

## Brambles (*Rubus* L. sect. *Rubus* and sect. *Corylifolii* Lindley, Rosaceae) of the Channel Islands

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### ABSTRACT

The history of the investigation of the predominantly apomictic genus *Rubus* L. in the Channel Islands (Les Îles Anglo-Normandes) is outlined and the records made to date are listed and critically assessed. Of species currently admitted to the British Isles list, 39 inclusive of two naturalised horticultural taxa are considered reliably recorded: 26 from Jersey, 23 from Guernsey, 14 from Sark and 11 from Alderney. Though these totals roughly correlate with island size, they are each made up of different species in substantial part. They include one apparent endemic, *R. cordatifolius* (Rogers ex Riddelsd.) D. Allen, shared by Guernsey and Sark. Many unnamed entities, however, also occur, one or two in each main island relatively widely, but the group has been too little investigated on the French mainland to tell how far any extend there sufficiently to merit being described should they not prove to belong to existing taxa. Dispersal and other factors determining the presence or influencing the frequency of certain species in the islands are also examined.

KEYWORDS: apomictic species, Britain, France, Normandy, Brittany, distribution, bird dispersal.

### INTRODUCTION

By virtue of their being Crown possessions in British home waters the Channel Islands - Les Îles Anglo-Normandes to the French (to whom one group of islets belong) – have traditionally been treated as part of their territorial responsibility by students of the British-cum-Irish flora. From the strictly geographical point of view, though, it is to Continental Europe that they manifestly belong, as confirmed by the Precambrian geology they share with Brittany and the nearest part of Normandy as well as by a general floristic character broadly different from that on the other side of the English Channel. That very degree of difference has tended to deter specialists in major critical groups such as *Rubus*, who have been conscious of the extra dimension of difficulty these islands are likely to present without some reasonable measure of familiarity with the representatives of those groups in the nearby parts of the mainland. The *Rubus* flora is particularly richly diverse, as it chances, in the Cotentin Peninsula of Normandy immediately to the east (Allen 1996) and only small portions of that, or of the whole of Brittany for that matter, have been investigated even cursorily by batologists until the last twenty years. Though knowledge of that wider context is still very incomplete, the islands themselves have by now been sufficiently well worked to justify putting together up-to-date lists of the taxa that seem to have been reliably recorded from each of the largest and to examine how far the presence or absence of some of the members of this predominantly apomictic group has extra insights to provide about the floristic affinities of the individual main islands – especially to one another – and of the archipelago as a whole.

### PREVIOUS WORK

Study of the islands' *Rubus* flora dates from Babington's pioneer exploration of 1837–8. Though that was before he had begun to specialise in the group, by then he was already sufficiently intrigued by its complexity to collect the odd specimen and seek the assistance of Borrer in naming them. Not surprisingly, though, given the primitive state of *Rubus* taxonomy at that period, their joint efforts proved on the whole inconclusive (Babington 1839); disappointingly, too, not all of the specimens appear to have survived. There is equally slight surviving evidence in herbaria of a

visit made by H. C. Watson to Guernsey in 1852 and of one by A. Ley to both there and Jersey in 1885, while two species listed by Marquand (1892) from Guernsey were under names that cannot be referred with confidence to any recognised today.

The islands were thus effectively still virgin territory batologically when W. Moyle Rogers, the then leading British specialist, devoted a visit of almost a fortnight in 1897 expressly to closing what had come to seem a glaring gap in his knowledge of the distribution in the British Isles of the various taxa he was about to recognise in his forthcoming revision of the group (Rogers 1900). Accompanied by his son, F. A. Rogers, who did some collecting as well, he concentrated on Jersey and Guernsey, forgoing Alderney and managing a few hours only on Sark. In the subsequent published reports (Rogers & Rogers 1898; Derrick 1898; Rogers 1899) he was to claim, with evident relief, that the "vast majority" of the forms encountered were "practically identical" with ones with which he was familiar in Britain. The specimens collected, however, now mostly in **BM**, provide notably less support for that conclusion than he had persuaded himself was the case, for those that are of entities to which a name cannot be put today almost match in number the 16 taxa in his list that he proves to have identified with British ones correctly. Had he written, rather, that most of the *widespread* taxa encountered were also British, that would have been near the truth – and is perhaps what he intended to convey.

Considering how many more of Britain's more widespread *Rubus* entities had yet to be discriminated and described at that period, the extent to which Rogers mastered the group in the islands on that single visit is nonetheless impressive. Unfortunately, for half a century after his death there were not to be any further *Rubus* specialists, British or French, with direct experience of the islands and attempts at determining material from there had a poor record of success by comparison. When W. C. R. Watson was invited in 1930 to pronounce upon random specimens G. C. Druce had collected on various visits, his touch was so uncertain that not only are one or two of his determinations patently wide of the mark, but in two cases he changed his mind in later years – but not for the better. He would really have been wiser not to have hazarded names at all, for Druce's material consists in the main of scarcely enlightening scraps. The mere handful now to be found in **OXF** are evidently by no means the full number that Druce amassed, for some records of his based at least partly on determinations by Rogers were published by him at an earlier date (Druce 1907).

Most of Druce's specimens are undated, but one from Jersey in 1923 shows that his collecting just overlapped with the period of activity there of Fr. Louis-Arsène, whose herbarium, now at **JSY**, contains a number of *Rubus* species allegedly from various named localities in that island. As shown by Le Sueur (1982), however, the stated provenance of all Louis-Arsène's botanical specimens is suspect and it would be unsafe to do other than ignore the examples of *Rubus* in their entirety.

#### RECENT WORK

Around 1970 a limited resumption of collecting took place in connection with the new Flora of Guernsey then in preparation. Material of a few plants met with by D. McClintock and Lady A. Brewis on different occasions was submitted to B. A. Miles for determination, with mixed success, before being deposited in the herbarium of the Société Guernesiaise in St. Peter Port (**STP**) and the few records resulting published in the eventual book (McClintock 1975).

Conscious of the inadequacy of the treatment of the group in that work, McClintock prevailed upon the present writer to pay a week's visit to Guernsey in July 1978 with a view to a more intensive survey. The opportunity was taken to spend a day and a half in Sark as well and three days in Jersey after that, with sufficiently productive results to warrant the publishing of new lists for all three islands (Allen 1981; Le Sueur 1984).

Those lists have subsequently been considerably modified and extended in the light of four further visits by the writer to Jersey and Guernsey for a week each (including a day on Herm) in 1990; to Jersey and Sark, similarly for a week each, in 1992; to Alderney for four days in 1993; and finally to Jersey again for a week, with a day's return to Sark, in 1994 (the updated Sark list, without localities, was subsequently published by Marsden (1995)). All material collected has been deposited in **BM** except for a few specimens donated to **JSY** and **STP**.

As a result Alderney, Sark and Herm can be claimed to have been investigated more or less exhaustively; Jersey and Guernsey, however, have been covered only incompletely – possibly important omissions in Jersey are Les Grands Vaux and parts of the north coast – and those larger two have undoubtedly more to yield up.

## ISLAND LISTS

The records for each of the main islands are considered below in turn, in the geographical sequence of these from south to north. As no non-British taxa have as yet been detected, the species order in each list is that in Kent (1992), to which reference should be made for sectional and series names.

Many specimens cannot be matched at present with any entity known from the rest of the British Isles or mainland Europe whether described or not. Unfortunately, authentic material of many taxa recorded from northern France is not in any British herbarium and the location of type specimens is all too often unknown. By no means all of those, however, would now be rated worthy of taxonomic recognition, for names have frequently been conferred in the past on the unique morphotypes (or “individua”) that the peculiar reproductive system found in the *Rubus fruticosus* aggregate not uncommonly gives rise to, or on entities with a distribution too narrowly local to have any significance geographically. In each of the main islands, however, there are one or two “*innominati*” that are relatively widespread, some at least of which may qualify for description should they turn out to occur widely outside the Channel Islands as well. Details of these select few have been thought worth appending at the end of the respective lists.

Now that UTT-gridded Ordnance Survey maps have become available in recent years for each of the four largest islands, it is at last possible to pinpoint Channel Islands records with six-figure references, and these are provided below in appropriate instances.

Numbers cited for some of Rogers’ specimens are not his own (he did not use collection numbers) but those of Herb. Barton & Riddelsdell, now in **BM**, into which were incorporated many specimens of particular interest extracted from Rogers’ herbarium by Riddelsdell after it passed into his possession.

## JERSEY

The most southerly of the four main islands and the one with the warmest climate, Jersey is also much the largest, its 115 km<sup>2</sup> making it almost twice the size of Guernsey. Though 24 km from the mainland, not nearly as close as Alderney and Sark, it has much the shallowest intervening sea, a principal reason for thinking that it was the last of the four to be severed from Normandy (Sincl 1912). While it resembles Guernsey in gradually sloping one way, it does so in the opposite direction from north to south. The north and south-west coasts are fringed with steep cliffs with a narrow belt of heath on top which widens in places into distinct commons and is one of the two habitats in the island particularly productive of *Rubus* diversity. The other is the series of long wooded valleys running down the centre of the island to the south coast. The lengthiest of these, the St. Lawrence Valley (since the building of two large reservoirs better known as Waterworks Valley), preserves at its north tip, close to the museum at Hamptonne, a fragment of rocky woodland with an exceptional assemblage of unusual brambles, almost all of them so far unmatched with any known from Britain or France. This is the one piece of ground encountered in the whole of the Channel Islands that most gives the impression of a portion of Normandy surviving little changed from the period before it was cut off by the sea.

*R. briggsianus* (Rogers) Rogers Recorded by Rogers from one spot near Waterworks Valley and by Druce from La Corbière. In neither case does a specimen seem to have been kept. Still not certainly known on the European mainland, the species may yet survive in the coastal heath.

*R. couchii* Rilstone ex D. E. Allen Common and widespread in the north-east corner, rising to abundance in Rozel Woods. A specimen of Druce’s in **OXF** from Flicquet Bay (where the species is prominent today) was erroneously referred by Watson (Druce 1931) to “*R. cariensis*” sensu Rogers (i.e. *R. altiarquatus* W. C. Barton & Ridd.).

*R. laciniatus* Hayne & Willd. Mont du Vallet, L’Étacq, since the 1950s (Le Sueur 1984).

- [*R. lindleianus* Lees Druce (1907), who was familiar with this common English species, claimed to have seen it “in several places” on his recent visit, leaving it ambiguous whether Rogers had confirmed his identification. None can be found in **OXF** today, no sign of the species has been discovered in Jersey since and it appears to be absent from north-west France. Presumably one or more other white-flowered, eglandular brambles were mistaken for it.]
- [*R. macrophyllus* Weihe & Nees Rogers may have been correct in recording this from a deep lane on the west side of Bouley Bay, but his specimen (**BM**) is not satisfactory enough for certainty. Though occasional in woods in central Normandy, this species has only once been recorded in the Cotentin Peninsula.]
- R. questieri* Lef. & P. J. Mull. Common to abundant in several wooded tracts, but absent from large areas. Rogers believed he saw this only in the Vallée des Vaux, where Ley had collected it earlier, but there are specimens of his in **BM** (4900, 7459) from two other localities which he failed to recognise, suggesting that his concept of the species was too narrow.
- R. cardiophyllus* Lef. & P. J. Mull. Rare, as in Normandy, and nowhere more than a patch. On roadsides in La Ville des Quennevais and Waterworks Valley but on wood margins in the Mourier Valley and two places in St. Peter’s Valley. Earlier records are dubious: the surviving specimen (**BM**, 8093) of what Rogers took to be a small-leaved form of this, at Rozel and Pont Marquet, is of some other bramble, while Druce’s material from Le Portelet and St. Aubin’s (Druce 1931) was so determined by Rogers in an aggregate sense only.
- R. davisii* D. E. Allen Open heath south of Gros Nez, extending thence along the cliff-top towards Plémont.
- R. dumnoniensis* Bab. Rogers recorded a supposedly strong form of this “especially abundant at Gorey Bay”, but his specimen (**K**) is of some quite different (but unknown) bramble. Another specimen of his from Rozel (**BM**) he also incorrectly referred to this species. His claim to have seen it in abundance in Waterworks Valley must accordingly be treated with reserve; though certainly present, it is no more than occasional there today at best. Apart from a bush in the next valley to the west (on the wooded margin of La Rue de l’Aleva) and several on the upper common at Le Ouisné it has been noted otherwise only on the north coast, at Le Marionneux (a colony), Le Jardin d’Olivet and La Chrétienne.
- R. polyanthemus* Lindb. Occasional. Mostly among bracken on the north coast heaths, but in woodland in the Vallée de Bellosanne.
- R. prolongatus* Boulay & Letendre Rare. Several patches at top of Waterworks Valley and a bush on a wood margin near Tesson Mill in St. Peter’s Valley. Rogers’ specimen (**BM**) of the “*R. micans*” he listed from Anne Port proves to be this and probably his Gorey record of that belongs here too.
- [*R. rhombifolius* Weihe ex Boenn. “South of England *incurvatus*”, the name by which Rogers mostly understood this species, was recorded by him from St. Aubin’s Bay. No specimen has been traced and the determination seems unlikely to have been correct.]
- [*R. rubritinctus* W. C. R. Watson Very rare. Two patches on lane at rear of Le Jardin d’Olivet. Recorded by Watson (1958) on unknown evidence and almost certainly in error.]
- R. sprengelii* Weihe Very local. Apart from a find by Druce in 1908 vaguely localised as “St. Helier” (**OXF**), where it must surely have been obliterated by building, all records are from the north-east of the island, where it is plentiful especially around Bouley Bay.
- R. armeniacus* Focke “Himalayan Giant” An increasingly widespread escape, though in colony strength as yet only in La Rue de l’Aleva. This cultivar, so very extensively grown in English gardens since the Second World War, has found little or no favour in France and is conspicuously absent from Normandy and Brittany.
- R. lamburnensis* Rilstone Specimens (**BM**, 8043–4) of a bramble found by Rogers “in good quantity” in Waterworks Valley match well Cornish material of this species in **BM** authenticated by Rilstone himself. These Cornish specimens were initially labelled by him as *R. macrostemon* Focke, to which Focke had independently referred, rather hesitantly, Rogers’ Jersey specimens earlier.
- R. ulmifolius* Schott Very common.
- R. adscitus* Genev. Very local. Abundant in wood along east bank of Queen’s Valley Reservoir; also a patch or two in St. Peter’s Valley and its Rue de l’Aleva branch. A specimen of Druce’s from Gros Nez (**OXF**), misdetermined by Focke as the Anjou species *R. andegavensis* Bouvet, was initially referred to *R. adscitus* by Watson (Druce 1931), a determination, however, he later withdrew; its identity remains unestablished.

- R. boraeanus* Genev. Very common and (as Rogers noted) generally distributed, including on the fixed dunes of Les Quennevais.
- R. caesarius* D. E. Allen Locally abundant. Especially plentiful in the coastal districts, on banks, roadsides and open heathland, but scarce in the central valleys. This is clearly the "abundant" bramble which Rogers passed as the species now known as *R. vestitus* Weihe, although, as he admitted, "usually untypical".
- R. corbieri* Boulay ex Corbière Very rare. Single bushes at Portinfer and Bouley Bay.
- R. leightonii* Lees ex Leighton Locally common at several points on the north coast, very thinly scattered elsewhere.
- R. percrispus* D. E. Allen & R. D. Randall Extinct? Old quarry, Le Jardin d'Olivet, one clump 1978, gone by 1990.
- R. dentatifolius* (Briggs) W. C. R. Watson Locally plentiful on wooded slopes around Bouley Hay; otherwise seen only in St. Peter's Valley (including a colony in its Rue de l'Aleval branch) and upper part of Waterworks Valley. There is, however, a specimen in **BM** collected on the south-west cliffs of La Moye by R. P. Murray in 1900, misdetermined as *R. dummoniensis*.
- [*R. adenanthoides* Newton Listed for Jersey by Watson (1958) under the name mostly applied by him to this species, *R. pseudadenanthus* W. C. R. Watson. As none of Druce's material received this name from him, it appears he was repeating Focke's determination of one of Rogers' specimens as *R. adenanthus* Boulay & Gillot. This was a "very handsome" plant found in some quantity in a very sunny spot in Gorey Bay. Rogers subsequently provided a description of it under that name in his *Handbook* (Rogers 1900: 53), indicating that it was a very hairy, considerably glandular-aciculate plant intermediate between *R. radula* Weihe ex Boenn. and *R. vestitus*. At least one specimen was formerly in his herbarium, but none can now be traced.]
- R. bloxamii* (Bab.) Lees Rare. Except for a population in oakwood at the upper end of the Vallée des Vaux seen only on the north coast cliffs: at intervals from Plémont to Gros Nez and on the east side of Bouley Bay.
- [*R. echinatus* Lindley A record of this from heathland by La Tête d'Âne (Le Sueur 1984) is suspect: a similar-looking unnamed bramble was all that could be found in 1994 at this locality.]
- R. peninsulae* Rilstone Common to abundant in and near most stretches of woodland. A species not described till 1950 and known elsewhere only in Devon, Cornwall and one wood on the northernmost part of the Brittany coast, this was initially queried by Rogers as *R. oigocladus* P. J. Mull. & Lef. (9169, 9170) or *R. micans* Godr. (7458) but eventually (Rogers 1900: 78) regarded by him as a form allied to *R. botryeros* (Focke ex Rogers) Rogers.
- R. conjungens* (Bab.) Rogers Rogers' record from Bouley Bay of the species then known as "*R. corylifolius* var. *cyclophyllus*" is confirmed by his specimen in **BM**. This widespread British bramble has as yet been detected on the European mainland only in Belgium. It is frequent near the coast in Devon and Cornwall.
- R. nemorosus* Hayne & Willd. Very local. Bouley Bay district and in and between the central valleys, but nowhere more than a patch.
- [*R. pruinosus* Arrh. Rogers' sole record of this (Bouley Bay) must be treated with reserve in the absence of a specimen.]
- R. transmarinus* D. E. Allen Correctly identified by Rogers as the member of sect. *Corylifolii* Lindley familiar to him round Bournemouth as "*R. dumetorum* var. *ferox*", this is occasional, rather than "generally distributed". Since the species was described (Allen 1994) it has proved to occur widely in Normandy and plentiful in the district of Brittany between St-Brieuc and St-Malo.

*Innominati*. Two unnamed brambles occur quite widely. One of these, as yet unmatched with any known outside the Channel Islands, is a member of ser. *Rhamnifolii* (Bab.) Focke with pink flowers and many long, subulate rachis prickles. This is found mainly in the Bouley Bay - Rozel area and the central valleys (up to colony strength beside the A11 in St Peter's Valley at WV605518), was twice collected by Rogers (**BM**, 10082, 10083) and has been detected in Guernsey also, on a hedgebank near St. Saviour Reservoir.

Unlike that, a robust member of ser. *Mucronati* (Focke) H. E. Weber has been encountered on the mainland immediately to the east: round a small wood on the D42 1 km north-east of St-Maurice-en-Cotentin, near Barneville. This has been noted in Jersey in three different areas: Waterworks Valley, in some quantity north of Millbrook Reservoir and again east of Hamptonne; Vallée des Vaux at WV651514; and Val de La Mare Reservoir, by the dam. In the third of these the population is wholly white-flowered, whereas elsewhere only pink petals have been seen.

In and near an oak-holly wood near Trois Bois (Côté de la Qualité nature reserve, WV623525) are patches of another robust bramble with large pink flowers, often red-based styles and incised leaflets, which, despite a sometimes amply glandular rachis and slightly aciculate stem, seems best in ser. *Sylvatici* (P. J. Mull.) Focke. This has also been collected in the Cotentin Peninsula, but in more distant parts, and is common in woods in the South Hams district of S. Devon, v.c. 3, where it is well-known to R. W. Gould (as "the Andrews Wood Bramble") and was collected by Briggs from 1872.

#### GUERNSEY

Covering 63 km<sup>2</sup>, Guernsey has much less ground conducive to *Rubus* diversity than Jersey, lacking wooded valleys at all comparable in scale and length and surviving expanses of suitable heathland of a similar size and number. The flat, rather exposed northern one-third is largely bereft of interest for the batologist, in marked contrast to the south, where plantations, massively augmented by self-sown trees, clothe the cliffs and extend some way inland in places. That some natural scrub may have escaped on these cliffs the otherwise wholesale removal of the island's original tree cover is suggested by the present-day restriction to those of such characteristic ancient woodland indicators as *Euphorbia amygdaloides* L., *Ruscus aculeatus* L. and *Luzula sylvatica* (Huds.) Gaudin (McClintock 1975: 19). That might account for the presence on them too of several *Rubus* species known nowhere else in the island – though these might equally well have been brought by frugivorous migrant birds, for which the fringe of trees and shrubs along the cliff-tops, especially its profusion of bullace, *Prunus domestica* subsp. *insititia* (L.) Bonnier & Layens (which fruits heavily in some years at least (N. Jee, pers. comm., 1990)), must constitute a favourite landfill.

- R. briggsianus* Seen by Rogers in several places (and "in considerable quantity", according to a postcard he sent to E. F. Linton in 1914, now in **BM**), including St. Peter, Petit Bot Bay, Cobo and quarries between St. Sampson and L'Ancrese, from the last two of which specimens of his are in **BM**. Extensive draining of boggy ground since may have rendered it extinct.
- R. laciniatus* Several recent records for this naturalised escape are cited by McClintock (1975). Rogers met with it only in Petit Bot Bay quarry.
- [*R. oxyanchus* Sudre Cited for the Channel Islands by Edees & Newton (1988) as a result of the patch of *R. daveyi*, q.v., having initially been determined as this.]
- R. plymensis* (Focke) Edees & Newton Common in plantations round Belvedere House, Fort George.
- R. questieri* Very local. Rogers said he had searched for this in Guernsey in vain, but as in Jersey his over-narrow conception of the species is shown by his having collected it under other names: his "*R. villicaulis*" (**STP**) and "*R. rhombifolius*" (**BM**, 7211; **K**), both from Fermain, where it is abundant in woodland today, have proved to be this. Scattered bushes extend to plantations on the south edge of St. Peter Port and occur in one or two other spots as well.
- R. cardiophyllus* Rare. Of the two stations recorded by Rogers, Fermain Bay yielded just one bush in 1978 while Petit Bot Bay may have been a loose localisation of a colony that grows among gorse on the cliff-top 0.5 km to the south. A bush has also been noted at Jerbourg.
- R. cordatifolius* (Rogers ex Ridd.) D. E. Allen Supposed by Rogers at the time of his visit to be merely a luxuriant state of what he understood as *R. dumnoniensis*, this very distinct bramble still hangs on at Petit Bot Bay, the source of his specimen (**BM**, 9823) that now constitutes the lectotype. Elsewhere in the south it has been noted in coastal scrub at Icart and in Silbe Nature Reserve in St. Peter; its presence, however, also on the north edge of St. Peter Port, in two spots east of Le Hougue des Quartiers, suggests it could turn out to be fairly widespread. It is still not known in any of the other islands apart from Sark or for certain anywhere outside them. A Belgian bramble that has been passing there under the names of "*R. nemoralis*" and "*R. argenteus* subsp. *incarnatus* var. *leventii*" (H. Vannerom, pers. comm., 1993) has been



identified with it by Vannerom (1998), but the one specimen of that seen by the writer, though very similar, lacks the peculiar inflorescence structure of the Channel Islands plant; the resemblance may therefore be fortuitous.

- R. daveyi* Rilstone One patch in a bullace thicket beside the cliff-top lane midway between Portelet Bay and Les Fontenelles at WV300745 and a further bush nearby among gorse. Hitherto believed endemic to Cornwall and a few places in Devon.
- [*R. dummoniensis* Rocquaine Bay was identified by Rogers (1899) as among the “one or two other localities” apart from Petit Bot Bay (his locality for what was to prove *R. cordatifolius*) in which he claimed in the initial paper to have seen this. Though its presence in the other three main islands makes it a likely Guernsey species, the lack of later records and the over-broad interpretation of the taxon by Rogers, revealed by material from Jersey and elsewhere misdetermined as this species, make it necessary to treat his claim with reserve in the absence of any specimen.]
- [*R. herefordensis* Sudre The basis for a claim by Watson (1958) to have seen a specimen of this from St. Andrew has not been ascertained. The species as now understood is unknown outside Hereford, v.c. 36.]
- R. polyanthemus* Local, but markedly more plentiful than in the other islands. Particularly large populations in the south-west corner, as in Silbe Nature Reserve and round Pleinmont.
- R. prolongatus* Rare. Recorded from six localities in the south, half of them on the coast, but in quantity only on Petit Bot cliffs.
- [*R. riddelsdellii* Rilstone A specimen in **STP** collected by McClintock west of Château des Marais was thought by Miles to be this, but the material is so poor that any determination would seem unwise.]
- R. rubritinctus* Listed by Watson (1958) on unknown evidence. Rogers remarked on its absence.
- R. sprengelii* Collected by Rogers at Fermain Bay (**BM**, 6073), but perhaps now extinct.
- R. armeniacus* “Himalayan Giant” As in Jersey, becoming a widespread escape.
- R. pydarensis* Rilstone Very local or overlooked. Common in hedges about 1 km inland in the district south of Les Arquets, St. Peter (conf. L. J. Margetts). Specimens in **BM** collected by Rogers at Fermain Bay (4898) and La Valette, referred by him to an aggregate taxon he called “*R. argentatus*”, also turn out to be this species, hitherto believed endemic to Cornwall and a few places in Devon.
- R. ulmifolius* Very common.
- [*R. adscitus* Believed to have been seen in 1978 in Silbe Nature Reserve, but requires confirmation].
- R. boreanus* Occasional. Noted more especially in Castel and St. Andrew. Surprisingly, Rogers appears not to have seen this. Of the only two localities given in the original paper (Rogers & Rogers 1898), one is omitted from his 1899 paper, suggestive of second thoughts, while the specimen from the other locality (**BM**, 10258) has proved to be a misdetermination. Possibly the species has colonised the island subsequently to his visit.
- [*R. conspersus* W. C. R. Watson Listed by Watson (1958) on the strength of his determination of one of Rogers’ specimens in **BM** from L’Ancresse Common as this in 1951. The specimen, however, is *R. corbieri*.]
- R. corbieri* Mainly in the north, where it is frequent on hedgebanks and abundant in old quarries, having probably colonised Guernsey from Sark subsequent to that island’s sixteenth-century resettlement or, alternatively, direct from the Cotentin Peninsula beyond.
- R. leucostachys* Sm. A colony by the cliff path on the south side of Fermain Bay.
- [*R. vestitus* This was the species, very common in much of England, to which Rogers and his contemporaries generally misapplied the name *R. leucostachys*. In the supplementary list (Rogers 1899) he provided for Guernsey that appears with “generally distributed” and “very variable” against it. Presumably one or more of the island’s still-unnamed brambles passed as this - as was certainly the case with specimens of Druce’s in **OXF** and Rogers’ own (**BM**, 10081) from St. Andrew.]
- R. coombensis* Rilstone One bush in shade on the cliff path south of Le Vallon (WV330754). When discovered in 1990, this was believed endemic to south-west England, but it has since been recognised as a bramble local in quantity round Cherbourg.

- [*R. moylei* W. C. Barton & Ridd. Listed by Watson (1958) on unknown evidence. In his supplementary list Rogers (1899) included the name *R. lejeunei* var. *ericetorum*, by which he normally meant this species, but gave no locality. It is unlikely that Watson saw that paper, however.]
- R. norvicensis* A. L. Bull & Edees Very local. Plentiful in plantations and shrubberies across the south-east corner, from above Moulin Huet Bay and Sausmarez Manor to the south edges of St. Peter Port. This species is otherwise known only in parts of England east of a line from Salisbury to The Wash and along one valley in south-west Wales. The compact nature of its Guernsey distribution and prevalence there in shady habitats comparatively recent in origin both suggest a colonist in the process of primary spread, perhaps following accidental introduction with nursery shrubs (as seemingly in some of its English stations). If so, that introduction must have been over a century ago, for this turns out to be the identity of one of the two brambles collected by Rogers' son at Fermain Bay (**BM**) which, after some hesitation, his father concluded was *R. rudis* Weihe "type or near it" (Rogers & Rogers 1898; Rogers 1899) – an unlikely species to occur in the Channel Islands, however, on geographical grounds.
- R. percrispus* This is the identity of the other Fermain "*R. rudis*" collected by F. A. Rogers, the specimen of which is in this case in **K**; it was initially determined by his father as the bramble now known as *R. micans* Godr. A depauperate example of probably this same species was collected on the cliff path above Petit Port in 1978. Recently described, like the previous species. *R. percrispus* is otherwise known outside the Channel Islands as yet only in parts of southern England and a single locality each in west Wales and Ulster.
- R. dentatifolius* Very local. Shares old quarries in Vale with *R. corbieri* and still as abundant in one as when Rogers found it there. Most of the few other records are from the south coast.
- R. leyanus* Rogers Rue du Banquet, near Pleinmont, one patch in hedge of the northernmost bend.
- R. bloxamii* Locally common; much more plentiful than in Jersey. Mainly in the southern half of the island but conspicuously absent from the self-sown woodland at Fermain. A specimen in **CGE** collected by Babington at Fort George is labelled "*R. koehleri* var. *lejeunei*".
- [*R. radula* Recorded from Fermain Bay by Rogers (1899) in his supplementary list, but no specimen has been traced. A specimen in **STP** from Mount Durant determined as this by Miles (McClintock 1975) has turned out to be *R. norvicensis*.]
- [*R. conjungens* "Fairly frequent" according to Rogers, but there have been no later finds and his statement must be treated with reserve in the absence of a confirming specimen.]
- R. transmarinus* Rogers' initial description of the bramble he knew as "*R. dumetorum* var. *ferox*" as generally distributed was modified in his supplementary list to "frequent". It appears, however, to be thinly scattered at best, mainly in the vicinity of the south-east coast.

*Innominati*. Of numerous unnamed brambles, one is particularly widespread, a member of ser. *Vestiti* (Focke) Focke with deep pink flowers, red styles and aculeate sepals, this is common in woodland in the centre of the island, especially along the Fauxquets Valley. Seemingly the same plant occurs in Jersey, in a wood by Gargate Mill Farm (WV604518) in St. Peter's Valley.

#### SARK

The smallest of the four main islands and unique among them in being entirely a lofty plateau, which gives it the appearance of an aircraft-carrier, Sark was probably a stretch of treeless heath before its first substantial colonisation in the sixteenth century. Like the very similar Île de Bréhat off the north coast of Brittany, it is essentially two islands, connected merely by a narrow isthmus; a detached portion of the larger one, the now strictly private Brecqhou, lies just 200 m off the west coast. High cliffs all round permit access to the sea in only a few, very restricted places. Protected from Atlantic gales to some extent by Guernsey, 13 km to the west, it presents a comparatively lush contrast to Alderney, as remarked upon by Druce (1907) after visiting the two for the first time in quick succession. Much less ground than in the other main islands has escaped cultivation and such of the little heath cover that remains is best represented by Eperquerie Common, at the north tip.

- R. altiarcuatus* W. C. Barton & Ridd. In an isolated clump of tall gorse by La Valette (WV474764) and several further bushes along the cliff-top to the north-west. The sole Channel Islands locality for this widespread species of south-west Britain, also in the far west of both Ireland and Brittany.



- R. cordatifolius* Scattered among gorse south-east of the Pilcher Monument (WV455754) – which is by no means “near the Dixcart Hotel”, where Rogers recorded this in quantity (specimen in **BM**). A search of the hotel’s vicinity has proved fruitless, but the area is no doubt much changed since 1897.
- R. dummoniensis* Several patches in a rough field west of D’Icart (WV466756) and one bush near the top of Eperquerie Common.
- R. nemoralis* P. J. Mull. In four widely separate places in Great Sark and one in Little Sark, mostly as single bushes and nowhere more than a patch.
- R. polyanthemus* A heath relic. One or two bushes at Eperquerie Landing; also collected on a cliff on Brecqhou by McClintock in 1968 (**STP**).
- R. prolungatus* Several patches in the south-west of Little Sark and a bush in a gorse hedge just below D’Icart.
- R. rubritinctus* Several patches at different levels on Grève de La Ville cliffs.
- R. ulmifolius* Very common.
- R. corbieri* Very common. A conspicuous feature of virtually every hedgebank, this probably post-dates their construction, having spread across from the north-west of the Cotentin Peninsula, where it occurs in comparable profusion locally. Rogers at first referred it to the group of brambles to which he applied the name *R. schlechtendalii* (Derrick 1898), but by the time he published his records (Rogers & Rogers 1898) had decided it best regarded as a strong and highly glandular form of *R. macrophyllodes* Genev., a species described from Angers. Subsequent collectors were to have specimens referred also to *R. adscitus* or *R. boraeanus* before the plant’s true identity was finally established c. 1990 (Allen 1992). Patches of apparent hybrids with *R. ulmifolius* have been noted in two places.
- R. leucostachys* One bush on cliff-top north-west of La Valette and a clump by the cliff path above Dixcart Bay. The latter may be much the same spot as the “furze brake near Dixcart Lane” from which Rogers recorded in a supplementary list (Derrick 1898) a bramble under this name. By this he normally understood *R. vestitus*, which is absent from the Channel Islands, or, in Jersey, as *R. caesarius*.
- R. dentatifolius* Frequent in rough ground. Probably general in the pre-resettlement era.
- R. conjungens* An unlocalised Sark specimen in **CGE** collected by Babington in 1838 and successively determined by him as “*R. rhamnifolius*” (as published in Babington 1839) and “*R. thyrsoides*” is in fact this, as first recognised by Miles.
- R. nemorosus* Frequent; much more plentiful than in the other islands. In places in open heath (in which it was doubtless prevalent formerly).
- R. transmarinus* Occasional, mainly around the south-east coast. Perhaps in part the bramble determined by E. F. Linton under the aggregate name of “*R. corylifolius*” which Hurst (1903) claimed to be abundant on Brecqhou.

*Innominati*. Sark has two relatively widespread brambles that are also known outside the island but so far unnamed. One, a pink-flowered member of ser. *Sylvatici* with strongly hairy anthers and reminiscent of small forms of *R. gratus* Focke, occurs in some quantity on the cliff-top north-west of La Valette and in two places on Eperquerie Common and also as single clumps on Harbour Hill (WV476758) and by D’Icart. Since its original discovery (“Sa36” in Allen 1981) it has been found in the third-largest of the Isles of Scilly (Allen 1997) and on a wood margin in the south-east corner of Hampshire, v.c. 11. This distribution suggests it may occur in Brittany too. The other is a member of ser. *Radula* (Focke) Focke recalling *R. longithyrsiger* Lees ex Focke but with pink flowers, pale styles and hairy anthers. In addition to a colony at Eperquerie Landing this occurs on the east cliff-tops between La Valette and Grève de la Ville as well as by D’Icart (WV466755); it is also in Jersey, dotted around Dannemarche Reservoir in Waterworks Valley.

Also worthy of mention is a very distinct member of ser. *Discolores* (P. J. Mull.) Focke with hairy anthers, pink filaments, pink-based styles and mucronate terminal leaflets with a lengthy mucro. Patches of this occur in Sark on the cliff-top at Grève de la Yule and in the gorse heath near the Pilcher Monument, in Alderney (where A. Newton has also seen it) in the old quarry on Val Longis (WA581076) and on the coast west of Cherbourg near Landemer.

## HERM

Covering 2.5 hectares, the largest of Guernsey's satellites, privately-owned but publicly accessible, Herm is an object lesson in the sharply disproportionate reduction in species diversity that can occur in the case of islands that are below a certain size – even in the case of plants that are bird-dispersed. In startling contrast to its neighbour some 5 km to the east, hardly any of Guernsey's numerous *Rubus* species are to be found, not even most of the commonest. Apart from the predictably abundant *R. ulmifolius*, indeed, and a patch by the landing of a member of the "*R. dumetorum*" aggregate, there appears to be only one other – and that not a Guernsey one, so far as is known at present. Resembling *R. orbis* W. C. R. Watson of south-west England and belonging like that to ser. *Vestiti*, this is common in the south half in ground with a modicum of shelter.

Herm's own even smaller satellite, the more strictly private Jethou, had several bramble specimens collected from it by Babington. Borrer, to whom he sent one, referred it doubtfully to *R. leucostachys* (Babington 1839); but Miles, who discovered it in CGE in 1965, thought it was indeed that species, in the original sense of Smith; though that has since been established as occurring in both Guernsey and Sark. Babington's material is unfortunately too scanty and immature to be given a confident determination.

## ALDERNEY

The northernmost of the main islands, 13.5 km west of Cap de la Hague and thus almost twice as close to the mainland as Jersey, Alderney differs from the other main three in resembling an inverted saucer, the one town standing on a hill in the centre. As in Guernsey, the northern third is low-lying and only the more southerly part fringed by cliffs. Though its cultivation dates from a much earlier period than Sark's, it still has extensive tracts of rough grassland and heath, of which those of La Giffoine are the most rewarding for the batologist. Introduced trees form dense thickets in places, but rarely shelter brambles of interest. The most exposed of the islands to the winds of the English Channel, Alderney's *Rubus* flora mainly owes such distinctiveness as it has to its consequently more oceanic climate.

*R. viridescens* (Rogers) T. A. W. Davis One patch among roadside gorse above Fort Tourgis just south of Roc à l'Epine.

*R. dumnoniensis* Local; patches on the coast here and there in the western one-third. Relatively more plentiful than in the other islands (though it seems to be missing from the coastline round Cherbourg).

*R. iricus* Rogers In plenty with *R. viridescens*. Locally abundant on La Giffoine southwards from east of Fort Clouque; also one bush in the Valley Gardens in the middle of St. Anne.

*R. polyanthemus* A patch in gorse heath on top of Essex Hill.

*R. prolongatus* Widespread and locally abundant on the south-west heaths; also abundant round the television tower on Les Rochers and in some quantity on Essex Hill. Markedly more plentiful than in the other islands.

*R. armeniacus* "Himalayan Giant" Escaping from a garden in St. Anne.

*R. ulmifolius* Very common.

[*R. winteri* P. J. Mull. ex Focke Listed by Watson 1958) following his determination of one of Druce's specimens in OXF as this, in place of Rogers' "apparently *R. leucostachys*". It is neither of those, however, but may be the same as an unnamed Guernsey bramble of hedgebanks in St. Andrew.]

[*R. adscitus* Another of Druce's specimens in OXF was considered by Watson at one time to be this (Druce 1932), but it appears to be merely a form of *R. ulmifolius*.]

*R. boraeanus* Common.

*R. corbieri* Very thinly scattered, achieving quantity only in three particularly sheltered locations: Barrack Master's Lane ("Essex Glen"), Vau du Saou and the top of Le Val Reuters.

*R. dentatifolius* Common and locally abundant on the southern heaths and cliffs southwards from Fort Tourgis in the west and Le Longue Pierre in the south; elsewhere rare or absent.

*R. tuberculatus* Bab. Common, taking the place of *R. transmarinus*.

*Innominati*. Given its greater proximity to the mainland, Alderney has a proportionately higher share of brambles that cannot be matched with any known in Britain. One of these is widespread on the neighbouring Cotentin Peninsula, a member of ser. *Discolores* resembling *R. rossensis* Newton, this occurs at the north tip near the lighthouse and in two places on the south coast. A large patch of another member of ser. *Discolores* on the upper margin of Barrack Master's Lane at WA591077 appears to correspond to a poorly-understood bramble of northern France that has

passed under the illegitimate name of *R. propinquus* P. J. Mull. A very distinct, white flowered member of ser. *Sylvatici* with many tiny rachis prickles and long, acuminate leaflets is also widespread, with clumps at intervals along the south-east coast and several patches on La Giffoine.

## DISCUSSION

Altogether, 39 entities currently accorded taxonomic recognition as species, including two naturalised horticultural ones, are accepted as reliably on record from one or more of the islands. Of these, 26 are on record from Jersey, 23 from Guernsey, 14 from Sark and 11 from Alderney. Though these totals roughly correlate with island size, the diminution is by no means a straight reflection of increasing failure to colonise on the part of certain species. Instead, as the Table below demonstrates, there are marked discrepancies between the four main islands in how the totals are made up:-

	Jersey	Guernsey	Sark	Alderney
<i>R. briggsianus</i>	0	0		
<i>R. couchii</i>	3			
<i>R. laciniatus</i>	1	2		
<i>R. plymensis</i>		1		
<i>R. questieri</i>	3	1		
<i>R. viridescens</i>				1
<i>R. altiarcuratus</i>			1	
<i>R. cardiophyllus</i>	1	1		
<i>R. cordatifolius</i>		1	1	
<i>R. daveyi</i>		1		
<i>R. davisii</i>	1			
<i>R. dumnoniensis</i>	2		1	2
<i>R. iricus</i>				3
<i>R. nemoralis</i>			1	
<i>R. polyanthemus</i>	2	2	1	1
<i>R. prolongatus</i>	1	2	1	3
<i>R. rubritinctus</i>	1		1	
<i>R. sprengelii</i>	1	0		
<i>R. armeniacus</i>	2	2		1
<i>R. lamburnensis</i>	1			
<i>R. pydarensis</i>		1		
<i>R. ulmifolius</i>	3	3	3	3
<i>R. adscitus</i>	1			
<i>R. boraeanus</i>	3	2		3
<i>R. caesarius</i>	3			
<i>R. corbieri</i>	1	2	3	2
<i>R. leucostachys</i>		1	1	
<i>R. coombensis</i>		1		
<i>R. leightonii</i>	3			
<i>R. norvicensis</i>		1		
<i>R. percrispus</i>	0	0		
<i>R. dentatifolius</i>	2	2	2	3
<i>R. leyanus</i>		1		
<i>R. bloxamii</i>	1	3		
<i>R. peninsulae</i>	3			
<i>R. conjungens</i>	0		0	
<i>R. nemorosus</i>	1		2	
<i>R. transmarinus</i>	2	2	2	
<i>R. tuberculatus</i>				3

0 - extinct ?, 1 - rare to very local, 2 - widely scattered, 3 - locally to very common

All of these species occur in Great Britain also - though in the case of *R. iricus* only in an island group far offshore - with the single exception of *R. cordatifolius*, which is apparently endemic to Guernsey and Sark. It is possible, however, that the seeming identity of *R. caesarius* with a bramble locally plentiful in one small district of S. Hants., v.c. 11, between Southampton and Portsmouth (Allen 1994), is the result of a fortuitous overlap in characters, in which case that would be a second apparent endemic (for despite the abundance of that species in Jersey no sign of it has so far been found in the nearer parts of the mainland, very surprisingly). Though no Continental taxa unknown in Britain have yet been detected in the islands, at least one or two of the many brambles to which no name can be put at present will almost certainly prove to come into that category once the taxonomy of the *Rubus* flora of north-west France has been more fully worked out. Until only two or three centuries ago, however, *R. corbieri* may have belonged in that category, for in the south-east corner of Dorset, v.c. 9, the sole area in which this conspicuous species is known on the other side of the English Channel, it has all the appearance of a comparatively recent colonist, though probably present well before the first specimen was collected, in 1892 (Allen 1992).

Of the 37 species apart from *R. caesarius* that the islands share with Britain, eight are not yet known to occur on the European mainland. These are *R. briggsianus*, *R. daveyi*, *R. davisii*, *R. iricus*, *R. lamburnensis*, *R. pydarensis*, *R. norvicensis* and *R. percrispus*. *R. norvicensis*, as already intimated, appears to owe its presence to accidental introduction with nursery plants at some comparatively recent date, while *R. percrispus*, despite a wide scatter of localities across southern England, has had too brief a taxonomic history for its presence or absence on the European mainland to have had time to be adequately tested as yet. The rest of the eight, though, are all strongly western species whose ranges could well extend at least to Brittany. Nevertheless, extensive sampling of coastal areas of both Brittany and western Normandy in recent years has not only failed to reveal those, but has turned up instead other species with a similar range on the other side of the English Channel: *R. hastiformis* W. C. R. Watson, for example, and *R. aequalidens* Newton along the Côte de Granit Rose, the former in abundance, and *R. rilstonei* W. C. Barton & Ridd. in no less abundance on Cap Fréhel, west of Dinard - each of them seemingly no less likely candidates for the Channel Islands flora.

More perplexingly, there are several brambles abundant in the adjacent parts of France that appear to be absent from the Channel Islands. The most conspicuous of these absentees is *R. venetorum* D. E. Allen, which is plentiful, commonly in profusion, almost throughout Brittany, including on the Île de Bréhat, to Jersey's south-west. Almost as odd is the failure of *R. thysigeriformis* (Sudre) D. E. Allen to reach at least the northern islands. It has found its way from the north of the Cotentin Peninsula to a wide part of S. Hants., v.c. 11 (in which it gives the appearance, like *R. corbieri*, of being a comparatively recent invader still in the course of primary spread). Similarly, there is no sign of an unnamed member of ser. *Sylvatici* that grows in profusion on the heaths around Cherbourg. Why has *R. questieri*, not noticeably more plentiful on the mainland than *R. venetorum*, been able to colonise Jersey and Guernsey and yet none of those?

It may be that the transmarine movements of the relevant species of frugivorous birds have persistently been from other directions than from the mainland for the most part, in particular from the north-west. It certainly looks suggestive that two species otherwise confined to Britain and Ireland and especially plentiful in south-west England, *R. leyanus* and *R. plymensis*, are both known from just a single locality in the Channel Islands (and in the westernmost of those, Guernsey) and from just a single mainland locality too, in the Cotentin Peninsula to the east - as if they were legacies of one and the same fly-line. *R. couchii* has (or rather had, for at Cherbourg it is probably extinct now) a similar distribution pattern, though in its case the population in Jersey is a very large one and in Britain the species appears confined to a solitary district in south-east Cornwall, v.c. 2. Even more suggestively, *R. daveyi*, a common species of Cornwall which extends thinly into Devon, has as its only Channel Islands site a bullace thicket on top of a Guernsey cliff, precisely the kind of landfall likely to be made by a migrant coming in from the open sea to the west. A species of warbler, most probably a Blackcap, *Sylvia atricapilla*, is likely to have been responsible in such a case, for that is known to feed on blackberries (Snow & Snow 1988: 61) and there have been recoveries in Guernsey of individuals ringed in Dorset. Moreover, unlike members of the thrush family, the birds generally thought to be the principal disseminators of *Rubus* species. Blackcaps and other warblers are commonly seen on the Guernsey cliffs (N. Jee, M. Austin, pers. comm., 1990).

Of all the British species that have turned out to be in the Channel Islands *R. iricus* was the least expected. At the time of its discovery in Alderney it was known elsewhere only along the Atlantic seaboard of Ireland, where it had long been presumed endemic and in parts of which it is very common. Subsequently it has proved to occur in abundance in the Isles of Scilly as well, which may thus have served as a half-way stepping-stone without which such a great distance seems much less likely to have been bridged by a bird with viable *Rubus* seed in its intestine (Allen 1997). The oceanic character of both Alderney and Scilly strongly suggests that the bird responsible for the original transmission between the two was a sea-going species, perhaps a member of the gull family. The possibility that gulls may disseminate *Rubus* species does not appear to have been entertained previously, but the recent find of a bush of *R. daveyi* in the middle of a gully on Gugh in the Isles of Scilly (Allen 1997) lends that idea some credence. Certainly, there is evidence that gulls feed on the fruits of other plants: *Solanum nigrum* L. has been noted in quantity in gulleries on the Calf of Man, v.c. 71 (Allen 1984) and *S. dulcamara* L. in the crevices of cliffs alongside nests on the off-shore islands of Pembroke, v.c. 45 (Gillham 1956: 446), while Snow & Snow (1988: 167) cite records from Central Europe of different gull species eating the fruits of *Vaccinium* and *Empetrum* spp., *Hippophae rhamnoides* L. and even the blackberry-sized fruits of cherries (*Prunus* spp.), which flocks of Black-headed Gulls pluck from the trees in flight - an apparently recently-developed habit.

The presence so far to the east of species characteristic of, or otherwise confined to, the extreme south-west of England is explained by the similar climate of the two regions. Although the Cotentin Peninsula of Normandy lies on the same longitude as Bournemouth and the Isle of Wight, its western half is so exposed to maritime influence in general and to the Gulf Stream in particular that its floristic affinity is rather with Cornwall and Devon (Allen 1996). That climate is shared with the Cotentin's offshore islands, which can be expected to experience an added measure of oceanicity by virtue of their insular character. That essential homogeneity of the western Cotentin and at least the more northern of the Channel Islands is well shown by the distribution of *R. corbieri*, a robust, shaggy species clearly exceptionally well adapted to existence in such a wet and windswept region. Apparently relatively recent in origin, with *R. bloxamii* patently as one ancestor, it would seem to have spread aggressively at one period in the not-too-distant past, spilling across from the Cotentin on to each of the four main islands and colonising the northern three in proportion to the amount of shelter they offer.

Though the most characteristic of its species, *R. corbieri* is not alone in being seemingly well-suited to the region's relatively high oceanicity. *R. iricus* is a similarly robust and very hairy bramble, with presumably many centuries, if not millennia of adaptation to the climate of the west coast of Ireland. It can be no accident that Alderney is the only one of the Channel Islands in which it has become established - and in considerable quantity. Besides *R. corbieri* the archipelago is noticeably rich in other members of ser. *Vestiti*, a chief character of which is a dense indumentum: they include *R. boraeanus*, one of the commonest species of Jersey and Alderney (though absent from Sark), *R. caesarius*, similarly prevalent in much of Jersey, the unnamed bramble plentiful in woodland in the centre of Guernsey and the unnamed one that dominates the *Rubus* flora of Herm jointly with *R. ulmifolius*. Members of this series are likewise prominent in the Cotentin Peninsula.

It is presumably for the same reason, that it can better cope with oceanic conditions, that *R. prolongatus* is distinctly more widespread in Sark and especially in Alderney than in Guernsey and Jersey, while the less hairy *R. polyanthemus* occurs in exactly the opposite island order of frequency. In just the same way *R. prolongatus* occurs on four of the isles of Scilly and in local abundance on the largest, whereas *R. polyanthemus* is known from only two and is very rare in both (Allen 1997). The difference between this pair in apparent oceanicity tolerance, though, would seem to obtain only at these latitudes, where *R. polyanthemus*, altogether a more northern species extending to Scandinavia, is at the southern limit of its range and thus presumably at a competitive disadvantage: on the west coast of Ireland it is *R. polyanthemus* that is locally common and *R. prolongatus* that is rare.

That a preference for the relatively moister and milder climate of those parts of western Europe more especially subject to the influence of the Gulf Stream is not necessarily synonymous with a tolerance of oceanic conditions is particularly well exemplified by the distribution pattern of *R. rubritinctus*. *Rubus* specialists accustomed to the prevalence of that species in Devon and

Cornwall (except the westernmost part) have difficulty in believing that in the Isles of Scilly it is represented by no more than a bush or two. No less puzzling at first sight is its wide scatter around Southampton Water yet total absence from the Isle of Wight, at most a mere 8 km offshore to the south (Allen 1990) - and despite the fact that this is a bramble especially dependent on birds for its dispersal, to judge from its marked tendency to occur as solitary bushes. The explanation for the second of these anomalies is that the Isle of Wight shields Southampton Water from the open sea. A slender plant with long ascending inflorescence branches and for the most part only sparsely hairy, *R. rubritinctus* is seemingly ill-adapted to oceanic rigours, and an overriding requirement for shelter from those largely excludes it from both the Channel Islands and the Cotentin Peninsula, just as it does from Scilly. Significantly, of the only two sites known for it in the Channel Islands, Jersey's is on the inland margin of a coastal common and Sark's is the only sheltered cove on the side that faces the mainland. The only area in that region where it thrives in quantity is the southernmost stretch of the Gulf of St-Malo coastline east of St-Brieuc, an area comparable to the Lancashire side of Morecambe Bay in England in the extent to which it constitutes an isolated "oasis" for this protection-demanding species.

Another distribution that merits some final comment is that of *R. leightonii*, which Jersey alone of the islands possesses and that in considerable plenty. Together with *R. bloxamii* this has a relatively narrow corridor of abundance down the centre of England from Staffordshire to the Bournemouth district, to either side of which the two species diminish steeply. Though both ranges continue southwards across the sea into Normandy, they lose their tightly corseted character there and the species lose their closely parallel occurrence as well. Once across the English Channel *R. leightonii* becomes noticeably the more warmth-demanding and intolerant of oceanic conditions, extending apparently further south (to beyond the Loire) and much further east than *R. bloxamii* and, unlike that, missing Guernsey and all but the south end of the Cotentin Peninsula. Its prevalence in Jersey, however, is repeated along the southern coast of the Gulf of St-Malo, from which *R. bloxamii* is seemingly debarred climatically - as both species are from the main mass of Brittany to the west.

These examples illustrate how differences between the islands in the *Rubus* species they possess or lack can in some cases be explained by scrutinising the wider ranges of those species for illuminating anomalies. They also serve to underline the substantial size of the addition to the phytogeographer's armoury that the study of a critical group such as this can bring, by reason both of its considerable species diversity even in an archipelago of relatively small islands and of the sensitivity of those individual species to subtle gradations in atmospheric moisture.

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