

Notes on some *Rosa* taxa recorded as occurring in the British Isles

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ABSTRACT

The authors of accounts of *Rosa* likely to be consulted at present differ in their treatment of the genus both in the number of species recognized and in the names applied to them. An attempt is made to rationalize the treatment of *Rosa* in the British Isles by typification of some of the controversial names and by suggesting which taxa should be given specific rank.

INTRODUCTION

For many years the most widely accepted authority for British roses was Wolley-Dod (1930–31). Wolley-Dod undoubtedly succeeded in making some order out of the chaos which had previously prevailed. However, his system was in many ways unsatisfactory. He never appeared to be really convinced about the great propensity for hybridization in the genus *Rosa*. Because of this he was obliged to consider most of his species as very variable, and to name and describe numerous varieties and forms. Wolley-Dod (1936) himself later expressed doubt as to the significance of these varieties, stating that rarely in the field did one find specimens which corresponded closely or even remotely with the author's description of a named variety.

Warburg (1952) favoured a somewhat different interpretation of species under a slightly different nomenclature. This treatment was closely followed by Dandy (1958). Nevertheless many British rhodologists continued to follow Wolley-Dod's system. Most notable of these was R. Melville, whose researches into the vitamin C content of rose hips during the Second World War led him to take an interest in the genus, and subsequently to become the leading authority on British *Rosa*. He was well aware of the propensity for hybridization in the genus. Melville (1967, 1975) gave excellent accounts of this phenomenon. Nevertheless, though he would confirm a hybrid determination, he continued to use Wolley-Dod varietal names for most specimens sent to him.

The publication of Klášterský's (1968) account of *Rosa* presented a somewhat different species concept and nomenclature. Klášterský gave specific rank to many taxa which are demonstrably hybrids. All the names used by Klášterský for British taxa were adopted by the Biological Records Centre as accepted names in its check list of British vascular plants. Furthermore the Scandinavian rhodologists, notably Malmgren (1986) and Nilsson (1967), favoured yet another interpretation of the genus. Therefore the authors of the present article, when commissioned by the Botanical Society of the British Isles to prepare a handbook of the roses of the British Isles, were faced with considerable taxonomic problems, both in the correct nomenclature and in the number of species which should be recognized. Confronted with the vital necessity of attempting to solve these problems, we undertook research with a view to the typifying of certain names, establishing cases of synonymy and priority, and deciding which taxa were to be accorded specific rank.

Our main source for the preliminary background information was Wolley-Dod (1908, 1910, 1930–31, 1936). Other important literature sources are cited in their appropriate places in the text. For

study of the plants themselves both of us can rely upon considerable experience of British *Rosa* in the field. Also, as B.S.B.I. referees for *Rosa*, we have both received and been able to examine specimens from all over the greater part of the British Isles. Problems of time and distance prevented us from undertaking as much herbarium research as we wished. However, we both spent some days examining Melville's British collection of *Rosa* at **K**, though it was impossible in the time available to do full justice to this vast collection. It is a pity that we were not able to take more than a cursory glance at some of Wolley-Dod's material at **BM**. Most of this is still in the original packages and, as far as we know, has not been examined by anyone since Wolley-Dod. We also examined some important specimens in **LINN**, and obtained on loan material from **LIV** and from some Continental herbaria.

Our conclusions concerning the taxa numbered 9 to 15 in this article are based largely on current British opinion, together with our personal experience of British *Rosa* in the field and in herbaria. Apart from the examination of some of Klášterský's specimens obtained on loan from **PR**, we have not undertaken any extensive research on these taxa. They are included here for the benefit of those who make use of *Flora Europaea* or the Biological Records Centre check list.

NOTES ON SELECTED TAXA

1. *Rosa canina* L., *Sp. Pl.* 491 (1753). LECTOTYPE: Specimen no. 652.31, labelled "canina 4" by Linnaeus (**LINN**), selected here. Seen by us 1989.

This species as at present understood by British rhodologists is very variable. It is difficult to determine from the accounts of Continental authors exactly what is included under this name. Wolley-Dod (1930–31) divided the species into five 'groups', two of which (groups *Andegavenses* and *Scabratae*) are now known to consist of hybrids of *R. canina* with other species. A third group, *Transitoriae*, almost certainly consists of hybrids between groups *Dumales* and *Lutetianae*.

The lectotype specimen of *Rosa canina* corresponds well with the characters of group *Lutetianae* in having uniserrate eglandular leaflets and very few glands on stipules and rachis. Group *Dumales* has glandular-biserrate leaflets and numerous stipitate glands on stipules and rachis. Pending further research, and to facilitate recording that would allow for possible future changes in taxonomic opinion, we propose to retain the informal groups *Lutetianae*, *Transitoriae* and *Dumales*. These groups will serve as convenient and familiar informal interim labels, even though they are not nomenclaturally valid, and the first named group is nomenclaturally typical.

The type specimen is wholly glabrous. In Britain one often finds plants differing from this only in having pubescent leaflets, the pubescence frequently being sparse or confined to midribs and veins beneath. Hitherto some British rhodologists, following Wolley-Dod, have named these plants as *Rosa dumetorum* Thuill. This has been proved inadmissible (cf. *R. dumetorum* below). It is therefore proposed that these pubescent plants should be included in *R. canina*, and, pending further research, recorded as a fourth group, group *Pubescentes*.

2. *Rosa dumetorum* Thuill., *Fl. Environs Paris*, 2nd ed., 250 (1799). LECTOTYPE: specimen collected by Thuillier, ex herb. Delessert, mounted with relevant cutting from the original *Fl. Env. Paris* (G), selected here. Seen by us 1989.

The lectotype without doubt consists of a hybrid of *R. canina* and *R. obtusifolia* Desv. So also does most Continental material labelled *R. dumetorum* at **K**, including one specimen labelled by Crépin as having been collected by Thuillier. The original description of *R. dumetorum*, though somewhat inadequate, confirms the determination. The British 'hairy *canina*' hitherto named as *R. dumetorum* does not correspond with Thuillier's material.

As far as we know, *R. × dumetorum* is the earliest (and therefore correct) name for the hybrid *R. canina* × *R. obtusifolia*.

3. *Rosa corymbifera* Borkh., *Vers. Forstbot. Beschr. Holzart* 319 (1790). TYPE: unknown (fide *Taxonomic Literature*, 2nd ed., 1: 280 (1976)).

Specimens from **PR** so determined by Klášterský and seen by us are without doubt the hybrid of *R.*

canina and *R. obtusifolia* with *R. obtusifolia* as the seed parent. Klášterský's (1968) description of *R. corymbifera* in *Flora Europaea*, though somewhat inadequate, also appears to refer to this hybrid. However, Borkhausen's very clear and detailed description cannot possibly be applied to this hybrid. Except for the pronouncedly corymbose inflorescence, which is unusual but not unknown in British material, Borkhausen's description points unequivocally to the pubescent variety of *R. canina* described above, which some British rhodologists have hitherto named as *R. dumetorum* Thuill. It is unfortunate that there is no type specimen. Klášterský's species concept for *Rosa* seems to be largely pragmatic, in that he assigns specific status to several hybrids. We do not know whether he consulted Borkhausen's description, but we cannot see how this description could be interpreted as applying to the specimens which we saw determined by Klášterský as *R. corymbifera*.

We do not think there is any justification for separating from *R. canina*, at species level, plants which differ from it only by the pubescence (often slight) of the leaves. However, if this distinction were to be made, the correct name for the taxon is *R. corymbifera* Borkh.

4. *Rosa caesia* Sm. in Smith & Sowerby, *Engl. Bot.* 33: t.2367 (1812). LECTOTYPE: Specimen no. 901.25, Smith Herbarium (LINN), selected here. Seen by us 1989.

5. *Rosa coriifolia* Fries, *Novit. Fl. Suec.* 33 (1814). HOLOTYPE: UPS. Seen by A. L. Primavesi 1987. Examination of the types of these two names, and of Borrer's excellent material of *R. caesia* at K (Borrer having provided Smith with the original material of *R. caesia*), convinced us that they represent a single taxon. The same decision was reached by Klášterský (1968). The correct name is therefore *R. caesia*. The taxon is characterised by pubescent, somewhat rugose, non-glaucous leaflets.

6. *Rosa afzeliana* Fries, *Fl. Halland.* 87 (1817). HOLOTYPE: UPS. Not seen by us (not available on loan).

Our interpretation of this taxon relies upon that of various Scandinavian authors (e.g. Nilsson 1967; Malmgren 1986), whose accuracy we do not doubt in this matter. It differs from *R. caesia* only in its glabrous, smooth, glaucous leaflets, and possibly in the greater incidence of anthocyanin in the young stems. It also differs somewhat in its geographical and altitudinal distribution. Hence it does not seem reasonable to consider them as separate species, and, in accordance with the views of some Scandinavian rhodologists, we shall treat the two as subspecies of one species.

As far as we are aware the earliest available name at subspecific rank is *Rosa glauca* subsp. *glauca* Nyman, an autonym created by Nyman (1878) when he published *R. glauca* subsp. *venosa* and subsp. *hibernica*. Although Nyman referred *R. glauca* to "Vill. ap. Lois.", that *R. glauca* is a later homonym of *R. glauca* Pourret (1788) and hence is illegitimate. Nevertheless the epithet *glauca* at subspecies level dating from Nyman (1878) is available as a basionym:

Rosa caesia subsp. *glauca* (Nyman) Graham & Primavesi, **comb. nov.**

Rosa glauca subsp. *glauca* Nyman, *Consp. Fl. Europ.* 236 (1878).

7. *Rosa dumalis* Bechst., *Forstbot.* 939 (1810). TYPE: formerly at B, destroyed (fide P. Hiepkö, in litt. 1989).

This name has been used by various authors to cover *R. caesia* subsp. *glauca* (as *R. dumalis* subsp. *dumalis*), and, if applicable, would certainly pre-date *R. caesia*, *R. coriifolia* and *R. afzeliana*. R. Melville (in litt. 1975) considered this application to be extremely dubious. In order to determine the identity of *R. dumalis* we have only Bechstein's description, which, like many of those of older authors, lacks some essential details. However, in our opinion, corroborated by that of A. O. Chater when we met together and discussed this matter in 1988, the description is of a hybrid between *R. caesia* subsp. *glauca* and *R. canina*. There are enough characters in the lengthy description to justify the consideration that the taxon is this hybrid, and to exclude it from synonymy with *R. caesia* subsp. *glauca*. On the evidence outlined above, the name *R. × dumalis* Bechst. should by priority be the correct one for the hybrid *R. caesia* × *R. canina*.

8. *Rosa elliptica* Tausch, *Flora (Regensb.)* 2: 465 (1819). TYPE: probably **PR** (fide *Taxonomic Literature*, 2nd ed., 6: 182 (1976). Not seen by us.

Continental specimens obtained on loan from **PR** and so determined by Klášterský represent a distinct species, but we have been unable to find any British or Irish material corresponding to this, and conclude that the species does not occur in the British Isles, despite its inclusion by Warburg (1952) and Dandy (1958). There are no specimens in **OXF** labelled *R. elliptica*. The specimens obtained on loan from there were labelled *Rosa inodora* Fr., which has been considered to be synonymous with *R. elliptica*. However this old material from **OXF** does not resemble the Continental material of *R. elliptica*, and appears to consist of hybrids of *R. agrestis* Savi or of *R. micrantha* Borrer ex Sm.

9. *Rosa squarrosa* (Rau) Boreau, *Fl. Centre Fr.*, 3rd ed., 2: 222 (1857).

R. canina var. *squarrosa* Rau, *Enumeratio Rosarium circa Wirceburgum et Pagos adjacentes sponte crescentium*, 77 (1816).

Rau's description of *R. canina* var. *squarrosa* corresponds closely with Wolley-Dod's *R. canina* group *Dumales*, in which this variety is included by Wolley-Dod. Boreau's description differs from this in that he describes the petioles as having some hairs, and the sepals as tomentose on the upper surface and the margins (this group of *R. canina* is entirely glabrous). He also says that the styles are hairy, but this could come within the range of variation of *R. canina* as we understand it at present. Klášterský's (1968) description is sparse, but differs from Boreau's in that he states that the styles are long-exserted (Boreau expressly states that they are short), and that they are villous (Boreau's word is "velu"). A specimen from **PR** determined as *R. squarrosa* by Klášterský appears to us to be a hybrid of *R. canina* group *Dumales* and *R. caesia* subsp. *glauca*, which would account for the villous styles; they were not long-exserted. Rau's type material is presumed to have been destroyed, and all we have to go on is his original description. We conclude that pending further research this taxon is best treated as a variety of *R. canina*. If British rhodologists should ever decide to separate the glandular-biserrate varieties from *R. canina* as a species, then *R. squarrosa* appears to be the correct name, provided that there is no earlier name which is applicable.

10. *Rosa andegavensis* Bast., *Essai Fl. Maine Loire* 189 (1809).

Wolley-Dod included this in his group *Andegavenses* as a variety of *R. canina*. British rhodologists now consider group *Andegavenses* to consist of hybrids of *R. canina*, probably in the main with *R. arvensis* Huds. or *R. stylosa* Desv. Klášterský's (1968) description could certainly be applied to the latter hybrid. We did not receive any material of this taxon on loan from Prague.

11. *Rosa nitidula* Besser, *Cat. Pl. Jard. Krzemien.*, *Suppl.* 4: 20 (1815).

If, as Klášterský (1968) stated, this is synonymous with *R. blondaiana* Ripart ex Deséglise, then Wolley-Dod included it in his group *Scabratae* as a variety of *R. canina*. This group is now considered to consist of hybrids of *R. canina* with species having glandular-hispid pedicels and subfoliar glands. The specimen from **PR** which we examined was in our opinion certainly a hybrid of *R. canina*, probably with *R. rubiginosa* L. Besser's detailed description confirms this view, and indeed Besser himself states that this plant has affinities with the *Rubiginosae*.

12. *Rosa vosagiaca* Desportes, *Ros. Gall.*, 88 (1828).

Klášterský's (1968) description of this corresponds in all respects with a description of *R. caesia* subsp. *glauca*. It would be interesting to know why, in treating this as a separate species, Klášterský did not make use of the earlier name *R. afzeliana* Fr. We did not receive any material of this on loan from **PR**. Klášterský omitted Br from his list of localities. Consequently *R. vosagiaca* (and hence *R. caesia* subsp. *glauca*) is omitted from the Biological Records Centre check-list.

13. *Rosa subcanina* (Christ) Dalla Torre & Sarnth., *Fl. Tirol.* 6(2): 515 (1909).

The specimen obtained on loan from PR was clearly *R. caesia* subsp. *glauca* × *R. canina*. This hybrid occurs frequently in Britain where the two parents occur together. Wolley-Dod placed it in *R. afzeliana* group *Subcaninae*.

14. *Rosa subcollina* (Christ) Dalla Torre & Sarnth., *Fl. Tirol.* 6(2): 516 (1909).

The specimen on loan from PR was clearly *R. caesia* subsp. *caesia* × *R. canina*. This hybrid also occurs frequently in Britain in the presence of the two parents. Wolley-Dod placed it in *R. coriifolia* group *Subcollinae*.

15. *Rosa deseglisei* Boreau, *Fl. Centre Fr.*, 3rd ed., 2: 224 (1857).

We did not receive any material of this on loan from PR. Klášterský's (1968) description of *R. deseglisei* would appear to be that of a hybrid of *R. obtusifolia*. Wolley-Dod made it a variety of *R. dumetorum* group *Deseglisei*, a group characterized by having glandular-hispid pedicels but with no subfoliar glands. Melville (1975) considered the British material to be a hybrid between *R. dumetorum* (i.e. pubescent *R. canina*) and *R. arvensis*. From our experience of British material formerly named as *R. dumetorum* var. *deseglisei* we are confident that this consists of hybrids of *R. canina*, probably not first-generation hybrids. We have not seen Boreau's original description. The translation of it given by Wolley-Dod (1908) is somewhat vague and could be applied to any of the above interpretations. Not having seen the type or any Continental material we cannot, of course, be sure that Continental plants are not a distinct species. However, we can say that if it is a distinct species then it does not occur in Britain, because all British material with any of the interpretations mentioned above can be accounted for as hybrids.

16. *Rosa scabriuscula* Sm. in Smith & Sowerby, *Engl. Bot.*, 27: t.1896 (1808). LECTOTYPE: Specimen 1909. LBG. 7116 (LIV), selected here. Seen by A. L. Primavesi 1989.

The specimen selected as lectotype was collected by Smith near Bury St Edmunds, Suffolk, in June 1804. In the Smith Herbarium at LINN there is only one specimen suitable for selection as a lectotype. This is on sheet 901.78, which has three different specimens mounted on it: (1) Near Newcastle, Winch, 1804; (2) Near Bury, Smith, 1804; (3) Near Newcastle, Winch, undated. Specimen No. 2 is identical in characters with the specimen at LIV, but it is smaller and less easy to examine than the Liverpool specimen. Smith's description mentions both the 1804 collections.

It is obvious from examination of the specimens that those of Winch and Smith are completely different plants. Smith's material is plainly a hybrid of *R. tomentosa*; Winch's is a form of *R. mollis*, most probably with introgression of some other species. Comparison of these specimens with Smith's description in the protologue led us to the conclusion that Smith was at least primarily describing his own material. The leaflets of Smith's specimens, for example, are pubescent on the midribs only, whereas those of Winch are pubescent over the whole lower surface. The young leaves of the dated Winch specimen are densely pubescent on both sides, a condition which Smith does appear to allow for in the protologue, and his own specimens do not show it. It seems to us that Smith was basing his description on his own material, and at the same time endeavouring to reconcile the differences shown by that of Winch. Sowerby's figure does not correspond with any of the specimens, especially in the leaves. The sepals with their large lobes are more like those of Smith's specimens. Wolley-Dod (1910, 1929, 1930, 1930–31) describes the considerable discussion and controversy as to what Sowerby based his figure on. It seems likely that he used material supplied by Winch, collected at a later date than the lectotype, but it has even been suggested that he used the wrong plant for his figure.

Wolley-Dod (1930–31) was also of the opinion that Smith based his description on his own material, stating that Winch distributed and sent to Smith specimens of *R. mollis* from Northumberland to represent Smith's *R. scabriuscula*. Wolley-Dod says: "Smith seems to have suspected some error, but did not fully appreciate it, and incorporated some of these wrongly named specimens with his own specimens and even illustrated one of them, but it is clear from his descriptions that he had quite a different plant in his mind."

Careful examination of the lectotype has convinced us that it is *R. canina* \times *R. tomentosa*. It certainly has no affinities with *R. mollis*, and Wolley-Dod (1930–31) concurs with this opinion. In any case this is extremely unlikely in a locality as far south as Bury St Edmunds. Conversely, it is almost equally unlikely that Winch's material could be a *R. tomentosa* hybrid; in the north *R. tomentosa* occurs as single bushes in a few areas only.

In accordance with the conclusions reached above, *R.* \times *scabriuscula* Smith is the earliest, and therefore correct, name for the hybrid *R. canina* \times *R. tomentosa*.

LIST OF NATIVE SPECIES

In accordance with these conclusions, the following are the species of *Rosa* native to the British Isles:

- R. arvensis* Huds.
- R. pimpinellifolia* L.
- R. stylosa* Desv.
- R. canina* L.
- R. caesia* Sm.
- subsp. *caesia*
- subsp. *glauca* (Nyman) Graham & Primavesi
- R. obtusifolia* Desv.
- R. tomentosa* Sm.
- R. sherardii* Davies
- R. mollis* Sm.
- R. rubiginosa* L.
- R. micrantha* Borrer ex Sm.
- R. agrestis* Savi

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