

PROCEEDINGS
OF THE
Liverpool Botanical Society.



Seventh—Tenth Sessions.

FOR THE YEARS 1912—1915 (inclusive).

LIVERPOOL :
PRINTED BY C. TINLING & CO., LTD., 53, VICTORIA STREET.

November, 1917.



A. A. DALLMAN, F.C.S.

President, 1914-1915.

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Headquarters :
COMMON HALL, HACKINS HEY.



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SATURDAY, 8th MARCH.

The seventh Annual Soirée was held in the Church Hall, Hope Street, at 7-0 p.m. The President, Mr. W. T. Haydon, F.L.S., and Mrs. Haydon received members and friends. A number of interesting exhibits were inspected, and the President made a few remarks, which were cordially appreciated. A number of tasteful musical items were an enjoyable feature, and a variety of competitions afforded an opportunity for guests with botanical knowledge and facility in applying it. A pleasant evening terminated with further musical renderings by favourite artistes.

WEDNESDAY, 16th APRIL.

At the Common Hall, the President in the chair.

A photographic section was inaugurated with the intention of forming a collection of photographs of typical plants, and of the various plant associations. Mr. C. Waterfall, F.L.S., exhibited, on behalf of the Rev. W. Wright Mason, B.A., specimens of a Vetch obtained at Jacobstow, near Okehampton, Devonshire, in 1912. The flowers were white with a slight tinge of lilac. The Rev. E. F. Linton had identified the plant as *Vicia angustifolia*, var.; *roseiflora*, Rouy and Fouc.; Mr. A. A. Dallman showed examples of *Lathyrus Aphaca*, and explained that the apparent leaves were really enlarged stipules functioning as leaves, the true leaves being converted into tendrils. Dr. Ellis announced the discovery of a new British fungus on the leaves of *Euonymus japonica*. He showed living specimens on the plant from Sefton Park, and coloured drawings from Nature. It was probably to be referred to *Septoria Euonymi*, Rub.; but he had not quite completed the identification. It was accompanied by *Cytospora foliicola*, Lev.; of which drawings were also shown.

Messrs. C. B. and W. G. Travis contributed a paper "On Plant-remains in Post-glacial Gravels at Seaforth," in which they described the discovery of sundry mosses, hepatics, and spermatophytes during the excavation for the new dock at Seaforth. Only one of the species, *Zygodon viridissimus* was unknown in the existing flora of the district.

Mr. J. A. WHELDON, F.L.S., read a paper on "Some Extinct British Plants," giving the complete history, so far as obtainable, of about half-a-dozen species which were believed to have become extinct in comparatively recent times.

Both papers led to instructive discussions.

THURSDAY, 29th MAY.

Mr. W. G. Travis, Vice-President, in the chair.

Miss A. LEE, L.I.A., showed specimens of *Cochlearia anglica* and *Anthyllis Vulneraria*, from Wallasey. Mr. A. A. Dallman, F.C.S., showed specimens of *Fritillaria Meleagris*, gathered near the Leete. The same species was stated by Mr. Dallman to have been recently found at Barnton, Cheshire.

Dr. J. W. ELLIS showed drawings of two rare fungi met with at Dolgelly, *Mitrella paludosa*, on decaying Sphagnum, and *Phoma occulta*, probably the conidial condition of a Pyrenomycete. This species of *Phoma* has not previously been recorded for Britain. The specimens occurred on the scales of spruce cones in Nannau Woods.

GENERAL MEETINGS, 1913.

FRIDAY, 10th JANUARY.

ANNUAL MEETING AT THE COMMON HALL,

Mr. W. G. TRAVIS presiding.

The reports of the Council, the South Lancashire Flora Sub-Committee, the Nature Study Sub-Committee, and the Librarian, were approved, as was also the Treasurer's financial statement for the year 1912.

The election of the Council and Office-bearers resulted as follows:

President:—Mr. W. T. Haydon, F.L.S.

Vice-Presidents:—Mr. A. A. Dallman, F.C.S.

Mr. W. G. Travis.

Hon. Treasurer:—Mr. G. Loftus.

Hon. Secretaries:—Miss M. B. Barr; Mr. A. A. Dallman, F.C.S.

Council:—Mr. W. Chesher, M.A., Miss L. R. Cooke, Miss A. B. Gleave, B.Sc., Dr. W. A. Lee, M.A., Mr. H. S. Marsh, Rev. W. Wright Mason, B.A., Miss N. Speakman, Mr. C. B. Travis, Mrs. Wheldon, Mr. J. A. Wheldon, F.L.S., Miss K. White, and Miss M. H. Wood.

It was decided to accept Junior members under 21 years of age at an annual subscription of 2s. 6d., but the proposal to raise the ordinary subscription was rejected. A proposed amendment to Rule 6:—That the secretaryship be divided between an honorary General Secretary and an honorary Scientific Secretary was accepted in the form that "there be two General Secretaries."

Mr. W. G. TRAVIS announced that Dr. Thellung, of Zurich, had named an alien *Rumex*, found by Mr. J. A. Wheldon in a field near Walton Prison, as *Rumex salicifolius*, a North American species apparently not previously noted in this country.

A paper entitled "A Résumé of the Field Meetings of 1912," was given by Mr. A. A. Dallman, F.C.S., and illustrated by numerous lantern slides and dried specimens.

FRIDAY, 19th SEPTEMBER.

Mr. W. G. Travis in the chair.

The Chairman called attention to the new book-case presented to the Society by the President—Mr. W. T. Haydon, F.L.S., and expressed the indebtedness of the members to Mr. Haydon for his generous gift. By order of the Council a special plate had been affixed with the following inscription:—

This Bookcase
together with a number of valuable books
was given to the Liverpool Botanical Society
by Walter T. Haydon, Esq., F.L.S.,
in the period of his Presidency, June, 1913.
This tablet was inscribed by order of the Council.
Naturam . intelligere . Deum . noscere.

Mr. J. A. WHELDON showed examples of local forms of *Sonchus arvensis* and specimens of *Rhamnus catharticus* from Silverdale, with unusually downy petioles and under-sides of leaves, possibly the variety termed "*Schroteri*."

Dr. W. A. LEE mentioned that *Cotula coronopifolia* had lately been found near Bidston Station, some distance inland from the well-known Leasowe habitat.

Miss E. BRAY forwarded specimens of Sussex lichens and examples of the alien, *Malva pusilla*.

Mr. W. G. TRAVIS remarked on the occurrence of *Sisyrinchium angustifolium* on the sandhills near Hall Road.

Mr. A. A. DALLMAN showed an abnormal development of *Rubus rusticanus*, sent by Dr. E. J. Haynes Thomas from the Dee Cop. The pedicels on several bushes had developed elongated apical clusters of small lanceolate leaves and stipules, in place of flowers.

The main business of the evening was the consideration of a paper by Miss W. M. Parker, B.Sc., on "Mutual Relationships among Plants and Animals," and a contribution by Mr. H. J. Wheldon, on "The Uses of Fungi to Man and Nature." Both studies were well received and cordially appreciated.

WEDNESDAY, 22nd OCTOBER.

Mr. A. A. Dallman, F.C.S., Vice-President, in the chair.

Dr. J. W. ELLIS, F.E.S., exhibited *Lepidium perfoliatum*, *Rumex cuneifolius* (new to Britain), and *Galinsoga parviflora*, all from Wallasey, and *Bunius Erucago* from Hall Road. He also showed beautifully executed drawings, with microscopic details, of the following fungi:—*Septoria Taraxaci*, sp. nov., from Thurstaston, *Gloeosporium Lonicerae*, sp. nov. (found by Miss O'Loughlin at Keswick), *Ascochyta Sparganii*, sp. nov., from Haslemere, *Phyllosticta Opuli*, Sacc. (new to Britain), from Higher Bebington, *Clitopilus vilis*, Fr., from Leasowe, and *Tubaria stagnina*, Fr., from sphagnum on Thurstaston Common.

Mr. J. A. WHELDON, F.L.S., exhibited *Galium tricornes*, from Ford, and *Rumex pulcher*, *Agrostis alba*, var., *majus*, and *Poa palustris*, from Walton. He also remarked on the work done by Miss M. C. Knowles, of Dublin, on the ecology of the lichens of Howth, showing the following new lichens discovered by her:—*Verrucaria Lorrain-Smithii*, Knowles, *V. striatula* f. *continua*, Knowles, and *Acarospora benedarensis*, Knowles.

Miss BRAY forwarded from Sussex *Trifolium patens*, only once previously recorded as a British plant.

Miss F. M. THOMAS contributed flowering examples of *Mercurialis annua*, originally brought from Kent.

Mr. W. G. TRAVIS showed fresh growing plants of *Scirpus Savii*, var. *monostachys* from the Lancashire coast dunes.

Papers were then read on "The forms of *Oenothera* and *Erythraea* which occur on the Lancashire coast" and "Recent additions to the South Lancashire flora," by Mr. J. A. Wheldon and Mr. W. G. Travis, respectively. Both papers were illustrated by specimens and drawings, and aroused much interest.

WEDNESDAY, 19th NOVEMBER.

Mr. W. G. Travis, Vice-President, in the chair.

Miss BRAY forwarded from Hailsham, examples of a late-fruited variety of the Raspberry, together with seedling plants of *Ranunculus hirsutus*, and *R. lutarius*.

Miss L. R. COOKE showed Bryophyta and Fungi from the Wallasey sandhills.

Dr. LEE reported that *Veronica longifolia* still persisted on the Wallasey golf-links, and there was reason to believe that the species had been introduced by a "squatter" about half a century before.

Mr. E. T. MILN then gave a lecture, with lantern illustrations, on the "Cereal Grains of Great Britain," special attention being given to the economic and agricultural aspects. The systematic side was fully dealt with and a number of morphological and physiological details were also discussed. One of the most noteworthy facts mentioned was the prevalence of cleistogamy in many grasses, notwithstanding text-book statements. In the subsequent discussion, Mr. Wheldon expressed surprise that wet seasons should exert an adverse influence on fertilisation, in view of the cleistogamous nature of the flowers. Mr. Dallman remarked on the paradoxical presence of anemophilous features and wondered if such cereals had been wind-pollinated at some period of their history. If so, it would be of interest to account for this radical change.

A hearty vote of thanks was passed to Mr. Miln, on the proposition of Mr. W. G. Travis, seconded by Mr. J. A. Wheldon.

A RESUME OF THE FIELD MEETINGS OF 1913.

(Summary of a paper by Mr. A. A. Dallman, F.C.S.)

The inaugural field meeting was arranged for May 3rd, at the Leete, but owing to heavy rain, the majority of members decided to forego the excursion. A small party, however, proceeded, and after numerous discomforts, reached the "Loggerheads." Down the Leete, *Lathraea Squamaria* was abundant and flowering profusely.

Paris quadrifolia also occurred, some variation in the number of leaf-like bracts being noted. Other species observed included *Lamium Galeobdolon*, *Saxifraga tridactylites* and, with the latter on limestone, was *Arabis hirsuta*. Lichens and Bryophyta were unusually conspicuous on the rocks and walls. At Cilcen we observed *Myrrhis odorata* and the White Dead Nettle. Time would not permit of visiting the station where *Fritillaria Meleagris* had been recently discovered in some quantity by two members, a find of particular interest and an addition to the flora of Wales. It is usually found in moist meadows and grows abundantly near Oxford, between Mortlake and Kew. The pendulous solitary flowers resemble tulips, to which the Fritillary is nearly related, but the colour is unique amongst indigenous plants. The curious marking with dull purple is recognised in the specific name "*Meleagris*"—a guinea hen. Gerard terms it the "Turkie or Ginny-hen floure." The name "Fritillus" is the classical term for a dice-box, and, according to some, refers to the resemblance between the chequered sepals and petals, and a chessboard. Occasionally albinos occur, but these are rare. The Snake's Head is not known to set seed in North Wales.

Hale Point was visited on May 24th, by way of Hale, which claims celebrity through its ancient charter. The body of the church dates from the 18th century, but the tower is of greater antiquity. Here too is a beautiful example of an ancient lych-gate.

The littoral flora proved uninteresting, and few Phanerogamia were in bloom. A number of arenicolous species were seen, such as *Carex arenaria*, *Plantago Coronopus*, *Honkenya peploides*, and *Carex hirta*. There was no sign of *Allium Scorodoprasum* (Sand Garlic) which was found at Speke in 1850, as recorded in Dickinson's Flora of Liverpool. Dr. J. W. Ellis informs me that he has seen it still growing in this old station within the last three years. Continuing up the river bank *Cochlearia anglica*, *Glaux maritima*, and *Sclerochloa maritima* were noted. Several shrubs of *Rhamnus Frangula* were seen in a hedge, relics, probably, of the old-time mossland.

The third field meeting was held at Helsby and Alvanley, on June 14th. On arrival at Helsby the members were met by Mr. J. N. Harnaman, of Alvanley, whose extensive knowledge of the local flora was placed at the party's disposal. *Thalictrum flavum* was noted in the ditches, and the neighbouring ground afforded a habitat for alien plants, including *Lepidium Draba*, *Sisymbrium orientale*, and *S. pannonicum*. *Sison Amomum* was noted, representing the northern limit of its range on the western side of Britain. *Utricularia vulgaris* was seen on the way to Abbot's Clough and, in Moor's Wood, *Geum rivale* was observed in company with *Lysimachia vulgaris*. Several examples of *Botrychium Lunaria* were also seen. This species resembles the Adder's Tongue and Royal Fern in having the sori borne on a sporangiophore. *Teesdalia nudicaulis* was also met with, and conjured up associations of an old Yorkshire botanist—Robert Teesdale—to whom it forms an apt memorial. An exhibition of children's nature-study work in the Alvanley School was the centre of much interest, as this institution, under the influence of Mr. Harnaman, led the way thirty years ago in adopting this subject. After tea, a cordial vote of thanks was passed to the Vicar—the Rev. F. S. C. Crane—and to Mr. and Mrs. Harnaman for their hospitable welcome. The xerophilous flora of Helsby Hill afforded further variety, and, amongst the species observed, were *Ornithopus perpusillus*, *Aira*

caryophyllea, *Rumex Acetosella*, *Lotus corniculatus* and *Corydalis claviculata*.

An evening meeting was arranged for June 20th, at Hall Road, under the leadership of Mr. J. A. Wheldon, F.L.S., but botanising was hindered by rain. *Sisymbrium pannonicum* was growing in quantity near the station and, amongst the plants noticed in flower, were *Sagina nodosa*, *Erigeron acris*, *Cynoglossum officinale*, *Rosa spinosissima*, *Gentiana campestris*, *Euphorbia Portlandica*, *Orchis incarnata*, *O. maculata*, and *Listera ovata*. *Elymus arenarius* was also flowering, and could readily be distinguished by its strongly glaucous and ribbed leaves. We saw no trace of the peculiar maritime variety of *Pyrola rotundifolia*.

On June 28th, Overton and Erbistock were visited, in conjunction with the Chester Society of Natural Science. The flora of the Shell Brook, which separates the counties of Flint and Shropshire, was investigated, and the west bank of the picturesque dingle. *Lithospermum officinale* was seen in some quantity along the Shropshire side. A distinct calciphilous element was noticeable, as shown by the occurrence of *Cornus sanguinea*, *Acer campestre*, *Euonymus europaeus*, and *Briza media*. Overton Church and its fine yews—one of the Seven Wonders of Wales—were visited, and, although scarcely equal to the trees at Gresford, the largest example had a circumference of 17 feet 10 inches, at a height of four feet above the ground. *Corydalis lutea* was seen naturalised near the ferry, and *Mimulus luteus*, originally introduced from Chili, was flourishing in several stations. The Yellow Balsam was still growing in the wood, and Teasel was noted in the valley below Overton Cemetery.

Woodvale and Halsall were visited on July 26th, under the leadership of the President:—Mr. W. T. Haydon, F.L.S. The Bog Myrtle was breast-high, forming a miniature forest, while *Rumex Hydrolapathum* was seen at its best. A careful search for *Osmunda regalis* was unrewarded, although formerly a common species in this locality. Country-folk bringing butter to St. Helens and Liverpool markets used to line their baskets with the fronds. Amongst the ditch vegetation were three species of Duckweed—*Lemna minor*, *L. gibba*, and *L. trisulca*. *Oenanthe Phellandrium* was plentiful, and *O. fistulosa* was also in bloom. Aquatic and sub-Aquatic species noted were *Catabrosa aquatica*, *Ranunculus Lingua*, *Hippuris vulgaris*, *Carex Pseudo-Cyperus*, *Scutellaria galericulata*, *Sparganium simplex*, *Elodea canadensis*, *Lythrum Salicaria*, *Veronica Anagallis* and *V. scutellata*. On an enclosed part of the mossland were *Molinia*, *Calluna*, *Rubus Selmeri*, and *R. pulcherrimus*. The latter bramble had broad ovate leaves of a deeper green than *R. Selmeri*. Much interest was aroused by a most unusual form of *R. Selmeri*, to which Mr. Wheldon directed attention. This was a striking instance, in which the sepals of the normal flower had reverted to ordinary leaves. So complete was the transition in some examples that the place of the sepals was taken by large ternate leaves which completely agreed with the normal foliage. A micro-fungus, seen in abundance on the Tormentil, was identified by the President as *Peronospora potentillae*, de Bary. In the lane near the station were visible *Trifolium arrense*, *T. procumbens*, *Anchusa arvensis*, *Erodium cicutarium*, and *Carex arenaria*. A large patch of *Symphytum asperrimum* was identified by Messrs. Wheldon and Travis and was an addition to our local flora. A further addition was made near Woodvale station where *Sedum album* was noted, apparently wild.

The concluding meeting of the season was held at Llyn Geirionydd and Trefriw. Passing Gwydir House, the ancient seat of the Wynne family, the party crossed into Carnarvonshire, and many charming views of the Conway Valley were obtained. The very local *Thlaspi alpestre* was found in some quantity, and *Rubus anglo-saeonicus* was noticed in the woods. *Peplis Portula* was plentiful on the margin of an artificial lake. Near Llanrhychwyn the Ivy-leaved Bell-flower was noticed in company with *Parnassia palustris*. The party continued over the rocky extremity of Mynydd Deulyn to Llyn Crafnant, and hereabouts the Bog Myrtle and three species of insectivorous plants were gathered. *Clematis Vitalba* and the form of *Cirsium arvense*, named *setosum* were found on the way to the station.
