

## Five new species of *Rubus* L. (Rosaceae) with transmarine ranges

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### ABSTRACT

Five new species of *Rubus* L. (Rosaceae) are described, all with ranges extending to more than one country and across a wide expanse of sea. **R. waddellii** D. E. Allen, **sp. nov.** (ser. *Sylvatici* (P. J. Mueller) Focke) occurs in quantity in one part of the Isle of Man and is known also from two counties in the far north of Ireland, where it may well prove to be widespread. **R. anglobelgicus** D. E. Allen & H. Vannerom, **sp. nov.** (ser. *Anisacanthi* H. E. Weber), is widespread in the west half of Belgium and locally common in one district of Hampshire by the south-east shore of Southampton Water. **R. davisii** D. E. Allen, **sp. nov.** (ser. *Rhamnifolii* (Bab.) Focke), confined to heaths and locally abundant in south-east Dorset, is known elsewhere in Wessex as well as in Pembroke and Jersey. **R. sempervitens** D. E. Allen & L. J. Margetts, **sp. nov.** (ser. *Radula* (Focke) Focke), is widely distributed in Devon and known from one wood in the Cotentin Peninsula, dép. Manche, France. **R. venetorum** D. E. Allen, **sp. nov.** (ser. *Hystrix* Focke), is locally abundant in Brittany and neighbouring parts of north-west France and in the largest of the Isles of Scilly; isolated patches have also been found in four counties in the far south of the English mainland.

KEYWORDS: apomictic species, Brambles, distribution.

### INTRODUCTION

It is now the convention among *Rubus* specialists to privilege with published descriptions only morphotypes with at least a “regional” (as opposed to no more than a “local”) distribution, in order to keep within manageable limits the very great number of potential taxa in this mainly apomictic genus. The five new species here described would not all have been considered to have ranges sufficiently wide to merit having a name conferred on them had not those ranges been found in each case to extend across a wide expanse of sea to a second country. Such a distribution in itself would seem to be of sufficient interest phytogeographically to warrant any morphotypes displaying it being accorded taxonomic recognition.

### DESCRIPTIONS OF NEW SPECIES

#### 1. *Rubus waddellii* D. E. Allen, **sp. nov.**

Turio altissime arcuatus, obtusangulus faciebus parum vel profunde excavatis, purpureo-rufescens, glaber vel glabrescens, aculeolis paucis minimis interdum praeditus, aculeis crebris 8–12 per 5 cm subaequalibus ad angulos dispositis mediis (3–7 mm) tenuibus e basi lata compressa rectis vel curvatis declinatis vel subpatulis interdum confluentibus munitus. Folia 3–5-nata, pedata, saepissime imbricata, crassiuscula et duriuscula, superne nitentia strigosa, inferne sparsim pubescentia vel glabra, quorum petioli aculeis (1–4 mm) numerosis curvatis muniti. Foliolum terminale rotundum vel ovatum, apice acuminatum, basi emarginatum vel cordatum, inaequaliter dentato-serratum dentibus primis nonnullis saepe patulis, ad marginem undulatum, eiusdem petiolulo quadruplo vel triplo longius; foliola infima brevissime (1–2 mm) petiolulata. Inflorescentia usque ad apicem non vel vix foliata, foliis ternatis inferne et saepe usque ad decem simplicibus et trilobatis bracteisque foliosis saepissime nonnullis magnis superne instructa, late vel anguste pyramidalis ad apicem truncata vel rotundata congesta, ramulis axillaribus omnibus erectis vel adscendentibus multifloris aucta. Rachis flexuosa, pilos numerosis vestita, aculeis crebris saepe basi latis purpureis plerumque

declinatis vel curvatis munita. Pedicelli sicut rachis vestiti aculeis nonnullis tenuibus (1–5 mm) muniti. Flores c. 2 cm diametro, cupulati. Sepala viridia vel grisea, albo-marginata, pilis densis aciculisque brevibus sparsim vel nullis praedita, non attenuata, patentia vel reflexa. Petala alba subrotunda vel late obovata, ad marginem pilis longis sparsim praedita, non contigua. Stamina alba stylos virideo-flavescentes parum vel multo superantia. Antherae glabrae. Carpella glabrescentia vel pilis interdum longis ornata. Receptaculum pilosum. Fructus rotundus.

Stem high-arching, bluntly angled with shallowly to deeply furrowed sides, dull reddish-purple, pruinose, glabrous or glabrescent, with many sessile glands and sometimes a few very small pricklets; prickles 8–12 per 5 cm, confined to the angles, tending to cluster, subequal, 3–7 mm, the longer ones equalling the stem diameter, slender from a broad compressed base, straight or curved, slanting or subpatent, sometimes confluent, crimson with a yellow point. Leaves pedate; leaflets 3–5, usually partly imbricate, thick and hard to the touch, shining dark green and strigose above, green and thinly pubescent or glabrous beneath; terminal leaflet 5–7(–9) × 4–6(–7) cm, rotund or ovate, with an acuminate (1–1.5 cm) apex and emarginate or cordate base, irregularly dentate and slightly compound serrate with often several principal teeth patent, undulate on the margin, the petiole  $\frac{1}{4}$ – $\frac{1}{3}$  as long as the lamina; petiolules of basal leaflets 1–2 mm; petiole longer than the basal leaflets, yellowish becoming dark purple, with many short and medium simple and tufted hairs, many sessile and subsessile glands and 6–10(–13) curved prickles 1–4 mm. Flowering branch with 3-foliate leaves below and up to 10 simple and trifid leaves above together with usually several conspicuous leaf-like simple and trifid axillary bracts, not or not quite leafy to the apex; inflorescence a broad or narrow pyramid with a truncate or rounded congested top and erect or ascending axillary peduncles, the upper and middle ones many-flowered and divided above the middle and usually shorter than but sometimes as long as their leaves; rachis flexuous, with numerous patent short to medium simple and tufted hairs, numerous sessile and subsessile glands and frequent often broad-based purple prickles 2–7 mm varying much in length and direction but mostly declining or curved; pedicels clothed like the rachis, with several slender prickles 1–5 mm. Flowers c. 2 cm in diameter, cupped; sepals green or greyish, white-bordered, with dense short simple and stellate hairs, numerous sessile and subsessile glands and rare or no short acicles, with a short but distinct point, patent or reflexed; petals 6–9 × 5 mm, pure white, roundish or broadly obovate, irregularly ciliate with occasional long simple and stellate hairs on the sinuate margin, not contiguous; stamens slightly to far exceeding styles, filaments white, anthers glabrous; styles yellowish-green; young carpels hairy or glabrescent, the hairs sometimes long; receptacle hairy; fruit globose. Flowering in July and August.

**HOLOTYPUS:** bank of ditch of hill lane below Bulbin, near Glenmullan, N.N.W. of Drumfree, East Donegal, v.c. H34, C/38.41, 9 August 1992, *D. E. Allen* s.n. (**BM**).

**Exsiccatae** (all **BM**):

v.c. 71, Man: hedge-top, Glenmoye village, SC/23.79, 4 July 1960 and 4 August 1963; hedge of lane N. of Eairy Dam, SC/296.782, 20 July 1960; old lane between Ballanank and Orrisdale farms, 2 km N.N.E. of Ballasalla, SC/290.717, 20 July 1960; bank of Cronk Road, Union Mills, SC/350.775, 10 August 1975; side of track just N. of Lonan church, SC/430.833, 11 August 1975, *D.E.A.* s.n.

v.c. H38, Down: N. of Banbridge, side of a lane branching off road to Belfast, c. J/15.47, 13 July 1901, *W. M. Rogers* s.n. as *R. hesperius* (**herb. Barton & Riddelsdell**, no. 8529).

This member of ser. *Sylvatici* can be identified at once by its cupped flowers of broad white petals, its dark, thick, shining stem leaves with roundish or ovate leaflets at most thinly hairy beneath, its more or less glabrous stem and a flowering branch, when well-developed, with conspicuously numerous leaves as well as leaf-like bracts. It is one of several *Rubus* species widespread in the Isle of Man for which a serial number ("M39") has for many years now stood in for a scientific name. There it is "thinly scattered over the mid-eastern section of the central and south-central lowlands . . . especially up to 700 ft [213 m] on the slopes overlooking the central valley, with a main concentration between the headwaters of the River Dhoo and the Santon Burn" (Allen 1986). Isolated bushes also occur far to the north and west of this core range. In all it has been noted in seven 10-km grid squares: SC/2.7, 2.8, 3.7, 3.8, 4.7, 4.8, 4.9, all on the Manx Slates, which constitute the near-universal formation of the island's southern three quarters. Tolerant of a considerable degree of exposure, it is

the ecological counterpart of *R. silurum* (Ley) Ley of the upland areas of Wales, a species which it also superficially resembles. Initially, B. A. Miles and E. S. Edees, to whom material was submitted in the 1960s, respectively suggested *R. sciocharis* (Sudre) W. C. R. Watson and "*R. carpinifolius*" (i.e. *R. platyacanthus* P. J. Mueller & Lef.) as the bramble's identity, determinations which they both, however, subsequently withdrew, concluding that it matched no British *Rubus* species so far described, a verdict with which A. Newton was to concur some years later.

As the Manx *Rubus* flora contains, at least at the present day, no two species, either described or undescribed, from which this very distinct bramble could have arisen by hybridization within the island, it has always seemed likely that it might also occur in one or more of the neighbouring regions bordering the Irish Sea. Its reported presence in Scotland in Kirkcudbright, v.c. 73 (Allen 1986), was based on a specimen collected c. 1975 which is unfortunately no longer extant (O. M. Stewart, in litt. 1993); the necessary verification of that record accordingly remains outstanding. In 1993, however, two bushes were recognised as being this same bramble in a hill lane in East Donegal (Allen 1994). A further Ulster specimen, collected in Down at the turn of the century, has since come to light in BM. The species may well prove to be widespread in the far north of Ireland, where the *Rubus* flora has been investigated so far at best only patchily. One other species, *R. lettii* Rogers, is similarly known as yet only in the Isle of Man and the north half of Ireland. In recognition of this dual range, it seems appropriate that the name should commemorate the Rev. Cosslett Herbert Waddell (1858–1919), who, uniquely, was a pioneer in the study of the group in both the Isle of Man and his native Ulster.

The distribution of the species is shown in Fig. 1.

## 2. *Rubus anglobelgicus* D. E. Allen & H. Vannerom, sp. nov.

Planta robusta. Turio altissime arcuatus, obtusangulus faciebus concavis, purpureus, glabrescens, glandulis stipitatis longis et aciculis longis et aculeolis sparsim praeditus, aculeis crebris 5–20 per 5 cm subaequalibus plerumque ad angulos dispositis tenuibus e basi lata compressa plerumque declinatis munitis. Folia 5-nata, digitata, plana vel concava, non vel vix imbricata, superne glabrescentia, inferne subcinerea tomentosa et sparsim breviter pilosa (praesertim ad venos), quorum petioli petiolulique glandulis stipitatis et aciculis et aculeolis saepe glanduliferis paucis, petioli aculeis (3–4 mm) numerosis curvatis vel declinatis muniti. Foliolum terminale ovatum vel anguste obovatum vel ellipticum, apice acuminatum, basi integrum vel emarginatum, inaequaliter serratum dentibus primis nonnullis patulis, ad marginem undulatum, eiusdem petiolulo triplo vel quadruplo longius; foliola infirma breviter (3–6 mm) petiolulata. Inflorescentia usque ad apicem non foliata, foliis ternatis inferne et uno vel duo simplicibus et trilobatis superne instructa, longa, subpyramidalis ad apicem rotundata congesta, ramulis axillaribus infimis saepe longissimis distantibus adscendentibus vel mediis erectis vel patulis aucta. Rachis flexuosa, acute angulata sulcata, pilis numerosis vestita, aculeolis paucis et aculeis (4–7 mm) numerosis declinatis curvatisque, ad apicem saepe glandulis stipitatis crebris munita. Flores c. 3 cm diametro. Sepala griseo-viridia tomentosa et sparsim pilosa, glandulis stipitatis aciculisque numerosis munita, anguste albo-marginata, omnia attenuata, reflexa vel tandem erecta. Petala roseola vel alba, ovata vel obovato-cuneata vel elliptica, ad apicem sparsim pilosa, vix emarginata, remota. Stamina alba, stylos flavescens vel virides, basi rufescentes, multo superantia. Antherae glabrae vel pilis raris praeditae. Carpella dense pilosa. Receptaculum glabrum vel pilis raris praeditum. Fructus parum oblongus. Facies Rubum geniculatum Kalt. revocat.

Robust. Stem tall (up to c. 2 m) and high-arching, stout (6–10 mm in diameter), bluntly angled with furrowed sides, dull purple, glabrescent, with rare long stalked glands, long acicles and pricklets; prickles c. 7–9 per 5 cm, mostly confined to the angles, subequal, 5–10 mm, slender from a broad compressed base, mostly slanting or a few subpatent, crimson. Leaves digitate; leaflets 5, flat or concave, not contiguous or slightly imbricate, yellowish-green and glabrescent above, pale or greyish green and felted and with sparse short mostly simple hairs chiefly on the veins beneath; terminal leaflet c. 9–13 × 5–8 cm, ovate or narrowly obovate or elliptical, with an acuminate apex c. 2 cm and entire or emarginate base, unequally and slightly compound-serrate with several of the principal teeth patent (rarely, one or two retrorse), with undulate margins, the petiole  $\frac{1}{4}$ – $\frac{1}{3}$  as long as the lamina; petiolules of basal leaflets 3–6 mm; petiole about as long as the basal leaflets, dark purple, with occasional to numerous short or medium simple and tufted hairs and 15–20 curved

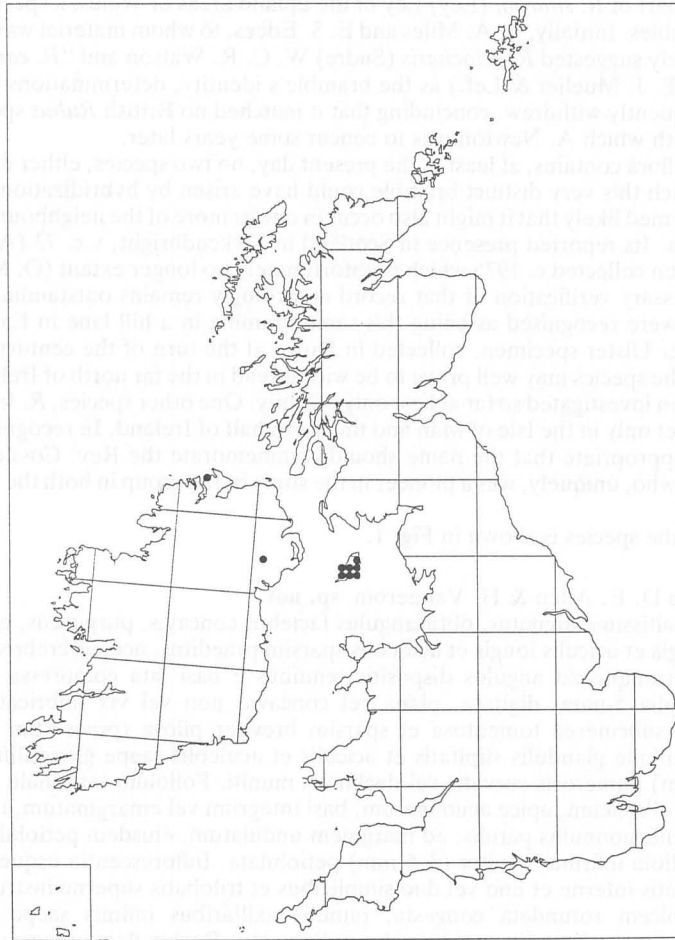


FIGURE 1. The distribution of *Rubus waddellii* in the British Isles.

or declining prickles 3–4 mm, both petiole and especially the petiolules with occasional and varying numbers of short and medium and long stalked glands, medium and long acicles and pricklets (often gland-tipped). Flowering branch with 3-foliate leaves below and 1–2 simple and trifid leaves above, not leafy to the apex; inflorescence long, subpyramidal with a congested rounded top, the many-flowered peduncles all ascending or the middle and upper ones erect or patent, the axillary ones 3–10 cm, the lowest one 6–11 cm distant from the next, often very long and subequalling the main axis, all shorter than their leaves and divided well above the middle; rachis somewhat flexuous, sharply angled and furrowed, with numerous patent and adpressed simple and tufted hairs, numerous sessile glands, occasional pricklets and numerous subequal broad-based slender-pointed mixed declining and curved prickles 4–7 mm with a tendency to cluster, the uppermost rachis and pedicels often with rather numerous stalked glands of varying lengths. Flowers (2–)3(–4) cm in diameter; sepals greyish-green, white-bordered, felted, with sparse short and medium simple and tufted hairs, numerous sessile glands and usually many very short and medium stalked glands and few to many medium acicles, long-pointed, reflexed in flower, reflexed or erect in fruit; petals 12–13 × 5–7 mm, pale pink to white, ovate or obovate-cuneate or elliptical, with sparse short hairs on the margin at the apex, erose, distant; stamens much exceeding styles, filaments white, anthers glabrous or with

rare long hairs; styles yellowish or green, sometimes reddish-based; young carpels densely hairy; receptacle glabrous or with a few hairs; fruit large, longer than broad. Flowering in July and August. Facies recalling that of *Rubus geniculatus* Kalt.

**HOLOTYPE:** hedgebank, Zichem, near Diest, Belgium, 8 July 1994, *H. Vannerom* no. 940708.5 as *R. spinuliferus* [sic] (**BM**).

This very distinct, strikingly tall and robust bramble, with long elliptical leaflets with conspicuously "jagged" dentation and long, narrow, usually pale pink petals, is widely distributed in the west half of Belgium, where it is known from 28 4 × 4 km grid-squares (*H. Vannerom*, in litt.). It has passed there till now as *R. spinulifer* P. J. Mueller & Lef., but that determination cannot be sustained, for excellent photographs taken by W. C. Barton of the holotype of that species in Lausanne (**LAU**) show that it possesses, inter alia, prickles of a different shape. Sudre (1912), who saw at least one specimen of Lefèvre's from the type locality (Waligny, Forêt de Retz, dép. Aisne, France), pronounced *R. spinulifer* intermediate between *R. fuscus* Weihe and *R. koehleri* Weihe, a verdict which implies a heavily glandular plant. This is borne out by the two numbers, 554 and 555, he distributed of *R. spinulifer* in his *Batotheca*, which are both patently different from the Belgian plant here described. This latter, by contrast, has only a very thin scatter of glands, acicles and pricklets, to the extent that it seems to belong best in series *Anisacanthi*.

In 1993 a specimen of the Belgian "*R. spinulifer*" sent to me by Vannerom in a miscellaneous exchange parcel struck me as suspiciously similar to an unnamed bramble ("H494") locally common in one district on the Tertiary gravels of the far south of Hampshire, v.c. 11, between Gosport and the River Hamble (to the north bank of which it extends in just the one place), by the south-east shore of Southampton Water. Apparently confined to the two 10-km squares SU/5.0 and SU/5.1, it occurs in shady places in general but more especially on wood margins. A series collected from one of these localities the following summer was sent to Vannerom, who confirmed it as indeed the plant well-known to him in Belgium. Other British *Rubus* specialists who subsequently saw specimens from both countries side-by-side at the 1994 B.S.B.I. Exhibition Meeting concurred with that opinion.

*R. anglobelgicus* is close in many respects to another British bramble, *R. celticus* Newton, a species apparently endemic to north-west Wales. *R. celticus*, however, is normally much more glandular (and accordingly regarded as best placed in series *Radula*) and typically has an inflorescence with a long, narrow, subracemose top and much more numerous, often subpatent prickles on the rachis. Its petals are also much broader and its pedate leaves hairier beneath, their terminal leaflets much more often having straight sides converging to a narrow base.

Representative exsiccatae from six localities in v.c. 11 have been deposited in **BM**. Specimens from various Belgian localities collected by J. van Winkel and labelled "*R. diestemius* Vannerom ined." are in Brussels (**BR**). In Vienna (**W**) and Hamburg (**HBG**), in the herbaria of A. Neumann and A. Schumacher respectively, there are also examples labelled "*R. lejeunei* var. *bracteatus* Sudre" collected by Vannerom (no. 66/59) from Assent, Belgium, on 16 July 1966.

The distribution of the species in the British Isles is shown in Fig. 2.

### 3. *Rubus davisii* D. E. Allen, *sp. nov.*

Turio arcuato-decumbens, obtusangulus faciebus concavis, purpureus vel atrorufescens, glabrescens, aculeis 8–12 per 5 cm subaequalibus patulis longis (6–10 mm) tenuibus e basi lata compressa plerumque ad angulos dispositis interdum confluentibus ± rectis munitis. Folia 4–5-nata, digitata vel subpedata, imbricata vel non contigua, superne glabra, inferne subcinerea tomentosa et praesertim ad venos numerosis satis longis pilis vestita, quorum petioli aculeis (3–4 mm) numerosis curvatis muniti. Foliolum terminale subrotundum vel ovatum, apice acutum vel acuminatum, basi integrum vel emarginatum, dentato-serratum, planum, eiusdem petiolulo duplo vel triplo longius; foliola infima brevissime (1–3 mm) petiolulata. Inflorescentia saepe fere usque ad apicem foliata, foliis ternatis inferne et 1–8 simplicibus et trilobatis superne instructa, late pyramidalis, truncata, ad apicem congesta, ramulis axillaribus omnibus adscendentibus infimis longis distantibus paniculatis aucta. Rachis flexuosa, pilis numerosis vestita, aculeis (5–9 mm) numerosis inaequalibus patulis et declinatis et curvatis munita. Flores c. 2–3 cm diametro. Sepala grisea, albo-marginata, pilis numerosis et aciculis saepe conspicue numerosis praedita, nonnulla attenuata, reflexa. Petala roseola vel rosea vel purpureo-rosea, obovata interdum attenuata, ad marginem sparsim pilosa, denticulata, non contigua. Stamina alba vel rosea, stylos flavescens vel virides, basi erubescens



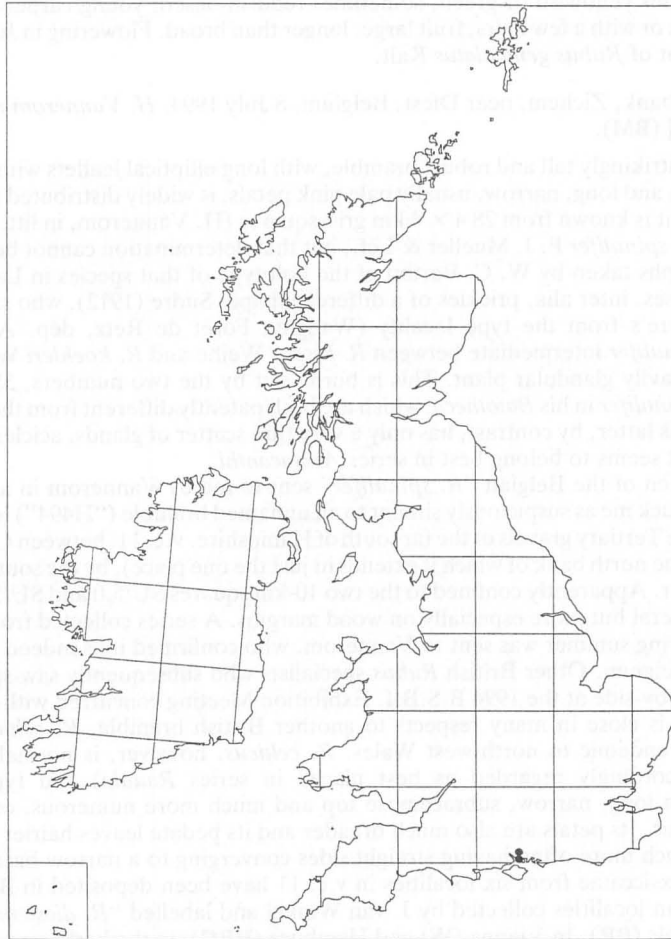


FIGURE 2. The distribution of *Rubus anglobelgicus* in the British Isles.

vel rufescentes vel purpureos, aequantia vel vix superantia. Antherae glabrae. Carpella barbata. Receptaculum hirsutum. Fructus rotundus.

Stem low-arching, bluntly angled with furrowed sides, purple or dark red, glabrescent with a few long simple and tufted hairs and many sessile glands; prickles 8–12 per 5 cm, mostly confined to the angles, subequal, (4)–6–10 mm, exceeding the stem diameter, slender from a broad compressed base, often somewhat curved above, patent, sometimes confluent, purple or red with a yellow point. Leaves digitate or subpedate; leaflets 4–5, imbricate or not, dark or yellowish green and glabrous above, greyish and felted with also numerous spreading medium and long simple and tufted hairs along the main veins beneath; terminal leaflet 5.5–8 × 4–7 cm, subrotund or ovate, with an acute or acuminate (1 cm) apex and entire or emarginate base, dentate and slightly compound serrate with sometimes one principal tooth patent, flat, the petiolule  $\frac{1}{3}$ – $\frac{1}{2}$  as long as the lamina; petiolules of basal leaflets 1–3 mm; petiole much longer than the basal leaflets, dark purple, with few to many long simple and tufted hairs and 14–17 curved prickles 3–4 mm. Flowering branch with 3-foliate leaves below and 1–8 simple and trifid leaves above, often leafy almost to the apex; inflorescence a broad pyramid with a congested flat top, the peduncles all ascending, the lower ones long (c. 20–25 cm) and paniced, the lowest one 5–10 cm distant from the next, divided above the middle; rachis

flexuous, with numerous medium and long simple and tufted hairs and numerous unequal mixed patent, declining and curved prickles 5–9 mm in shape and colour like those on the stem. Flowers c. 2–3 cm in diameter, cupped; sepals greyish, white-bordered, shaggy with medium and long simple and tufted hairs and often conspicuously numerous short and medium acicles, short- or long-pointed, reflexed; petals c.  $8 \times 5$  mm, pale to bright pink or puce, obovate, sometimes attenuate below, with sparse short simple and tufted hairs on the margin, denticulate, well spaced; stamens equalling or slightly exceeding styles, filaments white or pink, anthers glabrous, sutures sometimes purple; styles yellowish or green, pink- or reddish- or purple-based; young carpels bearded; receptacle hairy; fruit globose. Flowering in July and August.

**HOLOTYPE:** 1.6 km N. from Corfe, Dorset, v.c. 9, c. SY/96.83, 3 August 1892, *E. F. Linton* s.n. as *R. incurvatus* ("the usual S. England form of *Handbk. Br. Rubi* p. 27" – W. M. Rogers) (**BM**).

This member of ser. *Rhamnifolii* has been known since the 1890s on the heaths of south-east Dorset, v.c. 9, where it is widespread and locally abundant. Though rendered distinctive by its dark glabrescent stem with long patent prickles, roundish terminal leaflets of the stem leaves and strongly acuminate sepals, it has, even so, perplexed successive generations of *Rubus* specialists and been referred over the years to as many as eight different species. Its closest affinity among British species seems to be with *R. rhombifolius* Weihe ex Boenn. Friderichsen considered specimens sent to him by Rogers to be identical with the Scandinavian plant he understood as *R. insularis* F. Aresch. Rogers began by calling it "*R. villicaulis* strong luxuriant form" and then settled on the manuscript name of *R. incurvatus* var. *rotundifolius* (meaning by *R. incurvatus* the species now known to British batologists as *R. rhombifolius*), but it was not among his several manuscript names published after his death (Rogers & Riddelsdell 1925) because Riddelsdell acknowledged himself insufficiently conversant with the plant. That name is not, however, available for reviving, for the epithet *rotundifolius* is preoccupied at the specific level. The species is therefore named instead in honour of the late T. A. Warren Davis (1899–1980), whose intensive study of the Rubi of Pembrokeshire in the 1960s led him to distinguish it independently and to circulate material from there to the leading specialists of the period.

As demonstrated by the list of representative exsiccatae cited below, *R. davisii* appears to have a mid-western distribution in England and Wales, extending diagonally from Pembrokeshire to Dorset and the west margin of the New Forest, while its presence on a heath in the Channel Islands suggests that it may prove to occur on the European mainland as well:

- v.c. S, Channel Is: occasional in maritime heathy scrub E. and S. of Gros Nez, Jersey, WV/55.56, 18 July 1994, *D.E.A.* s.n. (**BM**).
- v.c. 6, N. Somerset: near Shapwick, c. ST/42.40, 6 August 1891, *D. Fry* s.n. (**BM**). Peat moor N. of Shapwick, c. ST/41.39, 9 September 1891, *J. W. White* s.n. as *R. cariensis* (**BM**). Shapwick moor to Ashcott, ST/4.3, 10 August 1892, *E. F. Linton* & *R. P. Murray* s.n. as *R. nemoralis* (**BM**: **herb. Barton & Riddelsdell** no. 9839). Ashcott Heath, near Shapwick, ST/44.39, 21 July 1856, *E. S. Edees* nos 12132, 12147 (**NMW**).
- v.c. 9, Dorset: Corfe Castle, c. SY/95.82, 24 July 1891, *R. P. Murray* s.n. as *R. villicaulis* var. *insularis* (**BM**, **CGE**, **LIV**). Norden Heath, SY/94.83, 24 July 1891, *W. M. Rogers* s. n. as *R. villicaulis* (**BM**: **herb. Barton & Riddelsdell** no. 9848). Half-way between Swanage and Corfe, SY/99.80, 12 July 1894, *F. A. Rogers* s.n. as *R. incurvatus* (**BM**). Furzebrook, between Wareham and Corfe, SY/93.83, 2 August 1955; Bere Wood, c. SY/87.94, 4 August 1955, *E. S. Edees* nos 11153, 11155 respectively (**NMW**). Corfe Common, SY/95.80, 31 July 1991, *D.E.A.* s.n. (**BM**).
- v.c. 11, S. Hants.: plentiful among gorse, hillside behind Blissford, near Fordingbridge, SU/176.139, 18 July 1984; gorse scrub, Godshill Ridge, SU/182.150, 14 July 1987, *D.E.A.* nos H827A, H827B respectively (**BM**).
- v.c. 45, Pembrokeshire: open scrub on side of a cwm, Ramsey Island, SM/70.24, 23 July 1965; raised area in river-side marsh, Letterston, SM/92.29, 16 July 1966, *T. A. W. Davis* nos 65/956, 66/1059 respectively (**CGE**, **NMW**: **herb. Edees** nos. 23350, 23372 respectively).

The distribution of the species in the British Isles is shown in Fig. 3.

#### 4. *Rubus sempervirens* D. E. Allen & L. J. Margetts, **sp. nov.**

Turio alte arcuatus, acutangulus faciebus planis vel parum excavatis, brunneus vel purpureus, striatus, glaber vel interdum leviter pilosus, glandulis stipitatis paucis plerumque

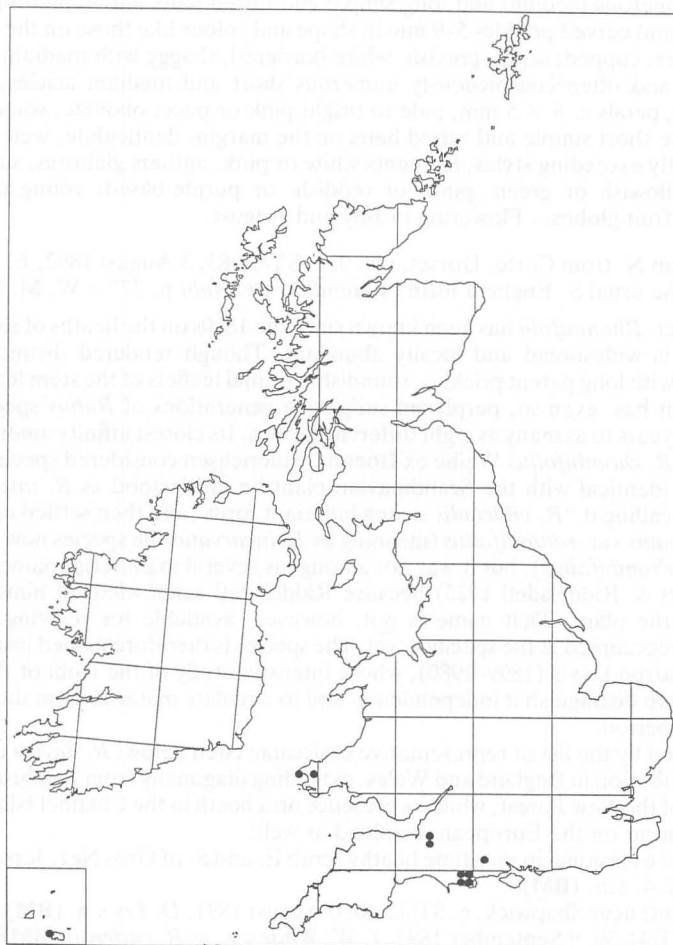


FIGURE 3. The distribution of *Rubus davisii* in the British Isles.

brevibus et aciculis crebris brevibus mediisque cum paucis longis nonnullis glanduliferis et aculeolis paucis vel numerosis patulis et aculeis crebris c. 15 per 5 cm inaequalibus ad angulos dispositis mediis (2–6 mm) tenuibus e basi lata compressa plerumque curvatis munitis. Folia 3–5-nata, pedata, interdum imbricata, crassiuscula, superne nitentia atrovirideo-flavescentia, inferne pallido-vel griseo-viridia sparsim pubescentia (praesertim ad venos), quorum petioli aculeis (1.5–2.5 mm) numerosis curvatis et superne (cum petiolulis) glandulis stipitatis crebris longis et aciculis longis nonnullis glanduliferis muniti. Foliolum terminale ovatum vel obovatum, apice longe acuminatum, basi emarginatum vel subcordatum, inaequaliter subdentato-serratum dentibus fere tenuibus primis nonnullis interdum patulis, planum, eiusdem petiolulo quadruplo vel triplo longius; foliola infima brevissime (2–3 mm) petiolulata. Inflorescentia usque ad apicem interdum foliata, foliis ternatis inferne et simplicibus et trilobatis saepissime duo usque quinque superne instructa, longa, pyramidalis ad apicem truncata vel acuta saepe congesta, ramulis axillaribus omnibus adscendentibus (vel superioribus patulis) infimis paniculatis aucta. Rachis flexuosa, pilis numerosis densius superne vestita, glandulis stipitatis numerosis et aciculis numerosis (longis nonnullis glanduliferis) et aculeolis paucis vel crebris et aculeis (1–6 mm) crebris declinatis curvatisque munita. Pedicelli sicut rachis superior aculeis nonnullis tenuibus 2–3 mm muniti. Flores c. 2 cm diametro, plani. Sepala



grisea, anguste albo-marginata, tomentosa glandulis stipitatis aciculisque numerosis munita, attenuata, apice saepe foliata, reflexa. Petala rosea, anguste obovata vel subrotunda, denticulata, sparsim pubescentia, ad marginem pilis numerosis praedita, ad apicem saepe emarginata, non contigua. Stamina alba stylos pallidos superantia. Antherae saepissime pilis raris ornata. Carpella pilis numerosis nonnullis longis (1 mm) praedita. Receptaculum dense pilosum. Fructus oblongus.

Stem high-arching, sharply angled with flat or shallowly furrowed sides, brown or purple, striate, with sparse to frequent simple and tufted hairs or (more usually) none, scattered mostly short stalked glands, more numerous short and medium and a few long (sometimes gland-tipped) acicles and few to many patent pricklets; prickles c. 15 per 5 cm, confined to the angles, unequal, 2–6 mm, slender from a broad compressed base, typically curved, tawny or purple with a yellowish point. Leaves pedate; leaflets 3–5, sometimes imbricate, relatively thick, conspicuously shining and dark yellowish-green and thinly hairy above, pale to greyish-green and with a thin clothing of mostly simple adpressed hairs mostly along the veins beneath; terminal leaflet c. 7–9 × 5–6 cm, ovate or obovate, with a long acuminate apex c. 1.5–2.0 cm and an emarginate or subcordate base, unequally rather finely subdentate-serrate with a principal tooth sometimes subpatent, flat, the petiolule  $\frac{1}{4}$ – $\frac{1}{3}$  as long as the lamina; petiolules of basal leaflets 2–3 mm; petiole as long as or shorter than the basal leaflets, coloured and armed like the stem but with frequent long stalked glands and long sometimes gland-tipped acicles at the apex of the petiole and on the lower parts of the petiolules, with c. 10–17 curved prickles 1.5–2.5 mm. Flowering branch with 3-foliate leaves below and (1–)2–5(–7) simple and trifid leaves above, sometimes leafy to the apex; inflorescence long, pyramidal with a flat or acute and often congested top, the peduncles all ascending or one or more mid or upper ones patent, the lowest ones c. 15 cm long, paniced, divided around the middle; rachis flexuous, with numerous white medium mostly tufted hairs increasing in denseness upwards, numerous short and medium stalked glands, numerous short and medium and long acicles (some of the long ones gland-tipped) occasional to frequent pricklets of various lengths and frequent declining and curved prickles 1–6 mm long in shape and colour like those on the stem; pedicels clothed like the upper part of the rachis, with several slender prickles 2–3 mm long. Flowers c. 2 cm in diameter, flat; sepals greyish, narrowly white-bordered, woolly with dense short or medium simple and tufted hairs, with many sessile glands and usually many short and medium stalked glands and acicles, long-pointed from bud and often leafy-tipped, reflexed; petals 7–10 × 4–7 mm, pink, narrowly obovate to subrotund, denticulate, with sparse adpressed hairs above and many tufted and a few simple short and medium hairs on the margin, often notched, well separated; stamens exceeding styles, filaments white, anthers usually with one or two hairs; styles pale; young carpels densely hairy and with some hairs 1 mm long; receptacle densely hairy; fruit oblong. Flowering in June and July.

**HOLOTYPE:** Core Copse, near Ottery St Mary, SY/132.945, S. Devon, v.c. 3, 30 June 1992, *L. J. Margetts* s.n. (**BM**).

This member of ser. *Radula* is readily told by its long leafy pyramid of relatively small pink flowers, long-pointed sepals, shining (*“sempernitens”*) dark yellowish-green leaflets with a long acuminate tip, densely hairy young carpels with a few much longer hairs and – in most cases – the contrasting glabrous stem and very hairy rachis. The presence of long, gland-tipped acicles on the petiolules and at the apex of the petiole is also a distinctive character.

*R. sempernitens* has escaped notice till only the last few years because its chief area of occurrence, south-east Devon, was previously neglected by batologists. Since 1987, on taking up residence there, *L. J. Margetts* has found what has become familiar to him as “the shiny-leaved Radulan” to be frequent to common in the east of the county, v.cc. 3 and 4, in hedgerows and light woodland and especially on commons, both on the Triassic pebble beds and on a combination of Greensand and Clay-with-Flints. Scattered colonies extend its distribution into the more central parts of Devon, but none have been observed as yet further west. A single bush has also been detected just inside Dorset, v.c. 9. The 10-km grid-squares in which the species has been noted now total 15: SS/4.1, 8.2, 9.0, 9.1; ST/0.0, 0.2, 2.0; SX/8.8, 9.8, 9.9; SY/0.8, 0.9, 1.9, 2.9, 3.9.

So wide a range would in itself justify privileging this bramble with a published name, but in addition it has emerged that the species is to be found on the other side of the English Channel as well, in the Cotentin Peninsula of Normandy. A specimen, now in **BM**, collected by *D.E.A.* in 1993 in local abundance in open oak-chestnut woodland (les Maresquiers) near le Vrétot, 4.5 km west of

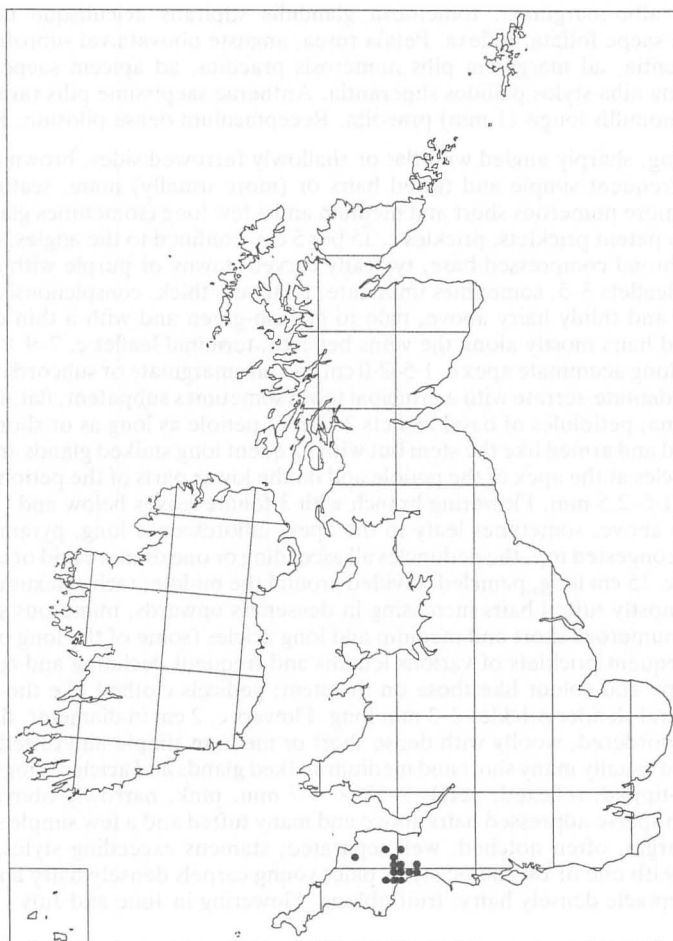


FIGURE 4. The distribution of *Rubus sempernitens* in the British Isles.

Bricquebec, dép. Manche, is, in the opinion of both myself and L. J. Margetts, *R. sempernitens* too, displaying the same unusual pattern of carpel hairiness and differing only from the general run of English plants in having quite glabrous anthers and a rather hairy stem. It may well turn out to occur more widely in that part of France.

This French specimen and the holotype are currently the only exsiccatae in public herbaria as far as we have been able to establish. **Herb. L.J.M.**, however, contains a range of further material, on which the description above has been partly based.

The distribution of the species in the British Isles is shown in Fig. 4.

##### 5. *Rubus venetorum* D. E. Allen, *sp. nov.*

Turio arcuato-decumbens, obtusangulus faciebus planis vel parum excavatis, atropurpureus, copiose pilosus, glandulis stipitatis numerosis plerumque brevibus et aciculis paucioribus et aculeolis numerosis nonnullis glanduliferis et aculeis c. 20–30 per 5 cm inaequalibus patulis vel curvatis mediis (3–6 mm) tenuibus e basi lata compressa plerumque ad angulos dispositis munitus. Folia 3–5-nata, digitata vel pedata, utrinque viridia, imbricata, superne sparsim pilosa, inferne sparsim pubescentia, quorum petioli aculeis (2–3.5 mm) numerosis curvatis muniti. Foliolum terminale subrotundum vel obovatum, apice cuspidatum vel acuminatum, basi emarginatum vel

subintegrum, inaequaliter saepe tenuissime serrato-dentatum dentibus primis interdum patulis, planum vel ad marginem undulatum, eiusdem petiolulo quadruplo vel triplo longius; foliola infima brevissime (2 mm) petiolulata. Inflorescentia usque ad apicem non foliata, foliis ternatis inferne et saepissime uno solo integro superne instructa, longa, pyramidalis ad apicem rotunda vel truncata, ramulis axillaribus omnibus adscendentibus vel mediis patulis infimis distantibus aucta. Rachis flexuosa, copiose pilosa, glandulis stipitatis numerosis brevibus et mediis et longis, aciculis mediis paucioribus, aculeolis numerosis interdum glanduliferis, aculeis numerosis inaequalibus tenuibus declinatis vel parum curvatis purpureis munita. Flores c. 2–3 cm diametro. Sepala griseo-viridia, dense pilosa, glandulis stipitatis aciculisque brevibus et mediis munita, albomarginata, attenuata, in flore laxa reflexa, tandem fructum amplectantia. Petala rosea vel roseola, obovata vel ovata vel elliptica, ad marginem pilis numerosis vestita, saepe emarginata, non contigua. Stamina rosea stylos virides vel flavos vel erubescens, basi roseos vel rufescentes, aequantia vel parum superantia. Antherae glabrae. Carpella dense pilosa. Receptaculum glabrum. Fructus rotundus.

Stem low-arching, bluntly angled with flat or shallowly furrowed sides, blackish purple, with many simple and tufted hairs, numerous short and a few long stalked glands, fewer acicles and numerous pricklets (some gland-tipped); prickles c. 20–30 per 5 cm, mostly confined to the angles, unequal, 3–6 mm, slender from a typically broad compressed base, patent to (mainly) curved, purple or red with a sometimes yellowish point. Leaves digitate or pedate; leaflets 3–5, tending to be imbricate, medium to dark green and thinly hairy above, pale green and with a usually thin clothing of simple adpressed hairs beneath; terminal leaflet c. 6–7 × 4.5–6 cm, subrotund or obovate, with a cuspidate or acuminate apex c. 0.5 mm and an emarginate or subentire base, unequally and often finely serrate-dentate with the principal teeth sometimes patent, flat or with the margins undulate, the petiolule  $\frac{1}{4}$ – $\frac{1}{2}$  as long as the lamina; petiolules of basal leaflets 2 mm; petiole as long as or shorter than the basal leaflets, coloured and clothed like the stem, with 15–25 curved prickles 2–3.5 mm. Flowering branch with 3-foliolate leaves below and 1(–3) simple entire leaves above, not leafy to the apex; inflorescence long, typically pyramidal with a rounded or sometimes flat top, all the peduncles ascending or the middle ones patent, the axillary peduncles 4–10 cm, the lowest one 5–7 cm distant from the rest, all shorter than their leaves and divided about halfway or well above the middle; rachis flexuous, dark purple, with numerous to dense patent and adpressed medium simple and tufted hairs, numerous (but varying proportions of) short and medium and long stalked glands, fewer short and medium acicles, numerous sometimes gland-tipped pricklets and rather numerous, unequal, triangular-based, slender-pointed, declining or slightly curved, purple prickles 2–5 mm. Flowers c. 2–3 cm in diameter; sepals greyish-green, shaggy with numerous white or yellowish short and medium simple and tufted hairs, usually many subsessile and short and medium stalked glands and short and medium acicles, white-bordered, long-pointed, loosely reflexed in flower patent then erect in fruit; petals 8–13 × 4–4.5 mm, pale or deep pink (to whitish in shade), obovate or ovate or elliptical, with numerous short to long simple and tufted hairs on the margin, often notched, distant; stamens equalling or slightly (rarely, much) exceeding the neat head of styles, filaments pink (or green in shade), anthers glabrous, sutures pink; styles pale green or yellow or pink, and pink- or reddish-based; young carpels densely hairy; receptacle glabrous; fruit globose. Flowering in June and July.

**HOLOTYPE:** locally abundant in open areas, Bois du Rabey, Quettehou, dép. Manche, France, 3 July 1991, *D. E. Allen* no. C87, specimen "A" (**BM**).

**Exsiccatae:**

**ENGLAND**

v.c. 1a, Scilly: Low Pool, Rose Hill, St Mary's, SV/912.108; Carn Morval Down, St Mary's, SV/90.12, both 3 July 1954, *J. E. Lousley* nos 660 and 672 respectively, both det. B. A. Miles 1967 as *R. hastiformis* (**BM**). Abundant in hedges and among bracken on slopes to the sea, Halangy Down, St Mary's, SV/90.12, 26 June 1995; wall-top, Back Lane, Tresco, SV/890.156, 7 July 1995, *D.E.A.* s.n. (**BM**).

v.c. 2, E. Cornwall: wood near Polbathic, SX/35.56, 25 July 1980, *E. S. Edees* no. 22641 (**NMW**) – shade form.

v.c. 4, N. Devon: "North Devon", 1880, *H. A. Evans* s.n. as *R. pallidus*, comm. Botanical Record Club 1883 (**BM**). Great Odam Moor Plantation, SS/74.18, 10 July 1990, *L. J. Margetts & W. H. Tucker* no. 444 (**herb. L.J.M.**).

v.c. 9, Dorset: hedgebank, Redbridge Road, near Moreton station, SY/776.885, 29 June 1996, *D.E.A.* s.n. (**BM: herb. H. Vannerom**).

v.c. 10, Wight: Combley Great Wood, one patch only among tall bracken, SZ/547.888, 19 July 1995, *D.E.A.* no. H337 (**BM**).

#### FRANCE

Representative specimens collected by me in 1994 and 1996 have been deposited in **BM** from:

dép. Ille-et-Vilaine: hedgebank outside Tremblay.

dép. Côtes-du-Nord: Lande de Fréhel; clay copse, La Poterie, near Lamballe.

dép. Loire-Inférieure: near Pénestin, under pines; wood W. of Herbignac, in open heathy ground; Forêt de Princé, S.W. of Nantes, in abundance.

This member of ser. *Hystrix* is named after the Veneti, the powerful Celtic tribe defeated in a naval battle by the Romans under Julius Caesar in 56 B.C. Their territory supposedly extended over much of the present-day département of Morbihan, on the west coast of Brittany, where this bramble occurs in local abundance (in the pinewoods bordering the prehistoric alignments at Carnac, for example). It seems to be predominantly a Breton species, populating broad-leaved and coniferous woodland alike, often in great quantity, and spilling over into hedges and heath scrub. I have seen it in every département of that region except Finistère and south of the Loire in the Forêt de Princé, near Nantes. It may well extend further south still, into dép. Vendée, though it is not represented in the extensive *Rubus* collection from the east of that département made by J. Charrier and now in **BM**. The holotype locality in dép. Manche, in the north-east corner of the Cotentin Peninsula of Normandy, is so far the only one known in France outside Brittany and the region of the Western Loire.

A bramble with showy pink flowers and occurring so widely in such profusion would surely have been described long since had the north-west corner of France received more attention from batologists. In the principal account to have been published of the Rubi of any part of Brittany, by Arrondeau (1863), a resident of Vannes in dép. Morbihan, there is indeed a mention of a plant which from its description might be a shade form of this species; wrongly identified by Arrondeau with *R. scabripes* Genev., it was later described by Sudre (1905) as *R. strictispinus* and later still reduced by him (Sudre 1910) to a variety of *R. muelleri* Lef., a member of ser. *Vestiti* (Focke) Focke. Unfortunately, I have been unable to trace any specimen of this. Sudre himself made only one fleeting visit to Brittany, to the neighbourhood of Quimper in dép. Finistère (Sudre 1904), on which occasion he recorded what might also have been *R. venetorum* under the aggregate and widely-misapplied name of "*R. fuscoater* Weihe".

Essentially a French bramble, *R. venetorum* is as yet known in Britain in quantity only in the sheltered north-east coastal district of the main island of the Scilly archipelago, St Mary's, v.c. 1a. The species evidently requires a milder climate than most parts of the English mainland can produce. Its absence from the extensive collections of Cornwall and Devon Rubi made by B. A. Miles (CGE), F. Rilstone (**BM**) and H. J. Riddelsdell (**BM**) and single representation only in those made by L. J. Margetts (**herb. L.J.M.**) and E. S. Edees (NMW) suggest that elsewhere in the far south-west of England it is distinctly rare. That must be even more the case further east, in the region centred on the Solent, for the *Rubus* flora of Hampshire and the Isle of Wight has been investigated by now with considerable thoroughness. Several of these English mainland occurrences have the appearance of being the product of separate recent introductions by migrant birds, possibly direct from France.

*R. venetorum* exhibits considerable variation but, when typical, is rendered distinctive by the round terminal leaflets of the stem leaves only thinly hairy beneath, dark stem, Hystrican armature and narrow, bright pink petals, pink filaments, usually red-based styles and ultimately erect sepals.

Putative hybrids of *R. venetorum* with *R. prolongatus* Boulay & Letendre and *R. iricus* Rogers have been observed on St Mary's, Scilly. One of those with *R. prolongatus* extends for some distance along hedgebanks on both sides of a metalled road (SV/916.118) and also occurs in a nearby green lane, so is evidently fertile. Examples of these have been deposited in **BM** as well.

The distribution of the species in the British Isles is shown in Fig. 5.



FIGURE 5. The distribution of *Rubus venetorum* in the British Isles.

#### ACKNOWLEDGMENTS

I am particularly indebted to H. Vannerom and L. J. Margetts for their assistance with the respective accounts of *R. anglobelgicus* and *R. sempervitens*, including commenting on the draft descriptions, and for providing the excellent specimens here designated as their holotypes; records of the latter's English distribution were also kindly provided by L. J. Margetts. I am also grateful to A. Newton for helpful comments, on different occasions, on material of most of the species described, and to Miss P. Hodson and Miss R. Fitzgerald for introducing me to the flora of East Donegal and leading my footsteps to an extra-Manx station at last for *R. waddellii*. Fuller study of *R. davisii* in its Jersey locality was made possible by a grant from the B.S.B.I. Welch Bequest Fund, which I also acknowledge with gratitude.

#### REFERENCES

- ALLEN, D. E. (1986). *Flora of the Isle of Man*. Manx Museum, Douglas.  
 ALLEN, D. E. (1994). Brambles of north-west Ireland. *Irish naturalists' journal* **24**: 375–376.



- ARRONDEAU, E. T. (1863). Étude monographique sur les espèces du genre *Rubus*, qui croissent dans le département du Morbihan. *Bulletin de la Société polymathique du Morbihan* **1862**: 97–119.
- ROGERS, W. M. & RIDDELSDELL, H. J. (1925). Some varieties of *Rubus*. *Journal of botany* **63**: 13–15.
- SUDRE, H. (1904). Un bouquet de ronces bretonnes. *Bulletin de la Société d'études scientifiques d'Angers* n.s. **33**: 1–20.
- SUDRE, H. (1905). Revision des *Rubus* de l'Herbarium europaeum de M. Baenitz. *Bulletin de la Société botanique de France* **52**: 315–347.
- SUDRE, H. (1910). *Rubi Europae*, fasc. 3. Librairie des Sciences naturelles, Paris.
- SUDRE, H. (1912). *Rubi Europae*, fasc. 5. Librairie des Sciences naturelles, Paris.

(Accepted July 1997)