

Four new Anglo-Sarnian species of *Rubus* L. (Rosaceae)

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ABSTRACT

Four new species of *Rubus* L. (Rosaceae) are described, all with ranges extending to both sides of the English Channel. *R. transmarinus* D. E. Allen, **sp. nov.** (sect. *Corylifolii* Lindley), locally common round Bournemouth and in the Isle of Wight and found widely across Hampshire, also occurs in Jersey and Sark and on coastal heaths in France east of Cherbourg. *R. caesarius* D. E. Allen, **sp. nov.** (ser. *Vestiti* (Focke) Focke), abundant in many parts of Jersey, is also known in one English locality, between Southampton and Portsmouth. *R. couchii* Rilstone ex D. E. Allen, **sp. nov.** (ser. *Sylvatici* (P. J. Mueller) Focke) is frequent in the extreme south-east of Cornwall and common in the north-east of Jersey; it was also distributed last century from Cherbourg. *R. percrispus* D. E. Allen & R. D. Randall, **sp. nov.** (ser. *Micantes* Sudre ex Bouvet) is known from eight vice-counties in the southern half of England, with concentrations round Colchester and Bristol. There are also single records of it for Jersey and Guernsey.

KEYWORDS: Channel Islands, England, France, brambles, apomictic species.

INTRODUCTION

Intensive investigation in recent years of the *Rubus* flora of the Channel Islands and of that part of France most immediately adjacent to them, the Cotentin Peninsula of Normandy, has brought to light numerous forms that it has not proved possible to match with published taxa. This was no more than to be expected, for all areas in which *Rubus fruticosus* agg. occurs in any diversity tend to have a proportion of putative local endemics, most of them too restricted in quantity and range to warrant adding to the formidable number of species described already in this group. In order to keep the taxonomy within manageable limits, it is now the convention among *Rubus* specialists to bestow names on only those forms that reveal a 'regional' (as opposed to merely 'local') distribution. The four described in this paper not only fall into this category, but qualify additionally by reason of their occurrence on both sides of the English Channel. Britain and France have many *Rubus* species in common, but an increasing number are being detected with ranges that (so far at least) seem to be only narrowly trans-Channel in character. Three examples are *R. boulayi* Sudre (abundant round Bournemouth), *R. thyrsigeriformis* (Sudre) D. E. Allen (locally abundant round Southampton) and *R. corbieri* Boulay (locally abundant in the Purbeck district of Dorset). Each of these is well-distributed in the coastal area of France more or less opposite the main English concentrations, namely the Cotentin Peninsula, but only the first has been recorded outside that strictly limited territory (and whether correctly needs to be confirmed). Three of the species described below have ranges of broadly this same pattern, though one has its English concentration much further to the west. The fourth is much more widespread in England and, so far as is known, has been found only twice on the other side of the Channel, on both occasions seemingly transiently.

DESCRIPTIONS OF NEW SPECIES

1. *Rubus transmarinus* D. E. Allen, **sp. nov.**

Turio arcuato-decumbens, obtusangulus, rubro-purpureus, sparsim pilosus, aculeolis saepe glandu-

liferis et aciculis et glandulis stipitatis numerosis et aculeis numerosis vel densis non ad angulos dispositis inaequalibus rectis e basi plana declinatisque vel curvatis tenuibus munitis. Folia 5-nata, pedata, imbricata, superne sparsim pilosa, subtus molliter pubescentia, quorum petioli aculeis (2–3 mm) numerosis declinatis vel leviter falcatis tenuibus et aculeolis et aciculis et glandulis plerumque brevibus muniti. Foliolum terminale subrotundum vel rotundo-ovatum, paulatim acuminatum, serratum dentibus nonnullis aduncis, planum, basi emarginata, eiusdem petiolulo ter longius. Inflorescentia usque ad apicem foliata, superne saepe condensata, inferne ramulis axillaribus distantibus adscendentibus aucta. Rachis vix flexuosa, supra copiose pilosa, aculeis (4–6 mm) tenuibus subaequantibus plerumque rectis vel declinatis et aciculis et glandulosis numerosis munita. Flores 2–3 cm diametro. Sepala griseoviridia, dense pilosa, leviter aculeolata, glandulifera, attenuata, albo-marginata, patula tandem reflexa. Petala alba vel subroseola, obovata vel subrotunda, ad marginem sparsim pilosa, integra, plana, non contigua. Stamina alba stylos flavos superantia. Antherae et carpella glabri vel pilis raris praediti. Receptaculum glabrum. Fructus rotundus.

Stem low-arching, bluntly angled, reddish-purple, with sparse medium simple and tufted hairs, numerous stalked glands and acicles and often also numerous gland-tipped pricklets of varying lengths; prickles numerous to crowded, not confined to the angles, unequal, the longest c. 6–9 mm, as long as the stem diameter or a little longer, patent or slanting or curved, slender, subulate from a narrow compressed base, with yellowish points. Leaves pedate; leaflets 5, imbricate, pale green with sparse short simple hairs above and soft beneath with a dense layer of short simple and tufted hairs; terminal leaflet c. 6–9 × 5–7.5 cm, subrotund or roundish ovate or (rarely) obovate, with a gradually acuminate apex c. 1.5 cm and emarginate base, unevenly serrate with some teeth retrorse, flat, the petiolule $\frac{1}{2}$ as long as the lamina; basal leaflets sessile; petiole as long as or a little longer than the basal leaflets, with few to many medium simple and tufted hairs, scattered short acicles and mostly short stalked glands, and 15–25 declining or slightly curved prickles 2–3 mm together with a varying number of pricklets. Flowering branch with 3-foliate and simple (trifid and entire) leaves extending nearly to the apex; inflorescence consisting of a flat or rounded usually condensed top and distant ascending 4–7-flowered axillary peduncles 3–7 cm $\frac{1}{2}$ as long as their leaves, the lowest sometimes much longer and divaricate; rachis slightly flexuose or \pm straight, with numerous short to medium simple and tufted hairs, numerous mostly short and medium stalked glands, very short to medium acicles and numerous mostly subequal patent or declining slender prickles 4–6 (–7) mm. Flowers 2–3 cm in diameter; sepals greyish-green, with dense short and medium tufted and simple hairs, few to many short stalked and sessile glands and scattered short acicles, white-bordered, long-pointed, patent at first then reflexed; petals 9–10 × 5.5–9 mm, 5 or 6, white or pinkish, obovate to subrotund, with sparse to very sparse short simple and tufted hairs on the margin, entire, flat, not contiguous; stamens exceeding the styles, filaments white, anthers glabrous or with an occasional hair; styles yellow; young carpels glabrous or slightly hairy; receptacle glabrous; fruit globose. Flowering from June to August.

HOLOTYPUS: hedge, Whitemoor Lane, near Copythorne, SU/323.149, S. Hants., v.c. 11, 26 June 1982, *D. E. Allen* s.n. (**BM**).

This distinctive member of section *Corylifolii* has been known to British batologists since the 1890s, when it was distributed by W. Moyle Rogers from Bournemouth, S. Hants., v.c. 11, as no. 49 in the historic Set of British *Rubi*, under the erroneous name of '*R. dumetorum* var. *ferox* Weihe'. There is, however, a specimen in **BM** from nearby Poole in Dorset, v.c. 9, labelled '*R. fuscoater*', collected by T. Bell Salter as early as 1837. It is locally plentiful in the Bournemouth area and parts of the Isle of Wight, v.c. 10, and extends widely across S. Hants., v.c. 11, and here and there into N. Hants., v.c. 12, as well, exhibiting a preference for dry, sunny heaths and commons (though not averse to chalk near the coast). It is also present in some quantity in at least two of the Channel Islands, Jersey and Sark, and may well be in Guernsey too, for Rogers & Rogers (1898) recorded '*R. dumetorum* var. *ferox*' as generally distributed there; Rogers, though, is known to have included other members of section *Corylifolii* under that name and this statement has yet to be confirmed. It is, however, absent for certain from Alderney, where its place is taken by *R. tuberculatus* Bab. In addition, I have

collected it in a chain of French localities, on and near the coastal heaths running east from Cherbourg (Le Becquet; Lande de Carneville; Petit Bois, Parc du Château, St-Pierre-Église: vouchers deposited in BM). Rogers (1900) claimed to have seen '*R. dumetorum* var. *ferox*' also in both Normandy and Brittany, presumably on the visit he is known to have made to small parts of each of these in 1897; but he appears to have passed far to the south of Cherbourg en route to Rouen and, again, his interpretation of the taxon is in any case liable to have been over-broad. That *R. transmarinus* may not occur in France more widely is suggested by the fact that Sudre (1904, 1913), after examining *Rubus* material from all parts of that country, regarded it as a form restricted to Britain, combining it with *R. rubriflorus* Purchas (no. 131 of the Set of British *Rubi*), a quite different bramble of the North Midlands, under the new name of *R. dasyphylloides* – which is consequently illegitimate – as the supposed product of recent crossing between *R. caesius* L. and *R. dasyphyllus* (Rogers) E. S. Marshall. Watson (1958) was the first to give specific rank to Rogers' taxon as an entity in its own right, but unfortunately he referred it, erroneously, to the apparently non-British *R. scabrosus* P. J. Mueller (Edees 1975). It features as 'H39' in my forthcoming account of *Rubus* in Hampshire (Allen, in press).

Unlike most other members of section *Corylifolii*, *R. transmarinus* has a characteristically neat appearance. When extreme, its dense-topped panicle, neat-looking flowers, crowded slender prickles and roundish leaflets render it unmistakable.

2. *Rubus caesarius* D. E. Allen, *sp. nov.*

Turio arcuato-decumbens, atropurpureus, obtusangulus, faciebus planis vel excavatis, striatis; pilis paucis vel numerosis, aculeolis nonnullis, glandulis stipitatis aciculisque brevibus paucis, aculeis crebris ad angulos dispositis inaequalibus e basi lata et compressa tenuibus declinatis vel curvatis rubro-purpureis munitus. Folia 5-nata, digitata, saepe imbricata, superne glabrescentia, subtus molliter cinereo-albo-tomentosa, dense pilosa. Foliolum terminale ovatum vel subrotundum, apice cuspidatum vel acuminatum, basi emarginatum vel subintegrum, inaequaliter et saepe acute serratum vel dentatum, planum, eiusdem petiolulo ter longius; foliola infima breviter pedicellata. Inflorescentia usque ad apicem non foliata, longa, superne angusta et thyrsoides vel lata et pyramidalis, ramulis axillaribus omnibus patulis vel inferioribus adscendentibus aucta. Rachis parum flexuosa, cinerea vel cinereo-atropurpurea, copiose pilosa, aciculis et glandulis stipitatis et aculeolis (interdum glanduliferis) paucis, aculeis e basi longa tenuibus patulis vel declinatis vel curvatis purpureis numerosis munita. Flores c. 2–2.5 cm diametro. Sepala cinereo-tomentosa, glandulis stipitatis aciculisque paucis praedita, semper reflexa. Petala dilute rosea, elliptico-ovata vel subrotunda, ad marginem sparse pilosa, integra, plana, non contigua. Stamina alba stylos virides vix superantia. Antherae glabrae. Carpella pilosa. Receptaculum glabrum. Fructus parvus rotundus.

Stem low-arching, dark purple, blunt-angled with flat or furrowed sides, striate, with few to many very short to medium simple and tufted hairs, numerous sessile and subsessile glands, a few pricklets and scattered or rare short stalked glands and short acicles; prickles 10–14 per 5 cm, confined to the angles, unequal, (3–)4–6 mm, slender from a rather broad compressed base, declining or curved, reddish purple with pale point. Leaves digitate; leaflets 5, often imbricate, pale or dark green, glabrescent above, softly greyish-white-felted beneath with dense short simple and tufted hairs; terminal leaflet 5–7(–10) × 4–6(–7.5) cm, ovate or subrotund, with a cuspidate or acuminate apex 0.5–1.5 cm and an emarginate or subentire base, unequally and often finely serrate or dentate with the principal teeth sometimes patent, flat, the petiolule $\frac{1}{3}$ as long as the lamina; petiolules of basal leaflets 1–4 mm; petiole as long as or a little longer than the basal leaflets, coloured and clothed like the stem, with 8–11 curved prickles 2–4 mm. Flowering branch with 3-foliate leaves below and 0–4 simple leaves above, not leafy to the apex; inflorescence long, with a dense truncate top, sometimes narrow and thyrsoid above, sometimes broad and pyramidal, the upper, middle and sometimes even the lowest peduncles patent, more often the lower peduncles ascending and sometimes longer than their leaves, all divided about half-way or well above the middle; rachis slightly flexuous, greyish or dark greyish-purple, with numerous adpressed and patent short to medium simple and tufted hairs, sparse sessile glands, scattered purple short and medium stalked glands, rarer short acicles and (sometimes gland-tipped) pricklets, and numerous long-based, slender-pointed, patent

or declining or curved purple prickles 2–6 mm; pedicels clothed like the upper part of the rachis, with numerous slender declining or curved prickles 1–2 mm. Flowers 2–2.5 cm in diameter; sepals grey with dense stellate hairs and few to many medium simple and tufted hairs, numerous sessile and scattered short stalked glands and short acicles, short- or long-pointed, reflexed; petals 9–10 × 5–6 mm, pale pink, elliptical-obovate to subrotund, entire, with sparse very short simple and tufted hairs on the margin, flat, not contiguous; stamens equalling or slightly exceeding styles, filaments white, anthers glabrous; styles pale green; young carpels hairy; receptacle glabrous; fruit small, globose. Flowering in July and August.

HOLOTYPE: heathy scrub, Le Jardin d'Olivet, par. Trinity, WV/673.543, Jersey, v.c. S, 1 July 1990, D. E. Allen s.n. (**BM**).

The epithet *caesarius*, also borne by the subspecies of Bank Vole endemic to Jersey, *Clethrionomys glareolus caesarius* (Miller), is taken from the alleged Roman name for the island, *Caesarea*.

R. caesarius is not only a characteristic member of series *Vestiti*, but was actually mistaken by Rogers for *R. vestitus* Weihe (MS note by him on sheet ex herb. Barton & Riddelsdell no. 9318 in **BM**, where he omits the qualifying "but usually untypical" of Rogers & Rogers 1898), a species now known to be absent from the Channel Islands, the Cornish Peninsula and extreme north-west France. The two are in fact readily distinguished, and it would seem that Rogers played down the differences evidently in a wish to satisfy himself that the *Rubus* flora of the Channel Islands is broadly similar to that of southern England (which, however, has turned out to be anything but the case). As he noted, this bramble is second only in abundance in Jersey to the ubiquitous *R. ulmifolius* Schott, occurring in profusion on banks, roadsides and heathland in many parts (e.g. La Grève de Lecq; Bouley Bay; Rue de l'Aleval; Val de la Mare), though scarce or absent in others, most noticeably in those which harbour the putatively oldest substratum of *Rubus* species (as at the top of Waterworks Valley). This suggests that it may be a relatively late incomer, a possibility rendered the more likely by its prevalence in Jersey despite its apparently total absence from all the other Channel Islands. It can hardly, however, have come from Britain, for only a single small population is known from there: midway between Southampton and Portsmouth, on hedgebanks along Segensworth Road, Park Gate, SU/526.078–9, S. Hants., v.c. 11, at the north end of the one-time Titchfield Common (a surviving fragment of which, further south, holds the only-known Hampshire patch of *R. imbricatus* Hort). On the other hand, unlike *R. corbieri* (Allen 1992), it would appear not to have come from the part of the French mainland that is closest either, for no sign of it has been met with in the Cotentin Peninsula after three seasons' extensive sampling of that area's *Rubus* flora. Should it be a species of French origin, therefore, the source must lie further to the east or south. Although no match for it has been found among the limited French material in British herbaria, it may yet turn out to have been among the numerous taxa described by French botanists prior to 1914, type material of many of which cannot now be located.

A representative series of *R. caesarius* from Jersey and Hampshire has been deposited in **BM**. In **OXF** there is a stem-piece of it in a mixed gathering by Rogers from Les Marais and Fauvic, misdetermined as a weak form of *R. radula* Weihe ex Boenn. There is also in **OXF** an undated specimen of G.C. Druce's from St Aubin, variously misdetermined as *R. vestitus* and *R. boraeanus* Genev., that may be this too. Otherwise no previous specimens have been detected in British herbaria.

3. *Rubus couchii* Rilstone ex D. E. Allen, *sp. nov.*

Turio alte arcuatus fuscus vel nigrescens, obtuse vel acute angulatus, faciebus planis vel concavis, striatis, glaber vel pilis paucis vel numerosis, aculeis crebris ad angulos dispositis saepe geminatis inaequalibus e basi lata et compressa attenuatis patulis vel declinatis vel curvatis purpureis munitis. Folia 5-nata, pedata vel digitata, vix imbricata, superne glabrescentia, subtus viridia (raro cinereo-tomentosa), leviter pilosa. Foliolum terminale subrotundum vel elliptico-obovatum vel oblongum, apice acuminatum, basi emarginatum vel integrum, inaequaliter acute serratum et dentatum, planum, eiusdem petiolulo ter longius; foliola infima breviter pedicellata. Inflorescentia usque ad

apicem non foliata, foliis nonnullis quinatis ternatisque inferne instructa, saepe longa, anguste pyramidalis truncata, ramulis axillaribus infimis distantibus adscendentibus et mediis subpatulis vel divaricatis aucta. Rachis flexuosa vel recta, infra sicut turio vestita, ad apicem pilis densis longioribus, glandulis stipitatis brevissimis paucis et aculeis purpureis numerosis declinatis vel curvatis vel falcatis 2–6 mm munita. Flores c. 2.5–3 cm diametro. Sepala cinereo-tomentosa, pilis flavescentibus numerosis vestita, aculeolata, anguste albo-marginata, omnia attenuata, patula vel reflexa tandem fructum amplectantia. Petala rosea vel roseola, subrotunda vel late ovata vel oblonga, subtus et ad marginem pilosa, saepe imbricata. Stamina alba stylos virides vel flavescentes, saepe basi erubescences, superantia. Antherae glabrae vel pilis raris praeditae. Carpella dense pilosa. Receptaculum glabrum. Fructus rotundus.

Stem high-arching, light brown to blackish, bluntly to rather sharply angled, with flat or shallowly furrowed sides, striate, glabrous or with few to many short and medium simple and tufted hairs, numerous sessile glands and very rare pricklets; prickles 11–15 per 5 cm, confined to the angles, often in pairs, unequal, the longest c. 6–8 mm, as long as or rather shorter than the stem diameter, patent or slanting or curved, narrowing from a broad compressed base, purple with yellowish tip. Leaves pedate or digitate; leaflets 5, not or scarcely overlapping, dark green with sparse simple hairs above and green (rarely, greyish-white) beneath with few to many medium simple hairs mostly on the veins; terminal leaflet c. 6–10 × 4–7 cm, subrotund or elliptical-obovate or oblong, with a gradually acuminate apex c. 0.5–1.5 cm and entire or emarginate base, unevenly and finely serrate-dentate with some principal teeth patent, flat, the petiolule c. $\frac{1}{3}$ as long as the lamina; petiolules of basal leaflets 1–6 mm; petiole usually well exceeding the basal leaflets, with few to many short and medium simple and tufted hairs, rare subsessile glands and 12–20 curved prickles. Flowering branch with 3–5-foliolate leaves below and 1–4 simple (trifid and entire) leaves above extending to usually well short of the apex; inflorescence often large, “usually somewhat narrowly pyramidal and truncate” (Rilstone ms.), with distant ascending 5–6-flowered lower axillary peduncles 4–10 cm as long as their leaves to only half as long and subpatent or divaricate middle peduncles; rachis flexuose or straight, with many mostly adpressed simple and tufted hairs becoming dense, more spreading and longer above together with numerous sessile and subsessile glands, a few short stalked glands and numerous declining or curved or falcate prickles 2–6 mm. Flowers largish, 2.5–3 cm in diameter; sepals greyish, with dense yellowish short and medium tufted hairs, numerous sessile glands and few to many short and medium acicles, narrowly white-bordered, all long-pointed from bud, in flower subpatent or reflexed, in fruit reflexed and ultimately erect and clasping; petals 8–12 × 5–9 mm, mid or pale pink, entire or erose, subrotund to broadly oval or oblong, not or scarcely clawed, with numerous hairs beneath and few to many short and medium simple and tufted hairs on the margin, moderately concave, spaced or overlapping; stamens usually exceeding the styles, filaments white or faintly pink, anthers glabrous or with a rare hair; styles green or yellowish, often red-based; young carpels densely hairy; receptacle glabrous; fruit globose. Flowering from June to August.

HOLOTYPE: Polperro, E. Cornwall, v.c. 2, 10 September 1932, *F. Rilstone no. 793*, herb. Barton & Riddelsdell no. 7782 (BM).

This bramble was first brought to notice in Britain in 1920 by Rilstone, who distributed specimens of it from around his then home village of Polperro through the Botanical Exchange Club, remarking that it was “a common and constant plant over this locality”. On that occasion H. J. Riddelsdell determined it as *R. macrophyllodes* Genev.; after seeing it for himself in the field in 1924–25, however, he queried it instead as *R. leucanthemus* P. J. Mueller before settling for *R. hirtifolius* P. J. Mueller & Wirtgen. All three of these taxa were at that time mistakenly thought to be British. Through some confusion Riddelsdell meanwhile led Rilstone into believing that the revised determination was *R. chrysoxylon* (Rogers) Rogers, a species of north-west Wales and the north end of the Welsh Marches. Unable to accept this, Rilstone used “Cornish *chrysoxylon*” as a working name for what he increasingly became convinced was an undescribed species and eventually, in 1946, annotated the sheets of it in his herbarium with the MS name “*R. couchii*” – in honour of the celebrated nineteenth-century Polperro naturalist Jonathan Couch (1789–1870). In that same year, in a letter to W. C. Barton (the relevant extract of which the latter subsequently attached to the

sheet which now bears the holotype), Rilstone wrote: "It is frequent rather than abundant, but I have seen it in a good many places in Polperro valley and in the east and west Looe valleys, almost always on the edge of thickets in the bottom of the valley." Presumably because of this very local distribution, in the far south-east corner of Cornwall, he did not include it among the several new Cornubian species whose descriptions he was to publish four years later (Rilstone 1950).

Were that indeed the full extent of its range, *R. couchii* would still be undeserving of a published name. In 1992, however, I realised that it was identical with a bramble known to me for some years in the north-east corner of Jersey, v.c. S. Common and widespread in the district between Bouley Bay and Flicquet Bay, it rises to abundance in Rozel Woods (WV/69.53, 69.54, 70.52). Though evidently preferring shade, it occurs also on sunny banks and roadsides and among gorse scrub on heathland. Representative material from four different Jersey localities has been deposited in BM, to join the considerable number of gatherings of the species therein from Cornwall made at different times by Rilstone, Riddelsdell, Barton and myself respectively.

Like *R. caesarius*, *R. couchii* appears not to occur in any of the other Channel Islands; it differs from it, however, in extending to the neighbouring Cotentin Peninsula – or at least in having done so formerly. For no. 893 of the specimens distributed late last century through the Association Rubologique (a set unfortunately not in any British herbarium but which I have been able to examine in Paris (P) and Geneva (G)) is clearly *R. couchii* too. It was collected by the Cherbourg botanist L. Corbière in 1889 from a shady hedge near the farm of Le Maupas on what was then the outskirts of that city (but now largely built over). Although put out under the name of *R. obvallatus* Boulay & Gillot, it does not match other material so named in various herbaria and the characters noted by Corbière on the label in fact fit *R. couchii* impressively exactly. There is a handwritten addition to these in the sheet in G to the effect that "l'indument en brillant assez semblable celui du vestitus." If the species is still to be found in the Cotentin Peninsula, it would appear to be at best very local, for in my own extensive sampling of the area I have failed to encounter it.

In BM there is a specimen collected by G. Didier (no. 1010) in the Forêt de Verrières, dép. Seine-et-Oise, in 1933 and labelled "*R. elongatispinus* Sudre var." which, while patently distinct from the *Batotheca Europaea* material of that Pyrenean species distributed by Sudre, closely approaches *R. couchii*. It differs, however, in having fewer and longer prickles and in lacking the yellowish tomentum on the sepals and upper rachis.

With its long, narrow pyramidal inflorescence and pale pink flowers, *R. couchii* superficially resembles *R. phaeocarpus* W. C. R. Watson. Unlike that species, however, it is more or less eglandular; the larger flowers and finely serrate-dentate leaves additionally distinguish it from that at once. In the numerous curved prickles, especially on the rachis and peduncles, it also recalls *R. crudelis* W. C. R. Watson, though readily told from that as well by its much shorter axillary peduncles, differently-shaped leaflets and glabrous anthers. It seems best placed in series *Sylvatici*, even though the leaves of at least the inflorescence are sometimes grey-felted beneath.

4. *Rubus percrispus* D. E. Allen & R. D. Randall, *sp. nov.*

Turio arcuatus, acute angulatus, faciebus planis vel leviter excavatis, atropurpureus vel purpureo-erubescens, parce pruinosis, sparsim pilosus vel glabrescens, aciculis glandulisque pluribus inaequalibus, aculeis numerosis 5–20 per 5 cm inaequalibus plerumque ad angulos dispositis rectis tenuibus e basi lata vel compressa patentibus vel declinatis, aculeolis nonnullis munitis. Folia 3–5-nata, subdigitata undulata, inferne albo-tomentosa et pilosa. Foliolum terminale 5–8 × 4–5 cm, obovatum vel subrotundum vel ovatum, apice cuspidatum vel acutum vel acuminatum, acutissime et tenuissime serrulato-denticulatum; foliola infima breviter pedicellata. Inflorescentia longa anguste pyramidalis, foliosa inferne foliis 3–4-natis et bracteis trilobatis vel simplicibus instructa, ramulis axillaribus longis superioribus adscendentibus aucta. Rachis ± recta vel parum nutans, superne dense tomentosa, glandulis numerosis brevibus aculeisque inaequalibus tenuibus declinatis 1–9 mm munita. Flores c. 2–2.5 cm diametro; sepala albescens-tomentosa, glandulifera, semper valde reflexa. Petala alba, late elliptica vel oblonga vel obovata, adscendens, unguiculata, saepe emarginata, non contigua. Stamina alba stylos flavescens vel viridescens superantia. Antherae glabrae. Carpella glabra. Receptaculum ± glabrum. Fructus parvus rotundus.

Stem arching, sharply angled with flat or slightly furrowed sides, dull blackish- or reddish-purple, striate, somewhat pruinose, with a few simple and tufted hairs or sometimes glabrescent; prickles numerous, 5–20 per 5 cm, unequal, 3–10 mm, patent or slightly declining, mostly confined to the angles, straight, subulate from a broadish or compressed base, usually accompanied by a few pricklets and more numerous unequal acicles and stalked glands. Leaves subdigitate; leaflets 3–5, dark green and \pm glabrous above, white-felted and pilose beneath, undulate on the margins, very deeply and finely serrate-dentate with some of the principal teeth recurved; terminal leaflet 5–8 \times 4–5 cm, varying from obovate-cuspidate or roundish- or rhomboid-acute towards the stem base to ovate-acuminate towards the stem apex; petiolules of basal leaflets usually less than 3 mm; petiole 1–1.5 times as long as the basal leaflets with 8–18 declining and slightly curved prickles 2–5 mm; stipules and sometimes leaf margins deep red. Flowering branch with 3–4-foliolate leaves below; inflorescence long, narrowly pyramidal, leafy with trifid and simple bracts when well-developed, cymose-racemose, peduncles long, the upper ones ascending, 2–3-flowered, overtopping the central axis. Rachis \pm straight or somewhat nodding, angled or furrowed below, felted above with dense simple and stellate hairs and abundant short stalked glands (some longer than the hairs), usually almost unarmed towards the apex but with unequal, slender, slanting prickles 1–9 mm below. Flowers c. 2–2.5 cm in diameter; sepals whitish-felted, usually short-pointed, dotted with very short stalked glands, strongly reflexed throughout; petals 8–17 \times 5–9 mm, faintly mauve or lilac in bud, opening pure white, ascending, broad elliptical or oblong or obovate, clawed, often notched, not contiguous; stamens exceeding the styles, filaments white, anthers glabrous; styles yellowish or greenish; young carpels glabrous; receptacle inconspicuously hirsute at the base; fruit small, globose. Flowering in July and August.

HOLOTYPE: hedgebank, Thorington, TM/095.213, N. Essex, v.c. 19, 16 July 1971, *J. R. I. Wood* no. 71/99 (**BM**).

Representative exsiccatae:

v.c. S, Jersey: old quarry, Le Jardin d'Olivet, WV/672.544, 23 July 1978 (gone by 1990), *D.E.A.* s.n. (**BM**).

Guernsey: Fermain Bay, WV/33.76, 30 June 1897, *F. A. Rogers* s.n. (**K**).

v.c. 4, N. Devon: hedgerow, Kingsland Barton, South Molton, SS/697.257, 26 July 1989, *R.D.Randall* no. 89.46 (**herb. R.D.R.**).

v.c. 5, S. Somerset: by bridge, Dulverton, SS/91.27, 4 August 1976, *L. J. Margetts* no. 99 (**NMW**: herb. E. S. Edees no. 23122).

v.c. 6, N. Somerset: Stanton Wick, ST/613.626, 16 August 1986; near Publow Wood, ST/625.640, 16 August 1986; Sandy Lane, Easton-in-Gordano, ST/512.744, 7 July 1988; junction of A368 and A37, Chelwood, ST/624.618, 29 July 1989; Young Woods Farm, Nailsea, ST/443.694, *R.D.R.* nos. 86.29, 86.32, 88.11, 89.77, 90.24 respectively (**herb. R.D.R.**).

v.c. 11, S. Hants.: in a holly on B3055, Brockenhurst, SU/297.018, 12 July 1986; wooded roadside, South Baddesley, SZ/350.960, 4 August 1987; Agar's Lane, between Sway and Hordle, SZ/273.970, 17 June 1989, *D.E.A.* s.n. (**BM**). Roadside park, Wick, near Christchurch, SZ/152.922, 13 July 1991, *R.D.R.* s.n. (**herb. A. D. Marshall**).

v.c. 19, N. Essex: Great Horkesley, TL/98.30, 1 September 1890, *J. D. Gray* s.n. (**BRISTM**). Heathland below ballast pits, Stanway, TL/960.246, 27 June 1920, *G. C. Brown* s.n. (**BM**). Hedgebank, St Osyth, TM/145.205, 17 July 1972; Stour Wood, Wrabness, TM/187.307, 1 August 1972, *J. R. I. Wood* nos. 72.57, 72.119 respectively (**BM**). Scrub, Fordham Heath, TL/94.26, 23 July 1982, *A. L. Bull & J. J. Heath* no. 1296 (**CLR**; **herb. A.L.B.**); 1 August 1991, *R.D.R.* (**herb. R.D.R.**).

v.c. 25, E. Suffolk: Dodnash Wood, Bentley, TM/107.364, 19 July 1972, *J. R. I. Wood* no. 72/81 (**BW**). Lady Anne Wake-Walker's field, East Bergholt, TM/06.35, 24 July 1973, *E. S. Edees* no. 20880 (**NMW**).

v.c. 30, Beds.: Folly Wood, near Flitwick, TL/04.35, 5 August 1956, *E. S. Eedes* no. 12099 (NMW).
v.c. 34, W. Gloucs.: old Midland Railway, Oldland Common, ST/677.723, 13 July 1987, *R.D.R.* no. 87.55 (**herb. R.D.R.**); ST/670.710, 19 July 1990, *R.D.R.* no. 90.34 (**herb. R.D.R.**; **herb. L. J. Margetts**; **herb. R. W. Gould**).

In the early 1970s J. R. Ironside-Wood, in preparing the account of *Rubus* which he contributed to the new *Flora of Essex* (Jermyn 1974), came across an unfamiliar glandular bramble on hedgebanks around Colchester, taking examples of it for his herbarium from four localities in N. Essex, v.c. 19, and one in E. Suffolk, v.c. 25. He noted that it resembled *R. raduloides* (Rogers) Sudre, but that it differed from that most noticeably in having white petals and a much less vigorous habit. Unbeknown to him, it had in fact been collected in that same district twice previously, respectively 52 and 82 years earlier. On the second of those occasions it had been queried by Riddelsdell as *R. griffithianus* Rogers, a species at that time not well understood.

A decade later R. D. Randall began finding what was subsequently to prove to be this same bramble in numerous, widely-scattered localities in N. Somerset, v.c. 6, and W. Gloucs., v.c. 34. Again, *R. raduloides* was noted as the species which it resembled most closely (and to which specimens from sunny spots were often referred), though some resemblance to *R. echinatoides* (Rogers) Dallman was also apparent, while in semi-shade it was seen to approach *R. dentatifolius* (Briggs) W. C. R. Watson.

On being shown a specimen by R.D.R. in 1990, I immediately recognised it as an unnamed bramble that I too had known for some years (as "H589"), having collected it in four widely-separated localities in S. Hants., v.c. 11, and, earlier still, in one place in Jersey. About the same time it was established that A. L. Bull and J. J. Heath had also collected it in N. Essex, and a Guernsey specimen was discovered in K which had been collected late last century and referred by Rogers successively to *R. anglosaxonicus* Gelert (now *R. micans* Godron) and *R. rudis* Weihe. R.D.R. and Bull have since studied the bramble round Colchester, and it has also been shown in the field to several other *Rubus* specialists. The general conclusion is that it does not correspond to any species so far described from the British Isles. Although its presence in the Channel Islands and the pattern of its Hampshire occurrences (isolated bushes or patches scattered across the south of the county, mainly near the coast) strongly suggest that its range may extend to France, no sign of it has been found in the Cotentin Peninsula of Normandy and a search of Continental *Rubus* material in British herbaria as well as in Geneva (G) and Leyden (L) has proved negative as well. The Belgian specialist H. Vannerom has also been unable to come forward with any Low Countries bramble that convincingly matches the British Isles plant.

A member of series *Micantes*, *R. percrispus* favours hedgerows and scrub on sandy or gravelly soils, occasionally also occurring in open woods but there tending to keep to the margins or rides. When growing in a dry, sunny situation the armature is well-developed and reminiscent of that of *R. raduloides* and *R. heterobelus* W. C. R. Watson, but the panicle is at the same time small, more or less cylindrical and lacks the characteristic leafy bracts. In moister conditions the plant becomes much more robust and the panicles well-developed, while in shade the prickles are less frequent and the secondary armature and glandular development very much reduced.

The epithet *percrispus* refers to the strikingly undulate leaf margins, which are rendered additionally distinctive by their very deep and fine teeth. The dark green upper side of the leaflets stands out in marked contrast to the white under side, which in turn forms a strong contrast to the dark purple stem and rachis.

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