

### Plant records from Mull and the adjacent small islands. 3

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#### ABSTRACT

Further information is given on early publications relevant to the flora of the area. New records of special interest are noted and in the Systematic List additional data to those already published (Cannon & Bangerter 1968, 1970) on species new to the area and confirmations of some old records are provided.

#### INTRODUCTION

The five-year period of fieldwork originally planned by our Department as the basis for an account of the vegetation of Mull and the adjacent small islands terminated in 1970. The collation of data from the field, herbarium and library is now being actively undertaken, with the intention of publishing in the near future a 'County' Flora of the area. In the meantime, we present the third in a series of papers (Cannon & Bangerter 1968, 1970) which draw attention to new and interesting records resulting both from our own visits and those of our collaborators, whose assistance has been greatly appreciated by the Department.

To the sources of records previously published we are able to add the following. Robert Sibbald (1684) gives 'rocks of Inch-Columb' (Iona) as a locality for *Cochlearia anglica*. Apart from an unconfirmed record (Wilmott 1942) by the B.E.C. 1939 party, no other report of the occurrence of this species in our area has been traced. Our recent work suggests that these records are probably errors, although the map in the *Atlas* (Perring & Walters 1962) indicates that the existence of the species in our area cannot be ruled out.

Sibbald's record antedates the earliest previously known record for vascular plants which is to be found in Ray (1724). Here Ray quotes from a letter to Richard Richardson from Edward Lhwyd in which the latter recorded what he believed to be *Arctous alpinus* but which Lightfoot (1777), with justification, corrected to *Arctostaphylos uva-ursi*. We are indebted to our colleague J. H. Price for drawing our attention to the date (1699) and text of Lhwyd's original letter, published by Gunther (1945). In this same letter Lhwyd says 'Going up one of the high hills of Mul [sic] we found *Rhodia Radix*; *Pes Cati*; *Cotyledon hirsut*. *Vaccinia rubra*; *Sedum Alp. trifido folio*; and (which I had never seen grow spontaneously) *Alchimilla* [sic] *Alpina quinquefolia*'. These provide the earliest known records of, in modern nomenclature, *Sedum rosea*, *Antennaria dioica*, *Saxifraga stellaris*, *Vaccinium vitis-idaea*, *Saxifraga hypnoides* and *Alchemilla alpina*, in Mull and most likely for the whole of v.c. 103. John Macculloch M.D. (1819), in a work that provides a detailed account of the geology of the Western Isles, includes some observations on plants from those islands which were later grouped by Watson into his Mid Ebudes. The majority of these botanical observations concern Coll and Tiree, but a number provide

early records for Mull, Inch Kenneth and Staffa.

In *Cybele Britannica* (1847–1859), one of the most significant pioneer works on the British flora, H. C. Watson divided Great Britain into eighteen large areas as units of distribution for vascular plants. While the published work is familiar to serious students of the British flora, it is not generally known that the manuscript slips accumulated by Watson as the basis of his account are preserved in the library of this department. These slips, which we consider to be a useful source of information to compilers of Local Floras, are arranged primarily by species and then geographically into the groups of counties which constitute each area. Unfortunately the records although localised are normally not dated, but as they must be earlier than the date of the appropriate volume of the *Cybele*, they provide for some species the first known reference to its occurrence in our area. A paper entitled 'The Flora of the Island of Iona (Argyllshire)', left in manuscript by A. J. Wilmott, has recently been discovered in this department. It describes the results of a visit to the island in 1912 and internal evidence suggests that he wrote the paper in 1913. It is accompanied by a map which divides the island into five recording areas, but for the more interesting species precise localities are given. For some reason, Wilmott (1942) did not mention these earlier observations in his account of the 1939 B.E.C. excursion, perhaps because of his dissatisfaction, for which there is evidence, with the systematic list, which indeed contains some highly doubtful records. Finally, we acknowledge our indebtedness to Dr Heather Salzen, who lent us her notebook containing lists of plants observed by her in 1948 on the island of Ulva. This we found to be most useful in supplementing the information derived from Distribution Maps Scheme cards lent to us through the courtesy of Dr F. H. Perring of the Biological Records Centre. The data for Ulva shown in the *Atlas* maps are mainly based on Dr Salzen's records.

During the early summer of 1970 the British Pteridological Society paid a week's visit to Mull under the leadership of A. C. Jermy. All the fern records, among which were several valuable additions, were made available to us. A short account of the excursion appears in the Society's *Newsletter* (1970). We also acknowledge the continuing assistance of many collaborators both in the field and in the realm of specialist studies. In 1969, through the courtesy of the Royal Navy, a helicopter was again placed at our disposal, enabling our party to make most profitable visits to Staffa, Little Colonsay, Soa and some of the small islands round Iona. A further two species, *Chenopodium bonus-henricus* and *Potamogeton berchtoldii*, of those originally listed (Cannon & Bangerter 1968) as being confined to Iona, have now been found on the mainland of Mull.

The most notable records made during the period under review are: *Ophioglossum vulgatum* and *Najas flexilis*, from the Ross of Mull in 1969 and in 1970, and *Hammarbya paludosa* and *Corallorhiza trifida* from the peninsula to the south of Loch Spelve. The latter year seemed to be a good season for orchids, *Listera cordata* being much more frequently seen than in recent years, *Pseudorchis albida* somewhat more in evidence, and *Cephalanthera longifolia* being found in a new locality, only its second in recent years and the third since the original discovery by G. Ross in 1877.

#### SYSTEMATIC LIST

In the following list, which follows the order of Dandy (1958), the British Museum (Natural History) Department of Botany Mull Survey is referred to as

BMMS. Specimens in the British Museum Herbarium are indicated by (BM) or by BMMS and number, specimens in the herbarium of the Department of Botany, University of Glasgow by (GL) and those in the herbarium of the University of Oxford by (OXF). Localities, unless otherwise stated, are on the mainland of Mull. Further details (e.g. National grid references) are available in most instances in our files.

The following members of the B.M. Survey are referred to in the list: E. B. Bangerter, Lorna F. Bowden (now Mrs L. F. Ferguson), J. F. M. Cannon, A. Eddy, E. W. Groves, P. W. James, A. C. Jermy, Lynn Kendrick, Elizabeth G. Moyes, N. K. B. Robson, Patricia A. Sims and A. R. Vickery.

29/1. *OPHIOGLOSSUM VULGATUM* L. Previously known in v.c. 103 only from Coll and Tiree but recently discovered in the Ross of Mull. Port nan Ròn, 1969, BMMS 3536 (EDDY). The plants belong to subsp. *vulgatum*.

49/1. *AQUILEGIA VULGARIS* L. Naturalised on roadsides, walls and similar habitats. Aros House woods and cliffs north of Tobermory, 1966, BMMS (CANNON & GROVES); Salen, 1970, BMMS 4314 (CANNON). New vice-county record.

66/6. *FUMARIA MURALIS* Sond. ex Koch subsp. *BORAEI* (Jord.) Pugsl. Previously known in v.c. 103 only from Coll and Tiree. Iona, fields south of Baile Mòr, 1968, BMMS 3395 (JAMES); Sunipol, oatfield, 1968, BMMS 3406 (JAMES); Port Langanmull, roadside, 1969, BMMS 3838 (CANNON & MOYES). Specimens determined by P. D. Sell.

70/2. *SINAPIS ALBA* L. On a low cliff with bird guano, Inch Kenneth, 1969, BMMS 3906 (JERMY). New vice-county record.

88/a. *COCHLEARIA ATLANTICA* Pobedimova A specimen, Gerrans 473 (BM), collected in 1958 at Salen Bay was named by Pobedimova (1968) as this species, which she has recognised from the Outer Hebrides, Arran and Mull. As at present recorded this is endemic to the Western Isles, the type (BM) coming from Lewis in the Outer Hebrides. Study of our more recent Mull collections in the light of Pobedimova's publications (1968, 1969) suggests that populations referable to this taxon occur elsewhere in Mull: Gorton, on Loch Don, 1969, BMMS 3515 & 3517 (JERMY); Ballygown, 1970, BMMS 4123 (CANNON). A complete evaluation of this taxon as it occurs in the British Isles demands a thorough review of all our representatives of this difficult genus. The Gerrans specimen, published in 1960 as *C. officinalis*, thus becomes the first record of this taxon for v.c. 103.

95/2. *EROPHILA VERNA* (L.) Chevall. subsp. *SPATHULATA* (A. F. Lång) Walters All the specimens from our area are this subspecies and it seems likely that field records can be similarly attributed. The first definite record for v.c. 103 for this subspecies is Calgary Bay, 1967, U.K. DUNCAN (BM).

102/2 × 1. *RORIPPA* × *STERILIS* Airy Shaw Calgary Bay, 1966, BMMS (CANNON & GROVES 265). A further five widely scattered localities have been subsequently recorded. New vice-county record.

113/1. *VIOLA ODORATA* L. On roadside bank near cottages at Tobermory, 1970, BMMS (ROBSON). New vice-county record, no doubt arising as an escape from recent cultivation.

154/1. *CHENOPodium BONUS-HENRICUS* L. Previously known only from Iona but now recorded from the mainland of Mull. Carsaig, rubbish dump near the shore, 1970, BMMS 4131 (JAMES).

170/4. *OXALIS EUROPAEA* Jord. Naturalised in gravel in front of cottage at Lochdonhead, 1966, U.K. DUNCAN (BM). Also known to us at Salen, 1968, BMMS 3115 (JAMES). New vice-county record.

211/8. *RUBUS SPECTABILIS* Pursh Naturalised in some quantity in S.E. Mull. Kilpatrick crossroads, 1965, KENNETH; roadside at Torosay Castle, 1967, BMMS; and at Lochbuie on the south coast of Mull, 1967, BMMS 2309 (JAMES & U. K. DUNCAN). New vice-county record.

234/1. *MALUS SYLVESTRIS* Mill. Noted without locality by Wilmott (1942) as 'would be N.C.R., needs confirmation'. We have been able to provide this confirmation. Aros House woods, 1967, BMMS (BOWDEN & J. EDMONSTON); also recorded from near Ulva House, 1967, BMMS (BOWDEN & JAMES). New vice-county record.

234/K. *KERRIA JAPONICA* DC. Naturalised in Pennyghael woods, 1968, BMMS 3208 (JAMES). New vice-county record.

239/4 × 5. *SAXIFRAGA* × *URBIUM* D. A. Webb (*S. umbrosa* × *S. spathularis*) Near Tavool House, 1968, BMMS 2302 (JAMES & U. K. DUNCAN); a record of *S. umbrosa* from ruined croft garden, Ulva, 1948, SALZEN, is presumably this hybrid. New vice-county record.

239/6. *SAXIFRAGA HIRSUTA* L. Well established under beech in woods in Torloisk House grounds, 1970, BMMS 4126 (JAMES). New vice-county record.

246/1. *RIBES SYLVESTRE* (Lam.) Mert. & Koch Salen, 1968, M. MULLIN; edge of field near farm, Sunipol, 1968, BMMS; 1970, BMMS 4045 (JAMES & FERGUSON). New vice-county record.

246/2. *RIBES SPICATUM* Robson Grounds of Glen Forsa House, 1967, U. K. DUNCAN (BM). New vice-county record.

246/3. *RIBES NIGRUM* L. Lagganulva, 1967, J. DUNCAN; Aros House woods, 1967, BMMS (BOWDEN & J. EDMONSTON); Tobermory, 1967, BMMS (MELDERIS); near derelict cottage, Kintra, 1970, BMMS 4200 (JAMES). New vice-county record.

271/1. *ASTRANTIA MAJOR* L. Recorded for 'Mull' by Ewing (1890). A modern localised record is: outskirts of Tobermory, 1968, C. A. STACE.

291/1. *CARUM VERTICILLATUM* (L.) Koch Since the publication of a first county record for this species (Cannon & Bangerter 1968), R. W. M. Corner has provided us with an earlier record: Coladoir estuary, 1956, CORNER (BM).

320/1(1). *POLYGONUM AVICULARE* L. *sensu stricto* This species has of course long been known in the aggregate sense, but we now publish records for the species in the strict sense and for an associated segregate. Lochdonhead; Ulva by the pier; Loch Assopol, all 1966, U. K. DUNCAN; Tobermory, 1968, STACE; Staffa, BMMS 3699 (CANNON), det. B. T. Styles. First vice-county record.

320/1(4). *POLYGONUM ARENASTRUM* Bor. Loch Buie shore, 1959, C. W. MUIR-HEAD (E); Loch Peallach, 1967, BMMS 2213 (MELDERIS); Camas an Lagain, 1968, A. J. RICHARDS (OXF). All det. B. T. Styles. First vice-county record.

342/t. *POPULUS TRICHOCARPA* Torr. & Gray Persisting in neighbourhood of Torloisk House, 1970, BMMS 4124 (JAMES). Det. G. A. Matthews. New vice-county record.

343/1. *SALIX PENTANDRA* L. Aros House woods, 1969, BMMS 3610 (JERMY). Conf. A. Neumann. New vice-county record.

364/2. *EMPETRUM HERMAPHRODITUM* Hagerup A. G. Kenneth (*in litt.*) drew attention to the possible occurrence of this species in the saddle between Beinn Fhada and Ben More. Confirmation of its presence on Mull is provided by a specimen from the adjacent Beinn nan Gabhar, 1968, H. A. McALLISTER (BM). It may also occur on Beinn Chreagach Mhor and Bheag as recorded by MULLIN later in 1968, but no specimen is available for critical examination. New vice-county record.

379/1. *VINCA MINOR* L. Included in Appendix II of the *Atlas*, presumably on the basis of the record by G. Ross from Drumfin in his 1878 list. We have recently

recorded another locality, Kellan Mill, 1969, BMMS (JAMES & VICKERY), where it is naturalised on the roadside.

395/1. *PENTAGLOTTIS SEMPERVIRENS* (L.) Tausch Aros House woods, 1966, BMMS (CANNON & GROVES); Iona, 1966, BMMS (JAMES & CANNON); Tobermory, bank opposite cottages, 1970, BMMS 4416 (BANGERTER & KENDRICK). New vice-county record.

400/7. *MYOSOTIS SYLVATICA* Hoffm. Naturalised at Port Uamh Beathaig, 1956, B. FLANNIGAN, and at Kilfinichen, 1968, BMMS 2285 (JAMES & U. K. DUNCAN). First vice-county record.

445/6  $\times$  7. *MENTHA*  $\times$  *VILLOSA* Huds. (*M.*  $\times$  *niliaca* Juss. ex Jacq.) Carsaig Bay, Innamore Lodge, 1967, A. G. KENNETH & A. McG. STIRLING (BM); Ardnacross, 1968, BMMS 2300 (JAMES & U. K. DUNCAN) and BMMS 3124 (JAMES); Tenga, 1968, BMMS 3190 (JAMES). All det. R. M. Harley. Previously recorded (as *M. alopecuroides* Hull) by J. W. Heslop-Harrison in 1951 from Tiree, but here recorded from the Mull part of v.c. 103. The Carsaig specimen was determined as 'the glabrous domesticated form known as "*M.*  $\times$  *cordifolia*" sensu Graham'.

475/2. *CAMPANULA TRACHELIUM* L. Recorded by Wilmott (1942) as 'near Aros Cottage, (no doubt only garden escape; not previously recorded)'. It has recently been recorded by Mrs J. E. Duncan at what appears to be the same locality, presumably having persisted for the intervening 28 years.

544/2. *CENTAUREA MONTANA* L. Established near derelict cottages at Kintra, 1967, BMMS (CANNON & BANGERTER); also recorded from Tobermory, 1970, BMMS 4415 (BANGERTER & KENDRICK). New vice-county record.

581/1. *NAJAS FLEXILIS* (Willd.) Rostk. & Schmidt Loch Poit na h'I, 1970, U. K. DUNCAN (BM). Conf. J. E. Dandy. Shown in the *Atlas* for the Outer Hebrides, Colonsay and Islay only for the whole of western Scotland. New vice-county record.

589/3. *POLYGONATUM MULTIFLORUM* (L.) All. Naturalised near the graveyard at Calgary Bay, 1969, BMMS 3993 (JAMES). New vice-county record.

593/2. *LILIUM PYRENAICUM* Gouan Naturalised at Torloisk House and reproducing by seed, occurring as an 'epiphyte' on the roots of a large fallen tree, 1969, BMMS 3637 (CANNON & JERMY). New vice-county record.

624/2. *CEPHALANTHERA LONGIFOLIA* (L.) Fritsch We can now report a second new locality in a completely different part of Mull to that previously recorded (Cannon & Bangerter 1968). Kilninian, 1970, BMMS 4263 (MOYES).

631/1. *HAMMARBYA PALUDOSA* (L.) Kuntze Included in the list of Mull plants published in Turner & Finlay (1967), based on a pre-1965 record by Mrs M. Caulfield from Treshnish, but not refound there by our parties despite careful search. We have, however, recently been able to confirm the presence in Mull of this interesting species. South-west of Dalnaha, 1970, BMMS 4455 (JERMY). It has been previously recorded from Coll in v.c. 103 and the adjacent mainland.

633/1. *CORALLORHIZA TRIFIDA* Chatel. Between Dalnaha and Lian Mòr, 1970, BMMS 4372 (ROBSON). Apparently the first record for the Western Isles and the first record since 1930 for the west of Scotland in general. A substantial extension of the known range in this country. New vice-county record. The population, which consisted of about twelve visible plants, was under the cover of an open birch wood on a medium slope facing north-east.

669/2. *GLYCERIA PLICATA* Fr. Calgary Bay in roadside ditch, 1966, BMMS (CANNON & GROVES 274). New vice-county record.

676/11. *POA ANGUSTIFOLIA* L. Melderis has identified a recent collection: Tobermory, 1970, BMMS 4414 (EDDY) as this species. This locality provides a substantial extension of range for this species, as shown by the map in the *Critical Supplement*. New vice-county record.

676/12. *POA SUBCAERULEA* Sm. Now known to be widespread in Mull and the adjacent islands. The first record for our area is Iona, south of the village, 1967, BMMS 72 (CANNON, BANGERTER & SIMS). Also known in v.c. 103 from Tiree.

683/12. *BROMUS THOMINII* Hardouin The records published in Cannon & Bangertter (1970), together with the record on which the Mull dot in the *Critical Supplement* is based, are very probably to be referred to *B. × pseudothominii* P. Smith.

683/10 × 13. *BROMUS × PSEUDOTHOMINII* P. Smith (*B. mollis* L. × *B. lepidus* Holmberg) This hybrid was first detected by Melderis in our area from two specimens collected in 1969 and his identifications were subsequently confirmed by Dr P. Smith. Shingle spit at the mouth of the river Bà, 1969, BMMS 3641 (CANNON, JERMY & EDDY); Inch Kenneth, 1969, BMMS 3909 (JERMY). New vice-county record. We now know it to be widespread in scattered localities in northern and western Mull.

## REFERENCES

- BRITISH PTERIDOLOGICAL SOCIETY (1970). Meetings 1970. *Newsletter*, 8: 9.
- CANNON, J. F. M. & BANGERTER, E. B. (1968). Plant records from Mull and the adjacent small islands. *Proc. bot. Soc. Br. Isl.*, 7: 365–372.
- CANNON, J. F. M. & BANGERTER, E. B. (1970). Plants records from Mull and the adjacent small islands. 2. *Watsonia*, 8: 145–153.
- DANDY, J. E. (1958). *List of British Vascular Plants*. London.
- EWING, P. (1890). A contribution to the Topographical Botany of the West of Scotland. *Proc. Trans. Nat. Hist. Soc. Glasgow*, New Series, 2: 309–321.
- GERRANS, M. B. (1960). Notes on the flora of the isle of Mull. *Proc. bot. Soc. Br. Isl.*, 3: 369–374.
- GUNTHER, R. T. (1945). *Early Science in Oxford. XIV. Life and Letters of Edward Lhwyd*, p. 423. Oxford.
- HESLOP-HARRISON, J. W. (1951). Further observations on the Vascular Plants of the Outer and Inner Hebrides. *Trans. Proc. bot. Soc. Edinb.*, 35: 415–426.
- LIGHTFOOT, J. (1777). *Flora Scotica*. London.
- MACCULLOCH, J. (1819). *A Description of the Western Isles of Scotland*. London.
- PERRING, F. H. & SELL, P. D., ed. (1968). *Critical Supplement to the Atlas of the British Flora*. London.
- PERRING, F. H. & WALTERS, S. M., ed. (1962). *Atlas of the British Flora*. London.
- POBEDIMOVA, E. G. (1968). Species Novae Generis *Cochlearia* L., *Nov. Syst. Pl. Vasc. (Acad. Sci. U.R.S.S.)*, 5: 131–139.
- POBEDIMOVA, E. G. (1969). Revisio Generis *Cochlearia* L. 1. *Nov. Syst. Pl. Vasc. (Acad. Sci. U.R.S.S.)*, 6: 67–106.
- RAY, J. (1724). *Synopsis Methodica Stirpium Britannicarum*, 3rd ed., ed. by J. J. Dillenius. London.
- ROSS, G. (1877). Isle of Mull, Mid Ebudes. *Rep. Bot. Loc. Rec. Club for 1876*: 188–192.
- ROSS, G. (1878). On the flora of Mull. *Trans. Proc. bot. Soc. Edinb.*, 13: 234–242.
- SIBBALD, R. (1684). *Scotia Illustrata . . . , De Plantae Scotiae*, 1/2: 18. Edinburgh.
- SMITH, P. (1968). The *Bromus mollis* aggregate in Britain. *Watsonia*, 6: 327–344.
- TURNER, N. & FINLAY, A. (1967). *The Isle of Mull*. Glasgow.
- WATSON, H. C. (1847–1859). *Cybele Britannica*, 1–4. London.
- WILMOTT, A. J. (?1913). *The Flora of the Island of Iona (Argyllshire)*. Manuscript in the British Museum (Nat. Hist.) Library.
- WILMOTT, A. J. (1942). v.c. 103. The Island of Mull, in Report on Excursions arranged in 1939. *Rep. botl Soc. Exch. Club Br. Isl.*, 12: 236–249.