masters in *Bull. Soc. Bot. Belg.* vol. xxviii. pt. 2, p. 135 (1889).—Hooker f. in *Bot. Mag.* vol. cxvi. t. 7096 (1890).

R. simplicifolia Salisbury, *Prodr. Stirp. Hort. Allert.* p. 359 (1796) ; *Parad. Lond.* t. 101 (1808).—Nicholson in *Gard. Chron.* n. ser. vol. ii. p. 468, fig. 100 (1885).

Hulthemia berberifolia Dumortier in Herrmann, *Dissert.* p. 13 (1824).—Ledebour, *Fl. Ross.* vol. ii. p. 72 (1844).—Boissier, *Fl. Orient.* vol. ii. p. 668 (1872).—Déséglise in *Bull. Soc. Bot. Belg.* vol. xv. p. 191 (*Cat. Rais. Ros.* p. 22 [1877]) (1876).

Lowea berberifolia Lindley in *Bot. Reg.* vol. xv. t. 1261 (1829).

Stems slender, sarmentose ; branches pubescent ; *prickles* many, slender, subequal, straw-yellow. *Leaves* simple, sessile, oblong, lanceolate or linear, simply serrated, pubescent ; *stipules* abortive. *Flowers* solitary ; *peduncles* aciculate. *Calyx-tube* globose, hispid ; *lobes* lanceolate, simple, setose on the back. *Corolla* 1-1½ in. diameter ; *petals* lemon-yellow, with a red-brown spot near the base. *Styles* free, densely villous. *Fruit* globose, hispid, ½ in. diameter ; *sepals* persistent, erect.

Rosa persica differs from all other Roses by its simple leaves and abortive stipules, and has often been regarded as the representative of a distinct genus. It ranges from Persia eastwards to the Altai Mountains and the Soongarian Desert, reaching an altitude of 5,000 feet. It is found in abundance near Amadin and in the fields at the

ROSA PERSICA

foot of the Elvina Mountains, where it grows in bushes of about three feet in height. Unfortunately it is not hardy in England. It was first mentioned by Jussieu in his *Genera Plantarum* in 1789. It was introduced into France by Michaux and Olivier, and into England in 1790 by Sir Joseph Banks.



1—ROSA PERSICA



2—ROSA HARDII Cels

(R. CLINOPHYLLA × BERBERIFOLIA)

Rosa Hardii Cels in *Ann. de Flore et de Pomone*, vol. iv. pp. 372, 373, fig. (1835-6).

R. berberifolia × *involutrata* Paxton, *Mag. Bot.* vol. x. p. 195, t. (1843).— Déséglise in *Bull. Soc. Bot. Belg.* vol. xv. p. 232 (*Cat. Rais. Ros.* p. 63 [1877]) (1876).—Nicholson in *Gard. Chron.* n. ser. vol. xxiv. p. 468, fig. 101 (1885).

A low erect bush, with slender, spreading, pubescent branches. *Leaflets* 5-7, oblanceolate, obtuse, $\frac{3}{4}$ -1 in. long, narrowed to the base, simply toothed, firm, glabrous on both surfaces; *petioles* pubescent; *stipules* narrow, adnate, gland-ciliated, with large, strongly toothed, free points. *Flowers* solitary; *peduncles* short, naked or slightly aciculate. *Calyx-tube* globose, naked or slightly aciculate; *lobes* simple, lanceolate, entire, not glandular on the back. *Petals* large, pale bright yellow, with a red-brown spot at the base. *Styles* villous, free, not protruded.

This curious and beautiful Rose was described for the first time in 1836 by Cels in the *Annales de Flore et de Pomone*. After his description occurs the following: "This interesting Rose, raised at the Luxembourg by our colleague M. Hardy,¹ from a cross between *Rosa clinophylla* and *Rosa berberidifolia*. It is of easy culture, and can with advantage replace *Rosa persicifolia* in our gardens. The individual flower is larger in size and more symmetrical in form." There is no mention of *Rosa involutrata*, as stated by Paxton in the *Magazine of Botany*, and by Déséglise and Nicholson. The *Annales de Flore et de Pomone* is a book so rare that Paxton may not have had access to it, and hence the misquotation.

This Rose furnishes a manifest proof that hybrids may be made even between Roses of but little affinity. *Rosa clinophylla* Thory is an Indian and Chinese species which is classed in the group *Bracteatae*. *Rosa berberifolia* Pallas (*Rosa persica* Michx.) is, as we have seen (page 3), a species so different from all other Roses that several authors have thought it should be put into a distinct genus. Thus Dumortier² made the genus *Hulthemia*, Lindley³ *Lorvea*, and Bunge⁴ *Rhodopsis*.

¹ Hardy was Curator of the Luxembourg Gardens in Paris.

² In Herrmann, *Dissert.* p. 13 (1824).

³ In *Bot. Reg.* vol. xv. t. 1261 (1829).

⁴ In Ledebour, *Fl. Alt.* vol. ii. p. 224 (1830).

ROSA HARDII

Of this parent *Rosa Hardii* retains only the flower, which, with its yellow petals and dark eye, suggests the flower of *Helianthemum formosum* Dun.

In England this Rose requires a well-chosen position, for preference in the rock garden, where perfect drainage can be assured, together with full benefit from the sun's rays. If only it were a little hardier and a little less capricious in its growth it would be one of the most popular of garden Roses, but it is generally a very short-lived plant and is apt to disappear suddenly. The drawing was made from a plant growing in the open ground at Warley.

Notwithstanding the wide difference which appears to exist between this Rose and other yellow Roses, there would seem to be some affinity between them, if we can judge by the result which M. Pernet Ducher obtained by crossing the *R. Persian Yellow* with the H. P. *Jean Ducher*. This cross, which produced *Rose Soleil d'or*, gave also a non-perpetual variety with flowers almost single having in the centre of each flower a decided eye which afterwards fades white but remains quite distinct. It grew in M. Viviand Morel's garden at Lyons and was extremely attractive, being very floriferous and of good habit. M. Pernet Ducher dedicated it to "Rhodophile Gravereaux," the enthusiastic rosarian, who has gathered together in his garden at l'Haie, Bourg-la-Reine, the most complete collection of Roses in existence.

II
SYSTYLAE



3—ROSA ARVENISIS Huds.

Rosa arvensis: ramis flaccidis, longe prostratis, saepe rubrobruneis, glaucis; aculeis sparsis, robustis, conformibus, uncinatis; foliolis 5-7 ovalibus, acutis, parvis, glabris, simpliciter grosse serratis; rhachi glabra vel obscure pubescente, vix glandulosa; stipulis adnatis, glanduloso-ciliatis, apice divergentibus; floribus paucis; pedunculis elongatis, glandulosis; bracteis glabris, lanceolatis; calycis tubo turbinato; lobis brevibus, ovatis, dorso nudis, exterioribus parce appendiculatis; petalis albis; stylis glabris, coalitis, longe protrusis; disco longe, conico; fructu subgloboso, parvo, serotino; sepalis caducis.

R. arvensis Hudson, *Fl. Angl.* p. 192 (1762).—Linnaeus, *Mant.* p. 245 (*ex parte*) (1767).—Smith in *Eng. Bot.* vol. iii. t. 188 (1794).—Lawrance, *Roses*, t. 86 (1799).—Guimpel, Willdenow & Hayne, *Abbild. Deutsch. Holzart.* p. 126, t. 95 (1815).—Lindley, *Ros. Monogr.* p. 112, No. 62 (1820).—Hooker in Curtis, *Fl. Lond.* ed. 2, vol. iv. t. 123 (1821).—Trattinnick, *Monogr. Ros.* vol. ii. p. 103 (1823).—Seringe in De Candolle, *Prodr.* vol. ii. p. 597 (1825).—Syme, *Eng. Bot.* ed. 3, vol. iii. p. 231, t. 476 (1864).—Baker in *Journ. Linn. Soc.* vol. xi. p. 241 (1869).—Christ, *Rosen Schweiz*, p. 195 (1873).—Déséglise in *Bull. Soc. Bot. Belg.* vol. xv. p. 214 (*Cat. Rais. Ros.* p. 45 [1877]) (1876).—Crépin in *Bull. Soc. Bot. Belg.* vol. xviii. p. 323 (*Primit. Monogr. Ros.* fasc. v. p. 569 [1880]) (1879); vol. xxv. pt. 2, p. 203 (1886); vol. xxxi. pt. 2, p. 71 (1892).—Borbas in *M.T. Akad. Math. S. Természettud Közlemények*, xvi. Kötet. p. 343 (*Ros. IIung.* p. 343) (1880).—Burnat, *Fl. Alp. Mar.* vol. iii. p. 25 (1899).—Keller in Ascherson & Graebner, *Syn. Mitteleur. Fl.* vol. vi. p. 39 (1900).

R. sylvestris Herrmann, *Dissert.* p. 10 (1762).

R. repens Scopoli, *Fl. Carniol.* ed. 2, vol. i. p. 355 (1772).—K. G. Gmelin, *Fl. Bad. Alsace*, vol. ii. p. 418 (1806).—Jacquin, *Fragm.* p. 69, t. 104 (1809).—Rau, *Enum. Ros.* p. 40 (1816).—K. Koch, *Dendrol.* vol. i. p. 264 (1869).

R. scandens Moench, *Verz.* p. 118 (*non* Miller) (1785).

R. Herporhodon Ehrhart, *Beitr. zur Naturk.* vol. ii. p. 71 (1788).

R. canina, var. *sylvestris* Roth, *Fl. Germ.* vol. ii. pt. 1, p. 560 (1789).

R. Halleri Krocke, *Fl. Siles.* vol. ii. pt. 1, p. 150 (1790).

R. fusca Moench, *Meth.* p. 688 (1794).

R. serpens Wibel, *Prim. Fl. Werth.* p. 265 (1799).—Kirschleger, *Fl. Alsace*, vol. i. p. 242 (1852).

R. sempervirens Roessig, *Die Rosen*, No. 32 (*non* Linnaeus) (1802-20).

R. glauca Dierbach, *Fl. Heidelberg.* vol. i. p. 140 (1819).

R. arvensis, β Sims in *Bot. Mag.* vol. xlvi. t. 2054 (1819).

Bush not more than 2-3 feet high when not supported; branches long, flaccid and trailing, in exposure red-brown and glaucous; *prickles* uniform, stout, scattered, strongly hooked. *Leaflets* 5-7, small, oval, acute, simply coarsely serrated, glabrous, often glaucous green above, paler and rather glaucous below; *petioles* glabrous or faintly pubescent, very slightly glandular; *stipules* adnate, somewhat gland-ciliated, with free, ovate, divergent tips. *Flowers* few, in a corymb; *pedicels* long, glandular;

ROSA ARVENSIS

bracts lanceolate. *Calyx-tube* turbinate; *lobes* short, ovate, not leaf-pointed, naked on the back, the outer with 1-2 small linear lobes. *Petals* large, pure white. *Styles* glabrous, forming a column considerably exerted beyond the very conical disc. *Fruit* small, subglobose or broadly ovoid, dark red, not ripening till October; *sepals* deciduous.

This well-marked species extends over central and southern Europe, from Spain and Britain to Greece. It is not mentioned by Turner or Lobel, but was noticed by Caspar Bauhin in 1623¹ under the name of "*Rosa arvensis candida*." It is contained in Buddle's herbarium, made late in the seventeenth century, and is called by Ray² "*Rosa sylvestris altera minor flore albo nostra*." Linnaeus only knew it from Hudson's description, and there is no specimen in his herbarium.

This Rose, the most beautiful of all our English wild Roses, is readily known by its snow-white flowers, more cup-shaped than those of any of our other wild Roses, by its styles united in a smooth prominent column, surrounded by a halo of golden stamens, and by the rambling habit of its long slender stems, which trail along the ground unless they encounter some object which encourages the branches to ascend. It is widely distributed throughout England, and is abundant in the southern counties, becoming scarcer as it goes north, and, though it ranges through Cheviotland to the Grampians, it is very rare north of the Tweed. With its wreaths of snowy bloom, its deep green foliage and purple, glaucous stems, it is one of the most beautiful objects of our English hedgerows at midsummer.

The Ayrshire Roses, amongst the most popular of our climbing Roses, originated from *Rosa arvensis*. Among them are *Queen of the Belgians*, *Alice Gray*, *Dundee Rambler*, and many others very generally grown for wreathing arches and pillars and covering walls. They are not only beautiful, but have the additional advantages of being absolutely hardy, and at the same time the strongest growing and most floriferous of all our garden Roses.

Rosa arvensis has also made many good natural hybrids with *Rosa gallica* L., *Rosa canina* L. and others. At Charbonnières, near Lyons, there is a whole series of these interesting hybrids which have been named and described by the Abbé Boullu and others.

This Rose is figured by Andrews (vol. i. t. 1).

¹ *Pinax*, p. 484.

² *Historia*, vol. ii. p. 1471 (1688).



3—ROSA ARVENSIS

4—THE AYRSHIRE ROSES

Although the Ayrshire Roses have occupied a prominent place in our gardens for more than a hundred years, they still enjoy so much favour that some account of their history may be of interest. This history has not been easy to trace, for unfortunately the present representatives of the two Scotch firms, Brown of Perth and Austin of Glasgow, which played an important part in Rose raising and growing in Scotland early in the last century, are not able to throw any light upon the subject, and there seem to be no documents relating to the work of these enthusiastic and enlightened florists. Loudon in his *Arboretum et Fruticetum Britannicum* gives “*Rosa arvensis Ayrshirea*” as having been introduced from America in 1818, but he adds a mark of doubt, and in volume viii. of the *Floricultural Cabinet* two double forms of *Rosa arvensis* Huds. are said to be cultivated in Germany. These are hybrids, according to the *Annals of the Horticultural Society* of 1845.

An interesting account of the Ayrshire Rose by Mr. Patrick Neill, Secretary of the Caledonian Horticultural Society, appeared in the *Edinburgh Philosophical Journal* in 1820.¹ He says that, for a number of years past, a very rampant climbing Rose-bush has been cultivated in Scotland under the name of the Ayrshire Rose. From this it would appear that the Rose was already established in Scotland before 1818. In 1817 John Goldie, son-in-law of Mr. Smith who founded a nursery-garden at Monkwood Grove in Ayrshire about 1821, went to America and remained there for three years in search of plants wherewith to stock the new nursery. The *Gardeners' Magazine* for 1831 contains a list of some of the plants cultivated in this nursery; among these occur *Rosa arvensis* v. *foliis variegatis* and v. *fl. pleno*. In 1828 Daniel Stewart exhibited at Dundee a seedling Rose named Craighall Climbing Rose. The description of this Rose says that “to the rambling habit of the Ayrshire it adds the beauty of some of the double white varieties.”

In view of all this evidence of the tolerably widespread existence of the Ayrshire Rose in Scotland at this period, it is strange to read

¹ Vol. ii. art. xvii. p. 102.

THE AYRSHIRE ROSES

in the *Botanical Magazine* in 1819¹ that Sir Joseph Banks had made the strictest inquiries and had been unable to discover that the Rose had ever been heard of either there or in any part of Scotland. The figure is stated to have been made from a plant growing in Sir Joseph's garden at Spring Grove, but nothing is said as to the origin of this plant. Now the Rose figured is *Rosa arvensis* with leaflets dark green above, paler and slightly glaucous below, stipules narrow, flat, edged with glands and having a red band down the middle. It is difficult to realise how this oversight could have arisen, for the true Ayrshire Rose was certainly growing at Spring Grove at that time, the plants having come from Ronald's Nursery at Brentford in 1811.

And now, having gathered together all the early references to the Ayrshire Rose which it has been possible to find, we will quote Mr. Neill's own account of its introduction into Scotland, as given in the *Edinburgh Philosophical Journal* referred to above :

“At the time when the Botanical Garden at Leith Walk, Edinburgh, was originally established (about 1767), the late Dr. John Hope, Professor of Botany, and some well-wishers to the garden and to botanical science, united in sending out a person to North America, with the view of his collecting the seeds of new, curious or useful plants. Of the transatlantic rarities sent home by this collector, no register seems to have been made ; and both he and his patrons have thus in a great measure lost the credit that was due to them for their zeal. The late John, Earl of Loudoun, was a subscriber towards this botanical speculation ; and in return, he received, in 1768 or 1769, a share of a parcel of seeds sent either from Lower Canada or Nova Scotia. Among these were some briar hews ; which being sown in the garden at Loudon Castle, produced a number of rose-bushes. These, in a year or two, attracted much notice by the great length to which they pushed their shoots. The present Mr. George Douglas of Rodinghead (factor upon the Duke of Portland's estate in Ayrshire) resided at Loudon Castle at that period ; and he perfectly recollects the sowing of the American hews, and the wide rambling rose-plants which sprung from them. Several of the neighbouring proprietors in Ayrshire got plants of the new rose for their gardens. Among others, the late Mr. Dalrymple of Orangefield received a plant from Mr. Douglas ; and he having trained it against the garden-wall, ‘it ran amazingly’ (as Mr. Underwood expresses it), the rapidity of its growth, and length of the shoots, surprising everybody. The nurserymen of Kilmarnock and Ayr having procured cuttings and layers from this plant, bestowed on it the name of the *Orangefield Rose* ; in places at a distance, however, it soon came to be known by the more general title of the *Ayrshire Rose*. The original Orangefield specimen was in existence little more than twenty years ago ; but the garden having, about that time, come into the possession of a tenant, who preferred currant bushes to rampant roses, it was grubbed up and destroyed. Several of the original plants, however, still remain at Loudon Castle, some trained against the walls of the factor's house, and others in old hedges on the farm of Alton, near Loudon. Mr. Douglas has likewise some of the original plants growing in hedges and against walls, on his own property of Rodinghead.”

Shortly after the publication of this account, Mr. Sabine read before the Horticultural Society a paper in which he discussed at length the history of the Ayrshire Rose. In this paper he examines

¹ Vol. xlvi. t. 2054.

THE AYRSHIRE ROSES

in detail the description of the Rose, pointing out how it differs from *Rosa arvensis* and *Rosa sempervirens* L., the two Roses to which it bears the greatest resemblance. He reviews all the information available and quotes a letter from Smith of Monkwood Grove in which the writer states that he perfectly well remembers the Rose growing in 1776 at Orangefield, where it had been planted by one John Penn, a Yorkshireman living in Ayr, and much interested in gardening. Penn had found it growing in a garden in Yorkshire and was told that it had come originally from Germany. The best authenticated version is, however, that given by Neill, and as it is corroborated by persons living at the time who would be likely to know, it may safely be assumed that the Ayrshire Rose originated at Loudoun Castle. Mr. Sabine was inclined to this opinion. Supposing the seed to have come from Canada or Nova Scotia, it might still be of garden origin, and so the fact that neither *Rosa arvensis* nor *Rosa sempervirens* is indigenous to North America would not influence the case.

5—ROSA SEMPERVIRENS Linn.

Rosa sempervirens: ramis elongatis, sarmentosis; aculeis sparsis, conformibus, modice robustis, leviter falcatis; foliis 5-7, ovatis vel oblongis, acutis, simpliciter serratis, firmis, viridibus, subpersistentibus; rhachi glabra, aciculata; stipulis adnatis, apicibus liberis parvis, ovatis; floribus paucis, corymbosis, pedicellis, glandulosis; bracteis lanceolatis; calycis tubo oblongo vel globoso, glanduloso; lobis lanceolatis, simplicibus, dorso glandulosis; petalis albis, magnitudine mediocribus; stylis villosis, coalitis, protrusis; fructu globoso, parvo, rubro; sepalis deciduis.

R. sempervirens Linnaeus, *Sp. Plant.* vol. i. p. 492 (1753).—Miller, *Gard. Dict.* ed. 8, vol. ii. No. 9 (1768).—Aiton, *Hort. Kew.* vol. ii. p. 205 (1789).—Lawrance, *Roses*, t. 45 (1799).—Roessig, *Die Rosen*, No. 32 (1802-1820).—Lindley, *Ros. Monogr.* p. 117 (1820); *Bot. Reg.* vol. vi. t. 465 (1820).—Thory in Redouté, *Roses*, vol. ii. pp. 15, 49, tabs. (1821).—Sibthorp & Smith, *Fl. Graec.* vol. v. t. 483 (1825).—Seringe in De Candolle, *Prodr.* vol. ii. p. 597 (1825).—Grenier & Godron, *Fl. France*, vol. i. p. 555 (1848).—Visiani, *Fl. Dalm.* vol. iii. p. 242 (1852).—Crépin in *Bull. Soc. Bot. Belg.* vol. xviii. p. 310 (*Primit. Monogr. Ros.* fasc. v. p. 556 [1880]) (1879); vol. xxv. pt. 2, p. 202 (1886); vol. xxxi. pt. 2, p. 71 (1892).—Burnat & Gremli, *Roses Alp. Marit.* p. 127 (1879); *Suppl.* p. 48 (1882).—Willkomm & Lange, *Fl. Hisp.* vol. iii. p. 209 (1880).—Christ in Boissier, *Fl. Orient.* *Suppl.* p. 228 (1888).—Burnat, *Fl. Alp. Mar.* vol. iii. p. 22 (1899).—Rouy & Camus, *Flore de France*, vol. vi. p. 237 (1900).—Keller in Ascherson & Graebner, *Syn. Mitteleur. Fl.* vol. vi. p. 36 (1900).—Rehder in Bailey, *Cycl. Am. Hort.* vol. iv. p. 1550 (1902).—C. K. Schneider, *Ill. Handbuch Laubholz.* vol. i. p. 544 (1906).

R. alba Allioni, *Fl. Pedem.* vol. ii. p. 139 (*non* Linnaeus) (1785).

R. balearica Persoon, *Syn.* vol. ii. p. 49 (1807).

R. atrovirens Viviani, *Fl. Ital. Fragm.* p. 4, t. 6 (1808).

R. arvensis Alschinger, *Fl. Jadrensis*, p. 113 (*non* Hudson) (1832).

R. longicuspis Bertoloni, *Misc.* fasc. xxi. p. 15, t. 3 (1861).—Hooker f. *Fl. Brit. Ind.* vol. ii. p. 367 (1879).

R. Gandogeri Debeaux in *Bull. Soc. Bot. France*, vol. xxi. p. 9 (1874).

Stems long, sarmentose; *prickles* scattered, uniform, moderately robust, slightly hooked. *Leaflets* 5-7, ovate or oblong, $\frac{3}{4}$ -1 $\frac{1}{2}$ in. long, acute, simply serrated, bright green, glabrous on both surfaces, firm in texture, lasting through the winter; *petioles* glabrous, aciculate; *stipules* adnate, with small, ovate, free tips. *Flowers* few, corymbose; *bracts* lanceolate; *pedicels* glandular. *Calyx-tube* oblong or globose, glandular; *lobes* lanceolate, simple, $\frac{1}{2}$ in. long, glandular on the back. *Petals* rather large, pure white. *Styles* villous, united in a protruded column. *Fruit* small, globose, bright red; *sepals* deciduous.

This Rose has a very wide range. According to Nyman,¹ it is found in southern and western France, Portugal, Italy, Carinthia,

¹ *Conspect. Fl. Europ.* p. 231 (1878).

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Dalmatia, Greece, Thrace, and also in Algeria, Morocco and Tunis. Grenier & Godron give its localities in France as following the shores of the Mediterranean, then reaching Angers and following the banks of the Rhone as far as Lyons. There is, however, no other record of Lyons being one of its habitats. It is intermediate between *Rosa arvensis* Huds. and *Rosa moschata* Miller, differing from both by its bright green, firm, subpersistent leaflets. According to Fraas¹ it is mentioned by Hippocrates, Dioscorides, Theophrastus and Pliny. C. Bauhin² published it under the name of "*Rosa moschata sempervirens*" in 1623, and it is figured and described by Parkinson³ and Dillenius.⁴

As is natural with a Rose so widely distributed, there are many geographical varieties, to which different authors have given specific rank. Of these the chief are:

Rosa scandens Miller,⁵ with larger leaflets, more abundant, musk-scented flowers, more abundant bracts, and sepals casually compound. This is the *Rosa sempervirens* of the Italian and Sicilian botanists.

Rosa prostrata DC.,⁶ with weak, decumbent stems, small leaflets, few and solitary flowers and glabrous styles. Dr. Christ describes a hybrid with *Rosa dumetorum* Thuill., and it is probable that var. *Russelliana* of Loudon⁷ and the Rose Clare⁸ are hybrids between *Rosa sempervirens* and *Rosa chinensis* Jacq.

Rosa sempervirens microphylla DC.,⁹ which De Candolle found near Montpellier, with leaves much smaller than the type.

Rouy in his *Flore de France*¹⁰ describes several other varieties, among them a very pretty form found on Mont Boron, Nice, *Rosa sempervirens micrantha*, which has retained all its characteristics and has flowered in the open ground at Warley regularly year by year.

M. de Pronville¹¹ refers to a very beautiful variety growing in the Luxembourg gardens under the name of *Rosa sempervirens latifolia*, which was described by Thory as follows: "Leaflets much larger and longer than in any other variety of the type. Tubes and pedicels tinged with red. Nine to ten white flowers in an inflorescence."

It is to be feared that this Rose must be added to the long list of old Roses which have gone out of cultivation, to make room for the increasing number of new introductions to which Alphonse Karr referred when he said that a Rose which lacked fragrance was but half a Rose, since perfume is the soul and spirit of a flower.

Several of our most valued climbing Roses belong to this group. Formerly the Ayrshire Roses were included, but now they are classed under *Rosa arvensis* Huds.

The early garden varieties of *Rosa sempervirens* originated in the

¹ *Synopsis Plantarum Florae Classicae*, p. 74 (1870).

² *Pinax*, p. 482.

³ *Paradisus*, p. 420 (1629).

⁴ *Hort. Elth.*, t. 246, fig. 318 (1732).

⁵ *Gard. Dict.*, ed. 8, No. 8 (1768).

⁶ De Candolle, *Cat. Hort. Monsp.*, p. 138 (1813).

⁷ *Arboretum*, vol. iv. p. 773 (1838).

⁸ Figured in *Bot. Reg.* vol. xvii. t. 1438 (1831).

⁹ De Candolle, *loc. cit.*

¹⁰ Vol. vi. pp. 239-240 (1900).

¹¹ *Sommaire d'une monographie du genre Rosier*, p. 42 (1822).

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gardens of the Duc d'Orléans at Neuilly where Jacques was gardener. *Félicité et Perpétue* is one of the best known, and it is highly esteemed for its beauty and luxuriance and at the same time vigorous constitution. *Myriantes Rénoncule*, *Princesse Maria*, etc., and indeed the whole series are invaluable for training on pergolas or as pillar Roses wherever vigorous growth, ample foliage and masses and wreaths of flowers are desired. All the garden varieties of *Rosa sempervirens* retain the semipersistent foliage of the type, and in a mild winter the leaves remain on the plants throughout until the coming of spring renews them.

Rosa longicuspis of Bertoloni, though accepted as a species by Sir J. D. Hooker, is probably nothing more than a robust geographical variety of *Rosa sempervirens*. It is confined to the mountains of Assam, and possibly Burma, and ascends to 5,000 feet above sea-level.

Rosa sempervirens is figured by Andrews.¹

¹ *Roses*, vol. ii. t. 89 (1828).

PART II

Dec. 15, 1910
Gray Herbarium
Harvard University.

THE GENUS ROSA

BY

ELLEN WILLMOTT, F.L.S.

Drawings by

ALFRED PARSONS, A.R.A.



LONDON
JOHN MURRAY, ALBEMARLE STREET, W.

1910



6—ROSA MULTIFLORA Thunb.

Rosa multiflora: caulibus elongatis, sarmentosis, ramulis viridibus; aculeis parvis, sparsis, conformibus, falcatis; foliolis 7-9, oblongis, acutis, simpliciter serratis, facie viridibus, glabris, dorso plus minusve pubescentibus; rhachi pubescente, aciculis paucis falcatis praedita; stipulis profunde laceratis, apice libero lanceolato; floribus multis, parvis, dense paniculatis; bracteis lanceolatis, laceratis; pedicellis plerumque setosis; calycis tubo oblongo, nudo; lobis ovatis, pinnatifidis, dorso parce glanduliferis; petalis parvis, orbicularibus, albis vel rubellis; carpellis 20-25; stylis pilosis, coalitis, protrusis; fructu minimo, subgloboso, nudo; sepalis caducis.

R. multiflora Thunberg, *Fl. Jap.* p. 214 (1784).—Lindley, *Ros. Monogr.* p. 119, No. 66 (1820).—Seringe in De Candolle, *Prodr.* vol. ii. p. 598 (1825).—Miquel, *Prol. Fl. Jap.* p. 227 (1866-67).—Crépin in *Bull. Soc. Bot. Belg.* vol. xiii. p. 250 (*Primit. Monogr. Ros.* fasc. iii. p. 257) (1874); vol. xviii. pp. 277-285 (*Primit. Monogr. Ros.* fasc. v. pp. 523-531 [1880]) (1879).—Franchet & Savatier, *Enum. Pl. Jap.* vol. i. p. 134 (1874); vol. ii. p. 343 (1876).—Franchet in *Mém. Soc. Sci. Nat. Cherb.* vol. xxiv. p. 216 (1882).—Forbes & Hemsley in *Journ. Linn. Soc.* vol. xxiii. p. 253 (1887).—Hooker f. in *Bot. Mag.* vol. cxvi. t. 7119 (1890).—Sargent in *Garden and Forest*, vol. iii. p. 405, fig. 51 (1890).—Kochne, *Deutsche Dendrol.* p. 277 (1893).—Rehder in Bailey, *Cycl. Am. Hort.* vol. iv. p. 1549 (1902).—C. K. Schneider, *Ill. Handbuch Laubholz.* vol. i. p. 540 (1906).

R. polyanthos Roessig, *Die Rosen*, No. 35 (1802-1820).

R. japonica Roessig, *Die Rosen*, No. 51 (1802-1820).

R. multiflora, β *Thunbergiana* Thory in Redouté, *Roses*, vol. ii. p. 70 (1821).

R. Thunbergii Trattinnick, *Ros. Monogr.* vol. i. p. 86 (1823).

R. polyantha Siebold & Zuccarini in *Abh. Acad. Muench.* vol. iv. p. 128 (1846).

R. intermedia Carrière in *Rev. Hort.* 1868, p. 270, figs. 29, 30.—Crépin in *Bull. Soc. Bot. Belg.* vol. viii. p. 344 (*Primit. Monogr. Ros.* fasc. i. p. 123) (1869).

R. Wichuriae K. Koch, *Wochenschr.* vol. xii. p. 202 (1869).

R. thyrsoflora Leroy ex Déséglise in *Bull. Soc. Bot. Belg.* vol. xv. p. 204 (*Cat. Rais. Ros.* p. 35 [1877]) (1876).

Stem long, sarmentose, reaching sometimes a length of 20-25 feet; young branches bright green; prickles small, scattered, uniform, hooked. *Leaflets* 7-9, oblong, acute, simply serrated, middle-sized, green and glabrous above, more or less pubescent beneath; petioles pubescent, with a few falcate aciculi, without glands; stipules deeply lacinated, with lanceolate gland-ciliated free tips. *Flowers* forming a dense panicle, sometimes half a foot long; bracts small, lanceolate, lacinated; pedicels usually setose, rarely naked. *Calyx-tube* oblong, naked; lobes ovate, pinnate, usually more or less glandular on the back. *Petals* orbicular, white in the type, about $\frac{1}{4}$ in. long and broad. *Carpels* 20-25; styles pilose, united in a column protruded beyond the disc. *Fruit* small, subglobose, naked; sepals deciduous.

ROSA MULTIFLORA

This species was first described by Plukenet¹ in the year 1700, as "*Rosa sylvestris cheusanica, foliis subtus incanis, floribus purpureis parvis.*" Linnaeus had it in his herbarium, but confused it with *Rosa indica*. Siebold & Zuccarini in their *Flora of Japan* enumerated this Rose under the name of *Rosa polyantha*, not knowing that it had already been described by Thunberg, a pupil of Linnaeus, under the name of *Rosa multiflora*. Following the fixed rule of priority, the earlier name must be retained, although the two adjectives both mean one and the same thing and refer to the many blossoms which the Rose bears, Thunberg describing in Latin what Siebold describes in Greek.

According to Sir J. D. Hooker, the type, which is the white single-flowered plant, was not seen in England until about 1875. He described it in 1890, and his article is accompanied by a drawing made from the plant growing in Mr. Girdlestone's garden at Sunningdale. Thory² mentions *Rosa multiflora flore simplici* in 1821, and gives it on the authority of Noisette, who informed him that he had seen it growing in the Physic Garden at Chelsea and that William Anderson, the curator, had given him a plant which he had brought back to France, had propagated, and was offering for sale in his nursery. The type seems to have been known in France certainly since about 1862, when M. Henon, mayor of Lyons, received from his son-in-law M. Coignet, an engineer in the Japanese service, seeds collected from plants growing wild in Japan. These seeds, distributed among the Lyons rose-growers by M. Jean Sisley under the name of *Rosa polyantha* Sieb. & Zucc., proved to be the type, with small, single, white flowers. This, crossed with double Roses belonging to different groups, produced a large number of new varieties, some vigorous and tall-growing, others, on the contrary, dwarf and compact, such as *Rose Mignonette*, *Rose Pâquerette*, etc. These diminutive Roses are classed by nurserymen as *Rosa polyantha*. They are charming, flower continuously, and should be given a place in every garden. Other hybrids of *Rosa multiflora* much resembled the type, but were discarded because they were not perpetual-flowering. Alex Bernaix, a rose-grower of Lyons, raised a hybrid between *Rosa multiflora* and *Rose Noisette* which much resembles *Rosa moschata* Miller. It is known as *Rosa polyantha grandiflora* and is extremely vigorous, producing countless clusters of pure white single flowers borne upon long trailing shoots.

The form with double pink flowers, which was figured by Redouté,³ was first introduced into this country in 1804 by Mr. Thomas Evans of the East India House. It flowered for the first time with Mr. Colville of Chelsea, but died three or four years later. A plant was sent from London to M. Boursault in Paris in 1808, and four years later it was in flower in M. Cartier's garden. The other *Rosa multiflora*

¹ *Amalth.* p. 185 (1700).

² In Redouté, *Roses*, vol. ii. p. 69 (1821).

³ Var. *carnea*: *Roses*, vol. ii. p. 67 (1821).

figured by Redouté is var. *platyphylla*, the *Seven Sisters* Rose,¹ which was introduced into France by Noisette in 1817 and flowered there in 1819.

Of the numerous varieties of *Rosa multiflora*, Franchet & Savatier give names to six, exclusive of *Rosa Luciae* Franch. & Rochebr. and *Rosa Wichuraiana* Crép. Several forms grown by the Japanese are figured in the *Phonzo Zoufou* (part 27); plates 8 and 28 of Braam's *Icones*² represent another form, and there are others in the Kew collection of drawings. The species is widely spread in China and Japan, and extends to the Philippine Islands and to eastern Thibet. It may readily be recognized by its many small flowers, small fruits, and lacinated or pectinate stipules. It may be distinguished even when not in flower by this last character, which it keeps in all the varieties. The character of the long loose panicle is apt, however, to be lost, as in the old variety, the *Seven Sisters* (*Rosa platyphylla* Thory), and still more in the *Crimson Rambler*, in which the panicle is so closely packed that at a short distance it looks like a huge double Rose.

The single-flowered white Rose which Carrière³ described in 1868 in an article entitled "Rosa dubia" is no other than the type *Rosa multiflora*. There can be no doubt about it because of the drawing which illustrates his description. Although he heads his article "Rosa dubia," he does not again use that name, nor even refer to it. "Le qualificatif *intermedia* que nous lui avons donné est très exact," is his only other reference to a name. He says that the Rose had been raised by André Leroy of Angers from seeds sent him from China. Déséglise, who, however, wrote without having seen the living plant, unhesitatingly referred it to *Rosa thyrsoflora* Leroy; he says the seeds came from Japan and not from China, and severely criticizes Carrière's description, which passes over the principal characters and exaggerates the superficial attributes of the Rose for the purpose of attracting the attention of his readers to its nature as a "plante d'ornement." In 1876 Carrière, writing again in the *Revue Horticole*,⁴ acknowledges his mistake and refers his *Rosa intermedia* to *Rosa polyantha* Sieb. & Zucc., saying that it was the Secretary of the French Horticultural Society, M. Lavallée, who brought to his notice the existence of Siebold & Zuccarini's Rose.

There are few Roses more desirable for a wild garden than the type of *Rosa multiflora*, where it can be given sufficient space to develop. It is perfectly hardy and grows very rapidly, and when in full flower

¹ *Roses*, vol. ii. p. 69 (1821).

² *Icones plantarum sponte China nascentium, e bibliotheca Braamiana excerptae*. (There are two copies of this collection in the Kew Library, both with unnumbered plates, differently arranged. One has a printed title-page, dated 1821, and a short Latin preface in which *Rosa microcarpa* and *Rosa involucrata* are mentioned. The other has a lithographed title-page, dated 1818, and an "advertisement" signed *W. Cattley*.)

³ *Revue Horticole*, p. 269.

⁴ Page 253.

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is a strikingly beautiful object. The flowers are borne in a long, loose panicle chiefly at the ends of the branches, and in such abundance that there are often more than two hundred blossoms on a panicle; they have a faint, delicate scent. The plant is easily propagated either by cuttings or by seeds: it does not, however, increase much from the roots. Seeds sown in spring germinate in about a month. The type is frequently used as a stock on which to bud and graft other Roses.

The plates in the *Botanical Magazine*¹ and the *Botanical Register*² represent garden forms. *Rosa florida* of Poiret,³ for which the plate in the *Botanical Magazine* is quoted, is also one of the garden forms.

Rosa multiflora is figured by Andrews.⁴

¹ Vol. xxvi. t. 1059 (1807).

² Vol. v. t. 425 (1819).

³ Lamarck, *Encycl. Suppl.* vol. iv. p. 715 (1816).

⁴ *Roses*, vol. ii. t. 83 (1828).



6—ROSA MULTIFLORA

7—ROSA MULTIFLORA, var. PLATYPHYLLA Thory

Rosa multiflora, var. *platyphylla*: a typo recedit habitu robustiori; foliis majoribus; floribus plenis, rubris.

R. multiflora, var. *platyphylla* Thory in Redouté, *Roses*, vol. ii. p. 69, t. (1821).—Lindley in *Bot. Reg.* vol. xvi. t. 1372 (1830).—Franchet & Savatier, *Enum. Pl. Jap.* vol. i. p. 134 (1874).—Crépin in *Bull. Soc. Bot. Belg.* vol. xxv. pt. 2, p. 188 (1886).—Rehder in Bailey, *Cycl. Am. Hort.* vol. iv. p. 1549 (1902).—C. K. Schneider, *Ill. Handbuch Laubholz.* vol. i. p. 540 (1906).

R. Thoryi Trattinnick, *Ros. Monogr.* vol. i. p. 85 (1823).

Stem reaching a height of 10-12 feet or more; *prickles* scattered, uniform, stout, hooked. *Leaflets* 5-7, oblong, acute, $1\frac{1}{2}$ -2 in. long, simply serrated, pubescent beneath; *petioles* pubescent, aciculate and glandular; *stipules* adnate, lacinated. *Flowers* many, in a corymbose panicle, double, red.

This variety of *Rosa multiflora* was introduced into England some time between 1815 and 1817. Noisette saw it growing in a nursery-garden near London and took back a plant with him to France, where it flowered in his garden in September 1819. Redouté's drawing and Thory's description were based upon this plant. The plate in the *Botanical Register* was from a plant growing in the Horticultural Society's garden at Chiswick in 1830, where Lindley describes it as flowering in the most luxuriant manner and refers to it as the most beautiful of all the climbing Roses of our gardens. Loudon gives an excellent woodcut in his *Arboretum*,¹ and says: "A plant of this variety, on the gable end of Mr. Donald's house, in the Goldworth Nursery, in 1826, covered about 100 square feet, and had more than 100 corymbs of bloom. Some of the corymbs had more than 50 buds in a cluster, and the whole averaged about 30 in each corymb; so that the amount of flower buds was about 3,000. The variety of colour produced by the buds at first opening was not less astonishing than their number. White, light blush, deeper blush, light red, darker red, scarlet, and purple flowers, all appeared in the same corymb, and the production of these seven colours at once is said to be the reason why this plant is called the 'Seven Sisters Rose.' This tree produced a shoot the same year which grew 18 feet in length in two or three weeks." The

¹ Vol. ii. p. 774 (1838).

ROSA MULTIFLORA, var. PLATYPHYLLA

plant here referred to by Loudon only survived about three or four years.

The Rose was known to Donn¹ under the names of *Rosa Roxburghii* and *Rosa Grevillii*, and it was growing at Cambridge about the year 1845.

The "*Seven Sisters Rose*," which was once such a favourite in our gardens, is now but rarely seen ; it appears to have been discarded in favour of later *multiflora* hybrids of more fashionable shades of colour, and also of the wild single type now so largely grown in the wild garden. Loudon considered the plant short-lived, and this may be another reason to account for its gradual disappearance.

In China it is also known as the "*Seven Sisters Rose*," but the Chinese ascribe the derivation of the name to the seven flowers which generally open at the same time on each corymb.

¹ *Hort. Cant.* ed. 13, p. 351 (1845).

8—ROSA POLYANTHA var. Hort.

(ROSA MULTIFLORA × CHINENSIS)

CRIMSON RAMBLER

Rosa polyantha var. : caulibus elongatis, viridibus, lucidis, sarmentosis; aculeis magnitudine mediocribus, sparsis, aequalibus, falcatis; foliis 7, oblongis, acutis, magnitudine mediocribus, simpliciter dentatis, facie viridibus, glabris, dorso pubescentibus; rhachi pubescente, aciculis paucis, falcatis; stipulis non usque ad basim fimbriatis, apicibus liberis, parvis, ovatis; floribus multis, in paniculam corymbosam dispositis; pedicellis elongatis, glandulosis; bracteis minutis; calycis tubo parvo, turbinato, glabro; lobis ovatis, simplicibus, dorso glandulosis; petalis permultis, parvis, kermesinis.

Stems long, green, shining, sarmentose; *prickles* moderately large, scattered, equal, falcate. *Leaflets* usually 7, oblong, acute, middle-sized, simply toothed, green and glabrous above, paler and pubescent beneath; *petioles* pubescent, with a few hooked aciculi; *stipules* broader than in *R. multiflora*, not fimbriated to the base; free tips small, ovate. *Flowers* many, in a corymbose panicle; *pedicels* long, glandular; *bracts* minute. *Calyx-tube* small, turbinate, glabrous; *lobes* ovate, simple, not leaf-pointed, glandular on the back. *Petals* very numerous, small, bright crimson.

Of the origin of this Rose nothing is known. The first record is to be found in the *Journal des Roses* of 1886, when M. Takasima published a series of notes upon the Japanese Roses, accompanied by coloured drawings. Plate 5, which he refers to *Rosa platyphylla* figured by Redouté,¹ has every appearance of being the Crimson Rambler. The inflorescence and the flower are faithfully drawn and leave no doubt as to their identity, but the leaves seem to have been added as an afterthought, as there is no trace of the ciliated stipules which are such a constant character in all *multiflora* Roses and their hybrids. The next notice of it appeared in the *Gardeners' Chronicle*,² where the story of its introduction into this country is given at length. The original plant was sent from Japan to Mr. Jenner in 1878 by Professor R. Smith, Professor of Engineering at Tokio, and Mr. Jenner very appropriately named it "The Engineer." Mr. Jenner subsequently gave the Rose to J. Gilbert, a nurseryman of Lincoln, who exhibited some cut blooms in London on July 8, 1890, and received an Award

¹ *Roses*, vol. ii. p. 69 (1821).

² Ser. 3, vol. xvi. p. 249 (1894).

ROSA POLYANTHA

of Merit from the Floral Committee of the Royal Horticultural Society. Soon after Gilbert sold the stock of the Engineer Rose for a small sum to Messrs. Turner of Slough, who changed its name to "Crimson Rambler" and put it upon the market. It soon found favour, and is now widely grown not only in England but all over the continent and the northern United States. Among its many claims to popularity are its extreme hardiness, the facility with which it may be propagated and the readiness with which it accommodates itself to all conditions. It is well, however, to avoid planting it against a wall which is much exposed to the sun, for in such positions it is apt, like most other Roses, to be attacked by thrips and mildew, and moreover its colour is less brilliant than when grown in the open or against a north wall. Care should also be taken to choose a suitable position away from other Roses, for its glowing brilliant colouring will clash with any but white flowers. When it can be planted in a green glade, or against a background of shrubs, or in an open place on grass, nothing can be more beautiful than a group of Crimson Rambler seen under these conditions. Although not a perpetual bloomer, its flowering season is often prolonged to four or five weeks, and the individual flowers last well owing to the substance of their petals. There is no Rose which produces flowers in such profusion; a single plant, when well established, will easily give 6,000 flowers. It has been the parent of many hybrids, and each season the number is largely increased.



9—ROSA MOSCHATA Miller

THE MUSK ROSE

Rosa moschata: caule elongato, viridi, sarmentoso; aculeis sparsis, conformibus, parvis, falcatis; foliis 5-7, oblongis, acutis, simpliciter serratis, facie glabris, dorso pubescentibus; rhachi pubescente, vix glandulosa; stipulis adnatis, apice libero, lanceolato; floribus pluribus, corymbosis; pedunculis pubescentibus, parce setosis; calycis tubo oblongo; lobis ovato-lanceolatis, exterioribus parce pinnatifidis; petalis albis; stylis pilosis, coalitis, protrusis; fructu globoso, parvo, rubro; sepalis reflexis, caducis.

R. moschata Miller, *Gard. Dict.* ed. 8, vol. ii. No. 13 (1768).—Jacquin, *Hort. Schoen.* vol. iii. t. 280 (1798); *Fragm.* p. 31, t. 34, fig. 3 (1809).—Lawrance, *Roses*, t. 64 (1799).—Roessig, *Die Rosen*, No. 27 (1802-1820).—Thory in Redouté, *Roses*, vol. i. p. 33, t. (1817).—Lindley, *Ros. Monogr.* p. 121, No. 68 (1820); *Bot. Reg.* vol. x. t. 829, 861 (1824).—Hayne, *Arzn.* vol. xi. t. 33 (1830).—Christ in Boissier, *Fl. Orient.* Suppl. p. 229 (1888).—Brandis, *Indian Trees*, p. 288 (1906).

R. opsostemma Ehrhart, *Beitr. zur Naturk.* vol. ii. p. 72 (1788).

R. arborea Persoon, *Syn.* pt. 2, p. 50 (1807).

Stem tall, green, arching or sarmentose; *prickles* small, scattered, stout, hooked, uniform. *Leaflets* 5-7, oblong, acute, moderately firm, green, simply toothed, glabrous on the upper surface, pubescent beneath; *petioles* pubescent, slightly glandular; *stipules* adnate, not lacinated, with small lanceolate free tips. *Flowers* many, in a corymb; *peduncles* long, pubescent, slightly setose; *bracts* lanceolate. *Calyx-tube* oblong; *lobes* ovate-lanceolate, $\frac{1}{2}$ - $\frac{3}{4}$ in. long, not glandular on the back, the outer slightly compound. *Petals* pure white, middle-sized. *Styles* pilose, united in a column which is distinctly protruded beyond the conical disc. *Fruit* small, globose, red, naked; *sepals* reflexing, deciduous.

Rosa moschata ranges in a wild state from Afghanistan to Kashmir, Simla, Garhwal, Kumaon and Nepal, at altitudes of from 3,000 to 8,500 feet. It is quite hardy in southern England. According to Fraas,¹ it is one of the Roses known to Theophrastus. Turner mentions it in 1551; three forms are figured by Lobel in 1581 in his *Plantarum seu Stirpium Icones*, vol. ii.—*flore simplici*, p. 207, *moschata* and *moschata major*, p. 208. Gerard had three forms of it in his garden in Holborn in 1596. Parkinson² figures it under the name of “*Rosa hispanica moschata simplex*,” and there is a specimen of it amongst Plukenet’s plants in the British Museum. It is curious that Linnaeus overlooked such a well-known plant, although he had two good specimens in his herbarium. The principal varieties are the plants known

¹ *Synopsis Florae Classicae*, p. 74 (1870).

² *Paradisus*, p. 419 (1629).

ROSA MOSCHATA

as *Rosa Brunonii* of Lindley (var. *nepalensis*) and *Rosa Pissarti* of Carrière (var. *nasturana* Christ). A great many well-known garden roses are *moschata* hybrids, such as the Noisettes, *Rosa nivea* Don, and probably *Rosa damascena* Mill. There is also a fine hybrid between *Rosa moschata* and *Rosa sempervirens* L.

Rosa moschata is the Musk Rose so beloved of our ancestors, and the old writers speak of it with affection. Its introduction into England is given by Hakluyt, who, writing in 1599, says that "the Artichowe was brought in the time of King Henry the Eight, and of later time was procured out of Italy the Muske Rose Plant,"¹ so it may rank as an Elizabethan plant. All the varieties are easily known by the central column of styles, which are more united in the Musk Roses than in any other of the *Systylae*; and the rigid foliage, strongly pinnate in feeling, together with the forcibly deflexed petals, are characters which must be regarded as vital to a proper conception of the species. The scent is not pleasant to all, though Bacon reckoned it as the sweetest smell in the air next to the violet. At times, and indeed generally, *Rosa moschata* is almost scentless; but in certain states of the atmosphere it is more or less fragrant, and undoubtedly the scent is strongest at night. The plant is very easily propagated by cuttings.

In an unpublished diary Sir George Watt thus describes the Rose as he has met with it in the Himalaya:

"This is by far the most obvious and most characteristic Rose of the Himalaya. It climbs over the bushes by the wayside and over the small trees of the forest. It thus produces dense rounded masses which when in bloom look like patches of snow. Its bright flowers are the delight of bird and bee, and they perfume the air in a manner few people could realize who have not lived in the invigorating atmosphere of the early months of summer on the outer ranges of these mountains. And yet a bunch in the hand is overpowering rather than pleasant. But the western Himalaya without the musk rose would be without half their charm."

Redouté² and Miss Lawrance³ figure a double form. Andrews figures var. *fl. pl.*⁴ and var. *carnea*.⁵

Rosa polyantha, var. *grandiflora* (see accompanying plate) was raised by Bernaix from seed obtained from *Rosa moschata*. Some doubt, however, exists as to its origin. Crépin, who at first regarded it as a mere variety of *Rosa moschata*,⁶ afterwards came round to the opinion of M. Viviand Morel⁷ that it was a hybrid having *Rosa multiflora* Thunb. for one of its parents. He considered that the influence of this Rose was shown in the ciliated bracts and stipules, in the somewhat pyramidal inflorescence and in the shortly ovoid buds. He was not, however, convinced that the other parent was *Rosa moschata*, as M. Viviand Morel believed, but thought it equally likely to be *Rosa sempervirens* L.⁸

¹ *Principal Navigations* . . . ed. 2, vol. ii. pt. i. p. 165 (1599).

² *Roses*, vol. i. p. 99 (1817).

³ *Roses*, t. 53 (1799).

⁴ *Roses*, vol. ii. t. 94 (1828).

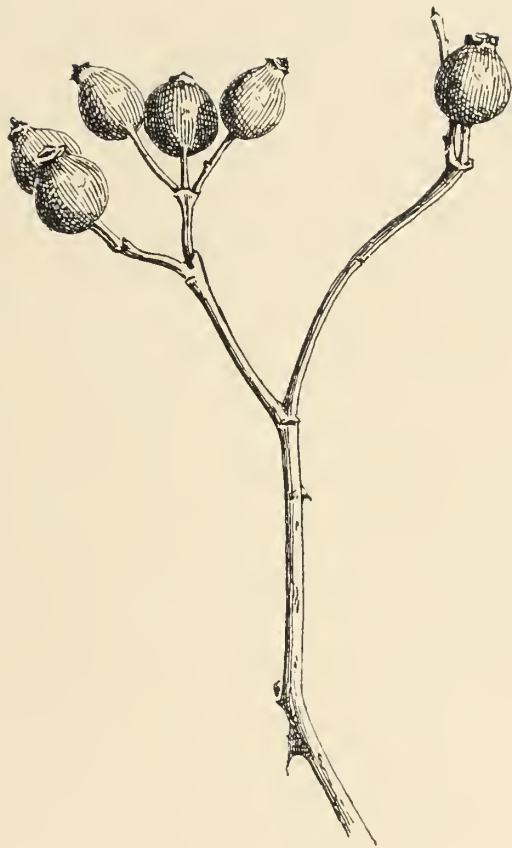
⁵ *Ib.* t. 95.

⁶ *Journ. des Roses*, 1891, p. 42.

⁷ *Lyon Horticole*, No. 17 (Sept. 15, 1891).

⁸ *Bull. Soc. Bot. Belg.* vol. xxxiii. pt. 1, pp. 120, 121 (1894).





9—ROSA MOSCHATA



10—ROSA MOSCHATA, var. NEPALENSIS Lindl.

Rosa moschata, var. *nepalensis*: a typo recedit habitu graciliori, foliis subtus ramulisque magis pubescentibus, foliolis angustioribus, acutioribus, pedicellis gracilibus, magis glandulosis.

R. moschata, var. *nepalensis* Lindley in *Bot. Reg.* vol. x. t. 329 (1824).

R. Brunonii Lindley, *Ros. Monogr.* p. 120, No. 67, t. 14 (1820).—Hooker in *Bot. Mag.* vol. lxi. t. 4030 (1843).

R. Brownii Trattinnick, *Ros. Monogr.* vol. ii. p. 96 (1823).

R. pubescens Roxburgh, *Fl. Ind.* ed. 2, vol. ii. p. 514 (1832).

R. moschata Hooker f., *Fl. Brit. Ind.* vol. ii. p. 367 (1879).

Stem tall, arching or sarmentose; *prickles* small, scattered, uniform, hooked. *Leaflets* 5-7, oblong or oblong-lanceolate, $1\frac{1}{2}$ -2 in. long, simply sharply serrated, pubescent beneath; *petioles* glandular and pubescent; *stipules* adnate, gland-ciliated, with a linear free point. *Flowers* up to 50-60 in a corymbose panicle; *pedicels* slender, glandular and pubescent. *Petals* white, middle-sized. *Styles* connate in a slender column, distinctly protruded from the disc. *Fruit* small, globose, naked; *sepals* deciduous.

Introduced in 1822 from Nepal by Wallich, who had sent specimens to the De Candolle herbarium, Geneva, in 1819-1821, this Rose was also collected in Nepal by Buchanan-Hamilton, who sent his specimens to Lambert. Lindley mentions a plant which was given to him from Prince Leopold's garden, where it had been raised from seed received direct from Nepal. In the Kew Herbarium there are specimens collected in various localities in the province of Kwangtung in the south of China. It is not found in the western Himalaya, but appears to be confined to the provinces of Garhwal, Kumaon and Nepal. In the forests of those regions it wanders from tree to tree and is described as being strikingly beautiful. Lindley described this Rose in his *Monograph*, dedicating it to Robert Brown under the name of *Rosa Brunonii*, and also in the *Botanical Register* as *Rosa moschata*, var. *nepalensis*. It is under the latter name that the plant should now be known.

Rosa moschata Mill. is such an extremely polymorphous species that it is not surprising that eminent botanists should hold different opinions as to its identity. Crépin¹ considered that *Rosa Brunonii*

¹ *Bull. Soc. Bot. Belg.* vol. xviii. p. 287 (*Primit. Monogr. Ros.* fasc. v. p. 533 [1880]) (1879).

ROSA MOSCHATA, var. NEPALENSIS

ought not even to be considered as a variety; he had observed in other forms of *Rosa moschata* all the characters supposed to be peculiar to *Rosa Brunonii*. In any case it is sufficiently distinct, from a horticultural point of view, to be given a favourable position in gardens, where its luxuriant beauty may develop without risk of being cut back by inclement weather. A well-chosen situation is advisable, for it is rather more tender than the typical *Rosa moschata* Mill.

The form grown in this country is easily distinguished from *Rosa moschata* Mill., as known in cultivation, by the pubescence of the branchlets, calyx and leaves, the much narrower and almost linear leaves, the glandular peduncles, and smaller, more exact flowers. Under cultivation these characters become still more marked. Crépin¹ pointed out that the character of pubescence is not confined to any one form of *Rosa moschata* but is found in many others. This need not, however, necessarily influence the inclusion in gardens of two Roses each so beautiful and so distinct in its way as *Rosa moschata* and *Rosa moschata*, var. *nepalensis*.

This Rose is figured by Andrews under the name of *Rosa napaulensis*.²

¹ *Loc. cit.*

² *Roses*, vol. ii. t. 82 (1828).

ROSA MOSCHATA, *HERM*

VAR ROSA PISSARDI, *GERARD*



11—ROSA MOSCHATA, var. NASTURANA Christ

Rosa moschata, var. *nasturana*: a typo recedit caule humiliori; foliolis minoribus, ovatis, firmis, dorso glabris; rhachi glabra, magis glandulosa; floribus paucioribus; pedicellis bruncis, glabris, magis glandulosis.

R. moschata, var. *nasturana* Christ in Boissier, *Fl. Orient.* Suppl. p. 229 (1888).
R. Pissarti Carrière in *Rev. Hort.* 1885, p. 314, fig. 62.

Stem not so tall as in the type; *prickles* uniform, scattered, moderately robust, slightly hooked. *Leaflets* 5-7, smaller, ovate, 1-1½ in. long, firm in texture, green, very acute, glabrous on the back; *petioles* glabrous, aciculate, very glandular; *stipules* adnate with a lanceolate free tip, copiously margined with glands. *Flowers* much fewer than in the type; *pedicels* brown, glabrous, densely glandular. *Calyx-tube* narrowly oblong, naked; *lobes* lanceolate, ½ in. long, slightly compound. *Petals*, *styles* and *fruit* as in the type.

This is a mere geographical variety of *Rosa moschata* Miller. It inhabits the mountains of Persia and was received at the Museum in Paris, in 1880, under the name of *Rosa Pissarti*. Pissart, who was gardener to the Shah of Persia at Teheran, brought the Rose to the notice of Carrière in a letter which was published, together with Carrière's description, in the *Revue Horticole*. In it he relates how the Rose had originally reached Teheran from Guiland on the shores of the Caspian and had at once become popular in Persian gardens. *Nastaran* is its Persian name. Dr. Stapf states that it ascends the mountains of southern Persia to 8,000 feet. Dr. Christ says that there is another form of *Rosa moschata*, with small double purplish flowers, which was found by Dr. Haussknecht at Bebehan in southern Persia; it was called by the natives *Gul e Reshti*, or the Rose of Rescht.

12—ROSA MOSCHATA, var. ABYSSINICA Rehder

Rosa moschata, var. *abyssinica*: a typo recedit habitu compacto; aculeis magis confertis; foliolis parvis, rigidulis; rhachi magis glandulosa; floribus paucioribus, minoribus; sepalis simplicibus.

R. moschata, var. *abyssinica* Rehder in Bailey, *Cycl. Am. Hort.* vol. iv. p. 1550 (1902).

R. abyssinica R. Brown in Salt, *Abyss. App.* p. lxiv (1814).—Lindley, *Ros. Monogr.* p. 116, t. 13 (1820).—Seringe in De Candolle, *Prodr.* vol. ii. p. 598 (1825).—A. Richard, *Fl. Abyss.* vol. i. p. 261 (1847).—Oliver, *Fl. Trop. Afric.* vol. ii. p. 381 (1871).—Déséglise in *Bull. Soc. Bot. Belg.* vol. xv. p. 206 (*Cat. Rais. Ros.* p. 37 [1877]) (1876).—Crépin in *Bull. Soc. Bot. Belg.* vol. xviii. p. 29 (*Primit. Monogr. Ros.* fasc. v. p. 537 [1880]) (1879).

R. Schimperiana Hochstetter in *Flora*, xxiv. Intell. 31 (1841).

Stems not sarmentose; *prickles* small, slightly hooked, more crowded than in the type. *Leaflets* firmer in texture, oblong, acute, $\frac{1}{2}$ - $\frac{3}{4}$ in. long, scarcely at all hairy, but minutely aciculate on the midrib beneath; *petioles* glandular and aciculate, not pubescent. *Flowers* few, in a corymb; *pedicels* pubescent, not aciculate. *Calyx-tube* turbinate; *lobes* ovate-acuminate, simple, $\frac{1}{3}$ - $\frac{1}{2}$ in. long, pubescent on the back.

This variety is allied to the Persian variety *nasturana* Christ. In its extreme form it has not much resemblance to *Rosa moschata* Mill., but is really connected with it by forms found at lower altitudes and in less arid situations. It inhabits the mountains of Abyssinia at heights of from 6,000 to 7,000 feet above sea-level. It was formerly supposed to be exclusively African, but it was found at Yemen in Arabia in 1837 by Botta and by other botanists in various localities in Asia, though always in the same latitude as Abyssinia. It was originally found by Salt during his travels in Abyssinia in 1809-11, and was first recognized as a distinct species by Brown, who wrote a botanical appendix to Salt's travels.

Lindley's description is very incomplete. Crépin attributed this to the dearth of specimens at his disposal when drawing up his description. Crépin, on the contrary, had ample material on which to base his conclusions. Oliver gives a good and careful description; he was inclined to think it might not be specifically distinct from some extra-African form. With *Rosa sempervirens* L. it has some superficial resemblance, but little in essential characters.

THE GENUS ROSA

BY

ELLEN WILLMOTT, F.L.S.

Drawings by

ALFRED PARSONS, A.R.A.



LONDON
JOHN MURRAY, ALBEMARLE STREET, W.

1910

Rosa Dupontii

(Rosa nivea Michxata - Gallica)



13—ROSA DUPONTII Déségl.

Rosa Dupontii: caulibus erectis; aculeis obliquis, sparsis, falcatis, aciculis intermixtis; foliis 5, magnis, oblongis, acutis, subcoriaceis, facie viridibus, glabris, dorso pubescentibus; rhachi pubescente, modice glandulosa; stipulis adnatis, glanduloso-ciliatis, apicibus liberis ovato-lanceolatis; floribus multis, corymbosis; pedicellis elongatis, glandulosis; bracteis lanceolatis; calycis tubo oblongo, lobis acutis, dorso nudis, glanduloso-ciliatis, exterioribus pinnatifidis; petalis albis; stylis in columnam breviter protrusam coalitis.

R. Dupontii Déséglise in *Mém. Soc. Acad. Maine-et-Loire*, vol. x. p. 58 (*Ess. Mon. Ros.* p. 18) (1861); in *Bull. Soc. Bot. Belg.* vol. xv. p. 206 (*Cat. Rais. Ros.* p. 37 [1877]) (1876).

R. damascena, var. *subalba* Thory in Redouté, *Roses*, vol. i. p. 63, t. (1817).

R. moschata, var. *nivea* Lindley in *Bot. Reg.* vol. x. t. 861 (1824).

R. moschata, var. *rosea* Seringe in De Candolle, *Prodr.* vol. ii. p. 598 (1825).

R. nivea Hort. Paris.

An erect bush 3-4 feet high. *Prickles* slant, hooked, scattered, mixed with aciculi. *Leaflets* 5, oblong, acute, large, subcoriaceous, green and glabrous above, paler and pubescent beneath; *petioles* pubescent and slightly glandular; *stipules* adnate, gland-ciliated, with ovate-lanceolate free tips. *Flowers* many, corymbose; *pedicels* long, glandular; *bracts* lanceolate. *Calyx-tube* oblong, lobes $\frac{3}{4}$ -1 in. long; *lobes* acute, naked on the back, gland-ciliated, the outer pinnatifid. Expanded *petals* pure white; buds red outside. *Styles* united in a shortly protruded column.

The Musk Rose is one of the old-fashioned flowers which greatly contributed to the charm and beauty of English gardens in former days. More fortunate than many another pretty Rose, it never completely disappeared, so that when the fancy for single Roses returned it was soon restored to favour.

Various accounts are given of its origin, but it is difficult to say with any degree of certainty whence it came. The beautiful drawing called *Rosa damascena subalba* in Redouté's *Roses* is accompanied by a description of the Musk Rose, which is said to grow in southern Europe, and to be indigenous to Spain. The writer concludes his account by remarking that its graceful growth and the beauty and profusion of its flowers will well repay those who procure it for their gardens. This was in 1817. Seven years later an excellent drawing of the Rose under the name of *Rosa moschata*, var. hort. *nivea*, the Snow-white Musk Rose, appeared in the *Botanical Register*. In the

ROSA DUPONTII

accompanying description Lindley says that it is the most beautiful single Rose he knows, and that it was raised by the French grower Dupont. The drawing was made from a plant growing in the garden of the Horticultural Society at Chiswick, whither it had been sent from Versailles by De Pronville, who had recently published an excellent French translation of Lindley's *Monograph*, containing much additional information about Roses.

William Paul, writing about the Musk Rose in the *Rose Garden*, says that it is common in Madeira and the north of Africa and is also found in Persia, and that, having been introduced into England about the year 1596, it has by reason of its long residence among us become widely spread throughout the country. He enumerates twelve hybrids by name.¹ The American writer Parsons² says that the Musk Rose grows naturally in Persia and other eastern countries, where it sometimes attains the dimensions of a small tree, and it is doubtless the Rose which has been celebrated by eastern poets. He mentions a plant in his own garden which had withstood the rigour of twenty New York winters. According to Rivers,³ Olivier, who travelled in the first six years of the French Republic, describes a Rose-tree at Ispahan called the "Chinese Rose-tree," which was fifteen feet in height and was formed by the union of several stems, each four or five inches in diameter. Seeds from this tree were sent to Paris, where they produced the common Musk Rose.

Déséglise considers that *Rosa Dupontii* differs from the type *Rosa moschata* Mill. in having glabrous calyx and sepals, and leaves which are oval and pubescent on the under side. He gives its period of flowering as June, and its habitat as Maine-et-Loire, and says that Boreau found a specimen growing in a hedge near Angers. This hedge was afterwards destroyed, but the bush was transplanted to the Botanic Garden. Boreau's plant disappeared during the changes which the garden has undergone since his time and no trace of it can now be found.

¹ *Rose Garden*, pt. 2, p. 150 (1848).

² *The Rose*, p. 262 (1847).

³ *Rose Amateur's Guide*, ed. 11, p. 155 (1877).



13—ROSA DUPONTII

ROSA STYLOSA



14—ROSA STYLOSA Desv.

Rosa stylosa: caule elongato, arcuato, viridi; aculeis robustis, conformibus, sparsis, falcatis; foliolis 5-7, ovalibus vel ellipticis, acutis, simpliciter serratis, facie viridibus, pubescentibus vel glabris, dorso leviter pubescentibus, rarius glabris; rhachi vix glandulosa, leviter pubescente; stipulis glanduloso-ciliatis, apice libero ovato-lanceolato; floribus 3-6 corymbosis; pedunculis glandulosis; calycis tubo ovoideo vel ellipsoideo, nudo; lobis copiose pinnatifidis, dorso parce glandulosis; petalis rubellis vel albidis; stylis glabris, leviter coalitis, breviter vel longe protrusis; disco longo, conico; fructu ovoideo, rubro, serotino; sepalis caducis.

R. stylosa Desvaux, *Journ. Bot.* vol. ii. p. 317 (1809); vol. iv. p. 113, t. 14 (1814).—Thory in Redouté, *Roses*, vol. iii. p. 31, t. (1824).—Seringe in De Candolle, *Prodr.* vol. ii. p. 599 (1825).—Crépin in *Bull. Soc. Bot. Belg.* vol. xxxi. pt. 2, p. 133 (1892).

R. collina Smith in *Eng. Bot.* vol. xxvii. t. 1895 (*non* Jacquin) (1808).

R. leucochroa Desvaux, *Journ. Bot.* vol. ii. p. 316 (1809); vol. iv. p. 113, t. 15 (1814).

R. systyla Bastard, *Fl. Maine et Loire*, Suppl. p. 31 (1812).—Woods in *Trans. Linn. Soc.* vol. xii. p. 230 (1818).—Lindley, *Ros. Monogr.* p. 111 (1820).—Smith, *Eng. Fl.* vol. ii. p. 395 (1824).—Syme, *Eng. Bot.* ed. 3, vol. iii. p. 230, t. 475 (1864).

R. brevistyla Thory in Redouté, *Roses*, vol. i. p. 91, t. (1817).

R. stylosa, var. *systyla* Baker in *Journ. Linn. Soc.* vol. xi. p. 239 (1869).

R. virginea Ripart ex Déséglise in *Journ. Bot.* vol. xii. p. 167 (1874); in *Bull. Soc. Bot. Belg.* vol. xv. p. 226 (*Cat. Rais. Ros.* p. 57 [1877]) (1876).

Stem tall, green, arching; *prickles* scattered, stout, falcate, uniform. *Leaflets* 5-7, oval or elliptical, acute, middle-sized, simply serrated, green and glabrous or pubescent above, slightly pubescent, rarely glabrous beneath; *petioles* hardly at all glandular and slightly pubescent; *stipules* adnate, gland-ciliated, with ovate-lanceolate free tips. *Flowers* 3-6, in a corymb; *peduncles* glandular; *bracts* ovate-lanceolate. *Calyx-tube* ovoid or ellipsoid, naked; *lobes* copiously pinnatifid, $\frac{3}{4}$ in. long, not leaf-pointed, slightly glandular on the back. *Petals* pink or white, 1 in. long. *Styles* glabrous, loosely coherent, more or less protruded beyond the very conical disc. *Fruit* urceolate-globose, red, naked, ripening late; *sepals* deciduous.

Rosa stylosa Desv. in one or other of its forms is a frequent plant in the southern counties of England and extends eastward to Styria and Hungary. The typical species is characterized by its very broad-based prickles with hooked point, leaflets hairy on both sides, simply serrate, long, somewhat glandular, hispid peduncles, glabrous styles more or less decidedly exerted from a very conical disc, and white flowers; but much the commoner form both in Britain and on the continent is *Rosa systyla* Bast., regarded by some as a mere variety,

ROSA STYLOSA

differing from the type in its larger, more widely spaced leaflets, narrower in proportion, glabrous above and only thinly hairy beneath, and pale rose flowers. There are several other varieties, the more prominent of which are *Rosa leucochroa* Desv., which may be regarded as *Rosa systyla* with white flowers, though it is very often much more *canina*-like in character than either *Rosa stylosa* or *Rosa systyla*. This form is a very common one in the south-west of England and was formerly miscalled *Rosa collina* Jacq. *Rosa virginica* Rip. is a small form with smooth peduncles, white flowers and subglobose fruit.

In addition to its glabrous, exserted style-column and very conical disc, *Rosa stylosa* in most of its forms can be distinguished from *Rosa canina* L. by its long peduncles with much narrower bracts. It is distinguished from *Rosa arvensis* Huds. by its stronger, more assurgent growth, and usually by its hairy leaflets, rose-coloured flowers, and shorter, much less firmly united style-columns. But some of its varieties approach that species very closely, and it also forms hybrids therewith.



14—ROSA STYLOSA

15—ROSA LESCHENAULTIANA Wight & Arnott

Rosa Leschenaultiana: caulibus longis, diffusis; aculeis parvis, sparsis, leviter hamatis; foliis persistentibus; foliolis 5-7, ellipticis vel oblongo-lanceolatis, acutis vel acuminatis, interdum basi rotundatis, minute serratis, supra atroviridibus, infra pallidioribus; rhachi infra aculeis hamatis numerosis instructa, glanduloso-pubescente, glandulis saepius stipitatis; stipulis adnatis, glanduloso-ciliatis, apice liberis, subulatis; floribus numerosis, corymbosis, alabastris, acutissimis; pedicellis validis, glandulosis, bracteatis; bracteis anguste oblongis, acuminatis, glanduloso-pubescentibus, deciduis; calycis tubo ovoideo, glandulosissimo; lobis oblongo-lanceolatis, acuminatis, saepe foliaceis, extra glandulosissimis, intra pubescentibus; petalis albis, late obovatis, rotundatis, integris vel emarginatis; stylis conjunctis, exsertis, pilosis; carpellis setis paucis instructis; fructu globoso, rubro; sepalis caducis.

R. Leschenaultiana Wight & Arnott, *Prodr. Fl. Ind.* 301 (1834).—Wight, *Icon.* t. 38 (1840).—Crépin in *Bull. Soc. Bot. Belg.* vol. xiii. p. 259 (*Primit. Monogr. Ros.* fasc. iii. p. 266) (1874).—Déséglise in *Bull. Soc. Bot. Belg.* vol. xv. p. 203 (*Cat. Rais. Ros.* p. 34 [1877]) (1876).—Hooker f., *Fl. Brit. Ind.* vol. ii. p. 368 (1879).—Brandis, *Indian Trees*, p. 288 (1906).

R. sempervirens, var. *Leschenaultiana* Thory in Redouté, *Roses*, vol. iii. p. 87, t. (1824).

R. moschata, var. *Leschenaultiana* Rehder in Bailey, *Cycl. Am. Hort.* vol. iv. p. 1550 (1902).

A large, straggling evergreen bush. *Prickles* small, sparse, slightly hooked. *Leaves*, including *petioles*, 4-6 in. long. *Leaflets* 5-7, elliptic or oblong-lanceolate, 1½-2½ in. long, ¾-1 in. wide, acute or acuminate, sometimes rounded at base, finely serrate, dark green above, paler below. *Petioles* with numerous hooked prickles on under side, glandularly pubescent, glands often stipitate. *Stipules* adnate, 1 in. long, glandular-ciliate, apices free, subulate. *Flowers* 2-2½ in. across, numerous, in large corymbs; buds very acute. *Pedicels* 1-2 in. long, stout, glandular, bracteate; *bracts* narrowly oblong, acuminate, pubescent and glandular, deciduous. *Calyx-tube* ovoid, very glandular; *lobes* oblong-lanceolate, acuminate, 1-1¼ in. long, often foliaceous, very glandular outside, pubescent inside. *Petals* white, broadly obovate, 1-1¼ in. long, 1 in. wide, rounded, entire or emarginate. *Styles* coherent, exserted, pilose; *carpels* with few setose hairs. *Fruit* globose, red; *sepals* deciduous.

This Rose has often been called the South Indian form of *Rosa moschata* Mill., but it is a perfectly good and distinct species. It is closely related to the South European *Rosa sempervirens* L., and has been considered by Seringe¹ and others as a geographical form of this species, from which it differs by its more robust habit, larger flowers,

¹ In De Candolle, *Prodr.* vol. ii. p. 598 (1825).

ROSA LESCHENAUULTIANA

and very glandular leaf-petioles, pedicels and calyx. The glands extend to the back of the young petals. It was first brought to Europe by the distinguished French naturalist Leschenault de la Tour, and by him sent to Thory. Leschenault found it on the higher levels of the Neilgherri and Pulney Mountains, where it is plentiful, and it was collected by Wight in 1836, by Munro in the same year, by Gardner in 1847 and by Sir George Watt in 1874. It has recently been found by Dr. Henry in Yun-nan. It is the only wild Rose of the temperate mountains of South India, *Rosa Lyellii* Lindl. being found exclusively on the lower hills, especially of Mysore.

Redouté made his drawings from Leschenault's herbarium specimens, and although the plate answers to Thory's description, it can give but a faint idea of the charm and beauty of this striking Rose. It is described by those who have seen it in its native mountains as so luxuriant that it festoons the trees to a height of sixty or seventy feet with its long trails of pure white fragrant flowers. The violet-tinted stems are powdered with a fine glaucous dust, which resembles the bloom on fruit and adds to the striking appearance of the *Samatigui*, as it is called by the natives.

Thory named this Rose after Leschenault, who has been honoured by many dedications, among others that of the very beautiful Australian genus *Leschenaultia*. It is in cultivation at Kew and elsewhere, but, like its prototype, is scarcely hardy in the neighbourhood of London.



16—ROSA WATSONIANA Crép.

Rosa Watsoniana: caulibus debilibus, decumbentibus, sursum pubescentibus; aculeis parvis, sparsis, leviter uncinatis; foliolis 3-5, linearibus, subintegris, leviter pubescentibus; rhachi pubescente, parce glandulosa et aciculata; stipulis longe adnatis, angustis, apicibus liberis linearibus; floribus multis, in paniculam laxam dispositis; bracteis linearibus, parvis; calycis tubo subgloboso, nudo; lobis lanceolatis, integris; petalis oblongis, acutis, parvis; stylis in columnam protrusam coalitis; fructu parvo, subgloboso, nudo; sepalis caducis.

R. Watsoniana Crépin in *Bull. Soc. Bot. Belg.* vol. xxvii. pt. 2, p. 96 (1888); in *Rev. Hort. Belg.* vol. xiv. p. 183, fig. 16 (1888).—Sargent in *Garden and Forest*, vol. iii. p. 477, fig. 59 (1890).—Rehder in Bailey, *Cycl. Am. Hort.* vol. iv. p. 1550 (1902).—C. K. Schneider, *Ill. Handbuch Laubholz.* vol. i. p. 541 (1906).

Stems very slender, weak, trailing, pubescent upwards; prickles small, scattered, slightly hooked. Leaflets 3-5, linear, subentire, 1-1½ in. long, often variegated with white, pubescent on both surfaces; petioles pubescent, slightly glandular and prickly; stipules adnate, with long linear free tips. Flowers many, arranged in a lax terminal panicle; pedicels short; bracts small, linear. Calyx-tube subglobose, naked; lobes lanceolate, entire, under ¼ in. long. Corolla ½ in. diameter; petals oblong, acute, small, white or rose-red. Styles united in a column protruded beyond the disc. Fruit globose, the size of a pea, red, naked; sepals caducous.

This very curious Rose of unknown origin has never been found in a wild state. It is supposed to have been introduced from Japan, although it does not appear among the series of Japanese Roses figured in part 27 of the *Phonzo Zoufou*. It was sent by Mr. Edward Rand of Dedham, Massachusetts, to the Arnold Arboretum in 1878. He had originally found it in a garden at Albany, New York. It has been said to be a variety of *Rosa multiflora* Thunb., bearing the same relation to the type that *Rosa longifolia* Willd. bears to *Rosa chinensis* Jacq., but Crépin considers it to be more nearly related to *Rosa anemoneflora* Fortune, another Asiatic species. He named this Rose *Watsoniana* in compliment to the late Dr. Sereno Watson, Curator of the Gray Herbarium at Harvard University.

Rosa Watsoniana does not make any great effect, but it is so interesting that it should be included in any collection of Roses. The inflorescence is pyramidal and the individual flowers are not more than half an inch in diameter; the petals, pointed at the apex, are

ROSA WATSONIANA

white tinged with pink. The leaves, three- to five-foliate, are pale in colour, with deep green veins, which give them a very curious appearance. It forms a low bush with many long thin branches which curve over very gracefully, and with its narrow leaves it is almost as suggestive of a dwarf bamboo as of a Rose. Its reputed Japanese origin seems very doubtful, but it certainly has the habit of so many of the Japanese shrubs in preferring shade and moisture. At Bitton, however, it has succeeded best on a wall facing the south. It can be increased by cuttings and layers.

For the specimen from which the drawing was made I am indebted to the kindness of Mr. Gumbleton, in whose well-known garden at Belgrove, Queenstown, so many rare and curious plants have flowered for the first time.



17—ROSA RUGA Lindl.

(ROSA CHINENSIS × ARVENSIS)

Rosa ruga: caule decumbente; aculeis brevibus, conformibus, sparsis, falcatis; foliis 5-7, ovatis, acutis, simpliciter dentatis, utrinque glabris, viridibus, lateralibus distincte petiolatis; rhachi glabra, aciculata; stipulis adnatis, apicibus liberis, parvis, ovato-lanceolatis; floribus pluribus in columna, albis vel roseo-tinctis, plenis, suaveolentibus; pedicellis elongatis, nudis; calycis tubo globoso, nudo; lobis parvis, simplicibus, ovato-acuminatis; stylis exsertis, leviter coalitis; fructu globoso, rubro, nudo; sepalis caducis.

R. ruga Lindley in *Bot. Reg.* vol. xvi. t. 1389 (1830).

R. indica, var. *rugata* Loudon, *Arboretum*, vol. ii. p. 771 (1838).

Stem trailing, reaching a length of 10-12 feet in a single season; *prickles* short, uniform, scattered, hooked. *Leaflets* 5-7, ovate, acute, middle-sized, simply toothed, green and glabrous on both surfaces, side ones distinctly stalked; *petioles* aciculate, glabrous; *stipules* adnate, with small ovate-lanceolate free points. *Flowers* several in a column, white or tinged with pink, double, fragrant; *pedicels* long, naked. *Calyx-tube* globose, naked; *lobes* small, simple, ovate-acuminate. *Styles* exserted, loosely coherent. *Fruit* rarely produced, globose, bright red, naked; *sepals* deciduous.

This very beautiful Rose was raised in Italy, and is believed to have been a cross between *Rosa arvensis* Huds. and a Tea Rose.

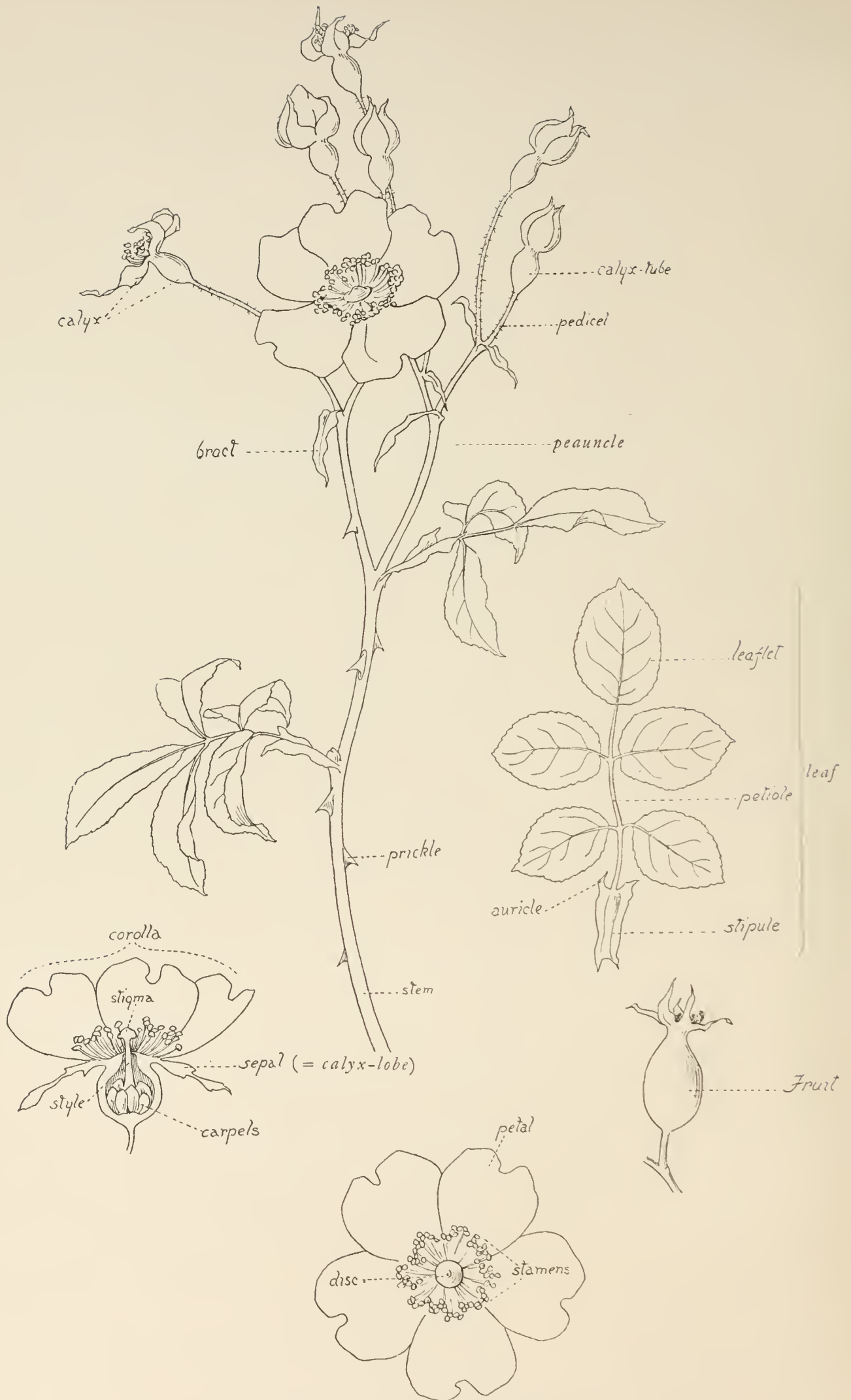
About 1830 Mr. Clare sent it to the Horticultural Society's garden at Chiswick, and it is to the generosity of the Society that we owe the introduction into English gardens of one of the most beautiful of climbing Roses.

Rosa ruga is intermediate between its parents, uniting the free, graceful growth of *Rosa arvensis* with the fragrant double flowers of the Tea Rose. The flowers are borne in clusters and are shell-pink in colour, gradually becoming paler as they expand. It is exceedingly floriferous, and although its foliage is not, strictly speaking, persistent, it remains on the bush far into the winter.

Lindley's description of *Rosa ruga* in the *Botanical Register* is accompanied by a drawing which gives an excellent idea of the Rose. He also wrote about it in the *Transactions of the Horticultural Society*,¹ stating it to be a mule between *Rosa indica* L. and *Rosa arvensis*, and calling attention to its not having been in the least injured by the frosts of 1837 and 1838, either at Pitmaston or at Redleaf.

¹ Ser. 2, vol. ii. p. 255 (1838).

GLOSSARY



KEY TO TERMS IN GLOSSARY

GLOSSARY

DEFINITIONS

THE definitions here given are those of the terms which have been used in the descriptive part of this book; they are drawn up with special reference to Roses, and chiefly for the advantage of the non-botanical reader. These botanical terms are arranged in relation to the several parts of the Rose-plant. Adjectival expressions are defined with the part of the plant to which they are oftenest applied. The accompanying illustrations show the principal parts of a Rose-bush. The various organs are figured separately.

I. STEM

(a) DIRECTION.

ARCUATE OR ARCHING.—Curved in a vertical plane.

ASCENDING.—Directed obliquely or curved upwards.

DECUMBENT.—Lying on the ground, but rising at the end.

PROCUMBENT OR PROSTRATE.—Lying on the ground.

SARMENTOSE.—Prostrate, but often starting with a very small arch from the root.

GLOSSARY

(b) CLOTHING.

ACICULATE.—Covered with *aciculi*. See *Acicular*, under PRICKLES.



GLAUCOUS.—Having a greyish bloom like a plum.

HISPID.—See under FRUIT.

NAKED.—Having neither prickles, hairs, bristles, nor setae.

PRICKLY.—See under FRUIT.

SETOSE.—See under FRUIT.

VERRUCOSE.—Covered with warts.

2. PRICKLES

ACICULAR.—Shaped like *aciculi*—*i.e.*, needle-shaped throughout, but slightly thickened downwards.

DECLINING.—Directed obliquely downwards, though straight, not curved nor hooked.



DILATED AT BASE.—Expanded at or from a little above the point of attachment.



GLOSSARY

FALCATE.—Curved more or less uniformly throughout ;
sickle-shaped.



GEMINATE.—Twin ; two together.



HETEROMORPHIC OR HETEROMORPHOUS.—
Of different forms.



HOMOMORPHOUS OR HOMOMORPHIC.—
Of similar form.



HOOKED.—Curved considerably throughout, but more at
the apex.



GLOSSARY

INFRASTIPULAR.—Situated below the stipules.



SETACEOUS.—Shaped like a bristle or stiff hair (*seta*).



WHORLED OR VERTICILLATE.—

In a ring—*i.e.*, a whorl or verticil around the stem.

3. LEAVES

PINNATE.—Having the leaflets quite distinct and arranged in pairs on the opposite sides of the petiole.



SIMPLE.—In one piece ; not divided into leaflets.

4. LEAFLETS

EACH SEPARATE LESSER LEAF OF WHICH THE WHOLE LEAF IS COMPOSED

(a) INSERTION.

LATERAL.—The side leaflets.

NODES.—The points on the petiole where the leaflets are attached, or on the stem or branch where the leaf is attached.

GLOSSARY

PETIOLULATE.—On a petiolule or short stalk.

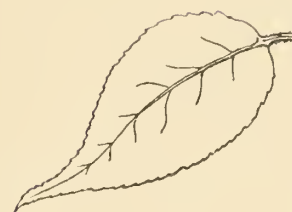
SESSILE.—Attached by their base to the petiole, not supported on a petiolule.



TERMINAL.—The end or odd leaflet.

(b) SHAPE.

ACUMINATE.—Drawn out into a longish point, which has its sides somewhat hollowed.

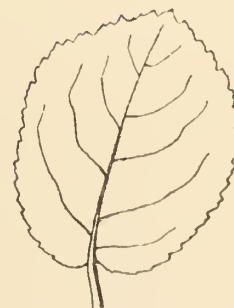


ACUTE.—Sharp, ending in a point, which has straight or somewhat convex but not concave sides.



APICULATE.—Furnished with a short abrupt point, usually formed by the excurrent of the midrib.

CORDATE.—Having a rounded base indented in the middle like a heart.



GLOSSARY

CUNEATE.—Wedge-shaped, with the point nearest the attachment.



CUSPIDATE.—See under SEPALS.

ELLIPTIC OR ELLIPTICAL.—Oval, but somewhat acute at each end.

LANCEOLATE.—Having a longish outline with curved sides, about three to five times as long as its greatest breadth, which is nearer to the base than to the apex.



LANCEOLATE-ACUMINATE.—Having generally a lanceolate outline, with an acuminate point.

LINEAR.—Long and very narrow, with parallel sides until near the tip.



LINEAR-LANCEOLATE.—Having a form between linear and lanceolate.

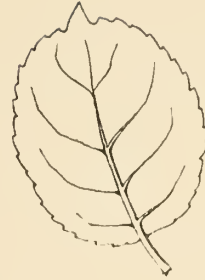


GLOSSARY

LINEAR-OBLONG.—Between linear and oblong.



MUCRONATE.—Abruptly tipped with a short point of the same texture as the leaflet.



NARROWED.—Reduced rather rapidly to a point, but with curved sides.

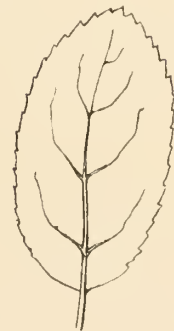


OB.—As a prefix, means inverted.

OBLANCEOLATE.—Lanceolate, or approximately so, but attached by the narrow end.



OBLONG.—Like oval, but more parallel-sided in the middle.



GLOSSARY

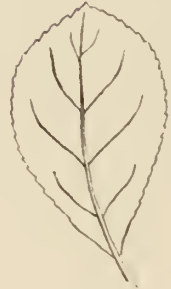
OBLONG-LANCEOLATE.—Having a form between oblong and lanceolate.



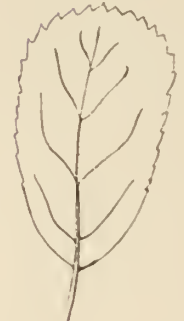
OBOVATE.—Ovate, or approximately so, but attached by the narrow end.



OBOVATE-CUNEATE.—Of an obovate outline, but cuneate at the base.



OBOVATE-OBLONG.—Between obovate and oblong.



OBTUSE.—Blunt or more or less shortly rounded, not widely rounded.



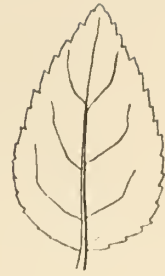
ORBICULAR.—Nearly circular.



GLOSSARY

OVAL.—About twice as long as broad, the widest part being in the middle, with the ends equally rounded or more or less acute at the apex.

OVATE.—About twice to twice and a half as long as broad, with rounded sides, broadest *below* the middle, and with an acute apex.



OVATE-ACUMINATE.—See under SEPALS.

OVATE-CUSPIDATE.—Having an ovate outline, but with a cuspidate apex.



OVATE-LANCEOLATE.—Between ovate and lanceolate.



ROUNDED AT BASE.—More or less evenly semicircular at base.



SUB.—As a prefix, means almost or somewhat.

SUBACUTE.—Somewhat acute

GLOSSARY

SUBOBTUSE.—Somewhat obtuse.



SUBORBICULAR.—Nearly orbicular, very broadly ovate.



SUBULATE.—Awl-shaped ; very narrowly triangular.

(c) CLOTHING OR SURFACE.

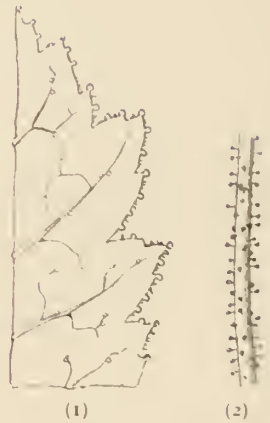
E.—As a prefix, means without.

EGLANDULOSE OR EGLANDULAR.—Without glands.

GLABRESCENT.—Becoming glabrous, but often used as synonymous with *Subglabrous*.

GLABROUS.—Without hairs.

GLANDULAR.—Bearing glands—*i.e.*, more or less spherical vessels often secreting a fluid. They may be (1) *sessile* or (2) *stalked*, often called *stipitate*.



MEMBRANOUS.—Thin and flexible.

PILOSE.—See under STYLES.

PUBERULOUS.—Very finely or shortly pubescent

GLOSSARY

PUBESCENT.—Having fine adpressed hairs or down.

PULVERULENT.—Having a dusty or powdery surface.

RUGOSE.—Covered with a network of lines or veinlets, enclosing more or less convex spaces; wrinkled.



SUBGLABROUS.—Nearly glabrous.

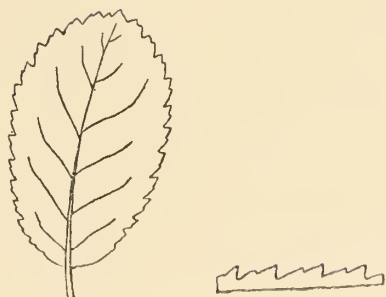
TOMENTOSE.—Densely covered with soft, interwoven hairs.

VEIN.—An elongated continuous vessel, running through the other tissues for the conveyance of sap, etc.

(d) EDGES.

CRENATE.—Having teeth of a rounded outline on the edge.

DENTATE.—Having teeth like a saw, but standing at right angles to the edge, not directed forward. If the teeth themselves are dentate, the leaflet is said to be *bidentate* or *doubly dentate*.



DENTICULATE.—See under STIPULES.

ENTIRE.—Not cut, toothed, nor lobed on the edges.

INCISED.—Deeply cut at the edges, cut into slices.



GLOSSARY

SERRATE.—Having teeth like those of a saw—*i.e.*, more or less directed forward. If the teeth are uniform in size, the leaflet is said to be *uniserrate* or simply serrated. If the teeth themselves are serrate, the leaflet is said to be *biserrate* or *doubly serrated*.



SERRULATE.—Like *Serrate*, but the teeth firm and small.

TOOTHED = *Dentate*.

5. PETIOLES

THE STALKS OF THE LEAF

FILIFORM.—Slender, like a thread.



6. STIPULES

THE SOMEWHAT LEAF-LIKE ATTACHMENT AT THE BASE OF THE LEAF-STALK

ADNATE.—Attached by the edges throughout to the petiole.



ADPRESSED.—Pressed close to one another by their faces.



GLOSSARY

CILIATE.—Bearing fine hairs like eyelashes (*cilia*) on the edges.

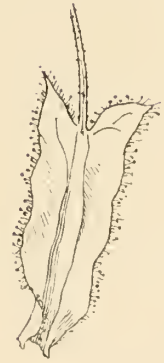


DENTICULATE.—Like *Dentate*, but the teeth fine and small.



FIMBRIATED.—Fringed.

GLAND-CILIATE.—Having cilia tipped with glands.



LACINIATE.—Sliced or cut into long, narrow, irregular segments.



PECTINATE.—Having firm, rather long, straight teeth or setae, like a comb.

GLOSSARY

7. AURICLE

THE TERMINAL PORTION OR TIP OF THE STIPULE, WHICH IS FREE—*i.e.*, NOT ADNATE TO THE PETIOLE

DELTOID.—Of an equilateral triangular form.



DIVERGENT.—Gradually separating.

ERECTO-PATENT.—Between erect and patent, nearly erect.

FILIFORM.—See under PETIOLES.

8. INFLORESCENCE

THE MANNER IN WHICH THE FLOWERS ARE ARRANGED

CORYMB, CORYMBOSE.—A raceme with the peduncles becoming gradually shorter towards the top of the axis, so that all the flowers are about on a level.



CYME, CYMOSE.—An inflorescence formed of a terminal flower beneath which are lateral branches, each having a terminal flower and lateral branches again similarly dividing, and so on.



GLOSSARY

FLOWER.—

The part formed for bringing about the multiplication of the plant by seed. It consists of various organs arranged in rings one within the other.

PANICLE, PANICLED, or PANICULATE.—

A central axis with peduncled flowers arranged along it, the peduncles being branched.



RACEME, RACEMOSE.—

An inflorescence consisting of an elongate central axis bearing equal or nearly equal unbranched side-stalks disposed throughout its length.

RACHIS.—The axis of the inflorescence.

UMBEL, UMBELLATE.—

An inflorescence in which all the peduncles spring from the same point.



GLOSSARY

9. BRACTS

SMALL, UNDEVELOPED LEAFLETS USUALLY SITUATED AT OR A LITTLE ABOVE THE BASE OF THE PEDUNCLE. THEY ARE OF A DIFFERENT FORM AND TEXTURE TO THE TRUE LEAFLET

BRACTEATE.—Bearing bracts.

IMBRICATED.—Overlying one another like the tiles or slates on a roof.



10. FRUIT

THE FULLY DEVELOPED PORTION OF THE FLORAL ORGANS WHICH SURROUNDS THE SEEDS

AMPULLAEFORM.—Flask-shaped—*i.e.*, ovoid, with a narrow, more or less elongated neck.



CERNUOUS.—Nodding or curved downwards.



CORIACEOUS.—Leathery or tough and rather hard.

DEPRESSO-GLOBOSE.—Globose, but depressed or flattened at the top.



GLOSSARY

FLASK-SHAPED = *Ampullacform.*

GLOBOSE = GLOBULAR.—Round, like a globe.



HISPID.—Having short, stiff hairs.

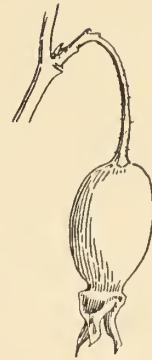


OBOVOID.—Inversely ovoid.

OVOID.—Having an ovate or oval outline in profile.



PENDULOUS.—Hanging downwards.



PRICKLY.—Covered with prickles.



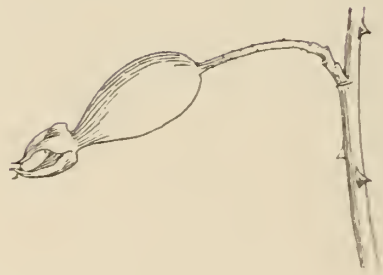
GLOSSARY

PYRIFORM.—Pear-shaped.



SETOSE.—Covered with bristles or stiff hairs (*setae*):
see *Setaceous* under PRICKLES.

SUBCERNUOUS.—Somewhat cernuous.



SUBGLOBOSE.—Nearly globose.



TURBINATE.—Top-shaped.



UMBILICATE.—Hollowed out at the point of
insertion of its peduncle.



GLOSSARY

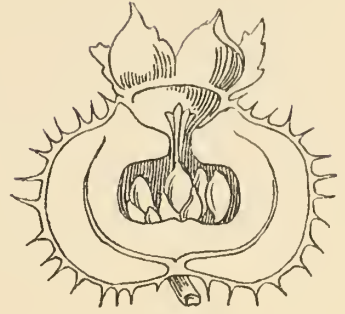
URCEOLATE.—Like a pitcher contracted at the mouth.



11. CARPELS

IN ROSES, THE SEED

BASAL.—Situating at and inside the base of the fruit.



12. SEPALS = CALYX-LOBES

THE UPPER AND FREE PORTION OF THE CALYX SURROUNDING THE PETALS. THE SEPALS ARE FIVE IN NUMBER

APPENDICULATE.—Having an appendage or a more or less widened or expanded apex.



CADUCOUS.—Falling off before the decay of the fruit.

COMPOUND.—Divided into lobes or segments, which lobes or segments are again and again divided.

CONNIVENT.—Converging at the tips so as to touch.



GLOSSARY

CUSPIDATE.—A more or less rounded end, but drawn up into an abrupt point in the centre.



DECIDUOUS OR FALLING = *Caducous*.

ERECT.—In prolongation of the direction of the peduncle.



FOLIACEOUS.—Leaf-like; having an expanded lamina like a leaf.



LEAF-POINTED.—Having the tip expanded like a leaf.



OVATE-ACUMINATE.—Having generally an ovate outline, with an acuminate point.



PATENT.—Spreading out.

GLOSSARY

PERSISTENT.—Adhering till the decay of the fruit.

PINNATIFID.—Same as *Pinnate* (see under LEAVES), but the segments or subdivisions not quite distinct from one another nor from the central axis.

REFLEXED, REFLEXING.—Bent abruptly backwards.



SPATULATE.—Narrowly oblanceolate, with a narrow attachment and a rounded apex.



SPREADING.—Standing at right angles, or nearly so, to the axis of the fruit.



13. PETALS

IN ROSES, THE COLOURED EXPANDED PORTION OF THE FLOWER

EMARGINATE.—Notched or indented at the end.



GLOSSARY

FUGACIOUS.—Very soon falling off or perishing.

INCURVED.—Curved inwards.

TRUNCATE.—Blunt, as if cut off at the end.

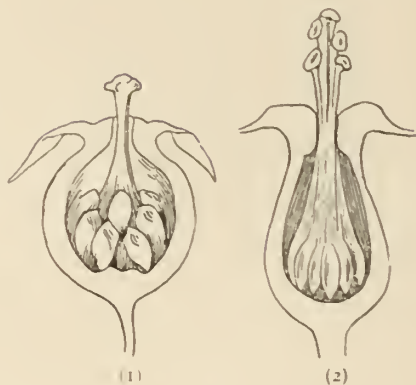


14. STYLES

THE STALK-LIKE PROLONGATION UPWARDS OF THE CARPELS WHICH BEARS THE STIGMA

COHERENT = *Connate*.

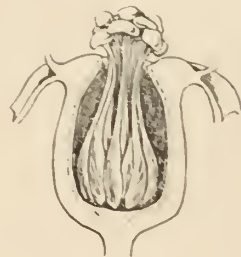
CONNATE.—Attached to each other, either throughout their whole length (1), or for a short distance from base only (2).



EXsertED (OR PROTRUDED).—
Projecting beyond the disc.



FREE.—Not attached to one another.



GLOSSARY

INCLUDED.—Not extending beyond the disc.

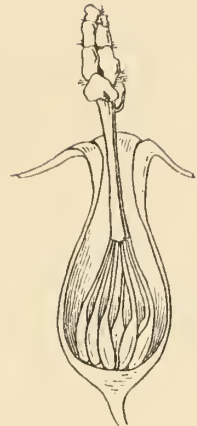


PILOSE.—With scattered, rather stiff hairs.



PROTRUDED.—See *Exserted*.

UNITED IN A COLUMN.—Connate throughout their length.



VILLOUS.—Having long, soft, straightish hairs.



15. DISC

THE SPACE BETWEEN THE CALYX AND THE STYLES

CONICAL.—Narrowing to a point from a circular base.



PART IV

THE GENUS ROSA

BY

ELLEN WILLMOTT, F.L.S.

Drawings by

ALFRED PARSONS, A.R.A.



LONDON

JOHN MURRAY, ALBEMARLE STREET, W.

1910

Nov. 3, 1911
Gray Herbarium
Harvard University
(4-13)



18—ROSA SOULIEANA Crép.

Rosa Soulieana: caule longissimo, arcuato, glauco-viridi; aculeis conformibus, brevibus, strictis, vel leviter hamatis, acutissimis, basi dilatatis; foliis pallide viridibus, glabris; foliolis 5-9 (saepius 7), late ellipticis vel obovatis, apice nunc rotundatis, nunc obtusis et mucronatis, basi excepta serratis; rhachi parce pubescente; stipulis adnatis, apice liberis, triangularibus, acutis, marginibus plus minusve glandulosis; floribus terminalibus, solitariis vel corymbosis; pedunculis bracteatis; bracteis viridibus, ovatis, acuminatis, dentatis vel integris, supra pubescentibus, margine saepe glandulis stipitatis vestitis; calycis tubo globoso, nudo, vel glandulis stipitatis instructo; lobis ovatis, acutis, reflexis, extra pubescentibus, intra lanatis, saepe cum 1-3 appendiculis linearibus e marginibus ortis; petalis albidis, late obovatis, truncatis; carpellis pilis setiformibus, nitidis, dense vestitis; stylis pubescentibus, conjunctis, breviter exsertis; fructu globoso, parvo, aurantiaco, nudo; sepalis caducis.

R. Soulieana Crépin in *Bull. Soc. Bot. Belg.* vol. xxxv. pt. 2, p. 21 (1896).—M. L. Vilmorin & Bois, *Cat. Prim. Frut. Vil.* p. 85, fig. (1904).—C. K. Schneider, *Ill. Handbuch Laubholz.* vol. i. p. 544 (1906).—Hemsley in *Bot. Mag.* vol. cxxxiii. t. 8158 (1907).

A large straggling bush. *Stems* glaucous green, arching; *prickles* uniform, short, straight or slightly hooked, very sharp, dilated at base. *Leaves* with petioles 2-3 in. long, pale green, glabrous. *Leaflets* 5-9 (usually 7), broadly elliptic or obovate, $\frac{1}{2}$ - $\frac{3}{4}$ in. long, rounded, or obtuse and mucronate, serrate to near the base. *Petioles* sparsely hairy; *stipules* adnate, more or less glandular along the margin, free ends triangular, acute. *Flowers* $1\frac{1}{2}$ -2 in. across, terminal and solitary, or in cymose corymbs. *Peduncles* 1 in. long, bracteate; *bracts* green, ovate, acuminate, toothed or entire, pubescent above, margins often clothed with stipitate glands. *Calyx-tube* globose, naked or glandular; *lobes* ovate, acute, reflexed, pubescent outside, woolly inside, usually with 1-3 bract-like outgrowths from margins. *Petals* creamy-white, broadly obovate, truncate; *carpels* densely clothed with shining, bristle-like hairs. *Styles* hairy, coherent, exserted. *Fruit* globular, small, orange, naked; *sepals* deciduous.

Rosa Soulieana was discovered in Sze-chuan in the south-west of China by the Père Soulié, and was named in compliment to him by Crépin, who in 1896 published his description, classing this Rose amongst the *Systylae*, that section of the genus so largely composed of Chinese and Japanese species. It is fairly common in the valley of the Yalung river, but does not occur east of this region. Its only affinity is with *Rosa moschata* Mill., and, like that Rose, it is extremely floriferous. It differs from it somewhat in its general aspect, in the

ROSA SOULIEANA

shape of its leaflets, which are oval and more rounded at the top and base, and in the form of its sepals, which are oval and shortened at the point. It varies from the other forms of *Rosa moschata* in so many of its characters that Crépin had no hesitation in giving it specific rank. It is at flowering-time that it shows most resemblance to *Rosa moschata*, with its small, pure white flowers and straw-coloured buds borne in corymbs; and again in autumn, when it is covered with masses of small, orange-coloured hips.

Rosa Soulieana is in cultivation at Kew; it is very free-growing and perfectly hardy.



19—ROSA WICHURAIANA Crép.

Rosa Wichuraiana: caule longe repente, ad nodos saepe radicante; aculeis sparsis, conformibus, modice robustis, leviter falcatis; foliis 5-7, oblongis, obtusis, parvis, subcoriaceis, simpliciter serratis, utrinque viridibus, glabris, facie nitidulis; stipulis adnatis, laciniatis, apice libero ovato; rhachi glabra; floribus multis, paniculatis; pedicellis nudis vel parce setosis; bracteis lanceolatis, laciniatis, parvis; calycis tubo globoso, nudo; lobis ovatis, acuminatis, simplicibus, dorso glabris; petalis albis, parvis, cuneatis, apice emarginatis; stylis villosis, coalitis, distincte protrusis; fructu globoso, parvo, nudo, rubro, serotino; sepalis deciduis.

R. Wichuraiana Crép. in *Bull. Soc. Bot. Belg.* vol. xxv. pt. 2, p. 189 (1886).—Sargent in *Garden and Forest*, vol. iv. p. 570, fig. 89, p. 569 (1891).—Bean in *Gard. Chron.* ser. 3, vol. xxii. p. 99, fig. 28 (1897).—Mottet in *Rev. Hort.* 1898, p. 104, figs. 45, 46.—Rehder in Bailey, *Cycl. Am. Hort.* vol. iv. p. 1550 (1902).

R. Luciae Franchet & Savatier, *Enum. Pl. Jap.* vol. i. p. 135 (*ex parte*) (1875); vol. ii. p. 344 (*ex parte*) (1876).—Hooker *f.* in *Bot. Mag.* vol. cxxi. t. 7421 (1895).

Stem trailing widely, often rooting at the nodes; *prickles* scattered, uniform, moderately robust, slightly hooked. *Leaflets* 5-7, small, oblong, obtuse, rather firm, bright green, shining above, glabrous on both surfaces, simply toothed; *petioles* glabrous; *stipules* adnate, laciniated, with small, ovate, free tips. *Flowers* many, panicked; *pedicels* naked or slightly setose; *bracts* small, lanceolate, laciniated. *Calyx-tube* small, globose, naked; *lobes* ovate-acuminate, $\frac{1}{3}$ in. long, simple, glabrous on the back. *Petals* small, pure white, cuneate at the base, emarginate at the apex. *Styles* villous, united in a distinctly protruded column. *Fruit* small, globose, naked, bright red, not ripening till late autumn; *sepals* deciduous.

Rosa Wichuraiana was named after the German botanist Wichura, who accompanied the German expedition to China and Japan in 1859-61. He died in 1866. The Rose came to England about 1890 by way of the United States, where it had already become popular and was largely grown, notably in the Franklin Park, Boston, where it was employed with great success in covering banks and rocky slopes. It had been sent from Berlin by Louis Späth in 1888 to the Arnold Arboretum as *Rosa bracteata*, but proved to be *Rosa Wichuraiana* of Crép. who first called attention to its distinctive characters in 1886. At that date it was already in cultivation at Munich and Brussels. It had previously been confounded with *Rosa Luciae* Franch. & Rochebr., and still earlier with *Rosa sempervirens* L. Although in a dried state it is difficult to distinguish *Rosa Wichuraiana* from some

ROSA WICHURAIANA

multiflora varieties, from a horticultural point of view it exhibits some very marked differences, such as its decumbent habit and the late period of its flowering, which is prolonged long after the Rose season has passed. It is one of the most valuable of our recent introductions, for its prostrate growth, its bright, glistening, box-like foliage and its abundant small white flowers with delicious wild-rose fragrance. In the type the branches, which lie closely upon the ground, often extend to fifteen feet or more; but hitherto this distinctive characteristic has not been transmitted to the hybrids, which are inclined to be more rampant and to throw up strong erect or arching branches instead of the creeping and trailing growths of the type; the box-like leaflets have likewise disappeared. The aim now should be to retain these good qualities, and with a Rose which hybridises so freely this ought not to be an insurmountable difficulty. Although none of the hybrids have preserved the main *Wichuraiana* features, they form nevertheless a very beautiful race of Roses, which has been a great addition to our gardens. Among the most notable of them is *Jersey Beauty*, raised in New Jersey by Manda in 1899, with almost persistent foliage and large, single flowers, which in the bud state are pale chrome in colour and change to cream white in the expanded flower. *René André* resulted from a cross with *L'Idéal*, and has inherited something of the soft sunset colouring together with the tea scent of its parent. Perhaps the greatest favourite of all the *Wichuraiana* hybrids is the charming *Dorothy Perkins*, whose beautiful pure pink flowers resemble a clustered *Rose de Meaux*. It is impossible here to enumerate all the hybrids of this Rose which are deserving of notice, and many of which are extremely beautiful, although we are now only at the beginning of what may be accomplished in this direction by judicious hybridising. There is a great future for *Wichuraiana* hybrids, and we may confidently hope to see a glorified race retaining the foliage, habit and constitution of the type together with variety of colour and the true Rose scent. In the type we have the wild-rose odour, and *René André* is tea-scented, but in no hybrid so far have we the exquisite fragrance of the Provence Roses.

Roses vary as much in perfume as they do in colour; each has its own distinctive scent, except in the instances, sad to say far too frequent among the newer Roses, where the flowers are absolutely devoid of any fragrance whatever.



19—ROSA WICHURIANA



20—ROSA JACKSONI Hort.

(ROSA RUGOSA × WICHURAIANA)

Rosa Jacksoni: caulibus brevibus, arcuatis; aculeis inaequalibus, haud densis, rectis, gracilibus; foliis 7-9, oblongis, obtusis, firmis, glabris, late breviter simpliciter serratis; rhachi aciculata, haud glandulosa; stipulis adnatis, apicibus liberis ovatis; floribus pluribus, corymbosis; pedicellis leviter aciculatis; calycis tubo globoso, leviter aciculato; lobis ovato-lanceolatis, apicibus elongatis, dorso leviter glandulosis; petalis magnis, rubris; stylis liberis, haud protrusis; fructu globoso, rubro.

Stems low, arching; *prickles* very unequal, not dense, straight, slender, the largest $\frac{1}{4}$ in. long. *Leaflets* 7-9, oblong, obtuse, firm, glabrous or nearly so, openly shallowly simply serrated; *petioles* aciculate, not glandular; *stipules* adnate, with ovate free tips. *Flowers* several, corymbose; *pedicels* slightly aciculate. *Calyx-tube* globose, slightly aciculate; *lobes* ovate-lanceolate, with long leafy tips, slightly glandular on the back. *Petals* large, bright crimson. *Styles* free, not protruded beyond the disc. *Fruit* urceolate-globose or ampullaeform, bright red, much smaller than in *Rosa rugosa*.

Rosa Jacksoni is one of the numerous hybrids to which these two Roses (*Rosa Wichuraiana* and *Rosa rugosa*) have given rise. It was raised at the Arnold Arboretum by Mr. Jackson Dawson, and was sent from thence to Kew in 1897; it is thus one of the earliest of the *Wichuraiana* hybrids. It is exactly intermediate between its parents, and is of graceful habit and good constitution, often making shoots seven to eight feet long in one season. It is extremely floriferous and is in every way an acquisition to a garden.



20—ROSA JACKSONI
(RUGOSA × WICHURIANA)



21—ROSA ANEMONEFLORA Fort.

Rosa anemoneflora: caule elongato, sarmentoso; aculeis parvis, sparsis; foliolis 3-5, ovato-lanceolatis, angustis, acuminatis, argute serratis, facie glabris, dorso glaucis; rhachi aculeata; stipulis angustis, integris, subglandulosis, apicibus liberis, subulatis; floribus parvis, corymbosis; pedunculis glabris; calycis tubo ovato-urceolato, nudo; lobis subintegris, glabris; stylis coalitis.

R. anemoneflora Fortune ex Lindley in *Journ. Hort. Soc.* vol. ii. p. 316 (1847).—Regel in *Act. Hort. Petrop.* vol. v. pt. 2, p. 367 (*Tent. Ros. Monogr.* p. 83 [1877]) (1878).—Crépin in *Bull. Soc. Bot. Belg.* vol. xxii. pt. 2, p. 45 (1881); vol. xxv. pt. 2, p. 195 (1886).

Stem long, sarmentose; *prickles* small, scattered. *Leaflets* 3-5, narrow, acuminate, ovate-lanceolate, finely serrated, glaucous beneath, glabrous on the upper surface; *petioles* aculeate; *stipules* narrow, entire, subglandular; *auricles* subulate. *Flowers* small, corymbose; *peduncles* glabrous. *Calyx-tube* ovate-urceolate, naked; *lobes* subentire, glabrous. *Petals* small, white, rounded. *Styles* united in a column.

This Rose was found growing in the gardens of Shanghai by Fortune, who in the autumn of 1844 sent it to Chiswick, where it was grown. Two years later it was described by Lindley in the *Journal of the Horticultural Society*.¹

Crépin was of opinion that the single form had been found previously to the discovery of the double variety by Fortune, judging from an interesting series of specimens sent to him for examination from St. Petersburg, where they had been raised from seed collected in southern China. He also found in the Vienna herbarium, in company with some of Fortune's specimens, an old specimen which had come from Portenschlag's collection.

In many respects *Rosa anemoneflora* resembles *Rosa macrocarpa* L. and *Rosa moschata* Mill. It may readily be distinguished from other Roses of the *Systylae* section by its narrow acuminate leaflets, usually three, occasionally five, on the stem leaves. The individual flowers bear a close resemblance to the double *Anemone nemorosa* L.; they are disposed in corymbs and are of a dull white. This Rose is seldom to be met with in gardens, but it is altogether so distinct that it should be included in every collection of Roses. A severe winter

¹ Vol. ii. p. 316 (1847).

ROSA ANEMONEFLORA

is apt to cut back the ends of its branchlets; these leafless branchlets remaining on the plant while it is in flower give it a very characteristic appearance.

There is an excellent plate of it in the *Revue Horticole* of 1849, together with a description by F. Hérincq¹ of the plant growing in Hippolyte Jamain's garden at Bourg-la-Reine.

The plant figured here is growing at Warley.

¹ P. 281, fig. 15.

22—ROSA PHOENICEA Boiss.

THE PHOENICIAN ROSE

Rosa phoenicea: ramis elongatis, sarmentosis; aculeis sparsis, conformibus, falcatis; foliolis 3-7, oblongis, obtusis, teneris, dentibus simplicibus, ovatis, apertis, facie ciliatis, dorso parce pubescentibus; rhachi pubescente et aciculata, parce glandulifera; stipulis adnatis, apicibus liberis ovatis, parvis; floribus pluribus, corymboso-paniculatis, ramis inferioribus foliis compositis stipatis; pedicellis nudis vel glandulosis; calycis tubo angusto, nudo; lobis ovatis, acuminatis, copiose pinnatifidis; petalis albis, magnitudine mediocribus; stylis glabris, coalitis, protrusis; fructu globoso, parvo, rubro, nudo; sepalis deciduis.

R. phoenicea Boissier, *Diagn. Pl. Orient. Nov.* fasc. x. p. 4 (1849); *Fl. Orient.* vol. ii. p. 688 (1872).—Déséglise in *Bull. Soc. Bot. Belg.* vol. xv. p. 206 (*Cat. Rais. Ros.* p. 37 [1877]) (1876).—Crépin in *Bull. Soc. Bot. Belg.* vol. xviii. pp. 318-322 (*Primit. Monogr. Ros.* fasc. v. pp. 564-8) (1880); vol. xxxi. pt. 2, pp. 57-61 (1892).—Christ in Boissier, *Fl. Orient. Suppl.* p. 228 (1888).—Koehne, *Deutsche Dendrol.* p. 278 (1893).—Post, *Fl. Syria*, p. 309 (1896).

Branches long, sarmentose; *prickles* scattered, uniform, hooked, moderately large. *Leaflets* 3-7, oblong, obtuse, thin, the end one 1-1½ in. long, openly simply bluntly toothed, glabrous on the upper surface when mature, slightly pubescent beneath; *petioles* pubescent, aciculate, slightly glandular; *stipules* adnate, with small ovate free points. *Flowers* many, arranged in a corymbose panicle, the lower branches of which are subtended by compound leaves; *pedicels* naked or glandular. *Calyx-tube* narrow, naked; *lobes* ovate-acuminate, ½-¾ in. long, copiously compound. *Petals* pure white, middle-sized. *Styles* glabrous, united in a protruded column. *Fruit* globose, bright red, naked, ½ in. diameter; *sepals* spreading, deciduous.

Rosa phoenicea ranges from the Troad eastward to Syria, and is one of the commonest Roses in Palestine, ascending the mountains to an altitude of 6,000 feet. Its area of distribution thus forms a link between *Rosa sempervirens* L., which does not extend eastward beyond Greece, and *Rosa moschata* Mill., which is found in Persia on one side and in Abyssinia and the south of Arabia on the other. Although a perfectly distinct and well-marked species, it has been persistently misunderstood by the various botanists who collected it on Mount Taurus, at Damascus, Beyrout, etc. Boissier was the first to distinguish it clearly as a new species and to describe it under the name of *Rosa phoenicea*. In affinity it stands next to *Rosa moschata* Mill., from which it differs by

ROSA PHOENICEA

its thin, obtuse leaflets, usually five in number, with open ovate teeth, the lower branches of the panicle subtended by compound leaves, its glabrous styles and very compound sepals. The flowers are white and in appearance much resemble *Rosa moschata* Mill. ; the form of inflorescence is likewise similar, frequently displaying as many as forty flowers to a panicle. With *Rosa sempervirens* L. it has also some affinity, but is easily distinguishable from that species by the difference in some of the most important characters. It is not often met with in cultivation, but is perfectly hardy in England.



23—ROSA SETIGERA Michx.

THE PRAIRIE ROSE

Rosa setigera: caulibus longis, erectis, arcuatis; aculeis parvis, sparsis, robustis; foliis plerumque ternis, oblongis, acutis, simpliciter serratis, facie glabris, dorso pubescentibus; rhachi pubescente, parce setosa et aciculata; stipulis longe adnatis, apicibus liberis ovato-lanceolatis; floribus paucis, laxe corymbosis; bracteis parvis, linearibus; pedicellis setosis; calycis tubo turbinato; lobis oblongis, acutis, saepe simplicibus, dorso pubescentibus et glandulosis; petalis cuneatis, emarginatis, roseis vel albis; stylis in columnam protrusam coalitis; fructu globoso, rubro, magnitudine mediocri, nudo; sepalis caducis.

R. setigera Michaux, *Fl. Bor. Am.* vol. i. p. 295 (1803).—Lindley, *Ros. Monogr.* p. 128, No. 73 (1820).—Gray, *Man. Bot. North U. States*, p. 127 (1848).—Chapman, *Fl. South U. States*, p. 125 (1860).—S. Watson in *Smithsonian Misc. Coll.* vol. xv. p. 313 (1878).—Koehne, *Deutsche Dendrol.* p. 278 (1893).—Sargent in *Garden and Forest*, vol. x. p. 320, fig. 42 (1897).—Rehder in Bailey, *Cycl. Am. Hort.* vol. iv. p. 1550 (1902).

R. rubifolia Aiton, *Hort. Kew.* ed. 2, vol. iii. p. 260 (1811).—Thory in Redouté, *Roses*, vol. iii. p. 71, t. (1824).

R. setigera, var. *tomentosa* Torrey & Gray, *Fl. N. Amer.* vol. i. p. 458 (1838).—Rehder in Bailey, *Cycl. Am. Hort.* vol. iv. p. 1550 (1902).

Stem very tall and arching; *prickles* small, scattered, uniform, robust. *Leaflets* usually 3, very rarely 5, ovate or oblong, acute, thin, simply serrated, glabrous on the upper surface, pubescent beneath, the end one 2 or 3 in. long; *petioles* pubescent and slightly aciculate and setose; *stipules* adnate, gland-edged, with small, ovate-lanceolate, free tips. *Flowers* few, laxly corymbose; *pedicels* setose; *bracts* small, linear. *Calyx-tube* turbinate, naked or slightly glandular; *lobes* oblong-cuspidate, $\frac{1}{2}$ in. long, pubescent and glandular on the back. *Corolla* pink or white, $1\frac{1}{2}$ or 2 in. in diameter; *petals* obovate-cuneate, emarginate. *Styles* united in a protruded column. *Fruit* globose, middle-sized, red, naked; *sepals* deciduous.

The Prairie Rose is found in a wild state from Florida and Texas northward to the Great Lakes, but does not extend westwards as far as the Rocky Mountains. According to Crépin,¹ this Rose is the only American representative of the section *Systylae*.

It is a very distinct species and is not so much cultivated as it deserves. Parkman² suggests that perhaps national prejudice may to

¹ *Bull. Soc. Bot. Belg.* vol. xv. p. 27 (*Primit. Monogr. Ros.* fasc. iv. p. 388) (1876).

² *Book of Roses*, p. 155 (1866).

ROSA SETIGERA

a certain extent account for its unpopularity in England, but a better reason may be found in the fact that there are such countless numbers of Roses in cultivation from which to make a choice. The type is somewhat coarse in growth, and the deep pink of its flowers is not a shade which is generally popular. It is furthermore deficient in fragrance. But Rivers was too severe in saying of the Prairie Roses, "I will dismiss them with the remark that none of them are worth cultivating."¹ Where space can be given this Rose should certainly be grown, not only on account of its beautiful foliage and abundant flowers, but because it is the latest to blossom of all the single Roses. It is exceedingly hardy and will grow and flourish under conditions which would discourage many other Roses of greater beauty but of less robust constitution. A Rose which blossoms so late in the season is valuable in prolonging our enjoyment of single Roses, and in the chance that it might be the parent of a Rose which might be expected to flower after all other varieties had passed, and perpetuate the many good qualities of the Prairie Rose.

It forms fine hybrids with *Rosa gallica* L., and other species. Among these may be mentioned *Queen of the Prairies*, a Rose so hardy and of such easy culture that it is of great value when wall space has to be covered quickly. This hybrid blooms profusely, and with its ample foliage of tender green it cannot fail to be admired. *Baltimore Belle* is also one of the best known of its hybrids. The pollen parent of this Rose is probably a Noisette Rose, which would account for the delicacy and beauty of its flowers. It may be grown either as a standard or a trellis Rose.

Professor Sargent says that the Prairie Rose sometimes forms shoots twelve or fifteen feet long in a single season, and that the following year these bear short ascending flowering branches.

¹ *Rose Amateur's Guide*, ed. 11, p. 87 (1877).

24—ROSA SINOWILSONI Hemsl.

Rosa Sinowilsoni: caule elongato, sarmentoso; aculeis sparsis, falcatis, aequalibus; foliolis 5-7, oblongis, acutis, magnis, simpliciter serratis, rigidis utrinque glabris; rhachi glabra, parce aciculata; stipulis adnatis, angustissimis, apicibus liberis, deltoideis, parvis; floribus pluribus in paniculum corymbosum dispositis; pedicellis elongatis, glabris; calycis tubo subglobose, nudo; lobis lanceolatis vel ovato-lanceolatis, parce appendiculatis; lobis linearibus, dorso glabris; petalis albis, latis, sepalis duplo longioribus, dorso pubescentibus; stylis coalitis, longe protrusis; fructu subglobose, nudo; sepalis deciduis.

R. Sinowilsoni Hemsley in *Kew Bull.* 1906, No. 5, p. 158.

Stems sarmentose, 12-20 feet; *prickles* scattered, falcate, uniform. *Leaflets* 5-7, oblong, acute, rounded at the base, 3-4 in. long, simply serrated, firm in texture, glabrous on both surfaces; *petioles* glabrous, with a few small hooked prickles; *stipules* adnate, very narrow, with small deltoid free tips. *Flowers* many, arranged in a very lax corymbose panicle; *pedicels* glabrous, one or two inches long. *Calyx-tube* subglobose, glabrous, $\frac{1}{2}$ in. long; *lobes* ovate-lanceolate, with a few linear erecto-patent appendages, naked beneath. *Petals* white, broad, twice as long as the sepals, pubescent on the outside. *Styles* united in a long column protruded beyond the disc. *Fruit* subglobose, glabrous; *sepals* deciduous.

This very fine new species comes nearest to *Rosa moschata* Mill., from which it differs by its very lax panicle, long pedicels and compound sepals. It is also much larger in all its parts. It was found by Mr. E. H. Wilson, after whom it is named, on Mount Omi and the hills to the south in the province of Sze-chuan in the south-west of China, at an elevation of 2,000 to 4,000 feet above sea-level.

25—ROSA KELLERI Baker

Rosa Kelleri: caule elongato; aculeis validis, conformibus, sparsis, falcatis; foliis 7-9, ellipticis, acutis, simpliciter late dentatis, facie glabris, dorso ad costam pilosulis; rhachi parce glandulosa; stipulis adnatis, glabris, denticulatis, apicibus liberis, angustis, acutis, divergentibus; floribus pluribus, corymboso-paniculatis; pedicellis elongatis, glabris; bracteis linearibus; calycis tubo globoso; lobis ovatis, apice linearibus, parce appendiculatis, dorso glabris; petalis albis, magnitudine mediocribus; stylis coalitis, glabris, protrusis; fructu ignoto.

R. Kelleri Baker inedit.

R. coreana Keller in Engler, *Jahrbuch*, vol. xlv. p. 46 (1909) (non *R. koreana* Komarov in *Act. Hort. Petrop.* vol. xviii. p. 434 [1901]).

Stems long; *prickles* stout, equal, scattered, falcate. *Leaflets* 7-9, elliptical, acute, 1-1½ in. long, simply openly toothed, glabrous on the upper surface, pubescent on the midrib beneath; *petioles* slightly glandular; *stipules* adnate, narrow, denticulate, with narrow, acute, divergent free tips. *Flowers* many, arranged in a corymbose panicle; *pedicels* long, naked; *bracts* linear. *Calyx-tube* globose, naked; *lobes* ovate with a linear tip, slightly compound, glabrous on the back. *Petals* white, about an inch long. *Styles* glabrous, united in a protruded column. *Fruit* not seen.

This new species is nearly allied to *Rosa multiflora* Thunb., from which it differs by its non-laciniated stipules and larger flowers. It was found near Kan-ouen-to, in the Korea, by the Abbé Faurie. *Rosa koreana* of Komarov is closely allied to *Rosa spinosissima* L.

PART V

THE GENUS ROSA

BY

ELLEN WILLMOTT, F.L.S.

Drawings by

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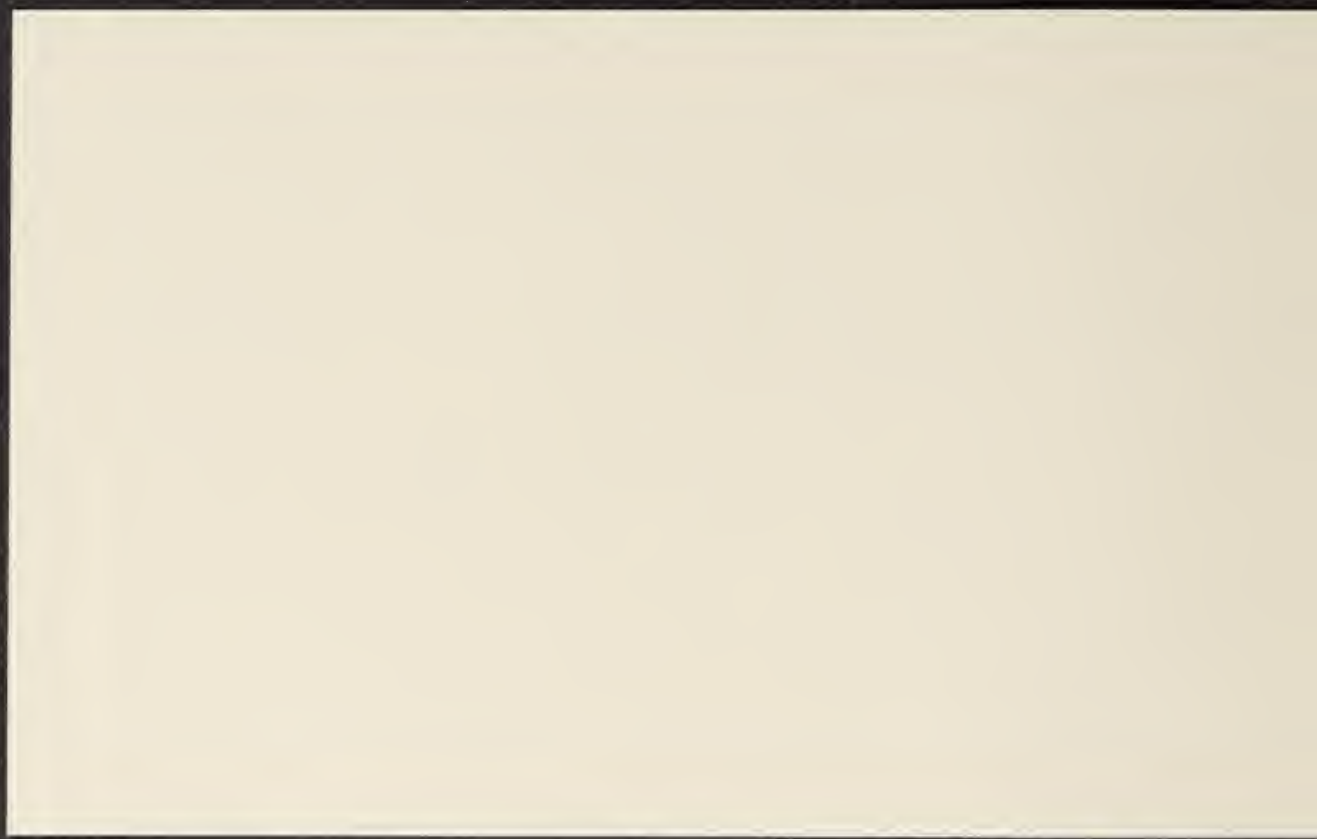
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III
INDICAE



In order to protect the parts of "The Genus Rosa" a portfolio has been sent out to hold them until the first volume (12 parts) is completed. Each subscriber is entitled to a portfolio without charge.



26—ROSA CHINENSIS Jacq.

(ROSA INDICA Lindl.)

Rosa chinensis: caule arcuato; aculeis sparsis, conformibus, falcatis; foliis 5-7, oblongis, acutis, viridibus, simpliciter serratis, utrinque glabris; rhachi glabra; stipulis adnatis, apice libero ovato; floribus paucis, corymbosis; pedunculis nudis vel parce setosis; calycis tubo subgloboso; lobis dorso glabris, apice elongatis, simplicibus vel parce pinnatifidis; petalis plerumque rubris; stylis liberis, inclusis; fructu turbinato, rubro; sepalis caducis.

R. chinensis Jacquin, *Obs. Bot.* vol. iii. p. 7, t. 55 (1768).—Thory in Redouté, *Roses*, vol. i. p. 49, t. (1817).—K. Koch, *Dendrol.* vol. i. p. 272 (1869).—Koehne, *Deutsche Dendrol.* p. 280 (1893).—Rehder in Bailey, *Cycl. Am. Hort.* vol. iv. p. 155 (1902).—C. K. Schneider, *Ill. Handbuch Laubholzsk.* vol. i. p. 546 (1906).

R. sinica Linnaeus, *Syst. Veg.* ed. 13, p. 394 (form with monstrous calyx) (1774).

R. canina Thunberg, *Fl. Jap.* p. 214 (non Linnaeus) (1784).

R. semperflorens carnea Roessig, *Die Rosen*, No. 19 (1802-1820).

R. indica Lindley, *Ros. Monogr.* p. 106, No. 58 (1820).—Lawrance, *Roses*, t. 6 (1799).—Aiton, *Hort. Kew.* ed. 2, vol. iii. p. 266 (1811).—Thory in Redouté, *Roses*, vol. i. p. 49, t. (1817).—Hooker f., *Fl. Brit. Ind.* vol. ii. p. 364 (1879).—Crépin in *Bull. Soc. Bot. Belg.* vol. xxv. pt. 2, p. 14 (1886).—Forbes & Hemsley in *Journ. Linn. Soc.* vol. xxiii. p. 249 (1887).

Stems green, moderately tall, arching; *prickles* scattered, uniform, stout, hooked. *Leaflets* 5-7, oblong, acute, green, middle-sized, simply serrated, glabrous on both surfaces; *petioles* glabrous; *stipules* adnate, with small ovate free tips. *Flowers* 1-5, corymbose; *peduncles* naked or slightly setose; *bracts* lanceolate. *Calyx-tube* subglobose, naked; *lobes* ovate, long pointed, naked on the back, simple or slightly compound. *Petals* pink in the typical form. *Styles* free, included. *Fruit* turbinate, naked, red; *sepals* deciduous.

The Chinese Monthly Rose has been cultivated from time immemorial in the East, and is now the most popular and widely grown Rose in Europe. Through its many varieties and hybrids it is the parent of a large proportion of the Roses now in cultivation. Of its country and origin nothing can be ascertained, but it does not appear to have been known in England before Sir Joseph Banks introduced it in 1789, and it is recorded to have flowered for the first time in Mr. Parsons' garden at Rickmansworth. It is not admitted by Hooker as a native of India, nor does Matsumura include it in the

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flora of Japan. The oldest herbarium specimen known is that from Gronovius, in the British Museum, dated 1704. Nearly all the herbarium specimens seem to have been gathered from cultivated plants. The only wild specimens known are those collected by Dr. Henry in the glens near Ichang in central China. He describes the growing plant as a large climbing shrub armed with brown, scattered, hooked prickles. Leaflets three to five, ovate or elliptic, acuminate, serrate, dark green above, glaucous below. The stipules are narrow, adnate almost to the top, finely serrated on the edge and ending in a subulate point. Contrary to the general rule among the cultivated forms of *Rosa chinensis*, these wild specimens have solitary flowers, usually red in colour, rarely pink.

The *Rosa indica* of the Linnaean herbarium includes both the present plant and *Rosa multiflora* Thunb., and the figure of Petiver,¹ which Linnaeus cites, represents *Rosa microcarpa* Lindl. There is a figure of it in part 27 of the *Phonzo Zoufou*.

In the garden forms the flowers are usually produced at the extremities of the branches in a kind of panicle and are slightly scented; some varieties, however, are very fragrant. Victor Hugo slandered the Bengal Rose when he said "Comme elle est sans épines, elle n'a pas d'odeur." Under the name of Bengal Roses the French cultivate a large number of varieties which, from their perpetual blooming, hardiness and power of accommodating themselves to any aspect or situation, are invaluable among garden plants. The popular names given to this Rose, "Monthly Rose," "Tous les Mois," "Quatre Saisons," testify to its almost constant blooming.

There is no more beautiful Rose in this section than *Cramoisie Supérieure*, which combines all the qualities of the China Roses with a rich and glowing shade of red. It was raised in 1832 by Coquereau, an amateur living near Angers, and came into the hands of Vibert, who distributed it in 1835. It has transmitted its beautiful colour to many hybrids, all of which possess the great advantage of keeping their colour unchanged even in fallen petals or withered flowers.

That useful, sweet and free-blooming Rose *Mrs. Bosanquet* may be mentioned here, for, although a hybrid, it has all the characters of a China Rose much pronounced.

The curious *Green Rose* belongs to this section. It is in no way beautiful, but is remarkable from having all its floral organs transformed into leaves.

An early mention of the China Rose is to be found in the *Memoirs* of Baroness d'Oberkirch:²

"HAARLEM, July 17th, 1782.

"I was delighted with Haarlem. We remained there several hours to admire the beautiful garden, and to see the gardener, who is celebrated throughout Europe.

¹ *Gazophylacium*, p. 56, t. 35, fig. 11 (1704).

² Vol. ii. p. 118.



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The gardener showed us different kinds of plants with which we were unacquainted ; amongst others a shrub that produces magnificent flowers, of which the petals are soft as velvet, but odourless. He told us that it was called the Chinese Rose and had been imported within the last year with great care. Roses of this species may, in fact, be seen delineated on screens and in the corner of fans."

The variety known as *Miss Willmott's indica* (see accompanying plate) is a garden form.

27—ROSA CHINENSIS, var. LONGIFOLIA Rehder

Rosa chinensis, var. *longifolia*: a typo recedit foliolis elongatis, lanceolatis.

R. chinensis, var. *longifolia* Rehder in Bailey, *Cycl. Am. Hort.* vol. iv. p. 1551 (1902).

R. longifolia Willdenow, *Sp. Plant.* vol. ii. p. 1079 (1799).—Poirét in Lamarck's *Encycl.* vol. vi. p. 296 (1804).—Thory in Redouté, *Roses*, vol. ii. p. 27, t. (1821).—Trattinnick, *Ros. Monogr.* vol. ii. p. 101 (1823).—Déséglise in *Bull. Soc. Bot. Belg.* vol. xv. p. 231 (*Cat. Rais. Ros.* p. 62 [1877]) (1876).

R. indica, δ *longifolia* Lindley, *Ros. Monogr.* p. 106 (1820).—Seringe in De Candolle, *Prodr.* vol. ii. p. 600 (1825).

R. persicifolia \times *salicifolia* Hort.

This is a slender variety of the Chinese Rose, with lanceolate leaflets, two or three inches long by a quarter of an inch broad. The flowers are smaller than in the type, and the flowering shoots usually without prickles.

Lindley calls it the willow-leaved Chinese Rose, and adds that it has little to recommend it to notice.

This Rose is figured by Andrews¹ under the name of *Rosa fraxinellaefolia*.

¹ *Roses*, vol. ii. t. 100 (1828).

ROSA PHENICIAE WAS A BOLD IDEA
FORTUNE'S DOUBLE YELLOW



28—ROSA CHINENSIS, var. PSEUDO-INDICA

FORTUNE'S DOUBLE YELLOW, OR BEAUTY OF GLAZENWOOD

Rosa chinensis, var. *pseudo-indica* (nov. nom.): a typo recedit habitu sarmentoso, foliolis firmioribus, floribus suaveolentibus, plenis, luteis, dorso rubro tinctis.

R. pseudo-indica Lindley, *Ros. Monogr.* p. 132 (1820).

Fortune's Double Yellow Lindley in *Journ. Hort. Soc.* vol. vi. p. 52 (1851).—Hooker in *Bot. Mag.* vol. lxxviii. t. 4679 (1852).—*Flore des Serres*, vol. viii. t. 769 (1852).

R. Fortuniana Paxton, *Flower Garden*, vol. iii. p. 157 (1852-3).—Lemaire, *Jardin Fleur.* vol. iv. t. 361 (1853).

Branches long and sarmentose; *prickles* strongly hooked. *Leaflets* 5-7, oblong, 1½-2 in. long, glossy, firm in texture, sharply simply serrated; *petioles* armed with hooks. *Flowers* often 3 or 4 in a corymb, sweet-scented, always double; *petals* salmon-yellow, tinged on the outside with red.

This Rose is hardly to be surpassed in beauty. It attracted the attention of the celebrated botanical collector Robert Fortune when, in 1842-6, he was travelling in China in search of new plants for the Horticultural Society of London. Whilst at Ningpo he paid frequent visits to the different nurseries, and also to the gardens of the Mandarins, which, although small, were extremely gay, particularly during the early months of the year, and contained a number of new plants of great beauty and interest. In his narrative¹ he thus describes his first view of the Rose: "On entering one of the gardens on a fine morning in May, I was struck by a mass of yellow flowers which completely covered a distant part of the wall; the colour was not a common yellow, but had something of buff in it, which gave the flower a striking and uncommon appearance. I immediately ran up to the place, and to my surprise and delight found that I had discovered a most beautiful new yellow climbing Rose. I have no doubt from what I afterwards learned that this Rose is from the more northern districts of the Chinese empire and will prove perfectly hardy in England." He sent plants to Chiswick in 1845. Lindley's description sounds tame after Fortune's

¹ *Journal of the Horticultural Society*, vol. i. p. 218 (1846).

ROSA CHINENSIS, var. PSEUDO-INDICA

glowing account; he says it is a straggling plant with the habit of *Rosa arvensis* Huds., and that with its loose petals the whole flower has the aspect of a slightly domesticated wildling, but he adds that Mr. Fortune still continues to speak highly of its beauty in China.

Messrs. Standish & Noble of Bagshot endeavoured to dispel the unfavourable opinion of Lindley, attributing the defects of the Rose to unsuccessful culture and injudicious pruning of the previous year's growth upon which the flowers are produced. They certainly proved the truth of their remarks by exhibiting splendidly grown specimens, which in June 1852 were the admiration of all who saw them. Since then *Fortune's Yellow* has been grown in many parts of the country both in the open and under glass. It is hardy in most countries, but the inclemency of our climate often injures its blossoms. Grown in an orangery, where it has protection against the vagaries of an English summer, it is greatly admired not only for the rare beauty of its flowers but for the graceful wreaths in which it produces them. For many years a beautiful mass of its flowers has been exhibited at the Royal Horticultural Shows, sent from the garden of Lady Wantage at Lockinge.

As this Rose is sometimes erroneously called *Rosa Fortuniana* it is as well to explain here that the mistake has arisen from what was probably a clerical error in Paxton's *Flower Garden*, vol. iii. p. 157,¹ where, under the heading *Rosa Fortuniana*, is quoted the description of *Fortune's Yellow Rose* which had previously appeared in the *Botanical Magazine*. The true *Rosa Fortuniana* is described in the *Flower Garden*, vol. ii. p. 71,² and the description is accompanied by a good black-and-white drawing. There is no similarity between *Fortune's Yellow* and the true *Rosa Fortuniana*, which is a large-flowered Banksian Rose, probably a hybrid of *Rosa Banksiae* Ait. and *Rosa laevigata* Michx., whereas *Fortune's Yellow Rose*, according to Crépin,³ may be a garden form of *Rosa gigantea* Collett ex Crép.

A writer in the *Gardener's Chronicle*, June 3rd, 1856, describing a visit to the Horticultural Society's garden at Chiswick, says: "As to Fortune's climbing Yellow China, its rich nankeen colour was actually glowing with salmon, the house was piled with gigantic Roses, sweeter than the sweetest of the Eastern world."

¹ 1852-3.

² 1851-2.

³ *Bull. Soc. Bot. Belg.* vol. xxvii. p. 150 (1888); vol. xxviii. pt. 2, p. 11 (1889).



29—ROSA CHINENSIS, var. GRANDIFLORA Hort.

Rosa chinensis, var. *grandiflora* : inter formas hujus speciei distincta floribus magnis, albis, simplicibus.

This is a fine form of *Rosa chinensis* Jacq., with very large shell-pink and white flowers, and approaches most nearly to *Rosa gigantea* of Collett. All attempts to trace the origin of this beautiful Rose have failed, for no mention of it has been made in any of the books on Roses, and it has not been figured. The only specimen known was found growing in Canon Ellacombe's garden at Bitton in Gloucestershire, and it is through his generosity that the plant has lately been distributed.



30—ROSA CHINENSIS, var. SEMPERFLORENS Koehne

Rosa chinensis, var. *semperflorens*: a typo recedit caulibus aculeisque gracilioribus, foliolis minoribus, rubro tinctis, petalis saturate rubris.

R. chinensis, var. *semperflorens* Koehne, *Deutsche Dendrol.* p. 281 (1893).—K. Koch, *Dendrol.* vol. i. p. 273 (1869).

R. semperflorens Curtis in *Bot. Mag.* vol. viii. t. 284 (1784).—Jacquin, *Hort. Schoen.* vol. iii. t. 281 (1798).—Roessig, *Die Rosen*, Nos. 12, 19 (1802–1820).—Aiton in *Hort. Kew.* ed. 2, vol. iii. p. 266 (1811).—Lindley, *Ros. Monogr.* p. 108, No. 59 (1820).

R. diversifolia Ventenat, *Jard. Cels*, t. 35 (1800).

R. bengalensis Persoon, *Syn.* vol. ii. p. 50 (1807).

R. indica, var. *semperflorens* Seringe in De Candolle, *Prodr.* vol. ii. p. 601 (1825).

Stem long, slender. *Prickles* uniform, slender. *Leaflets* 5-7, ovate, simply toothed, glabrous, more or less tinged with dark red. *Flowers* often solitary; *pedicels* naked. *Calyx-tube* oblong, naked; *lobes* ovate-lanceolate, acuminate, simple, $\frac{1}{2}$ in. long. *Petals* dark red. *Fruit* bright red. *Sepals* deciduous, spreading.

As its name implies, this Rose is rarely without flowers, and it is for its beauty and hardiness one of the most valuable acquisitions to our gardens. It was introduced into England in 1789 by Gilbert Slater of Knots Green. He was an enthusiastic and successful gardener, and was the means of introducing into this country many rare plants, which he readily distributed amongst those of his friends who would cultivate them. It was through his generosity that this Rose was in a very short time to be found in most of the gardens in the neighbourhood of London.

31—ROSA CHINENSIS, var. MINIMA Rehder

THE FAIRY ROSE

Rosa chinensis, var. *minima*: a typo partibus omnibus multo minoribus recedit.

R. chinensis, var. *minima* Rehder in Bailey, *Cycl. Am. Hort.* vol. iv. p. 1551 (1902).

R. semperflorens minima Sims in *Bot. Mag.* vol. xlii. t. 1762 (1815).

R. Lawranceana Sweet, *Hort. Suburb. Lond.* p. 119 (1818).—Lindley, *Ros. Monogr.* p. 110 (1820); *Bot. Reg.* vol. vii. t. 538 (1821).—Déséglise in *Bull. Soc. Bot. Belg.* vol. xv. p. 229 (*Cat. Rais. Ros.* p. 60 [1877]) (1876).

R. indica pumila Thory in Redouté, *Roses*, vol. i. p. 115, t. (1817); vol. ii. p. 25, t. (1821).

R. indica, var. *humilis* Seringe in De Candolle, *Prodr.* vol. ii. p. 600 (1825).

The first drawing of this charming little Rose appears in the *Botanical Magazine* of 1815, where it is called “*Rosa semperflorens minima*, Miss Lawrance’s Rose.” Mr. Hudson of the War Office sent the flower from which the drawing was made. The next plate is that in the *Botanical Register* of 1821 under the name of *Rosa Lawranceana*. Redouté’s drawing was made about the same time. Redouté also gives a drawing of a dwarf double-flowered Rose, *Rosa indica*, var. *pumila*, which gives the idea of a stronger-growing Rose, but it is evidently intended for the double form of Miss Lawrance’s Rose because it came from Colville’s Nursery at Chelsea, where this Rose is known to have been growing.

Although not such a favourite as formerly, the double form and its varieties are often to be seen, and may readily be known by their diminutive size. It is in fact a China Rose much dwarfed in all its parts, probably by the art of some Chinese or Japanese cultivator. The flowers are about an inch in diameter, and the ovate leaflets under half an inch long. In general appearance it much resembles a diminutive *Pompon de Mai* of the Parisian markets. It is often known as the Fairy Rose, a name which well describes it. Although of easy cultivation it requires attention to ensure its full beauty. Grown from cuttings it thrives and flowers in an incredibly short space of time, indeed it will often flower within a month of the cuttings having taken

ROSA CHINENSIS, var. MINIMA

root. Care must be taken to prune hard, for the old wood is apt to become hard and dry.

Paul in the ninth edition of his *Rose Garden* enumerates the following nine varieties: *Alba*, *Fairy*, *Gloire des Lawranceanas*, *Jenny*, *La Désirée*, *Nemesis*, *Nigra*, *Red Pet*, *Retour du Printemps*.

Sweet introduced the original plant from the Mauritius in 1810 and dedicated it to Miss Lawrance. It was in all probability the *Rosa pusilla* of the Mauritius Botanic Garden Catalogue. When the Rose arrived in England Miss Lawrance was at the zenith of her fame. A successful exhibitor at the Royal Academy, and possessed of much personal charm, she was exceedingly popular in London, where her lessons were in great request. All that was interesting and beautiful in the Vine Nursery, Hammersmith, soon made its way to her house in Queen Anne Street. Not only Mr. Lee, but most of the other nurserymen, made a point of sending their new flowers to be drawn by her. It was thought to be an honour for the owner as well as for the flower when Miss Lawrance painted its portrait. Her book on Roses was published in 1799, and the demand was far in excess of the number of copies printed. At the time it created much sensation, as nothing like it had been published before and Roses were beginning to take a prominent place in gardens and were rapidly gaining in popularity. Miss Lawrance married Mr. Kearsse in 1813, but she continued exhibiting and giving lessons until her death in 1830. The admiration excited by her flower pictures was partly due to the purity and delicacy of their colouring. She always attached great importance to the quality of her colours, which were all prepared at her own house and under her own supervision. The only other flower-book published by her was *A Collection of Passion Flowers*, 1799-1800.



32—ROSA CHINENSIS × MOSCHATA Koehne

(ROSA NOISETTIANA Redouté)

Rosa chinensis × *moschata*: caulibus longis, arcuatis vel sarmentosis; aculeis sparsis, robustis, falcatis, conformibus; foliolis 5-7, oblongis, acutis, magnitudine mediocribus, simpliciter serratis, viridibus, facie glabris, dorso leviter pubescentibus; rhachi pubescente, aciculata; stipulis angustis, adnatis, apicibus parvis, liberis, ovatis; floribus multis, corymbosis, plenis, magnitudine mediocribus, albis vel rubellis; pedicellis nudis; calycis tubo turbinato, nudo; lobis parvis, simplicibus, ovato-cuspidatis, dorso nudis; stylis pubescentibus, leviter coalitis, protrusis; fructu parvo, rubro, globoso, nudo; sepalis patulis, caducis.

R. chinensis × *moschata* Koehne, *Deutsche Dendrol.* p. 279 (1893).

R. Noisettiana Thory in Redouté, *Roses*, vol. ii. p. 77, t. (1821).

R. indica, var. *Noisettiana* Seringe in De Candolle, *Prodr.* vol. ii. p. 600 (1825).
—Loudon, *Arboretum*, vol. ii. p. 770, fig. 505 (1838).

Stems tall, arching or sarmentose; *prickles* stout, hooked, uniform, scattered. *Leaflets* 5-7, oblong, acute, middle-sized, simply toothed, green, glabrous on the upper surface, slightly pubescent beneath; *petioles* pubescent and aciculate; *stipules* narrow, adnate, with small, ovate, free tips. *Flowers* many (up to 20-30) in a corymb, double, middle-sized, white or pink; *pedicels* naked. *Calyx-tube* turbinate, naked; *lobes* small, simple, ovate-cuspidate, naked on the back. *Styles* pubescent, loosely coherent, protruded beyond the disc. *Fruit* rarely produced, small, red, globose, naked; *sepals* spreading, deciduous.

This Rose is generally believed to have been raised at Charleston, South Carolina, in 1816 by Philippe Noisette, a French florist, who sent it to Paris to his brother, Louis Noisette, with whom it flowered for the first time in the year 1818. John Champney, another nurseryman of Charleston, likewise claimed to have raised it. His version was that he raised the first cross between *Rosa chinensis* and *Rosa moschata*, the result being Champney's *Pink Cluster*; from this seedling Philippe Noisette then raised the *Blush Noisette*, and this was the plant sent to Louis Noisette. In any case, however, it was Noisette who raised the *Blush Noisette* Rose. The new seedling had the vigorous constitution of *Rosa moschata* together with a profuse clustered inflorescence, and Noisette, recognizing its value, carefully propagated it. Philippe Noisette also sent plants to Lendormi, an amateur gardener at Rouen, and to Jacques Durand, a tradesman also of Rouen; these same

ROSA CHINENSIS × MOSCHATA

plants were still growing in 1829. Durand's plants on their own roots came into the possession of Prévost fils, the celebrated nurseryman of Rouen, who at once proceeded to develop them. He found that many of the hybrids when grafted gave a greater number of flowers which opened better and were more perfect in form, but he noticed that the grafts united with difficulty to the *canina* stock and that many after having made a certain amount of growth turned yellow and came apart.

The Noisette Roses do not seed freely, and this may account for the comparatively small number of hybrids obtained from them; otherwise a race which could produce such Roses as *William Allen Richardson* and *Lamarque* would surely be worth developing further. One of the best known of the Noisette Roses is *Aimée Vibert* (see accompanying plate), raised at Angers in 1828 by the celebrated rose-grower J.-P. Vibert, who named it after his daughter. It has always been a favourite in gardens, not only on account of its very beautiful white clustered flowers, but because it blossoms profusely and is at its best in autumn when other Roses begin to feel the approach of winter. It is a useful Rose for gathering, for its stems are stiff and long and well able to support the heavy clusters of flowers. With so many valuable traits it is not surprising that its popularity has never waned. It still remains the most beautiful white Noisette we have, and being a true Noisette is absolutely hardy. Vibert was right in expecting great things from his Rose. Writing to Mr. Lee of Hammersmith to announce the magnificent new Rose he had raised and named after his daughter Aimée, he said the English when they saw it would go down on their knees.

The variety *purpurea* figured by Redouté is a stage nearer *Rosa chinensis* than the original cross, and it has rose-red flowers. It is the earliest of the red-flowered forms. In the ninth edition of Paul's *Rose Garden*¹ thirty-five Noisette Roses are enumerated in addition to sixteen hybrids between *Rosa indica fragrans* and *Rosa moschata*.

¹ Pages 318-321 (1888).





32—ROSA CHINENSIS × MOSCHATA
(NOISETTIANA)



33—ROSA CHINENSIS × MULTIFLORA Hort.

(FELLENBERG)

Rosa chinensis × *multiflora*: caulibus arcuatis, glabris; aciculis conformibus, sparsis, falcatis, haud stipularibus; foliis 7-9, oblongis, magnitudine mediocribus, acutis vel obtusis, argute simpliciter serratis, utrinque glabris; rhachi glabra, aciculata, haud glandulosa; stipulis adnatis, marginibus glandulosis, haud laciniatis, apicibus liberis, patulis, ovatis; floribus multis, corymbosis; pedicellis nudis; calycis tubo globoso, nudo; lobis ovato-acuminatis, simplicibus vel modice compositis; petalis rubellis; stylis leviter connatis; fructu globoso, rubro; sepalis caducis.

Stems arching, glabrous; *prickles* uniform, scattered, hooked, none stipular. *Leaflets* 7-9, oblong, middle-sized, acute or obtuse, simply sharply serrated, quite glabrous on both surfaces; *petioles* glabrous, aciculate, not at all glandular; *stipules* adnate, edged with glands, not laciniated, with spreading ovate free tips. *Flowers* many, corymbose; *pedicels* naked. *Calyx-tube* globose, naked; *lobes* ovate-acuminate, $\frac{3}{4}$ in. long, simple or slightly compound. *Petals* bright pink, much larger than in the double-flowered forms of *Rosa multiflora* Thunb. *Styles* slightly connate. *Fruit* globose, bright red; *sepals* deciduous.

This charming Rose was raised by Fellenberg, who distributed it in 1857.

It was formerly better known in France under the name of *La Belle Marseillaise*. In England it has always enjoyed a well-merited popularity, for it is perhaps the freest and most continuous flowering of Roses known. Although in horticultural lists it is generally included under the *Noisettes*, its parentage is believed to be *Rosa chinensis* Jacq. × *Rosa multiflora* Thunb. It is, however, much nearer *Rosa chinensis*, and it has not the ciliated stipules which are a constant character in *multiflora* hybrids. It does not appear to have been either published or described, although constantly referred to in Rose lists and elsewhere. As with all the Roses in this section, cuttings root with extreme facility, and the plants thrive in any soil and in all situations. Planted as a hedge Rose, against a wall or in the wild garden, its fine corymbs of glowing carmine flowers are scarcely surpassed by any other member of this beautiful genus.

De Pronville¹ alludes to this Rose as the "Bengale à bouquets"; he says it was growing in the Trianon Nursery in 1818.

¹ *Nomenclature du Genre Rosier*, pp. 102, 104 (1818).



34—ROSA GIGANTEA Collett *ex* Crép.

Rosa gigantea: caule elongato, sarmentoso; aculeis sparsis, robustis, conformibus, falcatis; foliolis 5, oblongis, acutis, magnis, minute simpliciter serratis, utrinque viridibus, glabris; rhachi glabra; stipulis angustis, adnatis, apicibus liberis ovato-lanceolatis; floribus solitariis; pedicellis nudis, glabris; calycis tubo oblongo, nudo; lobis simplicibus, lanceolatis, apice foliaceis, dorso glabris; petalis magnis, albis, late cuneatis; stylis pubescentibus, liberis, inclusis; fructu globoso, glabro, nudo; sepalis patulis, demum deciduis; carpellis fructiferis, magnis, castaneis, nitidis, glabris.

R. gigantea Collett *ex* Crépin in *Bull. Soc. Bot. Belg.* vol. xxvii. pt. 2, p. 148 (1888); vol. xxviii. pt. 2, p. 11 (1889).—*Gard. Chron.* ser. 3, vol. vi. p. 12, fig. 4 (1889).—Collett & Hemsley in *Journ. Linn. Soc.* vol. xxviii. pp. 6, 55, t. 9 (1890).—Koehne, *Deutsche Dendrol.* p. 280 (1893).—Berger in *Gard. Chron.* ser. 3, vol. xxiii. pp. 375, 376 (1898).—Rehder in Bailey, *Cycl. Am. Hort.* vol. iv. p. 1551 (1902).—*Bot. Mag.* vol. cxxx. t. 7972 (1904).—*Journ. As. Soc. Beng.* vol. lxxiii. p. 203 (1904).—C. K. Schneider, *Ill. Handbuch Laubholzsk.* vol. i. p. 545 (1906).—Brandis, *Indian Trees*, p. 287 (1906).

Stems long, trailing; *prickles* uniform, scattered, stout, hooked. *Leaflets* 5, large, oblong, acute, finely simply toothed, the end one $2\frac{1}{2}$ -3 in. long, the side ones distinctly stalked, green and glabrous on both surfaces; *petioles* glabrous; *stipules* adnate, narrow, with small, ovate-lanceolate free points. *Flowers* large, solitary; *pedicels* naked, glabrous. *Calyx-tube* oblong, naked; *lobes* simple, lanceolate, with long foliaceous tips, $1\frac{1}{4}$ - $1\frac{1}{2}$ in. long, glabrous on the back. *Petals* white, broadly cuneate, 2 in. long. *Styles* free, included, pubescent. *Fruit* globose, glabrous, naked, bright red; *sepals* spreading, deciduous. *Fruit carpels* brown, shining, glabrous, $\frac{1}{4}$ in. diameter.

Rosa gigantea was collected in 1888 in the Shan Hills, Upper Burma, at elevations of 4,000 to 5,000 feet, by the late General Sir Henry Collett, who sent dried specimens to Kew and to the Calcutta Botanic Garden, whence they were sent to Crépin with the name *gigantea* suggested by the discoverer. It has also been collected by Mr. W. Hancock and Dr. A. Henry in Mengtze in the province of Yun-nan. The flowers are said to be sometimes as much as fifteen inches in circumference.

Rosa gigantea grows well on the Riviera, but, though it is quite hardy in England, the sun has not sufficient power to bring it to the

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flowering stage. It blossomed for the first time in England at Albury Park, Guildford, in 1903.

Rosa macrocarpa, which was found by Sir George Watt in Manipur in 1882, was believed by Crépin to be identical with *Rosa gigantea*, but Sir George himself considers them distinct. In an unpublished diary he gives the following description of *Rosa macrocarpa*, or, as he afterwards named it, *Rosa xanthocarpa* :

“An extensive climber, running over trees and forming at first straight unbranched stems, as thick as the arm, younger ones with a soft grey-brown bark and here and there short sharp hooked prickles; above completely ramified until it envelopes the trees on which it is found. It thus produces a truly superb effect, and, when seen from a distance, causes the trees to appear like magnolias, with large yellow flowers. The leaves when young have a rich brownish green tint; when older they become pale shining green; leaflets 5-7, ovate-oblong, acuminate, shortly and sharply serrate, the terminal one on a long petiole (1 in.), the others almost sessile; stipules very long, linear, adnate throughout their length (except their spreading terminal arms) and thus extending along the greater portion of the leaf-stalk; in the more vigorous shoots they are conspicuous and red-coloured, but in the older parts they become very narrow. Prickles very few on the flowering branches, short, sharp, recurved; on the young flowerless shoots large, massive, flat, recurved. Flowers solitary or two or three in the axils of the terminal leaves of the shoots; flower-buds very long, smooth, glaucous. Calyx-teeth erect in bud, long, lanceolate, acuminate, quite entire, not becoming foliaceous but embracing firmly the pointed bud, silky tomentose upon the upper surface and margins (ciliate), quite glabrous below (that is, the outer surface of the bud), sharply reflexed when the flower is fully expanded. Ovary (the hip) glabrous; achenes very large, massive, sparsely hairy, with long, protruding, free styles and yellow globular stigmas. Stamens numerous, anthers orange-coloured. The fleshy hip or fruit is eaten by the Nagas, becomes as large as a small apple, and is smooth, glabrous, yellow (certainly never red, as has been said of the species grown in Europe) and sweetly scented.

“This species seems to me as possibly allied to, though quite distinct from, *Rosa chinensis* Jacq., and may probably be the true ancestral form of the Tea-roses. It was nowhere observed near villages, but was found frequenting the forests, far away from human dwellings. Since the Nagas do not cultivate flowering plants and seem never to have done so, there is no reason to doubt but that *Rosa macrocarpa* is, as stated, a truly indigenous plant on the north-eastern mountains of the Burma-Manipur frontier.”

In support of his view that the two Roses should be kept distinct Sir George adds that in all the forms of *Rosa gigantea* under cultivation the leaflets are much narrower than in *Rosa macrocarpa*, they are 7-9 in number instead of 5-7, with petioles often formidably armed; and moreover the flowers of *Rosa gigantea* are white, whilst those of *Rosa macrocarpa* are distinctly yellow. He suggests that the *Rosa gigantea* of cultivation may possibly be some hybrid of *Rosa chinensis*.

The flowers from which the drawing was made came from the fine plant in Lord Brougham's garden at Cannes.



THE GENUS ROSA

BY

ELLEN WILLMOTT, F.L.S.

Drawings by

ALFRED PARSONS, A.R.A.



LONDON

JOHN MURRAY, ALBEMARLE STREET, W.

1911

1891
Gray Herbarium
Harvard University

IV
BANKSIANAE



35—ROSA BANKSIAE Ait.

THE BANKSIAN ROSE

Rosa Banksiae: caule elongato, sarmentoso; aculeis sparsis, parvis, conformibus, uncinatis; foliis 5, oblongis, acutis, simpliciter serratis, utrinque glabris; rhachi nuda; stipulis liberis linearibus, deciduis; floribus multis, umbellatis; pedicellis nudis; calycis tubo globoso, nudo, parvo; lobis ovatis, acuminatis, simplicibus, dorso glabris; petalis parvis, oblongis, albis vel luteis; stylis nudis, liberis, inclusis; fructu globoso, nudo, magnitudine pisi; sepalis deciduis.

1. *R. Banksiae*, var. *albo-plena* Rehder in Bailey, *Cycl. Am. Hort.* vol. iv. p. 1552 (1902).

R. Banksiae Aiton, *Hort. Kew.* ed. 2, vol. iii. p. 258 (1811).—Roessig, *Die Rosen*, No. 57 (1802–1820).—Poiret in Lamarck's *Encycl.* vol. iv. p. 716 (1816).—Sims in *Bot. Mag.* vol. xlv. t. 1954 (1818).—Lindley in *Bot. Reg.* vol. v. p. 397 (1819); *Ros. Monogr.* p. 131, No. 76 (1820).—Thory in Redouté, *Roses*, vol. ii. p. 43, t. (1821).—Sabine in *Trans. Hort. Soc.* vol. iv. p. 170 (1822).—Trattinnick, *Ros. Monogr.* vol. ii. p. 212 (1823).—Seringe in De Candolle, *Prodr.* vol. ii. p. 601 (*Ic. Pl. Chin. e Bibl. Braam.* t. 28 [*descript. ex icon.*]) (1825).—Sprengel, *Syst. Veg.* vol. ii. p. 556 (1825).—Franchet & Savatier, *Enum. Pl. Jap.* vol. i. p. 137 (1875).—Forbes & Hemsley in *Journ. Linn. Soc.* vol. xxiii. p. 248 (1887).—Koehne, *Deutsche Dendrol.* p. 281 (1893).

2. *R. Banksiae* Aiton, *Hort. Kew.* ed. 2, vol. iii. p. 258 (*sensu* Crépin) (1811).—Crépin in *Bull. Soc. Bot. Belg.* vol. xiv. pt. 2, p. 162 (*Primit. Monogr. Ros.* fasc. iii. p. 366) (1875); vol. xxv. pt. 2, p. 7 (1886).—Regel in *Act. Hort. Petrop.* vol. v. p. 375 (*Tent. Ros. Monogr.* p. 91 [1877]) (1878).—Franchet in *Nouv. Arch. Mus. sér. 2*, vol. v. p. 267 (*Plantae Davidianae*, vol. i. p. 115 [1884]) (1883).

R. fragariaeflora Seringe in De Candolle, *Prodr.* vol. ii. p. 601 (*Ic. Pl. Chin. e Bibl. Braam.* t. 28 [*descript. ex icon.*]) (1825).

R. inermis Roxburgh, *Fl. Ind.* ed. 2, vol. ii. p. 516 (1832).

R. microcarpa Walpers, *Rep.* vol. ii. p. 12 (*Ic. Pl. Chin. e Bibl. Braam.* t. 8 [*descript. ex icon.*]) (1843).

3. *R. Banksiae lutea* Lindley in *Bot. Reg.* vol. xiii. t. 1105 (1827); in *Trans. Hort. Soc.* vol. vii. p. 226 (1830).

R. Banksiae, var. *luteo-plena* Rehder in Bailey, *Cycl. Am. Hort.* vol. iv. p. 1552 (1902).

4. *R. Banksiae* forma *lutescens* Voss & Siebert, *Vilmorin Blumengart.* vol. i. p. 49 (1896).

R. Banksiae Hooker *f.* in *Bot. Mag.* vol. cxvii. t. 7171 (*non* Aiton) (1891).

Stem trailing to a great length; *prickles* uniform, scattered, small, hooked, often absent from the flowering shoots in the cultivated plant. *Leaflets* 5, oblong,

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1-2 in. long, acute, simply serrated, green and glabrous on both surfaces; *petioles* naked; *stipules* free, linear, deciduous. *Flowers* many, in an umbel; *pedicels* naked. *Calyx-tube* small, globose, glabrous; *lobes* ovate-acuminate, $\frac{1}{3}$ - $\frac{1}{2}$ in. long, simple, glabrous on the back. *Petals* white or yellow, oblong, $\frac{1}{2}$ in. long. *Styles* free, included, glabrous. *Fruit* globose, naked, the size of a large pea; *sepals* deciduous.

The Banksian Rose, first brought into Europe by Mr. William Kerr in 1807, was named by Robert Brown in Aiton's *Hortus Kewensis* in compliment to Lady Banks. It is one of the most distinct and at the same time one of the most beautiful species of Rose in cultivation. It is widely distributed in central and western China, ascending the mountains to a height of 5,000 feet, and was found by Siebold in Japan, but it is not generally admitted into the flora of Japan and was most probably introduced into that country from China. The Abbé Delavay found it growing plentifully in Yun-nan, and collected specimens in flower and in fruit on the Mu-so-yu Mountains. The Abbé David met with it in Shensi, and Potanin collected it in Kansu. Dr. Henry's specimens were found in the provinces of Hupeh and Sze-chuan. It is abundant in the gorges of the Yangtse near Ichang, where it forms great hanging bushes. The single white form was collected in south Wushan.

Dr. Henry says¹ that this Rose varies greatly in its external characters. The forms found in western China have small leaves with three hairy leaflets; in central China the leaflets are glabrous, varying in size, and are often five in number. In the southern provinces the leaflets are almost always glabrous and most frequently seven in number. In the cultivated plant there are nearly always five leaflets, the third pair rarely developing. The prickles are usually to be seen in the wild plant, but rarely in cultivated specimens. In Hupeh, where it is abundant, it is glabrous and always covered with hooked prickles, generally wide at their base. There are usually five leaflets, rarely three or seven; these are more or less oval-lanceolate and serrated. The very characteristic stipules are formed by long hairs which fall early and are only seen on the flowering branches. The flowers are small, white or yellow, and sweet-smelling, arranged in false umbels, usually numerous but sometimes single. The specimens collected by the Abbé Delavay in southern China, and now at Kew, have seven leaflets which are mostly glabrous. Franchet, describing the same plant in flower, says that it has not always prickles, and that the leaflets, three or five in number, are covered with hairs on the median nerve and rarely on the peduncle and pedicels. In an article in the *Chih-wu-Ming*² the Banksian Rose is described as a cultivated Rose with double flowers and five lanceolate leaflets. The writer says that the

¹ *Gard Chron.* ser. 3, vol. xxxi. pp. 438-9 (1902).

² Vol. xxi. p. 47 (1578).

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variety with small white flowers and purple centre is very fragrant, while that with yellow flowers and green centre is scentless. He also mentions a third variety with large white flowers, the scent of which is not remarkable.

The first plant brought to England was certainly that of the double white-flowered form, which blossomed in Sir Joseph Banks' garden at Spring Grove, Isleworth, and from which the drawing in the *Botanical Magazine* was made.¹ In 1819 it was drawn for the *Botanical Register*, the plant having in the meantime attained to a considerable size; it is this form, too, of which Lindley gives a figure in his Monograph of 1820. A plant growing in the Orangery at Ditton Park had a stem eighteen inches in circumference, and as it had been there for over eighty years, it must have been one of the earliest planted in this country. The first Banksian Rose to blossom in Paris was also the double white-flowered variety, which M. Boursault had brought from England in 1819 and planted in his temperate house. Here the plants, grown in peat, reached the height of about forty feet and blossomed freely. Redouté's drawing was made from one of these.

The Jardin de la Marine at Toulon at one time possessed a magnificent specimen which had been sent there in 1813 by M. Bonpland. Loiseleur-Deslongchamps² states that in 1833 its stem was 2 feet 4 inches in circumference, while the largest of its six branches measured a foot in girth. The measurements were made by M. Robert, who said that on receiving the plant he had kept it in a pot two or three years, during which time it languished, but when planted out it grew so vigorously that in thirty years it covered the surface of a wall 75 by 18 feet. It would have considerably surpassed these limits had the space allowed, but Robert was obliged each season to cut away a large part of it, which he used as faggots for heating his furnace. This grand plant, which had been the admiration of all beholders, was destroyed in 1869 when the Jardin de la Marine was abandoned.

The Abbé Berlèze described another very fine plant at Caserta

¹ In the *Journal of the Royal Horticultural Society* for November, 1909 (p. 218), Mr. E. H. Woodall, F.R.H.S., gives the following interesting account of the introduction of *Rosa Banksiae*: "A curious fact concerning the Banksian Rose has this year come to light. The double white form of *Rosa Banksiae* was introduced to Kew in the early part of the nineteenth century, in 1815, but Wm. Kerr, according to a note in the *Botanical Register*, had it in cultivation as early as 1807. The double yellow was introduced some years later, and the single yellow only made its appearance about 1870. The typical form, the single white, remained unknown, though many inquiries were made for it in France, where these climbing roses abound in every garden in the Riviera, as well as in Italy and Switzerland. Four years ago I found a rose growing on the wall of Megginch Castle, Strathtay, Scotland, which seemed to me a very slender-growing form of *R. Banksiae*. Captain Drummond of Megginch told me it was a rose that his ancestor, Robert Drummond, had brought with other plants from China the year his brother, Admiral Sir W. Drummond, had cruised in the China seas, in 1796. This old rose had been repeatedly cut to the ground by severe winters, and rarely if ever had been known to flower. The impression, however, was that it was white and very small. Captain Drummond kindly gave me cuttings, which I took to Nice, and this year they flowered, proving themselves to be the single white Banksian rose so long sought for and hidden away in this nook of Scotland for more than 100 years. The introduction of the Banksian rose, therefore, is due to Robert Drummond of Megginch, who brought it from China in the year 1796."

² *La Rose*, p. 289 (1844).

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which had climbed to the summit of a poplar sixty feet high. The tree itself was dead, but the Rose had taken complete possession, and when in flower was a wonderfully beautiful sight.

In 1878 there was a very fine specimen in the garden of the Villa Palavacini at Pegli.

The yellow Banksian Rose does not differ from the type except in the colour of its flowers. Roxburgh had both the yellow and white varieties growing in the Calcutta Botanic Garden in 1814, and he included them in his *Hortus Bengalensis* under the name of *Rosa inermis*. Lindley appears to have overlooked this mention of a yellow form, for in his Monograph of 1820 and again in the *Botanical Register* of 1827 he says that the double white-flowered Banksian was the only one hitherto known. There is a good figure in this *Botanical Register*,¹ together with the following account of the introduction of the double yellow Banksian into England: "The attention excited by the intelligence [of the existence of the yellow-flowered variety] led to special directions being given on the part of the Horticultural Society to Mr. John Damper Parks, who was sent to China in 1823, to omit no opportunity of securing this valuable variety, in which he was so fortunate as to succeed, having brought home several plants in the *Lowther Castle East Indiaman*, 1824."

There is no record of a single yellow form having been found in a wild state, although both the white and the yellow varieties with single flowers have been in cultivation for about thirty years. Both were growing in the old Botanic Garden Dei Simplici in Florence, and Baroni, the Curator, published an account of them in the *Bullettino della R. Società Toscana di Orticultura*,² giving the history of their origin. The single yellow form was growing in Sir Thomas Hanbury's garden at La Mortola, Mentone, and was by him distributed in England in 1871. It flowered at Kew and also at Warley. The drawing of the single yellow form in the *Botanical Magazine*³ was made from the plant growing in Canon Ellacombe's garden at Bitton in Gloucestershire. The writer of the description accompanying this figure says that the single yellow form was found by Dr. Abel growing on the walls of Nankin. This statement is misleading, and as it has been copied without verification by subsequent writers, it seems worth while to correct it here. Dr. Abel merely enumerates some of the plants he saw growing on the walls of Nankin, and amongst them mentions "*Rosa Banksiana*," but does not describe it in any way.⁴ The same article refers to Dr. Abel as having gone out to China as physician to Lord Macartney's Embassy in 1792-94. As Dr. Abel was born in 1780 it is impossible that he should have accompanied Lord Macartney in this capacity. It was to Lord Amherst's Embassy of 1816 that Abel was attached

¹ t. 1105.

³ t. 7171.

² Vol. ii. p. 238 (1877).

⁴ *Journey in Interior of China*, p. 160 (1819).

in quality of physician and naturalist. He was amply equipped for scientific research, and but for the fact that the ship containing his collections was wrecked on the homeward voyage the mission would have been an exceedingly fruitful one.

No naturalist accompanied Lord Macartney's expedition, but Sir George Staunton collected specimens, and in his account of the Embassy gives lists of the plants found.¹

Unfortunately the Banksian Rose does not flower freely in the neighbourhood of London, but on the Riviera, in south-eastern France, Italy, California and Chili, it may be seen in full perfection. It is cultivated extensively in France from the south as far north as Paris, and is everywhere the most vigorous of all Roses. On the Riviera this great vigour is turned to account for grafting certain varieties, to which it imparts its luxuriant growth. At Lyons it is sometimes cut to the ground by severe frost, but in Savoy it has never been known to suffer even during the hardest winters. It is one of the earliest Roses to blossom, but sunshine is absolutely necessary to bring it to the flowering state.

Lindley, writing in the *Botanical Register* in 1827, said that the Banksian Rose had never been seen in a fruiting state by any European botanist. It is true that it does not seed freely, but yet it does often bear seed. From seed collected by M. Michelange Console at Palermo in 1888 from a double white-flowered plant, M. Vivian Morel raised several seedlings in his garden at Villeurbanne. The first to blossom produced yellow flowers. He also raised plants from seeds of the Yellow Banksian, but amongst all his plants none showed the least variation, the two types, the yellow and the white double-flowered, remaining constant.

All the Banksian Roses strike freely from cuttings made under a bell-glass, a few leaves being allowed to remain. Like nearly all others, they flower on the preceding year's growth. There are but very few Roses, such as *Rosa chinensis* Jacq., the *Bourbon Rose*, some dwarf tea-roses, etc., which flower on the year's growth. If the Banksian be pruned too hard on the preceding year's growth, it will not flower. Generally speaking, the vigorous-growing Roses are left too much to themselves. Dead and crowded wood should be cut away, and only those branches left which are growing in the direction required. These should be pruned after flowering; they will then develop several strong growths, which should be shortened to about three feet; these again will send forth fresh shoots, but shorter and weaker as the season advances and the sap is less active. Treated in this way, they will flower well unless an exceptionally severe season has injured the young buds.

¹ *An Authentic Account of an Embassy from the King of Great Britain to the Emperor of China* (1798).



36—ROSA FORTUNIANA Lindl.

(ROSA LAEVIGATA × BANKSIAE Crép.)

Rosa Fortuniana: ramis scandentibus, glabris; aculeis parvis, falcatis, distantibus; foliolis 3-5, ovato-lanceolatis, nitidis, argute serratis; floribus solitariis; calycis tubo hemispherico, nudo; lobis ovatis, indivisis.

R. Fortuniana Lindley & Paxton, *Flow. Gard.* vol. ii. p. 71, fig. 171 (1851).—Forbes & Hemsley in *Journ. Linn. Soc.* vol. xxiii. p. 249 (1886).

R. Banksiae × *laevigata* Koehne, *Deutsche Dendrol.* p. 281 (1893).

R. laevigata × *Banksiae* Crépin in *Bull. Soc. Bot. Belg.* vol. xxxiii. p. 127 (1894).

Stems long, slender, sarmentose; *prickles* small, scattered, uniform, slightly hooked. *Leaflets* 3-5, ovate-lanceolate, shining, acute, simply toothed, middle-sized, green, firm in texture, persistent; *petioles* glandular, aciculate, glabrous; *stipules* linear, free, deciduous. *Flowers* solitary; *pedicels* aciculate. *Calyx-tube* globose, naked or aciculate; *lobes* small, ovate, simple. *Petals* much larger than in *R. Banksiae*, white or pale yellow. *Fruit* not seen.

This Rose was sent by Robert Fortune to Chiswick in 1850, and was described by Lindley for the first time in Lindley & Paxton's *Flower Garden* in 1851. Lindley evidently did not think as highly of it as Fortune did, for he described it as a scrambling shrub, without much beauty as far as the flowers are concerned, but, from its exceedingly rapid growth, useful for covering walls and buildings.

In response to the inquiry of a correspondent Fortune wrote:

"The white climbing Rose referred to is cultivated in gardens about Ningpo and Shanghai, and is held in high esteem by the Chinese; indeed it is one of the best white kinds which I have met with in China. It is frequently seen of a large size covering trellis-work formed into alcoves or built over garden walks. For this purpose it is well suited, as it is a luxuriant grower, and it blooms profusely and early. This Rose was amongst my first importations to the Horticultural Society, and is no doubt well worth cultivation in English gardens. It may not please in every respect Rose-fanciers, but it is very beautiful nevertheless, and it has some advantages peculiar to itself."¹

On the Riviera it is largely employed as the best stock on which to graft other varieties, having proved extremely potent in transmitting its remarkable vigour to the scion.

¹ *Gard. Chron.* 1860, p. 623.

ROSA FORTUNIANA

This is the true *Rosa Fortuniana* described by Lindley in vol. ii. of Paxton's *Flower Garden* and accompanied by a very truthful drawing. It has nothing whatever in common with *Rosa pseudo-indica*, described in vol. iii. of the same publication,¹ and by a clerical error set down as *Rosa Fortuniana*. This error has caused some confusion, and for this reason it has been thought well to refer here to the circumstance already mentioned under the heading of ROSA CHINENSIS, var. PSEUDO-INDICA (FORTUNE'S DOUBLE YELLOW ROSE).

¹ P. 157 (1852-3).

37—ROSA COLLETTII Crép.

Rosa Collettii: ramis elongatis, sarmentosis; aculeis sparsis, conformibus, parvis, falcatis; foliolis 5-7, oblongis, acutis, rigidis, inconspicue simpliciter serratis; rhachi glabra vel pubescente, haud glandulosa; stipulis liberis, linearibus, deciduis; floribus paucis, umbellatis vel corymbosis; pedicellis nudis; calycis tubo minimo, globoso, nudo; lobis oblongis, acuminatis, simplicibus vel parce pinnatifidis, dorso pubescentibus; petalis parvis, albis; stylis liberis, villosis; fructu globoso, rubro, parvo, nudo; sepalis deciduis.

R. Collettii Crépin in *Bull. Soc. Bot. Belg.* vol. xxviii. pt. 2, p. 49 (1889).—
Collett & Hemsley in *Journ. Linn. Soc.* vol. xxviii. p. 56, t. 10 (1890).

Stems long, sarmentose; *prickles* scattered, uniform, hooked, small. *Leaflets* 5-7, oblong, acute, rigid, inconspicuously simply serrated, the end one 1-1½ in. long, glabrous on both surfaces or slightly pubescent beneath; *petioles* glabrous or pubescent, not glandular; *stipules* linear, free, deciduous. *Flowers* few, umbellate or corymbose; *pedicels* not aciculate. *Calyx-tube* very small, globose, naked; *lobes* oblong-cuspidate, ¼ in. long, simple or slightly compound. *Petals* white, ⅓ in. long. *Styles* free, villous. *Fruit* globose, very small, bright red, naked; *sepals* deciduous.

Rosa Collettii was found by the late General Sir Henry Collett in 1888, in the Koni district of the Shan Hills of Upper Burma, at an elevation of 3,000-4,000 feet above sea-level, where in certain localities it is common on the banks of streams. In May it had nearly passed out of flower. It was first described by Crépin, who classed it under the section *Systylae* and placed it next to *Rosa microcarpa* Lindl., with which he considered it had many points of resemblance, adding, however, that the specimens had suffered so much during their journey from the Calcutta Botanic Garden that he was unable to form a definite opinion upon the inflorescence, and pointing out that in *Rosa microcarpa* and in *Rosa Collettii* the columnar styles were much shorter than in other *Systylae*. Crépin named the Rose in compliment to its discoverer, who was much interested in the flora of Upper Burma, which was at that time but little known. It is due to his researches that two most distinct and interesting Roses, *Rosa gigantea* Collett ex Crép. and *Rosa Collettii* Crép., have been brought to our knowledge.

As *Rosa Collettii* has not yet been cultivated in England, we are dependent upon herbarium specimens for our knowledge of its characters.

38—ROSA MICROCARPA Lindl.

Rosa microcarpa: ramis elongatis, sarmentosis; aculeis sparsis, conformibus, parvis, falcatis; foliolis 3-5, oblongis, acutis, rigidis, simpliciter serratis, utrinque glabris; rhachi glabra vel pubescente, aciculata, haud glandulosa; stipulis liberis, linearibus, caducis, glanduloso-ciliatis; floribus pluribus, corymboso-paniculatis; ramis inferioribus foliis compositis stipatis; pedicellis nudis; calycis tubo minuto, globoso, nudo; lobis simplicibus, ovato-lanceolatis, acuminatis; petalis minutis, orbicularibus, albis; stylis villosis, liberis, protrusis; fructu globoso, minimo, nudo, rubro; sepalis deciduis.

R. microcarpa Lindley, *Ros. Monogr.* p. 130, No. 75, t. 18 (1820).—Seringe in De Candolle, *Prodr.* vol. ii. p. 601 (1825).—Hance in *Journ. Linn. Soc.* vol. xiii. p. 102 (1873).—Crépin in *Bull. Soc. Bot. Belg.* vol. xiii. p. 244, vol. xiv. pt. 2, p. 164 (*Primit. Monogr. Ros.* fasc. iii. pp. 251, 368) (1874, 1875); vol. xviii. p. 276 (*Primit. Monogr. Ros.* fasc. v. p. 522) (1879); vol. xxv. pt. 2, p. 13 (1886).—Déséglise in *Bull. Soc. Bot. Belg.* vol. xv. p. 233 (*Cat. Rais. Ros.* p. 64 [1877]) (1876).—Franchet in *Nouv. Arch. Mus.* sér. 2, vol. v. p. 270 (*Plantae Davidianae*, vol. i. p. 118 [1884]) (1883).—Forbes & Hemsley in *Journ. Linn. Soc.* vol. xxiii. p. 251 (*non* Retzius) (1887); *Ind. Flor. Sinen.* vol. i. p. 251 (1887).

R. indica Linnaeus, *Sp. Plant.* vol. i. p. 492 (*ex parte*) (1753).—Koehne, *Deutsche Dendrol.* p. 277 (1893).

R. cymosa Trattinnick, *Ros. Monogr.* vol. i. p. 87 (1823).

R. amoyensis Hance in *Journ. Bot.* vol. vi. p. 297 (1868).

R. intermedia Carrière, *Rev. Hort.* p. 270, fig. 29 (1868).

R. dubia Carrière, *Rev. Hort.* p. 271, fig. 30 (1868).

R. Banksiae, var. *microcarpa* Regel in *Act. Hort. Petrop.* vol. v. p. 376 (*Tent. Ros. Monogr.* p. 92 [1877]) (1878).

Stems long, sarmentose; *prickles* scattered, uniform, small, falcate. *Leaflets* 3-5, oblong, acute, rigid, simply serrated, usually glabrous on both surfaces, the end one 1-1½ in. long; *petioles* glabrous or pubescent, aciculate, not glandular; *stipules* free, linear, deciduous, gland-ciliated. *Flowers* very numerous, arranged in a corymbose panicle, the lower branches of which are subtended by compound leaves; *pedicels* glabrous or pubescent, not aciculate. *Calyx-tube* globose, naked, $\frac{1}{12}$ in. diam.; *lobes* simple, ovate-lanceolate, acuminate, $\frac{1}{8}$ in. long. *Petals* white, orbicular, $\frac{1}{8}$ in. long and broad. *Styles* villous, free, protruded from the disc. *Fruit* globose, naked, bright red, scarcely $\frac{1}{4}$ in. diam.; *sepals* deciduous.

Rosa microcarpa is a well-marked species of the Banksian group. It is one of the commonest Roses in China, being abundant in all the warmer parts from Hong-Kong in the south to Mount Omi in the far west, and it is exceedingly common throughout the Yangtse Valley.

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The species is well named, having the smallest fruits of the genus. It differs from *Rosa Banksiae* Ait. by its very compound inflorescence and its exterior sepals, which are spiny on the back, with pointed appendices spiny on the edges; these characters are not found in the Banksian Roses. *Rosa Banksiae* has larger flowers and fruits, smaller umbellate corymbs and free styles. The two species are very distinct in habit and appearance, and when seen growing side by side cannot be confused. Crépin protested strongly against the assertion that *Rosa microcarpa* was but a wild shoot (*souche sauvage*) of *Rosa Banksiae*. He allowed that there existed certain general affinities between the two types, but with such well-marked essential differences that the idea of specific identity could not for a moment be entertained. Petiver in the early part of the eighteenth century figured *Rosa microcarpa* under the name of *Rosa cheusan glabra, juniperi fructu*.¹ More than a hundred years later Lindley gave it its present name. Petiver's figure is cited by Linnaeus under *Rosa indica*, but the plants contained in his herbarium under this name are *Rosa multiflora* Thunb. and the plant we now call *Rosa chinensis* Jacq. Lindley calls attention to this fact as demonstrating how imperfect must have been Linnaeus' knowledge of Asiatic Roses when he referred Petiver's excellent figure to such dissimilar plants as *Rosa indica* and *Rosa multiflora*.

Rosa microcarpa is very variable in its degree of hairiness, and in the number and character of the spinuliform appendages to the sepals.

Lindley cites *Rosa microcarpa* as having been collected by Staunton in the province of Canton. Hance found it fairly common on the hills around Amoy, and he also collected it near Foochow. Dr. Savatier gathered specimens in the cemetery at Ningpo and sent them to Crépin.

In gardens where *Rosa multiflora* is to be found, it would be unnecessary to plant *Rosa microcarpa*, since these two Roses with their small paniced flowers and diminutive fruit closely resemble each other in general aspect.

¹ First described by him in *Gazophylacium Naturae et Artis*, p. 56, t. 35, fig. 11 (1704).

39—ROSA SORBIFLORA Focke

Rosa sorbiflora: caule elongato, sarmentoso; aculeis falcatis, parvis, sparsis, aequalibus; foliis 5-7, oblongis, acutis, firmulis, glabris, viridibus, simpliciter serratis; rhachi nuda; stipulis linearibus, liberis, parvis, deciduis; floribus pluribus, perparvis, corymboso-paniculatis; ramulis ultimis corymbosis; pedicellis brevibus, nudis; sepalis ovatis, acutis, simplicibus vel parce appendiculatis, dorso nudis; petalis obovatis, albis, sepalis vix longioribus; stylis liberis, glabris; fructu globoso, perparvo, rubello; sepalis deciduis.

Rosa sorbiflora Focke in *Gard. Chron.* ser. 3, vol. xxxvii. p. 227, fig. 96 (1905).

Stem long, sarmentose; *prickles* small, hooked, scattered, uniform. *Leaflets* 5-7, oblong, acute, 1-2 in. long, rather firm, glabrous, green, simply toothed; *petioles* naked; *stipules* free, linear, small, deciduous. *Flowers* very small, arranged in corymbose panicles, very numerous; ultimate *branchlets* corymbose, not umbellate; *pedicels* short, naked. *Calyx-lobes* ovate, acute, $\frac{1}{4}$ in. long, simple or slightly compound, naked on the back. *Petals* obovate, white, but little longer than the sepals. *Styles* free, glabrous. *Fruit* globose, naked, bright red, less than $\frac{1}{4}$ in. in diameter when dried; *sepals* deciduous.

This interesting new Rose is allied to *Rosa Banksiae* Ait., which it resembles in its habit, leaves and stipules, but it is abundantly distinguished by its numerous very small flowers, arranged in corymbose panicles, of which the ultimate branchlets are corymbose, not umbellate. Its original describer, Dr. Focke of Bremen, compares its inflorescence to that of a *Sorbus* or *Viburnum*. It was found by Mr. E. H. Wilson in the western part of the province of Hupeh in central China.



40—ROSA LAEVIGATA Michx.

THE CHEROKEE ROSE

Rosa laevigata: caulibus longe repentibus; aculeis sparsis, parvis, uncinatis, sursum aciculis copiosis intermixtis; foliis 3, magnis, oblongis, acutis, rigide coriaceis, nitidis, glabris; rhachi glabra, aciculata; stipulis liberis, linearibus; floribus solitariis, calycis tubo oblongo, aciculato; lobis simplicibus, apice foliosis, dense aciculis marginatis; petalis niveis, magnis, inodoris; stylis inclusis; fructu oblongo, rubro, dense aculeato; sepalis patulis, demum deciduis.

R. laevigata Michaux, *Fl. Bor. Amer.* vol. i. p. 295 (1803).—*Nowv. Duhamel*, vol. vii. p. 23 (*excl. syn.*) (1819).—Lindley, *Ros. Monogr.* p. 125, No. 70 (1820).—Trattinnick, *Ros. Monogr.* vol. ii. p. 184 (1823).—Lowe, *Man. Fl. Madeira*, p. 253 (1862).—Chapman, *Fl. South U.S.* p. 126 (1865).—Crépin in *Bull. Soc. Bot. Belg.* vol. xiv. pt. 2, p. 155 (*Primit. Monogr. Ros.* fasc. iii. p. 359) (1875).—S. Watson in *Smithsonian Misc. Coll.* vol. xv. p. 311 (1878).—Forbes & Hemsley in *Journ. Linn. Soc.* vol. xxiii. p. 250 (1887).—Koehe, *Deutsche Dendrol.* p. 301 (1893).—Rehder in Bailey, *Cycl. Am. Hort.* vol. iv. p. 1558, fig. 49 (1902).—C. K. Schneider, *Ill. Handbuch Laubholz.* vol. i. p. 588 (1906).

R. ternata Poir in Lamarck's *Encycl.* vol. vi. p. 284 (1804).

R. nivea De Candolle, *Cat. Hort. Monsp.* p. 137 (1813).—Thory in Redouté, *Roses*, vol. ii. p. 81, t. (1821).—Trattinnick, *Ros. Monogr.* vol. ii. p. 183 (1823).—Seringe in De Candolle, *Prodr.* vol. ii. p. 599 (1825).

R. sinica Lindley, *Ros. Monogr.* p. 126, No. 71, t. 16 (*non Murray nec Aiton*) (1820); in *Bot. Reg.* vol. xxiii. t. 1922 (1837).—Hooker in *Bot. Mag.* vol. lv. t. 2847 (1828).

R. hystrix Lindley, *Ros. Monogr.* p. 129, No. 74, t. 17 (1820).—Trattinnick, *Ros. Monogr.* vol. ii. p. 182 (1823).—Seringe in De Candolle, *Prodr.* vol. ii. p. 599 (1825).

R. triphylla Roxburgh *ex* Lindley, *Ros. Monogr.* p. 138, No. 88 (1820).—Seringe in De Candolle, *Prodr.* vol. ii. p. 600 (1825).—Roxburgh, *Fl. Ind.* ed. 2, vol. ii. p. 515 (1832).

R. cucumerina Trattinnick, *Ros. Monogr.* vol. ii. p. 181 (*Ic. Pl. Chin. e Bibl. Braam.* t. 28 [*descript. ex icon.*]) (1823).

R. amygdalifolia Seringe in De Candolle, *Prodr.* vol. ii. p. 601 (*Ic. Pl. Chin. e Bibl. Braam.* t. 28 [*descript. ex icon.*]) (1825).

R. cherokeensis Donn, *ex* Small, *Fl. South-Eastern U.S.* p. 528 (1903).

Stems trailing widely; prickles small, scattered, hooked, mixed upwards with copious aciculi. Leaflets always 3, oblong, acute, firm, shining, glabrous, simply serrated, the end one 2 or 3 in. long; petioles glabrous, aciculate; stipules small, linear, free from the base. Flowers usually solitary; pedicels and oblong calyx-tube densely aciculate; lobes simple, leaf-pointed, about 1 in. long, pubescent but

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not glandular on the back, aciculate on the margin in the lower part. *Corolla* pure white, 3 in. diam.; *petals* inodorous. *Styles* not exerted. *Fruit* oblong, red, densely aciculate; *sepals* spreading, finally deciduous.

This beautiful and very distinct Rose is a native of southern China. It was first described by Plukenet in 1705¹ under the name of "*Rosa alba cheusanensis foliorum marginibus et rachi media spinosis.*"

Few Roses have such a bewildering synonymy as *Rosa laevigata*, and many eminent botanists have confused it, a surprising fact when it is remembered how distinct and well marked a species it really is. It was overlooked by Linnaeus, and there is no specimen in his herbarium. His *Rosa sinica* was founded upon a specimen of *Rosa chinensis* Jacq. with monstrous sepals. The names under which it is most generally but erroneously known are *Rosa sinica* L., *Rosa Camellia* Hort. and the Cherokee Rose. Botanists are agreed in referring these and several other names to one and the same Rose, the *Rosa laevigata* of Michaux.

The Cherokee Rose was for many years believed to be indigenous to the southern United States, where it was in 1803 collected by Michaux. But the consensus of opinion has decided that *Rosa laevigata* is not an American plant. Its native habitats are given as China, Japan and the Isle of Formosa; Japan, however, is considered as a doubtful station, and it was more probably introduced from China. Bosc, who calls it *Rosier trifoliolé*, says that it is a native of China and is cultivated in French gardens under the name of *Rosier toujours vert de la Chine*, but he adds that it seldom blooms in France.² Siebold cultivated it in Japan under the name of *Rosa Camellia*. It is abundantly naturalized in the southern United States, Madeira and the Cape of Good Hope. There is a specimen in the Smithian herbarium from Carolina, collected by Fraser in 1791. It is said to have been cultivated by Philip Miller at Chelsea in 1759. Lowe says that in Madeira, where it is erroneously called the Macartney Rose, it makes shoots twelve to eighteen feet long in a single year. In the *Phonzo Zoufou*, part 27, three forms are figured; the type, called *Nanisa*, a form with double flowers called *Botanbara*, and a third form, probably a hybrid, with purplish flowers and naked calyx and peduncle, called *Hatobara*. The variety *Braamiana* of Regel³ is founded on a figure in Braam's drawings of Chinese plants with four or five flowers and five to seven leaflets; it is doubtless a hybrid.

If *Rosa laevigata*, the Cherokee Rose, could be grown in England as it is grown in southern Europe, Madeira, Teneriffe and China, it would take rank as one of the very finest wall Roses. It is perfectly

¹ *Amaltheum*, p. 185. Plukenet's type-specimen is in the herbarium of the British Museum.

² In *Nouveau Cours d'Agriculture*, vol. xiii. p. 280 (1823).

³ *Act. Hort. Petrop.* vol. v. p. 327 (*Tent. Ros. Monogr.* p. 43 [1877]) (1878).

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hardy in the south of England and in Essex, and produces long, vigorous shoots with handsome trifoliate leaves, which seem to give every promise of flowers, but they very seldom appear. It flowers sparsely at Abbotsbury and a few places along the south coast, but it is in Savoy and on the Riviera that this beautiful Rose is seen in perfection, and there the profusion of pure white flowers with their glowing yellow anthers and long trails of dark glistening foliage form pictures which for beauty cannot be surpassed.



41—ROSA LAEVIGATA × CHINENSIS

ROSE ANEMONE

Rosa laevigata × *chinensis*: caulibus sarmentosis; aculeis conformibus, robustis, falcatis, sparsis; foliis 3, interdum 5, magnis, oblongis, acutissimis, simpliciter serratis, subcoriaceis, utrinque glabris, facie viridibus, lucentibus, dorso pallidioribus; rhachi glabra, haud glandulosa; stipulis angustis, adnatis, apicibus liberis, magnis, lanceolatis; floribus saepius solitariis; pedunculis dense aciculatis; calycis tubo globoso; lobis lanceolatis, simplicibus, acutis, dorso haud glandulosis; petalis maximis, rubellis, purpureo-tinctis; stylis villosis, liberis, haud protrusis.

Stems sarmentose; *prickles* uniform, stout, hooked, scattered. *Leaflets* usually 3, sometimes 5, large, oblong, very acute, simply serrated, subcoriaceous, glabrous on both surfaces, bright green and shining above, paler beneath; *petioles* glabrous, not glandular; *stipules* narrow, adnate, with large lanceolate free tips. *Flowers* usually solitary; *peduncles* densely aciculate. *Calyx-tube* globose; *lobes* lanceolate, simple, leaf-pointed, $\frac{3}{4}$ -1 in. long, not glandular on the back. *Petals* very large, pink, tinged with red-purple. *Styles* villous, free, not exerted.

This very beautiful Rose was raised by J. E. Schmidt of Erfurt in 1896. It is perfectly hardy and very floriferous, and with its large, well-formed, shell-pink flowers and glistening foliage makes a welcome addition to our gardens.

V
BRACTEATAE



42—ROSA BRACTEATA Wendl.

THE MACARTNEY ROSE

Rosa bracteata: caulibus decumbentibus, sursum pubescentibus et aciculatis; aculeis plerumque geminis, stipularibus, robustis, uncinatis; foliolis 7-9, parvis, obovatis, obtusis, simpliciter serratis, rigide coriaceis, utrinque glabris; rhachi glabra, aciculata; stipulis breviter adnatis, apicibus liberis, lanceolatis, pinnatifidis, glandulis copiosis marginatis; floribus plerumque solitariis; pedunculis brevissimis; bracteis magnis, ovatis, pectinatis, imbricatis; calyce dense persistenter pubescente; tubo globoso; lobis simplicibus, ovatis, acuminatis vel cuspidatis; petalis magnis, obovatis, niveis; staminibus haud exsertis; fructu globoso, rubro, pubescente; sepalis patulis, caducis.

R. bracteata Wendl. *Obs.* p. 50 (1798); *Hort. Herrenh.* fasc. iv. p. 7, t. 23 (1801).—Ventenat, *Jard. Cels.* t. 28 (1800).—Jacquin, *Fragm.* p. 30, t. 34, fig. 2 (1809).—Sims in *Bot. Mag.* vol. xxxiv. t. 1377 (1811).—Thory in Redouté, *Roses*, vol. i. p. 35, t. (1817).—*Nouv. Duhamel*, vol. vii. p. 22, t. 13, fig. 2 (1819).—Lindley, *Ros. Monogr.* p. 10, No. 7 (1820).—Crépin in *Bull. Soc. Bot. Belg.* vol. xiv. pt. 2, p. 137 (*Primit. Monogr. Ros.* fasc. iii. p. 341) (1875).—S. Watson, *Smithsonian Misc. Coll.* vol. xv. p. 310 (1878).—Forbes & Hemsley in *Journ. Linn. Soc.* vol. xxiii. p. 249 (1887).—Koehne, *Deutsche Dendrol.* p. 300 (1893).—Rehder in Bailey, *Cycl. Am. Hort.* vol. iv. p. 1558 (1902).—C. K. Schneider, *Ill. Handbuch Laubholzsk.* vol. i. p. 586 (1906).

R. lucida Lawrance, *Roses*, t. 84 (*non* Ehrhart) (1799).

R. Macartnea Dumont de Courset, *Bot. Cult.* vol. v. p. 460 (1804).

Stems decumbent, trailing widely, pubescent and aciculate upwards; *prickles* mostly in stipular pairs, robust, hooked. *Leaflets* 7-9, obovate, obtuse, small, simply serrated, rigidly coriaceous, glabrous on both surfaces; *petioles* glabrous, aciculate; *stipules* nearly free, narrow, pectinate, margined copiously with glands. *Flowers* usually solitary, with very short peduncles; *bracts* ovate, pectinate, imbricated. *Calyx* persistently densely pubescent; *tube* globose; *lobes* ovate, simple, acuminate or cuspidate. *Petals* large, obovate-cuneate, pure white. *Stamens* very numerous, very hairy, not exserted beyond the disc. *Fruit* globose, pubescent, orange-red; *sepals* spreading, deciduous.

This very beautiful and distinct Rose was introduced from China to Europe by Sir George Staunton, who accompanied Lord Macartney's embassy to China in 1792. It is figured in Cattle's plates of Chinese plants,¹ and in the *Phonzo Zoufou*.² Its only near ally is the Indian

¹ Pl. 18.

² Part 27.

ROSA BRACTEATA

Rosa involucrata of Roxburgh. The carpels are frequently as many as 150-170.

Few Roses can rival the Macartney, with its bright, glossy, ever-green foliage and noble ivory-white flowers, which are produced in abundance and continue throughout the summer. Although indigenous to China and northern India, it resists our winters unless they are exceptionally severe. In Britain it is deficient in pollen and the fruit rarely attains perfection. The shelter afforded by a south wall is sufficient protection against a severe winter, and in such a position the Macartney Rose will flower in the neighbourhood of London until Christmas, provided it is not checked by a continuous sharp frost.

This Rose has given several varieties, some of which are still to be found in gardens. Others formerly in cultivation seem now to have disappeared, among them *Victoire Modeste*, *Rubra duplex*, *Coccinea*, *Rosea*, etc., which once all grew in the nursery-garden of Sisley Vandael, rue de Vaugirard, Paris. The nomenclature of the *bracteata* Roses now grown appears to be in some confusion. Many of the plants grown in England under the name of *Marie Leonida* have great difficulty in expanding their buds, though of vigorous constitution, imposing appearance, and very floriferous. In the *Revue Horticole*¹ there is a note upon *Rosa bracteata*, *fl. pl.*, which the writer describes as a beautiful Rose raised at Milan by M. Mariani and resembling *Marie Leonida*. The reader is cautioned against confounding it with the old *Rosa bracteata*, *fl. pl.*, which, as it never properly expanded its buds, went out of cultivation. The writer goes on to say that the principal difference between Mariani's new Rose and *Marie Leonida* is that in the latter the anthers turn purple, but in Mariani's Rose they remain yellow. The Rose here referred to evidently expanded its flowers, whereas the Rose brought from England under the same name and grown with every care in the south of France and in Italy, still maintains the same peculiarity which has made it a failure in English gardens. The plants experimented with were bought from different English nurseries, some as *Marie Leonida* and others as *Rosa bracteata alba*, *fl. pl.*

When Mariani's Rose was figured for the *Revue Horticole*, it was growing in the garden of M. Sisley Vandael, son-in-law of the celebrated Dutch flower-painter Vandael. Another *Rosa bracteata alba odorata* was raised by Lenet, a Lyons rose-grower. In Max Singer's *Dictionnaire des Roses*² Lenet's *Rosa bracteata* is quoted under the date 1876. M. Jean Sisley in his copy of the *Dictionnaire* makes a marginal note, "Je la possède depuis 1848."

M. Gordé of Nantes tried to discover the origin of *Marie Leonida*, but without success. It was certainly raised at Nantes, and was exhibited there on the 30th September, 1832. M. Ursin, President

¹ 1834, p. 479.

² Vol. i. p. 78 (1885).



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of the Société Nantaise d'Horticulture, mentioned it in his address as follows :

“ C'est à la fécondation adultérine, qui donne naissance aux hybrides, c'est à ce don magique qui fait participer l'homme au pouvoir du Créateur, que sont dues toutes ces tribus nouvelles de Roses, de Pélargoniums, d'Œillets, de fruits de toute espèce, écloses depuis peu d'années pour charmer ineffablement les regards, le goût et l'odorat. Ici l'art l'emporte sur la nature et concentre souvent dans un seul individu les perfections éparses que la puissance créatrice ne s'était pas donné la peine de réunir. Je ne citerai pour preuve de cette assertion que le succès obtenu récemment par l'un de nos honorables collègues. Jusqu'ici, quelques Rosiers remontants flattaient la vue par la continuité de leurs fleurs ; mais ils étaient ou sans odeur l'été, ou sans verdure l'hiver. La main d'un amateur ingénieux assortit l'union de deux espèces intéressantes : la Rose Thé et la Rose Macartney. La nature applaudit au succès de son expérience ; et de cet hymen accompli sous les plus heureux auspices, naît la Rose Marie Leonida, où la persistance des feuilles, la douceur du parfum, la pureté et la permanence des fleurs réunissent tous les avantages que nous ne trouvions que dispersés.”

M. Viviand Morel suggests that there may perhaps be only two double-flowered varieties of this Rose now grown, one which opens its buds and one which does not. He is furthermore inclined to believe that this state may be influenced by the graft, which is possible when we remember how large a part is played in the growth of a Rose by the subject on which it is grafted.

The hybrid between *Rosa bracteata* and *Rosa laevigata* is a garden form.



43—ROSA INVOLUCRATA Roxb.

Rosa involucrata: caule elongato, arcuato, ramis pubescentibus; aculeis robustis, patulis, subconformibus, saepe geminis infrastipularibus; foliis 7-9, oblongis, acutis, viridibus, simpliciter serratis, facie glabris, dorso saepe pubescentibus; rhachi pubescente et aciculata; stipulis breviter adnatis, profunde laciniatis, dense glandulosis, apicibus liberis, lanceolatis, magnis; floribus paucis vel multis, corymbosis; bracteis laciniatis; pedicellis pubescentibus; ovario parvo, globoso, pubescente; sepalis ovatis, acuminatis, dorso pubescentibus, saepissime simplicibus; petalis magnis, albis; stylis liberis, glabris; fructu globoso, pubescente; sepalis caducis.

R. involucrata Roxburgh ex Lindley, *Ros. Monogr.* p. 8, No. 5 (1820).—Roxburgh, *Fl. Ind.* ed. 2, vol. ii. p. 513 (1832).—Wight, *Icon.* t. 234 (1840).—Crépin in *Bull. Soc. Bot. Belg.* vol. xiv. pt. 2, p. 140 (*Primit. Monogr. Ros.* fasc. iii. p. 344) (1875).—Hooker f., *Fl. Brit. Ind.* vol. ii. p. 365 (1879).—Brandis, *Indian Trees*, p. 287 (1906).

R. Lyellii Lindley, *Ros. Monogr.* p. 12, No. 8, t. 1 (1820).—Crépin in *Bull. Soc. Bot. Belg.* vol. xiv. pt. 2, p. 143 (*Primit. Monogr. Ros.* fasc. iii. p. 347) (1875).—Déséglise in *Bull. Soc. Bot. Belg.* vol. xv. pt. 2, p. 233 (*Cat. Rais. Ros.* p. 64 [1877]) (1876).

Stem long, arching; branches densely pubescent; *prickles* subequal, stout, spreading, often in infrastipular pairs. *Leaflets* 7-9, oblong, acute, middle-sized, simply sharply serrated, green, glabrous on both surfaces or pubescent beneath; *petioles* pubescent and aciculate, not glandular; *stipules* shortly adnate, with long free lanceolate tips, deeply laciniated and densely glandular on the margin. *Flowers* several, corymbose; *pedicels* pubescent, not aciculate; *bracts* deeply laciniated. *Calyx-tube* globose, densely pubescent, not aciculate; *lobes* ovate-acuminate, $\frac{3}{4}$ in. long, densely pubescent all over the back. *Petals* large, pure white. *Styles* free, glabrous. *Fruit* small, globose, densely pubescent; *sepals* deciduous.

Rosa involucrata, discovered in Nepal by Dr. Buchanan, was first described by Lindley in 1820. The name is Roxburgh's and was used in his *Flora of India*, which at that date was in manuscript. The plate in Wight's *Icones* gives an excellent idea in black and white of this beautiful species, and there is a very good illustration of it in the *Botanical Register*. It is a native of subtropical (and to some extent even tropical) India. It has been collected in Kumaon, Sikkim, Assam, Silhet, Manipur, and on the banks of the Irawaddi in Burma, and from the mountains of the Gangetic basin to those of Rajputana

ROSA INVOLUCRATA

and Mysore. China also may be included among its habitats if we may rely upon the plate in Braam's Chinese drawings.¹ There is in the herbarium of the Botanical Garden at St. Petersburg a specimen belonging to the Chamisso collection of which the origin is given as "China." Bretschneider includes it in his *Botanical Discoveries in China*.

Rosa involucrata much resembles *Rosa bracteata*, but may easily be distinguished from that species by its narrower leaflets, drawn out at the points and thin in texture, by its long, slender branches, light brown and densely pubescent, by its lacinated stipules and bracts, and by its long, straight prickles pointing upwards, whereas in *Rosa bracteata* they are mostly hooked and it is only on the young flowering shoots that they are somewhat straight. The large white flowers and graceful growth of this species are seen to best advantage on the Riviera, for, although it will generally survive our English winters and has been known to flower in the open air at Kew, it cannot be considered as sufficiently hardy to take its place in our gardens. It was planted in the Calcutta Botanic Gardens in 1797, and imported into England by Whitley of Fulham in 1816. It is the only Rose indigenous in the plains and lower mountains of India, and is usually found growing in marshy ground or by the side of tanks and margins of streams. *Rosa bracteata*, on the contrary, prefers a dry situation.

Rosa involucrata is thus described by Sir George Watt in an unpublished diary of explorations in Manipur during 1882 :

"Common along the sandy margins of the rivers which traverse the valley of Manipur proper, especially around the city.

"Children are sent out to collect its large beautiful white flowers and to bring these into town, where they are used as offerings in religious worship or worn in the hair of the women. It grows in great isolated masses, being quite covered with flowers during two or three months of the winter season.

"The Indian distribution of this rose is somewhat remarkable. In his *Himalayan Journal* (vol. ii. pp. 261-2) Sir J. D. Hooker points out its extraordinary occurrence in the jungles of Eastern Bengal, intermixed with palms and other tropical plants and thus living on alluvial soils. Some years ago I came upon it, in great profusion, within the valleys of the Rajmahal hills (thus just outside the Tropics), luxuriating under conditions so very different from those of Eastern and Northern Bengal that its presence there seemed unaccountable. It is true I also collected in the same locality *Androsace saxifragaefolia*, *Drosera Burmanii* and several other plants which, like the rose, are representatives of the warm temperate vegetation, but the dry rocky soil and high temperature of Rajmahal is so different from that of the inundated swampy plains of Bengal, as to suggest a power of endurance at variance with the somewhat local and restricted occurrence of the species. I suspect there may be two species at least commonly placed under the present name, the one the swamp-loving, the other the dry-soil plant. In some respects the Manipur form is suggestive of a third that comes near to *Rosa bracteata* Wendl., ex *Bot. Mag.* vol. xxxiv. pl. 1377, the old-fashioned Macartney's Rose.

"The assemblage of wild roses of tropical (or perhaps rather subtropical) India

¹ See above, p. 25, note 2.

ROSA INVOLUCRATA

is an important one nevertheless, and Col. D. Prain (*Journ. As. Soc. Beng.* 1904, lxxiii. p. 202) refers *Rosa involucrata* to three varieties (which perhaps meets the case), but to these should be added *Rosa Lyellii* Lindl., an even still more mountainous form, their representative in the lower N.W. Himalaya and from thence to Rajputana and South India. Where met with the plants usually regarded as *Rosa involucrata* are plentiful enough, but between one locality and another a gap of many thousand square miles may interpose, over which the plant seems to possess no inclination to spread. For example, on passing North-East from Silhet it disappears, and on the road from thence *viâ* Cachar to Manipur, a distance of over 120 miles in a direct line, although it traverses many situations in which *Rosa involucrata* might luxuriate, it is nowhere met with until the valley of Manipur proper is reached, when, at altitudes of from 2,500 to 4,000 feet, what I have suggested as being possibly the Chinese form of the assemblage is found not only plentiful but one might almost say characteristic. This sudden appearance and disappearance, in Eastern Bengal, is that which the species everywhere manifests through its Indian area."

The plate shows a plant known in gardens as *Rosa clinophylla*. It is a garden form of *Rosa involucrata* in which the character of toothed stipules and bracts has almost disappeared.

March 14, 1911

PART VII

THE GENUS ROSA

BY

ELLEN WILLMOTT, F.L.S.

Drawings by

ALFRED PARSONS, A.R.A.



LONDON

JOHN MURRAY, ALBEMARLE STREET, W.

1911

1911
Gray Herbarium
Harvard University

VI
MICROPHYLLAE



44—ROSA MICROPHYLLA Roxb.

Rosa microphylla: caulibus erectis, glabris, glauco-purpureis; aculeis omnibus geminis stipularibus, ascendentibus, modice robustis; foliolis 11-15, oblongis, parvis, firmis, simpliciter serratis, utrinque glabris, vel dorso parce pubescentibus; rhachi glabra vel pubescente; stipulis parvis, angustis, longe adnatis, apice libero minuto; floribus saepe solitariis; pedunculo brevi, nudo vel aciculato; calycis tubo globoso, dense aciculato; sepalis ovatis, simplicibus, conspicue dentatis; petalis albis vel rubris; stylis liberis, inclusis, dense villosis; fructu magno, edibili, globoso, viridi, dense aculeato, cortice crasso, sepalis conniventibus persistentibus coronato.

R. microphylla Roxburgh ex Lindley, *Ros. Monogr.* p. 9, No. 6 (1820); *Bot. Reg.* vol. xi. t. 919 (1825).—Roxburgh, *Fl. Ind.* ed. 2, vol. ii. p. 515 (1832).—Crépin in *Bull. Soc. Bot. Belg.* vol. xiv. pt. 2, p. 146 (*Primit. Monogr. Ros.* fasc. iii. p. 350) (1875).—Hooker f., *Fl. Brit. Ind.* vol. ii. p. 364 (1879); in *Bot. Mag.* vol. cvii. t. 6548 (single form) (1881).—Koehne, *Deutsche Dendrol.* p. 301 (1893).—Rehder in Bailey, *Cycl. Am. Hort.* vol. iv. p. 1588 (1902).—C. K. Schneider, *Ill. Handbuch Laubholz.* vol. i. p. 588 (1906).

R. Roxburghii Trattinnick, *Ros. Monogr.* vol. ii. p. 233 (1823).

Stems erect, glabrous, glaucous-purple; *prickles* mostly in stipulary pairs, large, rather ascending, generally without intermediate aciculi. *Leaflets* 11-15, small, oblong, obtuse or sub-acute, simply serrated, green and glabrous on the upper surface, glabrous or pubescent beneath; *petioles* glabrous or slightly pubescent; *stipules* very narrow, adnate, with small free tips. *Flowers* few or solitary; *peduncles* short, hispid. *Calyx-tube* globose, rugose, densely aciculate; *lobes* small, ovate, hispid on the back, deeply toothed. *Petals* pink or white, middle-sized. *Styles* free, included, densely hairy. *Fruit* depresso-globose, green, umbilicate at the base, large, edible, with a very thick skin, with only a few sessile basal carpels with a tuft of hair at the apex.

Rosa microphylla is a very distinct species, clearly marked by its large, densely prickly, green, crab-apple-like fruit, crowned by the coriaceous, deeply toothed calyx-lobes. It is a native of Japan and of central, western and northern China, where it grows in the warm river valleys and never ascends above altitudes of 4,000 feet.

The first published description of this Rose appeared in Lindley's *Monograph*, his attention having been called to it through seeing a collection of Chinese drawings in the possession of Sir H. Colebrook, amongst which occurred a figure of this plant in its double form. It was found to exist in the Calcutta Botanic Garden, having been procured

ROSA MICROPHYLLA

from Canton by Dr. Roxburgh. Thence it was conveyed to this country, where it flowered for the first time in Colvil's nursery in 1824. Later it was thriving in Curtis's Glazenwood Nursery at Coggeshall in Essex. It had long been cultivated in China and Japan, but the *Rosa microphylla* of the Simla forests is not our plant. Till 1862 only the double form had been known in Europe, but in that year the single form was collected by M. Maximovicz on the shore of Lake Hakone in central Japan, and it was from these plants that Crépin published his excellent description. Dr. Savatier also found this Rose on the same spot in 1871, and two years later Dr. Shearn collected it at New-Kiang in north China.

Three forms are figured in the *Phonzo Zoufou*,¹ one with single white flowers, a second with single red flowers, and a third with double red flowers. There is an excellent figure representing the double red form in the *Botanical Magazine*.²

In its general appearance this charming Rose somewhat resembles the Macartney Rose, and forms a most attractive object in the garden. In France it is often called the *Rose Châtaigne* from the resemblance of its fruit to a sweet chestnut. Its leaflets, eleven to fifteen in number, are more numerous than in any other Rose yet known. At Tresserve, in Savoy, it blossoms from May to December, and its widely open flowers, which often measure five inches across, are succeeded by large, thorny, sweet-scented fruits. Although easily increased by seed, cuttings or suckers, it is still comparatively rare in English gardens.

An interesting hybrid of *Rosa microphylla* × *rugosa* originated in the garden of the Institut Botanique de Strasbourg. It was found growing at the foot of a plant of *Rosa microphylla* and clearly shows its parentage, having the straight branches of *Rosa microphylla*, with its globular buds and large prickly fruits. Its general habit and appearance suggest the *rugosa* influence.

¹ Part 27.

² Vol. lxiii. t. 3490 (1836).



44—ROSA MICROPHYLLA

VII
CINNAMOMEAE



45—ROSA CINNAMOMEA Linn.

THE CINNAMON ROSE

Rosa cinnamomea: caulibus arcuatis, bruneis; aculeis parvis, geminis, stipularibus, aciculis intermediis interdum productis; foliis 5, oblongis, simpliciter serratis, acutis vel obtusis, utrinque pubescentibus; rhachi pubescente, haud glandulosa; stipulis longe adnatis, apicibus liberis, parvis; floribus 1-2, pedunculis brevibus, nudis; bracteis oblongis, magnis; calycis tubo globoso, nudo; lobis simplicibus, apice productis, dorso pubescentibus, haud glandulosus; petalis plerumque rubris, magnitudine mediocribus; stylis liberis, inclusis; fructu parvo, globoso, rubro, nudo, pulposo, sepalis conniventibus coronato.

R. cinnamomea Linnaeus, *Syst. Nat.* ed. 10, p. 1062 (1759); *Sp. Plant.* ed. 2, p. 703 (1762).—Allioni, *Fl. Pedem.* vol. ii. p. 138 (1785).—Lawrance, *Roses*, t. 34 (1799).—Smith, *Eng. Bot.* vol. xxxiv. t. 2388 (1812).—Guimpel, Willdenow & Hayne, *Abbild. Deutsch. Holzart*, vol. i. p. 113, t. 85 (1815).—Thory in Redouté, *Roses*, vol. i. pp. 105, 133, tabs. (1817).—Lindley, *Ros. Monogr.* p. 28, No. 18, t. 5 (1820).—Trattinnick, *Ros. Monogr.* vol. ii. p. 171 (1823).—Seringe in De Candolle, *Prodr.* vol. ii. p. 605 (1825).—Koch, *Syn. Fl. Germ.* p. 224 (1837).—C. A. Meyer in *Mém. Acad. Sci. St. Pétersbourg*, sér. 6, vol. vi. pp. 7, 8, 9, 10, 21 (*Ueber die Zimmtrosen*, pp. 7, 8, 9, 10, 21) (1847).—Grenier & Godron, *Fl. Franç.* vol. i. p. 556 (1848).—Grenier, *Fl. Jura.* p. 233 (1865).—Boissier, *Fl. Orient.* vol. ii. p. 676 (1872).—Christ, *Rosen Schweiz*, p. 57 (1873); in Boissier, *Fl. Orient.* Suppl. p. 210 (1888).—Déséglise in *Bull. Soc. Bot. Belg.* vol. xv. p. 271 (*Cat. Rais. Ros.* p. 102 [1877]) (1876).—Crépin in *Journ. des Roses*, 1891, p. 54 (*Nouvelle Classif. Ros.* p. 19, 1891); *Bull. Soc. Bot. Belg.* vol. xxxi. pt. 2, p. 74 (1892); *Bull. Herb. Boiss.* vol. v. p. 143 (1897).—Keller in Ascherson & Graebner, *Syn. Mitteleur. Fl.* vol. vi. p. 295 (1902).—Rehder in Bailey, *Cycl. Am. Hort.* vol. iv. p. 1555 (1902).—C. K. Schneider, *Ill. Handbuch Laubholz.* vol. i. p. 573 (1906).

R. majalis Herrmann, *Dissert.* p. 8 (1762).—Roessig, *Die Rosen*, No. 3 (1802-1820).

R. foecundissima Muenchausen, *Hausv.* vol. v. p. 279 (1774).

R. fluvialis Lange, *Fl. Dan.* vol. v. t. 868 (1782).

R. davurica Pallas, *Fl. Ross.* vol. i. pt. ii. p. 61 (1788).—Lindley, *Ros. Monogr.* p. 32, No. 20 (1820).—Trattinnick, *Ros. Monogr.* vol. ii. p. 170 (1823).

R. collincola Ehrhart, *Beitr. zur Naturk.* vol. ii. p. 70 (1788).

R. gorenkensis Besser, *Enum. Volh. Podol.* p. 60 (1822).—K. Koch, *Dendrol.* vol. i. p. 242 (1869).

R. Fischeriana Besser, *Enum. Volh. Podol.* p. 60 (1822).

R. turbinella Swartz ex Sprengel, *Syst. Veg.* vol. v. p. 554 (1825).

R. amblyotis C. A. Meyer, *Mém. Acad. Sci. St. Pétersbourg*, sér. 6, vol. vi. p. 30 (*Ueber die Zimmtrosen*, p. 30) (1847).

Stems arching, brown, five or six feet long; *prickles* in stipulary pairs, small, moderately robust, often with intermediate aciculi on the sterile shoots. *Leaflets*

ROSA CINNAMOMEA

usually five, oblong, middle-sized, simply serrated, acute or obtuse, softly pubescent on both surfaces; *petioles* pubescent, not glandular; *stipules* adnate, with small free tips. *Flowers* 1 or 2; *peduncles* short, naked, hidden by the large oblong bracts. *Calyx-tube* globose, naked; *lobes* simple, leaf-pointed, pubescent, not glandular on the back. *Petals* middle-sized, usually red. *Styles* free, included. *Fruit* small, globose, red, naked, pulpy, crowned by the connivent persistent *sepals*.

Next to the Scotch Rose, the Cinnamon Rose occupies a wider geographical area than any other species of the genus; it extends from western Europe to Siberia and Japan, but does not reach Britain or the Himalaya. The names cited above cover a considerable range of variation, but they probably all belong to a single species. Salisbury found a plant in the wood at the Aketon pasture near Pontefract; this station is referred to in Smith's *English Botany* and admitted by Woods,¹ but Babington in a note says "probably not native."²

Although the cinnamon-scented Rose is mentioned by Dodoens,³ Clusius,⁴ Lobel,⁵ C. Bauhin,⁶ J. Bauhin,⁷ none of the references can be intended for the plant now known as *Rosa cinnamomea*. As Haller (1708–1777) did not mention the Rose, it is probable that the single form had not in his time been introduced into cultivation. The double variety was common enough in the sixteenth and seventeenth centuries, and, varying somewhat, seems to have been grown in most of the old gardens. Clusius was the first to publish a description. Gerard⁸ and Parkinson⁹ refer at more or less length to this Rose. Gerard gives figures of both double and single *Rosa cinnamomea*, with the following account:

"The Canell or Cinnamon rose, or the rose smelling like Cinnamon, hath shoots of a brown colour, foure cubits high, beset with thorny prickles, and leaues like vnto those of Eglantine, but smaller and greener, of the sauour or smell of Cinnamon. Whereof it took his name, and not of the smell of his floures (as some haue deemed) which haue little or no sauour at all: the floures be exceeding double, and yellow in the middle, of a pale red colour, and sometimes of a carnation: the root is of a wooddie substance.

"We haue in our London gardens another Cinnamon or Canell rose, not differing from the last described in any respect, but onely in the floures; for as the other hath very double floures, contrariwise these of this plant are verie single, wherein is the difference.

"*Rosa Cinnamomea pleno flore.*

"The double Cinnamon Rose.

¹ *Trans. Linn. Soc.* vol. xii. p. 175 (1816).

² *British Botany*, ed. 4, p. 110 (1836).

³ *Historia*, p. 187 (1583).

⁴ *Rariorum aliquot stirpium per Pannoniam . . . observatarum historia*, pp. 109, 110, 112 (1583); *Rariorum plantarum historia*, pp. 115, 116 (1601).

⁵ *Kruidtboeck*, pt. 2, p. 241 (1581).

⁶ *Pinax*, p. 483 (1623).

⁷ *Historia*, vol. ii. p. 39 (1651).

⁸ *Herball*, bk. 3, p. 1086 (1597).

⁹ *Paradisus*, pp. 416, 419 (1629); *Theatrum*, p. 1020 (1640).



ROSA CINNAMOMEA

“*Rosa Cinnamomea* flore simplici.

“The single Cinnamon Rose.

“These Roses are planted in our London gardens, and elsewhere, but not found wilde in England.”

It is difficult to identify the Rose from Gerard's figures, or to say with any certainty if his single form was simply the cinnamon-scented Rose of the other pre-Linnaean writers, or whether it was really our *Rosa cinnamomea*. There are somewhat similar figures in several other pre-Linnaean books.

Linnaeus at first confused this Rose with *Rosa alpina* (*pendulina*). His description of the Rose he calls *Rosa cinnamomea* in the first edition of the *Species Plantarum* is the same as that of *Rosa alpina* in the second edition, but his *Rosa cinnamomea* of the *Systema Naturae* and *Species Plantarum*, ed. 2, is our plant.

Rosa cinnamomea is easily distinguished from all other Roses by its very large spreading stipules, often an inch or more across from point to point. The name is misleading, for it is difficult to detect the scent of cinnamon in any part of the plant, although Gilbert,¹ in 1683, describes it as having “a faint scent, a little like Cinnamon, from whence its name.”

The double form figured is an old Rose, formerly to be found in many continental gardens, known as the *Rose de Mai*, *Rose de Pâques*, or *Rose du Saint-Sacrement*, and figured by Redouté² under the name of *Rosa majalis*. It differs from the double *cinnamomea* usually found in cultivation by its finely and slantingly crimped petals, which are of a beautiful bright rosy tint shading to nearly white. It has now almost died out, but may occasionally be met with in some out-of-the-world botanic garden. The Rose from which the drawing was made grew in the old Correvon garden at Yverdun, Canton de Vaud, Switzerland.

¹ *Florist's Vade Mecum*, p. 150.

² *Roses*, vol. i. p. 105 (1817).

46—ROSA ACICULARIS Lindl.

Rosa acicularis: caule elato, arcuato; ramis floriferis, plerumque dense aculeatis et aciculatis; aculeis gracillimis, rectis, saepe geminis infrastipularibus, in aciculis sensim gradatis; foliolis 5-9, oblongis, acutis, membranaceis, glaucis, simpliciter serratis, facie glabris, dorso interdum pubescentibus; rhachi glabra vel pubescente, obscure glandulosa; stipulis adnatis, apice libero, ovato-lanceolato, glandulosociliato; floribus solitariis vel paucis; pedunculis elongatis, nudis vel setosis; calycis tubo ampullaeformi; lobis simplicibus, elongatis, apice foliaceis, nudis vel glandulosis; petalis rubellis; stylis villosis, liberis, haud protrusis; fructu plerumque cernuo, interdum erecto, rubro, pulposo; aut subovato et apice breviter constricto vel elliptico et utrinque attenuato, aut suboblongo, saepius obovato-pyriformi, basi valde attenuato, sepalis persistentibus conniventibus coronato.

R. acicularis Lindley, *Ros. Monogr.* p. 44, No. 27, t. 8 (1820).—C. A. Meyer in *Mém. Acad. Sci. St. Pétersbourg*, sér. 6, vol. vi. p. 15 (*Ueber die Zimmtrosen*, p. 15) (1847).—Maximowicz in *Mém. Acad. Sci. St. Pétersbourg*, vol. ix. p. 100 (*Prim. Fl. Amur.*) (1859).—Franchet & Savatier, *Enum. Pl. Jap.* vol. i. p. 137 (1874).—Crépin in *Bull. Soc. Bot. Belg.* vol. xiv. p. 5 (*Primit. Monogr. Ros.* vol. iii. p. 299) (1875).—S. Watson in *Smithsonian Misc. Coll.* vol. xv. p. 309 (1878).—Koehne, *Deutsche Dendrol.* p. 298 (1893).—Dippel, *Ill. Handbuch Laubholzsk.* vol. iii. p. 584 (1893).—Keller in Ascherson & Graebner, *Syn. Mitteleur. Fl.* vol. vi. p. 296 (1902).

R. alpina Pallas, *Fl. Ross.* vol. i. pt. 2, p. 61 (*non* Linnaeus) (1784).

R. Gmelini Bunge in Ledebour, *Fl. Alt.* vol. ii. p. 228 (1829).—Ledebour, *Fl. Ross.* vol. ii. p. 75 (1844).—Déséglise in *Bull. Soc. Bot. Belg.* vol. xv. p. 281 (*Cat. Rais. Ros.* p. 112 [1877]) (1876).

R. carelica Fries, *Summa Veg. Scand.* vol. i. p. 171 (1846).—Lange, *Fl. Dan. Suppl.* 2, t. 75 (1865).—Déséglise in *Bull. Soc. Bot. Belg.* vol. xv. p. 274 (*Cat. Rais. Ros.* p. 105 [1877]) (1876).

Stem tall, arched, reaching a height of 6-8 feet; flowering branches usually densely prickly. *Prickles* very slender, straight, needle-like, passing gradually into aciculi, often in pairs at the base of the leaves. *Leaflets* 5-9, moderately large, thin, oblong, acute, glaucous, simply openly toothed, glabrous on both surfaces or pubescent beneath; *petioles* glabrous or pubescent, slightly glandular; *stipules* adnate, with ovate-lanceolate gland-ciliated free tips. *Flowers* one or few; *peduncles* long, naked or thinly setose; *bracts* ovate. *Calyx-tube* ampullaeform; *lobes* lanceolate, simple, an inch long, leafy at the tip, naked or glandular on the back. *Petals* bright pink. *Styles* free, villous, not protruded. *Fruit* bright red, pulpy, erect or more often cernuous, sometimes subovate and shortly constricted at the apex or elliptical and tapering at each end, sometimes suboblong or obovate-pyriform, much narrowed at the base, crowned by the persistent connivent *sepals*.

Rosa acicularis is a northern plant, extending through northern Russia and Siberia to Japan and across Behring Sea into northern

ROSA ACICULARIS

Alaska, and reaching southward to the Altai Mountains, but not to the Himalaya. In Europe, Japan and North America it is rare. In habit it is an erect, vigorous bush from six to eight feet high, with branches and stems generally armed with slender prickles. It was brought to England from Siberia by Mr. Thomas Bell.

It was first mentioned by J. G. Gmelin in 1768¹ as "*Rosa non spinosa fructu turbinato*," but it was Lindley who first described it as a distinct species in his *Monograph*. He based his description, however, upon plants growing in Mr. Sabine's garden at North Mimms in Hertfordshire, which had doubtless lost some of their distinctive characters. The result has been a certain confusion among continental botanists as to the true form of Lindley's plant. This is not a matter for much surprise, when we take into consideration the wide area over which *Rosa acicularis* is distributed and the great variation in the species to which such differing geographical conditions would give rise. Crépin even suggested that *Rosa acicularis* might prove to be a circumpolar type. It has by some authors been referred to *Rosa alpina* L., notably in the first instance by Pallas in 1784, but, allowing certain affinities with *Rosa alpina*, it is between *Rosa cinnamomea* L. and *Rosa blanda* Ait. that it must be placed. In North America it is extremely difficult to draw the line between forms of *Rosa acicularis* and *Rosa blanda*.

The chief merit of *Rosa acicularis* as a garden or woodland plant lies in its earliness; it is the first Rose to come into leaf, and its flowers are among the first to open. It is perfectly hardy and easy to naturalize, and in autumn the handsome long scarlet fruits are brilliant in colour and remain long on the plant.

The great variation to which the fruit of *Rosa acicularis* is subject can best be appreciated by comparing the accompanying drawings, which have been chosen to illustrate the two extremes.

¹ *Flora Sibirica*, vol. iii. p. 177.



46—ROSA ACICULARIS



46—ROSA ACICULARIS

ROSA NIPPONICA

ROSA ALBA VAR. NIPPONENSIS



47—ROSA ACICULARIS, var. NIPPONENSIS Koehne

Rosa acicularis, var. *nipponensis*: a typo recedit habitu humiliori, aculeis minoribus; foliis minoribus, 7-11, dorso glabris; floribus solitariis; sepalis brevioribus; petalis minoribus, saturate rubris.

R. acicularis, var. *nipponensis* Koehne, *Deutsche Dendrol.* p. 298 (1893).—Hooker f. in *Bot. Mag.* vol. cxxv. t. 7646 (1899).—Rehder in Bailey, *Cycl. Am. Hort.* vol. iv. p. 1555 (1902)

R. nipponensis, Crépin in *Bull. Soc. Bot. Belg.* vol. xiv. p. 7 (*Primit. Monogr. Ros.* fasc. iii. p. 301) (1875).

Stem short, erect; branches slender, dark brown. *Prickles* crowded, passing gradually into aciculi, straight, slender. *Leaflets* 7-11, usually 9, oblong, obtuse, small, simply sharply serrated, green and glabrous on both surfaces; *petioles* glabrous, aciculate; *stipules* adnate, with short deltoid free tips, slightly gland-ciliated. *Flowers* solitary; *pedicels* long, densely setose. *Calyx-tube* ampullaeform, glabrous; *lobes* simple, ovate, leaf-pointed, not glandular on the back. *Corolla* bright dark red, 1½ in. in diam. *Styles* not exerted. *Fruit* ampullaeform, naked, bright red, pulpy, ripening at the end of August, crowned by the erect persistent *sepals*.

This beautiful, dwarf, dark-flowered variety of *Rosa acicularis* Lindl. has only recently been introduced into England. The plant cultivated in the Royal Gardens, Kew, was received from the Botanic Garden at Copenhagen. It has also been received from the Botanic Garden at Würzburg. It most resembles *Rosa Malyi* Kern. or *Rosa rubella* Smith in its dwarf habit and copious, dark red flowers. There is a specimen in the Kew herbarium, collected in 1864 by Tschonoski on the well-known mountain Fujiyama in the island of Nippon. The seeds were first distributed by the Botanic Garden of St. Petersburg about 1870.

48—ROSA FRANCOFURTANA Muench.

(ROSA CINNAMOMEA × GALLICA)

Rosa francofurtana: caule alto, arcuato; aculeis ramulorum floriferorum nullis vel sparsis, modice robustis; foliolis 5, tenuibus, late oblongis, basi rotundis, simpliciter serratis, magnis, facie parce, dorso densius pubescentibus; rhachi pubescente, haud glandulosa; stipulis adnatis, apicibus liberis, magnis, lanceolatis; floribus solitariis, vel paucis, corymbosis, plenis, rubellis vel albis; pedicellis dense hispidis; calycis tubo robusto, globoso, saepius hispido; lobis ovatis, apicibus elongatis, compositis; fructu ignoto.

R. francofurtana Muenchausen, *Hausv.* vol. v. p. 288 (1774).—Borkhausen, *Holz.* p. 312 (1790).—Gmelin, *Fl. Bad.* vol. ii. p. 405 (1806).

R. turbinata Aiton, *Hort. Kew.* vol. ii. p. 206 (1789).—Jacquin, *Hort. Schoen.* vol. iv. t. 415 (1804); *Fragm.* p. 71, t. 107, fig. 2 (1809).—Thory in Redouté, *Roses*, vol. i. p. 127 (1817); *Prodr. Monogr. Ros.* p. 118 (1820).—Lindley, *Ros. Monogr.* p. 73 (1820).—Seringe in De Candolle, *Prodr.* vol. ii. p. 603 (1825).—Koch, *Syn. Fl. Germ.* p. 224 (1837).—Déséglise in *Bull. Soc. Bot. Belg.* vol. xv. p. 255 (*Cat. Rais. Ros.* p. 85 [1877]) (1876).—Dippel, *Handbuch Laubholz.* vol. iii. p. 566 (1893).—Keller in Ascherson & Graebner, *Syn. Mitteleur. Fl.* vol. vi. p. 52 (1900).—Rehder in Bailey, *Cycl. Am. Hort.* vol. iv. p. 1553 (1902).

R. campanulata Ehrhart, *Beitr. zur Naturk.* vol. vi. p. 97 (1791).—Thory in Redouté, *Roses*, vol. ii. p. 95 (1821).

R. francofurtensis Roessig, *Die Rosen*, No. 11 (1802-1820).

R. inermis Thory in Redouté, *Roses*, vol. ii. p. 93 (1821).

R. cinnamomea × *gallica* Koehne, *Deutsche Dendrol.* p. 283 (1893).—C. K. Schneider, *Ill. Handbuch Laubholz.* vol. i. p. 549 (1906).

Stem tall, arching; *prickles* usually absent from the flowering shoots; if present, scattered, moderately stout. *Leaflets* 5, thin, broadly oblong, rounded at the base, simply serrated, large, slightly pubescent on the upper surface, more so beneath; *petioles* pubescent, not glandular; *stipules* adnate, with large, lanceolate, free tips. *Flowers* solitary or few, corymbose, double, pink or white, 2-3 in. diam.; *pedicels* densely hispid. *Calyx-tube* stout, globose, usually hispid; *lobes* ovate with a long point, $\frac{3}{4}$ in. long, compound. *Fruit* not known.

Rosa francofurtana was described and figured by Clusius¹ in 1583 under the name of *Rosa sine spinis*, and again in 1601² with a figure which Crépin without hesitation referred to this species. In the text Clusius states that he had seen the plant growing in gardens at Frank-

¹ *Rariorum aliquot stirpium per Pannoniam . . . observatarum historia*, pp. 108, 109.

² *Rariorum plantarum historia*, p. 115.

ROSA FRANCOFURTANA

fort-on-the-Main. Tabernaemontanus in 1591,¹ C. Bauhin in 1623,² and J. Bauhin in 1651³ also describe Clusius' Rose, as do Parkinson⁴ in 1640 and Ray⁵ in 1688. Linnaeus makes no mention of it, but Muenchausen in 1774 describes it fully and identifies it conclusively with Clusius' Rose. Aiton in 1789 calls it *Rosa turbinata* from the shape of its fruit; and Ehrhart in 1791 calls it *Rosa campanulata*. Borkhausen, however, calls it *Rosa francofurtana*. Roessig in 1802 figured and described it under the name of *Rosa francofurtensis*.

This Rose, once common in English gardens, is now rarely to be met with, but Roessig's description exactly agrees with the Rose we know as *Rosa francofurtana*. Nearly allied hybrids are *Rosa Ventenatiana* Thory and *Rosa orbessanea* Thory; the latter is nearer to *Rosa gallica* L. than is *Rosa francofurtana*.

¹ *Neuw und vollkommenlich Kreuterbuch*, pt. 3, p. 789.

² *Pinax*, p. 482.

³ *Historia*, vol. ii. p. 35.

⁴ *Theatrum Bot.* pp. 1013, 1019.

⁵ *Historia*, vol. ii. p. 1470.



49—ROSA FEDTSCHENKOANA Regel

Rosa Fedtschenkoana: caulibus arcuatis; aculeis geminis, stipularibus, magnis, uncinatis; aciculis intermediis, copiosis; foliolis 7-9, oblongis, parvis, obtusis, simpliciter serratis, utrinque glabris, vel dorso pubescentibus; rhachi glabra vel pubescente; stipulis longe adnatis, apicibus liberis parvis, ovatis, glandulis, ciliatis; floribus 1-4; pedunculis brevibus, hispidis; calycis tubo globoso, aciculato; lobis simplicibus, apice elongatis, dorso glandulosis; petalis albis, parvis; stylis liberis, inclusis; fructu ovoideo, rubro, aciculato, sepalis persistentibus coronato.

R. Fedtschenkoana Regel in *Act Hort. Petrop.* vol. v. p. 314 (*Tent. Ros. Monogr.* p. 30 [1877]) (1878).—Hooker *f.* in *Bot. Mag.* vol. cxxvii. t. 7770 (1901).

Stems low, arching; *prickles* in stipulary pairs, large, hooked, moderately stout, with copious intermediate unequal aciculi. *Leaflets* 7-9, oblong, obtuse, small, thin, simply serrated, glabrous on both surfaces or pubescent beneath; *petioles* glabrous or pubescent, not glandular; *stipules* adnate, with small free tips, gland-ciliated. *Flowers* 1-4; *peduncles* short, hispid. *Calyx-tube* ovoid, densely aciculate; *lobes* simple with a long point, densely glandular on the back. *Petals* small, white. *Styles* free, included. *Fruit* ovoid, bright red, densely aciculate, crowned by the persistent *sepals*.

The *Fedtschenko Rose* was discovered in the Turkestan and Koram regions of Central Asia over thirty years ago by Madame Olga Fedtschenko, by whom it was introduced into the Botanic Garden of St. Petersburg. Thence it was sent to Warley, where it flowered for the first time in England, but did not bear fruit until the following year. The stems are red in the young state, darkening with age; the leaves are pinnate and glaucous, and the flowers white. The odour resembles that of *Rosa Beggeriana* Schrenk. It is most nearly allied to *Rosa acicularis* Lindl., but is smaller in all its parts and more densely aciculate. Regel describes four varieties, *lagenaeformis*, *ovata*, *pubescens* and *glandulosa*, the characters of which are indicated by their names.

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PART VIII

THE GENUS ROSA

BY

ELLEN WILLMOTT, F.L.S.

Drawings by

ALFRED PARSONS, A.R.A.



LONDON

JOHN MURRAY, ALBEMARLE STREET, W.

1911

1894
Gray Herbarium
Harvard University

ROSA MACROPHYLLA



50—ROSA MACROPHYLLA Lindl.

Rosa macrophylla: caule erecto; ramulis rubro-bruneis, inermibus, vel aculeis rectis geminis stipularibus, aciculis intermixtis, armatis; foliolis 9-11, oblongis, acutis, simpliciter serratis, facie viridibus, glabris, dorso pubescentibus; rhachi pubescente; stipulis latis, adnatis, apice libero, ovato; floribus 1-3; pedunculis parce setosis; fructu turbinato, nudo, vel parce setoso; sepalis lanceolatis, simplicibus, apice elongatis, foliaceis, dorso glandulosis; petalis rubris, magnitudine mediocribus; stylis pilosis, liberis, inclusis; fructu rubro, pulposo, turbinato, sepalis persistentibus coronato.

R. macrophylla Lindley, *Ros. Monogr.* p. 35, t. 6 (1820).—Wallich, *Pl. As. Rar.* vol. ii. p. 19, t. 117 (1831).—Brandis, *Forest Flora N.W. Ind.* p. 203 (1874); *Indian Trees*, p. 288 (1906).—Crépin in *Bull. Soc. Bot. Belg.* vol. xiii. p. 283 (*Primit. Monogr. Ros.* fasc. iii. p. 290) (1874); vol. xiv. p. 167 (*Primit. Monogr. Ros.* fasc. iii. p. 371) (1875).—Hooker f., *Fl. Brit. Ind.* vol. ii. p. 366 (1879).—Forbes & Hemsley in *Journ. Linn. Soc.* vol. xxiii. p. 251 (1887).—Collett, *Fl. Siml.* p. 168 (1902).

R. Hoffmeisteri Klotzsch in *Reise Prinz. Waldem.* p. 153, t. 7 (1862).

R. Guilelmi Waldemarii Klotzsch in *Reise Prinz. Waldem.* p. 153, t. 8 (1862).

R. Hookeriana Bertoloni, *Misc.* fasc. xxiv. p. 14 (1863).

Stem erect; *branches* reddish brown. *Prickles*, when present, straight, in stipulary pairs and intermixed with aciculi. *Leaflets* 9-11, oblong, acute, simply serrated, green and glabrous on the upper surface, pubescent beneath; *petioles* pubescent; *stipules* broad, adnate, with ovate free tips. *Flowers* 1-3; *peduncles* slightly setose. *Calyx-tube* naked or slightly setose; *lobes* lanceolate, simple, leaf-pointed, glandular beneath. *Petals* red, middle-sized. *Styles* pilose, free, included. *Fruit* red, pulpy, elongate-ovoid, crowned with the persistent *sepals*.

Rosa macrophylla is a native of the temperate Himalaya from Kashmir to Sikkim and the Naga Hills, and extends to the central and western provinces of China, reaching sometimes to altitudes of from 10,000 to 12,000 feet. It is quite hardy and ripens its fruit in England. *Macrophylla* is not a specially appropriate name, as there are many Roses that have larger leaflets. It is nearly allied to *Rosa alpina* L. and *Rosa acicularis* Lindl., differing from the former by its occasional pairs of stipular prickles, and from both by its more numerous leaflets. It is very variable in its prickles and in the size and shape of its leaflets. In an extreme form (var. *minor* Lindl.) it has flowers only 1-1 $\frac{1}{4}$ in. diam. and obtuse leaflets not more than $\frac{1}{2}$ - $\frac{3}{4}$ in. long. *Rosa macrophylla* is not common in cultivation.



50—ROSA MACROPHYLLA



51—ROSA PRATTII Hemsl.

Rosa Prattii: caule arcuato; aculeis conformibus, subrectis, modice robustis, saepe geminis infrastipularibus; foliolis 11-13, oblongo-lanceolatis, acutis, parvis, rigidulis, simpliciter serratis, utrinque glabris; rhachi glabra, aciculata, haud glandulosa; stipulis adnatis, apicibus liberis, ovatis, patulis; floribus paucis, corymbosis; pedicellis hispidis; calycis tubo angusto, parce aciculato; lobis ovatis, acuminatis, simplicibus, dorso glandulosis; petalis rubris, parvis; stylis villosis, liberis; fructu subgloboso, glanduloso, rubro, sepalis persistentibus coronato; carpellis dorso et apice pilis setiformibus subluteis vestitis.

R. Prattii Hemsley in *Journ. Linn. Soc.* vol. xxix. p. 307, t. 30 (1892).

Stems arching; *prickles* uniform, nearly straight, moderately stout, spreading, often in infrastipular pairs. *Leaflets* 11-13, oblong-lanceolate, acute, simply serrated, firm in texture, glabrous on both surfaces, the end one under an inch long; *petioles* glabrous, aciculate, not glandular; *stipules* adnate, with small, spreading free tips. *Flowers* few, corymbose; *pedicels* densely hispid. *Calyx-tube* narrow, slightly aciculate; *lobes* ovate-acuminate, simple, $\frac{1}{4}$ - $\frac{1}{3}$ in. long, glandular on the back. *Petals* bright red, $\frac{1}{2}$ in. long. *Styles* free, villous. *Fruit* subglobose, glandular, red; *sepals* persistent; *carpels* clothed with yellowish bristle-like hairs on back and apex.

Rosa Prattii is nearly allied to *Rosa macrophylla* Lindl., but is readily distinguished from it by its numerous small and closely arranged, narrow, obscurely toothed leaflets.

Mr. A. E. Pratt, naturalist and traveller, collected this rare and extremely interesting Rose in 1890 in west Sze-chuan on the frontier of Tibet at an elevation of about 9,000 feet, and he discovered it also in the neighbourhood of Ta-Chien-Lu on the borders of Tibet, western China. It is a distinct and interesting species, and it is to be hoped it may be introduced into cultivation in this country; up to the present it is only known to us in a dried state.



52—ROSA SERICEA Lindl.

Rosa sericea: caule elongato, erecto; ramulis multis, brevibus, dense foliosis; aculeis majoribus validis, uncinatis, saepe geminis infrastipularibus, aciculis copiosis inaequalibus intermixtis; foliolis 7-11, parvis, oblongis, obtusis, viridibus, simpliciter dentatis, facie glabris, dorso sericeis; rhachi pubescente; stipulis adnatis, glanduloso-ciliatis, apicibus liberis, parvis, ovatis; floribus plerumque solitariis; pedicellis brevibus, nudis vel sericeis et glandulosis; calycis tubo globoso, subnudo; lobis simplicibus, lanceolatis; dorso nudis vel glandulosis; petalis plerumque 4, albis; magnitudine mediocribus; stylis villosis, liberis, inclusis; fructu parvo, globoso, rubro, sepalis persistentibus coronato.

R. sericea Lindley, *Ros. Monogr.* p. 105, No. 57, t. 12 (1820).—Seringe in De Candolle, *Prodr.* vol. ii. p. 613 (1825).—Royle, *Ill. Bot.* vol. i. p. 208; vol. ii. t. 42, fig. 1 (1839).—Hooker in *Bot. Mag.* vol. xvi. t. 5200 (1860).—Crépin in *Bull. Soc. Bot. Belg.* vol. xiv. pt. 2, p. 151 (*Primit. Monogr. Ros.* fasc. iii. p. 355) (1875); vol. xxv. pt. 2, p. 9 (1886).—Déséglise in *Bull. Soc. Bot. Belg.* vol. xv. p. 280 (*Cat. Rais. Ros.* p. 111 [1877]) (1876).—Hooker f., *Fl. Brit. Ind.* vol. ii. p. 367 (1879).—Forbes & Hemsley in *Journ. Linn. Soc.* vol. xxiii. p. 254 (1887).—Mottet in *Rev. Hort.* 1897, pp. 444-6, figs. 136, 137.—Collett, *Fl. Siml.* p. 168 (1902).—Rehder in Bailey, *Cycl. Am. Hort.* vol. iv. p. 1557 (1902).—Brandis, *Indian Trees*, p. 288 (1906).

R. Wallichii Trattinnick, *Ros. Monogr.* vol. ii. p. 193 (1823).

Stem erect, reaching a height of 6-8 feet, with many short densely leafy branchlets; main *prickles* stout, hooked, often in infrastipular pairs, intermixed with copious irregular aciculi. *Leaflets* 7-11, small, oblong, obtuse, simply toothed, green and glabrous on the upper surface, silky beneath; *petioles* pubescent; *stipules* adnate, glandular-ciliated, with small, ovate free tips. *Flowers* usually solitary; *pedicels* short, naked or glandular and silky. *Calyx-tube* globose, nearly naked; *lobes* simply lanceolate, naked or glandular on the back. *Petals* usually 4, sometimes 5, pure white, middle-sized. *Styles* pubescent, free, included. *Fruit* small, globose, red, naked, crowned by the persistent *sepals*.

Rosa sericea inhabits the temperate Himalaya from the valley of the Ravi eastward to Sikkim, Bhutan, Manipur, Burma, and extends into the mountainous regions of Tibet and also of central China. It reaches an altitude of 6,000 feet above the sea in Manipur, of 13,000 feet in Sikkim and of 14,000 feet in Kumaon, and is quite hardy in England. It was first discovered by Dr. Wallich about 1820 at Gossain Than, and has since been collected in many other Himalayan localities. It was described for the first time by Lindley from specimens in the herbarium of Sir J. Banks, and about two years later found its

ROSA SERICEA

way into English gardens. It is the only four-petalled Rose in the whole genus. Lindley, having described it from dried specimens, probably never doubted that the flower presented the usual five divisions in calyx and corolla. In his description he does not refer to this strange anomaly, and his drawing gives a flower with five petals, although pentamerous flowers are extremely rare.

Rosa sericea is thus described by Sir George Watt in an unpublished diary of explorations in Manipur during 1882 :

“A singularly beautiful rose, forming as it does small, erect, isolated bushes that frequent exposed grassy situations or low brushwoods. As a species it may be described as distributed throughout the temperate Himalaya, from the valley of the Ravi (in the far north-west) eastward to Sikkim, Bhutan, Manipur, Burma and China.

“The young twigs are round, smooth, green, with below each lateral bud a pair of large, flat, greatly prolonged (if they might not be called winged), brown, glistening prickles which end, on their upper half, in a sharp straight spine; on the older twigs the prickles are round, straight, and very sharp, arising from a round basal expansion. The flowers borne on short lateral twigs, all along the secondary branches (one of the most striking features of the plant), are small, often less than one inch in diameter or, when exceptionally luxuriant, may be twice that size. Petals four, one large, another (opposite to it) small and the other two medium-sized, pure white or faintly tinged with pink toward the centre. Fruit the size of a pea, red and hairy.

“In Manipur this rose is exceedingly local and scarce; it was met with by me in two localities only, *viz.* near the village of Langda (altitude 6,000 feet), and again above the village of Ching Sow (altitude 7,500 feet). In the western Himalaya it is exceedingly plentiful in the Baghi district, some 50 miles north of Simla, at an altitude of from 9,000 to 14,000 feet above the sea. It is thus met with at considerably lower altitudes in the east than in the west.

“The extraordinary development of the prickles upon the young twigs led me at first to suspect that this was a quite distinct species from *Rosa sericea* Lindl. But I soon satisfied myself that the formation of flattened prickles was but a condition of growth, and in no way varietal in value. I have since repeatedly seen both conditions growing side by side and often from the same root. Certainly the Manipur plant seemed at first sight different (corresponding with var. *pteracantha*) from that which I had gathered in Sikkim and subsequently in Simla; but although hopeful at first of being able to confirm the impression thus formed in the field, when I placed the specimens side by side in the herbarium I had reluctantly to agree with the opinion arrived at by most botanists, namely, that the numerous forms referred to this plant constitute but one species, though it seems probable that that species has been confused, through the inclusion of certain forms that more correctly belong to *Rosa Webbiana* Wall., which may be regarded as its representative west and north of the Ravi, and is in fact the most common rose in Pangi and Ladakh.”

The most remarkable variety of *Rosa sericea* is var. *pteracantha* of Franchet,¹ which differs from the type in having remarkably dilated main prickles, decurrent, which, being translucent red on the young growths, give the plant an appearance of great beauty. This Rose was discovered in Yun-nan growing with the typical form, by the Abbé Delavay. Seeds were sent to M. de Vilmorin, who raised the plants now in cultivation. Another variety is *Rosa denudata* Franchet,¹ in which the stems are quite unarmed and the leaves glabrous beneath.

¹ *Plant. Delavay.*, pars i. p. 220 (1889).



52—ROSA SERICEA



53—ROSA LAXA Retz.

Rosa laxa: caule arcuato; aculeis majoribus, robustis, falcatis, saepe geminis infrastipularibus, aciculis intermediis, inaequalibus, setaceis additis; foliolis 7-9, oblongis, subacutis, firmulis, simpliciter serratis, utrinque glabris vel dorso parce pubescentibus; rhachi glabra vel pubescente, haud glandulosa; stipulis adnatis, apicibus liberis ovatis, parvis, patulis; floribus paucis, corymbosis vel solitariis; pedunculis nudis vel hispidis; calycis tubo oblongo, nudo; lobis ovatis, longe acuminatis, simplicibus, dorso nudis; petalis albis vel rubellis, magnitudine medio-cribus; stylis liberis, villosis; fructu globoso, nudo, rubro, pulposo; sepalis conniventibus, coronato pedunculo subcernuo.

R. laxa Retzius in Hoffmann, *Phyt. Blätt.* p. 39 (1803).—Seringe in De Candolle, *Prodr.* vol. ii. p. 605 (1825).—Fries, *Summa Veg. Scand.* p. 172 (1846).—Crépin in *Bull. Soc. Bot. Belg.* vol. xiii. pt. 2, p. 26 (*Primit. Monogr. Ros.* fasc. iii. p. 320) (1875).—Déséglise in *Bull. Soc. Bot. Belg.* vol. xv. (*Cat. Rais. Ros.* p. 107 [1877]) (1876).—Regel in *Act. Hort. Petrop.* vol. v. p. 330 (*Tent. Ros. Monogr.* p. 46 [1877]) (*excl. syn.*) (1878).—Koehne, *Deutsche Dendrol.* p. 295 (1893).

R. soongarica Bunge ex Ledebour, *Fl. Alt.* vol. ii. p. 226 (1830).

R. Gebleriana Schrenk in *Bull. Phys. Math. Acad. Sci. St. Pétersbourg*, vol. i. p. 80 (1843).—Ledebour, *Fl. Ross.* vol. ii. p. 76 (1844).

R. cinnamomea, var. *soongarica* Ledebour, *Fl. Ross.* vol. ii. p. 76 (1844).

Stem arching; *prickles* rather large, robust, falcate, some in infrastipular pairs with unequal setaceous aciculi also present. *Leaflets* 7-9, oblong, subacute, simply serrated, moderately firm in texture, glabrous on both surfaces or slightly pubescent beneath, the end one 1-1½ in. long; *petioles* glabrous or pubescent, not glandular; *stipules* adnate, with small, spreading, ovate free tips. *Flowers* 1-3; *pedicels* naked or hispid. *Calyx-tube* oblong, naked; *lobes* simple, ovate, with a very long point, ½-¾ in. long, naked on the back. *Petals* white or pink, middle-sized. *Styles* free, hairy. *Fruit* globose, naked, bright red, pulpy, crowned with the persistent connivent *sepals*; *fruit peduncle* subcernuous.

Although described in 1803 it was not until 1846 that this Rose was clearly understood. This will explain the many synonyms met with in its early history. The accounts given by Wikström,¹ Trattinick,² Sprengel,³ Seringe and Bunge⁴ threw very little light upon the identity of Retzius' type, but the careful descriptions given by Fries

¹ *Några Arter of Växtslägtet Rosa* in *K. V. Acad. Handl.* No. 3, t. iii. fig. 3 (1820).

² *Ros. Monogr.* vol. ii. p. 13 (1823).

³ *Syst. Veg.* vol. ii. p. 548 (1825).

⁴ In Ledebour, *Fl. Alt.* vol. ii. p. 226 (1830).

ROSA LAXA

and by Meyer,¹ who had himself collected it in Siberia, established the species.

Rosa laxa may be regarded as intermediate between *Rosa alpina* L. and *Rosa cinnamomea* L. From *Rosa acicularis* Lindl. it differs by its robust hooked main prickles, smaller, firmer, simply-toothed leaflets, and globose fruit. It is a native of the Altai Mountains and central Siberia. Although it has been long in cultivation in Sweden, it has not yet reached this country.

Lindley's later-named *Rosa laxa*² is a variety of *Rosa blanda* Ait. and must not be confused with *Rosa laxa* of Retzius.

¹ In *Mém. Acad. Sci. St. Pétersbourg*, sér. 6, vol. vi. pp. 6, 20 (*Ueber die Zimmtrosen*, pp. 6, 20) (1847).

² *Ros. Monogr.* p. 18, t. 12, No. 3 (1820).



53—ROSA LAXA



54—ROSA BEGGERIANA Schrenk

Rosa Beggeriana: caule erecto; aculeis robustis, conformibus, falcatis, saepe infrastipularibus geminis; foliolis 7-9, parvis, oblongis, acutis, simpliciter serratis, facie glabris, dorso glabris vel pubescentibus, haud glandulosis; rhachi glabra vel pubescente, haud glandulosa; stipulis adnatis, apice libero, parvo, ovato; floribus paucis, corymbosis; pedunculis brevibus, plerumque nudis; calycis tubo globoso, nudo; lobis lanceolatis, simplicibus, dorso nudis; petalis albis, parvis; stylis villosis, liberis, haud protrusis; fructu globoso, sordide rubro, nudo, magnitudine pisi; sepalis deciduis.

R. Beggeriana Schrenk, *Enum. Pl. Nov.* p. 73 (1841).—Ledebour, *Fl. Ross.* vol. ii. p. 82 (1844).—Crépin in *Bull. Soc. Bot. Belg.* vol. xiv. pp. 15-21 (*Primit. Monogr. Ros.* fasc. iii. pp. 309-315) (1875).—Regel in *Act. Hort. Petrop.* vol. v. p. 369 (*Tent. Ros. Monogr.* p. 85 [1877]) (1878).—Aitchison in *Journ. Linn. Soc.* vol. xix. p. 161, t. 7 (1882).—Christ in Boissier, *Fl. Orient. Suppl.* p. 208 (1888).

R. Silverhielmii Schrenk in *Bull. Scient. Acad. St. Pétersbourg*, vol. ii. p. 195 (1844).—K. Koch, *Dendrol.* vol. i. p. 249 (1869).

R. Lehmanniana Bunge, *Lehmann Rel. Bot.* p. 287 (1851).—Boissier, *Fl. Orient.* vol. ii. p. 678 (1872).

Stem erect, 3-4 feet high; *prickles* stout, hooked, uniform, often in pairs at the base of the leaves. *Leaflets* 7-9, small, oblong, acute, simply toothed, glabrous above, glabrous or pubescent beneath; *petioles* glabrous or pubescent, not glandular; *stipules* adnate, with small, ovate free tips. *Flowers* few, corymbose; *peduncles* short, usually naked; *bracts* ovate-lanceolate. *Calyx-tube* globose, naked, $\frac{1}{8}$ in. diam.; *lobes* simple, lanceolate, $\frac{1}{4}$ - $\frac{1}{3}$ in. long, naked on the back. *Corolla* white, 1 in. diam. *Styles* free, villous, not protruded. *Fruit* globose, dark red, naked, the size of a pea; *sepals* deciduous.

Rosa Beggeriana represents a small, well-marked group of species, widely spread over the tablelands of central Asia, which possess the geminate stipular prickles of *Rosa cinnamomea* L. and a small globose fruit not larger than a pea and not often seen on cultivated plants. Although not particularly ornamental, it is interesting on account of its curious double thorny stipules; by some authors these are considered stipules and by others thorns.

Its introduction into cultivation is due to Dr. J. E. T. Aitchison, botanist of the late Afghan Boundary Survey, who found it a common shrub at the western extremity of the Kurram district and throughout the Hariáb, in the vicinity of streams and watercourses. It is also

ROSA BEGGERIANA

very common in the neighbourhood of cultivated ground, where it forms natural hedges along the various channels of irrigation, at an altitude of from 4,000 to 9,000 feet. It forms a bush of from 4 to 6 feet in height. When in bloom it is covered with a mass of small pure white flowers which have a peculiar, somewhat briar-like scent. The fruit is little larger than an ordinary pea, at first orange-red and when fully ripe of a deep purple-black. This species is employed, as well as *Rosa Eglanteria* L., *Rosa Ecae* Aitch., the Gooseberry and Hippophae, in forming hedges in the Hariáb district, and is much browsed by cattle, especially goats.

Rosa anserinaefolia Boiss., which extends to the Himalaya, differs from *Rosa Beggeriana* mainly by its pubescent leaves. They are connected with the Sweet Briars through *Rosa lacerans* Boiss., which has doubly serrated leaflets, somewhat glandular beneath.

55—ROSA SETIPODA Hemsl. & E. H. Wils.

Rosa setipoda: caule arcuato; aculeis patulis, conformibus, oppositis vel sparsis, e basi lata subulatis, rectis; foliolis 7-9, oblongis, acutis, simpliciter serratis, utrinque glabris vel dorso pubescentibus; rhachi glabra, parce aciculata; stipulis adnatis, glandulis marginatis, apicibus liberis elongatis; floribus pluribus in paniculum corymbosum dispositis; pedunculis et pedicellis dense aciculatis; bracteis linearibus, parvis; calycis tubo angusto, aciculato vel nudo; lobis lanceolatis, apice elongato, foliaceo, dorso nudis; petalis latis, rubellis, calyce vix longioribus; stylis liberis, inclusis; fructu oblongo, apice constricto, rubro; sepalis erectis, persistentibus.

R. setipoda Hemsley & E. H. Wilson in *Kew Bull.* 1906, No. 5, p. 158.

Stem arching, 5-10 feet long; *prickles* opposite or scattered, spreading, straight, subulate from a dilated base. *Leaflets* 7-9, oblong, acute, simply serrated, thin, glabrous on both surfaces or pubescent beneath; *petioles* glabrous, with a few small prickles; *stipules* adnate, gland-margined, with long free points. *Flowers* many, arranged in a corymbose panicle with densely aciculate peduncle and pedicels; *bracts* linear, small. *Calyx-tube* narrow, aciculate or naked; *lobes* an inch long, lanceolate, foliaceous, with a long point, naked on the back. *Petals* pink, not longer than the calyx-lobes. *Styles* free, included. *Fruit* oblong with a constricted apex, bright red; *sepals* finally erect, persistent.

Rosa setipoda is closely allied to *Rosa macrophylla* Lindl., from which it differs principally by its densely aciculate peduncles and pedicels. It was first collected by Professor Henry in 1889 in the Fang district in the province of Hupeh in central China, and was afterwards found by Mr. E. H. Wilson in the same district at an elevation of 7,000 to 8,000 feet. Mr. Wilson says: "Its long pedicels clothed with spreading gland-tipped bristles and numerous foliaceous bracts give it a singular appearance."

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May 12, 1911

PART IX

THE GENUS ROSA

BY

ELLEN WILLMOTT, F.L.S.

Drawings by

ALFRED PARSONS, A.R.A.



LONDON

JOHN MURRAY, ALBEMARLE STREET, W.

1911

1891
Gray Herbarium
Harvard University



56—ROSA FENDLERI Crép.

Rosa Fendleri: caule elongato, arcuato; aculeis gracilibus, parvis, leviter falcatis, saepe geminis infrastipularibus, ad ramos steriles aciculis intermixtis; foliolis 5-7, obovato-oblongis, obtusis, firmis, opacis, simpliciter serratis, facie glabris, dorso leviter pubescentibus; rhachi aciculata, glabra vel pubescente; stipulis adnatis, glanduloso-ciliatis, apicibus liberis, parvis, ovatis; floribus saepe solitariis; pedicellis nudis; calycis tubo parvo, nudo, globoso; lobis simplicibus, apice elongato, dorso nudis; petalis parvis, cuneatis, rubellis; stylis pubescentibus, liberis, inclusis; fructu nudo, globoso, parvo, rubro, sepalis erectis coronato.

R. Fendleri Crépin in *Bull. Soc. Bot. Belg.* vol. xv. p. 91 (*Primit. Monogr. Ros.* fasc. iv. p. 452) (1876).—S. Watson in *Smithsonian Misc. Coll.* vol. xv. p. 310 (1878).—Coulter, *Man. Bot. Rocky Mount.* p. 88 (1885).—Macoun, *Cat. Canad. Plants*, vol. i. pt. 3, p. 521 (1886).—Rehder in Bailey, *Cycl. Am. Hort.* vol. iv. p. 1554 (1902).

R. parviflora Macoun, *Cat. Canad. Plants*, vol. i. pt. 1, p. 145 (*non* Ehrhart) (1883).

R. Woodsii Britton & Brown, *Ill. Fl. North States and Canada*, vol. ii. fig. 230 (*non* Lindley) (1897).

Stems arching, reaching a height of 6-8 feet; *prickles* small, slender, slightly hooked, often in infrastipular pairs, mixed with copious aciculi on the sterile shoots. *Leaflets* 5-7, obovate-oblong, obtuse, $\frac{1}{2}$ - $\frac{3}{4}$ in. long, firm, opaque, simply toothed, the side ones shortly stalked, the end one cuneate at the base, glabrous on the upper surface, slightly pubescent beneath; *petioles* aciculate, glabrous or pubescent; *stipules* adnate, gland-ciliated, with small ovate free tips. *Flowers* often solitary; *pedicels* naked. *Calyx-tube* small, globose, naked; *lobes* simple, lanceolate-acuminate, $\frac{1}{2}$ in. long, naked on the back. *Petals* small, cuneate, pink. *Styles* free, included, pubescent. *Fruit* small, red, globose or subglobose, crowned by the erect persistent *sepals*.

Rosa Fendleri inhabits the Rocky Mountains from West Texas and New Mexico to the Sierra Nevada, and northward into Canada. In New Mexico it reaches a height of 6,000-7,000 feet. It was first collected by Fendler in New Mexico in 1847. Amongst the *Cinnamomeae* with simple sepals it may easily be recognized by its early flowering, its small, obovate leaflets, and its small, globose, bright scarlet fruit crowned by the persistent sepals. It is rare in Europe in gardens.



56—ROSA FENDLERI

57—ROSA ELYMAITICA Boiss. & Haussk.

Rosa elymaitica: caulibus brevibus, ramosis; aculeis multis, conformibus, arcuatis, modice robustis, saepe geminis infrastipularibus; foliolis 3-5, orbicularibus, parvis, rigidulis, grosse simpliciter serratis, facie tenuiter, dorso dense pubescentibus; rhachi dense pubescente, parce glandulosa; stipulis adnatis, apicibus liberis, parvis, latis; pedunculis brevissimis, hispidis, saepissime solitariis; calycis tubo oblongo, hispido; lobis ovatis, acuminatis, parce compositis, dorso pubescentibus; petalis parvis, albis vel roseis; stylis villosis, liberis; fructu globoso, rubro, hispido, sepalis subpersistentibus patulis coronato.

R. elymaitica Boissier & Haussknecht, *Fl. Orient.* vol. ii. p. 675 (1872).—Crépin in *Bull. Soc. Bot. Belg.* vol. xiii. p. 278 (*Primit. Monogr. Ros.* fasc. iii. p. 285) (1874).—Déséglise in *Bull. Soc. Bot. Belg.* vol. xv. p. 278 (*Cat. Rais. Ros.* p. 109 [1877]) (1876).—Christ in Boissier, *Fl. Orient.* Suppl. p. 227 (1888).

R. albicans Godet ex Boissier, *Fl. Orient.* vol. ii. p. 675 (1872).

Stems short, much branched; prickles numerous, uniform, curved, moderately robust, often in infrastipular pairs. Leaflets 3-5, orbicular, $\frac{1}{4}$ - $\frac{1}{3}$ in. long, obtuse, rather rigid, simply conspicuously serrated, thinly pubescent on the upper surface, densely pubescent but not glandular beneath; petioles pubescent, obscurely glandular; stipules adnate, with short, broad, free tips. Peduncles very short, hispid, usually solitary. Calyx-tube oblong, hispid; lobes ovate-acuminate, $\frac{1}{3}$ in. long, slightly compound, pubescent on the back. Petals white or rose-red, not longer than the sepals. Styles free, villous. Fruit globose, hispid, dark red, $\frac{1}{3}$ in. diameter, crowned by the subpersistent spreading sepals.

This interesting Persian species was first discovered by Aucher Eloy and later by Bunge at Teheran, but was only distributed under herbarium numbers. Haussknecht collected it in 1867-68 in Kurdistan on Mount Parrow below Kirmanscha, and in Persia at Teng Nalli, ascending to altitudes of from 7,000 to 9,000 feet. Crépin intended to dedicate it to Haussknecht, but did not publish the name, and it was not until several years later that Boissier and Haussknecht described it under the name of *Rosa elymaitica*.

It is a very distinct species and has been classed with the *Cinnamomeae*, although presenting several marked differences from other species of this group. Its principal characters are its dwarf, compact habit, and large, curved, uniform prickles, its very small,

ROSA ELYMAITICA

orbicular, rigid, conspicuously toothed leaflets, and small flowers and fruit.

It has not been cultivated in England.

Rosa albicans of Godet is a variety with the leaves and stems clothed with dense, loose, white tomentum.



58—ROSA RUGOSA Thunb.

Rosa rugosa: caulibus erectis, ramosis; ramis junioribus viridibus; aculeis densis, rectis, gracilibus, valde inaequalibus; foliolis 7-11, oblongis vel obovatis, breviter simpliciter serratis, rugosis, facie viridibus, glabris, dorso pallidis, pubescentibus; rhachi pubescente; aciculis saepe falcatis; stipulis apice libero, ovato-acuminato; floribus paucis, corymbosis vel solitariis; bracteis ovatis, magnis, dorso pubescentibus; pedicellis brevibus, nudis; calycis tubo globoso, nudo; lobis lanceolatis, simplicibus, apice foliaceis; petalis magnis, saturate rubris, raro albis; fructu magno, depresso-globoso, nudo, sepalis persistentibus coronato.

R. rugosa Thunberg, *Fl. Jap.* p. 213 (1784).—Lindley, *Ros. Monogr.* p. 5, No. 3, t. 19 (1820).—Seringe in De Candolle, *Prodr.* vol. ii. p. 607 (1825).—Siebold & Zuccarini, *Fl. Jap.* vol. i. p. 66, t. 28 (1835).—Fr. Schmidt in *Mém. Acad. Sci. St. Pétersbourg*, sér. 7, vol. xii. No. 2, p. 128 (*Fl. Sachalinensis*) (1868).—Crépin in *Bull. Soc. Bot. Belg.* vol. xi. p. 52 (*Primit. Monogr. Ros.* fasc. ii. p. 168) (1872); vol. xiv. p. 41 (*Primit. Monogr. Ros.* fasc. iii. p. 335) (1875).—Franchet & Savatier, *Enum. Fl. Jap.* vol. i. p. 137 (1874).—*Garden*, vol. ix. t. 20 (May 13, 1876).—*Gard. Chron.* n. ser. vol. xiv. p. 372, fig. 72 (1880).—Forbes & Hemsley in *Journ. Linn. Soc.* vol. xxiii. p. 253 (1887).

R. ferox Aiton, *Hort. Kew.* ed. 2, vol. iii. p. 262 (1811).—Lindley in *Bot. Reg.* vol. v. t. 420 (1819); *Ros. Monogr.* p. 3, No. 2 (1820).

R. kamtchatica Thory in Redouté, *Roses*, vol. i. p. 47, t. (*non* Ventenat) (1817).

R. Regeliana Linden & André in *Ill. Hort.* 1871, p. 11.

R. Andreae Lange, *Ind. Sem. Hort. Haun., Adnot.* p. 23 (1874).

Stem erect, branched, 4-5 feet long; young *branches* pale green. *Prickles* dense, slender, straight, very unequal, passing gradually into aciculi. *Leaflets* 7-11, usually 9, oblong or obovate, large, thick, rugose, dull green and glabrous above, pubescent and pale with the veins much raised beneath, shallowly simply toothed; *petioles* pubescent, with a few straight or falcate aciculi; *stipules* very broad, with ovate-acuminate free tips. *Flowers* few, corymbose or solitary; *bracts* large, ovate, pubescent on the back; *pedicels* short, naked. *Calyx-tube* globose, naked; *sepals* lanceolate, simple, 1 in. long, pubescent, leafy at the tip. *Petals* 1-1½ in. long, bright red, rarely white. *Carpels* 50-60; *styles* villous, not protruded beyond the disc. *Fruit* depresso-globose, naked, bright red, pulpy, 1-1½ in. diameter, crowned by the persistent sepals.

Rosa rugosa is common in Japan and extends to eastern Siberia, Kamschatka and the north of China. Siebold describes it as growing on the sand-hills by the seashore towards the north of Nippon, where it is called by the natives *Hama Nasu*, the "Shore Bringal."¹

¹ Bringal is the Anglo-Indian name of the fruit of the Egg-plant or Aubergine (*Solanum Melongena*).

ROSA RUGOSA

Thunberg described it many years before it was cultivated in Europe. Bunge saw it in cultivation in the north of China, and most probably it was this Rose which was seen by La Pérouse in the Bay of Ternai on the coast of Tartary.¹ Its introduction into this country in 1796 is due to Messrs. Lee and Kennedy, to whom we owe so many of the good plants in our gardens. In cultivation with us it is the least exacting of all the Roses, every position and every soil suiting it perfectly. It hybridizes freely and seems to preserve at least one distinctive character, that of its reticulate, rugose leaves, which appears in a greater or lesser degree in all the hybrids, certainly to the third generation.

Meyer in his monograph on the *Cinnamomeae*² names and describes six varieties, which he calls respectively *Thunbergiana*, *ferox*, *Lindleyana*, *Chamissoana*, *Ventenatiana* and *subinermis*.

This Rose is figured by Andrews³ and by Miss Lawrance⁴ under the name of *Rosa ferox*.

¹ *Voyage de La Pérouse autour du Monde*, vol. iii. p. 49 (1798).

² In *Mém. Acad. Sci. St. Pétersbourg*, sér. 6, vol. vi. p. 33 (*Ueber die Zimmtrosen*, p. 33) (1847).

³ *Roses*, vol. ii. t. 129 (1828).

⁴ *Roses*, t. 42 (1799).



58—ROSA RUGOSA



59—ROSA WARLEYENSIS (*nov. hyb.*)

(ROSA RUGOSA × BLANDA)

Rosa warleyensis: caulibus armatissimis; aculeis gracilibus, subulatis, interdum geminis infrastipularibus; foliolis 5-7, oblongis, viridibus, modice rugosis, facie glabris, dorso leviter pubescentibus, haud glandulosis; rhachi pubescente, aciculata; stipulis adnatis, latis, margine haud glandulosis, apicibus liberis, ovatis; floribus solitariis; pedunculis nudis; calycis tubo globoso, nudo; lobis basi ovatis, apicibus elongatis; petalis magnitudine mediocribus, rubellis; stylis liberis, villosis; fructu globoso, nudo, rubro, sepalis erectis persistentibus coronato.

R. rugosa × *virginiana* Koehne, *Deutsche Dendrol.* p. 298 (1893).—Keller in Ascherson & Graebner, *Syn. Mitteleur. Fl.* vol. vi. p. 307 (1902).

Stems much armed; *prickles* slender, subulate, passing gradually into copious aciculi, some in infrastipular pairs. *Leaflets* 5-7, oblong, middle-sized (1-1½ in. long), green, less rugose than in *Rosa rugosa*, glabrous on the upper surface, thinly pubescent, not at all glandular beneath; *petioles* pubescent and aciculate; *stipules* adnate, broad, not gland-margined, with ovate free tips. *Flowers* solitary; *peduncles* naked. *Calyx-tube* globose, naked; *lobes* ovate at the base, with a long point, ⅓-½ in. long. *Petals* middle-sized, pink. *Styles* free, villous. *Fruit* globose, naked, bright red, ⅓-½ in. diameter, crowned with the erect persistent *sepals*.

The drawing represents one of the many *Rosa rugosa* Thunb. hybrids. In all Rose hybrids and crosses there is generally one character which persists until at least the third or fourth generation. Thus the *Rosa multiflora* Thunb. crosses have ciliated stipules, and in the *Rosa rugosa* hybrids the character of the reticulated, deeply veined, rough, dark green leaves is found with but little modification in all the hybrids now known. *Rosa warleyensis* was raised from seeds which were sent to Warley many years since and which were said to have been gathered from a wild Rose. It shows unmistakable signs of *Rosa blanda* Ait. influence, and is in fact about midway between its two parents. It is a pretty and free-flowering Rose, quite distinct from the generality of *Rosa rugosa* hybrids, and it well deserves a place in the garden.



59—ROSA WARLEYENSIS
(RUGOSA × BLANDA)



60—ROSA CALOCARPA

(ROSA RUGOSA × CHINENSIS)

Rosa calocarpa: caule satis alto, arcuato; aculeis densis, vel gracilibus et rectis, vel robustioribus et leviter falcatis; foliis 5-7, oblongis, acutis, simpliciter late dentatis, facie viridibus, parce pubescentibus, dorso pallidis, pubescentibus; rhachi pubescente, aciculata, haud glandulosa; stipulis adnatis, apicibus liberis, parvis, ovatis; floribus saepe pluribus, corymbosis; pedicellis brevibus, leviter aciculatis; calycis tubo globoso, nudo; lobis simplicibus, apicibus elongatis, pubescentibus, dorso glandulosis, parce aciculatis; petalis sordide rubris, late cuneatis; stylis liberis, inclusis, pubescentibus; fructu parvo, globoso, rubro, nudo vel basi parce aciculato; sepalis demum deciduis.

R. rugosa calocarpa André in *Rev. Hort.* p. 129, fig. 35 (1891).

R. rugosa × *indica* Crépin in *Bull. Soc. Bot. Belg.* vol. xxxiii. p. 122 (1894).

R. chinensis × *rugosa* Keller in Ascherson & Graebner, *Syn. Mitteleur. Fl.* vol. vi. p. 371 (1902).

Stem moderately tall, arching; *prickles* copious, passing gradually into aciculi, slender and straight, or more robust and slightly hooked. *Leaflets* 5-7, oblong, acute, 1-2 in. long, simply openly toothed, green and slightly pubescent on the upper surface, pale and pubescent all over beneath; *petioles* pubescent and aciculate, not glandular; *stipules* adnate, with small ovate free tips. *Flowers* often several, corymbose; *pedicels* short, slightly aciculate. *Calyx-tube* globose, naked; *lobes* simple, long-pointed, pubescent, glandular and slightly aciculate on the back. *Petals* dark red, broadly cuneate, middle-sized. *Styles* free, included, pubescent. *Fruit* small, globose, bright red, naked or slightly aciculate towards the base; *sepals* finally deciduous.

Rosa calocarpa is one of the many beautiful *Rosa rugosa* Thunb. hybrids raised by Bruant of Poitiers. It was described by Edouard André in the *Revue Horticole* of 1891 and put into commerce in 1895. It was one of a batch of seedlings resulting from *Rosa rugosa* being crossed with the common *China Rose*. Bruant noticed among the seedlings one with very bright pink flowers smaller than the type but more regular in form. The plant was kept under observation, and blossomed very freely from spring until late in the summer, and in autumn was covered with clusters of brilliant red fruits which kept their colour and beauty to the end of the year, notwithstanding the intense

ROSA CALOCARPA

cold of the winter of 1891 in France. This Rose, now to be found in many gardens, has thoroughly justified the favourable opinion first formed of it. It is especially adapted for planting in groups in the wild garden, where it is as brilliant an object in winter as it is in summer, for the colour of the fruit is so vivid a scarlet that it is visible from afar. It begins to flower the second year after grafting, and then continues each succeeding year to produce flowers and fruit in great profusion.



60—ROSA CALOCARPA
(RUGOSA × CHINENSIS)



61—ROSA IWARA Siebold

(ROSA RUGOSA × MULTIFLORA)

Rosa Iwara: caulibus erectis, arcuatis, modice longis; ramis viridibus, dense pubescentibus, aculeis copiosis, gracilibus, aciculis inaequalibus, setis glandulosis armatis; foliolis 7, magnis, oblongis, acutis, viridibus, simpliciter serratis, haud rugosis nec valde venatis, utrinque glabris; rhachi dense pubescente, haud glandulosa; stipulis angustis, adnatis, laciniatis, apice libero, angusto, laciniato; pedicellis leviter hispidis; calycis tubo parvo, globoso, nudo vel leviter aciculato; lobis lanceolatis, integris, longe productis, dorso dense pubescentibus; petalis parvis, albis; stylis liberis, hispidis, haud protrusis; fructu parvo, rubro, globoso.

R. Iwara Siebold *ex* Regel, *Ind. Sem. Hort. Petrop.* p. 53 (1861).—Regel in *Act. Hort. Petrop.* vol. v. p. 381 (*Tent. Ros. Monogr.* p. 97 [1877]) (1878).—K. Koch, *Dendrol.* vol. i. p. 237 (1869).—Crépin in *Bull. Soc. Bot. Belg.* vol. xiii. p. 261 (*Primit. Monogr. Ros.* fasc. iii. p. 268) (1874).—Rehder in Bailey, *Cycl. Am. Hort.* vol. iv. p. 1549 (1902).

Stems erect, arching, moderately tall; *branches* green, densely pubescent, with copious slender prickles, irregular aciculi and a few glandular bristles. *Leaflets* 7, large, oblong, acute, dull green, simply broadly serrated, not rugose or strongly veined, pubescent on both surfaces; *petioles* densely pubescent, not glandular; *stipules* narrow, adnate, laciniated, with narrow, laciniated free tips; *bracts* large, pubescent, oblong or lanceolate; *pedicels* slightly hispid. *Calyx-tube* small, globose, naked or slightly aciculate; *lobes* lanceolate, entire, long-pointed, densely pubescent on the back. *Petals* small, usually white. *Styles* free, hairy, not protruded beyond the disc. *Fruit* small, red, globose.

Rosa Iwara is first mentioned in the Year-book of the Royal Horticultural Society of the Netherlands¹ for 1844. This volume contains a list of names of “old and newly imported Japanese and Chinese plants cultivated under the auspices of the Society in the nursery-garden of Siebold & Co. at Leyden, and on sale there.” In this list the plant is given as *Rosa Iwara* Siebold, habitat Japan, a decorative and medicinal shrub, imported by Siebold in 1832, raised from seed, and growing in the open air.² It is described as “A species of *Rosa multiflora* which, notwithstanding its small, single, white flowers, may be regarded as one of the most beautiful of shrubs.”

¹ *Jaarboek van de Koninklijke Nederlandsche Maatschappij tot Aanmoediging van den Tuinbouw* (1845).

² P. 36.

ROSA IWARA

The price of shoots is 10 guilders, of plants grafted on wild Roses 6 guilders.¹ In an account of Siebold's garden in the same volume the writer says: "The *Rosa Iwara* raised by us from seed in 1832 has withstood the winter in the open air for more than ten years; it is now a shrub some six feet high, and is the first in our garden to produce its leaves and the last to lose them."² The list is quoted in the *Revue Horticole*, 1845, p. 224.

Rosa Iwara was described in 1861 by Dr. Regel, and in 1869 by Koch, who calls it also *Rosa Ibara*. Crépin's description was based on plants in Prince Walferdange's garden in Luxembourg, whither they had been sent by Siebold himself in 1849. It is believed to have been a spontaneous hybrid between *Rosa multiflora* Thunb., from which parent it has its scattered, unequal prickles, protruded styles and ciliated stipules, and *Rosa rugosa* Thunb., from which it has its dull green, shallowly toothed leaflets, few-flowered corymbs and globose ovary. It bears clusters of pure white flowers about mid-summer, and its distinct character makes a welcome variation from other garden Roses.

¹ P. 38.

² P. 27.

62—ROSA WILLMOTTIAE Hemsl.

Rosa Willmottiae: caule suberecto ramoso; aculeis geminis infrastipularibus, subulatis, patulis, rectis, pallide bruneis, aciculis intermediis nullis; foliis 9, oblongis, perparvis, obtusis, firmis, glabris, valde simpliciter serratis; rhachi nuda; stipulis adnatis, glandulis valde marginatis, apicibus liberis, oblongis, obtusis; floribus rubellis, solitariis; pedicellis modice longis, nudis; sepalis lanceolatis, simplicibus, dorso glabris; petalis latis, sepalis duplo longioribus; stylis liberis, parce pilosis; fructu oblongo, rubro, glabro; sepalis demum deciduis.

R. Willmottiae Hemsl. in *Kew Bull.* 1907, No. 8, p. 317.—*Bot. Mag.* vol. cxxxiv. t. 8186 (1908).

A suberect, much-branched bush 5 to 10 feet high; *prickles* in infrastipular pairs, spreading, subulate, pale brown, without any intermediate aciculi. *Leaflets* 9, oblong, obtuse, very small, glabrous, firm in texture, strongly simply toothed; *petioles* naked; *stipules* adnate, conspicuously margined with glands, with oblong obtuse free tips. *Flowers* bright pink, solitary, with moderately long naked *pedicels*. *Calyx-tube* oblong, glabrous; *lobes* lanceolate, simple, $\frac{1}{3}$ in. long, glabrous on the back. *Petals* broad, twice as long as the sepals. *Styles* free, slightly hairy. *Fruit* oblong, red, naked; *sepals* finally deciduous.

This interesting new species was raised by Messrs. James Veitch & Sons from seeds collected by Mr. E. H. Wilson on the Sangpan Mountains in south-western China near the border of Tibet, at an elevation of 9,500 to 11,000 feet. It comes nearest to the West Himalayan *Rosa Webbiana* Wall., but that Rose has straw-coloured prickles, fewer leaflets (usually seven), stipules without glands on the edge and sepals much longer in proportion to the petals.

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June 14, 1911

PART X

THE GENUS ROSA

BY

ELLEN WILLMOTT, F.L.S.

Drawings by

ALFRED PARSONS, A.R.A.



LONDON

JOHN MURRAY, ALBEMARLE STREET, W.

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Gray Herbarium
Harvard University



63—ROSA VIRGINIANA Mill.

Rosa virginiana: caule erecto; ramis floriferis saepe inermibus; aculeis inaequalibus, rectis vel leviter falcatis, saepe ad basim foliorum solitariis vel geminis; foliolis 7-9, oblongis, obtusis, rigidulis, conspicue simpliciter serratis, facie lucidis, viridibus, dorso interdum leviter pubescentibus; rhachi glabra vel pubescente, haud glandulosa; stipulis adnatis, apice libero, parvo, deltoideo; floribus paucis, corymbosis vel solitariis; pedunculis nudis vel leviter setosis; bracteis lanceolatis; calycis tubo globoso; lobis elongatis, apice foliaceis, dorso glandulosis, simplicibus, vel exterioribus parce pinnatifidis; petalis rubellis; stylis liberis, pilosis, haud protrusis; fructu parvo, globoso, rubro, serotino; sepalis reflexis, deciduis.

R. virginiana Miller, *Gard. Dict.* ed. 8, vol. ii. No. 10 (1768).—Keller in Ascherson & Graebner, *Syn. Mitteleur. Fl.* vol. vi. p. 297 (1902).—C. K. Schneider, *Ill. Handbuch Laubholz.* vol. i. p. 570 (1906).—Robinson & Fernald, *Gray's New Man. Bot.* ed. 7, p. 497 (1908).

R. carolina Linnaeus, *Sp. Plant.* vol. i. p. 492 (*ex parte*) (1753).—Aiton, *Hort. Kew.* vol. ii. p. 203 (*ex parte*) (1789).

R. lucida Ehrhart, *Beitr. zur Naturk.* vol. iv. p. 22 (1789).—Guimpel, Willdenow & Hayne, *Abbild. Deutsch. Holzart.* vol. i. p. 117, t. 93 (1815).—Thory in Redouté, *Roses*, vol. i. p. 45, t. (1817).—Savi, *Fl. Ital.* vol. i. p. 71, t. 23 (1818).—*Nouv. Duhamel*, vol. vii. p. 17, t. 7, fig. 2 (1819).—Lindley, *Ros. Monogr.* p. 17, No. 11 (1820).—Seringe in De Candolle, *Prodr.* vol. ii. p. 602 (1825).—A. Gray, *Man. Bot. N. States*, ed. 5, p. 158 (*ex parte*) (*non* Lawrance, *Roses*, t. 84) (1867).—S. Watson in *Smithsonian Misc. Coll.* vol. xv. p. 311 (1878).—Rehder in Bailey, *Cycl. Am. Hort.* vol. iv. p. 1554 (1902).

R. humilis, var. *lucida*, Best in *Bull. Torrey Bot. Club*, vol. xiv. p. 276 (1887).—Britton & Brown, *Illust. Fl. N. States and Can.* vol. ii. p. 231 (1897).

An erect bush, reaching a height of 4-6 feet; *branches* red-brown in exposure; flowering shoots often unarmed. *Prickles* unequal, straight or slightly hooked, often solitary or in pairs at the base of the leaves. *Leaflets* 7-9, oblong, obtuse, moderately firm, middle-sized, simply deeply toothed, green and glossy above, glabrous or slightly pubescent beneath; *petioles* glabrous or pubescent, not glandular; *stipules* adnate, with small deltoid free tips. *Flowers* few in a corymb or solitary; *peduncles* naked or slightly setose; *bracts* lanceolate. *Calyx-tube* globose; *lobes* an inch or more long, leafy at the tip, glandular on the back, all simple or the outer slightly compound. *Petals* bright pink. *Styles* free, villous, not protruded beyond the disc. *Fruit* globose, bright red, $\frac{1}{2}$ in. diameter, late in ripening; *sepals* reflexed, deciduous.

Rosa virginiana in a wild state extends in the neighbourhood of the coast from Newfoundland to Pennsylvania. It may be easily distinguished by its deeply toothed, glossy leaves. It was the first of

ROSA VIRGINIANA

the American species to be introduced into Europe, and is still a favourite in gardens. It is the *Rosa sylvestris virginiensis* of Parkinson¹ and the *Rosa parvo rubello flore foliis lucentibus* of Sutherland.² Dillenius figures it in *Hortus Elthamensis* under the name of *Rosa carolina fragrans*,³ and his figure is cited by Linnaeus and Aiton under *Rosa carolina* L. There can be no doubt about the synonym of Miller, as there is an authentic specimen from his herbarium at the British Museum. Lindley has identified this on the sheet as *Rosa lucida* Ehrh., but by mistake he cites Miller's plant under *Rosa fraxinifolia* Borkh.,⁴ which has misled K. Koch⁵ and Koehne,⁶ who have taken up Miller's name for *Rosa blanda* Ait.

The double-flowered form, *Rose d'Amour*, has been a favourite in English gardens since Miller introduced it in 1768. It has been identified with *Rosa rapa* of Bosc, and both the double and single forms are the St. Mark's Rose of Venice, where it is expected to flower on April 25th, St. Mark's day.

This Rose is more commonly known as *Rosa lucida* Ehrh., but as the latter name was not given until some twenty years after it had been described by Miller as *Rosa virginiana*, we follow the rule of priority and adopt Miller's name.

For its many good points this Rose has every claim to our appreciation; it is equally valuable in garden and in woodland. The individual flowers remain long on the bush, the outer petals becoming paler while the centre keeps its bright, rich colour. The leaves, which are a glossy polished green in summer, turn a brilliant yellow in autumn, and remain long on the branches, while the clusters of bright red fruit give it a glowing beauty scarcely to be surpassed. Harshberger, writing in *Garden and Forest*, describes the beauty of *Rosa virginiana* as he saw it with its half-ripe hips tinged with orange, glistening in the sunlight on Barnegat Peninsula, flourishing in sand and rejoicing in the salt-laden breezes.⁷

Andrews figures this Rose under the names of *Rosa lucida* and *Rosa pennsylvanica fl. pl.*⁸

¹ *Theatrum*, p. 1017 (1640).

² *Hort. Med. Edin.* p. 297 (1683).

³ Vol. ii. p. 325, t. 245, fig. 316 (1732).

⁴ *Ros. Monogr.* p. 26, No. 17 (1820); *Bot. Reg.* vol. vi. t. 458 (1820).

⁵ *Dendrol.* vol. i. p. 243 (1869).

⁶ *Deutsche Dendrol.* pp. 298, 299 (1893).

⁷ Vol. v. p. 45 (1892).

⁸ *Roses*, vol. ii. plates 78, 101, 102 (1828).





63—ROSA VIRGINIANA



64—ROSA HUMILIS Marsh

Rosa humilis: caulibus decumbentibus; aculeis parvis, modice robustis, haud falcatis, saepe geminis stipularibus, aciculis paucis, interdum additis; foliis 5-9, oblongis, acutis, simpliciter serratis, facie glabris, dorso parce pubescentibus; rhachi glabra, haud glandulosa; stipulis adnatis, apice libero ovato; floribus solitariis vel paucis; pedunculis brevibus, saepe aciculatis; calycis tubo globoso, parvo, saepe aciculato, glanduloso; lobis lanceolatis, apice elongatis, dorso glandulosis, majoribus saepe parce pinnatifidis; petalis rubris, magnitudine mediocribus; stylis pilosis, liberis, haud exsertis; fructu parvo, globoso, rubro, saepe aciculato; sepalis patulis, deciduis.

R. humilis Marshall, *Arbust. Amer.* p. 136 (1785).—S. Watson in *Smithsonian Misc. Coll.* vol. xv. p. 312 (1878).—Dippel, *Handbuch Laubholzsk.* vol. iii. p. 580 (1893).—Rehder in Bailey, *Cycl. Am. Hort.* vol. iv. p. 1554 (1902).

R. parviflora Ehrhart, *Beitr. zur Naturk.* vol. iv. p. 21 (1789).—Pursh, *Fl. Amer. Sept.* vol. i. p. 344 (1814).—Lindley, *Ros. Monogr.* p. 20 (*excl. syn.*) (1820).

R. carolina Aiton, *Hort. Kew.* vol. ii. p. 203 (*ex parte*) (1789).

R. Lyoni Pursh, *Fl. Amer. Sept.* vol. i. p. 345 (1814).

R. lucida A. Gray, *Man. Bot. N. States*, p. 127 (*ex parte*) (*non* Ehrhart) (1848).—Meehan, *Native Flowers*, ser. 1, vol. ii. p. 33, t. 9 (1879).

R. humilis, var. *parviflora* Koehne, *Deutsche Dendrol.* p. 293 (1893).—Keller in Ascherson & Graebner, *Syn. Mitteleur. Fl.* vol. vi. p. 292 (1902).

R. virginiana, var. *humilis* C. K. Schneider, *Ill. Handbuch Laubholzsk.* vol. i. p. 570 (1906).

Stems usually low and spreading; *prickles* small, moderately stout, not hooked, frequently in stipular pairs, often with a few aciculi. *Leaflets* 5-9, oblong, acute, simply serrated, 1 in. or more long, glabrous on the upper surface, slightly pubescent beneath; *petioles* glabrous or pubescent, not glandular; *stipules* adnate, with ovate free tips. *Flowers* one or few; *peduncles* short, often aciculate; *bracts* small. *Calyx-tube* globose, small, often aciculate and glandular; *lobes* lanceolate, long-pointed, glandular on the back, the largest usually sparsely pinnatifid. *Petals* bright red, 1 in. long. *Styles* pilose, free, not protruded beyond the disc. *Fruit* small, globose, red, often aciculate; *sepals* spreading, deciduous.

Rosa humilis ranges from Canada and Newfoundland through the eastern United States to Florida. The oldest specimen known is that collected by Bartram in 1764, but it was first described by Marshall in 1785. By Aiton, and perhaps also by Linnaeus, it was confused with *Rosa carolina* L.

Next to *Rosa carolina* it is the commonest Rose in Virginia, eastern Tennessee and Carolina. The double form had never been

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observed in a wild state until 1889, when Mr. G. N. Best found a large colony of it growing by the roadside near Rosemont, New Jersey.

In general this Rose prefers the shade, and it is in such positions that it usually grows. Although subject to variation, it has certain characters which distinguish it from other Roses in the same group, notably its slender growth, low and spreading habit, rather long, straight prickles and narrow stipules. The flowers are bright pink, symmetrical in form and fragrant. The fruit is neither so bright in colour nor so persistent as in the other Roses of the same group.





65—ROSA HUMILIS × RUGOSA Koehne

Rosa humilis × *rugosa*: caulibus brevibus, decumbentibus; aculeis parvis, modice robustis, interdum geminis infrastipularibus; foliis 7, oblongis, obtusis, simpliciter serratis, facie glabris, dorso pubescentibus; rhachi pubescente, haud glandulosa; stipulis adnatis, apicibus liberis, integris, deltoideis; floribus solitariis; pedicellis elongatis, glabris, parce aciculatis; calycis tubo ovoideo, parce aciculato; lobis lanceolatis, apicibus elongatis, simplicibus, pubescentibus, dorso multis aciculis armatis; petalis magnitudine mediocribus, rubris; stylis liberis, haud exsertis.

R. humilis × *rugosa* Koehne, *Deutsche Dendrol.* p. 294 (1893).—Keller in Ascherson & Graebner, *Syn. Mitteleur. Fl.* vol. vi. p. 308 (1902).

Stem low, spreading; *prickles* small, moderately stout, sometimes in infrastipular pairs, without any intermediate aciculi. *Leaflets* 7, oblong, obtuse, simply serrated, the larger an inch or more long, glabrous on the upper surface, pubescent beneath; *petioles* pubescent, not glandular; *stipules* adnate, with deltoid entire free tips. *Flowers* solitary; *pedicels* long, glabrous, slightly aciculate. *Calyx-tube* ovoid, slightly aciculate; *lobes* lanceolate with a long point, simple, 1 in. long, pubescent and furnished with many aciculi on the back. *Petals* middle-sized, dull purplish red. *Styles* free, not protruded beyond the disc.

This hybrid between *Rosa humilis* Marsh. and *Rosa rugosa* Thunb. was raised not long ago in America. The characters of the *humilis* parent greatly predominate in it over those of the *rugosa* parent. Although the colour is not particularly pleasing, it is nevertheless a useful Rose, and is especially well adapted for the wild garden and for hedges and plantations. It is exceedingly floriferous, hardy and quick growing, and forms a thick, compact bush, while its abundant and bright-coloured fruits make it very ornamental in the autumn.



65—ROSA HUMILIS × RUGOSA



66—ROSA HUMILIS, var. GRANDIFLORA Baker

Rosa humilis, var. *grandiflora*: a typo recedit floribus magnis.

Rosa humilis, var. *grandiflora* is a native of the northern United States. It differs from the ordinary form by its larger flowers, which are two inches in diameter.

67—ROSA MULTIBRACTEATA Hemsl. & E. H. Wils.

Rosa multibracteata: caule ramosissimo; aculeis oppositis vel sparsis, magnis, subulatis, rectis, patentibus, aciculis intermediis nullis; foliis 5-7, parvis, obovatis, obtusis, basi cuneatis, crassis, rigidulis, simpliciter serratis, utrinque glabris; rhachi et petiolo glabris; stipulis adnatis, rigide chartaceis, pallidis, glabris, apicibus liberis deltoideis, parvis; floribus in thyrsus terminalem dispositis; pedicellis nudis; bracteis conspicuis, rigide chartaceis, pallidis; calycis tubo globoso, nudo; sepalis ovatis, simplicibus, tubo aequilongis; petalis latis, emarginatis, sepalis vix longioribus; stylis liberis, pilosis; fructu parvo, globoso, nudo, sepalis erectis persistentibus coronato.

R. multibracteata Hemsley & E. H. Wilson in *Kew Bull.* 1906, p. 157.

Stems much branched, 5-6 feet long; *prickles* opposite or scattered, large, subulate, spreading, straight, without any aciculi intermixed. *Leaflets* 5-7, obovate-cuneate, $\frac{1}{4}$ - $\frac{1}{3}$ in. long, obtuse, simply serrated, dark green, somewhat rigid in texture, glabrous on both surfaces; *petioles* glabrous; *stipules* adnate, rigidly chartaceous, pale, glabrous, with small deltoid free tips. *Flowers* in a close thyrsus at the end of each branchlet; *pedicels* naked; *bracts* conspicuous, similar in texture and colour to the stipules. *Calyx-tube* small, globose, glabrous; *lobes* lanceolate, simple, $\frac{1}{4}$ in. long. *Petals* broad, emarginate, a little longer than the sepals. *Styles* free, pilose. *Fruit* globose, small, naked, crowned with the erect persistent sepals.

This very distinct new species is nearest to *Rosa Webbiana* Wall. and *Rosa Willmottiae*, but differs from them both by its thyrsoid inflorescence and by its very peculiar pale rigid chartaceous stipules and bracts. It was found by Mr. E. H. Wilson in the Min valley in the province of Sze-chuan, between Mao-chou and Sangpan, at an elevation of 7,000 feet.

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„	VIII	„	April	12,	„
„	IX	„	May	12,	„
„	X	„	June	14,	„

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PART XI

THE GENUS ROSA

BY

ELLEN WILLMOTT, F.L.S.

Drawings by

ALFRED PARSONS, A.R.A.



⁴ LONDON

JOHN MURRAY, ALBEMARLE STREET, W.

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68—ROSA CAROLINA L.

Rosa carolina: caule elongato, arcuato; aculeis conformibus, gracilibus, saepe geminis infrastipularibus; foliis 5-7, oblongis, acutis, leviter simpliciter serratis, utrinque griseo-pubescentibus; rhachi pubescente, haud glandulosa; stipulis adnatis, apice libero parvo, ovato, acuto; floribus saepe paucis, corymbosis; pedunculis glandulosis; bracteis ovatis; calycis tubo globoso, saepe glanduloso; lobis elongatis, apice foliaceis, simplicibus vel parce pinnatifidis, dorso glandulosis; petalis rubellis; stylis villosis, liberis, haud protrusis; fructu parvo, urceolato-globoso, rubro, pulposo, nudo vel glanduloso; sepalis deciduis.

R. carolina Linnaeus, *Sp. Plant.* ed. 2, p. 703 (1762).—Wangenheim, *Nordam. Holzart.* p. 112, t. 31, fig. 71 (1787).—Aiton, *Hort. Kew.* vol. ii. p. 203 (*ex parte*) (1789).—Lawrance, *Roses*, t. 54, 68 (1799).—Roessig, *Die Rosen*, No. 44 (1802-1820).—Lindley, *Ros. Monogr.* p. 23, No. 15, t. 4 (1820).—Emerson, *Trees of Mass.* ed. 2, vol. ii. p. 488, t. (1875).—S. Watson in *Smithsonian Misc. Coll.* vol. xv. p. 310 (1878).—Koehne, *Deutsche Dendrol.* p. 292 (1893).—Keller in Ascherson & Graebner, *Syn. Mitteleur. Fl.* vol. vi. p. 291 (1902).—Rehder in Bailey, *Cycl. Am. Hort.* vol. iv. p. 1553 (1902).—C. K. Schneider, *Ill. Handbuch Laubholzsk.* vol. i. p. 568 (1906).

R. virginiana Du Roi, *Obs. Bot.* p. 21 (*non* Miller) (1771); *Harbk. Baum.* vol. ii. p. 353 (1772).—Roessig, *Die Rosen*, t. 13 (1802-1820).—Trattinnick, *Ros. Monogr.* vol. ii. p. 154 (1823).

R. carolinensis Marshall, *Arbust. Amer.* p. 135 (1785).

R. palustris Marshall, *Arbust. Amer.* p. 135 (1785).

R. corymbosa Ehrhart, *Beitr. zur Naturk.* vol. iv. p. 21 (1789).

R. pennsylvanica Michaux, *Fl. Bor. Amer.* vol. i. p. 296 (1803).

R. caroliniana Bigelow, *Fl. Boston*, p. 121 (1814).

R. flexuosa Rafinesque, *Précis des Découvertes*, p. 35 (1814); *Desvaux, Journ. Bot.* vol. iv. p. 268 (1814).—Poiret in Lamarck, *Encycl. Suppl.* vol. v. p. 778 (1817).—Seringe in De Candolle, *Prodr.* vol. ii. p. 623 (1825).

R. enneaphylla Rafinesque, *Précis des Découvertes*, p. 35 (1814); *Desvaux, Journ. Bot.* vol. iv. p. 268 (1814).—Poiret in Lamarck, *Encycl. Suppl.* vol. v. p. 778 (1817).—Trattinnick, *Ros. Monogr.* vol. ii. p. 228 (1823).

R. maialis, γ Loiseleur in *Nouv. Duhamel*, vol. vii. p. 16 (1819).

R. virginica Sprengel, *Nov. Prov. Hort. Acad.* p. 36 (1819).

R. Hudsoniana Thory, *Prodr. Monogr. Ros.* p. 62 (1820).—K. Koch, *Dendrol.* vol. i. p. 244 (1869).

R. Rafinesquiana Trattinnick, *Ros. Monogr.* vol. ii. p. 234 (1823).

R. Sprengeliana Trattinnick, *Ros. Monogr.* vol. ii. p. 163 (1823).

R. cinnamomea, var. *gemella* Seringe in De Candolle, *Prodr.* vol. ii. p. 605 (*ex parte*) (1825).—Crépin in *Bull. Soc. Bot. Belg.* vol. xi. p. 73 (*Primit. Monogr. Ros.* vol. i. fasc. i. p. 189) (1872).

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Stem arching, brown, reaching a height of 6-10 feet; *prickles* often in infra-stipular pairs, uniform, small, slender, straight or slightly hooked. *Leaflets* 5-7, oblong, acute, faintly simply toothed, grey and softly pubescent on both surfaces; *petioles* pubescent, not glandular; *stipules* adnate, with small ovate free tips. *Flowers* often several, corymbose; *peduncles* glandular; *bracts* ovate. *Calyx-tube* globose, often glandular; *lobes* long, leaf-pointed, glandular on the back, simple or slightly compound. *Petals* bright pink. *Styles* villous, free, not protruded. *Fruit* small, urceolate-globose, bright red, naked or glandular, pulpy; *sepals* deciduous.

Rosa carolina is distributed through eastern North America, from Canada (Ontario) and Nova Scotia southward to Florida, and is common in low, moist ground and in swamps. Erect in habit, it is the tallest of the American wild Roses, and one of the latest to flower. Its fruit is bright scarlet, and not only remains long on the plant, but keeps its form and colour. With its reddish stems and ruddy hips this plant is a beautiful object in the wild garden during winter. It grows freely and increases rapidly by its underground roots. It differs from the other American Roses by its grey, pubescent, faintly toothed leaflets and its adpressed stipules and small globose fruit.

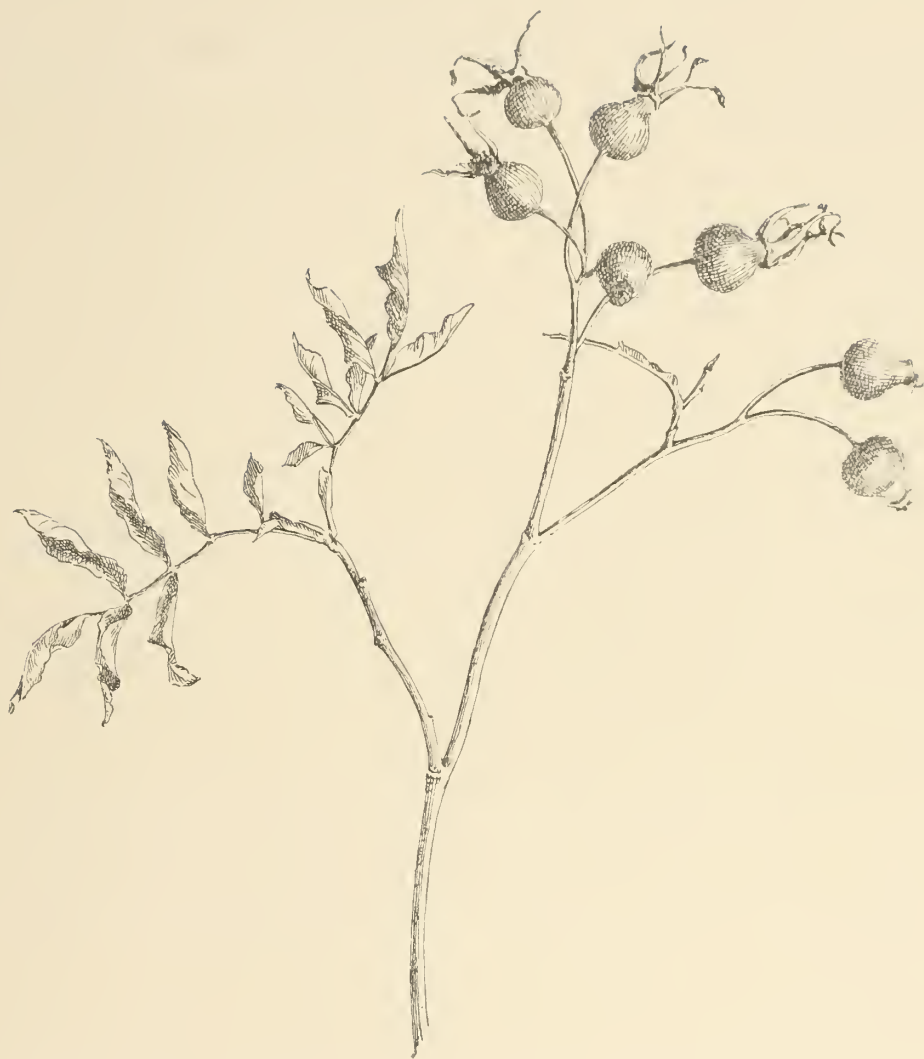
In the first edition of the *Species Plantarum* Linnaeus confused this Rose with *Rosa virginiana* Mill., which was called by Dillenius *Rosa carolina fragrans*.¹ The *Rosa carolina* of the second edition, described from his own herbarium, is the true one, but here also Linnaeus quotes the synonym of Dillenius, though with a mark of doubt.

Rosa florida Donn² is merely a slight variety, with less hairy leaves than in the type.

NOTE.—Redouté, vol. i. p. 81 is *Rosa carolina* var. *corymbosa*; vol. i. p. 95 is *Rosa Hudsoniana* var. *salicifolia*; vol. ii. p. 109 is *Rosa Hudsoniana* var. *scandens*; vol. ii. p. 117 is *Rosa Hudsoniana* var. *subcorymbosa*. This last is a semi-double form.

¹ *Hort. Eth.* vol. ii. p. 325 (1732).

² *Hort. Cant.* ed. 8, p. 169 (1815).



68—ROSA CAROLINA



69—ROSA NITIDA Willd.

Rosa nitida: caule brevi, recto; aculeis densis, gracilibus, valde inaequalibus, majoribus geminis infrastipularibus; foliolis 7-9, lineari-oblongis, acutis, firmis, viridibus, nitidis, utrinque glabris, simpliciter serratis; rhachi glabra, nuda; stipulis adnatis, apice libero, ovato; floribus saepissime solitariis; pedunculo hispido; calycis tubo globoso, hispido; lobis lanceolatis, acuminatis, simplicibus, dorso glandulosis; petalis cuneatis, pulchre rubris, magnitudine mediocribus; stylis liberis, inclusis, pubescentibus; fructu parvo, globoso, hispido; sepalis patulis, caducis.

R. nitida Willdenow, *Enum. Hort. Berol.* p. 544 (1809).—Lindley, *Ros. Monogr.* p. 13, No. 9, t. 2 (1820).—Crépin in *Bull. Soc. Bot. Belg.* vol. xv. p. 63 (*Primit. Monogr. Ros.* fasc. iv. p. 424) (1876).—S. Watson in *Smithsonian Misc. Coll.* vol. xv. p. 312 (1878).—Koehne, *Deutsche Dendrol.* p. 293 (1893).—Rehder in Bailey, *Cycl. Am. Hort.* vol. iv. p. 1554 (1902).—C. K. Schneider, *Ill. Handbuch Laubholz.* vol. i. p. 571 (1906).

R. rubrispina Bosc ex Poiret in Lamarck, *Encycl. Suppl.* vol. iv. p. 715 (1816).—Trattinnick, *Ros. Monogr.* vol. ii. p. 179 (1823).—Seringe in De Candolle, *Prodr.* vol. ii. p. 623 (1825).

R. Reduteana, var. *rubescens* Thory in Redouté, *Roses*, vol. i. p. 103, t. (1817); *Prodr. Monogr. Ros.* p. 44 (1820).

R. lucida, var. *nitida* A. Gray, *Man. Bot. N. States*, p. 127 (1848).

Stem short, stiffly erect, turning red-brown in exposure; *prickles* crowded, slender, straight, passing gradually into aciculi, the largest in infrastipular pairs. *Leaflets* 7-9, linear-oblong, acute, rigid, simply toothed, shining, glabrous on both surfaces; *petioles* glabrous; *stipules* adnate, with ovate free tips. *Flowers* usually solitary; *peduncles* densely hispid and setose. *Calyx-tube* globose, hispid; *lobes* simple, lanceolate-acuminate, $\frac{3}{4}$ -1 in. long, glandular on the back. *Petals* cuneate, bright pink, 1-1 $\frac{1}{4}$ in. long. *Styles* free, pubescent, not exerted. *Fruit* small, globose, bright red, hispid; *sepals* spreading, deciduous.

Rosa nitida is confined in a wild state to the region between Newfoundland and eastern Massachusetts, and is found along the margins of swamps and in other low-lying places. The oldest specimen is in the herbarium of the British Museum; it was gathered in Newfoundland in 1776. By Miss Lawrance¹ and Andrews² it was confounded with *Rosa blanda* Ait., from which it differs in its dwarf

¹ *Roses*, t. 27 (1799).

² *Roses*, vol. ii. t. 90 (1828).

ROSA NITIDA

habit, narrow, glossy leaflets, and dense, very unequal, red prickles. From *Rosa virginiana* Mill. it differs in its dwarf habit, narrow leaflets, and dense, very unequal prickles. This Rose may be readily distinguished by the bright red of its branches, and in autumn by the vivid glistening red of its leaves. Though a very handsome and hardy species, and perhaps the most beautiful Rose of eastern North America, *Rosa nitida* is rare in cultivation in Europe.



69—ROSA NITIDA



70—ROSA FOLIOLOSA Nutt.

Rosa foliolosa: caule brevi, erecto vel arcuato; aculeis conformibus, gracilibus, subrectis, saepe geminis infrastipularibus; foliolis 7-11, lineari-oblongis, parvis, acutis vel obtusis, firmulis, viridibus, simpliciter serratis, saepissime utrinque glabris; rhachi aciculata, glabra; stipulis adnatis, apicibus liberis ovatis; floribus saepissime solitariis; pedunculis brevibus, nudis vel hispidis; calycis tubo globoso, saepe hispido; lobis ovatis, acuminatis, dorso hispidis, pubescentibus, simplicibus vel parce compositis; petalis roseis, magnitudine mediocribus; stylis liberis, villosis; fructu globoso, rubro, saepe hispido; sepalis patulis, deciduis.

R. foliolosa Nuttall ex Torrey & Gray, *Fl. N. Amer.* vol. i. p. 460 (1840).—S. Watson in *Proc. Amer. Acad.* vol. xx. p. 349 (1885).—Sargent in *Garden and Forest*, vol. iii. p. 100, fig. 22 (1890).—Koehne, *Deutsche Dendrol.* p. 294 (1893).—Dippel, *Handbuch Laubholz.* vol. iii. p. 581, f. 243 (1893).—Rehder in Bailey, *Cycl. Am. Hort.* vol. iv. p. 1554 (1902).—Small, *Fl. S.E. United States*, p. 527 (1903).—C. K. Schneider, *Ill. Handbuch Laubholz.* vol. i. p. 570 (1906).

Stem short, erect or arching; *prickles* uniform, small, slender, nearly straight, often in infrastipular pairs. *Leaflets* 7-11, linear-oblong, acute or obtuse, the end one $\frac{1}{2}$ -1 in. long, rather rigid, green, simply serrated, usually glabrous on both surfaces; *petioles* aciculate, glabrous; *stipules* adnate, with ovate free tips. *Flowers* usually solitary; *peduncles* short, naked or hispid. *Calyx-tube* globose, often hispid; *lobes* ovate-acuminate, $\frac{1}{3}$ - $\frac{1}{2}$ in. long, hispid and pubescent on the back, simple or the outer slightly compound. *Petals* bright red; *corolla* 1-1 $\frac{1}{2}$ in. diameter. *Styles* free, villous. *Fruit* globose, red, $\frac{1}{3}$ - $\frac{1}{2}$ in. diameter, hispid or naked; *sepals* spreading, deciduous.

This interesting and distinct species was first discovered by Thomas Nuttall in 1818-20 in Arkansas; it was, however, some twenty years before it was described and named. In the interim it had been collected by other botanists from east Texas to Arkansas, but it does not appear to be very widely distributed.

In appearance it most nearly resembles *Rosa virginiana* Mill., from which it differs in its dwarfer habit, smaller, narrower, more numerous leaflets, and in its hispid peduncle, calyx and sepals. It is a late bloomer, and although it is not at any time very floriferous there are always sufficient of the bright pink, sweetly scented flowers to make this species a welcome addition to our Rose gardens, while with its short, compact, graceful habit, leafy stems and shining leaves it is a good shrub even when not in blossom.

ROSA FOLIOLOSA

There appears to be some uncertainty with regard to the colour of the flowers of *Rosa foliolosa* in a wild state. None of the botanists who have collected it have recorded this definitely, and the plants raised from seed at the Arnold Arboretum are stated in *Garden and Forest*¹ to have pale yellow or creamy white flowers, whilst the flowers on the plants growing at Kew and at Warley are bright pink and rather large. It is quite hardy in England and increases by underground stems; a peculiarity is that the blossoms are produced on the second year's growth, after which the branches dwindle and die, making way for the new growth.

¹ Vol. iv. p. 66 (1891).



71—ROSA GYMNOCARPA Nutt.

Rosa gymnocarpa: caule debili, valde ramoso; aculeis inaequalibus, multis, gracilibus, rectis, saepe geminis infrastipularibus; foliolis 5-7, obovatis, parvis, obtusis, duplicato-serratis, rigidulis, viridibus, utrinque glabris; rhachi glabra, aciculata; stipulis adnatis, glanduloso-ciliatis, apicibus liberis, ovatis, parvis; floribus saepissime solitariis; pedicellis nudis vel hispidis; calycis tubo oblongo, nudo; lobis parvis, ovatis, simplicibus; petalis rubellis, parvis; stylis liberis; fructu parvo, ovoideo, nudo, rubro; pedicellis cernuis; carpellis paucis; sepalis caducis.

R. gymnocarpa Nuttall ex Torrey & Gray, *Fl. N. Am.* vol. i. p. 461 (1840).—Presl, *Epimel. Bot.* p. 203 (1849).—Torrey, *U. S. and Mex. Bound. Survey*, vol. ii. p. 64, t. 21 (1859).—Crépin in *Bull. Soc. Bot. Belg.* vol. xv. p. 72 (*Primit. Monogr. Ros.* fasc. iv. p. 433) (1876).—S. Watson in Brewer & Watson, *Bot. Calif.* vol. i. p. 187 (1876); *Proc. Amer. Acad.* vol. xx. p. 350 (1885).—Coulter, *Man. Bot. Rocky Mount.* p. 88 (1885).—Rehder in Bailey, *Cycl. Am. Hort.* vol. iv. p. 1554 (1902).—Piper in *Contrib. U. S. Nat. Herb.* vol. xi. p. 334 (*Fl. State of Washington*) (1906).

R. spithamea, var. *subinermis* Engelm. in *Bot. Gaz.* vol. vi. p. 236 (1881).

Stems weak, much branched; *prickles* numerous, unequal, slender, straight, spreading, often in infrastipular pairs. *Leaflets* 5-7, small, obovate, obtuse, green, rather rigid, doubly toothed, glabrous on both surfaces; *petioles* glabrous, aciculate; *stipules* adnate, narrow, gland-edged, with small ovate free tips. *Flowers* usually solitary; *pedicels* naked or hispid. *Calyx-tube* oblong, naked; *lobes* ovate, simple, $\frac{1}{4}$ - $\frac{1}{3}$ in. long, naked on the back. *Petals* small, pink. *Styles* free. *Fruit* small, ovoid, bright red, naked, with few *carpels*, cernuous *pedicels* and deciduous *sepals*.

Rosa gymnocarpa was first found in British Columbia by David Douglas in 1824-5, and afterwards in Oregon by Nuttall, who wrote the description incorporated in Torrey & Gray's *Flora*. It inhabits California, and extends northward to British Columbia and eastward to Idaho, Montana and Oregon. It resembles the European *Rosa spinosissima* L. in its dwarf habit, small, obtuse leaflets, small, solitary flowers, and abundant, unequal, slender prickles, but the prickles are often in infrastipular pairs, the leaflets are fewer and doubly toothed, and the fruit is very different. It also bears some resemblance to *Rosa Beggeriana* Schrenk. The flowers are very small, slightly involute, pale pink, deepening in colour on the edges of the petals. Albino

ROSA GYMNOCARPA

forms have been found. Torrey at first classed it among the *Caninae*, but it is now recognized as belonging to the *Cinnamomea* section.

There is a plate of *Rosa gymnocarpa* in the *Report of the Mexican Boundary Survey*, but Crépin did not consider it sufficiently distinct. He thought that either the plant collected at San Diego, from which the drawing was made, was not the true type, or else the artist had not made a perfectly accurate drawing.



72—ROSA CALIFORNICA Cham. & Schlecht.

Rosa californica: caule alto, arcuato; aculeis conformibus, robustis, falcatis, saepe geminis infrastipularibus; foliis 7-9, oblongis, obtusis, magnitudine mediocribus, viridibus, simpliciter serratis, facie glabris, dorso saepe pubescentibus; rhachi pubescente, aciculata; stipulis latis, adnatis, apicibus liberis, parvis, ovatis, margine glandulosis; floribus multis, corymbose paniculatis; bracteis oblongo-lanceolatis, margine glandulosis; pedicellis brevibus, nudis; calycis tubo globoso, parvo, nudo; lobis ovatis, acuminatis, simplicibus, dorso nudis; petalis parvis, rubris; stylis liberis, pilosis; fructu globoso, rubro, nudo; sepalis caducis.

R. californica Chamisso & Schlechtendal in *Linnaea*, vol. ii. p. 35 (1827).—Torrey & Gray, *Fl. N. Am.* vol. i. p. 462 (1840).—C. A. Meyer in *Mém. Acad. Sci. St. Pétersbourg*, sér. 6, vol. vi. p. 18 (*Ueber die Zimmtrosen*, p. 18) (1847).—Presl, *Epimel. Bot.* p. 202 (1849).—S. Watson in Brewer & Watson, *Bot. Calif.* vol. i. p. 187 (1876); *Proc. Amer. Acad.* vol. xx. p. 343 (1885).—Crépin in *Bull. Soc. Bot. Belg.* vol. xv. p. 49 (*Primit. Monogr. Ros.* fasc. iv. p. 410) (1876).—Koehne, *Deutsche Dendrol.* p. 295 (1893).—Rehder in Bailey, *Cycl. Am. Hort.* vol. iv. p. 1554 (1902).

Stems tall, arching; prickles uniform, robust, hooked, often in infrastipular pairs. Leaflets 7-9, oblong, obtuse, green, middle-sized, simply openly serrated, glabrous on the upper surface, often pubescent beneath; petioles pubescent and aciculate; stipules broad, adnate, gland-edged, with small, ovate, free tips. Flowers many, arranged in a corymbose panicle; bracts oblong-lanceolate, gland-edged; pedicels short, naked. Calyx-tube small, globose, naked; lobes ovate-acuminate, $\frac{1}{2}$ - $\frac{3}{4}$ in. long, naked on the back. Petals small, pink. Styles free, villous. Fruit globose, bright red, naked; sepals deciduous.

Rosa californica is distinguished from the other American *Cinnamomeae* by its robust prickles, almost as hooked as in *Rosa canina* L., and by its small pale pink flowers produced in clusters, often as many as thirty or forty in a panicle. It varies much in habit. As we know it in England, it is distinguished by its tall growth, the bushes frequently attaining a height of five or six feet, but from the description of this Rose in its native habitat it would seem to vary in stature from quite dwarf bushes. It is common in California, ascending to 6,000 feet above sea-level in the Sierra Nevada, and it extends to British Columbia, Oregon, Nevada and Washington.

Rosa californica is extremely polymorphous. When Crépin first examined the specimens sent him, he was inclined to make varieties of

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a large number, because they did not answer to the description of Chamisso & Schlechtendal's type. He subsequently modified his opinion, but a large number of varieties have been distinguished by both Crépin and Watson. Among the principal are *Rosa ultramontana* of Sereno Watson and *Rosa glandulosa* of Crépin. *Rosa californica* has been hybridized with *Rosa rugosa* Thunb. and is quite hardy, but is not often met with in cultivation in England.

73—ROSA PISOCARPA A. Gray

Rosa pisocarpa: caule erecto, aculeis parvis, rectis, saepe geminis infrastipularibus; foliolis 5-7, parvis, oblongis, simpliciter serratis, facie glabris, dorso leviter pubescentibus; rhachi pubescente, haud glandulosa; stipulis adnatis, haud glanduloso-ciliatis, apice libero parvo; floribus paucis, corymbosis; pedunculis nudis; calycis tubo globoso, nudo; lobis lanceolatis, simplicibus, apice foliaceis, dorso glandulosis; petalis parvis, rubellis; stylis liberis, villosis, haud protrusis; fructu parvo, globoso, rubro, pulposo, sepalis erectis persistentibus coronato.

R. pisocarpa A. Gray in *Proc. Amer. Acad.* vol. viii. p. 382 (1873).—S. Watson in Brewer & Watson, *Bot. Calif.* vol. i. p. 187 (1876).—Hooker *f.* in *Bot. Mag.* vol. cxii. t. 6857 (1886).—Koehne, *Deutsche Dendrol.* p. 295 (1893).—Rehder in Bailey, *Cycl. Am. Hort.* vol. iv. p. 1554 (1902).—C. K. Schneider, *Ill. Handbuch Laubholz.* vol. i. p. 578 (1906).—Piper in *Contrib. U. S. Nat. Herb.* vol. xi. p. 335 (*Fl. State of Washington*) (1906).

Stem erect, reaching a height of 5-6 feet; *branches* bright red-brown in exposure. *Prickles* small, slender, nearly straight, often in pairs at the base of the leaves. *Leaflets* 5-7, small, oblong, simply serrated, glabrous above, thinly pubescent beneath; *petioles* pubescent, not glandular; *stipules* adnate, not gland-ciliated, with small, ovate, free tips. *Flowers* often 3-4, in a corymb; *pedicels* naked; *bracts* ovate-lanceolate. *Calyx-tube* globose, naked; *lobes* lanceolate, simple, leaf-pointed, $\frac{3}{4}$ in. long, glandular on the back. *Petals* small, bright pink. *Styles* free, villous, not protruded. *Fruit* red, pulpy, globose, $\frac{1}{2}$ in. diameter, ripening early in September, crowned by the erect persistent sepals.

Rosa pisocarpa is scarcely more than a mountain variety of *Rosa californica* Cham. & Schlecht., from which it differs only in the small size of its parts. Its characters, however, have kept constant after many years' cultivation. It was first found in Oregon by Mr. Elihu Hall in 1871. Sir J. D. Hooker and Dr. Asa Gray found it in the upper valley of the Sacramento, at an elevation of 4,000-6,000 feet above sea-level. A plant was sent to the Royal Gardens, Kew, from the Arnold Arboretum by Professor C. S. Sargent.



73—ROSA PISOCARPA

74—ROSA MOYESII Hemsl. & E. H. Wils.

Rosa Moyesii: caule elongato, arcuato; aculeis paucis, patentibus, rectis, subulatis; aculis intermediis nullis; foliolis 7-13, ellipticis, cuspidatis, simpliciter serratis, facie glabris, dorso ad costam pubescentibus; rhachi aciculata; stipulis adnatis, latis, glanduloso-ciliatis, apicibus liberis deltoideis; floribus solitariis; pedunculis nudis vel aciculatis; calycis tubo ovoideo, aciculato; lobis simplicibus, elongatis, apice foliaceo; petalis latis, magnis, saturate rubris; stylis liberis, pubescentibus; fructu ovoideo, apice constricto, rubro, sepalis erectis coronato.

R. Moyesii Hemsley & E. H. Wilson in *Kew Bull.* 1906, p. 159.—*Journ. Hort.* ser. 3, vol. lvi. p. 587 (1908).—*Bot. Mag.* vol. cxxxvi. t. 8338 (1910).

Stems tall, arching, 10-14 feet long; *prickles* few, slender, straight, spreading, not intermixed with aciculi. *Leaflets* 7-13, elliptical, cuspidate, simply serrated, glabrous on the upper surface, pubescent on the midrib beneath; *petioles* aciculate; *stipules* adnate, gland-ciliated, with deltoid free tips. *Flowers* solitary; *peduncle* about an inch long, naked or aciculate. *Calyx-tube* ovoid, aciculate; *lobes* long, simple, with a long leafy tip. *Petals* large, dark red. *Styles* free, pubescent. *Fruit* ovoid, above an inch long, constricted at the apex, bright red, crowned with the erect persistent sepals.

Rosa Moyesii is very near to *Rosa macrophylla* Lindl. It is found in the province of Sze-chuan, in the south-west of China, where it is not uncommon on the hills between Mount Omi and Tatieu-lu near the Tibetan frontier, at an elevation of 6,000-12,000 feet. It was first collected near Tatieu-lu by Mr. A. E. Pratt, and afterwards by Mr. E. H. Wilson when travelling for Messrs. James Veitch & Son, by whom it has now been brought into cultivation. It was named after the Rev. J. Moyes, of the China Inland Mission stationed at Tatieu-lu, who greatly aided Mr. Wilson in his exploration.

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PART XII

THE GENUS ROSA

BY

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Drawings by

ALFRED PARSONS, A.R.A.



LONDON

JOHN MURRAY, ALBEMARLE STREET, W.

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75—ROSA NUTKANA Presl.

Rosa nutkana: caule erecto, brunneo; aculeis robustis, leviter falcatis, aequalibus, sparsis, saepe geminis infrastipularibus; foliolis 5-7, oblongis, acutis, magnitudine mediocribus, simpliciter serratis, facie viridibus, glabris, dorso pallidioribus, leviter pubescentibus; rhachi leviter pubescente; stipulis latis, apice libero, magno, ovato; floribus solitariis vel paucis; pedunculis brevibus, plerumque nudis; bracteis magnis, ovatis; calycis tubo globoso, nudo; lobis simplicibus, apice foliaceis, dorso leviter glandulosis; petalis majoribus, rubris; stylis villosis, liberis, haud protrusis; fructu magno, nudo, globoso, pulposo, sepalis erectis persistentibus coronato.

R. nutkana Presl. *Epimel. Bot.* p. 203 (1849).—Crépin in *Bull. Soc. Bot. Belg.* vol. xv. pp. 39-46 (*Primit. Monogr. Ros.* fasc. iv. pp. 400-407) (1876).—S. Watson in *Smithsonian Misc. Coll.* vol. xv. p. 312 (1878).—Coulter, *Man. Bot. Rocky Mount.* p. 88 (1885).—Sargent in *Garden and Forest*, vol. i. p. 449, fig. 70 (1888).—Koehne, *Deutsche Dendrol.* p. 296 (1893).—Rehder in Bailey, *Cycl. Am. Hort.* vol. iv. p. 1555 (1902).—C. K. Schneider, *Ill. Handbuch Laubholzsk.* vol. i. p. 576 (1906).—Piper in *Contrib. U. S. Nat. Herb.* vol. xi. p. 334 (*Fl. State of Washington*) (1906).

R. fraxinifolia Hooker, *Fl. Bor. Am.* vol. i. p. 199 (*non* Borkhausen *nec* Gmelin) (1833).—Torrey & Gray, *Fl. N. Am.* vol. i. p. 460 (1840).—Newberry in *Pacific R. R. Rep.* vol. vi. pt. iii. p. 73 (1857).

R. cinnamomea Hooker, *Fl. Bor. Am.* vol. i. p. 200 (*non* Linnæus) (1833).—Torrey & Gray, *Fl. N. Am.* vol. i. p. 459 (1840).—Seemann, *Bot. Voy. Herald*, p. 52 (1852).

R. melina Greene, *Pittonia*, vol. iv. p. 10 (1899).

Stem erect, 3-4 feet long, bright brown. *Prickles* stout, slightly hooked, equal, scattered and often in pairs at the base of the leaves. *Leaflets* 5-7, oblong, acute, middle-sized, membranous, simply serrated, green and glabrous above, paler and slightly pubescent beneath; *petioles* slightly pubescent; *stipules* broad, with large, ovate, free tips. *Flowers* one or few; *peduncles* short, rarely setose; *bracts* large, ovate. *Calyx-tube* globose, naked; *lobes* simple, leaf-pointed, 1 in. long, slightly glandular on the back. *Petals* rather large, pink. *Styles* villous, free, not protruded beyond the disc. *Fruit* large, globose, red, pulpy, naked, crowned by the erect persistent sepals.

Rosa nutkana inhabits the north-west coast regions of North America from Alaska to northern California. It was first found by Menzies in Vancouver's Island in 1790, and rather later by Haenke at Nutka Sound. It most resembles *Rosa blanda* Ait. in habit, but differs in the presence of many robust prickles on the flowering branches, some of them in infrastipular pairs. It resembles also *Rosa cinnamomea* L. in its short peduncles and large bracts, but the fruit is much longer. It was sent from the Arnold Arboretum to the Royal Gardens, Kew, in 1884. Both Nuttall and Douglas recognised it as a distinct species, but did not describe it.



76—ROSA WEBBIANA Wall.

Rosa Webbiana: caulibus brevibus, erectis; aculeis longis, stramineis, robustis, rectis, subaequalibus, leviter ascendentibus; foliolis 7-9, parvis, obovatis, obtusis, simpliciter serratis, facie glabris, dorso interdum pubescentibus; rhachi haud glandulosa; stipulis apice libero, parvo, deltoideo; floribus plerumque solitariis; pedunculis plerumque nudis; calycis tubo urceolato, plerumque nudo; lobis lanceolatis, simplicibus, dorso nudis; petalis rubellis; stylis villosis, liberis, haud protrusis; fructu globoso, coriaceo, brunneo, nudo, saepe cernuo, sepalis persistentibus coronato.

R. Webbiana Wallich *ex* Royle, *Ill. Bot.* p. 208, t. 42, fig. 2 (1839).—Crépin in *Bull. Soc. Bot. Belg.* vol. xiii. p. 273 (*Primit. Monogr. Ros.* fasc. iii. p. 280) (1874).—Hooker *f.*, *Fl. Brit. Ind.* vol. ii. p. 366 (1879).—Aitchison in *Journ. Linn. Soc.* vol. xix. p. 161 (1882).—Christ in Boissier, *Fl. Orient.* Suppl. p. 207 (1888).

R. unguicularis Bertolini, *Misc.* fasc. xxii. p. 15, t. 3 (1862).

Stems short, erect, sending out many short flowering shoots. *Prickles* of the flowering shoot subequal, robust, straight, long, straw-coloured, rather ascending, those of the sterile stem more unequal. *Leaflets* 7-9, small, firm, obovate, obtuse, shallowly simply toothed, glabrous on both sides or pubescent beneath; *petioles* not glandular; *stipules* adnate, with short deltoid free tips. *Flowers* usually solitary; *peduncles* usually naked, cernuous in the fruiting stage. *Calyx-tube* urceolate, usually naked; *lobes* lanceolate, simple, not leaf-pointed, about $\frac{1}{2}$ in. long, naked on the back. *Petals* pink, moderately large. *Styles* villous, free, not exerted. *Fruit* globose, coriaceous, brown, naked, $\frac{1}{2}$ in. diam., crowned by the persistent sepals.

This variable species is common in the central Himalaya from Kashmir to Kamaon, at elevations of from 6,000–13,000 feet above sea-level. It is found also in western Tibet, Afghanistan, and at Samarkand. Dr. J. E. T. Aitchison brought a fine series of forms from the Kurram valley in 1879, including the varieties *pustulata* Christ, with stems clothed with copious sessile glands between the prickles, and *microphylla* Crépin; also *Rosa maracandica* Bunge, from Samarkand, a high dry-country form with a very dense habit and all its parts dwarfed. The Rose was dedicated to Captain Webb, who first discovered it in the province of Kamaon and sent specimens to Wallich, who distributed them.

Rosa Webbiana most nearly resembles *Rosa pimpinellifolia* L., but is very different in the prickles, which are subequal on the flowering shoots, straw-coloured and rather ascending. The leaflets are less

ROSA WEBBIANA

distinctly serrated, the flower is pink and the fruit cernuous. The plant in the Kew collection was brought home by Dr. Aitchison in 1879. In 1903 a specimen was presented to Kew by Sir Martin Conway, who had found it in the Karakoram range. It has also been collected by Dr. Albert Regel in Turkestan at an elevation of 6,000–7,000 feet above sea-level. It requires a rather sheltered situation, and is best grown under a wall facing south. The great beauty of this Rose lies in the young shoots, which at first are absolutely blue and covered with pure white thorns. It has the smallest leaves of any species of Rose in cultivation; they are produced in nines, and the diminutive leaflets form a striking contrast to the large white thorns. There is a form with variegated leaves which is extremely pretty but does not grow so high as the type. Both forms are easily increased by cuttings.



77—ROSA WOODSII Lindl.

Rosa Woodsii: caule debili, arcuato; aculeis patulis, gracilibus, rectis, inaequalibus, saepe geminis infrastipularibus; foliolis 7-9, oblongis, obtusis, magnitudine mediocribus, teneris, simpliciter vel raro duplicato-serratis, facie glabris, dorso glabris vel pubescentibus; rhachi pubescente, aciculata, haud glandulosa; stipulis adnatis, haud glandulosis, apicibus liberis, parvis, ovatis; floribus 1-3; pedicellis brevibus, nudis; calycis tubo parvo, globoso, nudo; lobis lanceolatis, longe acuminatis, simplicibus vel parum pinnatifidis, dorso nudis vel hispidis; petalis rubris, parvis; stylis liberis, dense pilosis; fructu parvo, pyriformi, rubro, nudo; sepalis subpersistentibus.

R. Woodsii Lindley, *Ros. Monogr.* p. 21 (1820); *Bot. Reg.* vol. xii. t. 976 (1826).—Torrey & Gray, *Fl. N. Amer.* vol. i. p. 460 (1838).—S. Watson in *Proc. Amer. Acad.* vol. xx. p. 345 (1885).—Coulter, *Man. Bot. Rocky Mount.* p. 88 (1885).—Rehder in Bailey, *Cycl. Am. Hort.* vol. iv. p. 1554 (1902).—Robinson & Fernald, *Gray's New Man. Bot.* ed. 7, p. 496 (1908).

R. virginiana Kochne, *Deutsche Dendrol.* p. 299 (*ex parte*) (1893).

Stem weak, low, arching; *prickles* slender, unequal, spreading, straight, often in infrastipular pairs. *Leaflets* 7-9, oblong, obtuse, $\frac{3}{4}$ -1 in. long, thin, usually simply, rarely doubly serrated, glabrous on the upper surface, glabrous or pubescent beneath; *petioles* pubescent, aciculate, not glandular; *stipules* adnate, not gland-edged, with small ovate free tips. *Flowers* solitary or few; *pedicels* short, unarmed. *Calyx-tube* small, globose, naked; *lobes* lanceolate with a long acuminate tip, simple or slightly pinnate, $\frac{1}{2}$ - $\frac{3}{4}$ in. long, naked or hispid on the back. *Petals* small, pink. *Styles* free, villous. *Fruit* small, pyriform, bright red, naked, $\frac{1}{4}$ - $\frac{1}{3}$ in. diam.; *sepals* ultimately deciduous.

Rosa Woodsii occurs on the prairies from Minnesota to Missouri and from Colorado northward to the Saskatchewan river. It is a low bushy plant, with erect red-brown stems, most nearly resembling the weak forms of *Rosa blanda* Ait. Lindley likens it to a stunted *Rosa cinnamomea* L. It differs from *Rosa blanda* in the arrangement of its prickles, which are in infrastipular pairs, by its frequently slightly pinnate sepals, and by its flowering earlier than most of the Roses of the *Cinnamomea* section.

Lindley describes it in his Monograph and mentions that Mr. Sabine and himself, having but little hope of finding a new British Rose worthy of bearing Mr. Woods' name, decided to call the new Rose "Woodsii" in compliment to him. The plant was at that time growing in Mr. Sabine's garden at North Mimms. Writing again

ROSA WOODSII

about "Mr. Joseph Woods' Rose" in the *Botanical Register*, Lindley deplores the error and misapprehension which have been the fate of this Rose. He proceeds to say that it was first mentioned in a little work on the nomenclature of Roses, by M. de Pronville, who stated, upon the authority of a cheating gardener, that it bore yellow flowers with a black centre. The passage occurs in de Pronville's book after the description of *Rosa pimpinellifolia* L., and is as follows: "M. Noisette a reçu d'Angleterre un rosier qui paraît être une variété du *pimpinellifolia*, et qui vient du Missouri, Amérique-Septentrionale. M. Kennedy l'a envoyé sous le nom de Rose lutea, nigra"¹—not quite so bad as Lindley's version. De Pronville himself alludes to the incident in his French translation of Lindley's Monograph²: "M. Sabine assure que c'est cette plante qui a été envoyée en France d'une de nos pépinières comme un nouveau Rosier d'Amérique, portant des fleurs noires et jaunes, et cité sous ce rapport, dit M. Lindley, dans l'ouvrage de M. de Pronville. On le croit indigène du Missouri." It was Noisette who first brought *Rosa Woodsii* to de Pronville's notice. It flowered in M. Vallée's garden at Versailles, and in 1823 with de Pronville, to whom Sabine had given a plant.

There is an excellent plate in the *Botanical Register* from the plant growing in the Horticultural Society's garden at Chiswick. We have thought well to illustrate both the pink and the white forms. The former is from a specimen in the Royal Gardens, Kew, and is somewhat off type in being unarmed and in having cernuous peduncles. The white form is very rarely to be met with in gardens. The drawing was made from the plant growing at Warley.

¹ *Nomenclature raisonnée du Genre Rosier*, p. 23 (1818).

² *Monogr. du Genre Rosier*, p. 39 (1824).



78—ROSA GRANULOSA Keller

Rosa granulosa: caule brevi, ramosissimo; aculeis robustis, rectis vel subfalcatis, saepe geminis, aciculis intermixtis; foliis 5-7, oblongis, biserratis, facie glabris, dorso pubescentibus et granuloso-glandulosis; rhachi pubescente et glandulosa; stipulis adnatis, glandulis marginatis, apicibus liberis elongatis, dorso glandulosis; floribus 1-3; pedicellis brevibus, erectis; calycis tubo globoso, nudo; lobis simplicibus, dorso et margine glandulosis; petalis ignotis; stylis liberis, lanosis; fructu subgloboso, parvo, nudo, atropurpureo, sepalis erectis persistentibus coronato.

R. granulosa Keller in Engler, *Jahrbuch*, vol. xlv. p. 46 (1909).

A small much-branched bush, with short, dark-brown stems; *prickles* robust, straight or subfalcate, often geminate, intermixed with aciculi. *Leaflets* 5-7, oblong, biserrate, the upper an inch long, glabrous on the upper surface, pubescent and covered with large granular glands beneath; *petioles* pubescent and glandular; *stipules* adnate, margined with glands, with large free tips, glandular beneath. *Flowers* 1-3; *pedicels* short, erect. *Calyx-tube* globose, naked; *lobes* entire, with a lanceolate point, glandular on the back and edges. *Petals* unknown. *Styles* free, woolly. *Fruit* subglobose, small, naked, dark purple, crowned by the erect persistent sepals.

This interesting new species forms a connecting link between the sections *Cinnamomeae* and *Rubiginosae*. From all the other species of *Cinnamomeae* it differs in having leaves covered with granular glands on the under surface. It was found by roadsides in central Korea by Abbé Faurie, who has collected largely in Japan and discovered many interesting novelties.

79—ROSA MOHAVENSIS Parish

Rosa mohavensis: caule ramosissimo; aculeis rectis, patulis, gracilibus, valde inaequalibus, interdum geminis; foliolis 5-7, oblongis, obtusis vel subacutis, simpliciter serratis, firmis, utrinque glabris; rhachi glabra, parce aciculata; stipulis liberis, apicibus liberis, ovatis; floribus solitariis; pedunculis nudis, modice brevibus; calycis tubo globoso, nudo; lobis parvis, integris, lanceolatis, dorso nudis; petalis obovato-cuneatis, parvis, rubellis; stylis pubescentibus; fructu globoso, nudo, sepalis persistentibus coronato.

R. mohavensis Parish in *Bull. South Calif. Acad.* vol. i. p. 87 (1902).

Stems much branched; *prickles* slender, straight, spreading, very unequal, some in pairs. *Leaflets* 5-7, oblong, obtuse or subacute, $\frac{1}{2}$ - $\frac{3}{4}$ in. long, firm in texture, simply toothed, glabrous on both surfaces; *petioles* glabrous, slightly aciculate; *stipules* free, with small, ovate, free tips. *Flowers* solitary; *peduncles* naked, not very short. *Calyx-tube* globose, naked; *lobes* small, lanceolate, entire, $\frac{1}{2}$ - $\frac{3}{4}$ in. long, naked on the back. *Petals* small, obovate-cuneate, pink, $\frac{3}{4}$ in. long. *Styles* pubescent. *Fruit* globose, naked, crowned with the persistent sepals.

Rosa mohavensis is a native of the mountains of southern California. It has the habit of *Rosa spinosissima* L., but differs from it in several particulars, having geminate prickles and fewer leaflets.

80—ROSA PINETORUM Heller

Rosa pinetorum: caule ramosissimo; aculeis rectis, patulis, gracillimis, inaequalibus, interdum geminis; foliolis 5-7, parvis, oblongis, obtusis, membranaceis, simpliciter serratis, utrinque glabris; rhachi glabra, parce aciculata; stipulis angustis, apicibus liberis lanceolatis; floribus solitariis; pedunculis brevibus, nudis; calycis tubo globoso, nudo; lobis lanceolatis, integris, dorso glandulosis; petalis rubellis, magnitudine mediocribus; stylis pubescentibus; fructu parvo, globoso, rubro, sepalis persistentibus coronato.

R. pinetorum Heller in *Muhlenbergia*, vol. i. p. 53 (1904).

Stems much branched; *prickles* very slender, straight, spreading, unequal, some in pairs. *Leaflets* 5-7, few, oblong, obtuse, simply toothed, very thin, $\frac{1}{4}$ - $\frac{1}{2}$ in. long, glabrous on both surfaces; *petioles* glabrous, slightly aciculate; *stipules* narrow, with lanceolate free tips. *Flowers* solitary; *peduncles* short, naked. *Calyx-tube* globose, naked; *lobes* lanceolate, entire, glandular on the back. *Petals* middle-sized, pink, $1\frac{1}{2}$ in. long. *Styles* pubescent. *Fruit* small, globose, red, crowned with the persistent sepals.

Rosa pinetorum was discovered in the pinewoods of Monterey county, southern California. In habit it comes nearest to *Rosa gymnocarpa* Nutt.

81—ROSA ILLINOIENSIS Baker

Rosa illinoensis: caule ramosissimo; aculeis stramineis, gracilibus, rectis, patulis, inaequalibus, interdum geminis; foliolis 7, parvis, late oblongis, obtusis, simpliciter serratis, utrinque glabris; rhachi parce aciculata, glabra; stipulis angustis, apicibus liberis, ovato-lanceolatis; floribus solitariis; pedunculis brevibus, hispidis; calycis tubo globoso, parce aciculato; lobis ovato-lanceolatis, integris, dorso glabris; petalis magnis, albis; stylis pilosis; fructu ignoto.

R. illinoensis Baker inedit.

Stems much branched; *prickles* straw-coloured, slender, spreading, straight, unequal, a few in pairs. *Leaflets* 7, small, broadly oblong, obtuse, simply serrated, $\frac{1}{4}$ - $\frac{1}{2}$ in. long, glabrous on both surfaces; *petioles* glabrous, slightly aciculate; *stipules* narrow, with ovate-lanceolate free tips. *Flowers* solitary; *peduncles* short, hispid. *Calyx-tube* globose, slightly aciculate; *lobes* ovate-lanceolate, entire, $\frac{1}{2}$ in. long, glabrous on the back. *Petals* large, pure white, $\frac{1}{2}$ in. long. *Styles* pilose. *Fruit* not seen.

Rosa illinoensis is a native of the bare rocky districts of La Salle county, Illinois, United States, where it was collected by Green, Lansing and Dixon in 1910. It has the habit of the European *Rosa spinosissima* L., but its leaflets are only seven in number and its upper prickles are arranged in infrastipular pairs.

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„	IX	„	May 12, „
„	X	„	June 14, „
„	XI	„	July 14, „
„	XII	„	August 14, „

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PART XIII

THE GENUS ROSA

BY

ELLEN WILLMOTT, F.L.S.

Drawings by

ALFRED PARSONS, A.R.A.



LONDON

JOHN MURRAY, ALBEMARLE STREET, W.

1911

1100.3, 1911
Gray Herbarium
Harvard University

VIII
SPINOSISSIMAE



82—ROSA SPINOSISSIMA L.

THE BURNET ROSE

Rosa spinosissima: caule erecto vel arcuato; aculeis sparsis, rectis, gracilibus, aciculis copiosis intermixtis; foliolis 7-9, parvis, oblongis, obtusis, simpliciter serratis, utrinque glabris; rhachi glabra; stipulis longe adnatis, apice libero ovato; floribus semper solitariis; pedunculis aciculatis vel nudis; calycis tubo globoso; lobis lanceolatis, simplicibus, dorso glabris; petalis albis; stylis liberis, tomentosis, inclusis; fructu globoso, nudo, brunneo, sepalis persistentibus coronato.

R. spinosissima Linnaeus, *Sp. Plant.* vol. i. p. 491 (1753).—Lange, *Fl. Dan.* vol. iii. t. 398 (1770).—Jacquin, *Fragm.* p. 79, t. 124 (1809).—Guimpel, Willdenow & Hayne, *Abbild. Deutsch. Holzart.* vol. i. p. 115, t. 86 (1815).—Lindley, *Ros. Monogr.* p. 50, No. 31 (1820).—Syme, *Eng. Bot.* ed. 3, vol. iii. p. 203, t. 461 (1864).—Grenier, *Fl. Jurass.* p. 226 (1865).—Burnat & Gremli, *Roses Alp. Marit.* p. 61 (1879).—Koehne, *Deutsche Dendrol.* p. 299 (1893).—Rehder in Bailey, *Cycl. Am. Hort.* vol. iv. p. 1556 (1902).—C. K. Schneider, *Ill. Handbuch Laubholz.* vol. i. p. 583 (1906).

R. pimpinellifolia Linnaeus, *Syst. Nat.* ed. 10, vol. ii. p. 1062 (1759); *Sp. Plant.* ed. 2, vol. ii. p. 703 (1764).—Aiton, *Hort. Kew.* vol. ii. p. 202 (1789).—Roessig, *Die Rosen*, No. 59 (1802-1820).—*Nouv. Duhamel*, vol. vii. p. 19, t. 16, fig. 2 (1819).—Dumortier in *Bull. Soc. Bot. Belg.* vol. vi. p. 39 (1867).—Christ, *Rosen Schweiz*, p. 62 (1873).—Borbás in *M. T. Akad. Math. S. Természettud Közlemények* xvi. Kötet. p. 537 (*Ros. Hung.* p. 537) (1880).—Waldner, *Europ. Rosentyf.* p. 28 (1885).—Crépin in *Bull. Soc. Bot. Belg.* vol. xxxi. pt. 2, p. 73 (1892).—Burnat, *Fl. Alp. Mar.* vol. iii. p. 35 (1899).—Keller in Ascherson & Graebner, *Syn. Mitteleur. Fl.* vol. vi. p. 309 (1902).

R. viminea Lindley, *Ros. Monogr.* p. 49, No. 30 (1820).

R. spinosissima, subsp. *pimpinellifolia* Hooker, *Student's Flora*, p. 120 (1870).

Stem short and erect on the coast sandhills, longer and arcuate inland; *prickles* scattered, straight, slender, intermixed with copious unequal aciculi. *Leaflets* 7-9, small, oblong, obtuse, simply serrated, glabrous on both surfaces; *petioles* glabrous; *stipules* adnate, with small, ovate, free tips, not margined with glands. *Flowers* always solitary; *peduncles* aciculate or naked. *Calyx-tube* globose, naked; *lobes* lanceolate, entire, glabrous on the back. *Petals* pure white, middle-sized. *Styles* free, tomentose, included. *Fruit* globose, dark brown, naked, crowned with the persistent sepals.

Rosa spinosissima is a very distinct species, its spiny aspect being well described by its name. The synonymy and description here given only apply to the type, for by reason of its widely extended range over Europe and temperate Asia, its specific characters have been much modified by the varying conditions, as well as by cultivation. It has

ROSA SPINOSISSIMA

not only the widest distribution of any species of the genus, but it is the most northerly in its range, being the only Rose known to be spontaneous in Iceland, where it was discovered by Sir W. J. Hooker. It extends from Iceland to Ireland, through northern and central Europe, and is sparingly found in Italy and Spain; it reaches northern China and Japan, but does not touch the Himalaya. It has been known to botanists under different names for some four centuries, if not more, and has been distinguished in their writings. Thus C. Bauhin's¹ figures are perfectly manifest, and Lobel's Duyn-Roosen² and the *Rosa arvina* of Tabernaemontanus³ are unmistakable. Ray in his *Historia Plantarum*⁴ leaves no doubt as to the identity of our Burnet Rose, nor does Dalechamp under his "Rosa sylvestris pomifera."⁵ Gerard in his Catalogue of 1596 calls it "Rosa pomifera, the Pimpernel Rose." Many other instances among the pre-Linnaean botanists could be cited, but those enumerated will suffice.

It is well known that Linnaeus gave but scant attention to the genus *Rosa*, and thereby created great confusion both at the time and subsequently. The name *spinosissima* was adopted by him from Bauhin, and under this name he first described this Rose in his *Species Plantarum* (1753), but he did not mention its peduncles till the publication of the *Systema Naturae* (1759), wherein he credits it with hispid peduncles and introduces *Rosa pimpinellifolia* with those organs glabrous. In the *Mantissa* (1771) he publishes *Rosa pimpinellifolia* without description, saying that Haller makes it the same as *Rosa spinosissima*, which he describes as having its peduncles sometimes smooth and sometimes hispid. This seems to have started a controversy which has lasted to the present day, in spite of the fact that there are two specimens in Linnaeus' herbarium, both labelled *Rosa pimpinellifolia*, and both having smooth peduncles. Smith altered the name on one of these to *Rosa spinosissima*, possibly because Jacquin, who supplied the specimen and who had labelled it *Rosa austriaca* (which it certainly is not), added that it differed but slightly from *Rosa spinosissima*. The confusion this time does not appear to have been Linnaeus', except that he united under one name a smooth and a hispid-peduncled plant which he had at first thought should be kept distinct. In the *Amoenitates* Linnaeus speaks of *Rosa spinosissima* as growing in Sweden; but as the plant had not in his time been found there, it is probable that he is here confusing *Rosa cinnamomea* with *Rosa spinosissima*. The name *spinosissima* was adopted by Lindley, Woods, and Sir J. E. Smith; the latter came to the conclusion that when Linnaeus added *Rosa pimpinellifolia* he had forgotten the plant to which he had previously

¹ *Pinar*, p. 483 (1623).

² *Kruydtboeck*, pt. 2, p. 244 (1581).

³ *Kreuterbuch*, pt. 2, p. 788 (1591).

⁴ Vol. ii. p. 41 (1650).

⁵ *Icon*. p. 1088 (1590).



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given another name. Neither Crépin nor Déséglise was disposed to accept the name *spinosissima*; Déséglise considered that it would lead to confusion over Bauhin and Tournefort's synonyms. The modern tendency is to apply the name *Rosa pimpinellifolia* to the form with smooth peduncles, and *Rosa spinosissima* to that with hispid-glandular peduncles; but the latter, being the older name, has priority among botanists. I propose, however, to call the form with smooth peduncles *Rosa spinosissima*, var. *pimpinellifolia*. It has not previously been reduced to a variety by any author, but it deserves no higher rank.

Although this Rose has been the cause of so much controversy, it is the smallest wild Rose known, rarely exceeding a foot or eighteen inches in height in its wild state. It is one of the prettiest of our native flowering shrubs. It is found all round Great Britain, but often with great intervals between different localities, and almost everywhere it seems to like to be within the influence of the sea. On the continent, however, it is otherwise, since the Abbé Coste in his *Flore de la France* gives as its locality "Europe—surtout centrale."

A variegated pink and white form of *Rosa spinosissima* was described and figured by Sir Robert Sibbald, under the name of *Rosa Ciphiana*.¹ His drawing was made from plants found wild on his property of Kippis, in Perthshire. Mrs. Delany, in her beautiful collection of mosaic flowers now in the British Museum, has a charming representation of the Ciphian Rose made at Bulstrode in 1775. The late Rev. C. Wolley-Dod, of Edge Hall, Cheshire, found near Llandudno a pink-flowered form which comes true from seed, and maintains its colour and character. Major Wolley-Dod has recently found the same form in Kent. W. Koch, in his *Synopsis*,² mentions a var. *rosea*, with which the Llandudno and Kent forms agree.

Of the two plates the first represents *Rosa spinosissima* L., that is, the form of the species with hispid peduncles, but the larger prickles are as a rule longer and more marked off from the lesser armature; the foliage is usually darker and more bluish green, more often with nine leaflets, and the petals smaller and of a less pronounced yellow than the plate shows. The other plate shows a cultivated form frequently found in French gardens.

¹ *Scotia Illustrata*, pt. 2, p. 46, t. 2 (1684).

² Vol. ii. p. 194 (1837).

83—SCOTCH ROSES

The name of Scotch Rose or Scots Rose, given to a section of the group *Spinosisissimae*, originated with the hybrids raised by Robert Brown of Perth from the native Burnet Rose crossed with some double garden Roses. In 1820 Sabine read before the Horticultural Society a most interesting paper upon the varieties of the Double Scotch Roses,¹ in which he thus relates the circumstances of their introduction :

“In the year 1793, Robert Brown of Perth and his brother transplanted some of the wild Scotch Roses from the Hill of Kinnoul, in the neighbourhood of Perth, into their nursery-garden : one of these bore flowers slightly tinged with red, from which a plant was raised, whose flowers exhibited a monstrosity, appearing as if one or two flowers came from one bud, which was a little tinged with red : these produced seed, from whence some semi-double flowering plants were obtained ; and by continuing a selection of seed, and thus raising new plants, they in 1802 and 1803 had eight good double varieties to dispose of ; of these they subsequently increased the number, and from the stock in the Perth garden the nurseries both of Scotland and England were first supplied.”

Sabine arranged these Roses in sections according to the colour of the flowers. He enumerates twenty-six varieties which he classes in seven sections :

- I. Double White Scotch Roses.
- II. Double Yellow Scotch Roses.
- III. Double Blush Scotch Roses.
- IV. Double Red Scotch Roses.
- V. Double Marbled Scotch Roses.
- VI. Double Two-coloured Scotch Roses.
- VII. Double Dark-coloured Scotch Roses.

In most cases he used names which indicated the colours of the flowers, as “True Double Red,” “Double Light Red,” “Double Dark Red.” This system has certain obvious drawbacks, and it is a pity that he did not at least add the popular names for purposes of identification. Of these twenty-six varieties all except three were of British origin. Contemporary events in France were not conducive to the peaceful pursuit of gardening in that country, but with the advent of more settled times it was not long before those excellent gardeners, Vibert, Descemet, Prévost, Laffay, and others were raising

¹ *Trans. Hort. Soc.* Nov. 7, 1820.

SCOTCH ROSES

Roses of great beauty. For the most part they turned their attention to the Bengals, the Centifolias, and afterwards to the Noisettes, leaving the *spinosissima* hybrids to our English and Scotch growers, Brown, Austin, Malcolm, Lee and Kennedy, and others, who were so active in raising new varieties that there were soon between two and three hundred upon the market under distinctive names. A glance at the nurserymen's catalogues of the first half of the last century is bewildering and leads us to wonder if so many of these little Roses could possibly have been sufficiently distinct to appear as independent varieties. Many of them were charming, to judge from the few which have survived the changes of fashion, and it would be interesting to try to reintroduce some of the vanished varieties by raising a fresh series of seedlings. Paul in his *Rose Garden*¹ enumerates by name seventy-six of these hybrid Scotch Roses which were in vogue about 1840. They must have lost favour very shortly after, for only about eight out of the number are now to be found. In its wild state *Rosa spinosissima* has a greater tendency to form hybrids than any other of our native Roses.

It does not appear that Scotch Roses were ever so popular upon the continent as they were in England, although the French catalogues contain a certain number of varieties. Prévost in 1829 includes thirty-six, but mostly under fancy names, so that it is difficult to identify them with Sabine's list.

These little Roses are so charming that they can never entirely disappear from our gardens. Flowering from three weeks to a month earlier than the generality of other Roses, they continue in bloom for a considerable time, and in autumn their bronze foliage and plentiful hips are an additional charm. The fruit apparently ripens but slowly, and is therefore not attacked by birds until towards the end of winter. Their compact habit and wealth of blossom makes them very beautiful objects for the rock garden. Care should, however, be taken not to plant them where their suckers are likely to interfere with the rarer plants. These Scotch Roses are seen to best advantage when growing on grass where they may increase unrestrained year after year, without requiring the least attention, except that the old wood should be cut out from time to time.

¹ Pt. 2, pp. 17-19 (1848).

ROSA SPINOSISSIMA HYBRID STANWILL PERPETUAL

STANWILL





84—STANWELL PERPETUAL

This beautiful Rose has been for more than a century one of the greatest charms of our English gardens. In all ways it is good, in colour, fragrance, and habit. Never capricious, it will grow and thrive year after year, producing its beautiful flowers in profusion, shedding its delicious fragrance all around, and continuing in flower long after the other Scotch Roses are over. It flourishes even in poor soil, requires no attention, and will produce flowers even in the shade, although it undoubtedly prefers a sunny, open situation and so placed will attain to extreme old age and still preserve all its charms.

Simon and Cochet¹ give Robert Brown of Perth as the original raiser of this Rose, but they assign no date. Miss Lawrance has an excellent drawing of it under its name *Stanwell Perpetual*.² Mr. Sabine considered the plate too richly coloured, but it has been observed that when the wood has been well ripened during the previous season the delicate blush pink of the flowers is generally of a deeper shade the following summer. This is more especially the case in France. In the *Hortus Kewensis* of 1811 Miss Lawrance's plate is quoted under *Rosa spinosissima* as "Double Scotch Rose." The Rose is also figured by Andrews, but though he gives two plates (Nos. 125 and 126), either of which would do very well for *Stanwell Perpetual*, the drawings are not sufficiently accurate to enable us to decide. His *Rosa spinosissima incarnata* (plate No. 126) was brought by Mr. Crace from Rouen, where it had the reputation of flowering all the year round. Andrews found it in flower in October in the Hammersmith nursery under the name of *Lee's Eternal*, and he mentions that it flowers much later than other Scotch Roses. These Scotch Roses and their hybrids were essentially British in their origin and development, and as they never found the same favour in France, it is not surprising to find that they were ignored by Redouté. His drawings of Roses are so beautiful in colouring and so delicate in delineation, that it is much to be regretted that he did not leave us any drawings of the Double Scotch Roses; *Stanwell Perpetual* in particular would have been a charming subject for his brush.

¹ *Nomenclature de tous les Noms des Roses*, p. 167 (1899).

² *Roses*, t. 63 (1799).

STANWELL PERPETUAL

Mr. Sabine concludes his interesting paper upon "The Double Scotch Roses" by referring to the "Tall Double Scotch Rose." Although, according to his practice, he refrains from giving its popular name, there can be no doubt as to its identity, for he cites Miss Lawrance's drawing of *Stanwell Perpetual*. He saw the Rose growing in Lee and Kennedy's nursery and ascertained that it had come from Dr. Pitcairn's garden at Islington, but of its previous history nothing could be traced. It is evidently of garden origin, but it is difficult to determine its parentage, and it has not been known to produce fruit. We give Sabine's description of the Rose in his own words :

"The plant differs much from the Scotch Roses, being of taller growth, and looser habit; the branches do not grow thickly together, but detached; the aculei are of various sizes, and straight, but they are generally small, and many are more like setae than aculei; the petioles are hairy, the foliola are not flat, but folded together, and bend back at their connection with the petiole; their colour is a paler green than is usual in the foliola of Scotch Roses; they are also more elliptical and more acutely serrated; and their under surfaces are hairy. The peduncles are short, not stiffly upright, thickening towards the top, and having glandiferous setae; the germen is long, ovate, and smooth, with long narrow sepals, which when the flower opens, are reflected quite to the peduncle. The bud is a bright pink; the flower is large and double, having a fine rich scent; it opens cupped, and has no resemblance to the flowers of the Double Scotch Roses; the centre has a very delicate and beautiful tinge of pale carmine, approaching to flesh colour; the outside petals are so much paler, as to be almost white; the interior petals gradually become shorter and smaller as they approach the centre, and the stamina are seen amongst them; the petals have occasionally a stripe of carmine in them, like to that of a carnation, or similar to the variegation of the York and Lancaster Rose. The flowers become paler after they have been some time expanded, and as they open in succession, there is a great variety of appearance when the plant is in full bloom. It comes into flower after the true Scotch Roses are over, and is a very desirable plant for any garden."¹

¹ *Trans. Hort. Soc.* Nov. 7, 1820.



85—ROSA SPINOSISSIMA, var. OCHROLEUCA Baker

Rosa spinosissima, var. *ochroleuca*: a typo recedit caule altiore, floribus majoribus, luteis.

R. ochroleuca Swartz in *Mem. Svensk. Acad.* pt. 2, p. 3 (1820).

Stems erect, branched, 3-4 feet high; *prickles* crowded, slender, straight, passing gradually into aciculi. *Leaflets* 7, small, oblong, simply serrated, glabrous on both surfaces; *petioles* glabrous or slightly glandular; *stipules* adnate, with small ovate free tips. *Flowers* solitary; *pedicels* naked. *Calyx-tube* globose, naked; *lobes* simply lanceolate, glabrous on the back. *Petals* pale yellow. *Styles* free, villous, not protruded. *Fruit* globose, dark brown, naked, crowned by the persistent sepals.

The herbarium of the British Museum contains an authentic specimen of the *Rosa ochroleuca* of Swartz. The plant growing at Tresserve, from which our drawing was made, answers in every respect to the Swartz specimen. In the Kew herbarium there is a specimen collected by Mr. John Ross at Sachow, in northern China, and labelled "Common yellow garden Rose."

This Rose differs from *Rosa xanthina* of Lindley (*Rosa platyacantha* Schrenk) by its slender prickles intermixed with copious aciculi. It is quite hardy in England, whilst *Rosa xanthina* is only doubtfully so. Sabine in his enumeration of the varieties of the Double Scotch Rose includes four forms with yellow flowers. He calls them "The Small Double Yellow," "The Pale Double Yellow," "The Large Double Yellow," and "The Globe Double Yellow."¹

The present Rose is the *Rosa spinosissima luteola* of Andrews,² and his figure is one of the best in the collection.

¹ *Trans. Hort. Soc.* Nov. 7, 1820.

² *Roses*, vol. ii. t. 128 (1828).



86—ROSA SPINOSISSIMA, var. ALTAICA Rehd.

Rosa spinosissima, var. *altaica*: a typo recedit caule elatiori; foliolis floribusque majoribus.

R. spinosissima, var. *altaica* Rehder in Bailey, *Cycl. Am. Hort.* vol. iv. p. 1557 (1902).

R. altaica Willdenow, *Enum. Hort. Berol.* p. 543 (1809).

R. grandiflora Lindley, *Ros. Monogr.* p. 53, No. 32 (1820); in *Bot. Reg.* vol. xi. t. 888 (1825).

R. sibirica Trattinnick, *Ros. Monogr.* vol. ii. p. 230 (1823).

R. pimpinellifolia, var. *altaica* Seringe in De Candolle, *Prodr.* vol. ii. p. 608 (1825).

R. pimpinellifolia, var. *grandiflora* Ledebour, *Fl. Alt.* vol. ii. p. 227 (1830); *Fl. Ross.* vol. ii. p. 73 (1844).

An erect bush 4-7 feet high; *prickles* straight, slender, dense, passing gradually into aciculi. *Leaflets* 7-11, oblong, obtuse, simply serrated, glabrous on both surfaces, $\frac{1}{2}$ - $\frac{3}{4}$ in. long; *petioles* glabrous, not glandular; *stipules* adnate, with small free tips. *Flowers* solitary; *peduncles* naked. *Calyx-tube* globose, naked; *lobes* lanceolate, simple, entire, not leaf-pointed, naked on the back. *Corolla* pure white, 2-2 $\frac{1}{2}$ in. diameter. *Styles* free, villous, not protruded. *Fruit* globose, sub-coriaceous, black, crowned by the persistent sepals.

Lindley describes this Rose in his *Monograph*, but he was evidently doubtful about giving it specific rank, since he states that he does so at Mr. Sabine's suggestion. He adds, however, that it is too remarkable a plant to be passed over unnoticed, and even should it eventually be referred to *Rosa spinosissima* L. it would always be a distinct variety. The plate in the *Botanical Register*, which was made from the plant growing in the Horticultural Society's garden at Chiswick in 1825, represents a much larger-flowered plant than the present; this may, however, be due to the artist having slightly exaggerated his subject. Lindley gives Siberia as its habitat. Of the plants growing at Kew some were collected in Songaria by Schrenk and others in the Altai Mountains by Ledebour. Its long shoots covered with rather large, pure white flowers make it one of the most beautiful of the single Roses, and it is one of the earliest to blossom. It is quite as hardy as the ordinary Scotch Rose to which it is so nearly allied, and increases very rapidly by suckers.

The drawing was made from a plant growing in my garden at Tresserve, where it is in flower year after year all through the month of May.



87—ROSA SPINOSISSIMA, var. HISPIDA Koehne

Rosa spinosissima, var. *hispida*: a typo recedit caule altiori, foliolis majoribus, floribus sulphureis multo majoribus.

R. spinosissima, var. *hispida* Koehne, *Deutsche Dendrol.*, p. 300 (1893).—Rehder in Bailey, *Cycl. Am. Hort.* vol. iv. p. 1557 (1902).

R. hispida Sims in *Bot. Mag.* vol. xxxviii. t. 1570 (*non* Poiret) (1813).

R. lutescens Pursh, *Fl. Amer. Sept.* vol. ii. p. 735 (1814).—Lindley, *Ros. Monogr.* p. 47, No. 29, t. 9 (1820).—Torrey & Gray, *Fl. N. Amer.* vol. i. p. 462 (1838).

Stem erect, branched, 4-5 feet high; *prickles* irregular, straight, moderately robust, passing gradually into aciculi. *Leaflets* 7-11, oblong, obtuse, green, $\frac{3}{4}$ -1 in. long, simply toothed, glabrous on both surfaces; *petioles* glabrous, aciculate; *stipules* adnate, with small lanceolate free tips. *Flowers* solitary; *pedicels* naked. *Calyx-tube* globose, naked; *lobes* ovate, simple, $\frac{1}{2}$ in. long, not leaf-pointed. *Corolla* sulphur-yellow, $2\frac{1}{2}$ -3 in. diameter. *Styles* free, densely villous, not protruded. *Fruit* globose, dark brown, glabrous, $\frac{1}{2}$ - $\frac{3}{4}$ in. diameter, crowned with the persistent sepals.

Rosa spinosissima, var. *hispida* is a yellow-flowered variety nearly allied to var. *ochroleuca*. It was growing in 1813 in the Physic Garden at Chelsea, where it had been established for many years. A specimen preserved in Sir Joseph Banks' herbarium was gathered in Dr. Pitcairn's garden at Islington as far back as 1781. There is a good drawing in the *Botanical Magazine*. From its being called the "Yellow American Rose" Pursh was led into the mistake of including it in his *Flora of North America*. It only differs from *Rosa spinosissima*, var. *altaica* in the sulphur-yellow colour of its flowers. Its fruit does not differ from that of the typical *Rosa spinosissima* L. It comes true from seed.

The specimen from which our plate was drawn is somewhat off type in the armature, which should be like that of the type.



88—ROSA SPINOSISSIMA, var. MYRIACANTHA
Koehne

Rosa spinosissima, var. *myriacantha*: a typo recedit foliolis minoribus, duplicato-serratis, dorso glandulosis et parce pubescentibus; costa faciei inferioris hispida; pedicellis dense hispidis; sepalis margine glandulosis.

R. spinosissima, var. *myriacantha* Koehne, *Deutsche Dendrol.* p. 300 (1893).—Rehder in Bailey, *Cycl. Am. Hort.* vol. iv. p. 1557 (1902).

R. myriacantha De Candolle, in Lamarck & De Candolle, *Fl. Franç.* ed. 3, vol. iv. pt. ii. p. 439 (1805).—Lindley, *Ros. Monogr.* p. 55, No. 34, t. 10 (1820).—Thory in Redouté, *Roses*, vol. iii. p. 11, t. (1824).—Willkomm & Lange, *Prodr. Fl. Hisp.* vol. iii. p. 211 (1880).

R. pimpinellifolia, var. *myriacantha* Loiseleur, *Fl. Gall.* vol. i. p. 294 (1806).—Seringe in De Candolle, *Prodr.* vol. ii. p. 608 (1825).

R. pimpinellifolia, var. *adenophora* Grenier & Godron, *Fl. France*, vol. i. p. 554 (1848).

R. granatensis Willkomm in *Linnaea*, vol. xxv. p. 24 (1852).

Stems short, erect, much branched; prickles very dense, slender, spreading, unequal. Leaflets 7-9, obovate, obtuse, $\frac{1}{3}$ - $\frac{1}{2}$ in. long, rigid, doubly serrated, green, glabrous on the upper surface, glandular and slightly pubescent beneath, glandular on the margin; petioles pubescent, glandular and aciculate; stipules adnate, with small glandular free tips. Flowers solitary; peduncles short, densely hispid. Calyx-tube globose, naked or hispid; lobes simple, $\frac{1}{3}$ in. long, glandular on the margin. Petals small, white or tinged with red. Styles free, villous. Fruit globose, brown, naked or hispid; sepals spreading, persistent.

The *Rose of a Thousand Thorns* is a curious and interesting variety of *Rosa spinosissima* L. It differs from the type in the glands which occur on the back of the leaves, on the petioles and on the margin of the sepals, in its densely hispid pedicels and in its doubly toothed leaves.

It is connected with *Rosa spinosissima* by *Rosa Ripartii* of Déséglise. It has, however, no connection with *Rosa villosa* L., to which it was referred by Lapeyrouse.¹ It inhabits Spain and also the south of France, where it is found growing in the stony, arid parts of the Route de Mireval, near Montpellier. De Candolle, who describes it in his *Flore Française*, gives Dauphiné and the neighbourhood of Lyons among the localities where it occurs; but there does

Pl. des Pyrénées, p. 283 (1813).

ROSA SPINOSISSIMA, var. MYRIACANTHA

not appear to be any record of its ever having been found near Lyons, nor indeed in Dauphiné. Redouté made a charming figure of this Rose, to accompany which Thory quotes De Candolle's description from the *Flore Française*.

This Rose is rare in cultivation in England, although it is quite hardy and in gardens preserves its characters unchanged.



89—ROSA SPINOSISSIMA, var. ANDREWSII

Rosa spinosissima, var. *Andrewsii*: a formis minoribus typicis recedit floribus paulum plenis, rubris.

This very pretty little Rose is the form of *Rosa spinosissima* most generally met with in old French gardens. Sometimes it occurs in hedges parting off flowers from vegetables, sometimes in isolated bushes, and it is rarely absent from the village curé's garden. Its power of renewing itself under any conditions of neglect and starvation accounts for its being still with us whilst many of the other Scotch Roses, at one time so plentiful, have long since disappeared.

Andrews has nine plates of Scotch Roses, and his *Rosa spinosissima nana*, one of the three forms on plate 123, is evidently intended for the present Rose, although it is never actually so vivid in colour as in his drawing. Miss Lawrance has two drawings of single red forms of *Rosa spinosissima*, and her plate 15 represents a very pretty variegated form which may be the *Rosa nova variegata* of Du Pont referred to by Thory.¹ Redouté's *Grande Pimprenelle aux Cent-Écus* is described by Thory as resembling Du Pont's Rose, but finer and more beautiful in every respect;² it has long disappeared from cultivation.

These are but a few out of the large number of varieties to which hybrids of *Rosa spinosissima* have given rise, for in the space available it has only been possible to mention some of the more notable among them.

¹ *Gym. Ros.* p. 14 (1813).

² *Roses*, vol. ii. p. 103 (1821).



89—ROSA SPINOSISSIMA, var. ANDREWSII

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„	VII	„	March	14,	„
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„	IX	„	May	12,	„
„	X	„	June	14,	„
„	XI	„	July	14,	„
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„	XIII	„	September	20,	„

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PART XIV

THE GENUS ROSA

BY

ELLEN WILLMOTT, F.L.S.
c

Drawings by

ALFRED PARSONS, A.R.A.



LONDON

JOHN MURRAY, ALBEMARLE STREET, W.

1911



90—ROSA FOETIDA Herrm.

Rosa foetida: caule arcuato; aculeis sparsis, inaequalibus, gracilibus, rectis; foliolis 5-7, oblongis, acutis vel obtusis, parvis, duplicato-serratis, facie glabris, dorso pubescentibus, leviter glandulosis; rhachi pubescente et setosa; stipulis adnatis, glanduloso-ciliatis, apice libero lanceolatis; floribus saepe solitariis; pedunculo nudo vel hispido; calycis tubo globoso, nudo vel hispido; lobis simplicibus, lanceolatis, apice elongato dorso glanduloso; petalis luteis; stylis villosis, liberis, inclusis; fructu globoso, rubro; sepalis subpersistentibus.

R. foetida Herrmann, *Dissert.* p. 18 (1762).—Allioni, *Fl. Pedem.* vol. ii. p. 138 (1785).

R. Eglanteria L. *Frut. Suec. Diss.* p. 16 (not of *Sp. Plant.* ed. 1, vol. i. p. 491) (1753); *Syst. Nat.* ed. 10, vol. ii. p. 1062 (1759); *Mant.* p. 399 (1771).—Thory in Redouté, *Roses*, vol. i. p. 69, t. (1817).—*Nouv. Duhamel*, vol. vii. p. 45, t. 15, fig. 1 (1819).—Hooker f., *Fl. Brit. Ind.* vol. ii. p. 366 (1879).—Koehne, *Deutsche Dendrol.* p. 300 (1893).—Rehder in Bailey, *Cycl. Am. Hort.* vol. iv. p. 1557 (1902).

R. lutea Miller, *Gard. Dict.* ed. 8, vol. ii. No. 11 (1768).—Aiton, *Hort. Kew.* vol. ii. p. 200 (1789).—Curtis in *Bot. Mag.* vol. xi. t. 363 (1797).—Lawrance, *Roses*, t. 12 (1799).—Guimpel, Willdenow & Hayne, *Abbild. Deutsch. Holzart.* vol. i. p. 111, t. 84 (1815).—Lindley, *Ros. Monogr.* p. 84, No. 48 (1820).—Keller in Ascherson & Graebner, *Syn. Mitteleur. Fl.* vol. vi. p. 312 (1902).—C. K. Schneider, *Ill. Handbuch Laubholz.* vol. i. p. 584 (1906).

R. chlorophylla Ehrhart, *Beitr. zur Naturk.* vol. ii. p. 69 (1788).

R. cerea sive *chlorophylla* Roessig, *Die Rosen*, No. 2 (1802-1820).

R. Eglanteria, var. *luteola* Thory, *Prodr. Monogr. Ros.* p. 100 (1820); in Redouté, *Roses*, vol. iii. p. 19, t. (1824).

Stems 4-6 feet high, arching; *prickles* copious, irregular, scattered, slender, straight. *Leaflets* 5-7, small, oblong, obtuse or acute, doubly serrated, glabrous on the upper surface, pubescent and slightly glandular beneath; *petioles* pubescent and setose; *stipules* adnate, gland-ciliated, with lanceolate free tips. *Flowers* usually solitary; *peduncles* naked or hispid. *Calyx-tube* globose, naked or hispid; *lobes* lanceolate, simple, leaf-pointed, glandular on the back. *Petals* bright yellow, an inch or more long. *Styles* free, hairy, not exerted beyond the disc. *Fruit* globose, bright red; *sepals* subpersistent.

The yellow Austrian Briar ranges in a wild state from the Crimea through Asia Minor and Persia to Turkestan and the Punjab, and appears in Afghanistan and eastern Thibet. Here and there in Europe it has been found subsponaneous. Requier found a specimen near Avignon and sent it to Sir J. D. Hooker, who

ROSA FOETIDA

preserved it in his herbarium. Prof. Wolf collected it on the gypseous rocks near Nax and M. Correvon near Lierre in the Valais. Tchihatcheff, Dr. T. Thomson, and Dr. Haussknecht found it growing wild in various localities in the East, but K. Koch, who travelled much in the East, never came across it except in cultivation. It was already well known in gardens in the latter part of the sixteenth century. Dodonaeus¹ and Lobel² figured it under the name of *Rosa lutea*; and Gerard had both the type and the crimson variety in his Holborn garden in 1596. Linnaeus confused it with the Sweet Briar in the *Species Plantarum*, his diagnosis of *Rosa Eglanteria* being really that of the Austrian Rose, whilst the synonyms he cites belong to the Sweet Briar. In his annotated edition of the *Species Plantarum*, preserved at the Linnean Society, he has erased these synonyms and written "R. lutea, Bauh. Pinax. p. 483."

Before Linnaeus there had never been any doubt as to what was meant by the Eglantine. The sixteenth-century botanists gave that name to the wild Roses of the hedges, *Rosa canina* L., *Rosa tomentosa* Sm. and *Rosa rubiginosa* L., but the name was most commonly given to the last. In France it is still the popular name for these Roses.

Notwithstanding the decree that nomenclature should date from Linnaeus, Crépin retained the name of *Rosa lutea*, under which Dalechamps had exactly described this Rose more than three hundred years ago.

"The yellow or golden Rose is so named on account of its colour. Its flowers and its colour are different to others, its leaves are small, round, and of a brownish green, much serrated, the points almost sharp. Its branches are well armed with thorns, the flowers golden or yellow, but not double like garden Roses, for it has but five petals. Its odour is unpleasant, nature did wrong in depriving such a beautiful flower of the perfume which it should have had in common with other Roses, for had it only given forth a sweet scent, it would not have ranked among the last of beautiful flowers. It is indigenous in Italy, and we have only lately begun to grow it in our French gardens."³

Both the typical form and the two-coloured form of the Austrian Briar are most ornamental and very floriferous, although the blossoms are fugacious. It may be grown as a standard in the open ground, but deserves a wall, and, so treated, it is one of the most attractive of shrubs. It increases by suckers, but these are not produced in any abundance.

Crépin was of opinion that in future all the yellow Roses would be grouped together on account of their affinity.

¹ *Historia*, p. 186 (1583).

² *Icones*, vol. ii. p. 209 (1581).

³ Dalechamps, *Hist. Pl.* vol. i. p. 126, fig. (1587).



91—ROSA FOETIDA, var. BICOLOR

COPPER AUSTRIAN BRIAR

Rosa foetida, var. *bicolor*: a typo recedit floribus intus cupreo-rubris.

R. punicea Miller, *Gard. Dict.* ed. 8, vol. ii. No. 12 (1768).—Du Roi, *Harbk. Baum.* vol. ii. p. 347 (1772).—Roessig, *Die Rosen*, No. 5 (1802-1820).

R. bicolor Jacquin, *Hort. Vind.* vol. i. t. 1 (1770).

R. lutea, var. *bicolor* Sims in *Bot. Mag.* vol. xxvii. t. 1077 (1808).—Bois, *Atl. Pl. Jard.* t. 84 (1896).

R. Eglanteria, var. *punicea* Thory in Redouté, *Roses*, vol. i. p. 71, t. (1817); *Prodr. Monogr. Ros.* p. 100 (1820).—Rehder in Bailey, *Cycl. Am. Hort.* vol. iv. p. 1557 (1902).

R. lutea, var. *punicea* Keller in Ascherson & Graebner, *Syn. Mitteleur. Fl.* vol. vi. p. 312 (1902).—C. K. Schneider, *Ill. Handbuch Laubholzsk.* vol. i. p. 584 (1906).

Stem arching; *prickles* slender, scattered. *Leaflets* 5-7, small, oblong, doubly serrated, pubescent beneath; *petioles* pubescent; *stipules* adnate, with small free tips. *Flowers* usually solitary; *peduncles* naked or hispid. *Calyx-tube* small, globose; *lobes* simple, glandular on the back. *Petals* bright coppery red. *Styles* free, included. *Fruit* small, globose; *sepals* finally deciduous.

There is no record of the date of the introduction of the Copper Austrian Briar into this country, but it was certainly in cultivation here in the sixteenth century. Gerard grew it in his Holborn garden in 1596. It is figured by Parkinson¹ under the name of "Rosa sylvestris austriaca flore pheniceo." It is probably a variation, which has become fixed, of the yellow Austrian Briar, since it is not uncommon to find on the same bush, simultaneously, pure yellow flowers as well as copper-coloured and even two-coloured flowers. Sometimes the petals are half copper-coloured and half yellow. It is now known in France as Rose Capucine; formerly it was called the Rose Comtesse. About 1815 a double form was said to be growing in the gardens of the Montmorency valley, but there do not appear to be any double Copper Briars in existence at the present time. Wild specimens of the single form were collected by Dr. Stapf at Mardin and Sirvan in Asiatic Turkey, by Strauss in western Persia, and by Dr. Albert Regel in Turkestan.

¹ *Theatrum*, p. 1018, fig. 6 (1640).

ROSA FOETIDA, var. BICOLOR

This Rose and the Persian Yellow possess characters which make it possible to distinguish them readily from other Roses ; such characters are the tawny brown colour of the glistening stems, the many but solitary flowers, and their distinctive unpleasant odour. The leaves when crushed, however, have a slight perfume of sweet briar or apple. This Rose is rarely known to produce fruit, as it is deficient in pollen, but in 1893 M. Brun Joannès of Lyons succeeded, after eight years, in artificially pollinating all the flowers on his plant. The fruit was of the same reddish, well-burnished copper colour as the petals.

The flowering branches should be shortened at midsummer in order to induce lateral growths, the natural tendency of the plant being to make shoots from the upper part of the branches.

92—THE PERSIAN YELLOW ROSE

The Persian Yellow Rose was brought from Persia in 1838 by Sir Henry Willock, K.L.S., Envoy Extraordinary and Minister Plenipotentiary at Teheran.¹ It soon became popular, and in the *Gardener's Chronicle* for 1843 appears the advertisement: "Mr. Hooker has a few plants to spare of the new Persian Yellow Rose on short stems at 15s. each. Nursery Gardens, Brenchley, near Lamberhurst, Kent."² In a notice to correspondents it is stated that this Rose much resembles the old double yellow. In 1848 a drawing made by Stroobank from a plant growing in Van Houtte's garden appeared in the *Flore des Serres et des Jardins de l'Europe*,³ accompanied by a description by Lemaire. The next reference is in the *Revue Horticole* of 1850,⁴ where we read that the Persian Yellow was exhibited by M. Marest at a show of the Société Nationale d'Horticulture in the Luxembourg Gardens. The writer goes on to say that among such a multitude of beautiful Roses it is impossible to mention all those deserving of particular commendation, but that he could not resist singling out such a Rose as this. At the same Society's show in 1852 M. Marest again exhibited the Persian Yellow in great beauty; it was the only yellow Rose in the exhibition and formed the centre of attraction to an admiring public.

It is easy to understand the popularity of the beautiful Persian Yellow Rose, for, with the exception of *Rosa hemisphaerica* Herrm. (then generally known as the double yellow Provence Rose), nothing so striking had been seen, while the fact that it flowered freely and was easy of culture soon led to its being grown in every garden worthy of the name. It had, moreover, the great advantage over *Rosa hemisphaerica* of expanding its flowers in spite of the vagaries of the English climate; and, notwithstanding its lack of fragrance, it had a distinctive charm of its own. Now, however, it is rarely met with, having been crowded out by the overwhelming invasion of new Roses of every kind; but although its place has been to a large extent usurped,

¹ An account of his career is to be found in *Colonsay to Teheran, being the Memoirs of the Right Hon. Sir John McKill, G.C.B.*, and in *Notes on the Willock Family*, by H. D. Willock, 1902.

² February 11, p. 82.

³ Pl. 364.

⁴ P. 137.

THE PERSIAN YELLOW ROSE

it can scarcely be said to have been superseded, since no Rose of its sort has yet appeared to replace it.

On its own roots the Persian Yellow grows freely and flowers well, though not in the same profusion as when budded on the Briar or the Manetti Rose. Care must be taken not to over-prune, for it is a Rose which will rarely break back. When the old shoots have to be shortened, they should be pruned down to a strong growth and on no account below. When grown in a border or in a somewhat confined position, it becomes straggling in growth and requires all the pruning it will submit to. It should be planted in a light soil with a warm sunny aspect, and may then be left to develop unrestrained. It will become in time a bush some nine feet in height, throwing out long branches, the extremities of which will often be covered for from a foot and a half to two feet with golden flowers. In spite of its height the Persian Yellow Rose never becomes ungainly, for the branches stand erect for about half their length and then arch over gracefully, so that the appearance of the bush from a little distance is strikingly beautiful. A hedge of this Rose in flower produces the effect of a cascade of gold.

Rosa Harrisoni, a double yellow Rose which originated in America some years before the introduction of the Persian Yellow, has occasionally been confused with it, but *Rosa Harrisoni* is much paler on expanding, and becomes paler still when exposed to the sun. It is, moreover, by no means such a strikingly handsome flower, but it has the advantage of being less susceptible to the deleterious effects of London smoke. Until quite recently this Rose bloomed profusely every year in an old garden on Clapham Common, and it was only when the builders took possession of the garden that the bushes disappeared.



93—ROSA HEMISPHERICA Herrm.

THE SULPHUR ROSE

Rosa hemisphaerica: caule elato, arcuato; aculeis sparsis, robustis, falcatis, aciculis gracilibus intermixtis; foliolis 5-7, obovato-oblongis, obtusis, basi cuneatis, glaucis, facie glabris, dorso pubescentibus, dentibus saepe simplicibus; rhachi pubescente, parce glandulosa; stipulis adnatis, apice libero magno, dentato; floribus solitariis; pedunculo nudo, saepe cernuo; calycis tubo globoso, nudo; lobis lanceolatis, simplicibus; petalis luteis; stylis liberis, dense villosis, haud protrusis; fructu parvo, globoso, nudo; sepalis patulis, demum deciduis.

R. hemisphaerica Herrmann, *Dissert.* p. 18 (1762).—K. Koch, *Dendrol.* vol. i. p. 226 (1869).—Déséglise in *Bull. Soc. Bot. Belg.* vol. xv. p. 404, No. 271 (*Cat. Rais. Ros.* p. 235, No. 271 [1877]) (1876).—Koehne, *Deutsche Dendrol.* p. 300 (1893).—Rehder in Bailey, *Cycl. Am. Hort.* vol. iv. p. 1557 (1902).—C. K. Schneider, *Ill. Handbuch Laubholz.* vol. i. p. 585 (1906).

R. glaucophylla Ehrhart, *Beitr. zur Naturk.* vol. ii. p. 69 (1788).

R. sulphurea Aiton, *Hort. Kew.* vol. ii. p. 201 (1789).—Lindley in *Bot. Reg.* vol. i. t. 46 (1815); *Ros. Monogr.* p. 46, No. 28 (1820).—Thory in Redouté, *Roses*, vol. i. p. 29, t. (1817).—Seringe in De Candolle, *Prodr.* vol. ii. p. 608 (1825).—Christ in Boissier, *Fl. Orient. Suppl.* p. 206 (1888).

R. Rapiui Boissier & Balansa, *Diagn. sér. ii.* No. 6, p. 72 (1859).—Boissier, *Fl. Orient.* vol. ii. p. 672 (1872).—Crépin in *Bull. Soc. Bot. Belg.* vol. xi. pp. 100, 101 (*Primit. Monogr. Ros.* fasc. ii. pp. 216, 217) (1872).

R. Bungeana Boissier & Buhse, *Nouveaux Mémoires Soc. Imp. Nat. Mosc.* vol. xii. p. 84, t. 6 (*Aufz.* p. 84, t. 6 [1860]).

Stem arching, reaching a height of 8-10 feet. *Prickles* scattered, stout, hooked, intermixed with slender aciculi. *Leaflets* 5-7, obovate-oblong, obtuse, small, glaucous, narrowed to the base, glabrous above, pubescent beneath; teeth usually simple; *petioles* pubescent and slightly glandular; *stipules* adnate, with large toothed free tips. *Flowers* solitary; *peduncles* naked, often cernuous. *Calyx-tube* globose, naked; *lobes* simple, lanceolate, $\frac{3}{4}$ in. long. *Petals* bright yellow, an inch long in the wild plant. *Styles* free, densely villous, not protruded. *Fruit* small, globose, naked; *sepals* spreading, finally deciduous.

A native probably of Asia Minor, Armenia and Persia, this Rose was first introduced into western Europe by Clusius early in the seventeenth century, having originally been brought to his notice in Vienna by a paper model of a garden ornamented with different kinds of shrubs, among them a double yellow Rose. This little artificial

ROSA HEMISPHERICA

garden had been brought by a lady from Constantinople. By means of his many correspondents Clusius succeeded in obtaining plants of the Rose, and from these are probably descended the plants now found in our gardens.

De Pronville, writing in 1824, spoke of the great beauty of this Rose, adding that its habitat was unknown and that it had never shown any tendency to produce single flowers, and expressing surprise that botanists, including Lindley himself, had not referred to the variety *Rosa hemisphaerica minor*, which rarely flowers, and which has branches hairy to their extremities, and leaves growing close together.¹

Linnaeus cannot have seen the Rose, or he would never have considered it as being a variety of *Rosa foetida* Herrm.

Although mentioned by Parkinson and Rea, *Rosa hemisphaerica* is passed over by Miller. Parkinson speaks of it as having been found wild and yielding single flowers on the Himalayas. He knew of two varieties, a large-flowered form and its dwarf variety (that noticed by De Pronville), both double in cultivation. He calls the large form "*Rosa lutea multiplex sive flore pleno*," and thus describes it:

"The double yellow Rose is of great account, but for the rarity, and the doubleness of the flower, and had it sent to the rest, would of all other be of highest esteeme. The stemme or stocke, the young shoots or branches, the small hairy prickes, and the small winged leaves, are in all parts like unto the former single kinde; the chiefest difference consisteth in the doubleness of the flower as Rose, which is so thick and double, that very often it breaketh out on one side as another, and but a few of them abiding whole and faire in our Countrey, the cause whereof wee doe imagine to bee the much moisture of our Countrey, and the time of flowring being subject to much raine and showers; many therefore doe either plant it against a wall, as other wayes defend it by covering: againe, it is so plentifull in young shootes as branches, as also in flowers at the toppe of every branch, which are small and weake for the most part, that they are not able to bring all the flowers to ripenesse; and therefore most of them fall or wither away without coming to perfection (the remedy that many doe use for this last recited is, that they nippe away most of the buds, leaving but some few upon it, that so the vigour of the plant may be collected into a few flowers, whereby they may the better come to perfection, and yet even thus it is hardly effected) which are of a yellowish green colour in the bud, and before they be blowne open, but then are of a faire yellow colour, very full of leaves, with many short hairs rather than leaves in the middle, and having short, round, greene, smooth buttons, almost flat under them: the flower being faire blowne open, doth scarce give place for largenesse, thicknesse, and doublenesse, unto the great Provence or Holland Rose. This Rose bush or plant is very tender with us here about London, and will require some more care and keeping then the single of this kinde, which is hardy enough; for I have lost many my selfe, and I know but a few about this towne that can nourse it up kindly, to beare or scarce to abide without perishing: but abideth well in every free aire of all as the most parts of this Kingdome: but (as I heare) not so well in the North."²

Below, he says:

"Some . . . Roses had their originall . . . in Turkie, as the double yellow Rose, which first was procured to be brought into England, by Master Nicholas

¹ *Monographie du Genre Rosier*, p. 56.

² *Parad.* p. 417 (1629).

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Lete, a worthy Merchant of London, and a great lover of flowers, from Constantinople, which (as wee heare) was first brought thither from Syria; but perished quickly both with him, and with all other to whom hee imparted it: yet afterward it was sent to Master Iohn de Franqueuille, a Merchant also of London, and a great lover of all rare plants, as well as flowers, from which is sprung the greatest store, that is now flourishing in this Kingdome."¹

John Rea² writes of the Rose as follows:

"The *Double Yellow* is the most unapt of all others to bear kindly and fair flowers, unless it be ordered and looked unto in an especial manner; for whereas all other Roses are best natural, this is best inoculated upon another stock; others thrive and bear best in the Sun, this in the shade; therefore the best way that I know to cause this Rose to bring forth fair and kindly flowers, is performed after this manner; First, in the stock of a Francford Rose near the ground put in a Bud of the single *yellow Rose*, which will quickly shoot to a good length; then half a yard higher than the place where the same was budded, put into it a Bud of the *double yellow Rose*; which growing, the Suckers must be kept from the Root, and all the Buds rubbed off except those of the kind desired; which being grown big enough to bear (which will be in two years), it must in Winter be pruned very near, cutting off all the small Shoots, and only leaving the biggest, cutting off the tops of them also as far as they are small; then in the Spring, when the Buds for leaves come forth, rub off the smallest of them, leaving onely some few of the biggest, which by reason of the strength of the stock affording more nourishment than any other, and the agreeable nature of the *single yellow Rose* from whence it is immediately nourished, the Shoots will be strong and able to bear out the flowers, if they be not too many, which may be prevented by nipping off the smallest Buds for flowers, leaving onely such a number of the fairest as the Tree may be able to bring to perfection; which Tree would stand something shadowed, and not too much in the heat of the Sun, and in a standard by it self, rather than under a wall. These Rules being observed, we may expect to enjoy the full delight of these beautiful *Roses*, as I myself have often done by my own practice in divers Trees so handled, which have yearly borne store of fair flowers, when those that were natural, notwithstanding all the helps I could use, have not brought forth one that was kindly, but all of them either broken, or, as it were, blasted."

Rivers says:

"Various situations have been recommended. Some have said, 'Plant it against a south wall'; others, 'Give it a northern aspect, under the drip of some water-trough, as it requires a wet situation.' All this is quackery and nonsense. The *Yellow Provence Rose* is a native of a warm climate, and therefore requires a warm situation, a free and airy exposure, and rich soil; a wall with a south-east or north-west aspect will be found eligible. Give the plants surface-manure every Autumn, and water with manure-water in May; prune with the finger and thumb in Summer, as recommended for the *Persian Yellow*.

"At Burleigh, the seat of the Marquis of Exeter, the effect of situation on this Rose is forcibly shown. A very old plant is growing against the southern wall of the mansion, in a confined situation, its roots cramped by a stone pavement: it is weakly, and never shows a flower-bud. In the entrance-court is another plant, growing in front of a low parapet wall, in a good loamy soil, and free, airy exposure: this is in a state of the greatest luxuriance, and blooms in fine perfection nearly every season. Mr. Mackintosh, the gardener, who kindly pointed out these plants to me, thought the latter a distinct and superior variety, as it was brought from France by a French cook a few years since; but it is certainly nothing but the

¹ P. 420.

² *Flova, Ceres, and Pomona*, pp. 33, 34 (1655).

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genuine old Double Yellow Rose. In unfavourable soils, it will often flourish and bloom freely if budded on the Musk Rose, the common China Rose, or some free growing hybrid China Rose; but the following pretty method of culture I beg to suggest. Bud or graft it on some short stems of the *Rosa Manetti*. In the Autumn pot some of the strongest plants; and, late in Spring, force them with a gentle heat, giving plenty of air. It will now also be very interesting to plant trees of this variety in orchard houses: this seems to me to be the exact climate required by it. By this method, the dry and warm climate of Florence and Genoa may perhaps be partially imitated; for there it blooms in such profusion, that large quantities of its magnificent flowers are daily sold in the markets during the Rose-season."¹

Rosa hemisphaerica is now a very rare Rose, although even in the early part of the nineteenth century it was fairly common in English gardens. It was a great favourite with the Dutch flower-painters. In cultivation it is always copiously double, but it is rarely seen to advantage in England, and has never been known to produce seeds. In southern Europe, however, it is strikingly beautiful, and at Tresserve the bushes are literally covered with rich golden globes. The stems are weak in proportion to the size and weight of the blossoms, which renders them liable to be spoilt by the slightest rain, for when once the expanding buds have been touched by water the flower rots without coming to maturity. This circumstance and the fact that it is very difficult to propagate may be the reason why this once-popular Rose lost favour and had to make way for new varieties better able to withstand the conditions of our English climate. Although moisture injures the flower-buds, it appears to be essential to the roots, and plants grown where there is abundance of moisture gain in vigour and health. Sir Joseph Banks noticed it flowering luxuriantly on marsh ground. Sir James Smith,² on the contrary, says he has seen it flourishing to perfection on poor gravelly soil, exposed to east winds and where no care was taken of the plant.

There is an old story of a lady going to the play wearing in her dress a bud of the Sulphur Rose which opened during the representation.

The *Botanical Register*³ contains an excellent plate followed by a most interesting account of this Rose, and Andrews⁴ gives a characteristic representation of it under the name of *Rosa sulphurea*.

¹ *Rose Amateur's Guide*, ed. 11, pp. 59-61 (1877).

² Rees' *Encyclopaedia*, vol. xxx. (1819).

³ Vol. i. t. 46 (1815).

⁴ Vol. ii. t. 91 (1828).



94—ROSA XANTHINA Lindl.

Rosa xanthina: caule brevi, valde ramoso; ramis brunneis; aculeis multis, subaequalibus, patulis, robustis, basi conicis; foliolis 9-11, oblongis, obtusis, parvis, viridibus, simpliciter serratis, utrinque glabris; rhachi glabra, aciculata; stipulis adnatis, angustis, apicibus liberis parvis; floribus solitariis; pedicellis brevibus, nudis; calycis tubo globoso, nudo; lobis ovatis, acuminatis, parvis, simplicibus; petalis pallide luteis, magnitudine mediocribus; stylis liberis, pilosis; fructu globoso, nudo, sordide rubro; sepalis patulis, persistentibus.

R. xanthina Lindley, *Ros. Monogr.* p. 132 (1820).—Franchet in *Nouv. Arch. Mus. sér. 2*, vol. v. p. 269, t. 15, fig. 2 (*Plantae Davidianae*, vol. i. p. 117 [1884]) (1883).—Forbes & Hemsley in *Journ. Linn. Soc.* vol. xxiii. p. 254 (1887).—Koehne, *Deutsche Dendrol.* p. 300 (1893).—Palibin in *Act. Hort. Petrop.* vol. xiv. p. 118 (*Pl. Sin.-Mongol.*) (1895).—Hooker f. in *Bot. Mag.* vol. lv. t. 7666 (1899).—C. K. Schneider, *Ill. Handbuch Laubholz.* vol. i. p. 587 (1906).

R. platyacantha Schrenk in *Bull. Phys. Math. Acad. Sci. St. Pétersbourg*, vol. x. p. 254 (1842).—Ledebour, *Fl. Ross.* vol. ii. p. 75 (1844).—Regel, *Act. Hort. Petrop.* vol. v. p. 311 (*Tent. Ros. Monogr.* p. 27 [1877]) (*excl. syn.*) (1878).

R. pimpinellifolia, var. *platyacantha* Crépin in *Bull. Soc. Bot. Belg.* vol. xiv. p. 165 (*Primit. Monogr. Ros.* fasc. iii. p. 369) (1875); vol. xviii. p. 379 (*Primit. Monogr. Ros.* fasc. v. p. 625 [1880]) (1879).

R. Ecae Aitchison in *Journ. Linn. Soc.* vol. xviii. p. 54 (1880); vol. xix. p. 161, t. 8 (1882).—Oliver in Hooker *Icon.* vol. xiv. p. 21, t. 1329 (1881).—Christ in Boissier, *Fl. Orient. Suppl.* p. 207 (1888).

Stems short, brown, much branched; prickles dense, subequal, stout, spreading, $\frac{1}{4}$ - $\frac{1}{3}$ in. long, with a compressed conical base, not in infrastipular pairs. Leaflets 9-11, small, oblong, obtuse, simply serrated, green, glabrous on both surfaces; petioles glabrous, aciculate; stipules narrow, adnate, with small, toothed, free tips. Flowers always solitary; pedicels short, naked. Calyx-tube small, globose, naked; lobes simple, ovate-acuminate, $\frac{1}{4}$ - $\frac{1}{3}$ in. long, naked on the back. Petals pale yellow; corolla in the type $1\frac{1}{4}$ - $1\frac{1}{2}$ in. diameter. Styles free, densely hairy. Fruit globose, dull red, $\frac{1}{3}$ in. diameter, naked; sepals spreading, persistent.

Rosa xanthina much resembles the yellow-flowered varieties of *Rosa spinosissima* L., but the prickles are subequal and much stouter and the fruit is dull red instead of bright brown. It ranges from Afghanistan and the Altai Mountains to the northern provinces of China. Lindley thus described it from a Chinese drawing of a double-flowered form: ¹ “A Rose with all the appearance of *Rosa spinosissima*

¹ *Ic. Pict. Bibl. Lambert.*

ROSA XANTHINA

except having no setae and double flowers the colour of *Rosa sulfurea*." Crépin¹ states that although he did not himself see the figure, this brief description enabled him to identify it with a yellow rose which he had described in his *Primitiae*² and which is cultivated at Pekin, the single form being found in the mountains of northern China. The stems and branches of the double form are either unarmed or have slender, straight, purplish prickles, not intermixed, as in *Rosa spinosissima*, with setae; the flowering branches are short and bear the flowers at regular intervals. The Rose seemed to him to be identical with *Rosa platyacantha* Schrenk, except that the latter was said to have white petals. Afterwards he received from Franchet two specimens of yellow Roses which had been collected by the Abbé David in Mongolia, one at Ta-Tsin-Chan and the other at Toumet, Sartchy, and which were identical with a Rose found by M. Przewalski on the Alaskan mountains and referred by Crépin to Schrenk's type. This Rose Crépin had at first believed to be white, but on examining it more closely he discovered that the flowers were yellow, so that it seemed reasonable to assume that *Rosa platyacantha* had also yellow flowers. Whether or no the Rose of Pekin is identical with Schrenk's type, there seems little doubt that it is really the *Rosa xanthina* of Lindley, to which likewise may be referred the Rose collected by the Abbé David and by M. Przewalski. This discovery was due to Franchet, who, when sending the two specimens to Crépin, asked if they were not the *Rosa xanthina* of Lindley. Crépin had curiously enough lost sight of the Rose which Lindley had determined upon the evidence of a single figure.

Rosa Ecae of Aitchison is the Afghan form of *Rosa xanthina* and only differs from the type in its much smaller flowers and less robust prickles. It was collected by Dr. J. E. T. Aitchison, who went out to Afghanistan with the troops and served through the Afghan war, and by whom it was described in the *Journal of the Linnean Society*. He found it growing in abundance from Habibkalla as far as Alikhél, where, with *Amygdalus eburnea* Spach, it forms the major part of the vegetation which covers the rocky hills of the district of Hariáb. This species is still rare in cultivation in England, but is perfectly hardy.

¹ *Flore des Serres et des Jardins de l'Europe* (1880), vol. xxiii. pp. 104-5.

² Fasc. iii. p. 277 (1875) (*Bull. Soc. Bot. Belg.* vol. xiii. p. 270 [1874]) and fasc. v. p. 624 (1879) (*Bull. Soc. Bot. Belg.* vol. xviii. pt. 1, p. 378 [1879]).



95—ROSA HUGONIS Hemsl.

Rosa Hugonis: caule erecto, 4-6 ped. alto, purpureo, verrucoso, rigido, diffuse ramoso, ramulis virgatis; aculeis biformibus, majoribus strictis, 3 lin. longis, acutis, basi lateraliter dilatatis, nitidis, rubris, minoribus setiformibus; foliis cum petiolis 2-4 poll. longis, pallide viridibus; foliolis 5-11, tenuibus, subsessilibus, ellipticis vel obovatis, 3-9 lin. longis, dentatis, rotundatis, interdum mucronatis; rhachi filiforme; stipulis adnatis, angustissimis, apice liberis, erectis, acutis; floribus solitariis, ramulos breves laterales terminantibus; pedunculis gracilibus, foliis aequantibus; calycis tubo globoso, glabro, levi; lobis linearo-lanceolatis, acuminatis, 6 lin. longis, integris, intra tomentosus; petalis luteis, orbicularibus vel obovatis, emarginatis vel rotundatis; carpellis circiter 12, hirsutissimis; stylis liberis, breviter exsertis; fructu parvo, globoso, nigro, nudo; sepalis caducis.

R. Hugonis Hemsley in *Bot. Mag.* vol. cxxxi. t. 8004 (1905).

Stems purplish, erect, 4-6 ft. high, rigid, diffusely branched; branches short, twiggy, spreading, bark verrucose. *Prickles* heteromorphic; larger ones straight, $\frac{1}{4}$ in. long, sharp, dilated laterally at base, bright red in colour; smaller ones bristle-like. *Leaves*, including petioles, 2-4 in. long, pale green; *leaflets* 5-11, thin, subsessile, oval or obovate, $\frac{1}{4}$ - $\frac{3}{4}$ in. long, toothed, rounded, sometimes mucronate; *petioles* filiform; *stipules* adnate, very narrow, apices free, erect, acute. *Flowers* 2-2 $\frac{1}{2}$ in. across, solitary; *peduncles* slender, equalling the leaves in length. *Calyx-tube* globose, glabrous, smooth; *lobes* linear-lanceolate, acuminate, $\frac{1}{2}$ in. long, entire, tomentose on inner surface. *Petals* yellow, orbicular or obovate, notched or rounded. *Carpels* about 12, very hairy. *Styles* free, shortly exserted. *Fruit* small, black, globose, naked; sepals deciduous.

Rosa Hugonis was first collected in western China by the Rev. Hugh Scallan. The exact habitat is not known, but there is good reason to believe that it is in the province of Shan Hsi. The plant at Kew was raised from seeds received from the British Museum in 1904. It is quite hardy in this country, and its habit suggests *Prunus japonica* Thunb. Mr. Hemsley named it in compliment to its discoverer and gave it specific rank, believing it to be sufficiently distinct from *Rosa xanthina* Lindl., *Rosa platyacantha* Schrenk, and *Rosa Ecae* Aitch., to warrant him in doing so. Crépin referred both *Rosa platyacantha* and *Rosa Ecae* to Lindley's *Rosa xanthina*, and Sir J. D. Hooker¹ and Franchet² have followed him. Mr. Baker gave

¹ *Bot. Mag.* vol. lv. t. 7666 (1899).

² *Nouv. Arch. Mus. sér. 2*, vol. v. p. 269, t. 15, fig. 2 (*Plantae Davidianae*, vol. i. p. 117 [1884]) (1883).

ROSA HUGONIS

Rosa platyacantha specific rank, referring *Rosa Ecae* to it, and *Rosa xanthina* also, but not without some hesitation.

All these Roses present certain differences, and probably the last word about them has not yet been said. No herbarium specimen of *Rosa Hugonis* was sent with the seed; and Mr. Hemsley's description and the drawing in the *Botanical Magazine* were made from the living plant at Kew. The only dried specimen in the Kew herbarium which at all resembles *Rosa Hugonis* is one labelled "R. pimpinellifolia flore luteo," collected in the Ili district in Chinese Turkestan.

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Gray Herbarium
Harvard University
(5)

PART XV

THE GENUS ROSA

BY

ELLEN WILLMOTT, F.L.S.

Drawings by

ALFRED PARSONS, R.A.



LONDON

JOHN MURRAY, ALBEMARLE STREET, W.

1911



96—ROSA INVOLUTA Sm.

Rosa involuta: caule brevi, erecto; aculeis sparsis, gracilibus, rectis, aciculis copiosis intermixtis; foliolis 5-7, ovalibus vel suborbiculatis, obtusis, parvis, plus minusve duplicato-serratis, viridibus, facie glabris vel leviter pubescentibus, dorso tomentosis, interdum glandulosis; rhachi pubescente, aciculata; stipulis adnatis, apicibus liberis ovatis; floribus solitariis, rarius paucis; pedicellis brevibus, hispidis; calycis tubo globoso, hispido vel raro nudo; lobis subsimplicibus, lanceolatis, dorso glandulosis; petalis parvis, rubellis; stylis liberis, inclusis, villosis; fructu globoso, rubro, pulposo, nudo vel hispido, sepalis persistentibus coronato.

R. involuta Smith in *Eng. Bot.* vol. xxix. t. 2068 (1809); *Eng. Fl.* vol. ii. p. 377 (1824).—Woods in *Trans. Linn. Soc.* vol. xii. p. 183 (1818).—Lindley, *Ros. Monogr.* p. 56, No. 35 (1820).—Borrer in Hooker, *Brit. Fl.* p. 229 (1830).

R. involuta, var. *Smithii* Baker in *Journ. Linn. Soc.* vol. xi. p. 207 (1869).

Stem short, erect; *prickles* slender, straight, $\frac{1}{3}$ in. long, passing gradually down into copious aciculi and setae. *Leaflets* 5-7, oval or suborbicular, obtuse, small, somewhat doubly toothed, green, glabrous or slightly pubescent on the upper surface, densely pubescent beneath; *petioles* pubescent, aciculate; *stipules* adnate, with ovate free tips. *Flowers* solitary, rarely few in a cluster; *pedicels* short, hispid. *Calyx-tube* globose, hispid or naked; *lobes* simple or nearly so, lanceolate, glandular on the back. *Petals* small, pink. *Styles* free, included, villous. *Fruit* globose, pulpy, bright red, hispid or naked, crowned by the persistent *sepals*.

Rosa involuta was discovered by Mr. J. T. Mackay, author of *Flora Hibernica*, in 1800, in the Hebrides. It was also collected about the same time by Dr. Walker in the same locality. Mackay includes it in his *Flora Hibernica*,¹ and says that he had not personally found it in Ireland, but that according to Dr. Hincks it had been collected at Glengariff, Co. Cork. *Rosa involuta* is a collective name representing a series of hybrids between *Rosa spinosissima* L. and *Rosa tomentosa* Sm. or *Rosa mollis* Sm., most of its forms bearing a strong resemblance to one or both parents; the *spinosissima* influence is almost always evident in the acicles on the stem, and in the number, shape and colour of the leaflets.

Crépin and Déséglise designated the whole group under the name of *Sabiniae*, from its commonest but not its oldest representative, but afterwards they appreciated its hybrid origin. It runs into several varieties, of which the commonest are *Rosa Sabini* Woods and *Rosa*

¹ P. 97 (1836).

ROSA INVOLUTA

Doniana Woods, both commoner than the type, which is often distinguished by the name of var. *Smithii* Baker. Less common forms are *Rosa gracilis* Woods and *Rosa involuta*, var. *Robertsoni* Baker, while var. *gracilescens* Baker, var. *laevigata* Baker, var. *Wilsoni* Baker and var. *Webbii* Baker are very rare. *Rosa involuta*, var. *Nicholsonii* Crép. and var. *Moorei* Baker, are very probably hybrids between *Rosa spinosissima* L. and *Rosa Eglanteria* L.

The group as a whole, although rare, is much more abundant in Britain than on the continent, where Belgium appears to be its headquarters, but the forms found there differ considerably from the British forms. *Rosa coronata* Crépin is their chief representative. This has much more glandular leaflets and much fewer acicles than most of our British forms.

Our typical form, *Rosa involuta*, var. *Smithii* Baker, differs from the rest in its lower growth, more glabrous, less biserrate leaflets, very mixed armature, and pale, cup-shaped flowers. Smith gave it the name of *involuta* from its involute petals.



96—ROSA INVOLUTA



97—ROSA INVOLUTA, var. WILSONI Baker

Rosa involuta, var. *Wilsoni*: a typo recedit foliis simpliciter serratis, saepe basi cordatis, facie glabris, dorso leviter pubescentibus; sepalis simplicibus vel exterioribus parum compositis; fructu ampullaeformi.

R. involuta, var. *Wilsoni* Baker in *Journ. Linn. Soc.* vol. xi. p. 208 (1869).

R. Wilsoni Borrer in Hooker, *Brit. Fl.* p. 228 (1830); *Eng. Bot. Suppl.* vol. ii. t. 2723 (1834).—Syme in *Eng. Bot.* ed. 3, vol. iii. p. 206 (1864).

R. tomentosa × *pimpinellifolia*, var. *Wilsonii* Keller in Ascherson & Graebner, *Syn. Mitteleur. Fl.* vol. vi. p. 342 (1902).

Stem erect, 3-4 feet high, bright red-brown in exposure; *prickles* moderately dense, straight, slender, scattered, passing gradually into aciculi. *Leaflets* 7, middle-sized, oblong, subobtuse, broadly rounded or cordate at the base, simply toothed, glabrous above when mature, somewhat pubescent, not glandular beneath; *petioles* glandular and pubescent; *stipules* adnate, gland-ciliated, with small, ovate, free tips. *Flowers* 1-3; peduncles with glandular and eglandular setae. *Calyx-tube* broadly ovoid, naked or more rarely setose; *lobes* lanceolate, $\frac{3}{4}$ in. long, densely glandular on the back, simple, or the outer slightly compound. *Petals* bright pink, middle-sized. *Styles* free, densely villous, not protruded. *Fruit* urceolate, bright red, pulpy, erect, crowned by the erect persistent sepals.

This is one of the rarest of our native plants, its classic locality being on the south bank of the Menai Straits, near Bangor. It was discovered about 1820 by W. Wilson, the well-known bryologist, author of *Bryologia Britannica*. A similar plant was found by Dr. David Moore at Umbra Rocks, Co. Derry, Ireland, but nothing quite like it has been collected on the continent. It is an erect bush, some two to three feet in height, with pink flowers, and has an appearance between that of *Rosa spinosissima* L. and *Rosa tomentosa* Sm.; it is no doubt a hybrid between these two species. It is often called the Irish Sweet Briar; it comes into leaf very early in the season, and is nearly as fragrant as the true Sweet Briar. In cultivation it loses some of its characters and becomes stronger and more luxuriant in growth.

The varieties making up the group *Sabiniæ* are linked to each other by their extreme forms to such an extent that it is very difficult to distinguish between them. This is not surprising when it is recollected that the whole series is of hybrid origin, between *Rosa spinosissima* L. on the one hand and *Rosa tomentosa* Sm. and *Rosa mollis* Sm. on the other.



97—ROSA INVOLUTA, var. WILSONI



98—ROSA HIBERNICA Templeton

Rosa hibernica: caule ramoso, erecto vel suberecto; aculeis sparsis, parvis, modice robustis, falcatis, aciculis sparsis intermixtis; foliolis 5-7, parvis, late ovalibus, simpliciter serratis, obtusis, facie glabris, dorso leviter pubescentibus vel glabris; rhachi aciculata, pubescente vel glabra, parce glandulosa; stipulis adnatis, apice libero divergente, dentato; floribus fere 1-3; pedunculis brevibus, nudis; bracteis parvis; calycis tubo parvo, globoso, nudo; lobis pinnatifidis, apice elongato, foliaceo, dorso glabro; petalis parvis, rubro tinctis; stylis villosis, liberis, inclusis; fructu globoso, parvo, sordide rubro, nudo, sepalis persistentibus coronato.

R. hibernica Templeton in *Trans. Dublin Soc.* vol. iii. pp. 162-4 (1802-3).—Smith in *Eng. Bot.* vol. xxxi. t. 2196 (1810); *Eng. Fl.* vol. ii. p. 393 (1824).—Aiton, *Hort. Kew.* ed. 2, vol. iii. p. 261 (1811).—Woods in *Trans. Linn. Soc.* vol. xii. p. 222 (1818).—Lindley, *Ros. Monogr.* p. 82, No. 47 (1820).—Syme in *Eng. Bot.* ed. 3, vol. iii. p. 205, t. 463 (1864).—Baker in *Journ. Linn. Soc.* vol. xi. p. 209 (1869).—Déséglise in *Bull. Soc. Bot. Belg.* vol. xv. p. 307 (*Cat. Rais. Ros.* p. 138 [1877]) (1876).

In exposed places a compact erect bush 3-4 feet high, in hedges more drawn out; *prickles* scattered, small, moderately robust, curved, intermixed with a few unequally distributed aciculi. *Leaflets* 5-7, small, broadly oval, obtuse, $\frac{3}{4}$ -1 in. long, simply toothed, glabrous on the upper surface, green with a slight glaucous tinge, in the type somewhat pubescent beneath; *petioles* pubescent in the type, aciculate, not very glandular; *stipules* adnate, with short, free, divergent, ovate, toothed tips. *Flowers* usually 1-3; *peduncles* short, naked; *bracts* small. *Calyx-tube* small, globose, naked; *lobes* ovate with a long leafy point, pinnatifid, glabrous on the back. *Corolla* pale pink, $1\frac{1}{4}$ - $1\frac{1}{2}$ in. diameter. *Styles* villous, free, included. *Fruit* globose, naked, $\frac{1}{2}$ in. diameter, dark dull red, crowned with the persistent *sepals*.

Rosa hibernica has not been found wild beyond the limits of Ireland and England. For its discovery near Belfast in 1802 Mr. William Templeton was awarded the premium of five guineas which had been offered by the Dublin Society for the discovery of a new Irish plant.

It is intermediate between *Rosa spinosissima* L. and *Rosa canina* L., and is generally supposed to be a hybrid between these two species. It is extremely polymorphous, and Lindley was at a loss to know under which section to place it, for its habit is, when weak, like *Rosa spinosissima*, and when more vigorous, like *Rosa canina*. He admired Mr. Woods's acuteness in selecting as its most important character the mixture of small, straight prickles or acicles on the branches,

ROSA HIBERNICA

indicating the *Rosa spinosissima* parentage, but these acicles are often absent from considerable portions of the stem, as in our plate. Its nearest allies amongst continental Roses are *Rosa armatissima* Déségl. and Rip., and *Rosa Schultzii* Rip.

There are three varieties: the Irish type, with leaves pubescent beneath and pubescent petioles; var. *glabra* Baker, with leaflets much more elliptical and acuminate, entirely glabrous, the usual English form; and var. *cordifolia* Baker, found by Professor Oliver in Northumberland, with the terminal leaflet cordate at the base. The last is very similar to, if not identical with, *Rosa involuta*, var. *Wilsoni* Baker.



98—ROSA HIBERNICA



99—ROSA PENDULINA L.

Rosa pendulina: caule erecto; ramulis floriferis plerumque inermibus; aculeis sparsis, rectis, gracilibus, aciculis intermixtis; foliis 5-9, oblongis, simpliciter vel duplicato-serratis, plerumque utrinque glabris; rhachi glandulosa; stipulis adnatis, glanduloso-ciliatis, apice libero ovato; floribus saepe solitariis; pedunculis elongatis, dense glandulosis; calycis tubo ampullaeformi; lobis simplicibus, lanceolatis, apice foliaceis, dorso glabris vel glandulosis; petalis rubellis; stylis liberis, dense villosis; fructu urceolato, rubro, pulposo, sepalis persistentibus coronato.

R. pendulina Linnaeus, *Sp. Plant.* vol. i. p. 492 (1753).—Koehne, *Deutsche Dendrol.* p. 299 (1893).—Crépin in *Bull. Herb. Boiss.* vol. v. p. 135 (1897).—Burnat, *Fl. Alp. Mar.* vol. iii. p. 38 (1899).—Keller in Ascherson & Graebner *Syn. Mitteleur. Fl.* vol. vi. p. 298 (1901).—Rehder in Bailey, *Cycl. Am. Hort.* vol. iv. p. 1555 (1902).—C. K. Schneider, *Ill. Handbuch Laubholz.* vol. i. p. 579 (1906).

R. alpina Linnaeus, *Sp. Plant.* ed. 2, vol. i. p. 703 (1762).—Jacquin, *Fl. Aust.* vol. iii. p. 43, t. 279 (1775).—Aiton, *Hort. Kew.* vol. ii. p. 208 (1789).—De Candolle in Lamarck & De Candolle, *Fl. Franç.* ed. 3, vol. iv. pt. 2, p. 446 (1805).—Lindley in *Bot. Reg.* vol. v. t. 424 (1819); *Ros. Monogr.* p. 37, No. 24 (1820).—Trattinnick, *Ros. Monogr.* vol. ii. p. 198 (1823).—Seringe in De Candolle, *Prodr.* vol. ii. p. 611 (1825).—Grenier & Godron, *Fl. Franç.* vol. i. p. 556 (1848).—K. Koch, *Dendrol.* vol. i. p. 240 (1869).—Christ, *Rosen Schweiz*, p. 58 (1873).—Burnat & Gremlin, *Roses Alp. Marit.* p. 55 (1879); Suppl. p. 73 (1883).—Borbás in *M. T. Akad. Math. S. Természettud. Közlemények* xvi. Kötet. p. 527 (*Ros. Hung.* p. 527) (1880).—Hooker f. in *Bot. Mag.* vol. cix. t. 6724 (1883).—Waldner, *Europ. Rosentypen*, p. 43 (1885).—Crépin in *Bull. Soc. Bot. Belg.* vol. xxvii. p. 109 (1888); vol. xxxi. pt. 2, p. 75 (1892).—Gaillard in *Bull. Herb. Boiss.* vol. vi. p. 405 (1898).

R. rupestris Crantz, *Stirp. Austr.* fasc. ii. p. 32 (1763).

R. monspeliaca Gouan, *Fl. Monsp.* p. 255 (1765).—Déséglise in *Bull. Soc. Bot. Belg.* vol. xv. p. 287 (*Cat. Rais. Ros.* p. 118 [1877]) (1876).

R. inermis Miller, *Gard. Dict.* ed. 8, vol. ii. No. 6 (1768).

R. pyrenaica Gouan, *Illust.* p. 31, t. 19 (1773).—Guimpel, Willdenow & Hayne, *Abbild. Deutsch. Holzart.* vol. i. p. 123, t. 93 (1815).—Déséglise in *Bull. Soc. Bot. Belg.* vol. xv. p. 288 (*Cat. Rais. Ros.* p. 119 [1877]) (1876).

R. lagenaria Villars, *Hist. Pl. Dauph.* vol. iii. p. 553 (1789).—Déséglise in *Bull. Soc. Bot. Belg.* vol. xv. p. 287 (*Cat. Rais. Ros.* p. 118 [1877]) (1876).

R. hispida Krockner, *Fl. Siles.* vol. ii. pt. 1, p. 152 (1790).

R. alpina, var. *hispida* Desvaux, *Journ. Bot.* vol. ii. p. 119 (1813).

R. alpina, var. *pyrenaica* Seringe in De Candolle, *Prodr.* vol. ii. p. 611 (1825).

R. adjecta Déséglise in *Bull. Soc. Bot. Belg.* vol. xv. p. 286 (*Cat. Rais. Ros.* p. 117 [1877]) (1876).

R. alpestris Déséglise in *Bull. Soc. Bot. Belg.* vol. xv. p. 286 (*Cat. Rais. Ros.* p. 117 [1877]) (1876).

R. intercalaris Déséglise in *Bull. Soc. Bot. Belg.* vol. xv. p. 286 (*Cat. Rais. Ros.* p. 117 [1877]) (1876).

ROSA PENDULINA

Stem often low and erect, sometimes reaching a height of 5-6 feet; *flowering branches* usually unarmed, bright red-brown in exposure. *Prickles* slender, straight, scattered, unequal, mixed with aciculi. *Leaflets* 5-9, oblong, moderate-sized, simply or doubly toothed, usually green and glabrous on both surfaces; *petioles* glabrous and glandular; *stipules* adnate, gland-ciliated, with small free tips. *Flowers* usually solitary; *peduncles* long, densely glandular. *Calyx-tube* ampullaeform; *lobes* lanceolate, usually simple, glabrous or glandular on the back, leaf-pointed, $\frac{3}{4}$ -1 in. long. *Corolla* bright red. *Styles* free, densely villous, not protruded. *Fruit* narrowly urceolate, bright red, pulpy, an inch long, $\frac{1}{2}$ in. diam., crowned by the persistent *sepals*, usually pendulous.

The Alpine Rose is one of the great ornaments of all the mountains of central and southern Europe, for both flowers and fruit are beautiful. It ranges from the Alps westward to the Pyrenees and eastward to Greece. Many of its varieties have received specific names; it hybridizes with *Rosa spinosissima* L. and other species, and, crossed artificially with *Rosa chinensis* Jacq., it has formed the Boursault Rose.¹ It is figured by Besler in the *Hortus Eystettensis* under the name of *Rosa rubra praecox fl. simp.*,² and is said to have been introduced into Britain by Mr. James Sutherland in 1683. *Rosa pendulina* is an earlier name than *Rosa alpina*, but was originally applied by Linnaeus to one of the hybrids between *Rosa alpina* and *Rosa spinosissima*; the type of his herbarium is, however, this species. The glands on the fruit and peduncle have a strong smell of turpentine. It has borne the popular name of Rose of Sharon, to which it has no title, but the name was given in allusion to its harmless character.

Several authors have given specific rank to certain curious forms of Roses which may be included under the Alpine Rose considered in a broad sense, such as the following: *intercalaris* Déségl., *adjecta* Déségl., *lagenaria* Vill., *pyrenaica* Gouan, *monspeliaca* Gouan, *pendula* Salisb., *inermis* Mill., etc. Rouy gives a large number of others.³ True synonyms are those which arise from errors. But when an author describes as a species a variety which he considers a species, being perfectly well acquainted with the type to which this species or variety belongs, it is because he holds it to be sufficiently distinct to be given specific rank. Until the contrary is proved, we may at least allow it to be a variety. Where the authors have published figures, it is easy to see, by referring to the sources, if we have to do with a good species or an undoubted synonym.

¹ For an account of the *alpina* hybrids see Crépin, who gives *Rosa alpina* × *pomifera*; *Rosa alpina* × *glauca*; *Rosa alpina* × *montana*; *Rosa pimpinellifolia* × *alpina*; *Rosa alpina* × *rubrifolia*: *Bull. Soc. Bot. Belg.* vol. xxi. pp. 80-4 (*Primit. Monogr. Ros.* fasc. vi. pp. 740-4) (1882).

² Vern. Ordo. VI. fol. 5, iii. (1613).

³ *Flore de France*, vol. vi. pp. 400-3 (1900).



99—ROSA PENDULINA



100—ROSA MALYI Kern.

Rosa Malyi: caule brevi, erecto, ramoso; aculeis ad ramos floriferos nullis; foliis 7, parvis, late oblongis, obtusis, duplicato-serratis, utrinque glabris; rhachi glabra, parce aciculata; stipulis latis, adnatis, glanduloso-ciliatis, apice libero, parvo ovato; floribus solitariis; pedunculis dense aciculatis, fructiferis cernuis; calycis tubo turbinato, nudo; lobis ovatis, simplicibus, longe acuminatis, dorso glabris; petalis parvis, saturate rubris; stylis liberis, villosis; fructu lagenaeformi, rubro, pulposo, sepalis persistentibus coronato.

R. Malyi Kerner in *Oester. Bot. Zeitschr.* xix. 325 (1869).—Borbás in *M. T. Akad. Math. S. Természettud. Közlemények* xvi. Kötet. pp. 526, 535 (*Ros. Hung.* pp. 526, 535) (1880).—H. Braun in *Act. Soc. Zool. Bot. Vind.* vol. xxxv. p. 115 (1885).—Nyman, *Conspectus Fl. Europ.* Suppl. ii. p. 116, No. 37 (1890).

R. pendulina, var. *Malyi* Keller in Ascherson & Graebner, *Syn. Mitteleur. Fl.* vol. vi. p. 305 (1902).

Stem erect, much branched, 3-4 feet high, without prickles on the flowering branches. *Leaflets* 7, small, oblong, obtuse, $\frac{1}{2}$ - $\frac{3}{4}$ in. long, doubly toothed, green, glabrous on both surfaces; *petioles* glabrous, slightly aciculate; *stipules* broad, adnate, gland-ciliated, with small, ovate, free tips. *Flowers* solitary; *peduncles* densely beset with gland-tipped aciculi, nodding in fruit. *Calyx-tube* naked, turbinate; *lobes* ovate, tapering into a long point, $\frac{1}{2}$ - $\frac{3}{4}$ in. long, naked on the back. *Corolla* deep bright red, 1-1 $\frac{1}{4}$ in. diam. *Styles* free, villous. *Fruit* flask-shaped, bright red, pulpy, an inch long, naked, crowned with the persistent *sepals*.

Rosa Malyi was discovered on Monte Santo in Dalmatia by Franz Maly and was described by Kerner in 1869. Maly was Garteninspektor of the Hofburg at Vienna. He accompanied the Archduke Maximilian to Brazil in 1859; and his name is also known in connection with the alpine flora of Austria-Hungary, of which he made a careful study. He collected several new species of European Roses, among which the most interesting is *Rosa Malyi*. It is intermediate between *Rosa pendulina* L. and *Rosa spinosissima* L., having the flowers of the former and the small leaves of the latter, and is probably a hybrid between these two species. Dr. Keller wrote an elaborate paper upon it in Engler's Jahrbuch.¹

Rosa Malyi is certainly one of the most beautiful of the wild Roses yet introduced into our gardens. It is amongst the first in the year to open its buds, and it is exceedingly floriferous. In colour the flowers are of a bright rich shade of pink; the habit of the plant is compact, and in all ways it is a satisfactory garden shrub.

¹ Vol. xv. p. 493 (1893).

101—ROSA REVERSA Waldst. & Kit.

(ROSA PENDULINA × SPINOSISSIMA)

Rosa reversa: caule brevi, erecto; aculeis densis, gracilibus, rectis; foliolis 7-11, parvis, oblongis, obtusis, simpliciter serratis, glabris; rhachi glandulosa; stipulis adnatis, apicibus liberis, parvis, ovato-lanceolatis; floribus solitariis; pedunculis brevibus, aciculatis; calycis tubo oblongo, nudo; lobis lanceolatis, integris, dorso parce glandulosis; petalis albis; stylis liberis, dense villosis, haud protrusis; fructu ampullaeformi, rubro, sepalis persistentibus coronato.

R. reversa Waldstein & Kitaibel, *Pl. Rar. Hong.* vol. iii. p. 293, t. 264 (1812).—Crépin in *Bull. Soc. Bot. Belg.* vol. viii. p. 328 (*Primit. Monogr. Ros.* fasc. i. p. 107) (1869); vol. xxxiii. pt. 1, p. 35 (1894).—Borbás in *M. T. Akad. Math. S. Természettud Közlemények* xvi. Kötet. pp. 539, 544 (*Ros. Hung.* pp. 539, 544) (1880).

R. rubella Smith in *Eng. Bot.* vol. xxxvi. t. 2521 (1814); *Eng. Fl.* vol. ii. p. 374 (1824).—Woods in *Trans. Linn. Soc.* vol. xii. p. 177 (1818).—Lindley, *Ros. Monogr.* p. 40, No. 25 (1820).—Godet, *Fl. Jur.* p. 205 (1853).—Syme in *Eng. Bot.* ed. 3, vol. iii. p. 204, t. 462 (1864).—Grenier, *Fl. Jur.* vol. i. p. 227 (1865).—Crépin in *Bull. Soc. Bot. Belg.* vol. viii. p. 328 (*Primit. Monogr. Ros.* fasc. i. p. 107) (1869).

R. Candolleana Thory in Redouté, *Roses*, vol. ii. p. 45, t. (1821).

R. Ozanonii Déséglise in *Mém. Soc. Acad. Angers*, vol. x. p. 88 (*Ess. Mon. Ros.* p. 48) (1861).

R. pimpinellifolia × *alpina* Reuter, *Cat. Pl. Vasc. Genève*, ed. 2, p. 64 (1861).—Christ, *Rosen Schweiz*, p. 65 (1873).—Crépin in *Bull. Soc. Bot. Belg.* vol. xxxiii. pp. 33, 143 (1894).

R. medioxima Christ, *Rosen Schweiz*, p. 66 (1873).

R. alpino-pimpinellifolia Christ, *Rosen Schweiz*, p. 67 (1873).

R. gentilis Déséglise in *Bull. Soc. Bot. Belg.* vol. xv. p. 264 (*non* Sternberg teste Keller) (*Cat. Rais. Ros.* p. 95 [1877]) (1876).

R. alpina × *pimpinellifolia* Schmidely in *Bull. Trav. Soc. Bot. Genève*, vol. viii. p. 50 (1895-7).—Gaillard in *Bull. Herb. Boiss.* vol. vi. p. 417 (1898).

R. pendulina × *pimpinellifolia* Keller in Ascherson & Graebner, *Syn. Mitteleur. Fl.* vol. vi. p. 314 (1902).

A low, erect, compact bush; *prickles* dense, slender, straight, passing gradually into aciculi and setae. *Leaflets* 7-11, small, oblong, obtuse, simply serrated, glabrous; *petioles* glandular; *stipules* adnate, with small, ovate-lanceolate, free tips. *Flowers* solitary; *peduncle* short, aciculate. *Calyx-tube* oblong, naked; *lobes* lanceolate, entire, thinly glandular on the back. *Petals* white. *Styles* free, densely villous, not protruded. *Fruit* ampullaeform, pendulous, red, crowned by the persistent sepals.

Rosa reversa is found in Hungary, and is probably one of the many *spinosissima-pendulina* crosses. These two species appear to

ROSA REVERSA

hybridize freely with one another when growing in the same localities, and several different forms have been distinguished. Crépin examined a specimen of this Rose in Willdenow's herbarium from a plant growing in the Berlin Botanic Garden, which is believed to have been sent thither by Kitaibel himself. He also examined two specimens in Sprengel's herbarium, which, however, were without any indication of origin. All these specimens answered exactly to Kitaibel's description.

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„	XII	„	August	14,	„
„	XIII	„	September	20,	„
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PART XVI

STAMP
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THE GENUS ROSA

BY

ELLEN WILLMOTT, F.L.S.

Drawings by

ALFRED PARSONS, R.A.



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1912
Gray Herbarium
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ROSA ALPINA INDICA (59-185411)

ROSA LHERITIERANEA

In order to protect the parts of
"The Genus Rosa" an additional
portfolio is now sent to hold them
until the second volume is completed.
Each subscriber is entitled to a port-
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102—ROSA LHERITIERANEA

(ROSA CHINENSIS × PENDULINA)

BOURSAULT ROSE

Rosa Lheritieranea: caulibus elongatis, erectis; foliis angustis, oblongis, magnitudine mediocribus, viridibus, simpliciter serratis, utrinque glabris; rhachi glabra; stipulis adnatis, haud glanduloso-ciliatis, latis, apicibus liberis, ovatis; floribus paucis vel multis, corymbosis; pedunculis nudis; bracteis lanceolatis; calycis tubo globoso, nudo; lobis simplicibus, apicibus elongatis, dorso nudis; petalis rubris; stylis liberis, haud protrusis; fructu ignoto.

R. Lheritieranea Thory in Redouté, *Roses*, vol. iii. p. 21, t. (1824).

R. reclinata Thory in Redouté, *Roses*, vol. iii. p. 79, t. (1824).—Rehder in Bailey, *Cycl. Am. Hort.* vol. iv. p. 1555 (1902).

R. alpina × *indica*, var. *odorata* Focke, *Pfl. Mischl.* p. 141 (1881).

R. chinensis × *pendulina* Koehne, *Deutsche Dendrol.* p. 281 (1893).—Keller in Ascherson & Graebner, *Syn. Mitteleur. Fl.* vol. vi. p. 371 (1902).

R. alpina × *indica* Crépin in *Bull. Soc. Bot. Belg.* vol. xxxiii. p. 32 (1894).

Stems long, erect; *prickles* none on the flowering shoots in the form drawn. *Leaflets* fine, oblong, middle-sized, thin, bright green, simply serrated, glabrous on both surfaces; *petioles* glabrous; *stipules* adnate, not gland-ciliated, broad upwards, with ovate free tips. *Flowers* few or many, in a corymb; *peduncles* naked; *bracts* lanceolate. *Calyx-tube* globose, naked; *lobes* simple, long-pointed, naked on the back. *Petals* bright red. *Styles* free, not protruded beyond the disc. *Fruit* not seen.

In his catalogue of Roses grown in France, published in 1829,¹ N. Desportes mentions several Boursault Roses which he names respectively *Boursaultiana*, *multiplex*, *plena*, and *carnea*; the last is a single Rose. Max Singer in his *Dictionnaire des Roses*² gives "Rosier Boursault à fleurs doubles," Laffay. But Singer is not always trustworthy in his information; he speaks of Thory, Laffay, and Cartier as raisers of Roses, although Thory never raised Roses, but only described them; and he does not mention Cugnot, who, according to Desportes and Thory, was the originator of the Boursault Rose.

In the catalogue of the *Roseaie de l'Hay*, Laffay is said to have

¹ Desportes, *Roses cultivées en France, au nombre de 2562 variétés.* (Paris.)

² Vol. i. p. 23 (1885).

ROSA LHERITIERANEA

raised the Boursault Rose in 1829. This statement is vague and, if correct for one variety, is not so for the type, which is the oldest. The Boursault Rose was apparently common in French gardens early in the nineteenth century. Thory describes this Rose and *Rosa reclinata* as follows :

“Les deux Rosiers qui nous occupent n'exigeront qu'une seule description, attendu qu'ils sont absolument les mêmes, avec la seule différence que l'un est à fleurs simples et l'autre à fleurs composées d'une vingtaine de pétales. Tous les deux sont susceptibles de s'élever à une grande hauteur si on a le soin de les palisser contre un treillage. Les rameaux sont généralement sans aiguillons ; cependant, il s'en rencontre parfois sur les branches inférieures. Les feuilles se composent de trois, cinq, et le plus souvent de sept folioles glabres sur les deux faces, d'un vert clair en dessus, un peu plus pâle en dessous, simplement dentées. Elles sont portées par un pétiole glabre, muni de petits aiguillons rougeâtres ayant à sa base deux stipules décurrentes, pointues au sommet, denticulées en leur bord, lavées d'une teinte rouge dans leur jeunesse, et de couleur verdâtre au moment de la chute des feuilles. Les fleurs sont disposées plusieurs ensemble à l'extrémité des rameaux qui croissent le long des branches principales. Les boutons, avant l'anthèse, se courbent vers la terre d'une manière remarquable ; mais ils se redressent avant l'épanouissement. Les tubes des calices sont courts, presque globuleux et glabres ; ainsi que les pédoncules et les divisions du limbe ces mêmes divisions sont presque simples, aussi longues que les pétales et dilatées en spatules au sommet. Les pétales sont échancrées en cœur et d'un rose tendre. Le fruit est presque rond et rouge à la maturité.

“Le premier de ces Rosiers (celui à fleurs simples) est vraisemblablement un hybride issu d'un Rosier du Bengale et d'un Rosier des Alpes : il nous a été communiqué par M. Cugnot ; il est assez rare. Le second, qui se trouve communément dans les jardins, et qu'on connaît sous le nom de *Rosier Boursault*, est un produit de semence du premier. Tous deux se couvrent au printemps d'un grand nombre de fleurs qui persistent jusqu'à l'automne sur les pieds bien exposés. Ils n'exigent aucune culture.”¹

It would thus appear that Cugnot was the originator of *Rosa reclinata*, which was the result of a cross between *Rosa pendulina* L. and *Rosa chinensis* Jacq., as well as of the Rose commonly known as the Boursault Rose, which he raised from *Rosa reclinata*. He dedicated it to Boursault, a *conventionnel*, whose garden in the Rue Blanche, now the Chaussée d'Antin, was famous towards the end of the eighteenth century for one of the richest collections of plants at that time to be found in Paris. De Pronville,² writing in 1824 of the noteworthy gardens in the neighbourhood of Paris, says that M. Boursault possessed a magnificent collection of the rarest Roses then existing, and often anticipated the nurserymen in obtaining new varieties. It is of course possible that some professional Rose-grower may have had this Rose from M. Boursault's garden and introduced it into commerce under his name, which at that time would have been a valuable aid in securing a ready sale for a new plant.

Dumont de Courset, an author who gave much attention to

¹ Redouté, *Les Roses*, vol. iii. p. 79.

² *Sur les Roses*, p. 148.

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Roses, does not mention the Boursault Rose in the second edition of his *Botaniste Cultivateur*, which appeared in 1811. Thory, in his *Monographie des espèces et des variétés du genre Rosier*,¹ published in 1820, speaks of "un arbrisseau connu dans les pépinières sous le nom de Rosier Boursault qu'on soupçonne hybride d'un Rosier des Indes et d'un Rosier des Alpes." J. P. Vibert, in the catalogue of the Roses cultivated by him in June 1822, gives the Boursault Rose under Hybride Bengale, but without author or date, although he carefully mentions the date of introduction of several other varieties. Noisette has a Rose "Agathe Boursault" in his list of 1827, but does not mention the Boursault Rose itself. Parkman,² writing in 1866, speaks of the Boursault Rose as well known in America, and describes the "Old Red Boursault" and its improved hybrids "Amadis," "Blush Boursault," "Inermis," "Elegans," "Gracilis."

As the origin of the first Boursault Rose is somewhat obscure, I have thought it advisable to give all the information which it has been possible to obtain upon the subject. The plate here given was drawn from a plant growing at Warley of the variety "Calypso," a form which comes nearer in its characters to *Rosa pendulina* than to *Rosa chinensis*.

¹ P. 132.

² *Book of Roses*, pp. 141-2.

103—ROSA STELLATA Wooton.

Rosa stellata: caule brevi, erecto, ramoso; aculeis magnis, sparsis, gracilibus, suberectis, aciculis parvis intermixtis; foliis saepissime 3, raro 5, pinnatis, obovato-cuneatis, rigidulis, viridibus, utrinque glabris, praesertim ad apicem simpliciter serratis; rhachi glabra, aciculata, haud glandulosa; stipulis adnatis, apicibus liberis linearibus; floribus solitariis; pedunculis brevissimis, nudis; calycis tubo globoso, aciculato; lobis ovato-lanceolatis, acuminatis, dorso hispidis, exterioribus parce compositis; petalis magnis, rubellis; stylis liberis, villosis, haud protrusis; fructu globoso, aciculato, sepalis erectis persistentibus coronato.

R. stellata Wooton in *Bull. Torrey Bot. Club*, vol. xxv. p. 152, t. 335 (1898).—Crépin in *Bull. Herb. Boissier*, vol. vi. p. 725 (1898).—Baker in *Journ. Hort. Soc.* vol. xxvii. p. 455, fig. 128 (1902).—Rehder in Bailey, *Cycl. Am. Hort.* vol. iv. p. 1558 (1902).

Stem short, erect, much branched; *prickles* large, scattered, slender, $\frac{1}{4}$ in. long, intermixed with small aciculi, but not passing down into them gradually. *Leaflets* usually 3, sessile at the tip of the petiole, rarely 5, pinnate, obovate-cuneate, $\frac{1}{4}$ in. long, rigid, green, glabrous, simply toothed, principally at the tips; *petioles* glabrous and aciculate, not glandular; *stipules* adnate, with linear free tips. *Flowers* solitary; *peduncles* very short, naked. *Calyx-tube* globose, very prickly; *lobes* ovate-lanceolate, with a long point, hispid on the back, the outer slightly compound. *Corolla* $1\frac{1}{2}$ -2 in. diam., pink. *Styles* free, villous, not protruded. *Fruit* globose, $\frac{1}{3}$ in. diam., prickly, crowned by the erect persistent *sepals*.

Rosa stellata is a very remarkable and distinct species. It was discovered in July 1897 by Mr. E. O. Wooton on the mountains of Lincoln and Donna Ana counties, New Mexico, at an elevation of 5,500 to 6,000 feet. The discovery was one of great interest from a botanico-geographical point of view. For here we have two Roses belonging to the same section, having such important points of resemblance as *Rosa minutifolia* Engelm. of Lower California and *Rosa stellata* of New Mexico, existing in almost the same latitude but at some 700 miles' distance from each other.

Rosa stellata differs from other Roses of the *spinosissima* group in having usually only three obovate-cuneate leaflets, sessile at the tip of the petiole. The flowers are much larger than in the other forms of this group, and the fruit is very prickly. It has been in cultivation in the United States, but has not yet reached England.



104—ROSA BLANDA Aiton.

HUDSON'S BAY OR LABRADOR ROSE

Rosa blanda: caule erecto, ramoso, plerumque inermi; aculeis sparsis, rectis, gracilibus, inaequalibus; foliolis plerumque 7, oblongis, acutis, ad basim angustatis, simpliciter serratis, teneris, facie opacis, glabris, dorso pubescentibus; rhachi inermi, pubescente; stipulis apice libero ovato; floribus paucis vel solitariis; pedicellis nudis vel setosis; calycis tubo globoso, nudo; lobis simplicibus, elongatis, apice foliaceis, dorso glandulosis; petalis rubellis, magnitudine mediocribus; stylis villosis, liberis, haud protrusis; fructu globoso, parvo, rubro, pulposo, sepalis persistentibus coronato.

R. blanda Aiton, *Hort. Kew.* vol. ii. p. 202 (1789).—Jacquin, *Fragm.* p. 70, t. 105 (1809).—Lindley, *Ros. Monogr.* p. 25, No. 16 (1820); *Bot. Reg.* vol. vi. t. 458 (1820).—S. Watson in *Smithsonian Misc. Coll.* vol. xv. p. 309 (1878).—Britton & Brown, *Illustr. Fl. Northern U. States and Can.* vol. ii. p. 229, fig. 1966 (1897).—C. K. Schneider, *Ill. Handbuch Laubholz.* vol. i. p. 577 (1906).

R. fraxinifolia Borkhausen, *Forstbot. Beschr. Holz.* p. 301 (1790).—Lindley, *Ros. Monogr.* p. 26, No. 17 (1820).—Seringe in De Candolle, *Prodr.* vol. ii. p. 606 (1825).

R. laxa Lindley, *Ros. Monogr.* p. 18, No. 12, t. 3 (*non* Retzius) (1820).

R. Solandri Trattinnick, *Ros. Monogr.* vol. ii. p. 150 (1823).

R. Lindleyi Sprengel in Linnaeus, *Syst. Veg.* ed. 16, vol. ii. p. 547 (1825).

R. virginiana K. Koch, *Dendrol.* vol. i. p. 243 (*non* Miller) (1869).—Koehne, *Deutsche Dendrol.* p. 298 (*non* Miller) (1893).

R. alpina Regel in *Act. Hort. Petrop.* vol. v. p. 296 (*Tent. Ros. Monogr.* p. 12 [1877]) (*ex parte*) (1878).

Stems erect, 4-6 feet high, branched, the main ones brown, the young ones green; flowering shoots usually without any prickles; *prickles* when present small, slender, straight, unequal. *Leaflets* usually 7, rarely 9, oblong, acute, moderately large, narrowed to the base, simply serrated, thin, dull green and glabrous above, paler and pubescent beneath; *petioles* pubescent, not aciculate or setose; *stipules* adnate, with an ovate, acute, free point. *Flowers* one or few; *pedicels* short, naked or setose. *Calyx-tube* globose, naked; *lobes* simple, with a long leafy point, glandular on the back. *Corolla* pink, moderately large. *Styles* free, villous, not protruded beyond the flat disc. *Fruit* small, globose, red, naked, pulpy, crowned by the persistent *sepals*, ripening in August.

The Labrador or Hudson's Bay Rose was introduced into cultivation in 1773 by Mr. James Gordon. Some authors have imagined it to be the *Rosa sylvestris virginiensis* of Parkinson,¹ others

¹ *Theatrum Botanicum*, p. 1017 (1640).

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the *Rosa virginiana* of Miller ; but as it was not in cultivation till 1773, it cannot have been known to either Parkinson or Miller. Aiton was the first to describe it, and his description exactly fits the Labrador Rose now in our gardens.

Jacquin describes and figures a glabrous-leaved form well known to other botanists. Redouté figures the same form under the name of *Rosa alpina laevis*.¹ Lindley made two separate species of the two forms, calling the pubescent form *Rosa blanda* and the glabrous form *Rosa fraxinifolia*. He never saw a living specimen of the pubescent form, and his *Monograph* does not include plates of either ; but *Rosa fraxinifolia*, the glabrous form, is figured in the *Botanical Register*. Andrews gives a drawing and description of a much-armed Rose which he calls *Rosa blanda*,² but which has no resemblance whatever to the *Rosa blanda* of Aiton. He was no doubt misled into accepting as *Rosa blanda* a Rose cultivated in Loddiges' Nursery as the Hudson's Bay Rose.

Rosa blanda is generally found in damp, rocky situations ; it ranges from Labrador, Canada, and the northern United States, across the continent to Vancouver Island. The flowers, which are sweet-scented, are rather large and a rich pink in colour. The hips do not last so long on the bushes as those of *Rosa carolina* L. and *Rosa humilis* Marsh., and are not so bright in colour, but it is a pretty Rose, one of the earliest to flower, and altogether well worth growing. Its forms are infinite, and are a source of endless bewilderment to amateurs who attempt to determine their wild Roses. The plates represent two of the forms most frequently met with.

Rosa blanda, var. *Willmottiana* (see accompanying plate) is a form growing in Warley garden, which was raised from seed sent from America and which Mr. Baker considered sufficiently well marked to be given a varietal name. It is an extremely pretty and interesting Rose with its red stem, small leaves, and clustered, coral-pink flowers. It is free-flowering and compact in growth.

¹ *Roses*, vol. i. pp. 50, 60, t. (1817).

² *Roses*, vol. ii. t. 90 (1828).



104—ROSA BLANDA





104—ROSA BLANDA, var.





104—ROSA BLANDA, var. WILLMOTTIANA

ROSA ANGULARIS

ROSE PRATINCOLA



105—ROSA PRATINCOLA Greene

Rosa pratincola: caule brevi, viridi; aculeis purpureis, plurimis gracilibus debilibusque, rectis, patulis vel modice deflexis; foliis magnis; foliolis 7-11, obovatis vel oblongo-obovatis, acute serratis, cuspidato-acutis, primo utrinque pubescentibus, denique facie glabris; stipulis angustissimis, integris, pubescentibus, haud glandulosis nec aciculatis; rhachi saepe setoso-aciculata; floribus in paniculum corymbosum dispositis; calycis tubo glabro, lobis lanosissimis, apicibus utrinque villosis, basi dorso glanduloso-hispida.

R. pratincola Greene, *Pittonia*, vol. iv. p. 13 (1899).—Robinson & Fernald in Gray's *New Man. Bot.* ed. 7, p. 495 (1908).

“Almost herbaceous, and never more than suffrutescent, 1 or 2 feet high, usually flowering terminally and corymbosely from upright shoots of the season; bark of the stem green and glaucescent, the prickles dark purplish, all rather slender and weak, but some larger and less slender than others, all straight, spreading or slightly deflexed; leaves very ample for the plant; leaflets 7 to 11, obovate and oblong-obovate, sharply serrate, somewhat cuspidately acute, pubescent on both faces when young, the upper face glabrate in age; stipules very narrow and entire, soft-pubescent, but neither glandular nor prickly, the rachis often setose-prickly; receptacle smooth and glabrous, the sepals very woolly within and also marginally, the tips villous on both sides, the back of the basal part glandular-hispid; achenes nearly smooth, but more or less hirsute on certain of the angles and about the base or summit.”

The above is the description of *Rosa pratincola* given by its author, Mr. E. L. Greene, who continues:

“I thus designate unhesitatingly as a new species one of the commonest of North American roses, and one most abundantly inhabiting a very extensive range in the United States and Canada; a denizen of the prairie regions of the West and North-west, from Illinois and Missouri to the Dakotas and Manitoba. It has passed for *R. Arkansana*, and to that extent that probably almost all the so-called *R. Arkansana* of the herbaria of the country is of this species. It is found in eastern Kansas and Nebraska, but does not occur in Colorado or anywhere very near its borders, in so far as we can ascertain. It is the peculiar rose of the rich grassy prairies of the upper Mississippi Valley; and, though passing usually for *R. Arkansana*, has been distributed by Sandberg, from Minnesota, as *R. humilis*. It is, of course, a part of *R. blanda* of the earlier American authors, and of local botanists residing in the prairie regions.

“Probably no botanist knowing, as I know, both the Illinois and Wisconsin prairies, and the valley of the Arkansas in Colorado, could be brought to entertain the notion that any species of rose could be common to the two. The latter is an

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arid and subsaline half-desert country, a region of cactaceous and salicorniaceus plants, probably about as different from the region of *R. pratincola* as Arabia is from England; a consideration which does not seem to have entered the minds of our American rhodologists—if we have any—much less those of the European students of the genus.

“*R. Arkansana* has not, I think, been collected a second time; and as I spent many a week in arduous collecting about Cañon City, in different years between 1873 and 1896, without having seen original *R. Arkansana*, I entertain a suspicion that it may have been founded on some corymbose-flowering precocious shoot from the root of the so-called *R. blanda* of that region, or perhaps of *R. Fendleri*. But, apart from the antecedent improbability of this our eastern prairie species being also an inhabitant of a cactus desert, the western and xerophilous Rose, the real *R. Arkansana*, is glabrous, while ours is pubescent; it has stipules both glandular and prickly, while ours has them softly pubescent only; it has sepals reflexed in fruit, while in ours these are erect.”

106—ROSA MINUTIFOLIA Engelm.

Rosa minutifolia: caule brevi, erecto, ramoso; aculeis crebris, gracilibus, rectis, valde inaequalibus; foliolis 3-5, obovatis, obtusis, profunde incisis, minutis, facie tenuiter, dorso dense pubescentibus; rhachi pubescente et aciculata, haud glandulosa; stipulis adnatis, apicibus liberis ovatis; floribus solitariis; pedunculis brevissimis, nudis; calycis tubo globoso, hispido; lobis ovato-lanceolatis, acuminatis, exterioribus compositis; petalis parvis, rubris; stylis liberis, villosis; fructu globoso, parvo, hispido, sepalis subpersistentibus erectis coronato.

R. minutifolia Engelmann in *Bull. Torrey Bot. Club.* vol. ix. pp. 97, 127 (1882).—S. Watson in *Proc. Amer. Acad.* vol. xx. p. 346 (1885).—Crépin in *Journ. Hort. Soc.* vol. xi. p. 226 (1889).—Baker in *Journ. Hort. Soc.* vol. xxvii. p. 455, fig. 127 (1902).—Rehder in Bailey, *Cycl. Am. Hort.* vol. iv. p. 1557 (1902).—C. K. Schneider, *Ill. Handbuch Laubholzsk.* vol. i. p. 586 (1906).

An erect, much-branched shrub, 3-4 feet high; *prickles* crowded, slender, straight, very unequal. *Leaflets* 3-5, obovate, very small ($\frac{1}{4}$ - $\frac{1}{3}$ in. long), obtuse, deeply incised, slightly pubescent on the upper surface, densely pubescent with raised veins beneath; *petioles* pubescent and aciculate, not glandular; *stipules* adnate, with ovate free tips. *Flowers* solitary; *peduncles* very short, naked. *Calyx-tube* globose, hispid; *lobes* ovate-lanceolate, acuminate, $\frac{1}{3}$ in. long, pubescent on the back, the outer compound. *Petals* bright red, not longer than the sepals. *Styles* free, villous, not protruded. *Fruit* globose, very hispid, $\frac{1}{3}$ in. diam., crowned with the erect subpersistent *sepals*.

Rosa minutifolia is a native of Lower California; and was discovered in April 1882 by Dr. C. C. Parry and Mr. C. G. Pringle, near the 32nd parallel of north latitude. It most resembles the low coast-sandhill forms of *Rosa spinosissima* L. both in habit and armature, but differs in its much fewer, very small, deeply incised, pubescent leaflets and densely hispid fruit. It was planted out at Kew but did not survive, and is probably not hardy in England.

107—ROSA ALBERTI

NATIVE OF CENTRAL ASIA

Rosa Alberti: caule brevi, suberecto, ramoso; aculeis subulatis, rectis, patulis, aequalibus; foliolis 5-7, parvis, obovatis, obtusis, simpliciter vel subsimpliciter dentatis, utrinque glabris; rhachi glabra; stipulis adnatis, apicibus liberis, brevibus, utrinque glabris; floribus solitariis; pedunculis brevibus, erectis, nudis; calycis tubo oblongo, nudo; lobis elongatis, simplicibus, lanceolatis, dorso glabris; petalis magnis, pallide luteis; stylis liberis, hirsutis; fructu ovoideo, nudo, sepalis persistentibus coronato.

R. Alberti Regel in *Act. Hort. Petrop.* vol. viii. p. 278 (1883).—Koehne, *Deutsche Dendrol.* p. 298 (1893).

Stem suberect, much branched, 2-3 feet long; *prickles* subulate, equal, spreading, scattered. *Leaflets* 5-7, very small, obovate, obtuse, glabrous on both surfaces, teeth simple or nearly so; *petioles* glabrous; *stipules* adnate, with short free tips, glabrous on both surfaces. *Flowers* solitary; *peduncles* short, naked. *Calyx-tube* oblong, naked; *lobes* lanceolate, simple, $\frac{1}{2}$ - $\frac{3}{4}$ in. long, glabrous beneath. *Petals* broad, pale yellow, an inch long. *Styles* free, hairy. *Fruit* ovoid, naked, crowned by the persistent sepals.

This is the plant grown as *Rosa Alberti* in English gardens, though it does not exactly agree with Regel's short original diagnosis. Regel's plant was raised in the Botanic Garden of St. Petersburg, from seeds collected by his son, Dr. Albert Regel, on the Thian-schan mountains in Central Asia. Our plant closely resembles *Rosa spinosissima* L. in habit and foliage, but differs from the yellow-flowered variety of that species in its equal prickles, leaflets only 5-7 in number, and long-acuminate sepals.

108—ROSA MACDOUGALII

Rosa Macdougalii: caule bruneo, ramosissimo; aculeis pluribus, rectis, patulis, inaequalibus, nullis geminis; foliolis 5-7, parvis, oblongis, obtusis, simpliciter serratis, utrinque glabris; rhachi glabra, parce aciculata; stipulis apicibus parvis, patulis, ovatis, liberis, praeditis; floribus solitariis; pedunculis brevibus, aciculatis; calycis tubo globoso, dense aciculato; lobis lanceolatis, acuminatis, integris, dorso glabris; petalis rubellis, magnitudine mediocribus; stylis dense pilosis; fructu globoso, aciculato, sepalis persistentibus coronato.

R. Macdougalii Holzinger in Coult. *Bot. Gaz.* vol. xxi. p. 36 (1896).

Stems brown, much branched; *prickles* numerous, unequal, straight, spreading, none in pairs. *Leaflets* 5-7, small, oblong, obtuse, $\frac{1}{2}$ in. long, simply toothed, glabrous on both surfaces; *petioles* glabrous, slightly aciculate; *stipules* with small, ovate, spreading, free tips. *Flowers* solitary; *peduncles* short, aciculate. *Calyx-tube* globose, densely aciculate; *lobes* lanceolate, acuminate, entire, $\frac{3}{4}$ in. long, glabrous on the back. *Petals* pink, middle-sized. *Styles* very hairy. *Fruit* globose, hispid, crowned with the persistent sepals.

Rosa Macdougalii is a native of the United States. It is found in the mountains of Montana and Idaho at a height of about 3,000 feet. In habit it closely resembles the European *Rosa spinosissima* L.

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