

Six brambles (*Rubi*) from the north Midlands

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ABSTRACT

Descriptions are given of six new species of *Rubus* referred to in the author's *Flora of Cheshire* (1971).

DESCRIPTIONS

1. *RUBUS ACCRESCENS* A. Newton, *sp. nov.*

Turio primo semisuberectus, in autumnno accrescens et decumbens, interdum radicans, viridis, glaber, obtuse angulatus, sulcatus, aculeis sat validis sed sparsis, rectis, e basi longa declinatis, ad angulos dispositis.

Folia (3-4) quinata, pedata, plana, atro-viridia, superne glabrescentia, subtus ad nervos pubescentia, tenuia; petiolus longus et pubescens, aculeolis declinatis vix uncinatis armatus, paullo canaliculatus. Foliolum terminale oblongum vel ellipticum vel suborbiculare, basi cordatum, apice acuminatum cuspidatumque, margine inaequaliter serratum.

Inflorescentia undulata, brevis, subracemosa, apice truncata, ramulis infimis ascendentibus 2-3-floris, superioribus erecto-patentibus 1-2-floris.

Rachis obtuse angulata, pilis brevibus, aculeolisque sparsis, longis, gracilibus, rectis, declinatis vestita.

Sepala inermia, tomentosa, albo-marginata, apicibus viridibus attenuatisque, post anthesin reflexa, fructum laxe amplectantia. Petala alba, elliptica, apice vix emarginata. Stamina alba stylos flavo-virides vix superantia. Carpella glabra.

Stem suckering, occasionally tip-rooting, at first growing at a low angle to the ground surface, scrambling and trailing later in the summer, green, grooved, bluntly angular, glabrous, eglandular except for minute sessile glands. Prickles fairly strong, \pm straight, declining from stout bases, fairly sparse, confined to the angles.

Leaves (3-4) quinate pedate, dark green, the petiole long, pubescent with sparse declining curved pricklets, slightly furrowed above; leaflets thin, glabrescent above, shortly hairy on the veins beneath; terminal leaflet oblong, elliptic or suborbicular with a cordate base and cuspidate, acuminate point, the margin sub-compound serrate.

Panicle slightly flexuose, short cylindrical, few-flowered, subracemose above, the apex truncate, with 1-2 distant lower branches which are sharply ascending and 2-3-flowered, subtended by ternate leaves, the upper laxer, spreading or slightly ascending.

Rachis bluntly angled, shortly pilose, armed with long, sparse, slender, straight, declining pricklets.

Flowers *c* 2.5 cm diameter. Sepals felted, white-margined, with attenuated green tips, reflexed after flowering, become patent on the ripening fruit, the tips

ascending. Petals, white, pale pink in bud, elliptic, the tips sometimes erose. Stamens white, slightly exceeding greenish-yellow styles. Carpels glabrous.

HOLOTYPE: Southern part of Lindow Common, Cheshire, GR 33/825.794, 2/7/1970, *A. Newton* no. 13A1 (**BM**)

Characteristic features distinguishing this bramble from *Rubus opacus* Focke ex Bertram, with which it sometimes grows, are the slender, straight, declining prickles on the panicle, slightly later flowering commencement (in Cheshire late instead of early June), and the strong, straight growth of new stems, at a low angle to the ground, some later scrambling and tip-rooting. This plant is particularly characteristic of the surrounds of peat mosses and damp heaths, persisting amongst birch scrub; it is also to be found in scrub or open woods on gritstone rocks in the Pennine moorlands.

Associated species include *Betula pubescens*, *Corydalis claviculata*, *Deschampsia flexuosa*, *Dryopteris carthusiana*, *Dryopteris dilatata*, *Galium saxatile*, *Holcus mollis*, *Molinia caerulea*, *Rubus opacus*, *R. scissus*, *R. selmeri*, *R. sprengelii*, *Salix cinerea*, *Sorbus aucuparia*.

The observed range of distribution is from North Staffordshire south of Leek, to the Glossop district of Derbyshire, extending over the morainic foothills to the mosses and heathland of the Eastern Cheshire Plain. Hybrids with *Rubus sprengelii* have been observed, distinguished by abnormally large leaves, the terminal intermediate in shape, and fruit almost entirely abortive.

The species should be included in *Rubus* section *Semisuberecti* W.C.R. Wats. which includes plants intermediate in character between *Suberecti* and *Sylvatici*.

2. **RUBUS ROBII** (W.C.R.Wats.) *A. Newton, comb. et stat. nov.*

R. muenteri Marss. var. *robii* W.C.R.Wats., Handbook of the Rubi of Great Britain and Ireland, 287 (1956).

syn. *R. godronii* Lec. & Lam. var. *foliolatus* Rogers & A. Ley, J. Bot., Lond., 44: 58 (1906), pro parte, quoad spec. ex Cheshire et Yorkshire.

R. muenteri Marss. sensu Sudre, Rubi Europae, 38 (1908), quoad exsicc. leg. A. H. Wolley-Dod, ex Larkton Lane, Cheshire. *Non R. muenteri* Marss. spec. auth. in Herb. Focke, Bremen, leg. Marsson ex Wolgast, Jägerhofer Forst, 1876.

R. larktonensis W. C. Barton, MSS. in Mus. Brit.

Watson (1956 p. 287, 1958 p. 71) states that his var. *robii* differs only from 'typical *R. muenteri* Marss.' in the smallness of all its parts. However, the type specimen of var. *robii* is not noticeably smaller than other specimens named *R. muenteri* by Watson. The plant is widespread in Staffordshire, Cheshire, South and West Lancashire, N.W. and N.E. Yorkshire, Derbyshire and Warwickshire; it is quite distinct from *R. muenteri* and is considered to merit specific rank.

The varietal description given by Watson (1958 p. 71) under *R. muenteri* needs amendment only in a few particulars: leaflets are normally five, the base of the terminal leaflet is better described as subcordate, the predominant shape is obovate-pentagonal-suborbicular; the petals are usually pink, sometimes pale pink. The following Latin description is given here as there is no satisfactory one elsewhere in the literature.

Validus, eglandulosus. Turio latiarcuratus, atrorufescens, leviter pilosus, obtuse

angulatus, canaliculatus, aculeis validis rectis vel leviter declinatis ad angulos dispositis.

Folia (3-4) quinata subdigitata, nonnunquam imbricata, plana, utrinque viridia, inferne pubescentia, aequaliter serrato-dentata (dentibus haud profundis); petioli aculeolis falcatis obsiti. Foliolum terminale plerumque longe petiolulatum, basi subcordatum obovatum vel pentagonum vel suborbiculare, apice breviter cuspidatum.

Inflorescentia late pyramidalis ad apicem truncata, laxa, subracemosa; ramuli medii vix ascendentes, 3-7-flori, superiores longe pedicellati.

Rachis pilis patulis vestita, aculeolis rectis vel leviter declinatis nonnullis e basi longa validis praedita.

Flores *c* 2.5 cm diameter. Sepala externe inermia, villosa, albo-marginata, apice foliosa, sub anthesi et post anthesin reflexa. Stamina alba ad basin roseata stylos viridescentes vel rufescentes longe superantia. Carpella glabra.

HOLOTYPUS: Yearsley Moor, N.E. Yorks., 29/7/1937, *C. M. Rob* (BM)

3. *RUBUS WIRRALENSIS* A. Newton, *sp. nov.*

Turio altiarcuatus, rufescens, superficiebus leviter excavatis striatisque; aculeis validis subaequalibus leviter declinatis, aculeolis sparsis, glandulis raris et pilis crebris munitus.

Folia (3-4) quinata, pedata, \pm imbricata, utrinque viridia, in apricis coriacea, infra pubescentia; petioli aculeolis falcatis declinatisque armati. Foliolum terminale late obovatum vel suborbiculare cuspidatum vel acuminatum, eiusdem petiolulo ter longius, simpliciter, vel ad apicem irregulariter serratum, basi truncatum vel emarginatum. Stipulae villosae glandulis brevibus munitae.

Inflorescentia pyramidalis (foliis nonnullis quinatis ternatisque inferne instructa, superioribus ad folium abbreviatum unum saepe redactis) racemosa, in apricis saltem multiflora, ramuli medii multiflori, leviter adscendentes vel primo suberecti, superiores patuli.

Rachis breviter tomentoso-villosa, aculeis tenuibus autem validis aliquot armata, glandulis stipitatis haud multis sed in pedunculis superioribus crebrioribus praedita.

Sepala tomentosa griseo-albescentia, post anthesin et sub fructu reflexa. Petala angusta, obovata rosea. Stamina alba, ad basin rosea vix stylos superantia. Carpella sparsim pilosa.

Stem high-arching, rufous particularly in exposure, subsulcate, faces shallowly grooved, striate; armed with prickles often tipped yellow, strong (\pm stem width), slightly declining, almost confined to the angles; with scarce pricklets, rare short-stalked glands and frequent short hairs.

Leaves (3-4) quinate pedate, \pm imbricate, green on both sides, thick in exposure, softly pilose and slightly felted beneath, the veins prominent; petiole prickles hooked, declining. Terminal leaflet broadly obovate or suborbicular, rarely cuneate-based, cuspidate or acuminate, approximately three times the length of its petiole, evenly serrate but more irregularly toothed towards the apex, the teeth patent or directed forwards, with truncate or emarginate base. Stipules linear, villose, shortly glandular.

Panicles pyramidal, narrowing to a truncate apex, with several ternate and quinate leaves below, and one or two simple leaves above, compound racemose

in well-developed specimens, the median branches many-flowered, slightly or occasionally sharply ascending at first, the uppermost spreading.

Rachis clothed with fine ashy tomentum beneath dense patent hairs, a few slender but strong declining prickles and variable quantities of stalked glands, shorter than or \pm equal to the hairs. The glands are most numerous in the upper portion of the panicle and on the upper pedicels.

Flowers *c.* 2.5 cm diameter. Sepals grey-white felted, reflexed after flowering and remaining so in fruit. Petals long, narrow, obovate, deep pink. Stamens cream, pink-based, \pm equal to styles. Anthers glabrous. Carpels sparingly pilose.

HOLOTYPE: Hedge bank, Aldford, Cheshire, GR 33/423.581, 19/7/1970, *A. Newton* no. 182A1 (**BM**)

This plant is abundant in Wirral on clay and sandy soils but is particularly well-developed on the damper clays, where it forms a conspicuous element of hedges, wood borders and thickets. It appears to be absent however from the immediate sublittoral fringe of the north-west and north Cheshire coasts. It exhibits some variation of leaf-size, shape and texture, leaflet-number and strength of stem-armature due to its wide range of habitat, being equally tolerant of damp thickets on clay and open, dry, sandy banks. It is not however a species of the open heath. Some specimens from Wirral in **MANCH** are labelled '*R. mucronatus*' (= *R. mucronifer* Sudre), with which there is some affinity, but there are also significant differences, for example glabrous anthers, narrower, deeper pink petals, more complex and racemose panicle with less glandular but hairier rachis and more imbricate leaves with a tendency towards cuneate bases in some terminal leaflets.

The plant is however not confined to Wirral but extends as far as the lower Dee Valley; specimens have also been seen from Anglesey, South Lancashire and West Lancashire, one of which from near Knott End (see below) was said by W. M. Rogers to be "in leaves somewhat intermediate between *R. cinerosus* and *R. mucronatus* but I suppose going best under the latter". Identical plants have also been found recently by E. S. Edees in several places in Connemara. The following exsiccata (*inter alia*) are in **MANCH**:

- Patrick Wood, Claughton, Cheshire, -/7/1862, —, '*R. mucronatus*'
- Speke Road, Garston, South Lancs., 7/7/1872, *J. H. Lewis*, '*R. mucronatus* Bor, Blox.'
- Egerton Road, Claughton, Cheshire, 2/9/1871, *J. H. Lewis*, '*R. mucronatus*'
- Hillside, Holyhead, Anglesey, 8/10/1885, *C. Bailey*, '*R. mucronatus*'?
- Lane by canal, Maghull, South Lancs., 5/8/1902, *J. A. Wheldon*, '*R. cinerosus*'
- Near Knott End, West Lancs., -/7/1901, *J. A. Wheldon*, '*R. mucronatus* Blox.'
- Preesall, West Lancs., -/7/1902, *J. A. Wheldon*, '*R. cinerosus* Rog.'

The position of this species in Dandy (1958) should be within the section *Appendiculati* (Genev.) Sudre close to *R. mucronifer* Sudre.

4. *RUBUS PORPHYROCAULIS* A. Newton, **sp. nov.**

Turio arcuato-procumbens, obtusangulus, gracilis, purpurascens, pilosus, superficiebus planis, striatis; glandulis crebris purpureis, quam pilis brevioribus ornatus; aculei declinati vel subfalcati, e basi longa compressi, nonnulli

mediocres, acicularibus minimis immixti. Specimina omnia ex apricis provenientia parum validiora paullo validius crebriusque armata.

Folia 3(4)-nata, plana, supra glabrescentia, subtus ciliata, atrovirentia, aequaliter serrata. Foliola inferiora patentia vel e petiolo declivia. Foliolum terminale ovatum vel pentagonum, breviter cuspidatum, basi truncata vel rarius emarginata, eiusdem petiolulo quater longius.

Inflorescentia laxa, elongata, apicem versus vix decrescens, basi leviter flexuosa, bracteis foliaceis basi ternatis, superne in foliolum unum redactis. Ramuli patuli, 3-4-flori, ad apicem plures 1-2-flori.

Rachis obtusangula, striata, pilosa, glandulis creberrimis, aculeis raris falcatis praedita.

Sepala deflexa et post anthesin et sub fructu, glanduligera, attenuata. Petala alba, mediocria, distantia. Stamina alba stylos virides vix superantia. Carpella glabra.

Stem low arching, bluntly angular, slender, striate, purplish-red or purplish-green in shadier places, hairy, with many purple, stalked glands, nearly all less than or equal to the hairs, and many acicles of similar length. Prickles rare or few, the larger nearly equal in size, as long as the stem-width, mostly on the angles, the smaller about half the size of the larger, slanting from long compressed bases. The tips of the prickles often yellowish and hooked. The density of all the arms is higher in open-grown plants.

Leaves flat, almost uniformly ternate, rarely 4-nate, thin, dark green, glabrescent above, lighter green but not felted, with sparse short hairs beneath. Terminal leaflet ovate-pentagonal, evenly serrate with some patent teeth particularly towards the apex, shortly cuspidate with a truncate or emarginate base, about four times as long as its petiolule; basal leaflets at right-angles or somewhat deflexed from the petiole, lobed in the lower portion when ternate. Petioles glandular hairy and like the stem aciculate with short falcate prickles. Stipules linear, long, hairy.

Panicle usually lax, cylindrical, the lower branches stronger and more floriferous. The lower foliaceous bracts ternate, the upper two-lobed and simple.

Rachis usually wavy at the base, with dense spreading hairs, purple stalked glands about half as long as the hairs, and slightly declining and curved, subequal pricklets.

Sepals ovate, acuminate, shortly glandular, hairy, with slender points, light grey margins, felted within, strongly reflexed after flowering and remaining so in fruit. Petals small (1.75-2 cm), obovate, white or faintly pinkish, spaced. White stamens barely exceeding the greenish styles. Carpels small, well-formed.

HOLOTYPE: Woods near Marple Sanatorium, Goyt Valley, Cheshire, GR 33/950.897, -/8/1969, *A. Newton* no. 223A1 (BM)

This species has been found to be locally plentiful in the Goyt, Etherow and Tame valleys and their tributaries (N.E. Cheshire and N.W. Derbyshire around Marple, Romiley and Glossop) in *Quercus petraea* oakwood on medium acid soils. Other *Rubi* present in this district are: *R. polyanthemus*, *R. calvatus*, *R. selmeri*, *R. sprengei*, *R. accrescens*, *R. echinatoides*, *R. distractiformis*, *R. hylocharis*, *R. newbouldii*, *R. vestitus*.

Rubus porphyrocaulis is quite distinct in habitat and physiognomy from all these species. It has affinities with *R. flexuosus* Muell. & Lefèv. and there are

specimens in **MANCH** collected by W. R. Linton from Dinting (22/8/1894) and Charlesworth (23/8/1894), both in north Derbyshire, labelled '*R. foliosus* Weihe & Nees'. The latter name has often been regarded in the past as synonymous with *R. flexuosus*. Another gathering of the plant by C. Bailey from quarry refuse between Mottram and Charlesworth (17/6/1893) was labelled '*R. podophyllus*' by Linton (this sheet also includes a leaf of *R. newbouldii* Bab.).

Similarities to *R. flexuosus* lie in the deflexed, grey-felted sepals and the single terminal 'leaf'; it differs in more pronounced hairiness, stronger stem armature, less zig-zag panicle rachis, purplish dark-green cast and white flowers. True *R. flexuosus* is not known in Cheshire or, reliably, in Derbyshire.

5. **RUBUS ADENANTHOIDES** A. Newton, **sp. nov.**

Turio fusco-rufescens, obtuse angulatus, leviter pilosus, superficiebus planis vel concavis, striatis; aculeis crebris e basi longa et angusta abrupte contractis, rectis vel subfalcatis, declinatis 50°–80°, aculeolis aciculisque numerosis inaequalibus (nonnullis glanduligeris) et glandulis paucis obsitus.

Folia 3–4(5)-nata pedata, subimbricata, profunde duplicato-crenata, subtus leviter pilosa, viridia vel cinereo-tomentosa. Foliolum terminale angustelloidum, elliptico-obovatum vel rhomboideum, acuminatum, basi subcordata, eiusdem petiolulo 3·5–4·5 longius; foliola infima breviter pedicellata.

Inflorescentia pyramidata, ad apicem truncatum vel rotundatum decrescens, inferne foliis ternatis, superne foliis usque 4 simplicibus subtus cineris ornata. Ramuli medii ascendentes *c* 60°, 3–5-flori, superiores breves, patuli, cymosi, 1–3-flori, pedunculis pedicellisque brevibus ad apicem fasciculatis.

Rachis inferne vix flexuosa, pilosa, superne villosa, tomentosa; aciculis numerosis (nonnullis glanduligeris), glandulis stipitatis inaequalibus, aculeolis flavescentibus inaequalibus rectis vel declinatis praedita.

Sepala cinereo-tomentosa aculeolata post anthesin patentia vel leviter reflexa, mox fructum laxè amplectantia. Petala dilute rosea, oblonga, apice emarginata. Stamina alba stylos pallide luteos vix superantia. Carpella glabra vel parce pilosa. Receptaculum pilosum.

Stem reddish brown, sparsely hairy, obtuse-angled, sides flat or shallowly grooved, striate, armed with numerous light brown, yellow-tipped prickles slanting at an angle of 50°–80°, straight or slightly falcate, abruptly contracted from a long compressed base, frequent pricklets and acicles (some gland-tipped) and a few short-stalked glands.

Leaves 3–4(5)-nate, pedate, petioles armed as the stem but with some longer-stalked glands. Leaflets almost imbricate with margins deeply subcompound-crenate, slightly hairy, green or grey felted beneath. Terminal leaflet narrow elliptic, elliptic-obovate or rhomboidal acuminate, base subcordate, 3·5–4·5 times the length of its petiolule. Petiolules of intermediate leaflets *c* 1/3rd length of that of the terminal leaflet, of basal leaflets very short.

Panicle pyramidal narrowing to a truncate or rounded apex, with several ternate leaves below and up to four simple leaflets above, at least the uppermost grey felted beneath. Median branches 3–5-flowered, ascending (*c* 60°). Apical branches short, ± patent, cymose, 1–3-flowered, with very short pedicels giving a narrow congested top.

Rachis slightly flexuose and pilose below, villose and felted above with

abundant acicles, some gland-tipped, glands short-and long-stalked, and numerous yellowish declining pricklets slightly exceeding the stem-width, straight or slightly curved.

Flowers 2–2.5 cm diameter. Sepals armed with short pricklets, slightly glandular, grey felted with short linear tips, at first patent or loosely reflexed then loosely clasping the fruit. Petals pale pink, elliptic, notched at the tip. Stamens white, slightly exceeding cream styles. Anthers glabrous. Carpels glabrescent. Receptacle hairy.

HOLOTYPE: Lane between Harthill and Dropping Stone House, Cheshire, GR 33/50.55, 25/7/1970, *A. Newton* no. 225A1 (**BM**)

Rubus adenanthoides is one of several taxa included by Rogers (1900 p. 53) in *R. adenanthus*. It is abundant in the Peckforton Hills area of West Cheshire and is also widespread in other parts of the British Isles. I have seen the following exsiccata:

MANCH: Below Peckforton Castle, Cheshire, 5/8/1903, *A. H. Wolley-Dod*, '*R. adenanthus*'

CGE: Under Peckforton Castle, Cheshire, 18/9/1951, *W. H. Mills*, '*R. pseudadenanthus*'

N.E. margin of Peckforton Hills, Cheshire, 2/8/1952, *W. H. Mills*, '*R. pseudadenanthus*'

Cleadon, N.E. Yorkshire, 1865, *J. G. Baker*, '*R. pallidus*'

Wood below Peckforton Hill, Cheshire, 11/8/1902, *A. H. Wolley-Dod*, '*R. adenanthus*'

Hedge W. of Bickerton sandpit, Cheshire, 29/7/1905, *A. H. Wolley-Dod*, '*R. adenanthus*', 'I agree WMR'

Lane at Pennsylvania, Cheshire, 12/8/1903, *A. H. Wolley-Dod*, '*R. adenanthus*', 'apparently WMR'

Below Peckforton Castle, Cheshire, 3/8/1963, *B. A. Miles*, '*R. adenanthus*, Rog. Hbk.'

Roundhill Wood, 1 mile N. of Clifton Hampden, Oxon, 6/8/1965, *B. A. Miles*, '*R. pseudadenanthus*'

S. edge of Wood, Humphrey Head, N. Lancs., 6/8/1964, *B. A. Miles*, '*R. pseudadenanthus*'

Below Gowbarrow Park, Ullswater, Cumberland, 4/8/1964, *B. A. Miles*, '*R. pseudadenanthus*'

Lower Ballacotter Glen, I.O.M., 6/8/1963, *D. E. Allen*, '? *R. pseudadenanthus*'

Birtley, Northumberland, *Y. Massey*, '*R. pseudadenanthus*'

Lane to Mountshannon Pier, L. Derg (H9), 4/9/1963, *D. E. Allen*

This species was certainly included in Watson's (1958 p. 138) concept of *Rubus pseudadenanthus* but unfortunately the type specimen of this taxon (**BM**) comes from Roscarrock Hill, Port Isaac, Cornwall, and is a hard-ground state of *R. echinatus* Lindl. The name *R. pseudadenanthus* must therefore be discarded.

6. *RUBUS DISTRACTIFORMIS* *A. Newton*, **sp. nov.**

Turio arcuato-decumbens, obtusangulus, pruinosis, pilosus, superficiebus planis, striatis; aculei numerosi e basi angusta declinati, robustiores subaequales ad angulos dispositi, aculeoli et aciculi et glanduli stipitati numerosi pilis plerumque breviores.

Folia 3(4-5)-nata, pedata, utrinque viridia, serrato-dentata, supra glabrescentia, inferne pubescentia; foliolum terminale obovatum vel ellipticum, cuspidatum, ad basin subcordatum vel emarginatum, eiusdem petiolulo ter longius.

Inflorescentia ad apicem fere aphylla, angusta, elongata, apicem versus vix decrescens, ramuli inferiores 3-7-flori adscendentes, superiores 1-3-flori suberecti.

Rachis villosa, hirsuta, sulcata, striata, aculeis numerosis vix declinatis, glandulis nonnullis longis, aculeolis glanduligeris raris munita.

Sepala tomentosa, glandulis aciculisque praedita, post anthesin reflexa sed sub fructu nonnulla subpatentia. Petala alba, angusta, distantia. Stamina alba stylos virescentes superantia. Carpella pilosa.

Stem high arching then decumbent, obtusely angled, pruinose, hairy with simple and stellate hairs, striate, armed with many, often yellow-tipped prickles and pricklets slanting from narrow bases, the stronger confined to the angles, about half the width of the stem, numerous acicles and scattered short-stalked glands mostly shorter than the hairs.

Leaves 3(4-5)-nate pedate, light green on both sides, glabrescent above, pubescent beneath; terminal leaflet obovate or elliptic-obovate, serrate-dentate, some of the larger teeth sometimes patent or recurved, cuspidate, the base shallowly emarginate or subcordate, 2-3 times the length of its grooved petiole, which is pilose and armed with scattered falcate pricklets and short glands.

Panicle narrow cylindrical, elongate, all branches \pm erect, the lowest 3-7-flowered, the upper 1-3-flowered.

Rachis villous and hairy, grooved and striate with many scarcely declining prickles, sparse long glands and rare gland-tipped pricklets.

Flowers *c* 2.5 cm diameter. Sepals felted, clothed with long and short glands and acicles, reflexed in flower and early fruit, a few spreading on the mature fruit. Petals white, narrow, spaced. Stamens white, exceeding the greenish styles. Carpels hairy.

HOLOTYPE: North bank of R. Bollin, Hale, Cheshire, GR 33/793.846, 5/7/1970, A. Newton no. 248A1 (BM)

In shade the armature is weaker and the panicles much abbreviated; the predominant light green cast, ternate leaves often held erect from the pruinose stem, even armature and pilose panicles are distinctive features.

This bramble is widespread over a considerable area of the western Pennines and their foothills from the Leek (Staffs.) area to Glossop (Derbyshire) including the valleys of the Mersey tributaries, and it extends over the morainic foothills into the Cheshire plain as far as Northwich, Knutsford and the eastern part of Delamere Forest.

It appears to be equally prevalent on boulder clay and marl as on Carboniferous shales but it is particularly prominent on shallow soils derived from glacial sand in the vicinity of old mosses and heathland where it is a major member of the scrub community in woodland and hedgerows.

Specimens collected by botanists at the end of last century received a number of names and the following exsiccata are in **MANCH**:

Hedge in lane near Knutsford, Cheshire, 31/8/1889, C. Bailey, 'Pyramidalis Kalt. teste Focke'; 'nr. Bloxamii, J. G. Baker', 'like Welsh Newton plant (*R. hirsutissimus*), C. C. Babington'

Wood between Chelford and Alderley Edge, Cheshire, 20/8/1898, C. Bailey, 'R. regillus A. Ley, form less glandular than type, W. Moyle Rogers' Hedge in cornfield near Knutsford Heath, 6/8/1884, C. Bailey, 'R. derasus Mull.?'

Knutsford Heath—Tabley Lane, 6/9/1873, F. M. Webb, 'R. warrenii Blox. MS'

Rushton Spencer, Staffs., 7/1890 W. H. Painter, 'R. hystrix'

Rudyard Moor, Staffs. at 600', 27/8/1889, W. H. Painter, 'R. distractus P.J.M. teste Focke'

Between Rudyard and Harracles Mill, Staffs., 8/9/1887, C. Bailey, 'R. radula'

This plant is also referred to by Rogers (1900 p. 94) as *R. distractus* Muell. and by Butcher (1961 p. 658) as *R. disjunctus* Muell. & Lefèv.

With the exception of *R. warrenii* Blox. MS., comparisons have been made with authentic material of all these taxa from which *R. distractiformis* is, despite occasional similarity in some points of detail, clearly distinct. It is nearest to *R. menkei* Weihe & Nees, of which I have seen an authenticated specimen in Babington's herbarium (Focke's Rubi selecti no. 81). *R. distractus* (to which Focke referred the Rudyard Moor, Staffordshire plant listed above) is synonymous with *R. menkei*. This was the opinion of W. C. Barton (MSS. in Mus. Brit.) on the basis of a specimen collected and named *R. menkei* by Weihe and now in Focke's Rubi authentici. I have seen a photograph of this specimen and also one of Müller's type specimen of *R. distractus* from the Vosges and agree with Barton's view. *R. distractiformis* differs from *R. menkei* in the following respects:

Leaf shape and indentation: the terminal leaflet in *R. menkei* is pentagonal, considerably incise-serrate at the apex, and abruptly acuminate.

Stem armature: the longer prickles in *R. menkei* are sparser and unequal.

Rachis armature: in *R. menkei* the prickles are more declining, less crowded and long glands are more frequent.

The affinity with *R. menkei* is sufficiently close to justify its inclusion next to that taxon in Dandy (1958) within the section Appendiculati (Genev.) Sudre.

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REFERENCES

- BUTCHER, R. W. (1961). *Illustrated British Flora*, vol. 1, p. 658. London.
 DANDY, J. E. (1958). *List of British Vascular Plants*. London.
 NEWTON, A. (1971). *Flora of Cheshire*. Chester.
 ROGERS, W. M. (1900). *Handbook of British Rubi*. London.
 WATSON, W. C. R. (1956). New species and combinations in the genus *Rubus* L. *Watsonia*, 3: 285-290.
 WATSON, W. C. R. (1958). *Handbook of the Rubi of Great Britain and Ireland*. Cambridge.