

Edited by EDGAR D. WIGGINS

Cowpasture, Felixstowe, Suffolk IP11 9RD.



Petasites japonicus (Sieb. & Zucc.) F. Schmidt

ADMINISTRATION

HON. GEN. SEC. (General Enquiries) **Mrs Mary Briggs, M.B.E.,**
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(Please quote membership number on correspondence concerning membership or subscriptions – your membership number is on the address label of your mailings).

ACTING FIELD SEC. (Enquiries on Field Meetings) **Mr Roy Smith**
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SECRETARIES OF PERMANENT WORKING COMMITTEES:

CONSERVATION: (full committees, p 26) **Miss Lynne Farrell,**
N.C.C., Northminster House, Northminster Road, PETERBOROUGH PE1 1UA.

PUBLICATIONS: **Mr Arthur O. Chater,** Dept of Botany,
British Museum (Nat. Hist.), Cromwell Road, LONDON SW7 5BD.

MEETINGS: **Mrs Joanna Robertson,**
70 Castlegate, GRANTHAM, Lincs NG31 6SH.

RECORDS: **Mr David J. McCosh,**
13 Cottesmore Gardens, LONDON W8 5PR.

NOMINATIONS FOR COUNCIL

Nominations for vacancies on Council, in writing, signed by two members of the Society and accompanied by the written consent of the candidate to serve, if elected, should be sent to the Hon. General Secretary, White Cottage, Slinfold, Horsham, West Sussex RH13 7RG, to arrive **BEFORE FEBRUARY 1st 1985.**

Mary Briggs
Hon. Gen. Sec.

CONTRIBUTIONS INTENDED FOR

BSBI NEWS 39

should reach the Editor before

11th FEBRUARY 1985

HON. GEN. SEC'S NOTES

Field Meeting Bookings

If you plan to join a field meeting, but you are then unable to come after booking, please remember to send your cancellation to the leader. This is particularly important for those meetings where numbers have to be limited; again in 1984 some members could not be included as places had been held for those who had booked earlier but failed to come to the meeting.

WWF Plants Conservation Campaign

BSBI was represented at the meeting at RBG Kew held by WWF-International and WWF-UK in March at which HRH the Duke of Edinburgh launched the 1984 Plants Campaign. Threats to plants around the world were outlined with the message support the world's plants because after all it is the plants that support you. A breakthrough in the propagation from seed of European terrestrial orchids was announced, with the hope that this will in the near future remove the threat to these orchids of collection from their wild habitats. Details of the new propagation procedures may be published in 1985. In Britain the Plants of the Water's Edge is a theme for the plants year and in October the programme of the meeting held jointly by BSBI and FFPS discussed different aspects of Water's Edge vegetation.

Plant Galls Bulletin

Bulletin of Plant Galls No. 1 was published in Spring 1984, with No. 2 planned for November 1984, (subscription £1 for the 2 numbers). Interested members should write to: Mr F.B. Stubbs, 27 Annasgarth, Harmy, LEYBURN, N. Yorks DL8 5PJ. Bulletin No. 1 includes papers on 'Turkey Oak as a Host Plant' by Arnold Darlington. Also 'Andricus quercuscalicis – a Pause for Reflection' by P.R. Shirley who writes that he had (this spring) records from every English county except Durham and Northumberland, "which means that in just twenty years this newcomer has spread from the south coast to the Scottish border – an average of 17 miles per year". Peter Shirley would welcome records, locality details and comments from BSBI members, please send these to: Mr P.R. Shirley, 72 Dagger Lane, WEST BROMWICH B71 4BS. In general there are fewer Knopper Galls on Sussex Oaks this year than in recent past years. In March emerging wasps from these galls were seen in two West Sussex localities and BSBI members Vera and Stan Heyward were fortunate to observe one of the gall wasps chewing a way out of its pupa, throughout a day – with circular motion, leaving a round hole.

The Flora of Inner Dublin by Peter Wyse Jackson and Micheline Sheehy Skessington published recently is available from Oundle Lodge, price £4.60 (and we hope to distribute an information leaflet with this mailing). It includes an interesting bibliography of papers on city floras. It does not mention the good account of 'Wild of Wild Flowers of London W1' by BSBI member Rosalind M. Hadden, in *The London Naturalist* (Journal of LNHS) No. 57 (1978) 26-33.

A city introduction of culinary significance was exhibited by Elizabeth Conacher and Peter Macpherson at the 1978 Exhibition Meetings in Glasgow and London, when *Coriandrum sativum L.* had been found in Glasgow where Asian residents were using coriander in cooking.

Wildlife Photographer of the Year 1984

Congratulations to BSBI member Vaughan Fleming, a prizewinner in the 'Beyond the Human Eye' section of this national competition with his picture of *Physarum nutans*, a slime-mould. The prize-winning photographs will be on exhibition at the BM (Natural History) from 25 October until 4 January 1985 – so can be seen by those attending the BSBI Exhibition meeting.

Future Rediscoveries in Britain?

BSBI members who also belong to the Alpine Garden Society were particularly interested in 'The next twenty' by J. Kirby in AGS Bulletin vol 52 no. 2 172-177. In this paper referring to the discoveries of *Koenigia islandica* on Skye (1934, but reported in 1950), *Homogyne alpina* in Clova and *Diapensia lapponica* near Glen Finnan (1951), and *Artemesia norvegica* in Wester Ross (1952), Jim Kirby offers a shortlist of twenty species with descriptions in the hope that "some lynx-eyed Member may take up the Challenge" and possible find some of these in Britain.

We hope to follow this idea in *BSBI News* with a further selected list of lowland species whose distribution in continental Europe suggests possible discovery of overlooked sites in Britain and Ireland.

Congratulations

Our congratulations and good wishes to two members on recent appointments:

Prof C.D. Piggot, M.A., PhD. now Director, University Botanic Garden, Cambridge.

Mr G.W. Lucas, BSc., F.L.S., Keeper, The Herbarium, Royal Botanic Gardens, Kew.

Members attending the Exhibition Meeting at the BM on 24th November will have noted the small specimen of *Homo sapiens*, exhibited by **Joanna Robertson** whom we congratulate on producing it. (Sorry, her).

Tail-piece

Dorothy Lousley sent some profile notes on the late Miss C.M. Rob, written by Kit herself, and which include the evocative description "Began Botany in pony trap at age of 4. Taught groom how to collect suitable specimens".

Mary Briggs

BSBI MEMBERS LEADING BOTANY HOLIDAYS FOR COX & KINGS IN 1985

MALTA (Gozo)	February 28 – March 9	Mrs Mary Briggs
CRETE	March 28 – April 11	Mrs Mary Briggs
MAJORCA	April 10 – 17	Dr John Mason
PORTUGAL	April 18 – May 2	Mrs Mary Briggs
AUSTRIA (Carinthia)	June 12 – 26	Mrs Mary Briggs
SWITZERLAND (Wengen)	July 2 – 16	Mrs Mary Briggs
SWITZERLAND (Kandersteg)	July 15 – 29	Sir Charles Willink
GREECE (Mt Olympus)	June 22 – July 5 (t.b.c.)	Dr John Richards
AUSTRIA (Oberurgl)	July 22 – August 5	Dr John Mason

BSBI COUNTY RECORDERS

Supplement 4 to March 1982 List

* New Recorder † Change of Address

- | | |
|----------------|---------------------------------------------------------------------------------------|
| 2 E. CORNWALL | * Miss R. Murphy, Shangri-la, Reskadinnick, CAMBORNE, Cornwall TR14 0BH. |
| 92 S. ABERDEEN | † P. Marren, Foxhold House, Thornford Road, Crookhan Common, NEWBURY, Berks RG15 8EL. |
| 102 S. EBUDES | * E. Bignall, Quinhill, Clachan, TARBET, Argyll. |
| 106 E. ROOS | * P.S. Lusby, Dykeneuk, Clatt, by RHYNIE, Aberdeenshire |

BSBI PANEL OF REFEREES AND JUDGES

Supplement 3 to *September 1983* List

Mrs Irene Vaughan, sending her resignation as "Periti" for the Genus *Rosa*, also sends a practical note on the interpretation of the specimen instructions: M. fr (Mature fruit), which is intended to mean that any fruit sent should be mature, is often thought to mean that a mature fruit *only* is required; fruits are therefore sometimes sent without stem, leaves, prickles or any other necessary diagnostic characters, which causes bother, expense and frustration to both sender and Referee.

Thank you for that comment, and also our grateful thanks to you for the help with *Rosa* spp. which you have given to many members through the years.

MARY BRIGGS Hon. Gen. Sec.

DAVID J. McCOSH Hon. Sec. Records Committee

VICE-COUNTIES FAVOURED IN SCOTLAND

"Because of the recent correspondence in *B.S.B.I. News* on the topic of vice-counties, it was decided to take the opportunity to air the subject at the Scottish Recorders Meeting held near Killin in June. The meeting, which was attended by over half the Scottish Recorders, was completely unanimous. Those present were in favour of retaining vice-counties as a framework for more detailed recording on a grid basis. I have since asked a number of other Recorders, who were unable to attend the meeting, and all were of a similar opinion".

NICK STEWART, 14 Church Hill, EDINBURGH EH10 4BQ.

COLLECTING PLANTS ABROAD

For several years the Conservation Committee has been receiving reports of destructive collection of rare plants from abroad by botanists and gardeners from the British Isles. Import controls and regulations for collecting from the wild have been tightened, but these are still mainly for commercial salesmen and are not entirely appropriate for the amateur plantsman (who may be given the impression that restrictions are minimal). A new DOE leaflet which will cover wild-collected plants is in preparation. Meanwhile a **Conservation Reminder** drawn up by BSBI with advice from the IUCN Conservation Monitoring Centre at Kew, was published in *The Garden*, April 1984 **109** (4) p 140 by the Royal Horticultural Society as part of an article on 'Plant health legislation and the gardener' and reproduced here by kind permission of the Editor, Elspeth Napier.

Sara Oldfield in the Threatened Plants Newsletter No. 13 August 1984 reminds us that new EEC Regulations strengthen protection of Terrestrial Orchids and four spp. of Cyclamen (*C. graecum*, *C. creticum*, *C. balearicum* and *C. persicum*) in Europe. Wild-taken plants of these species are subject to strict licensing. Propagation in cultivation of these spp. and other rare plants is to be encouraged; techniques for this are improving and hopefully will become more widely practised. But the administrative burden of controlling the large trade in artificially propagated plants can all too easily lead to a lack of attention to trade in rare wild-collected plants. Unfortunately some British nurseries still sell orchids which have been dug up from the wild.

A world-wide network of orchid seedbanks to encourage growers to propagate orchids from seed has been called for by the International Orchid Commission, as rare orchid spp. continue to have considerable appeal to collectors. *Paphiopedilum armeniacum*, known only from one hill in Yunnan, China was described in 1982 – by the following year wild collected plants were offered by nurseries in California, Taiwan, Japan and the U.K. It may already be too late for this species to be saved in the wild.

Further copies of the Code of Practice can be supplied. Please contact the Hon. Gen. Sec. if you have a specific use for a further copy or copies.

Mary Briggs

APOLOGY

To avoid any confusion between two authors, would readers please amend the initials at the end of the paragraph headed "Red Indian Bean Trees in Westminster" on p 16 of BSBI News No. 35 to "J.R.". And while you are at it please amend the specific name of the trees in question to "bignonioides". Thank you.

Ed.

A conservation reminder

Every year more and more of the world's wild flowers disappear. Travellers have a special responsibility to leave undisturbed the wild flowers of the countries they visit. Plant collecting can lead to the extinction of plants already rare naturally or made so through modern changes in their environment. It may seem that where there are hundreds of flowers still, to take "only a few" can do no harm. This is not so. If many people take "just one", even a large colony may finally disappear. Along many of the well-trodden tourist tracks today the wayside is lamentably bare of flowers. Many of the horticulturally-worthwhile species are already in cultivation and available from specialist plant nurseries. Gardeners ought to use these sources and should not exploit further the wild. To collect rare plants for personal gain is morally indefensible.

Find out and observe the law

Remember that National Parks, Forestry Parks, Nature Reserves and other protected areas provide local protection for specially selected parts of the natural heritage. Many countries now also have national or regional plant protection laws to safeguard decreasing species outside the protected areas. Conservation laws differ from country to country and in many cases are complex. If you have a special reason for collecting, then the local laws should always be observed.

Details of foreign conservation legislation covering plants can be obtained from:
Conservation Unit, The Herbarium, Royal Botanic Gardens, Kew, Richmond, Surrey TW9 3AE.

Import and Export Controls

1. Certain plant species are protected by the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), an agreement signed by many countries worldwide. Plants covered by the Convention include all orchids, cyclamen, cacti and certain other succulents. Permits from the country of origin are required for the export of such plants.

In Britain the provisions of CITES are administered by the Department of the Environment through British and EEC legislation. Import permits are required to bring CITES plants into the country. Seeds are not covered by the legislation. Further details can be obtained from:

Department of the Environment, International Trade in Endangered Species Branch, Tollgate House, Houlton Street, Bristol BS2 9DJ.

2. The importation of living plants into Britain is subject to phytosanitary regulations. (see pp. 137 – 141).

Don't be selfish, please leave wild flowers for others to enjoy and help save them from extinction.

This conversation reminder was prepared by the Botanical Society of the British Isles.

Over the years I had several specimens of *Aira* identified by Dr. Hubbard, and quite a few were *Aira multiculmis*, now considered a subspecies of *Aira caryophyllea*. This brought to my attention that it was not as written in his book of Grasses (2nd Edn. p. 259) "of rare occurrence in S. England" but a frequent grass in Scotland. In the Edinburgh herbarium, there are specimens ranging from Sky and Orkney, Inverness-shire, Angus, Roxburghshire, Kirkcudbrightshire, Surrey, Herefordshire to the Scillies and Jersey. They are mostly from dry habitats, railway lines, embankments and forest tracks. I had four records identified for Kirkcudbrightshire, two were from railway embankments, one a car park in the Cairn Edward forest near the railway and the last from steep cliffs by the sea. Since then I have seen *Aira 'multiculmis'* in other places in the county, in fact it is more common than *Aira caryophyllea*.

The description in *Flora Europea* is as follows:-

Ssp caryophyllea L. Plant usually 5-35 cm. Spikelets 2.5-3.5 mm. Longer pedicels usually more than 5 mm. $2n = 28$.

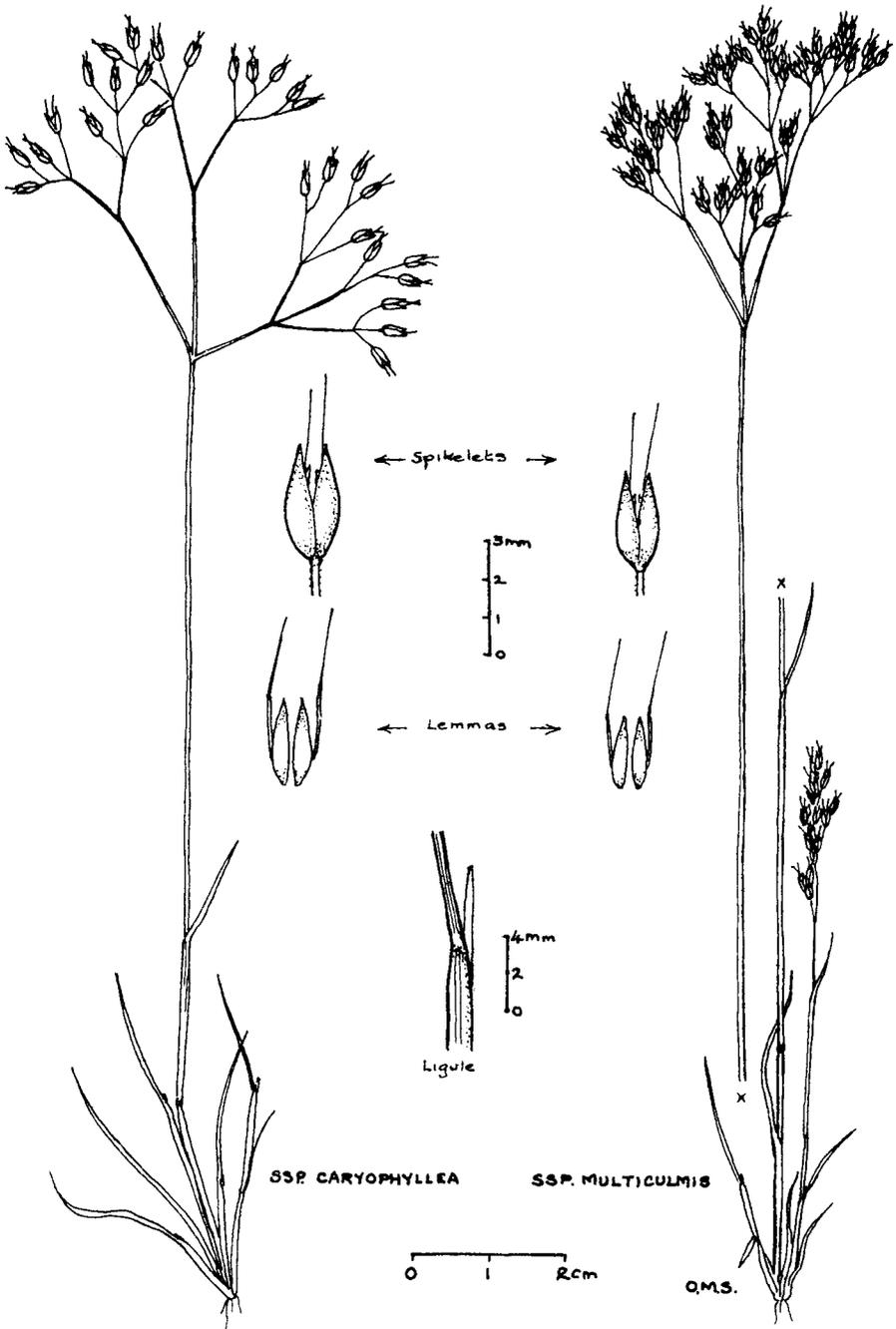
Ssp multiculmis (Dumort) Bonnier & Lagens. Plant usually 20-50 cm. Spikelets 2-2.5 mm. Longer pedicels usually less than 5 mm. $2n = 28$. The more upright, tall sturdy habit is most noticeable. With this description and my drawings, it may help other people to distinguish between the two subspecies.

OLGA M. STEWART, 14 Church Hill, EDINBURGH EH10 4BQ.

BSBI NETWORK RESEARCH SURVEY OF CHURCHYARDS & BURIAL GROUNDS

In some areas of the British Isles churchyards and cemeteries are oases of natural grassland, and with an increasing number of reports of graveyards being levelled "for easy maintenance", with all vegetation being closely mown, shaved or scraped off old walls and tombstones, the Records Committee decided on a survey to highlight the remaining botanically rich churchyards, and to advertise their potential as refuges for wildlife.

A survey form was prepared by members of a working group and advisers, and after considerable thought and deliberation, and a preliminary trial run the agreed form was mailed to all members in December 1981 with instructions in *BSBI News* 29. It was realised that the project was more practical, necessary and useful in some vice-counties, and the survey was designed to be organised in each vice-county by the Recorder or an appointed deputy, and no central organiser was nominated. With hindsight this was a mistake. Very soon after the survey was launched it was reported in the national press and the Society was inundated with offers of help by non-members mostly with no recording experience, access to cards, or to the instructions in *BSBI News*. This necessitated the preparation of a new set of instructions and explanation of the purpose of the survey, and resulted in bulging files of Hon. Gen. Sec. correspondence, and no-one else to write a report - hence the delay in this publication.



AIRA CARYOPHYLLEA

del. O.M. Stewart 1984 ©

With the report in mind, in September 1983 a questionnaire slip was sent to all vice-county Recorders. 26 reported no action in their VC, most of these from Scotland where the management of churchyards is by the local authorities and a typical comment on Scottish churchyards was “all are sterile in the extreme”. It seems that the survey came too late for Scotland? However one record of Holy Grass on the Western Isles is growing in a burial ground.

No returns were sent from Ireland; possibly in Ireland the churchyards are not yet seriously threatened?

Of the 52 Recorders reporting some progress few have reached the final goal of reporting to their local Diocesan Advisory Committee – but 19 Recorders have passed information on the botanically richest churchyards etc in their County or VC to their local Trust for Nature Conservation, or equivalent. Comments from Recorders included highlights from their survey, some sending a few plant notes even if no forms had been completed. One with honesty replied “no effort available”. Another referred to “those diabolical churchyard forms” – although requesting further supplies at the same time! The County with complete coverage is Cardiganshire, where Arthur Chater surveyed and completed the form, with diagrams, for all 101 churchyards, finding 48 of “real botanical interest”, and these results were passed to the local Naturalists’ Trust and Diocesan Advisory Committee. Arthur reports that his churchyards averaged 1.00 acre in size, that all his ‘top ten’ scored 20 or more, and that all those which scored 10 or more were “positively good”. Plants which have the majority of their VC 46 sites in churchyards include *Galium mollugo*, (a very rare relic of rich permanent pasture in that county), *Trisetum flavescens* and *Briza media*.

In E and W Sussex, with nearly 600 parish churches and additional cemeteries, coverage although not complete included many good habitats and interesting records, and Gill Barter prepared excellent reports from survey forms sent in by 33 local recorders, who each surveyed one or more Sussex sites. There were several typical churchyard plants e.g. *Valerianella carinata*, *Ranunculus auricomus* and *Umbilicus rupestris*. More surprising was *Wahlenbergia hederacea*; probably the best site in Sussex for *Ceterach officinarum*, and *Orchis morio* in 8 Sussex churchyards; also a record of *Atropa belladonna* under a Yew tree, and possibly more appropriate a planted Tree of Heaven, *Ailanthus*.

Dave Green sent a note from N Wilts of a churchyard with *Calluna vulgaris*, *Nardus stricta* and *Sieglingia decumbens*, and in contrast Mr Shepard described from two of his churchyards on the Isle of Wight “a marvellous downland turf with a great variety of plants, especially orchids”, and “unimproved grassland with a sward of green-veined orchids and adder’s tongue fern”. From the Channel Islands too, Frances Le Sueur reported *Spiranthes spiralis* in almost every Jersey churchyard.

From Surrey there is comment again on *O. morio* when Joyce Smith tells us that a churchyard record is one of only 3 recent localities for this in the County – also reporting *Hypericum x desetangsii*, *Vicia lathyroides*, *Calamintha ascendens*, *Crocus purpureus* and *Poa chaixii*.

John Killick reported 46 surveys in Oxfordshire, Roy Maycock 235 in Buckinghamshire and Gill Gent 80+ in Northamptonshire, with *Rumex pulcher* noted as a significant local plant; a similar number were recorded in Worcestershire where John Day reports several churchyards with fairly rich neutral grassland.

Stephanie and Peter Thomson wrote in *BSBI News* 30, p. 9 of an exceptional churchyard at Dulas, Herefordshire, which is managed as a small meadow, but reported that most others in the County were “cleanshaven”. Three of those surveyed in Radnorshire “compared very favourably with meadows in that County in terms of diversity and rare spp.” Ann Powell reports, also mentioning the diversity of other habitats e.g. walls, hedges and trees giving their churchyards added value; a Manpower Services Team helped with their survey. From Carmarthenshire Richard Pryce reports old hay meadows with *Platanthera chlorantha*, old grassland with near-dominant *Sanguisorba officinalis*, and in a town chapelyard “abundant *Euphorbia exigua* – the first VC record since 1905”. Stephen Evans from Pembroke reports *Filipendula vulgaris* which is locally scarce, occurring in more sites within churchyards than without – as it does in Cardiganshire. An interesting point is that in Pembrokeshire only part of the county is on limestone so that for Stephen it is difficult to assess which of these churchyard records are native or introduced. (In Cardiganshire all the *F. vulgaris* is assumed to be non-native).

In Suffolk Mr Simpson reports about 50 churchyards with very good flora and 60 good to moderate – with others graded as less rich botanically; in Norfolk 84 have been surveyed with additionally all the E Norfolk recorded for ferns. Best finds so far are two with *Trifolium ochroleucon* and several with *Anacamptis*.

Eva Crackles in SE Yorks made a special study of the old custom of planting medicinal plants in churchyards, and of the significance of the occurrence of tetraploid *Ranunculus ficaria* there also. Professor Swan writes from Northumberland that a volunteer was obtained for every churchyard – c 210, with their survey organised by Mr Bowman, and from results he notes *Cirsium heterophyllum* and *Saxifraga granulata* – this another “churchyard plant” recorded from many counties. Roderick Corner reported *Plantago media*, which was recorded at Lilliesleaf, Roxburgh by Rev. James Duncan in the 1830s, as “just surviving there today”; Margaret Barron included *Arabis hirsuta* and *Geranium lucidum* as highlights from Easternness and Mary Martin from Dumfriesshire reports *Crocus* sp. in St Mungo Cemetery as a “sight worth seeing”. Larch Garrad, Isle of Man, noted *Euonymus europaeus* but “very rare even planted in Man – about 6 in all known”.

In general the churchyards have been shown to be exceptionally good areas for grass spp. and also for orchids – *Orchis morio*, *O. mascula*, *Dactylorhiza fuchsii*, *D. praetermissa*; *Anacamptis pyramidalis*, *Platanthera chlorantha*, *Listera ovata*, *Aceras*, *Neottia* and *Spiranthes spiralis* all being recorded in a number of those surveyed.

Meanwhile the Council for the Care of Churches has shown interest in the survey. At their invitation Arthur Chater wrote *God's Acre: The Conservation of Consecrated Vegetation*, published in *Churchscape* 3 (1984) pages 21-27; and for RSNC in *Natural World*, Winter 1982, *Life in the Graveyard*. Also in October 1982 Arthur read a paper, *The Botany of Churchyards – Relics, Riches and Conservation*, at the School of Botany, Trinity College, Dublin.

During the time of the Survey Dilys Breese of the BBC Natural History Unit produced a film on the wildlife of churchyards which was shown as *God's Acre* in *The Natural World* in January 1984. The Prince of Wales' Committee convened a Forum

Graveyards and their Environment at Wrexham in 1982, and since has published a leaflet *Graveyard Upkeep*; The British Lichen Society has published an information sheet *Lichens in Churchyards*; local surveys of birds in churchyards have been organised by the RSPB; the BSBI held field meetings in 6 London churchyards and cemeteries in May 1982, and Northamptonshire Rural Community Council has initiated a Conservation Churchyard of the Year Award.

A Survey was also carried out by members of the National Federation of Women's Institutes, and from the results Francesca Greenoak, BSBI member, is writing a book which will incorporate some of our Survey results and include a chapter on the care and conservation of churchyards. This is scheduled for publication by WI Books Ltd in June 1985.

We send thanks to all who participated in this Survey.

October 1984

Mary Briggs

BSBI NETWORK RESEARCH PROJECT ON POLYMORPHIC VARIATION IN *ARUM MACULATUM* L.

As the Project Co-ordinator for the above Network Research Project, I should like to express my sincere thanks to all those BSBI members who have contributed towards the first year of recording.

By the end of September 1984, 135 completed forms had been returned showing that the anthocyanin fringe of the leaf margins is present over much of the British Isles. However, more data are required and members may be interested to know that the survey is to be continued next season, i.e. April - May 1985.

As yet there are no records for the following vice-counties:

England, Wales and Scotland

8, 12, 25, 27, 31-33, 37, 38, 42, 43, 47-49, 52, 55b, 56, 57, 63, 66, 67, 70-79, 81, 83-95, 97, 99-112.

Ireland

H1-3, 5-32, 34-39.

Can anyone supply records for any of these unsurveyed vice-counties? Further forms are available on request from the author.

Also, I should like to investigate whether the anthocyanin fringe forms (*BSBI News* 33 p. 20 April 1983) show a cline (directional change) in their distribution in the British Isles. I would therefore, be pleased if members could sample at least 20 plants chosen at random from a local population of *Arum maculatum* L., and record the relative proportions of each form, along with details of locality, habitat description and six figure grid reference.

PHILIP HARMES, 21 Newthorn Place, BUCKLEY, Clwyd CH7 2EY.

ALIENS and ADVENTIVES

ADVENTIVE NEWS 29

compiled by Adrian L. Grenfell

CUCURBITACEAE IN BRITAIN

Cucurbitaceae is represented in Britain by a solitary native species – *Bryonia cretica* L. ssp. *dioica* (Jacq.) Tutin (*Bryonia dioica* Jacq.) – a common and familiar plant of hedgerows and wood margins. The family as a whole contains many plants of economic importance, however, and this accounts for several species which appear on our rubbish dumps, on waste ground and, most frequently, at sewage farms. The taxonomy of these plants seems to be much confused: in these notes, which are largely based on the extensive field observations of G.M.S. Easy (to whom I am also indebted for the fine illustrations) and C.G. Hanson, I shall attempt to lighten the gloom!

Most of these plants are found only on rubbish dumps and sewage farms; more commonly in the latter, the seeds arriving largely with kitchen waste. On dumps, introduction is by means of sewage sludge, garden and kitchen waste and the occasional discarded vegetable. Frequency is dictated by the state of the seeds when the vegetable is eaten; thus marrow, melon and, to a lesser extent, water melon, eaten when the seeds are ripe, are more frequent than cucumber which is normally eaten well before the seeds reach maturity. The only viable seeds which actually pass through the human digestive tract are those of water melon although most of these are probably discarded before consumption. Gourds are grown in Britain solely as ornamentals and other members of the family rarely as curios: of the latter only *Cyclanthera brachystachya* (perhaps better known as *C. exfoliata*) is dealt with here; very few cucurbits have been rarely recorded as adventives.

Flower morphology is extremely variable within the species listed. In general, female flowers are borne singly on short peduncles while the male flowers often fall early; (the female being more persistent) have peduncles up to ten times as long. Characters of the female peduncles can be most useful in identification. A preponderance of male flowers is often noticed in casual plants. *Sicyos* (5 stamens) and *Cyclanthera* (one stamen) are immediately separable from the rest of the group which have three. Tendril characteristics should be used with care in identification and it is important to note that tendrils always appear to be borne singly, thus even those branching from the base should not confuse the issue. This is well illustrated in the drawing of the vegetable marrow. Of *Cucumis sativus* G.M.S. Easy writes

PETASITES JAPONICUS

(see front cover)

Colin Ormerod, whose excellent drawing appears on our front cover, fills another gap in illustration of naturalised alien species (see *News* 26: 1 & 19). *Petasites japonicus* flowers early, from late March to mid-April, the flowers appearing before the leaves which, later in the season, assume huge proportions (up to 1 m in diameter with stalks up to 2 m tall). It is a native of Japan, Sakhalin, and is locally naturalised from gardens and in plantations in Britain.

A.L. Grenfell

“Some confusion seems to have arisen with plants of the *Cucurbita pepo* range. Often the so-called branched tendrils of that group have such a compressed base, that the branches seem to spring as simple tendrils from a bump in the stem!” I have devised the following simple artificial keys which should help in separating the genera and species of *Cucumis* and *Cucurbita*.

- | | |
|-------------------------------------------------|--------------------|
| 1. Stamens 5, female flowers long-pedunculate | <i>SICYOS</i> |
| Stamens 1 or 3, female flowers usually solitary | 2 |
| 2. Stamens 1 | <i>CYCLANTHERA</i> |
| Stamens 3 | 3 |
| 3. Leaves pinnately divided | <i>CITRULLUS</i> |
| Leaves entire or palmately divided | 4 |
| 4. Tendrils branched | <i>CUCURBITA</i> |
| Tendrils simple or absent | 5 |
| 5. Tendrils absent, fruit dehiscing explosively | <i>ECBALLIUM</i> |
| Tendrils simple | 6 |
| 6. Leaves deeply divided | <i>MOMORDICA</i> |
| Leaves almost entire | <i>CUCUMIS</i> |

CUCUMIS

- | | |
|------------------------------------------------------------|-----------------------|
| 1. Corolla 4-5 mm | <i>C. myriocarpus</i> |
| Corolla 20-30 mm | 2 |
| 2. Fruits ovoid, ± densely appressed villous when young | <i>C. melo</i> |
| Fruits cylindrical, usually tuberculate/aculeate, glabrous | <i>C. sativus</i> |

CUCURBITA

- | | |
|------------------------------------------------------------------------------------------------------------|------------------|
| Immature fruits cylindrical to ovoid, peduncles
conspicuously 5-angled, ± expanded below female flowers | <i>C. pepo</i> |
| Immature fruits ± globose, peduncles terete, not expanded
below female flowers | <i>C. maxima</i> |

Citrullus lanatus (Thunb.) Mansfield (*C. vulgaris*) Water melon (South Africa) is rather infrequent on rubbish dumps but common and often abundant at sewage farms. Leaves pinnately divided or dissected: tendrils unbranched or branched. Fruit ± globose, smooth, dark green, pulp red, succulent. 1984 records include: Rye Meads Sewage Works, Essex. C.G. Hanson; Grampound, Cornwall (tan-bark alien). K.L. Spurgin; Ayres rubbish dump, Bride, I.O.M. Dr L.S. Garrad; Weston-super-Mare tip, Somerset. T.G. Evans & A.L. Grenfell; abundant, Avonmouth Sewage Works, Bristol. T.G. Evans, A.L. Grenfell & J. Scott; Redfield, Bristol on demolition site (of a foundation garment factory!). A.L. Grenfell.

Cucumis melo L. Melon (Tropical Africa and Asia), commonest (with *Cucurbita pepo*) of the group, frequent and often abundant on rubbish dumps and sewage farms. Leaves suborbicular or reniform, cordate, variously angled/shallowly lobed, lobes rounded, villous: tendrils simple. Immature fruit densely appressed villous. Mature fruit ± globose, becoming glabrous.

Cucumis myriocarpus Naud. (South Africa). Very rare wool alien last recorded at Blackmoor Fruit Farm, N. Hants. in 1973 (comm. C.G. Hanson).

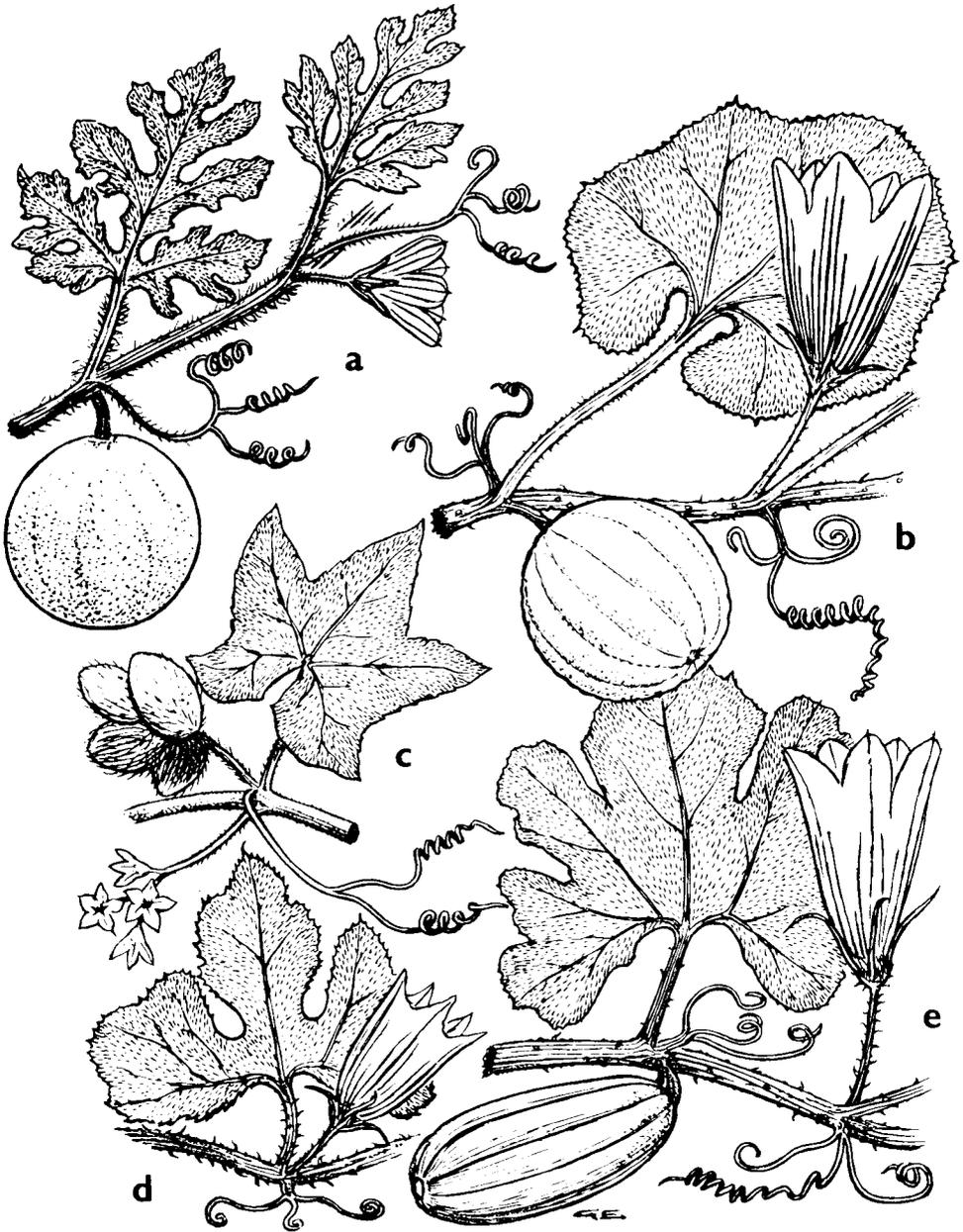
Cucumis sativus L. Cucumber (India). The immature fruits are known as 'gherkins' and eaten raw or in pickles. The fruit proper is eaten before the seed matures, hence its status as a very rare plant of rubbish dumps and sewage farms. Much mis-recorded in Britain owing to frequent confusion with *C. melo* and *Cucurbita pepo*. Leaves palmately 3- to 5-lobed, dentate, villous and scabrid; lobes acute/acuminate: tendrils simple. Fruits cylindrical, terete or angled, frequently tuberculate and aculeate (especially when young). 1984 records:- three plants together, Ware tip, Herts. (suggesting discarded fruit). C.G. Hanson; single plant, Avonmouth Sewage Works, Bristol. T.G. Evans, A.L. Grenfell & J. Scott.

T.G. Evans' 1979 plant at Newport Tip, Gwent (Hb. TGE) sported a fully grown cucumber. One of the all-female glasshouse hybrid strains was noted at Stoke Gifford, Bristol, associated with dumped garden rubbish in 1983. (Leg., det. and Hb. ALG).

Cucurbita maxima Duchesne Pumpkin (Central America) is cultivated as a food plant but, to many people, is less palatable than the vegetable marrow. Its huge fruits, of course, are a prominent feature of our horticultural shows and I suspect its prime function is to satisfy the egos of amateur gardeners! Earlier this year the world record weight for a pumpkin was raised to nearly 430 lb but such a fruit must surely be a gigantic culinary embarrassment! As an alien *C. maxima* is rare and apparently only recorded at sewage works. This, in itself, suggests that it is infrequently eaten as a vegetable. Leaves orbicular, not/slightly lobed, softly hairy: tendrils branched. Fruits very large, \pm globose, usually glabrous. C.G. Hanson located a fine plant at the Rye Meads, Essex, sewage works in 1984 which was bearing fruits some 30 lb in weight in early September. G.M.S. Easy reports its rare occurrence at the Cambridge sewage works in recent years.

Cucurbita pepo L. Vegetable marrow (N. Central America), including courgette and ornamental gourd. Immature fruits are eaten as courgettes, usually grown from hybrid strains. The vegetable marrow is probably the most commonly cultivated member of the group, is very long keeping and finds a great diversity of culinary use as a vegetable and in preserves. It is common on rubbish dumps and sewage farms, occasionally elsewhere. Leaves broadly ovate in outline, cordate and very variably lobed, hispid-setose: tendrils branched, sometimes only from the base. Some bush forms appear to lack tendrils. Young fruit globose to cylindrical, with \pm spreading hairs, peduncles 5-angled and expanded below the female flowers. Mature fruit shape, size and colour extremely variable, the colour often spectacular (especially ornamental gourd). Marrow is usually cylindrical but variously squat, curved and globose forms exist. Ornamental gourd is usually \pm globose, with or without carbuncles.

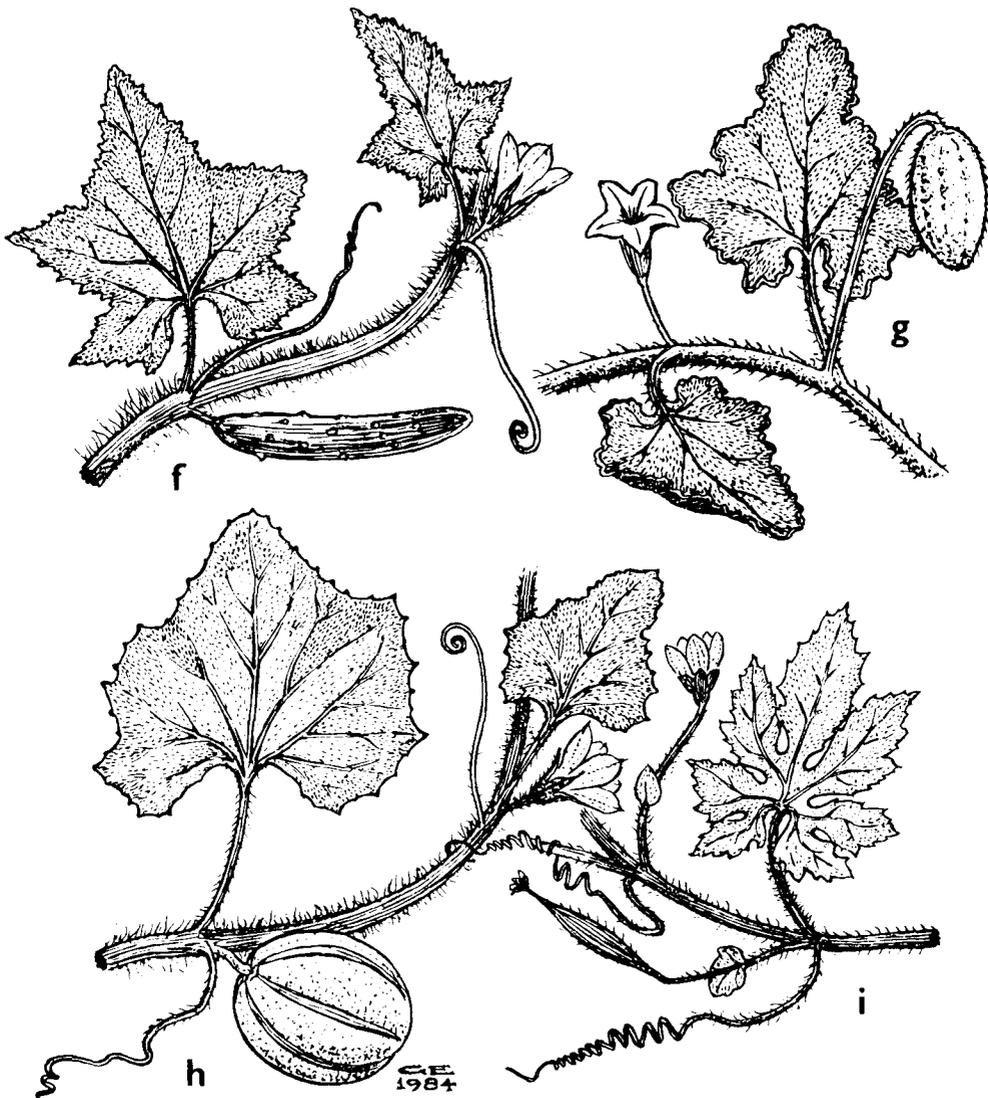
Cyclanthera brachystachya (Ser.) Cogn. (*C. explodens* Naud.) (N.S. America). Grown as a greenhouse curio for its inch-long, spiny fruits which burst explosively (c.f. *Ecballium elaterium* below) and produce good seed which, writes R. Woods, appears to survive the winter outside. After having 'taken over the rockery' the plant is now 'well entrenched' in the vegetable patch at his home near Newbridge-on-Wye, Powys, where annual rainfall is in excess of 1250 mm and frosts come early . . . 'it might pose problems in better parts of the country'. He still cultivates *Cyclanthera* although 'not entirely willingly'. C.G. Hanson relates a similar experience.



a *Citrullus lanatus* (Thunb.) Mansfeld (Water Melon)

b *Cucurbita maxima* Duchesne (Pumpkin)

CUCURBITACEAE IN BRITAIN del. G.M.S. Easy © 1984



c *Sicyos angulatus* L. (Bur Cucumber) d *Cucurbita pepo* L. (Ornamental Gourd)

e *Cucurbita pepo* L. (Vegetable Marrow) f *Cucumis sativus* L. (Cucumber)

g *Ecballium elaterium* (L.) A. Richard (Squirting Cucumber)

h *Cucumis melo* L. (Melon) i *Momordica charantia* L. (Balsam Pear)

Ecballium elaterium (L.) A. Richard Squirting cucumber (S. & C.S. Europe, Mediterranean region). Rare casual, occasionally \pm naturalised in S. England. In S. Europe an opportunist ruderal often colonising large areas of waste ground. Well known on account of its explosive dehiscence, the seeds (and mucilage) being projected up to 10 m or more. See *B.S.B.I. News* 26:16 and 28:15. Leaves \pm entire, shallowly lobed, rather fleshy, undulate: tendrils absent. Fruit 5 x 2 cm, ovoid, green, hispid, hanging from erect pedicels. One 1984 record, also from R. Woods, who grew it some years ago as a greenhouse subject 'amongst cabbages in the vegetable garden . . . has now set seed'.

Momordica charantia L. Balsam pear (widespread in the Old World Tropics). Fruits bitter but cooked and eaten in the Orient. A very rare rubbish dump casual with two records in *The Flora of the London Area* which relate to gatherings at Barking Tip in 1971 and 1976. C.G. Hanson recorded it at Aveley Tip, Essex in 1973. Leaves dentate, deeply lobed, the lobes acute: tendrils unbranched. Fruits oblong/ovoid, 2.5-20 cm in length, warty, bursting at maturity to reveal red arils.

Sicyos angulatus L. Bur cucumber (E. North America), naturalised in damp places in S.C. & S.E. Europe, occurs as a rare soybean alien as at Stone tip, Kent. In 1982 it was found on the Thames shingle nearby (J.R. Palmer). Leaves deeply cordate, denticulate, \pm deeply 5-lobed: tendrils branched. Fruits borne in groups of c. 4, 1.5 cm, compressed-ovoid, lanate with long setae.

I am particularly indebted to Messrs. G.M.S. Easy and C.G. Hanson for their considerable help in the preparation of these notes. Also to those who have kindly sent in records in response to my requests. Graham Easy points out that his *excellent* drawings (my italics) are prepared from all manner of material including photographs, gardening catalogues, average samples from garden exhibitions and inadequate and often incorrectly named herbarium sheets. He submits them with 'some apprehension', 'not happy about the flowers depicted' and solicits criticism; however, he hopes that they will show the basic features of the main species involved. The fruits as drawn are typical of rubbish dump plants; they are not drawn to scale. I look forward to receiving further specimens and records of these interesting plants.

CORRIGENDUM

Unfortunately, errors crept into my key to *Physalis* species occurring in Britain, see *News* 35:14, and as printed it was valueless. The offending lines should read:-

4. Corolla 5-10 mm, yellow with purple markings in throat;
anthers 1.2-1.8 mm, straight at maturity *P. ixocarpa*
4. Corolla (10-) 15-25 (-30) mm, yellow (occasionally with purple markings in throat);
anthers 3-5 mm, curved at maturity *P. philadelphica*

Once again I thank members for their specimens and records (SAE, please, if you require 5 x 3" record slips). In the next issue I hope to assemble some more records of *Setaria* and *Phalaris* spp. in Britain, together with a larger miscellany. 1984 seems to have been a good year for aliens - I look forward to receiving more of your records in due course.

ADRIAN L. GRENFELL, 19 Station Road, Winterbourne Down, BRISTOL BS17 1EP.

**CONYZA BONARIENSIS (L.) Cronq. and
CONYZA ALBIDA Willd. ex Sprengel**

J.R. Palmer in *B.S.B.I. News* 37:16, when reporting on the occurrence of another Fleabane in England, chooses to name it *Conyza bonariensis* (L.) Cronq. He then follows Cronquist's treatment in *Flora Europaea* 4:120. 1976, where *C. bonariensis stricto sensu* and '*C. floribunda* Kunth', whose correct name is *C. albida* Willd. ex Sprengel, are merged into the single species *C. bonariensis*.

Both, however, are readily to be distinguished. Diagnostic characters have been discussed at length by P. Jovet in P. Jovet and R. de Vilmorin, *Flore . . . de la France* par l'abbé Coste, 3eme supplement: 188-192, 308-311. 1975. Whereas *C. bonariensis* hardly exceeds 50-80 cm in height, *C. albida* is commonly 150-200 cm. The former has no glands on its stem, glands do occur on the latter's. *C. bonariensis* has no true ligules, whereas little ligules occur around the flowerheads of *C. albida*, etc.

The "stickily hairy" English plant drawn by Hilli Thompson in *B.S.B.I. News* is *C. albida*. *C. bonariensis*, although it may have been introduced as early as the 17th century in the Mediterranean and has become so well established in this area as to pass for a native plant, has not really migrated towards the North, except along the Atlantic coast of France up to and including Brittany. *C. albida*, on the contrary, reached Europe only in the 1870s, being first reported on Ch. Naudin's estate in Collioure, France. Thence it began a northward migration and by the 1970s had reached the Loire Valley and Paris, where it is now perfectly established. Besides their distinctive habits and morphologic characters, both taxa thus appear to differ in their migratory abilities; and their respective autecologies would certainly repay a precise study.

C. bonariensis (L.) Cronq. *stricto sensu* must occur in Britain as a wool alien, as it does in many other countries, including Northern Germany, but does not become naturalized.

Cronquist in *Flora Europaea* (*loc. cit.*) asserts that "study of native populations does not support" the recognition of the two taxa. It should be noted, however, that they were distinguished at various ranks by South-American botanists, and their introduction to Europe appears to have been a large-scale experiment that demonstrated their distinction. They must hybridize freely when occurring together.

In France, *C. albida*, although it flowers later, commonly hybridizes with *conyza canadensis* (L.) Cronq. Hybrids are intermediate, but nearer *C. albida*. Their tubular florets have mostly 5 petals, as those of *C. albida*, but some have 4 as those of *C. canadensis*. It is a pity that the so clear-cut petal character for *C. canadensis* and *C. albida*-*C. bonariensis* is not even mentioned in *Flora Europaea*.

M. GUÉDÈS, 11 rue Edgar Quinet, 37 000 TOURS, France.

TWO NOTABLE ESCAPEES

Gnaphalium pennsylvanicum. Willd.

This species, belonging to a taxonomically difficult group of pantropical weeds, is now well established in the churchyard of St. Ann's, Kew. It originally escaped from the order beds in the Royal Botanic Gardens where it is uncritically labelled as *G. purpureum*. It flowers and fruits in July-August, producing abundance of extremely light, windblown seed in dense axial clusters. The whole plant is woolly with white down densest on the upper stems and at the bases of capitula. The leaves are bright green above, greyer with down below. The shape and colour of the bracts is characteristic in this group. (See figure). They are green below and tipped light brown. The rootstock sometimes sends up a single flowering stem, but more often groups of decumbent ones, giving a patch-forming effect. So far *G. pennsylvanicum* has been unable to spread beyond the confines of the churchyard and here it is restricted to the southern end, making its stronghold in the rose bed by the boundary wall. Of late years it has begun to spread from here to colonise the dry, packed soil around nearby tombs. Its abundance from year to year seems to depend on the timing and thoroughness of hand weeding operations. Its ability to re-establish itself on the site even after being apparently eradicated is noteworthy.

The name *G. pennsylvanicum* is unmentioned by *Flora Europaea* Vol 4, and is new to the names of British adventives. Doubtless, older gatherings will be redetermined as this in the future, particularly those labelled as *G. peregrinum*, Fernald and *G. indicum* L. Indeed, two such gatherings already lie in the herbarium at Kew, vis 'Herbarium field, Royal Botanic Gardens, Kew. 12/10/1944. S. Ross-Craig and J.R. Sealy.' 'At foot of wall, Kew Gardens Road, opposite Cumberland Gate, Kew, Surrey. 18/9/1946. H.K. Airy-Shaw.' (4 sheets).

It appears, then, that this is no newcomer to the adventive flora of Britain and that its rate of spread will never equal that of its *Galinsoga* predecessors!

I would like to thank Eric J. Clement for help in the preparation of this article.

JBL.

Campanula carpatica

This alpine plant is represented in Britain usually by cultivars in nurserymen's catalogues under such names as 'Blue Moonlight', 'Chewton Joy', but these often differ markedly from the type which I have illustrated here but which is seldom seen outside Botanical Gardens.

However, a variety almost indistinguishable from the type has established itself, along with *Nicotiana alata* and *Solanum capsicastrum*, on walls, steps and pavements in Yeoman's Row, London SW3. From a strongly tufted growth it sends up slightly scented violet-blue – rarely white – flowers. Many of the nurserymen's clones, including those observed in Yeoman's Row, bear a close family resemblance to it, whilst other forms show a grotesque enlargement of the flower.



Gnaphalium pennsylvanicum

del. J.B. Latham © 1984

The species is tolerant of a wide variety of soils and situations, a fact which has led gardeners to call it the 'All-purpose' campanula, and it is easily grown from seed. In Yeoman's Row it appears to be spreading both by seed and vegetatively. In the S.W. London area it is often grown as a crazy paving plant in the company of *C. porshkyana* or *C. portenschlagiana* where, like them, it will readily spread along cracks between the flagstones. But it is less frequently grown in front gardens than either of the aforementioned and hence is rarely met with as an outcast from them. (See *BSBI News* no. 33, page 11).

JOHN B. LATHAM, 66 Burlington Lane, Chiswick, LONDON W4.

LEVISTICUM OFFICINALE Koch, in Kent

In June 1983 a patch of the herb Lovage (leaves only) was found below Wrotham Hill, on the outskirts of Wrotham village, possibly as a relic of past cultivation.

As far as I am aware, this rare umbellifer has not previously been recorded in Kent. It did not flower in 1983 and when I returned in 1984 the patch had been destroyed by building. Fortunately a small rooted piece had been taken to be grown on, and will be transferred to the garden of the South London Botanical Institute.

The herb Lovage is not to be confused with *Ligusticum scoticum* L. (the plant of rocky coasts in the N. & W. of the British Isles) which is also known as *Lovage*. Both these umbellifers appear in J.E. Dandy's 'List of British Vascular Plants', and illustrated in the BSBI Handbook No. 2 – *Umbellifers of the British Isles*.

J.R. PALMER, 19 Water Mill Way, S. Darenth, DARTFORD, Kent DA4 9BB.

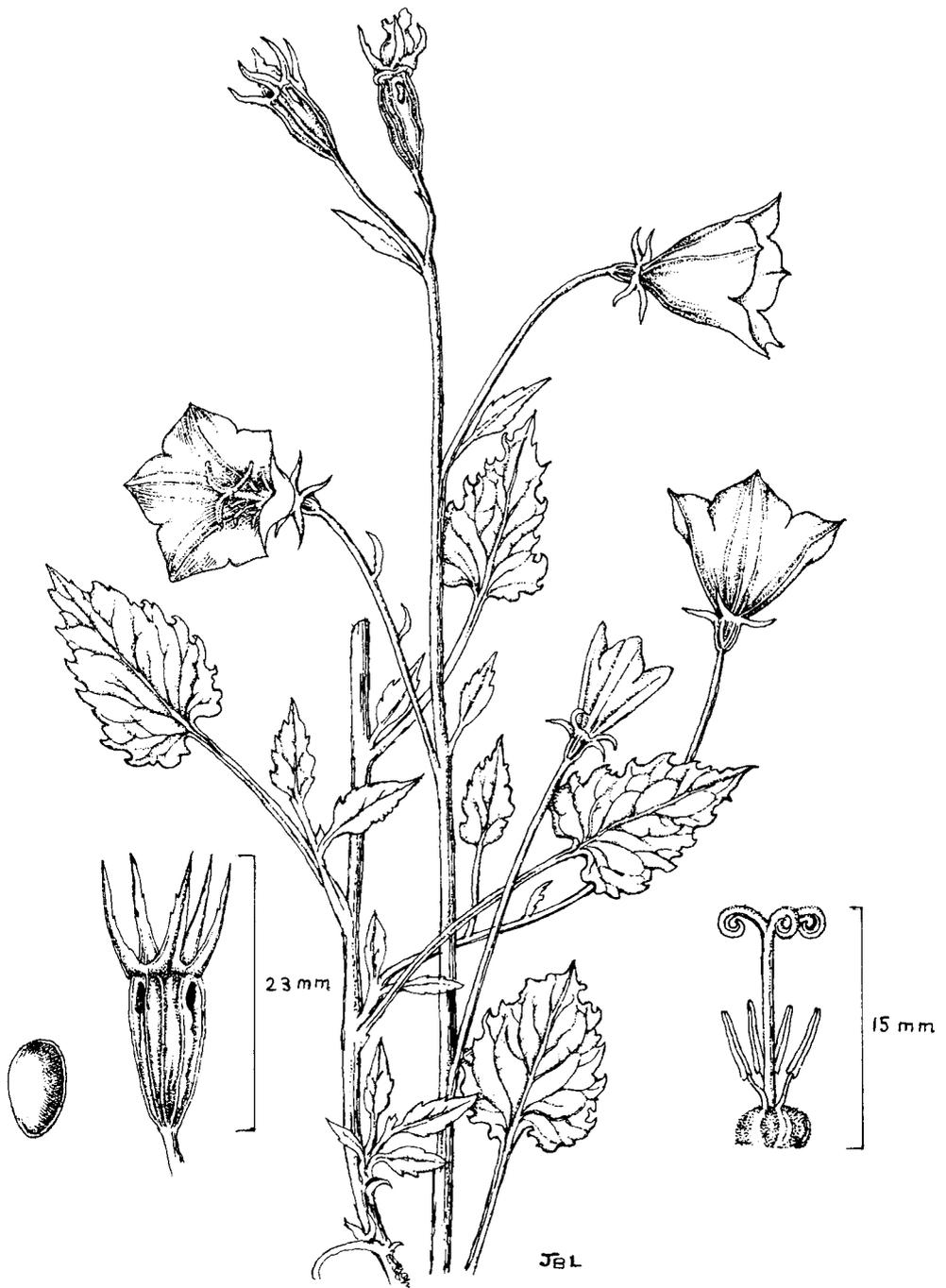
REQUESTS

PILULARIA SURVEY

Pilularia globulifera, the Pillwort, a plant of ponds, lakes and reservoir margins, is a threatened plant in Britain, Ireland and throughout its range in Europe. Drainage of wet sites, dew-ponds and hollows, pollution by fertilizer, farm sewage and chemical waste have taken their toll. The species appears to have been lost from over 120 separate 10.km squares over the past 50 years.

The British Pteridological Society is carrying out a survey of sites where the species is known, in order to collect information on its status, ecology and breeding biology with a view to promoting its conservation. A data-form has been prepared and anyone willing to visit known sites or help in any way is asked to contact the project Coordinator;

A.C. JERMY, Botany Dep't, British Museum (Nat. Hist.), LONDON SW7 5BD.



Campanula carpatica del. J.B. Latham © 1984

IS THERE A BOTANICAL EXPLANATION?

From an article on Hampstead Heath in the London *Evening Standard* for 3rd October 1984:

“There are also solemn gentlemen in baggy trousers and square-shouldered coats who walk slowly about the Heath looking at the ground. These are Russians from their trade mission headquarters on Highgate Hill, from which large numbers have been expelled as spies.

Are they looking for dead-letter boxes, or microdots carelessly dropped on the grass? They are apparently looking for a herb that grows there, possibly woodruff . . . They use it to flavour their vodka”.

Can anyone solve the identity of this intriguing plant?

D.E. ALLEN, Lesney Cottage, Middle Road, WINCHESTER, Hants SO22 5EJ.

BSBI YEAR BOOK 1949

The Croydon Natural History Society is binding its sets of BSBI journals, but missing the *1949 Year Book*. Would any member who has a spare copy please contact:

MR P.W. SOWAN, 96a Brighton Road, CROYDON CR2 6AD.

OROBANCHE HOST PLANTS

Unfortunately when records are cited for members of the genus *Orobanche*, there is often no reference to host species, or possible host species. Such omissions leave serious gaps in our knowledge of the host range of *Orobanche* species.

As part of my research into British *Orobanche* species, I would be grateful if any member could supply locations for:

Orobanche minor on any host other than *Trifolium pratense*. *Orobanche rapumgenistae* on any host other than *Ulex europaeus* or *Cytisus scoparius*. Replies, please, to:

MICHAEL JONES, 10 Lamb's Lane, BUCKLEY, Clwyd.

MONTGOMERY FLORA PROJECT

The organisers of the Montgomery Flora Project want any post-1970 records for vc 47. We aim to continue the recording of plants in the shire over at least the next three years. Records will be welcomed from botanists visiting Montgomeryshire, and during Miss Doris Pugh's present illness, recording cards may be obtained from MRS. WAINWRIGHT, 1 Green End, OSWESTRY, Salop, tel. (Oswestry 652798).

NOTICES

(BSBI (official) Notices)

SPECIAL OFFER TO BSBI MEMBERS

AN ECOLOGICAL FLORA OF BRECKLAND by P.J.O. TRIST

This important local flora was published in 1979 and has proved to be a most useful guide to the plants of this unique area of Britain. The work contains 210 pages including 569 distribution maps and detailed ecological notes on many Breckland rarities. A transparent overlay is provided as an aid to reading the maps.

Unfortunately the high selling price fixed by the publisher deterred many members from purchasing the work. We are pleased to announce that the entire remainder stock has now been purchased by the BSBI and we are able to offer it at the considerably reduced price of £5.00 per copy (£5.50 overseas) including post and packing. To take advantage of this offer, orders should be sent, with a remittance, to the **Hon. Treasurer, 68 Outwoods Road, Loughborough, Leics LE11 3LY.**

As the Society intends to promote sales through other outlets during the spring of 1985 early application for copies is advisable.

RECORDING CRITICAL GROUPS IN THE BRITISH AND IRISH FLORA (Advance notice)

A conference will be held at the **University of Liverpool Halls of Residence** and the Merseyside County Museums on **September 12th & 13th 1985.**

The conference will examine through lecture and workshop sessions methods of recording critical groups in the British and Irish flora, and attempt to establish their significance in vegetation classification and nature conservation. The programme with application forms will be sent to all members in April 1985. Meanwhile for further details please contact: Dr John Edmondson, Merseyside County Museums, William Brown Street, LIVERPOOL L3 8EN. Tel: 051-2070001.

In association with this conference there will be the biennial BSBI Recorders meeting. This will be held on Saturday September 14th 1985 at the University of Liverpool Botanic Garden, Ness, (with a possible field excursion on Sunday 15th). Accommodation at the Halls of Residence as above will be available. Priority for this day meeting will be given to the vc Recorders, all of whom will be sent a programme in March/April. BSBI members who are not vc Recorders but who are interested in recording and local Floras are welcome – as space allows – and those interested in joining this meeting should write to: Mr D.A. WELLS, Northminster House, Northminster Road, PETERBOROUGH PE1 1UA for a programme when available (April).

Mary Briggs

Eric F. Greenwood

Just issued under the Editorship of I.K. Morgan, this number is almost completely devoted to a lengthy article on "An unpublished botanical notebook of Edward Llwyd" by Arthur Chater. Timothy Evans contributes a cover drawing of *Draba azoides* and a note on this species inside. Readers interested in the Carmarthenshire Flora Project will like to note H.D. Pryce's report of progress in 1983.

other (non-BSBI) Notices

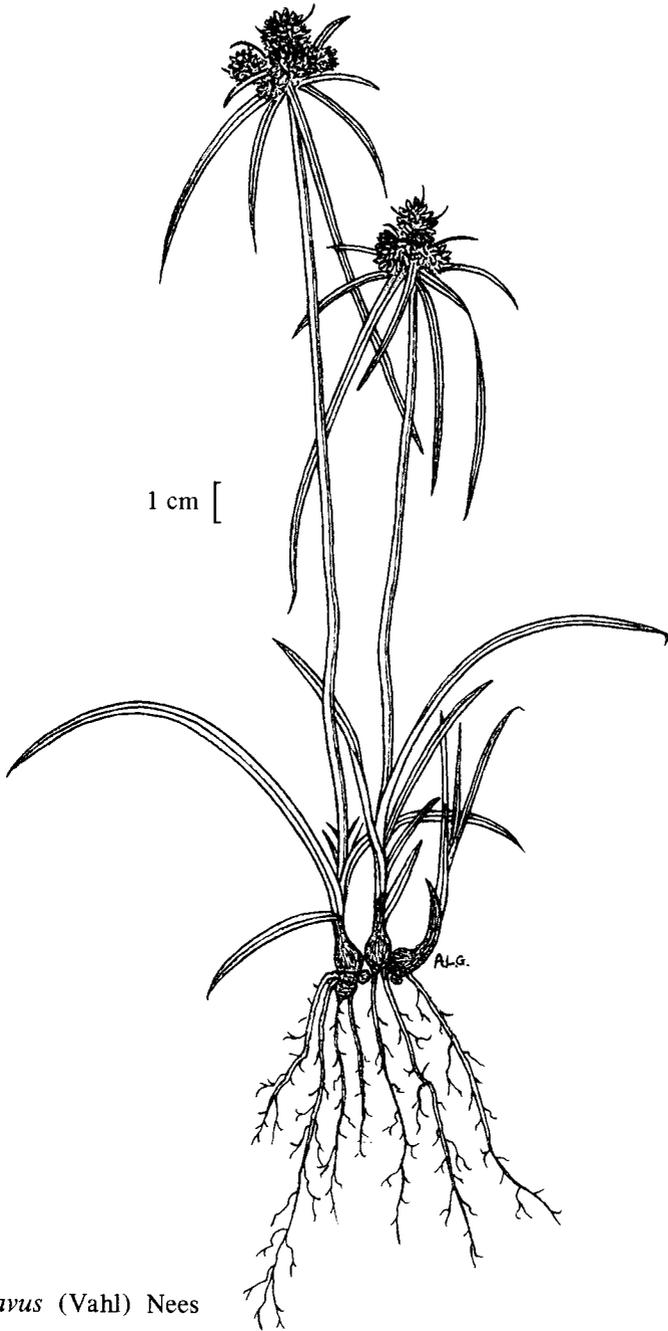
PLANT GROWTH REGULATORS

The Royal Society has announced a Review Lecture on this subject, is to be given by Professor P.F. Wareing, F.R.S., (a BSBI member) on March 7th 1985 at 6 Carlton House Terrace, London S.W.1. The time of the lecture will be announced in the new year – any member interested in further details please contact the Hon. Gen. Sec. before February 26th.

PERMANENT WORKING COMMITTEES FOR 1984-1985

CO-ORDINATING	J.F.M. Cannon (<i>Hon. Sec.</i>), A.O. Chater, Miss L. Farrell, Mrs. J. Robertson, D.J. McCosh.
CONSERVATION	Miss L. Farrell (<i>Hon. Sec.</i>), O.T. Cairns (<i>Asst. Sec.</i>), Dr A.J. Silverside, Scotland, P.J. Wanstall, Dr P.M. Wade, Miss I.F. Gravestock, Dr H.A. McAllister, Dr P.E. Brandham, R.W. David, R.G. Woods, Wales, J.M. Montgomery, D.R. Donald, Dr N.T.H. Holmes, M.A.R. Kitchen, F.H. Brightman (<i>British Lichen Society</i>), C.D. Preston (<i>British Bryological Society</i>), A.C. Jermy (<i>British Ecological Society</i>), Dr F.H. Perring (<i>Royal Society for Nature Conservation</i>), C.D. Brickell (<i>Royal Horticultural Society</i>), Dr D.E.G. Irvine (<i>British Phycological Society</i>).
MEETINGS	Mrs J. Robertson (<i>Hon. Sec.</i>), R. Smith (<i>acting Field Sec.</i>), Dr N.K.B. Robson, Mrs A. Lee, Miss J.E. Rich, J.M. Mullin, Dr J.L. Mason, Dr H.J.M. Bowen, Miss E. Young, Dr J.R. Akeroyd, Miss G.M. Barter, Lady Rosemary FitzGerald, J. Ounsted.
PUBLICATIONS	A.O. Chater (<i>Hon. Sec.</i>), Dr S.M. Eden, Dr R.J. Gornall, Dr N.K.B. Robson, Dr J.R. Akeroyd, Dr B.S. Rushton, D.H. Kent, E.D. Wiggins, Dr F.H. Perring, J.F.M. Cannon, Dr P.F. Yeo, E.J. Clement, A.C. Jermy, Dr S.L. Jury, Dr R.K. Brummitt, A. Newton, Dr C.A. Stace.
RECORDS	D.J. McCosh, (<i>Hon. Sec.</i>), E.C. Wallace, D.E. Allen, E.G. Philp, Dr I.K. Ferguson, R.J. Pankhurst, Miss E. Ni Lamhna, Ireland J. Bevan, R.G. Ellis, Wales, Dr A.J. Silverside, Scotland, P.J.O. Trist, Dr Q.O.N. Kay, T.F. Medd, T.C.E. Wells, D.A. Wells, C.D. Preston, A.O. Chater, R.M. Burton, A.J. Worland (<i>British Pteridological Society</i>).

The President, Hon. Treasurer and Hon. Gen. Sec. are ex officio members of all the above committees.



Cyperus flavus (Vahl) Nees
del. A.L. Grenfell © 1982

See Adventive News 24, p 10

CROCKENHILL

Trees and Shrubs of a Kentish Village

At the Exhibition Meeting in November 1983 our attention was attracted to an exhibit which showed what local botanists can achieve by a systematic study of their environment. This was an excellently presented and illustrated report of work done in surveying vegetation, in a Green Belt area, by Susan Pittman.

Not only does this detailed survey provide a comprehensive picture of the community's ecology, but gives guidance on how to initiate such a project as well as instructions on hedge dating, tree classifying and other techniques.

Concerned by the number of trees lost each year by disease, natural decay and deliberate destruction, and knowing Britain to be the least treed country in Europe, **The Tree Council** wished to establish a national record of the number, species and condition of trees. It was felt that such a survey would be the best way to conserve our existing trees because it would provide information for the assistance of local authorities, farmers, foresters and conservationists. It would also reveal sites for future tree planting.

The purpose and organisation of the Survey, as carried out at a local level, are set out in the form of a Report which can be used by those in other areas who might be encouraged to undertake similar tree surveys.

An unexpected thing about the Survey was the insight gained into the history of the area through a study of its trees, a feature which is fully explored in the Report.

This survey of the tree and hedgework carried out in and around Crockenhill between May and October, 1981 and 1982, is as accurate as the group of volunteers were able to make it – a virtually complete record – though inevitably trees have died or been removed since recording them, and hedgeworks are continually being depleted.

The Crockenhill survey will contribute to the national survey, but on the parish level it was inspired by the realisation that, apart from the nature of the built-up environment and the community spirit, the rural character of the village is largely the result of the legacy of tree cover left by our predecessors, and appreciated and preserved by farmers and residents today.

Crockenhill won the 'Trees in Your Village' competition in 1983 organised by the Men of the Trees and sponsored by Bowaters. 75 villages in Kent entered and were judged on good tree management, new tree planting and tree awareness on parish council land, other publicly owned land and in private gardens.

If this one small survey can arouse interest at a local and county level – it is well worthwhile other areas doing the same. The team was made up of ordinary people with no deep, detailed knowledge of trees, people who were in no way exceptional and one hopes their success will be an encouragement to others. ('Crockenhill – Trees and Shrubs of a Kentish Village' available from Mrs Pittman, 27 Old Chapel Road, Crockenhill, Swanley, Kent BR8 8LL, price £2 + 50p postage).

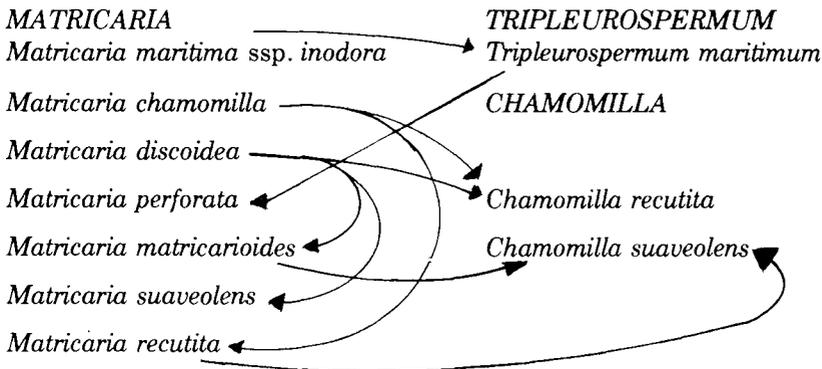
It is worth noting that Crockenhill is not exceptionally well endowed with trees – indeed compared with some areas it is apparently unpromising, with much already lost, but nevertheless the Survey revealed a legacy of tree features of which the village can be proud and which are worth preserving. The Tree Survey has not made the area immune to a new landowner coming in and grubbing up every tree and hedge in sight – but it has increased the tree awareness of ordinary people and this helps to create a favourable climate of opinion.

WHAT'S IN A NAME?

Shakespeare said it mattered not provided a rose bloom remained suitably perfumed. However, correct plant nomenclature is essential in science today both to identify species and to indicate natural affinity. Linnaeus in 1753 brought order into the then existing polynomial chaos by introducing the binomial system. He regarded it as a divine mission and consequently got up early every morning to accomplish it. Ever since that time taxonomists have had the need frequently to change details of this divinely inspired system – illustrated by the following examples:-

Name Change Types

1. The reciprocating type. In this the name changes intermittently between two alternatives so that no-one knows which it is at present: e.g. *Legousia hybrida*, *Specularia hybrida*, *L. hybrida*, *S. hybrida*, *L. hybrida*, etc., etc.
2. The progressive type. Here the name changes continuously and, as Floras do not always mention previous synonyms, several species may occur where only one grew before:
e.g. *Cerastium vulgatum* pre-1952; *C. holosteoides* 1952; *C. fontanum* 1981
and *Agropyron repens* 1812; *Elytrigia repens* 1933; *Elymus repens* 1947; *Triticum repens* 1953; *Agropyron repens* 1958.
3. (a) The Uncle Tom Cobbleigh et al. variation. You must (at first mention) give the name of the authority who invented the name you intend to use. This is simple for many weeds because being common they usually are content with a simple L. at the end. When other taxonomists get in on the act then the name can become a sentence in itself. For instance, take *C. fontanum* above. It used to be *C. holosteoides* Fries, but now has added grandeur as *C. fontanum* Baumg. ss. *glabrescens* (G.F.W. Mayer) Salman *et al.* Note the *et al!* Under the rules this *et al.* (at first mention) means that there are more than two other people – possibly Mrs. Salman and the children too.
4. The Musical Chairs Type. This type can only be represented by a flow diagram, which has been called the Dance of the Mayweeds.



with the permission of:

R.J. CHANCELLOR, Weed Research Organisation, Kidlington, OXFORD (from the Newsletter of the Association of Applied Biologists).

BOOK NOTES

In the January part of *Watsonia*, Vol. 15(3), reviews of the following books will be included:

- Atlas Florae Europaeae*, Vol. 6, edited by J. Jalas and J. Suominen.
Wild Flowers in their Habitats and Flowers in the Wild, by D. and M. Parish.
Flowering Plants of Wales, by R.G. Ellis.
Plant Variation and Evolution, Ed. 2, by D. Briggs and S.M. Walters.
Ponds and Pools – Oases in the Landscape, by K. Kabisch and J. Hemmerling.
Plant Science and Scientists in St. Andrews up to the Middle of the 20th Century, by J.A. Macdonald.
Russian-English Botanical Dictionary, by P. Macura.
A Colour Atlas of Poisonous Plants, by D. Frohme and H.J. Pfander.
The European Garden Flora, Vol. 2, part 2, edited by S.M. Walters *et al.*
An Irish Flower Garden, by E.C. Nelson.
The Wild Flowers of the British Isles, by I. Garrard and D. Streeter.
Atlas der Brombeeren von Danemark, Schleswig-Holstein und dem benachbarten Niedersachsen, by H.A. Martensen, A. Pedersen and H.E. Weber.
The Diversity of Crop Plants, by J.G. Hawkes.
Dispersal and Distribution, edited by K. Kubitzki.
Plant Portraits from the Flora Danica 1761-1769, with text by W.T. Stearn.
The Natural History Prose Writings of John Clare, edited by M. Grainger.
A Camera in the Garden, by H. Angel.

The following books have been received recently. Those that will NOT be reviewed in *Watsonia* are marked with an asterisk:

- The Northwest European Pollen Flora*, Vol. 4, ed. by W. Punt and G.C.S. Clarke.
Nature's Second Kingdom, by F. Delaporte.
A Concise Dorset Flora, by R. Good.
Nature Conservation in Britain & Summary of Objectives and Strategy, by the N.C.C.
The Sex Life of Flowers, by B. Meeuse and S. Morris.
Our Green and Living World. The Wisdom to Save It, by E. Ayensu, V.H. Heywood, G.L. Lucas and R.A. De Filippis.
Phytochemical Methods, ed. 2, by J.B. Harborne.
Directory of Important World Honey Sources, by E. Crane, P. Walker and R. Day.
**History of the British Flora*, ed. 2, by Sir H. Godwin. Cambridge University Press, Cambridge. 1984. Paperback edition, price £18.00 (ISBN-521-26941-5).
**Flora of the British Isles, Illustrations I-IV*, by S.J. Roles. Cambridge University Press, Cambridge. 1984. Paperback edition, price £8.95 per volume (ISBN 0-521-26965-2).
**Plant Pathogens and their control in Horticulture*, by G.R. Dixon. Pp. 253, with 33 text-figures. Macmillan, London. 1984. Price £7.95 (ISBN 0-333-35912-7).
**The Ecology of Tropical Food Crops*, by M.J.T. Norman, C.J. Pearson and P.G.E. Searle, Pp. 369, with 55 text-figures. Cambridge University Press, Cambridge 1984. Price (paperback) £12.95 (ISBN 0-521-28428-7).
**Positional Controls in Plant Development*, ed. by P.W. Barlow and D.J. Carr. Pp. 502, with numerous text-figures. Cambridge University Press, Cambridge 1984. Price £45.00 (ISBN 0-521-25406-X).

°*Vicia faba: Agronomy, Physiology and Breeding*, ed. by P.D. Hebblethwaite *et al.* Pp. 333, Nijhoff/Junk, The Hague, etc, 1984. Price £33.75 (ISBN 90-2472-964-5).

°*Sampling Methods and Taxon Analysis in Vegetation Science*, ed. by R. Knapp. Pp. 370, with numerous text-figures. Junk, The Hague, etc. 1984. Price £39.25 (ISBN 90-6193-185-1).

Finally, Dr K.M. Mathew S.J., an Indian B.S.B.I. member, has been sending us his mammoth work, *The Flora of the Tamilnadu Carnatic*. The latest volumes to arrive are Vol. 3, Parts 1 and 2, which constitute the main text of the Flora and were published on 30.12.1983 by the Rapinat Herbarium, St. Joseph's College, Tiruchiripalli, India, at a cost of £40 per part. Part 1 (1284 pages) includes Ranunculaceae to Labiatae and Part 2 (2154 pages) Plantaginaceae to Cycadaceae (Vols 1 and 2 respectively contain Materials and Illustrations for the Flora). With incredible industry, Dr Mathew appears to have been author or co-author of nearly all the family accounts, as well as the introduction and family keys (of which there are two, one based on fruits). The Flora deals with a relatively small area of south-eastern India that is floristically rich, and it will certainly be useful in a wider Indian context.

NORMAN K.B. ROBSON, Botany Dep't, British Museum (Nat. Hist.), LONDON SW7 5BD.

NEWS FROM OUNDLE LODGE

Revised prices just received from publishers. Please amend the Autumn 1984 list as shown:

FLORA OF CORNWALL - £7.00.

FLORA OF THE LONDON AREA - £17.50.

FLORA OF ESSEX - £11.25.

FLORA OF SHROPSHIRE - £6.00.

THE FLORA OF WEST LANCASHIRE - £5.00.

THE FLORA OF WEST YORKSHIRE - £6.00.

FLORA OF PERTHSHIRE - £5.00.

FLORA OF KINTYRE - £7.50.

FLORA OF CONNEMARA AND THE BURREN - £37.50.

FLORA OF THE BRITISH ISLES - £45.00.

THE FERNS OF BRITAIN AND IRELAND - £45.09, Paperback £17.50.

BRITISH MOSSES AND LIVERWORTS - Paperback. £17.50.

THE MOSS FLORA OF BRITAIN AND IRELAND - £17.50.

FLORA EUROPAEA - £65.00 per volume, £265.00 the set.

CHROMOSOME INDEX TO FLORA EUROPAEA - £35.00.

CONSOLIDATED INDEX TO FLORA EUROPAEA - £45.00.

WILLIS'S DICTIONARY OF FLOWERING PLANTS AND FERNS - £47.50.

ELM - £37.50.

HOW TO DRAW PLANTS - £11.00.

A. & C. Black who took over Epworth Press have remaindered the reprint floras of Cornwall, Shropshire, West Lancashire, West Yorkshire and Perthshire. We have acquired copies of these from a wholesaler and are offering them as shown on the amended list above.

The Flora of Kintyre, which is an original flora and not a reprint will be £7.50. Note also the price of Flora of the Mediterranean is raised to £9.50.

MARGARET PERRING, Oundle Lodge, Oundle, PETERBOROUGH PE8 5TN.

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