

BRITISH LICHEN SOCIETY.

President: J. H. G. Peterken, F.L.S.

BULLETIN 21. October 1967

Blackwell to publish The Lichenologist

Agreement has now been reached whereby Blackwell Scientific Publications Ltd., 5 Alfred Street, Oxford, will publish The Lichenologist from the 1st January 1968. The publishers will sub-edit manuscripts and will be responsible for the entire production; they will also collect non-member subscriptions and will store and sell back numbers. The British Lichen Society retain full responsibility for editorial policy. Two numbers will generally be published each year to form one volume. The subscription price will be £2 or \$6.50 per single issue and £3 or \$10.00 per annum post free. Members of the British Lichen Society continue to receive the journal free of charge.

The agreement marks an important step forward in the history of The Lichenologist. Henceforth the journal will be able to appear twice yearly instead of once only, and the circulation should increase through subscription agents and booksellers with whom Blackwell have connections. Professional sub-editing will enhance the typography and lay-out. Blackwell Scientific Publications are justly famous for the high standard of their New Phytologist, Journal of Ecology, etc. and a great future for The Lichenologist therefore appears assured.

Colour

This year's number of The Lichenologist, expected to be published towards the end of the year, will contain a colour plate, the first to appear in the journal. The high cost of colour reproduction inhibits their use and the one to be published this year is being paid for by the author, who has acquired grants to finance it. Regrettably coloured plates are unlikely to be a regular feature of The Lichenologist for some years to come.

Subscription Rates

The annual subscription to the Society is £2 for ordinary members, £1 for junior members and 5/- for family members from 1st January 1968. Members who pay by Bankers' Order are asked to ensure that they have instructed their bank to pay £2 instead of £1.10.0. as hitherto. New Bankers' Order Forms are enclosed for this purpose, which members should give to their bank, and then kindly inform the Treasurer, Dr. D. H. Brown, Department of Botany, The University, Bristol 8, that they have altered their subscription. Junior and family members with bank accounts can also use these forms by making an initialled alteration to the appropriate amount for their subscription. Please note that the Society's account is at the National Provincial Bank Ltd., Bristol, Queen's Road; Cheques and postal orders should be made out to the "British Lichen Society" and never to individual members.

Nominations for Council

Nominations for Council Members for 1968 - 69 should be sent to the Secretary, Mr. J. R. Laundon, Department of Botany, British Museum, (Natural History) Cromwell Road, London S.W.7 before 31st December 1967. Mr. J. D. Guiterman, Dr D. H. S. Richardson and Mr E. C. Wallace retire from the Council and are not eligible for re-election.

Annual General, Lecture and Exhibition Meeting, 6 January 1968

The Annual General Meeting will be held at 11.00 hrs. on Saturday 6 January 1968, in the Department of Botany, Imperial College, Beit Hall, Prince Consort Road (north side), South Kensington, London S.W.7. The nearest Underground Station is South Kensington, and Exhibition Road connects the station with Prince Consort Road. The Department is immediately to the south of the Albert Hall. It is hoped that all members will endeavour to attend.

AGENDA

1. Apologies for absence.
2. Minutes of the last Annual General Meeting.
3. Matters arising.
4. Reports of the Secretary, Treasurer and other officers.
5. Motion by Council: that in Rule 7 line 3 the words "who will normally succeed the president in office" shall be deleted.
6. Motion by Council: that in Rule 7 line 6 the sentence "All other officers shall be nominated by the Council and submit themselves for election annually at the Annual General Meeting of the Society" shall be deleted, and the sentence "Nominations for all other officers shall be in writing, submitted with the consent of the nominee, and shall be received by the Secretary two weeks before election at an Annual General Meeting. The Council shall have power to make nominations at any time prior to an Annual General Meeting" added.
7. Motion by Council: that in Rule 8 the following sentence be added after the first sentence "Nominations for the members shall be in writing, submitted with the consent of the nominee, and shall be received by the Secretary two weeks before an Annual General Meeting."
8. Place and dates of Autumn Meeting, 1968.
9. Place and dates of Annual General, Spring and Summer Meetings, 1969.
10. Election of Auditor.
11. Election of three members of Council in place of those retiring in rotation.
12. Election of Officers.
13. Any other business.

J. R. Laundon
Honorary Secretary

The Lecture and Exhibition Meeting will be held in the afternoon in the same building. Members are asked to make a special effort to contribute exhibits of specimens or other material relevant to lichenology, and an hour has been set aside for their study and discussion; during this time the exhibitors may speak about their displays should they wish to do so. It is also hoped that some members might be able to give short talks or show slides, and those willing to do so are kindly requested to inform the Secretary before the meeting. The main programme is as follows:

- 14.00 P.W. JAMES, B.Sc., F.L.S. Modern methods of lichen taxonomy.
- 14.30 T. D. V. SWINSCOW, M.B., B.S., M.Sc., F.L.S. Delimitation of genera in the pyrenocarpous lichens.
- 15.00 Study of exhibits.
- 16.00 R. H. BAILEY, B.Sc. Dispersal of lichen propagules.
- 16.30 D. H. S. RICHARDSON, D.Phil. Transplant experiments with lichens.

Spring Field Meeting on the Isles of Scilly, 1968

See Bulletin 20 STOP-PRESS for details. Certain lichens, e.g. Roccella, Teloschistes, are conspicuous but rare on the Islands. Their conservation is a vital matter, and they should not therefore be collected.

Summer Meeting in the Scottish Highlands, 1968

The Summer Field Meeting will be held in the Cairngorm Mountains area of the Scottish Highlands. There will be large areas of natural Pinus forest for investigation in addition to mountain vegetation. The first week will be centred on Aviemore, Inverness-shire, from Wednesday evening 31 July until Wednesday morning 7 August 1968. The High Range Hotel is the headquarters accommodation, and members should meet outside at 9.30 on Thursday 1 August. Accommodation at Aviemore is as follows, the tariff chiefly applicable to 1967:

- Alt-na-Craig Hotel (Telephone 217), 1 single, 8 double rooms. £14.14.0 per week full board; £13.13.0 half-pension; service 10%
- Aviemore Chalets, 48 rooms with 4 bunks per room. £1.1.0. per night, bed only.
- Cairngorm Hotel (Telephone 233) 12 single, 15 double rooms. £16.16.0. per week full board.
- High Range Hotel (Telephone 636/7/8) (Headquarters). 12 single, 12 double chalet rooms. £17.6.6 - £18.18.0 per week full board; £14.3.6 - £15.15.0 per week half-pension (breakfast, tea, lunch or dinner).

Strathspey Hotel (Telephone 681). 54 double rooms. £23.10.0. per week full board.

Winking Owl Roadhouse (Telephone 646). 2 double rooms. 19/6 bed and breakfast.

Cairngorm Hotel (Telephone 630). 1 single, 2 double rooms. 17/6 bed & breakfast.

Craigellachie Guest House (Telephone 236). 4 double rooms. £10.10.0 per week full board.

Ranville (Telephone 631). 1 single, 2 double rooms. 18/6 bed and breakfast.

Ravenscraig Guest House (Telephone 278). 2 single, 4 double rooms. £12.0.0. per week full board.

There is a Youth Hostel at Aviemore and the following important hotels occur at Rothiemurchus (marked Inverdrue on the Ordnance Survey map), 1 mile from Aviemore, and Coylumbridge, 2 miles from Aviemore:

Coylumbridge Hotel (Rank Hotels Ltd.) (Telephone 661/667). 113 double rooms. £35.0.0. per week full board.

Dell Private Hotel, Rothiemurchus (Telephone 216). 4 single, 8 double rooms. £12.12.0. per week full board, plus service charge.

The second week will be centred on Braemar, Aberdeenshire, from Wednesday evening, 7 August to Wednesday morning, 14 August, 1968. The Fife Arms Hotel will be the headquarters accommodation, and members should meet outside here at 9.30 hrs. on Thursday 8 August. Accommodation at Braemar is as follows, the tariff chiefly applicable to 1967:

Bellvue, Chapel Brae. 1 single, 3 double rooms.

Braemar Lodge Hotel, Castleton (Telephone 617). 3 single, 8 double rooms. £14.14.0. per week full board.

Callater Lodge, Castleton (Telephone 275). 8 double rooms. £14.14.0. per week full board.

Fife Arms Hotel (Telephone 644) (Headquarters). 26 single, 60 double rooms. £2.12.6 per day full board.

Invercauld Arms Hotel (Telephone 605). 10 single, 49 double rooms. £3.13.6. per day full board.

Mar Lodge (Telephone 216). 4 single, 29 double rooms. £19.19.0 - £29.8.0 per week full board.

Mayfield Guest House, 11 Chapel Brae (Telephone 238). 2 single, 7 double rooms. Dinner, bed & breakfast £1.15.0. per night. No lunches.

There is a Youth Hostel at Braemar.

Miss U. K. Duncan and Mr. P. W. James are leaders for the fortnight and persons attending must return the enclosed form to Miss Duncan and book their own accommodation stating that they require a room fitted with hot and cold water (if required; water is not always on tap in all rooms), and packed lunches each day. Early booking is essential. Members using public transport to Aviemore may travel by night train (Euston 20.20. - Aviemore 7.09) and those going to Braemar go by bus from Aberdeen. Details from travel agents. Miss Duncan will be pleased to answer any special enquiries regarding the Summer Meeting.

Proposed Rule Changes

The proposals for certain changes in the Rules may again cause controversy at the Annual General Meeting. All the proposed changes relate to the way in which the Officers and Council of the Society are nominated and elected. The Council would like to see more freedom of manoeuvre in the election of the President by not, as at present, having to elect him, in effect, four years in advance. Some members consider that the present system is a good one in that the promotion of vice-president to president makes for stability within the Society. At the last Annual General Meeting this same proposal was discussed and, although more members supported the change than opposed it, it was not approved by the necessary two-thirds of the members present. Council's other main proposal is that members should be able to submit nominations for officers. Under the present Rules only the Council itself is able to make such nominations, and since the Council is largely composed of officers the latter are in effect nominating themselves. Such a procedure is undemocratic and gives rise to the danger of the Society being run by a self-perpetuating clique over whom the members have no control. However, others may argue that to allow members to make nominations could lead to persons being elected to positions to which they were unsuited, and that the filling of positions is best left to the wisdom of the Council.

Proposed Rule changes which excite controversy experience difficulty in being passed, because they require approval of not less than two-thirds of the members present. Arguments over proposals usually lead to abstentions when the matter is put to the vote. Yet to abstain has the same effect as opposing the motion where Rule changes are concerned. A decisive decision is obtained only when members make up their minds and use their votes.

Librarian

The Society's Librarian, Dr D. C. Smith, will be away from Oxford from January to September 1968. During this period all correspondence regarding the library should be addressed to the Acting Librarian, Mr. D. Jackson Hill, Department of Agriculture, The University, Parks Road, Oxford.

Reading Circle

The annual subscription to the Reading Circle is increased from 2/- to 5/- per year from 1 January 1968. This is to enable two copies of each of The Bryologist and the Revue Bryologique et Lichenologique to be circulated, instead of a single copy as formerly. The extra copy should enable members to receive the journals twice as quickly as in the past.

Both journals contain interesting papers on bryophytes and lichens, mostly written in English and French. Both list recent papers on lichens, that in The Bryologist being so complete as to include occasional references to lichens in works of fiction, e.g. "WYNDHAM, J. Trouble with Lichen ... entertaining science fiction novel brimming with fractured lichenology." Those who find the scientific articles in this journal rather staid can quickly turn to the controversial book reviews for exciting reading: "if some clod mistakes our scholarship for snobbery, we will excuse him since common sense is no match for tradition" - "Stearn's guided tour through the ruins" - "typical of what we have come to expect from the Cramer Verlag; an unedited, crudely printed, tasteless production priced with a cynical cupidity". The "News and Notes" tell one who is visiting who's herbarium or dinner party, whilst the poetic quotations make for happy endings. In common with The Lichenologist, The Bryologist has now increased its format. Members can join the Reading Circle by sending their subscription to the Reading Circle Secretary, Dr D. C. Smith, Department of Agriculture, The University, Parks Road, Oxford. From January to September 1968 Dr Smith will be away, and Mr D. Jackson Hill of the same address will be Acting Reading Circle Secretary. During this period correspondence regarding the Circle should be addressed to Mr Hill.

Individual Maps Scheme

Mr R. M. Garrett's address is now El. Colegio Colombo-Britanico, Cali, Colombia, South America. The following additions to the lists of individual mappers given in Bulletins 19 and 20 should be noted:

<u>Buellia canescens</u>	Miss P. B. Topham, Scottish Horticultural Research Institute, Invergowrie, Dundee, Angus.
<u>Parmelia borreri</u>	D. I. Morgan-Huws, Department of Biological Sciences, Hay Street, Portsmouth, Hampshire.
<u>P. conspersa</u>	D. I. Morgan-Huws.
<u>P. saxatilis</u>	D. I. Morgan-Huws.
<u>P. subrudecta</u>	D. I. Morgan-Huws.
<u>P. sulcata</u>	D. I. Morgan-Huws.
<u>Umbilicaria cylindrica</u>	Miss P. B. Topham.
<u>U. polyphylla</u>	Miss P. B. Topham.
<u>U. polyrrhiza</u>	Miss P. B. Topham.
<u>U. torrefacta</u>	Miss P. B. Topham.
<u>Usnea ceratina</u>	D. I. Morgan-Huws.
<u>U. florida</u>	D. I. Morgan-Huws.
<u>U. rubiginea</u>	D. I. Morgan-Huws.
<u>U. subfloridana</u>	D. I. Morgan-Huws.

It is with deep regret that we record the death of Professor emeritus G. E. Du Rietz at Uppsala, Sweden, on 7 March 1967. Professor Du Rietz was born on 25 April 1895 in Stockholm, and he became a lecturer at Uppsala University in 1921, becoming professor of plant ecology in 1934. He was a member of the British Lichen Society. Amongst his many botanical publications were many important papers on lichens and lichen communities which had a great influence on lichenology. He not only revised groups of species and described communities but contributed major works on such general fundamental topics as the classification and nomenclature of vegetation units, bipolar species, the soredia and isidia of lichens, the fundamental units of biological taxonomy, etc. All lichenologists owe an immense debt to his work.

Reprints for Sale:

- ADAMS, J. 1909. The distribution of lichens in Ireland. Proc. R. Ir. Acad., Sect. B, 27: 193 - 234. Obtainable from the Royal Irish Academy, 19 Dawson Street, Dublin 2, price 3/- plus postage. Invoice will be sent.
- KNOWLES, M. C. 1929. The lichens of Ireland. Proc. R. Ir. Acad., Sect. B, 38: 179 - 434. Obtainable from the Royal Irish Academy (address above), price £1. 2. 6. plus 1/6 postage.
- PORTER, L. 1917. On the attachment organs of the common corticolous Ramalinae. Proc. R. Ir. Acad., Sect. B, 34: 17 - 32. Obtainable from the Royal Irish Academy (address above) price 1/6 plus postage.
- PORTER, L. 1919. On the attachment organs of some common Parmeliae. Proc. R. Ir. Acad., Sect. B, 34: 205 - 211. Obtainable from the Royal Irish Academy (address above), price 1/6 plus postage.
- PORTER, L. 1948. The lichens of Ireland (Supplement). Proc. R. Ir. Acad., Sect. B, 51: 347 - 386. Obtainable from the Royal Irish Academy (address above), price 7/- plus postage.
- REILLY, J., HAYES, M., & DRUMM, P. J. Lichenin and lichenin nitrate. Proc. R. Ir. Acad., Sect. B, 40: 102 - 105. Obtainable from the Royal Irish Academy (address above), price 3/- plus postage.
- RYAN, H. & O'RIORDAN, W. M. 1917. On the tinctorial constituents of some lichens which were used as dyes in Ireland. Proc. R. Ir. Acad., Sect. B, 33: 91 - 104. Obtainable from the Royal Irish Academy (address above), price 1/6 plus postage.
- SMITH, A. L. 1911. Lichenes. Proc. R. Ir. Acad. 31 (Sect. 1, part 14). This reprint from the Biological Survey of Clare Island is obtainable from the Royal Irish Academy (address above), price 1/6 plus postage.

The Secretary will be pleased to hear of other lichen reprints for sale, including authors who are kind enough to sell any of their reprints, so that they might be listed in future Bulletins.

Lichen Symposium

La Société botanique de France is marking the centenary of the discovery of symbiosis in lichens by holding a symposium entitled "Les Lichens et la Symbiose lichénique" at the Museum National d'Histoire naturelle, Paris, from 17 - 18 November 1967. Papers regarding symbiosis, physiology, biology, origin and systematics of lichens will be included. Further information may be obtained from the organiser, Professor R. G. Werner, 78 rue Jeanne d'Arc, Nancy, France.

Dr. J. W. Sheard

Dr. J. W. Sheard, Department of Botany, Magee University College, Londonderry, is spending a year at the Natural History Section, National Museum of Canada, Ottawa 4, Ontario, Canada, studying the North American species of Rinodina, with the aid of a National Research Council Post-doctoral Fellowship. Dr. Sheard's important account of the British species of this genus will be published in the 1967 number of The Lichenologist.

Derbyshire Lichens

D. L. Hawksworth, 3 Hawkins Drive, Ridgeway, Ambergate, Derbyshire, is preparing a lichen flora of Derbyshire, and would be grateful to receive lists of species from anyone who has collected or recorded in the county. All records will also be incorporated into the 10 km. grid mapping scheme.

The first two issues of an International Lichenological Newsletter appeared in April and September 1967. The newsletter is edited by Dr V. Ahmadjian, Clark University, Worcester, Massachusetts 01610, U.S.A. Its purpose is to provide a common communication link between lichenologists for the exchange of ideas and information, to circulate requests from and news of lichenologists and to stimulate research in lichenology.

The first number of this newsletter calls for the setting up of an International Association of Lichenology. At the Botanical Congress in Edinburgh in 1964 a group of lichenologists met and approved a motion to initiate such an Association. A committee of three was formed to prepare a newsletter, but two members subsequently doubted its value in view of the bulletins and journals for lichenologists which were already in existence. Thus Dr Ahmadjian decided to issue the newsletter himself. He announces that a constitution, rules and committee for the International Association of Lichenologists will be discussed at the International Botanical Congress in Seattle, U.S.A., 24 August - 2 September 1969.

The second number of the newsletter is mainly devoted to the research projects of lichenologists.

International Association of Lichenologists

Dr Ahmadjian's proposal to form an International Association of Lichenologists at Seattle in 1969 has provoked varying reactions among lichenologists. Many welcome the proposal and feel that lichenology will be strengthened and advanced by the formation of an Association of this kind. Many, however, feel that such an Association might prove superfluous in view of the already highly active lichen section of the American Bryological Society, the Revue Bryologique et Lichénologique and the British Lichen Society, whilst a body composed of an elite of lichenologists would isolate professional workers from amateur field naturalists at a time when they should be working in close contact and harmony. The competence of the existing lichenological groups has certainly prevented the active development of an International Association to date. At present it appears that the proposed Association is unlikely to die a natural death through lack of support, and that the promotion of the Association may be successful.

Keys

Although all important research floras (e.g. Flora Europaea, Flora Malesiana, Flora of Tropical East Africa, Flora of Turkey, Flora Zambesiaca, etc.) use indented dichotomous keys, as do most continental botanists, British botanists plod wearily on with their bracket dichotomous keys. The merits of the indented keys in giving a visual presentation of the group, and defining the characters of a particular species at a glance, are evident to everyone except British botanical (including lichenological) authors. Perhaps one day the latter might consider the wishes of the user of the keys, instead of simply being kind to their printers.

Divided Britain

M. C. F. Proctor's statistical analysis of the distribution of British liverworts (J. Ecol. 55: 119 - 135 (1967)) emphasises the phytogeographical boundary between Highland Britain and Lowland Britain. Dr Proctor also mentions the importance of this division in relation to the distribution of mosses and flowering-plants. He could also have mentioned lichens, for an examination of the vice-county distribution of many species in Watson's Census Catalogue of British Lichens (1953) indicates that the division of the British Isles into these two regions is also of fundamental importance as far as the distribution of this group of plants is concerned. Although the division is well-known to geographers and is given special emphasis in the yearly editions of Britain. An Official Handbook, prepared by the Central Office of Information, British lichenologists pay little attention to its existence, and continue to use such loose phrases as "hilly districts", "upland situations", etc.

Lowland Britain (also sometimes called the Lowland Zone) comprises that part of England east and south of an approximate line from the mouth of the Tyne

in the north-east to the mouth of the Exe in the south-west. Highland Britain (also called the Highland Zone) comprises Scotland and Ireland, the Lake District, the Pennines, almost the whole of Wales and the south-western peninsula of Devon and Cornwall. A map of the two regions and an excellent description of their contrasting characteristics is published in L.D. Stamp's Britain's Structure and Scenery (1946).

Extra Time

The decision by the Home Secretary, Mr R. Jenkins, to adopt Central European Time from 18 February 1968 will be welcomed by all British lichenologists. The resulting extra hour of daylight on winter afternoons will make a considerable difference to the amount of field work which can be carried out at such times of the year. In the past, excursions involving long distance travel could not be undertaken during December and January because of the few hours of daylight available on reaching the destination. This was particularly unfortunate since winter is the best and most pleasant time of the year for lichen field work. Only at this time of year is the flowering-plant vegetation low, the tree bark not obscured by leaves, the countryside uncluttered with humans and their vehicles, the weather pleasantly cool and one is not under constant insect attack. From February lichenologists will be able to take full advantage of the winter season.

Council for Nature

The Council for Nature acts as a central agency for naturalists and natural history societies in Britain, exerting their case on the Government, press and public opinion. It deals with conservation at a national level (including such matters as the control of pesticides, future of common land, etc.) has an all-party Parliamentary Committee, deals with education through its Youth Committee, provides information in the newsletter Habitat for naturalists, press, radio and television, as well as running the Conservation Corps, which undertakes some of the manual tasks necessary for the scientific management of nature reserves. Subscribers receive Habitat monthly. Subscriptions for individuals are £1 a year (Subscriber), £5 a year (Associate) or £50 a lifetime (Life Associate). Further information may be obtained from the Council for Nature, Zoological Gardens, Regent's Park, London N.W.1.

Conservation Society

A new Society, called The Conservation Society, has recently been formed. As well as promoting the conservation of wild life and amenities, this Society is concerned with the basic problems of conservation, of which the "population explosion" is the most important. The Society urges that the United Kingdom (and other countries) should adopt a population policy, or the quality of human enjoyment of life will suffer as a result of over-population. The number of people in the United Kingdom is expected to increase by 20 millions by the end of the century and large areas of the countryside will have to be built over in order to house this extra population. Forty more cities the size of Leeds will be needed.

In order to bring about a slower increase in population, the Conservation Society urges that parents should adopt a responsible attitude to the number of children they bring into the world by limiting their families to two children. Full family planning facilities should be free under the National Health Service, and after a lapse of nine months family allowances and income tax relief should be given only in respect of the first and second children born thereafter. Details of the Conservation Society are obtainable from the Honorary Secretary, Dr D. M. C. MacEwan, 28 Abercromby Place, Edinburgh 3.

Conservation Code

The Field Studies Facilities Committee have produced a provisional version of the Conservation Code. Members will be informed when a final version is available. The provisional Code emphasises the following points:

1. Plan and lead excursions well. Successful field work depends on careful planning, with adequate reconnaissance. Parties should be under responsible supervision.

2. Choose and use your area carefully. Areas of special scientific interest

- are not necessarily the best for field work, especially for beginners.
3. Respect ownership. Obtain permission from the owner before going on to private land.
 4. Think of other users of the countryside. Do not spoil the enjoyment of anglers and other sportsmen.
 5. Leave the area as you found it. Avoid trampling. Thoughtless hammering of rocks may not only ruin their scientific interest, but also undermine or disfigure other people's property. Never collect rock specimens from walls or buildings.
 6. Avoid disturbance to plants and animals. Logs and stones should be replaced in their original positions, or the animals which live underneath may die.
 7. Collect no more than you need. Most field work can be done without collecting specimens. Unnecessary collecting is wasteful and can rapidly lessen the interest of an area. If collecting is essential, make sure that you only take just enough for your needs.
 8. Safeguard rare species. Rare species should never be collected.
 9. Record your observations. Leave things where they are and make careful records.
 10. Give no one cause to regret your visit. Do not give field studies a bad name.

Literature on lichens

- AHMADJIAN, V. 1966. Lichens. Symbiosis 1: 35 - 97. Academic Press, New York. (Important review article).
- AHMADJIAN, V. 1967. The Lichen Symbiosis. Waltham, Massachusetts. (Excellent textbook on lichen biology and physiology; \$5.75.)
- AHMADJIAN, V. 1967. A guide to the algae occurring as lichen symbionts: isolation, culture, cultural physiology, and identification. Phycologia 6: 127 - 160. (Important guide to phycobionts. "Free-living populations of Trebouxia, the most common phycobiont, ... probably do not exist.")
- BAILEY, R. H. 1967. Notes upon the germination of lichen ascospores. Rev. Bryol. Lichen., nouv. ser., 34: 852 - 853. (Germination of lichen spores in water films.)
- BAILEY, R. H. 1967. Notes on Gloucestershire lichens - 1: North Gloucestershire Naturalists Society Journal 18 (4): 154 - 156. (Status of Lecanora conizaeoides, Peltigera spurea, and Solorina saccata in Gloucestershire, record of Dermatocarpon miniatum from Berkshire, and finding of spores of Pyrenula nitida on natural substratum away from parent plants.)
- CULBERSON, W. L. 1967. Chimie et taxonomie des Lichens du groupe Ramalina farinacea en Europe. Rev. Bryol. Lichen., nouv. ser., 34: 841 - 851. (Ramalina farinacea s. lat. is shown to comprise four chemical strains: R. farinacea (L) Ach. s. str. (protocetraric acid), R. hypoprotocetrarica Culb. (sp. nov.) (hypoprotocetraric acid), R. reagens (B. de Lesd.) Culb. (stat. nov.) (norstictic and salacinic acids), and R. subfarinacea (Nyl. ex Cromb.) Nyl. (norstictic acid). R. pollinaria (Westr.) Ach. (evernic acid) is also included in this account. All occur in Britain).
- DREW, E. A. & SMITH, D. C. 1967. Studies in the physiology of lichens. VII. The physiology of the Nostoc symbiont of Peltigera polydactyla compared with free-living forms. New Phytol. 66: 379 - 388. (Marked differences are found between Nostoc directly isolated from the thallus and that which had been in pure culture for several weeks. The principal photosynthetic product of the phycobiont of Peltigera polydactyla is free glucose.)
- DREW, E. A. & SMITH, D. C. 1967. Studies in the physiology of lichens. VIII. Movement of glucose from alga to fungus during photosynthesis in the thallus of Peltigera polydactyla. New Phytol. 66: 389 - 400.
- HALE, M. E. 1967. The Biology of Lichens. London (Important textbook dealing with morphology, dispersal, physiology, growth, ecology, chemistry, classification, economic uses, etc., of lichens. Published by Edward Arnold Ltd., price £1.1.0. (paperback), £2.2.0 (hard-cover).)
- HAWKSWORTH, D. L. 1967. Lichens collected by Jonathan Salt between 1795 and 1807 now in the herbarium of Sheffield museum. Naturalist. Hull, 1967(901): 47 - 50. (83 specimens, mostly from Derbyshire and Yorkshire).

HENNIPMAN, E. 1967. Notes on some Dutch Cladoniae (Lichenes). Persoonia 4: 427 - 428. (Cladonia crispata var. subcrispata Hennipm. is described as a fumarprotocetraric acid strain (P+) of C. crispata, the combination C. furcata var. subrangiformis (Sandst.) Hennipm. is made, and C. squamosa var. allosquamosa Hennipm. is a new name for C. subsquamosa (Nyl. ex Leight.) Nyl. ex Cromb. (1880), non C. subsquamosa Krempelh. (1873).)

LETRUIT-GALINOU, M. A. 1967. Recherches sur l'ontogénie et l'anatomie comparées des apothécies de quelques Discolichens. Rev. Bryol. Lichén., nouv. sér., 34: 413 - 588, plates 1 - 46. (Major work on the development and structure of the ascocarps of Baeomyces rufus, Buellia conescens, Cladonia floerkeana, Graphis elegans, G. scripta, Lecanora subfuscata, Lecidea elaeochroma (= L. limitata), Opegrapha viridis, Pertusaria pertusa, Phlyctis agelaea, Roccella montagnei and Theolotrema lepadinum, with analyses into types of development, etc.)

MASSE, L. J. C. 1967. Flore at végétation lichéniques des Iles Glénan (Finistère). Rev. Bryol. Lichén., nouv. sér., 34: 854 - 927. (Detailed account of the lichen flora and communities etc.)

RANWELL, D. S. & JAMES, P. W. 1967. Lichens from the Ile du Levant (Iles d'Hyères). Rev. Bryol. Lichén., nouv. sér., 34: 836 - 840. (33 species from this island of renown in the south of France.)

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Index

It is intended to issue an index to Bulletins 1 - 25 with Bulletin 25. A title-page will also be issued with Bulletin 25 for members wishing to bind their Bulletins.

BULLETIN 21. Issued by the British Lichen Society c/o Department of Botany, British Museum (Natural History), Cromwell Road, London S.W.7. Edited by J. R. Laundon. Duplicated by Brown's Typewriting Service Ltd., Fulfilledge Works, Helena Street, Burnley, Lancashire. October 1967.

9.

Cut here

To Miss U. K. Duncan, Parkhill, Arbroath, Angus.

Date

I hope to attend the summer field meeting at *Aviemore and/or *Braemar, and will be staying at

*I shall have a car and can provide seats for passengers.

Signed

Address

*Delete as necessary.