

HAMPSHIRE PLANT NOTES, 1934—1940.

By PATRICK M. HALL, F.L.S.

SINCE the publication of the last list of notes in the *Papers and Proceedings*, Vol. XII, Part 3, pp. 291-7 (1934), a great deal of botanical exploration has been carried out in the County. The formation of a Committee to produce a new edition of Bentham and Hooker's "Students' Flora," the appointment of specialists to write up the various sections and especially the publication of papers such as those of Messrs. Dandy and Taylor on *Potamogeton*, R. Melville on *Ulmus*, and J. E. Lousley on *Rumex*, to mention but a few, have been an immense stimulus to field botany during the years immediately preceding the outbreak of war. Unfortunately such activities are almost impossible in present conditions, so that this is a convenient moment at which to take stock and publish the results which have been achieved up to the end of the year 1940.

Only a few of these notes are here published for the first time: nearly all of them are taken from the Reports of the Botanical Exchange Club and are here collected and reprinted for the benefit of students of the flora of Hampshire and the Isle of Wight. Except for a few records of long survival, all the records are for new localities not previously published in Floras or papers devoted to the botany of Hampshire and the Isle of Wight.

The list includes 19 new vice-County records, one for v.-c. 10 (Isle of Wight), and nine each for v.-cc. 11 (S. Hants) and 12 (N. Hants). Five of these are additions to the flora of the whole County. The N.C.R.'s are:—

New to v.-c. 10.

Potamogeton pusillus L. (*P. panormitanus* Biv.-Bern.).

New to v.-c. 11.

Ranunculus sphaerospermus Boiss and Blanch.

Iberis amara L., as a native.

Geranium rotundifolium, L.

Sorbus latifolias Pers., not indigenous.

Epilobium adenocaulon Hausskn., well-dispersed adventive.

Potamogeton acutifolius Link. New to County.

P. obtusifolius Mert. and Koch.

P. pusillus L. (*P. panormitanus* Biv.-Bern.).

Bromus lepidus O.R. Holmberg.

New to v.-c. 12.

Cardamine impatiens L. New to County.

Draba muralis L., not indigenous.

Astragalus danicus Retz. New to County.

Epilobium adenocaulon Hausskn., well-dispersed adventive. New to County.

Galium anglicum Huds. New to County.
 *x *Mentha gentilis* L., not indigenous.
Prunella laciniata L., not indigenous.
Zostera pedicellata Fries.
Cladium Mariscus R. Br.

In addition to the above the list also contains a number of hybrids, varieties and forms not previously recorded.

I wish to record my gratitude to all those ladies and gentlemen whose names appear below and who have communicated their discoveries to me and by their guidance have enabled me to see many interesting plants in new localities. In this connection I wish to record my especial indebtedness to my friend and companion on many excursions, Mr. E. C. Wallace, whose name figures so largely in the list of records and whose energy and skill have been rewarded with so many notable discoveries. To him also I am indebted for correcting the proofs of this paper.

My grateful thanks are also tendered to the many expert botanists who have assisted me by the identification of critical gatherings.

I wish to take this opportunity of letting it be known that I have made testamentary arrangements by which Hampshire specimens in my herbarium at my death will be separated from the general collection with the intention that they shall become the nucleus of an herbarium representative of the flora of the County available for study in the County. At the present time it might be difficult to find a Museum in the County where a collection of this nature could be adequately housed and made available for study, but it is to be hoped that the projected new County Museum will eventually materialise. At the time, as far as material will allow, I am supplying a duplicate set of Hampshire gatherings to the British Herbarium of the Department of Botany of the British Museum, South Kensington.

This statement will, I hope, encourage botanists making new discoveries in the County to send me voucher specimens in the knowledge that these will be preserved as a part of a representative collection.

SYMBOLS.

- I Specimen seen by myself.
- !! Specimen seen by myself *in situ*.
- * New vice-County record.
- ** New to the whole County.
- † Not indigenous in the locality recorded.

The numbers are those of the *London Catalogue of British Plants*, Eleventh Edition.

- 13. *Myosurus minimus* L.
 VI (2). Abundant in garden, Ampfield, 1936, Mrs. A. White.
 VIII (1). Little Park Farm, Swanwick, 1934, Hall !!
 XI. Between Fleet and Crookham, 1937, Watts.
- 16. *Ranunculus trichophyllus* Chaix.
 VIII (2). Pond near E. Meon, 1935, Hall, Simpson and Wallace !!
 XI. Winchfield, 1934, Watts.

- *20. *R. sphaerospermus* Boiss and Blanch.
VI (2). R. Test below Stockbridge, 1936, Mrs. Foggitt. First record for v.-c. 11, see *B.E.C.* 1936 *Rep.*, 236 (1937).
24. *R. Lenormandi* F. Schultz.
X. Weaver's Down, near Liphook, 1937, Wallace !
- 41 var. *R. Ficaria* L. var. *bulbifera*, Marsden-Jones.
VIII (3). Lane N. of Whitefell Farm, Fareham, Hall !! This variety, which is distinguished by bulbils in the axils of the leaves, was described by Marsden-Jones in *Journ. Linn. Soc., Bot.*, No. 333, L., pp. 39-55. (1935), *q.v.* for full account.
46. *Helleborus foetidus* L.
VIII (1). Townsend, 2nd edition, p. 16, states :—"Peak Wood, Upham, in abundance, 1886." I have not seen it in Peak Wood, this name being now applied to the more southerly of two woods divided by a lane, the more northerly being known as Grasted's. After much searching I found the plant in very small quantity in 1912 in Grasted's, but failed to re-find it until 1935. About 1930 the beeches in these woods were cut, and this resulted in a remarkable ebullition of the species in Grasted's, where in recent years it has covered an area of several acres.
77. *Fumaria Bastardi* Bor.
VIII (3). Portchester, 1934, Hall !! (*det.* H. W. Pugsley). New to Div. VIII.
- 81 c. *F. Boraei* Jord. var. *gracilis* Pugsl.
VI (2). Near Eling, 1937, Lady Davy and Chapple.
82. *F. micrantha* Lag.
VII (2). Near Owslebury, 1934, Hall and Pugsley !!
XI. Near Greywell, 1934, Watts.
- 83 d. *F. officinalis* L. var. *Wirtgenii* Hausskn.
VII (2). A rampant form in cultivated ground, St. Cross cricket ground, 1934 Hall !! (*det.* H. W. Pugsl.).
- **108. *Cardamine impatiens* L.
X. Catham Copse, Bentley, on upper greensand. Reported in 1938 by W. E. Warren to Wallace, who collected the plant in 1939 in fruit ! but was unable to find it in 1940. A very valuable discovery and first record for v.-c. 12. I have marked it as new to the County, as I am convinced that the records for v.-c. 11 in Rayner's *Supplement*, p. 10. are errors.
- †111. *Alyssum alyssoides* L.
VIII (3). S. Hayling, introduced with shoddy, 1938, J. Staley.
- *†113. *Draba muralis* L.
VI (1). Shrubbery, Longstock Park, Stockbridge, 1937, Miss Beddington. New to v.-c. 12 but adventive. This species seems to have found its way into one of Messrs. Hillier's nurseries at Winchester and to have been disseminated thence. It is a native of limestone rocks and walls in Western and Northern England and Wales.
- † —. *Sisymbrium orientale* L.
VIII (3). S. Hayling, introduced with shoddy, 1938, J. Staley.
- † —. *Lepidium bonariense* L.
VIII (3). Wicor, 1934, W. A. Sledge and Hall !! (*Det.* Dr. P. Aellen). An alien species near *L. ruderale* L.

- *165. *Iberis amara* L.
VIII (2). Stock's Bottom, Meonstoke, 1940, Hall !!. A very luxuriant growth occurred in 1940 in light, chalky land which was ploughed in 1939 after being uncropped since the war of 1914-18. In 1940 the land was cropped with barley and the species occurred in great abundance in the crop and in less quantity among rabbit-holes on adjoining downland. This shows that the plant was not introduced with the barley and makes it certain that it is of long standing in the locality. First record for v.-c. 11 as a native: in the two localities recorded by Rayner, *loc. cit.* p. 15, it was certainly adventive.
187. *Viola Riviniana* Reichb. forma *rosea*.
V (1). Brighstone Down, 1935, Hall !!
190. *V. lactea* Smith.
VIII (3). Wickham Common and Hayling Island, 1935, Hall !!
New to this sub-division. In both localities hybrids with *V. Riviniana* occur and on Wickham Common hybrids with *V. canina* also.
XI. Hook Common, 1934, Still !
200. *V. ruralis* Bor.
VIII (1). Ride in Grated's Copse, Upham, 1935, Hall !!
X. Sandpit, Kingsley, 1935, Hall, Simpson and Wallace !!
208. *Polygala oxyptera* Reichb.
X. Nore Hill, Selborne, 1937, Wilmott and Hall !!
- †297. *Claytonia sibirica* L.
X. Waggoner's Wells, recently introduced and spreading, 1935, Watts and Hall !!
301. *Elatine hexandra* DC.
III (2). Hatchett's Pond, 1936, Lady Davy: pond near Hatchett's Pond, 1936, Miss K. Pickard in *B.E.C.* 1936 *Rep.* 245 (1937).
- †304. *Hypericum hircinum* L.
II or VI (2). Lane, Fritham, 1938, Mrs. R. C. Ashby ! Hedge near Lymore, 1938, Lady Davy and Mrs. R. C. Phelps.
308. *H. maculatum* Crantz.
XI. Several places about Hartley Wintney, 1937, Wallace !
342. *Geranium pratense* L.
XI. South Warnborough, 1937, Hall and Wallace !! new to this Division.
345. *G. pusillum* L.
XI. Hazeley Heath, 1937, Watts.
- *346. *G. rotundifolium* L.
VI (2). Broughton, 1935, Miss H. Salmon: new to v.-c. 11.
- †362. *Impatiens biflora* Walt.
II. Mudeford, 1934, N. D. Simpson and Hall !!
- **426. *Astragalus danicus* Retz.
VI (1). Roadside near Danebury, one small patch only, 1940, Payn !! New to the County and a valuable discovery. This beautiful plant should also be found in the Shipton Bellinger district, where it occurs in Wiltshire close to the boundary.
- 460b. *Lathyrus montanus* (L.) Bernh. var. *tenuifolius* Reichb.
X. Near Blackmoor, 1937, Wallace !!

- 460b. *Rubus curvispinus* W. Watts.
II. Between Highcliffe and Milton, 1935, A. H. Evans and N. D. Simpson in *B.E.C.* 1935 *Rep.*, 27 (1936).
- *R. rosaceus* Weihe and Nees var. *scabripes* (Génév.) Sudre.
II. Breamore Wood, 1935, Evans and Simpson (*loc. cit.*, 28).
- 595*. * *Geum intermedium* Willd.
XI. Greywell, 1936, Lousley.
609. *Potentilla argentea* L.
X. Headley, 1934, Hall !!
628. *Agrimonia odorata* (Gouan) Mill.
II. Small wood near Breamore Wood, 1936, N. D. Simpson.
XI. Coxmoor Wood, Crondall, 1934, Watts.
631. *Poterium officinale* (L.) A. Gray.
XI. Meadow by R. Blackwater, Bramshill, 1937, Wallace and Hall !!
- *†685. *Sorbus latifolia* Pers.
VIII (2). Copse near Riplington, planted, 1935, Wallace and Hall !!
706. *Saxifraga granulata* L.
XII. Laneside, N. Sydmonton Common, 1935, Lousley !
719. *Chrysosplenium alternifolium* L.
VI (2). Streamside near Ampfield, 1935, H. T. White !!
A very rare plant in the County and only the second record for v.-c. 11.
728. *Cotyledon Umbilicus-veneris* L.
X. Still occurs at Headley, 1934, Hall !!
- 761x. *Epilobium* L. All determinations are by Mr. G. M. Ash.
E. montanum L. x *obscurum* Schreb.
X. Waggoner's Wells, 1935, Hall !!
- 761x. *E. montanum* L. x *roseum* Schreb.
VIII (3). Garden weed, Fareham, 1935, Hall !!
765. *E. tetragonum* Curt.
VIII (3). Garden weed, S. Hayling, 1936, Hall !!
766. *E. obscurum* Schreb.
X. Waggoner's Wells, 1935, Hall !!
- 766x. *E. obscurum* Schreb. x *parviflorum* Schreb.
VIII (3). Garden weed, S. Hayling, 1936, Hall !!
- **†766 bis. *E. adenocaulon* Hausskn.
VII (2). Crabwood, 1936, Rev. H. P. Fitzgerald !
IX. Margin of Petersfield Heath Pond, 1935, R. W. Butcher and Hall !! First record for v.-c. 11, see *B.E.C.* 1935 *Rep.*, 29 (1936).
X. Waggoner's Wells, 1936, Butcher and Hall !!
XI. Hook Common and Fleet Pond, 1934, G. M. Ash and N. Y. Sandwith in *Journ. Bot.*, 73, 179 (1935) : first record for v.-c. 12. Fleet Pond, 1936, Watts !
E. adenocaulon Hausskn. was first recorded for Britain by Messrs. Ash and Sandwith in *Journal of Botany*, 73, pp. 177-184 and Plate 609 (1935), and as it has now become naturalized in S. England and is likely to be met with by botanists in this County a note on the characters by which it may be recognised may be valuable. It is an American species, which occurs in this country in woods, streamsides, gardens and waste places. It is distinguished by its upright growth much branched above, reddish stems, numerous very small flowers, patent pods, glandular clothing, short entire stigma, and seeds with a small pellucid beak protruding from the outer covering of the fruit.

By reason of one or other of these characters it is therefore liable to be confused with any of the species of the *E. tetragonum* group, with *E. roseum* or with *E. palustre*. The introduction of this species to S. England appears likely to have been effected during the war of 1914-18, although one or two earlier and casual occurrences have been detected in herbaria. The species has produced spontaneous hybrids with several native species in this country, some of which have occurred in Hampshire.

- 766 bis x. *E. adenocaulon* Hausskn. x *hirsutum* L.
 XI. Fleet, waste ground between road and canal, 1936, Hall and W. A. Sledge !! First British record for this hybrid.
- 766 bis x. *E. adenocaulon* Hausskn. x *montanum* L.
 VII (2). Crabwood, 1936, Rev. H. P. Fitzgerald !
- 766 bis x. *E. adenocaulon* Hausskn. x *obscurum* Schreb.
 X. Waggoner's Wells, 1935, Butcher and Hall !!
- 766 bis x. *E. adenocaulon* Hausskn. x *palustre* L.
 XI. Fleet Pond, 1934, Ash and Sandwith (*loc. cit.*).
808. *Pimpinella major* (L.) Huds.
 VIII (2). Coombe, near E. Meon, 1939, G. W. S. Pemberton.
 (Voucher specimen not seen by me.—P.M.H.)
- †845. *Caucalis daucoides* L.
 VI (1) Casual at Lockerley Mill, 1934, Miss Gullick.
- *871. *Galium anglicum* Huds.
 XI. Walls, Old Basing, Mrs. Lang and Miss Webster in *B.E.C.* 1935 *Rep.*, 31 (1936). New to Hants.
888. *Valerianella carinata* Loisel.
 XI. Hazeley Heath, 1937, Watts.
- † — *Galinsoga parviflora* Cav.
 I. Common weed in Messrs. Watts' nurseries, Redhill, Bournemouth, 1936, N. D. Simpson.
 XI. Waste ground, Fleet, 1934, Watts.
- † — *Xanthium spinosum* L.
 VII (2). Waste ground, Southampton Docks, 1937, A. J. Ingram, Comm. Lousley.
 VIII (3). S. Hayling, introduced with shoddy, 1938, Staley !
- †959. *Senecio viscosus* L.
 VII (2). Railway embankment between four and five miles south of Winchester, increasing, 1938, the late Miss F. C. Bromet !
1008. *Arnoseris minima* (L.) Schw. and Koerte.
 XI. Yateley, 1938, J. B. L. Stilwell.
- 1069b. *Hieracium lepidoides* K. Johans. var. *sublepidoides* Zahn, det. H. W. Pugsley.
 X. Bank of lane, Selborne, 1937, Hall and Wilmott !!
1216. *H. trichocaulon* Dahlst., det. H. W. P. as *H. rigidum* var. *trichocaulon*.
 X. Near Frensham, 1934, Hall !!
1221. *H. scabrescens* Dahlst., det. H.W.P. as *H. rigidum* var. *scabrescens*.
 VIII (3). S. Boarhunt, 1934, Hall !!
1268. *Hypochoeris glabra* L.
 XI. Sandy field at east end of Fleet Pond, 1938, Watts.
- 1310 var. *Oxycoccus quadripetalus* Gilib. var. *maculatus* Lousley.
 X. Oakhanger Bog, 1936, Lousley !
 This new variety of the Cranberry, distinguished by the berries being uniformly covered with brownish-red speckles was described from Oakhanger specimens by Lousley in *Journ. Bot.*, 74, pp. 198-200 (1936).

- †1310 bis. *O. macrocarpus* Pursh (an American species).
III (1). Naturalized near Lyndhurst, 1927, R. Findlay in *B.E.C.*
1936 *Rep.*, 266 (1937).
- †1325. *Dabeocia cantabrica* K. Koch.
VI (2). Appeared spontaneously by footpath outside Ampfield
Church, 1938, H. T. White.
1331. *Monotropa Hypopitys* L.
VI (2). Ampfield Wood, 1936, Mrs. A. White.
- 1350b. *Lysimachia vulgaris* L. var. *Klinggraeffii* Abromeit.
III (2). Margin of Sowley Pond with typical form, 1937, Lady
Davy and Lousley.
- †1351. *L. punctata* L.
XI. Roadside near Fleet, 1938, Watts.
- 1357 var. *Anagallis arvensis* L. var. *verticillata* Diard.
III (1). Near Brockenhurst, 1936, Miss G. Young in *B.E.C.*
1936 *Rep.*, 267 (1937).
1360. *Centunculus minimus* L.
XI. East end of Fleet Pond, 1938, Watts.
- 1372b. *Centaureum littorale* (Turner) Gilmour var. *occidentale* (Wheld.
and Salm.) Gilmour.
VIII (3). Sinah Common, Hayling, one plant only ("near this
var."—Gilmour), 1936, Lousley.
- 1384b. *Gentiana anglica* Pugs. [= *G. lingulata* Ag. var. *praecox* Towns.]
VII (2). Cheesefoot Head in small quantity, 1934, Pugsley and
Hall !!
1404. *Myosotis caespitosa*, K. F. Schultz.
XI. Fleet Pond, 1934, Hall !!
1408. *M. sylvatica* Hoffm.
VI (1). Woodland near Vernham's Dean and at Hampshire Gate,
near Andover, 1934, Hall !!: undoubtedly native in
the first of these localities but status doubtful in the
second, where some plants have white flowers and
others pale pink.
- †1427. *Datura Stramonium* L.
VII (2). Clearing in wood, West End, 1938, Mrs. R. C. Ashby.
- † — *Verbascum phlomoides* L.
XI. Hazeley Heath, 1938, Watts.
1453. *Limosella aquatica* L.
II. Dried mud of ponds on Breamore Common, in great quantity,
1934, Miss Gullick !!
(Breamore Common appears to be same locality as
that frequently cited by Townsend as "Blashford.")
- † — *Veronica filiformis* Smith.
X. Garden outcast, Kingsley, 1935, Hall, N. D. Simpson and
Wallace !!: this New Zealand species has been
cultivated in many gardens in recent years.
Euphrasia L. Determinations are by H. W. Pugsley.
1482. *Euphrasia confusa* Pugs. forma *albida* Pugs.
III (1). Roadside near Holmsley Station, 1938, Hall and
Wilmott !!
1484. *E. occidentalis* Wettst. var. *calvescens* Pugs.
VIII (3). Sinah, S. Hayling ("probably this"—H.W.P.), 1936,
Hall !!
- *E. anglica* Pugs.
III (2). Grassy roadside, Matley Passage, 1934, Hall !!
- *E. Pseudo-Kernerii* Pugs.
VII (1). Edge of Cheriton Wood, near Bramdean, 1934, Hall !!

- 1511 (a) e. *Melampyrum pratense* L. var. *ericetorum* D. Oliver.
III (1). Highland Water, 1936, Hall !!: determined by C. E. Britton.
- 1511 (b) d. *M. pratense* L. var. *vulgatum* (Pers.) Beck sub-var. *laurifolium* Beauv.
III (1). Milton—Hordle road, 1935, N. D. Simpson in *B.E.C. 1935 Rep.*, 36 (1936): det. C.E.B.
- [1516. *Orobanche rubra* Smith.
VII (2). Crabwood, Winchester, 1934, H. T. Baker, det. W. H. Pearsall in *B.E.C. 1934 Rep.*, 835 (1935), as a new record for v.-c. 11. This identification is not accepted in the absence of a voucher specimen and the record is therefore excluded.]
1527. *Utricularia neglecta* Lehm. and
1528. *U. minor* L.
XI. Stream on east side of Fleet Pond, 1938, Watts.
1535. *Pinguicula lusitanica* L.
XI. West side of Laffan's Plain, Aldershot, 1935, Watts !!
First recorded from here by Mrs. Gibson in *B.E.C. 1919 Rep.*, 671 (1920), the first record for v.-c. 12. This is the only known locality in N. Hants and is of particular interest in that it is the most easterly recorded British station for the species: prior to the discovery of this station, Purbrook Common (Div. VIII (3)) held that position.
- Mentha* L. Determinations are by A. L. Still.
- †1540. *Mentha spicata* Huds.
VII (1). Derelict cottage garden, near Bramdean, 1934, Watts !!
- 1543 var. *M. aquatica* L. var. *austriaca* (Jacq.) Briq.
III (2). Hatchett's Pond, 1937, Lady Davy and Chapple.
- 1543-x. *M. verticillata* L. var. *adulterina* Briq.
XI. Rye Green, Odiham, 1936, still in *B.E.C. 1936 Rep.*, 274 (1937).
- 1543-x. *M. verticillata* L. var. *rivalis* Briq.
III (2). Buckler's Hard 1937, Lady Davy and Chapple.
1544. *M. rubra* Smith.
XI. Greywell, 1934, Watts.
- 1544b. *M. rubra* Smith var. *ravipila* Briq.
XI. Near Crookham, 1934, Watts.
- *†1545. *M. gentilis* L.
VII (1). Derelict cottage garden, near Bramdean 1934, Watts !!:
first record for v.-c. 12, see *B.E.C 1934 Rep.* (1935).
- 1548c. *M. Pulegium* L. var. *erecta* Martyn.
III (1). Forest View, near Lyndhurst, 1937, Lady Davy and Chapple.
- †1562. *Salvia pratensis* L.
VII (2). Millbrook, 1936, S. A. Warner in *B.E.C 1936 Rep.*, 274 (1937).
1564. *Nepeta Cataria* L.
II. Still flourishing in the station recorded in 1879 by Townsend, 1939, Mrs. R. C. Ashby
- *†1569. *Prunella laciniata* L.
II (northern portion). Old camp site near Shipton Bellinger, together with the hybrid x *P. vulgaris* L., 1937, J. D. Grose, Hall and Wallace !!: first record for v.-c. 12, see *B.E.C 1937 Rep.* (1937).
1570. *Melittis Melissophyllum* L.
II. Several patches in lane near Breamore Wood, 1939, Mrs. R. C. Ashby.

1587. *Lamium hybridum* Vill.
XI. Winchfield, 1934, Watts.
1601. *Aruga Chamaepitys* Schreb.
VII (1). Between Alresford and Bramdean, 1934 Watts.
1632. *Chenopodium rubrum* L.
II. Breamore Common, 1934, Miss Gullick and Hall !!
- †1634. *C. glaucum* L.
XI. Manure heaps, Laffan's Plain, Aldershot, 1934 Wallace, Lousley and Hall !!
- 1670 x. *Polygonum Lapathifolium* L. x *Persicaria* L.
IX. On mud dredged from Petersfield Heath Pond, 1935, Wallace and Hall !! det. C. E. Britton.
- 1671 var. *P. nodosum* Pers. var. *erectum* Rouy.
II. Breamore Common, 1934, Wallace and Hall !! det. C.E.B.
IX. On mud dredged from Petersfield Heath Pond, 1935, Wallace and Hall !!, det. C. E. B.
- † — *P. sachalinense* Schmidt.
III (1). Milford-on-Sea, 1935, N. D. Simpson.
1684. *Rumex pulcher* L. sub-sp. *eu-pulcher* Rech. fil.
IX. The Spain, Petersfield, 1939, Wallace.
- †1713. *Euphorbia virgata* Waldst. and Kit.
VI (1). Railway bank, Fullerton Junction, 1938, Mrs. Foggitt, det. A. J. Wilmott as forma *esulifolia* Thell.
VII (2). Near Owslebury, 1934, Hall and Pugsley !!: first recorded in *B.E.C. 1934 Rep.*, 840 (1935), erroneously as *E. Esula* L.
- 1727 var. *Ulmus stricta* Lindl. var. *Goodyeri* Melville.
II and III (1). Several localities between Pennington in the east and Sopley in the west, 1937, R. Melville in *Journ. Bot.*, 76, pp. 185-192 (1938).
This new variety of the Cornish Elm differs from the typical form principally in the habit since it forms a broad crown with ascending branches. The variety was described from a tree at Pennington and has only as yet been reported from this part of the Hampshire coastal belt. For a full account see Melville, *loc. cit.*
- †1734 bis. *Myrica carolinensis* Mill.
III (1). Near Holmsley, 1936, Lady Davy, N. D. Simpson and Hall !! but known to Simpson in this locality some years before 1935. This is a native of N. America which is known to have been grown in gardens in this country since 1699 and is presumably bird-sown.
XI. Marshy wood between Fleet and Crookham, 1937, Watts.
1775. *Ceratophyllum demersum* L.
III (2). Sowley Pond, 1936, N. D. Simpson.
1788. *Spiranthes aestivalis* L.
This species still maintains a precarious existence in two localities. It is quite certain that nearly all the flowering-spikes produced are gathered every year, and this practice cannot be too severely condemned. The species is of no critical interest, there are many specimens available for study in all our public herbaria, and it is of real importance that the species should be given every possible chance to hold its own.
Mrs. Ashby informs me that in 1936 she saw eight flowering plants in the "old" locality, but that all had been taken when she made a second visit two days later. In 1939 at the end of July I found three plants in bud in the same locality, but could not find any three weeks later. In August 1939 I found only five flowering spikes, where ten years earlier I had seen over thirty.

1795. *Epipactis leptochila* (Godf.) Godf.
X. Colemore, 1939, Miss Bradfield and Miss Newcombe !!
- 1795c. *E. vectensis* (T. and T. A. Stephenson) Brooke and Rose.
(*E. leptochila* (Godf.) Godf. var. *vectensis* T. and T. A. Stephenson)
VII (2). The Longwood colony, never very robust, has disappeared
at least temporarily: in 1939 the site was overrun
and scratched up by poultry, Hall.
1798. *E. purpurata* Smith.
VI (2). Ampfield Wood, 1936, Mrs. A. White.
1809. *Orchis latifolia* L. sec. Pugs. (*O. incarnata* auct. non L.).
VIII (3). Chark Common, 1934, Hall !!
- 1809c. *O. latifolia* L. sec. Pugs. var. *pulchella* (Druce) Pugs.
XI. Western edge of Laffan's Plain, Aldershot, 1938, Watts.
- 1809 x. *O. latifolia* L. sec. Pugs. x *maculata* L. sec. Druce.
VIII (2). Marshy meadow near Soberton, 1938, Hall and E. Milne-
Redhead !!
- 1821b. *Gymnadenia conopsea* (L.) R. Br. var. *densiflora* (Wahl.) Lindl.
X. Canford, 1938, Wallace and Hall !!
XI. Greywell, 1936, Wallace and Hall !!
- †1836. *Sisyrinchium angustifolium* Mill.
III (1). Roadside, Brockenhurst, 1939, H. Symes comm. W. A.
Payn.
VIII (1). Several strong clumps in a derelict arable field, Little
Park Farm, Swanwick, 1934, Hall !!
- †1874. *Ornithogalum umbellatum* L.
II. Martin, 1937, H. J. Goddard.
1880. *Gagea lutea* (L.) Ker-Gawler.
VI (2). In 1935 Miss Gullick reported to me that she had found
this species in a wood near Moot Lane, Downton,
and that it occurred on both sides of the Hants—Wilts
boundary, which runs through the wood. Reference
to the O.S. 1 : 2500 map, however, which I took with
me when I visited the locality, showed that the County
boundary runs along the foot of a high bank and that
all the *Gagea* seen was on the Wilts side of the bound-
ary and none on the bank in Hants.
On a subsequent visit in April 1940 I found one
flowering plant on the Hampshire side of the
boundary.
Prior to this the only record for v.-c. 11 is that from
Beaulieu in Rayner's *Supplement*, p. 108. I do not
know the whereabouts of this locality and do not
know that the species has been re-found there since
the first discovery in 1908. Re-discovery is very
desirable.
1882. *Cochicum autumnale* L.
VI (1). Woodland near Vernham's Dean, 1934, Hall !!
1909. *Luzula Forsteri* (Smith) DC.
VIII (2). Edge of woodland, Mislingford, 1938, Hall !!
XI. Near Fleet, 1937, Watts.
- 1909 x. x *L. Borreri* (Bromf.).
VIII (2). Roadside verge, Mislingford, 1938, Hall !!
Potamogeton L. Much interest has been aroused by the critical
investigations into the British species of this genus made by
Messrs. J. E. Dandy and G. Taylor during the years 1937-39.
The results of their researches are still appearing in a series
of papers published in the *Journal of Botany*.

As a result of examination of Linnaean types, several changes in nomenclature have had to be made. So far as possible these authors have examined and identified all the British material of this genus in the principal public and private herbaria in Britain and this in addition to their own researches in the field has shown not only how incomplete was our knowledge of the distribution of the various species, but also how much there is still to be learned.

The following records were all determined by Dandy and Taylor :—

- 1953 x. *P. lucens* L. x *natans* L. (= x *P. fluitans* Roth).
 I. In a tributary of the River Stour (*i.e.*, Moors River) near Hurn Station, 1879, Townsend as *P. lucens* L. Moors River at Palmer's Ford, 1939, Hall !!
 Although the parents occur together very frequently, this hybrid is of the greatest rarity and previous to the identification of my gatherings in August 1939 from the Moors River in S. Hants and Dorset it was only known from two vice-counties. This record was published by Dandy and Taylor, *loc. cit.*, 77, 255 (Sept. 1939), and shortly afterwards, *loc. cit.*, 77, 342 (Dec. 1939), the same authors reported that an earlier gathering had come to light, specimens of Townsend's collected sixty years earlier in the stream having been discovered in the herbarium of the South London Botanical Institute under the name *P. lucens* "approaching var. *acuminatus*."
1954. x *P. decipiens* Nolte.
 II. R. Avon, near Sopley, 1934, Hall !!
- **1962: *P. acutifolius* Link.
 VI (2). Mottisfont, 1898, R. Meinertzhagen ex Dandy and Taylor, *loc. cit.*, 77, 257 (1939). New to v.-c. 11 and to the County.
- *1963. *P. obtusifolius* Mert. and Koch.
 VI (2). Mottisfont, undated, R. Meinertzhagen ex Dandy and Taylor, *loc. cit.*, 77, 257 (1939). New to v.-c. 11.
1966. *P. Berchtoldii* Fieb. (= *P. pusillus* L. non Koch).
 VIII (1). Pond in grounds of Botleigh Grange Hotel, 1934, Hall !!
 XI. Canal, Odiham, 1934, Hall !!
 Dandy and Taylor (*loc. cit.*, 78, pp. 55-56 (March 1940)), review the whole of the British material of this species seen by them and give a list of localities in each vice-county, which includes records from Townsend's Divisions I, II, III (1), IV (1) (3) and (4), VI (1) and (2), VIII (1) and XI.
- *1967. *P. pusillus* L. (= *P. panormitanus* Biv.-Bern.).
 Dandy and Taylor (*loc. cit.*, 78, pp. 5 and 6 (Jan. 1940)), in an enumeration of the British localities include the following in Hants and Isle of Wight not previously recorded :—
 II. Muddeford, Christchurch, 1934, J. E. Lousley : first record for v.-c. 11.
 IV (3). Medina valley near Cowes, 1921, J. Groves and J. W. Long.
 V (2). Brading Marshes, 1835, W. A. Bromfield (Herb. Kew) (first record for v.-c. 10) and 1915, E. W. Hunnybun. Brading Harbour, Bembridge, 1881, C. Bailey.

1969. *P. trichoides* Cham. and Schlecht.
The record from Fleet Pond in my paper in Vol. XII, Part 3, p. 297 (1934) must be deleted and the species excluded from the Flora of the County at the present time. Pearsall's identification was based on scrappy material which he did not return to me and I have been unable to rediscover the species in Fleet Pond.
- *1976. *Zannichellia pedicellata* Fries var. *reptans* (Wallr.) Fries.
XI. Fleet Pond, a very slender form creeping on the sandy bottom in shallow water, 1934, Hall !! det. W. H. Pearsall. This species usually inhabits brackish waters: first record for v.-c. 12, see *B.E.C. 1934 Rep.* (1935).
1979. *Zostera marina* L.
VIII (3). Very sparingly in Ports Creek, Cosham, 1934, J. Staley !: more plentiful in Paulsgrove Lake, off Portchester, 1934, Hall !!
- 1979c. *Z. Hornemanniana* Tutin (= *Z. marina* L. var. *angustifolia* Hornem.) and
1980. *Z. nana* Roth.
VIII (3). Sinah, S. Hayling, 1934, Hall !!
1985. *Cyperus fuscus* L.
II. Very abundant on dried mud of ponds on Breamore Common, 1934, Miss Gullick !! Drought in early summer is favourable to the appearance of this species which has not been reported from the County since 1893. W. R. Linton's locality "near Ringwood" was Blashford, which was probably the name then given to Breamore Common.
1991. *Scirpus pauciflorus* Lightf.
X. Conford, Liphook, 1937, Wallace !!
2009. *Eriophorum latifolium* Hoppe.
X. Conford, Liphook, 1937, Wallace !!
2010. *E. gracile* Roth.
XI. Greywell, 1936, Wallace !! A most valuable re-discovery of this rare species, which, as far as I am aware, has not been seen in this locality since its original discovery by the late Miss C. E. Palmer some 40 years before.
- *2015. *Cladium Mariscus* R. Br.
XI. Greywell, 1936, Wallace !! First record for v.-c. 12, see *B.E.C. 1936 Rep.*, 284 (1937): another good find by Mr. Wallace. It is most remarkable that this should have been overlooked by Miss Palmer since it grows within a few yards of the *Eriophorum gracile* which she found and is far more conspicuous. The habitat of these two species is probably only accessible in very dry seasons.
2017. *Carex dioica* L.
X. Near Weaver's Down, Liphook, 1937, Wallace !!
XI. Mapledurwell, 1939, Wallace !
Two good records for a species which is extremely rare in Hants. The last previous record from Mapledurwell is dated 1860 and the other record is the first from District X.
2019. *C. pulicaris* L.
X. Near Weaver's Down, Liphook, 1937, Wallace !! New to this Div.
2033. *C. contigua* Hoppe.
XI. Greywell, 1937, Hall and Wallace !!

2034. *C. Pairaei* F. Schultz.
X. Roadside near Liphook, 1937, Hall and Wallace !!
- [2038. *C. elongata* L.
This species was discovered in Dorsetshire in 1938 close to the Hampshire boundary near St. Leonard's Bridge in Div. I. Mr. Wallace and I have so far failed to find it over the Hampshire border, neither have we been able to find it in its only recorded Hampshire locality in Div. XI.]
2040. *C. Curta* Good.
X. Edge of pond, near Liphook, 1934, G. M. Ash in *B.E.C.* 1934 *Rep.*, 847 (1935).
2046. *C. gracilis* Curt.
XI. Eversley, 1937, Wallace and Hall !!
2072. *C. strigosa* Huds.
IX. Between Greatham and Empshott on the gault clay, 1937, Wallace !!
XI. Heather Row, Hook, 1938, Wallace !: new to this Div.
2074. *C. sylvatica* Huds.
XI. Heather Row, Hook, 1938, Wallace !
2075. *C. laevigata* Smith.
VI (2). Awbridge, 1934, Miss Gullick.
2077. *C. distans* L.
VIII (3). Brown-down, 1934, Hall !!
XI. Greywell, 1936, Lousley, Wallace and Hall !!. Andwell, 1939, Wallace !
2079. *C. Hostiana* DC.
VIII (2). Watermeadow near Soberton, 1934, Hall and Pugsley !!
X. Conford, near Liphook, 1937, Wallace !!: new to Div.
XI. Hazeley Heath, 1937, Wallace.
- 2079 x. *C. Hostiana* DC. x *lepidocarpa* Tausch.
XI. Greywell, 1937, Hall !! (det. E. Nelmes).
- 2081 x. *C. flava* L. x *Hostiana* DC.
X. Conford, near Liphook, 1937, Wallace !
2082. *C. lepidocarpa* Tausch.
VIII (2). Marshy meadow near Soberton, 1938, Hall and Milne-Redhead !!
2086. *C. Pseudo-cyperus* L.
X. Passfield, 1938, Wallace !: new to this Div.
- †2094. *Echinochloa Crus-galli* (L.) Beauv.
VII (1). Roadside ballast, Ovington, 1934, R. W. Butcher in *B.E.C.* 1934 *Rep.*, 848 (1935).
- †2094 var. *E. Crus-galli* (L.) Beauv. var. *aristata* S. F. Gray.
VIII (2) or (3). Carrot-field, Heytesbury Farm, Fareham, 1938, Hall !! det. C. E. Hubbard.
- †2095. *Digitaria sanguinalis* (L.) Scop.
VI (2). Garden weed, Ampfield, 1936, Mrs. A. White.
- †2096. *Setaria viridis* Beauv.
VII (1). Roadside ballast, Ovington, 1934, R. W. Butcher.
- 2112 x. x *Alopecurus hybridus* Wimm.
XI. Marshy field south of R. Blackwater between Eversley Cross and Finchampstead, 1937, A. H. G. Alston and N. Y. Sandwith.
2113. *A. bulbosus* Gouan.
VIII (3). Salt-marsh off West Lane, Hayling, 1935, J. Staley !!
2130. *Calamagrostis epigejos* (L.) Roth.
VIII (3). Margin of arable field near S. Hayling railway station, 1939, Hall !!

- †2172. *Briza minor* L.
VI (2). Marchwood Manor, 1937, H. J. Goddard : first recorded here in 1836.
2175. *Poa bulbosa* L.
IV (1). On brink of cliff between Freshwater and the Needles, 1939, J. P. M. Brenan.
- †2193. *Puccinellia distans* (L.) Parl.
XI. Manure heaps, Laffan's Plain, Aldershot, 1936, Lousley, Wallace and Hall !! New to v.-c. 12 : normally a littoral species but occurs inland as an adventive.
2194. *P. fasciculata* Bickn. (= *Glyceria Borreri* Bab.).
III (1). Pennington Marshes, 1939, Mrs. A. White !
- **2208. *Festuca heterophylla* Lam.
III (1). In a spinney near the road between Lyndhurst and Brockenhurst, 1939, S. A. Taylor, det. W. O. Howarth. New to the County but status doubtful, possibly adventive.
- †2222 bis. *Bromus Gussonei* Parl.
VIII (3). Margin of newly widened road between Fareham and Portchester, 1935, Hall !!
2225. *B. racemosus* L.
VIII (2). Watermeadow near Soberton, 1934, Hall and Pugsley !!
- *2228 bis. *B. lepidus* O. R. Holmberg (*B. britannicus* I. A. Williams) forma *lasiolepis* O. R. Holmberg.
VI (2). Marchwood, 1935, H. J. Goddard. First record of species for v.-c. 11, see *B.E.C. 1935 Rep.*, 48 (1936).
2245. *Pholurus incurvus* (L.) Schinz and Thell.
* Under the name *Lepturus incurvatus* Trin. Rayner in *Supplement*, p. 125, refers to specimens from Freshwater Gate in Herb. Druce and to Groves' opinion that "this is probably only a curly state of *L. filiformis*, which is abundant here." *P. incurvus*, however, is a good species, which may be especially distinguished from *P. filiformis* by its small anthers, which are only 0.5—1 mm. in length compared with 2—3 mm. in the latter.
The occurrences and status in Britain of this species are discussed by C. E. Hubbard in *Proc. Linn. Soc. Lond.*, 1935-6, Pt. 2, pp. 111-3, where the following Isle of Wight records are cited :—
IV (1). Freshwater Gate, c. 1830 (Tyacke in Herb. Druce); Freshwater, 1919 (Britten and Groves).
V (2). Near St. Catherine's Point, 1932 (Sprague and Hubbard).
There is good reason to suppose that the species is indigenous in these localities.
2286. *Dryopteris Thelypteris* (L.) A. Gray.
X. Conford, near Liphook, 1939, G. M. Ash, comm. Wallace : new to this Div.
- 2307 x. *x Equisetum litorale* Kuhl.
XI. Between N. Warnborough and Odiham, 1937, A. H. G. Alston and N. Y. Sandwith.
- 2309b. *E. sylvaticum* L. var. *capillare* Hoffm.
VI (2). Between Minstead and Minstead Newton, 1936, Lady Davy.
- 2344b. *Chara vulgaris* L. var. *longibracteata* Kuetz.
XI. Canal near Odiham, 1934, Hall !!
2358. *Nitella translucens* Ag.
VIII (1). Pond in grounds of Botleigh Grange Hotel 1934, Hall !!