#### Watsonia, 12, 23-27 (1978).

# Notes on British Rubi, 5 E. S. EDEES and the ball of th

## filmments equaling pinkish-based styles: carpels and receptuels pilose

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#### ABSTRACT

Rubus fuscus Weihe & Nees is discussed and two new species are described, viz. R. anglofuscus and R. informifolius. R. nemoralis P. J. Muell. is confirmed as the correct name for R. selmeri Lindeb.

### 1. Rubus fuscus Weihe & Nees in Bluff & Fingerh., Comp Fl. Germ., 1: 681 (1825)

British batologists have misunderstood this taxon. They have applied the name too loosely. Rogers (1900) called R. fuscus 'variable' and 'seldom quite typical with us' and (note on specimen in BM) 'notoriously one of our most hopelessly aggregate species.' The herbarium of W. C. Barton and H. J. Riddelsdell in BM contains about 100 sheets labelled R. fuscus, but, as far as I can ascertain, only one of them, a specimen collected by Focke in 1875 from Weihe's original station (see below), is correctly named. Focke is partly to blame for the confusion. He knew very well what Weihe meant by R. fuscus, but in later life broadened his interpretation of the name to accommodate related taxa which he had found in England and other European countries. He wrote (Focke 1914): 'Planta typica species vel prospecies bene distincta videtur, sed innumerae occurrunt formae, in quibus omnes partes leviter variant, ita ut alias species imitentur. Limites R. fusci igitur dubii et variabiles sunt.' W. C. R. Watson began by trying to define R. fuscus precisely, but ended like Focke in a generalization. In 1949 he correctly distinguished two taxa, one from The Chart, Limpsfield, Surrey, v.c. 17, which he claimed to be the true R. fuscus, and one from the west of England, which he identified with R. fusciformis Sudre. But in 1958 he united them and called them both R. fuscus.

The lectotype of R. fuscus, designated by Professor H. E. Weber in 1976, is a specimen in BR collected by Weihe. It consists of a panicle and a piece of the barren stem with one leaf. The label in Weihe's handwriting reads as follows: 'Rubus fuscus Weihe in montibus circa Altena comitatus Mark.' It is undated, but, as Weihe is known to have visited Altena only once, there is no doubt that it is one of the specimens referred to in the original description. There are other undated specimens from the same locality in MSTR and yet another in Focke's herbarium in BREM, but these are mite-infested and therefore less satisfactory. I have not seen the lectotype, but Weber has given me three photographs of it, one showing the whole plant and two showing a flower head and the barren stem enlarged. The specimen in BM collected by Focke at Altena in 1875 matches the photographs very well and so does an undated specimen in K collected by G. Braun (Herbarium Ruborum germanicorum no. 93), 'Auf mergeligem Boden im Amte Sternberg, Lippe-Detmold, sehr verbreitet.' Weber visited the locus classicus in 1970 without finding R. fuscus there, but he said it was more or less plentiful in southern Westphalia as far as the Lippe district, especially at Blomberg. I have two recent specimens from Blomberg, collected by A. Newton and Weber in 1974, which tally very well with the lectotype and which are, to quote Weber (in litt. 1975), 'certainly true R. fuscus with all the characteristic features.'

The following description is based on the Blomberg specimens:-

Stems angled, clothed with numerous, short (c 0.5-1 mm) hairs, acicles and stalked glands, many of the glands (as distinct from some gland-tipped acicles) being shorter than the hairs. Prickles numerous (c 12 every 5 cm), about as long as the stem diameter, subequal, declining.

Leaves quinate (one ternate), pedate. Leaflets green and thinly hairy on both sides; upper surface dark, matt green. Terminal leaflet broadly elliptic to obovate with somewhat straight sides and tapering to a fine point; base emarginate or truncate. Serration uneven, with the principal teeth more prominent than the others and sometimes slightly retrorse. Petiolule about 1/3 length of blade.

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Inflorescence leafy for 2/3 of its length with ternate and simple leaves subtending peduncles; lower peduncles 6 cm, upper 2 cm long; upper leafless part of inflorescence more or less cylindrical, with short, subequal peduncles; all peduncles divided near the top into short pedicels producing dense clusters of flowers. Rachis densely hairy with many stalked glands almost as long as the hairs. Prickles numerous, slender, declining or curved.

Sepals grey-felted with many acicles and stalked glands, reflexed. Petals pinkish, broadly elliptic; filaments equalling pinkish-based styles; carpels and receptacle pilose.

The description in Weihe & Nees (1826) differs in a few ways, but the full page illustration in that book (t. xxvii) is wonderfully accurate. The prickles on the barren stem are said to be sparse, but the illustration shows them to be numerous. The terminal leaflet is said to be cordate-ovate, but again the illustration shows it as described above, though with a slightly more indented base. The most serious discrepancy is in the shape of the petals, which are said to be suborbicular and are so drawn in the illustration. But Focke (1877), soon after he had studied the living bushes in Weihe's locality, wrote: 'Petala obovato-cuneata alba vel rosea.' The barren stem-piece is very well drawn and shows the short glands, hairs and acicles to perfection.

I am not sure that typical *R. fuscus* has yet been discovered in the British Isles. Newton and Weber found a bramble at Lee Clump, near Wendover, GR 42/911.046, Bucks., v.c. 24, 17/7/1976, which they both thought was *R. fuscus*. But the specimen I have seen is not in my judgment identical with the Blomberg plant. For one thing the toothing of the leaflets is not the same. Weber's latest opinion (*in litt.* 1977) is that it is an extreme form of *R. fuscus*, though it was not the leaf serration but the relatively long glands and short hairs which seemed to him atypical.

Of the many taxa which have been labelled R. *fuscus* by British batologists, several deserve recognition as new species. Two which occur in Staffordshire are described below.

#### 2. Rubus anglofuscus E. S. Edees, sp. nov.

Turiones obtuse angulati, in apricis rubescentes, interdum pruinosi, dense pilosi. Aculei numerosi (10–15 per 5 cm), e basi lata declinati, inaequales, impariter dispositi aculeolis tuberculisque saepe interspersi. Aciculae et glandulae stipitatae pilos aequantes vel eis breviores, vulgo sparsiores.

Folia ternata aut quinata pedata. Foliola laete viridia, supra strigosa, subtus leviter pilosa, dentibus latis inaequaliter serrata. Foliolum terminale parum obovatum, breviter acuminatum, basi emarginatum, petiolulo proprio quadruplo longius.

Rami floriferi pilis patentibus dense vestiti. Aculei declinati. Aciculae glandulaeque stipitatae non rarae. Inflorescentiae foliaceae, e ramulis brevibus, adscendentibus, 1-7-floris compositae.

Sepala aculeolata et glandulosa, primo laxe reflexa, demum patentia vel suberecta. Petala alba, late obovata. Stamina alba stylos rubros aequantia vel parum superantia. Carpella et receptacula pilosa.

Stems bluntly angled, red, densely clothed with patent hairs ( $c \ 1 \ \text{mm}$  long), sometimes pruinose. Prickles numerous (10–15 per 5 cm), slightly declining from a broad base, unequal in length and unevenly distributed, often interspersed with pricklets and tubercles. Acicles and stalked glands equal to or shorter than the hairs, usually few and sometimes rare or absent.

Leaves ternate or quinate pedate. Leaflets bright green, strigose above, thinly hairy beneath, biserrate with broad teeth. Terminal leaflet obscurely obovate, with short acuminate point and emarginate base, about four times as long as its petiolule.

Flowering branches clothed with many patent hairs and numerous acicles and stalked glands. Prickles more strongly declining than those of the stems. Panicles with short, ascending peduncles bearing 1–7 flowers, sometimes leafy throughout, but usually with a short leafless extension. Leaflets like those of the stem-leaves in shape, colour, texture and serration.

Sepals aculeolate, glandular, at first reflexed, then patent or suberect. Petals white, broadly obovate. Stamens white, equalling or slightly exceeding the red or reddish-based styles. Carpels and receptacles hairy.

HOLOTYPUS: Wigginton Heath, GR 42/3.3, Oxon, v.c. 23, 24/7/1931, H. J. Riddelsdell, as R. fuscus Weihe & Nees, no. 3007 in herb. Barton & Riddelsdell (**BM**)

*R. anglofuscus* differs from *R. fuscus* in several ways. In *R. anglofuscus* the stalked glands on the barren stems may be as long as the patent hairs, but are usually few and sometimes rare or even absent. *R. fuscus* on the other hand has a rather dense clothing of short acicles and stalked glands, which Weihe & Nees (1826) described thus: 'Aciculae semilineam vix longae nudoque oculo fere inconspicuae, sed tactu sine negotio distinguendae.' The leaves of the two taxa have a very different appearance. Those of *R. fuscus* are usually quinate. Weihe & Nees (1826) said, 'Folia omnia quinata'. But those of *R. anglofuscus* are often ternate. However there are too many exceptions on both sides to make this a reliable distinction. There is a much more important difference in the shape and serration of the terminal leaflets. Those of *R. fuscus* have fine acuminate points and rather straight sides reminiscent of *R. pallidus* Weihe & Nees, whereas the terminal leaflets of *R. anglofuscus* are normally a bright, fresh green contrasting with the brick-red colour of the stems; the leaflets of *R. fuscus* are darker, 'saturate viridia' (Weihe & Nees 1826). The sepals of *R. fuscus* may be pink or white; those of *R. anglofuscus* seem to be always white.

*R. anglofuscus* is a common bramble of the west Midlands from Oxford north to Staffordshire. I have specimens in my herbarium (*herb. E. S. Edees*), all collected by myself, from the following localities: Norton near Stourbridge, GR 32/8.8, Worcs., v.c. 37; Sutton Park, GR 42/1.9, and Edge Hill, GR 42/3.4, Warks., v.c. 38; Trysull and Seisdon, GR 32/8.9, Arley Wood, GR 32/8.8, Enville, GR 32/8.8, Baggeridge Wood, GR 32/8.9, and Wrottesley, GR 33/8.0, Staffs., v.c. 39; Puleston Common, GR 33/7.2, and near Claverley, GR 32/8.9, Salop, v.c. 40; and another collected by myself from the type locality.

Watson's specimens from The Chart, Limpsfield, Surrey, v.c. 17, which he distributed through the Botanical Exchange Club in 1945 as *R. fuscus*, are probably *R. anglofuscus*, though on the two sheets I possess the barren stem is not sufficiently hairy to be typical and the short acicles and stalked glands, which do not exceed 0.5 mm, resemble those of *R. fuscus*. There are early specimens of *R. anglofuscus* (all labelled *R. fuscus*) in **CGE** from Warwickshire, collected by J. E. Bagnall and others. The earliest I have seen is one in Babington's herbarium in **CGE** from Sutton Park, collected by W. Mathews in 1850. In Barton and Riddlesdell's herbarium in **BM** there is an excellent series from Wiggington Heath, Oxon., v.c. 23, collected by H. J. Riddelsdell between 1916 and 1935, and a specimen from Seven Springs, Bourton-on-the-Water, GR 42/131.226, E. Gloucs., v.c. 33, collected by Riddelsdell in 1935.

Finally it is probable that this taxon also occurs in France. There is a specimen in **MANCH** of Sudre's Rubi rari no. 215, gathered in the Rhine Province in 1911, which seems to me identical with *R*. *anglofuscus*. Sudre named it *R. erubescens* Wirtg., but it is certainly not that.

#### 3. Rubus informifolius E. S. Edees, sp. nov.

Turiones obtuse angulati, in apricis rufescentes, pilis brevibus ( $c \ 1 \ mm$ ) vestiti, aciculis glandulisque stipitatis ( $c \ 0.5 \ mm$ ) obsiti. Aculei numerosi ( $c \ 10-15 \ per \ 5 \ cm$ ), inaequales ( $c \ 2-6 \ mm \ longi$ ), paulo declinati. Glandulae stipitatae nonnunquam sparsae.

Folia quinata pedata. Foliola pallide viridia, supra glabrescentia, subtus ad nervos leviter pilosa sed non tomentosa, non profunde crenata, ad marginem undulata. Foliolum terminale, ubi perfectum, late ovatum vel obovatum vel suborbiculare, sed non raro plane informe, cordatum vel emarginatum, breviter acuminatum.

Rami floriferi dense pilosi, aciculis multis brevibus muniti. Aculei graciles declinati vel curvati. Inflorescentiae subpyramidatae, ramulis inferioribus longis saepe divaricatis instructae, fere usque ad apicem foliosae. Foliola illis turionum pilosiora sed nequaquam tomentosa. Ramuli superiores uniflori vel in medio divisi et 2-4-flori. Pedicelli glandulis breviter stipitatis crebris aculeolisque multis tenuibus flavis praediti.

Sepala albo-marginata, appendiculata, aculeolata, glandulosa, erecto-patentia. Petala alba, late obovata sed non contigua, paulo indentata. Stamina alba stylos virides vix superantia. Carpella subglabra. Receptacula hirsuta.

Stems bluntly angled, reddish in the sun, clothed with short hairs (c 1 mm). Prickles numerous (c

10–15 per 5 cm), unequal (c 2–6 mm long), slightly declining. Acicles and stalked glands rather short (c 0.5 mm), not exceeding the hairs. Stalked glands sometimes rare.

Leaves quinate pedate. Leaflets yellowish-green, slightly hairy on both surfaces, but glabrescent above and hard to the touch beneath, without felt; serration shallow; margins undulate. Terminal leaflet broadly ovate or slightly obovate in general outline, but often shapeless with humps and indentations; base emarginate or cordate; point shortly acuminate.

Flowering branches clothed like the stems with many short hairs, acicles and stalked glands. Prickles slender, declining or curved. Panicles subpyramidal, with long, often divaricate, lower branches, leafy nearly to the top. Leaflets hairier than those of the stems, but green on both sides and not felted. Upper peduncles sometimes with a single flower, but more often deeply divided and 2-4-flowered. Pedicels clothed with many fine, yellow acicles and stalked glands of varying length.

Sepals white-bordered, long-pointed, aciculate, glandular, patent to erect. Petals white, broadly obovate but not contiguous, slightly indented. Stamens white, only very slightly longer than the green styles. Carpels subglabrous. Receptacles hairy.

HOLOTYPUS: Cranmoor Park, Wrottesley, GR 33/85.00, Staffs., v.c. 39, 20/7/1958, E. S. Edees 12732 (herb. E. S. Edees)

*R. informifolius* is common in the Wyre Forest and in the neighbouring parts of Hereford, Worcester, Staffordshire and Salop. In addition to the holotype, the following exsiccata may be cited as representative:

Wood west of Buckenhill Common, Bromyard, GR 32/6.5, Hereford, v.c. 36, 22/7/1952, W. H. Mills, det. W. C. R. Watson, as *R. aristisepalus* (Sudre) W. C. R. Wats., CGE

Tedstone Delamere, GR 32/6.5, Hereford, v.c. 36, 6/8/1924, H. J. Riddelsdell, herb. Barton & Riddelsdell, no. 957, BM

Clifton (probably Clifton-on-Teme), GR 32/7.6, Worcs., v.c. 37, undated, W. C. R. Watson, as *R. aristisepalus*, CGE

Southstone Rock, GR 32/7.6, Worcs., v.c. 37, 24/7/1972, E. S. Edees, herb. E.S.E.

Sheep Walks, Enville, GR 32/81.85, Staffs., v.c. 39, 31/7/1954, E. S. Edees, herb. E.S.E.

Wyre Forest, near Cleobury Mortimer, GR 32/6.7, Salop, v.c. 40, 15/7/1953, W.C.R. Watson, as *R. fusciformis* Sudre, CGE

Whiteliff, Ludlow, GR 32/5.7, Salop, v.c. 40, 8/7/1953, W. C. R. Watson, as *R. fuscus* Weihe, syn. *R. fusciformis* Sudre, herb. E.S.E.

Woodland near Billingsley, GR 32/70.84, Salop, v.c. 40, 9/7/1965, E. S. Edees, herb. E.S.E.

*R. informifolius* has several distinctive features, *viz.* broad, often shapeless leaflets with ungainly humps and indentations, which are hard to the touch beneath and which have broad shallow teeth sometimes coalescing near the point of the leaflet; fine rachis prickles, of which a few are strongly curved; rather long, somewhat divaricate peduncles; pedicels with fine, needle-like, yellow prickles; long-pointed, spreading sepals; and a general yellowish-green hue.

#### 4. Rubus nemoralis P. J. Muell., Flora (Regensb.), 41: 139 (1858)

R. selmeri Lindeb., Herb. Rub. Scand. no. 33 (1884)

The object of this note is to justify W. C. R. Watson's identification of *R. selmeri* Lindeb. with *R. nemoralis* P. J. Muell. Watson first declared these two to be the same taxon in 1938, though he advanced no evidence. He had probably seen E. Mueller's paper, published in 1937, in which the same identification was made. E. Mueller (not to be confused with P. J. Mueller) said that *R. selmeri* occurred plentifully at Kaiserslautern and was 'ohne Zweifel der Müllersche *Rubus nemoralis*'. I have a specimen in my herbarium collected by E. Mueller at Kaiserslautern, Rheinpfalz, Germany, 3rd August 1935, which is named in the collector's handwriting '*Rubus nemoralis* P. J. Muell. (*= Rubus selmeri* Lindeb.)'. This specimen is undoubtedly identical with *R. selmeri* or at any rate with the common British bramble which has been given that name. The specimen came to me from F. Rilstone and he

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agreed that it was 'certainly *selmeri*'. I have not seen the lectotype of *R. selmeri* designated by Beek (1974), but there is no reason to doubt the identity of the British and Norwegian plants.

The question remains, is *R. selmeri* identical with *R. nemoralis*? W. C. Barton (manuscript notes) thought it was not. He admitted that the descriptions were similar but thought that there were differences between the type specimen of *R. nemoralis* (Reissbach, 20th July 1857, P. J. Mueller, no. 473, LAU) and English specimens of *R. selmeri* which could not be explained away. However, Professor H. E. Weber has labelled Mueller's no. 473 '*Rubus nemoralis* P.J.M. 1858 (= R. rotundatus P.J.M. ined.) = *R. selmeri* Lindeberg 1884, holotypus.' A. Newton and I have examined the specimen independently and have reached the same conclusion that Barton was wrong and Weber right. The specimen is not convincingly the same as *R. selmeri* at first sight, because the panicle prickles are not strongly curved, most of them being straight and declining. But a close examination reveals the presence of other characters which bring the specimen within the range of *R. selmeri*. The leaves are digitate, the leaflets glabrous on the upper surface, the sepals loosely reflexed to patent, the stamens short, the carpels pilose and, though the petals are difficult to examine, one of them at least is plainly notched. I have a specimen from Alum Chine, Bournemouth, S. Hants., v.c. 11, collected by W. M. Rogers in 1907, which closely matches Mueller's type and which Rogers did not hesitate to call *R. selmeri*.

Therefore will collectors please note that specimens named *R. selmeri* by me should be re-named *R. nemoralis*? Both names are taxonomically correct, but *R. nemoralis* has priority.

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