

THE ROYAL COMMISSION ON HISTORICAL MANUSCRIPTS

Report on the papers of
SIR FREDERICK CHARLES BAWDEN FRS
(1908-1972)

including papers of
ALFRED ALEXANDER PETER KLECZKOWSKI FRS
(1908-1970)

and of
NORMAN WINGATE PIRIE FRS
(B. 1907)

deposited in the Library of the Royal Society,
London

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THE ROYAL SOCIETY

THE ROYAL COMMISSION ON HISTORICAL MANUSCRIPTS

Joint Committee on Scientific and Technological Records

CONTEMPORARY SCIENTIFIC ARCHIVES CENTRE

Report on the papers of

Sir Frederick Charles Bawden FRS
Plant Pathologist
(1908 - 1972)

and including papers of

Dr. Alfred Alexander Peter Kleczkowski FRS
Bio-Mathematician
(1908 - 1970)

and

Norman Wingate Pirie FRS
Biochemist

Listed by: Jeannine Alton
Harriot Weiskittel

Deposited in the Library of the Royal Society, London 1976

Description of the collection

The papers, which cover the years 1936-73, were received from Lady Bawden, from Rothamsted Experimental Station, and from the Royal Society.

Personal correspondence remains in the possession of Lady Bawden. Some of Bawden's correspondence and papers dealing with Rothamsted Experimental Station are held there.

Bawden's close collaboration with scientific colleagues and members of the staff of Rothamsted is shown in the laboratory notebooks (Section B) and in all sections of the correspondence. In particular, his collaborative work with N.W. Pirie and A.A.P. Kleczkowski is kept as a single section (B.1-38, see notes on pps. 3 to 6). Dr. Kleczkowski's notebook (B.38) was received from Miss Helen Kleczkowski (daughter), who retains some personal papers of her father.

The help of Lady Bawden and Miss Mildred Ashford (Bawden's secretary) is gratefully acknowledged.

The papers are not yet necessarily all available for consultation.

Summary of the career of Sir Frederick Bawden

- b. 1908 North Tawton, Devon
Educated at Okehampton Grammar School
- 1925-26 Crediton Grammar School
- 1926-30 Emmanuel College, Cambridge
- 1928 First Class, Natural Sciences Tripos
- 1930-36 Research Assistant to R.N. Salaman, Potato Virus Research Station, Cambridge
- 1934 Married Marjorie Elizabeth Cudmore
- 1936-40 Virus Physiologist, Plant Pathology Department, Rothamsted Experimental Station, Harpenden
- 1940-~~50~~⁵⁸ Head of Plant Pathology Department, Rothamsted
- 1949 Fellow of the Royal Society
- 1950-58 Deputy Director, Rothamsted
- 1958-72 Director, Rothamsted
- 1967 Knighthood
- 1968 Treasurer of Royal Society
- (see also A.1, A.2 of the handlist)

Contents of the handlist

	<u>Items</u>	<u>Page</u>
A. Biographical and Personal	A.1-A.12	3
B. Laboratory notebooks (F. W. Bawden, A. Kleczkowski, N.W. Pirie)	B.1-B.38	3
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A. Biographical and Personal

- A.1 Memoir by N.W. Pirie, Biographical Memoirs of Fellows of the Royal Society, Vol.19, 1973, pp.19-63.
Rothamsted Report for 1971: tributes and appreciations of Bawden.
- A.2 Typescript summary of career (including all committees and awards) 5pp.
Typescript list of Royal Society Committees on which Bawden served.
Typescript list of all Bawden's visits abroad, 4pp.
- A.3 Travel diary of trip to Ghana (then the Gold Coast) and Nigeria to study swollen shoot disease. Detailed descriptions of crops and agricultural institutes. 1946-47
- A.4 Letter from J. Henderson Smith to publisher recommending Bawden as author of book on viruses. 1938
Letter from Sir Alexander Fleming asking Bawden to lecture at the Wright-Fleming Institute of Microbiology and congratulating him on his election to the Royal Society. 1949
- A.5 Invitations to University of Minnesota as visiting professor, and to Pennsylvania State University as Senior Foreign Scientists Fellow (both declined). 1964
- A.6 Hon. D.Sc. conferred by Hull University: related correspondence. 1964
- A.7 Opening of Plant Pathology Laboratory at Harpenden by Minister of Agriculture, Fisheries and Food: invitation, luncheon invitation and responses. 1960
- A.8 Agricultural Research Council of Central Africa: letter of congratulation on Bawden's appointment as Chairman, photocopy of final annual report and of Bawden's report (with letter to Lady Bawden from H.C. Pereira) (see also C.4). 1964
- A.9 File of misc. shorter personal correspondence (selectively indexed).
- A.10-A.12 Misc. invitations and social engagements (personal and official).

B. Laboratory Notebooks

- B.1 Large green loose-leaf laboratory notebook in Bawden's hand with correspondence from N.W. Pirie interleaved. Experimental data (the experiments are dated but do not appear in the book in chronological sequence) on work done on viruses in collaboration with Pirie. Photographic record of 'depth of penetration of a tobacco leaf in relation to time of feeding'. (see also C.15, C.16). 1936-40

- | | | |
|------|--|---------------------|
| B.2 | Green loose-leaf binder with notes of experiments and correspondence with Pirie. Some loose sheets of notes at the front of the book are of a later date.
Notebook included 4 small exercise books which have been extracted and are numbered separately (B.3-B.6). | 1939-44
1946-48 |
| B.3 | Small green notebook labelled on cover with name and 'Virus Purification'. | 1936 |
| B.4 | Notebook labelled on cover 'Potato Virus Y'. Some of the later experiments deal with tobacco necrosis. | 1938-39 |
| B.5 | Notebook labelled on cover 'Tests on outside plants'. | 1941-42 |
| B.6 | Notebook of work on tobacco mosaic virus. | 1959-60 |
| B.7 | Green loose-leaf binder with notes on experiments (mostly work on tobacco mosaic virus), notes on the literature, correspondence with James F. Duncan, photographs. Proofs of 2 articles (by Bawden and Pirie) originally intended for publication in <u>J. Gen. Microbiol.</u> but which appeared in <u>Proc. Roy. Soc.</u> | 1943-57

1972 |
| B.8 | Loose pages (from a binder) of laboratory notes (mostly on bushy stunt and tobacco mosaic virus). | 1940-43 |
| B.9 | Small exercise book containing record of experiments (TMV, cowpea virus). | 1960-62 |
| B.9a | Small exercise book containing record of experiments (cowpea, TMV, RNA). | 1962-70 |
- Items B.10 to B.37 comprise the remaining 28 volumes in a series of 45 laboratory notebooks documenting the collaboration between F.C. Bawden and N.W. Pirie from 1934 to 1970. The notebooks are in Pirie's hand and labelled with his name and address; they are numbered in a chronological sequence and the pages are numbered consecutively in sets of 1-1000. In most of the later notebooks there are typescript content lists of page references with a descriptive note of the experiments therein. The wide range of topics reflects the changing focus of ideas and problems for research. Titles given in inverted commas are those which appear on the notebooks; the underscored number is that of the notebook in the original sequence.
- | | | | |
|------|-----------|--|-------------------------|
| B.10 | <u>10</u> | 'Brucella Potato X' with note inside front cover 'Potato X started (p) 139'. | Sept.1934-
Oct. 1935 |
| B.11 | <u>13</u> | 'Virus work continued from Book 10.
Ammonium sulphate pptn results on p.142 of Book 10.
Acetic anhydride experiments on pp.160-163.
Separation of layers June 24th p.40.' | Oct.1935
Oct.1936 |

B.12	<u>14</u>	'Virus' (tobacco mosaic, potato X, tobacco necrosis).	Oct.1936- Aug.1937
B.13	<u>15</u>	'Viruses' (potato X, tobacco necrosis).	Aug.1937- Oct.1938
B.14	<u>17</u>	'Viruses' (bushy stunt, tobacco mosaic).	Oct.1938- April 1940
B.15	<u>20</u>	'Virus' (tobacco mosaic, necrosis, bushy stunt, etc.).	March 1940- Feb.1941
B.16	<u>21</u>	'Virus' (tobacco mosaic, necrosis).	Feb.1941- Nov.1941
B.17	<u>22</u>	'Normal Leaf Protein' with note inside first page 'leaf protein experiments in previous books'. Notes of conversations with other plant pathologists, notes of experiments.	Aug.1941- Feb.1951
B.18	<u>23</u>	'Virus'.	Nov.1941- Nov.1942
B.19	<u>25</u>	'Virus': 'continuation from book 23'.	Nov.1942- June 1943
B.20	<u>26</u>	'Virus' with note inside front cover of contents with page references: 'Results not yet absorbed King Edward potato Lack of effect on drying T.M.V. Single lesions of T.N. (Markham's rosette) Prep. of TN II Single lesions of T.N. B.S. inhibition'	June 1943- March 1944
B.21	<u>27</u>	'Virus' with note inside front cover: 'continuation from book 26' (notes on experiments, notes on the literature).	March 1944- July 1945
B.22	<u>28</u>	'Virus'.	April 1945- Oct.1947
B.23	<u>30</u>	inside front cover 'survey of chloroform, etc. results'; typescript list of page references.	Sept.1947-
B.24	<u>31</u>	'continued from book 30'; at back of book typescript index of contents 'in vitro inactivation of Rothamsted'	Sept.1948- Nov.1949
B.25	<u>32</u>	'NP' with typescript index of contents at back of book.	Nov.1949- Aug.1950
B.26	<u>33</u>	'NP Fission expts. -2-' with typescript index of contents.	Sept.1950- Nov.1951
B.27	<u>34</u>	At end of book 'Ribonuclease and N.P.' and 'Ascorbic acid on Necrosis': 2 typescript indexes of contents.	Nov.1951- May 1953
B.28	<u>36</u>	At end of book 'TMV': index of contents.	May 1953- May 1954

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|------|-----------|---|---------------------------|
| B.29 | <u>37</u> | Book labelled 'Nothing on Necrosis'. Indexes labelled 'Ca and Mg contents' and 'RNase activity of TMV preps...' | May 1954-
Aug. 1955 |
| B.30 | <u>38</u> | 'T Necrosis Inactivation'. | Aug. 1955-
Dec. 1956 |
| B.31 | <u>39</u> | 'TMV fragments', 'infectivity of TMV fragments': index of contents. | March 1957-
March 1959 |
| B.32 | <u>40</u> | Inside front cover labelled 'still interesting: unassimilated thiaminase expts.' | March 1959-
Oct. 1963 |
| B.33 | <u>41</u> | Notebook of experiments: not labelled. | Oct. 1963-
Dec. 1965 |
| B.34 | <u>42</u> | Notebook of experiments with typescript index at back. | Dec. 1965-
May 1967 |
| B.35 | <u>43</u> | Lab. notebook with list of experiments and page references on first page. | May 1967-
Oct. 1968 |
| B.36 | <u>44</u> | Lab. notebook with list of experiments on first page. | Oct. 1968-
April 1970 |
| B.37 | <u>45</u> | Lab. notebook with list of experiments on first page. | April 1970-
May 1971 |
| B.38 | | Green loose-leaf binder containing work of <u>Dr. Alfred Kleczkowski FRS</u> , carried out in the Plant Pathology Department at Rothamsted. The notes are in roughly chronological sequence, some have been annotated (at a later date?), and two sets of notes made in 1953-54 and 1968-69 have been inserted in the front of the book. The notebook includes graphs and charts, photographs, working notes, tracings, tabular summaries of data, diagrams.
(see Bawden's Memoir of Kleczkowski, <u>Biographical Memoirs of Fellows of the Royal Society</u> , <u>17</u> , 431-440, 1971. | 1942-69 |

C. Scientific Correspondence

Correspondence with individuals, or with institutions and official bodies. An indication of the contents is given for the more extensive files, and the principal correspondents are listed in the general index on pp.18-20.

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|----------|--|---------|
| C.1 | Agricultural Research Council
Correspondence with officials and professional colleagues in ARC Research Units re: publications, research proposals etc. submitted to Bawden for comment; conferences, symposia, discussions, lectures and talks to be attended or given by Bawden and his staff; visits to research stations and laboratories; staff appointments, secondments and courses. | 1959-71 |
| C.2, C.3 | Annals of Applied Biology
(Bawden served on the editorial committee 1942-1965)
Correspondence and comments with editors and colleagues on papers submitted for publication:
C.2 1958-62
C.3 1963-65 | 1958-65 |

- C.4 Agricultural Research Council of Central Africa, 1964-65
Andrewes, Christopher H. 1958-60 (on Virus nomenclature)
Badami, R.S. 1961
Batisse, M. 1970
Best, Rupert J. 1963
- C.5 Bos, L. 1960-71
- C.6 Broadbent, Leonard 1959-62
Buxton, Eric W. 1960-61
Caspar, Don L. D. 1958
Chessin, Meyer 1961, 1965
Close, Ronald C. 1963
Dhar, N. R. 1961
Dunworth, J. V. 1968
East Malling Research Station 1959-65
- C.7 Food and Agriculture Organization 1961 (on proposed FAO research programme under Freedom from Hunger campaign)
Francki, R. 1961
Gates, L. F. 1959-60
Harrison, Bryan D. 1964, 1968
Hodge, C. A. H. 1960
Hull, Raymond 1959-60 (Dr. Hull was Head of Dunholme Field Station until 1962 and thereafter Head of Broom's Barn.)
- C.8 Institute of Biology 1959-71
(Bawden was President of the Institute, 1969-71); misc. correspondence on symposia, lectures, etc., including 'The biological hazards of disease control' Oct. 1959; programme drafts and summaries of papers read, etc.
- C.9 Israel Agricultural Research Station 1959, 1968
Kalbfleisch, W. 1962
Knight, C. Arthur 1959
Knorr, L. C. 1966
Mann, Harold H. 1961
Maramorosch, Karl 1963-71 (includes correspondence on Methods in Virology, of which Maramorosch was Joint Editor, while Bawden served on the Advisory Board)
Needham, Dorothy 1953
Nye, G. W. 1949 (on bunchy-top disease of manilla hemp in North Borneo)
- C.10, C.11 Ministry of Agriculture, Fisheries and Food 1958-71 (including National Agricultural Advisory Service; Agricultural Improvement Council). The correspondence deals with:
visits, lectures, meetings at sub-stations, research units, etc.
recommendations and reports on research proposals submitted to Bawden and his staff for comment;
publications and exchanges of publications, especially articles in Agriculture

- C.10 1958-1960
 C.11 1961-1971 (including correspondence on enquiry into soil fertility and structure 1970)
- C.12 Natrass, R. M. 1943-46 (on potato viruses in Kenya)
- C.13 Nature 1958-71: re articles written for Nature by Bawden, books reviewed by Bawden or his staff, mss. submitted to him for appraisal or comment.
- C.14 Nutman, F. John 1949-50: re Bawden's visit to Zanzibar on Colonial Office mission 'to examine certain aspects of 'Sudden Death' of clove trees in Zanzibar and Pemba', his report and scientific correspondence with Nutman as Director, Clove Research Scheme. (see also D.8)
- C.15, C.16 Correspondence exchanged with Norman Wingate Pirie ('Bill'). (see also B.1, B.2, B.10-B.37). Pirie was Bawden's chief collaborator in work on the chemical and physical properties of viruses, beginning at the Potato Virus Research Station, Cambridge (1930-36), and continuing after Bawden's move to Rothamsted as Virus Physiologist (1936). When Bawden became Head of the Plant Pathology Department in 1940, Pirie succeeded him as Virus Physiologist. In his Royal Society Memoir (pp.23, 39-55) Pirie describes their collaboration, conducted mainly by exchanging preparations and results by post 1936-40. These files, in conjunction with the laboratory notebooks listed in Section B, are the record of the work.
- The letters are almost wholly confined to experiments, results and conclusions, and the preparation of papers for publication; some brief personal and social references are included, and Bawden's 'editorial' hand can also be seen at work. Pirie's correspondence (C.15) is very rarely dated, headed, or signed; Bawden's letters (C.16) are more frequently, but by no means generally, dated.
- C.15 Letters from N.W. Pirie to Bawden (c) 1937-40, from School of Biochemistry, University of Cambridge, and 4 letters from the Worcester Foundation for Experimental Biology, Massachusetts.
- C.16 Letters from Bawden to N.W. Pirie (c) 1937-40 and one letter 1946 (includes some correspondence, 1937, with J.T. Edwards, Cattle Testing Station, Pirbright, re visit by Bawden and Pirie to collect foot and mouth virus).
- C.17 Peachey, J. M. 1968
 Roland, G. 1958 (on Virus nomenclature)
 Rose, J. 1945 (on Coconut disease. See also C.14)
 Single, B. N. 1961
 Solo, Robert A. 1964-71
 Steere, Russell L. 1962-63
 Thung, T. H. 1958 (on Virus nomenclature)

- C.18 Personal and scientific correspondence with Sir E. John Russell (Director of Rothamsted 1912-1943).
Official letter of appointment, and private letter of welcome, to Bawden on his appointment as Virus Physiologist at Rothamsted, 1936.
Letters exchanged with Sir John during his retirement 1959-64.
- C.19 Salaman, Redcliffe Nathan 1936-51. Salaman was Director of the Potato Virus Research Station, Cambridge, where Bawden worked as his research assistant 1930-36.
- C.20 Shell Chemical Company Limited 1959-71.
Misc. correspondence re books received and articles written by Bawden for Shell journals 'Span' and 'Land', conferences, etc.
- C.21 Smith, Kenneth M. 1935-50. The correspondence deals with virus experiments and results, publications, Virus nomenclature, etc.
- C.22 Spooner, E. T. C. 1937-41.
- C.23 Stanley, W. M. 1936-47.
- C.24 Correspondence exchanged between Bawden, Pirie and Stanley 1936-38, and drafts of papers submitted for publication; with a letter from Pirie 1974 to Lady Bawden, explaining and dating the material.
- C.25 Storey, Harold Haydon. Correspondence on misc. virus diseases:
Virus multiplication, 1940
Cocoa cloves, 1946
Sudden Death of cloves, 1947-50 (see also C.14)
Rosette disease of groundnuts, 1949-51
Unexplained disease of coconuts in Jamaica, 1948
- C.26-C.29 Virus nomenclature. (see Pirie's discussion of Bawden's views, Memoir, pp.52-54)
- C.26 Correspondence between H.H. Storey and R.N. Salaman on Johnson's nomenclature 1935-36
Misc. printed reports etc. on systems of nomenclature and classification.
- C.27 Papers and correspondence relating to the International Committee on Description and Nomenclature of Plant Viruses 1938-40, with special reference to the System of Nomenclature proposed by the Committee in 1939, a draft of which is included. The chief correspondents are: James Johnson, J. Henderson Smith, Geoffrey Samuel, H.M. Quanjér, G. Dufrénoy, L.O. Kunkel, Carlyle W. Bennett, H.H. Storey.
(Bawden was not a member of the Committee, and the papers were originally in the possession of Dr. J. Henderson Smith, a member of the Committee and Bawden's predecessor as Head of the Plant Pathology Department at Rothamsted.)

- C.28 Correspondence and papers relating to the Plant Virus Section of the sub-committee on virus nomenclature set up by International Microbiological Congress (1949); Bawden served on this Committee and the Chairman was Dr. Lindsay M. Black 1950-55.
The chief correspondents are: Lindsay M. Black, T.H. Thung, P. Limasset, Christopher H. Andrewes, G. Roland.
Includes correspondence re International Conference on 'Virus and Rickettsial Nomenclature and Classification', organised by New York Academy of Sciences, Jan. 1952, at which Bawden spoke on 'Criticism of Binomial Nomenclature as applied to Plant Viruses'.
- C.29 Valteau, W. D. 1964
Waddington, C. H. 1961-62 (on International Biological Programme)
Western, J. H. 1964
Wildy, P. 1965
Wood, Ronald K. S. 1960
- C.30 Misc. shorter scientific correspondence (not indexed).
- C.31 Misc. shorter scientific and personal correspondence re invitations to lecture, attend conferences, requests for advice on publications and papers, etc. (not indexed).
- C.32-C.40 Misc. reports and advice on research projects, application for grants, etc.
- C.32 Australian Research Grants Committee 1965.
- C.33 Department of Scientific and Industrial Research
Department of Education and Science
National Science Council, Dublin
- C.34 National Environment Research Council, Nature Conservancy Research Grants Sub-Committee 1967-73 (the work was continued by the Deputy Director of Rothamsted after Bawden's death in 1972).
- C.35 National Science Foundation, Washington 1959-72.
- C.36 The Nuffield Foundation 1962-70.
- C.37 Science Research Council 1965-67.
- C.38 Misc. reports by Bawden on research proposals 1968-71.
- C.39 Kellogg Fellowships: nominations from Rothamsted with research proposals, supporting statements, related correspondence, etc. 1959-67.
- C.40 Correspondence and reports on theses and application for higher degrees referred to Bawden.

D. Correspondence re Overseas Visits

D.1-D.46 'Invitations and Visits'.

This section consists of correspondence re visits abroad by Bawden or his staff to attend symposia or conferences, to lecture, or to act as advisor/consultant to agricultural institutes and laboratories. The files are arranged alphabetically by name of country visited and their contents are briefly summarised. Most of the correspondence is necessarily re invitations, programme scheduling, travel arrangements, visas and other matters appropriate to the journeys. Scientific correspondence has been noted in the handlist and the principal correspondents have been listed in the general index on pp.18-20.

(See also item A.2, a chronological list of all visits abroad by Bawden.) Very few documents remain which relate to Bawden's visits abroad before 1958.

- | | | |
|------|---|---------|
| D.1 | Australia. 13th Conference of the International Association of Agricultural Economists (1967): correspondence <u>re</u> conference arrangements, invitations to visit various agricultural institutes and laboratories in Australia, itinerary. Typescript report by Bawden to A.R.C. on visit. | 1966-67 |
| D.2 | Australia. Misc. correspondence <u>re</u> invitations, correspondence with Australian Scientific Liaison Office in London. | 1959-63 |
| D.3 | Bulgaria. Royal Society invitations to visit as part of exchange programme with Bulgarian Academy of Sciences. Bawden's visit at invitation of Academy of Agricultural Sciences: itinerary, correspondence <u>re</u> travel arrangements. | 1961-71 |
| D.4 | Canada. Invitations to conferences (IX International Botanical Congress; Pugwash), staff visits; misc. correspondence and letters of thanks. | 1958-73 |
| D.5 | Ceylon. Correspondence <u>re</u> staff secondment, <u>re</u> Bawden's visit (1967), <u>re</u> invitation to address Ceylon Association for the Advancement of Science (declined). | 1967-69 |
| D.6 | Cyprus. Secondment of staff. | 1967 |
| D.7 | Czechoslovakia. Invitations to Bawden (delined). | 1961-68 |
| D.8 | East Africa. Bawden's visit to Tobacco Research Board of Rhodesia and Nyasaland (1960); correspondence <u>re</u> visits to Kenya (1962, 1965, 1967), staff secondment and visits. (See Item C.14, 1959-66, correspondence with F.J. Nutman, <u>re</u> Bawden's visit to Zanzibar in 1949 to report on the scheme for the control of 'Sudden Death' disease in cloves, and C.25, correspondence with H.H. Storey.) | 1959-67 |
| D.9 | Egypt. Staff secondment. | 1962 |
| D.10 | France. Suggestion for U.K. delegation to UNESCO conference on the Biosphere. | 1968 |

Bawden CSAC 37/1/76		12
D.11	Germany. Bawden's visit to agricultural institutes of BSAF (United Kingdom).	1970
D.12	Ghana. Staff secondment and visits.	1959-68
D.13	Greece. Staff secondment.	1964-68
D.14	Guinea. Staff secondment.	1965
D.15	Holland. Invitations to Bawden (declined).	1963, 1968
D.16	Hong Kong. Request for slides for staff lecture.	1961
D.17	Hungary. Bawden's visit under arrangements for exchange of visits of scientists between the Hungarian Academy of Sciences and the Royal Society: correspondence <u>re</u> travel and programmes, typescript of Bawden's report.	1969
D.18	India. Invitations to Bawden (declined).	1959-72
D.18a	India. Bawden's visit at invitation of Indian Science Congress Association to attend Science Congress at Hyderabad and to visit universities and agricultural research stations: official invitation, correspondence <u>re</u> proposed titles for lectures, itinerary, travel arrangements.	1954
D.19	India. Bawden's visit to attend 2nd International Symposium on Plant Pathology: correspondence with British Council <u>re</u> travel arrangements, invitations to lecture and subsequent correspondence <u>re</u> scheduling, some scientific correspondence, lists of talks given by Bawden, itinerary.	1969-71
D.20	India. Staff secondment and visits (includes scientific correspondence and staff members' reports).	1958-71
D.21	Indonesia. Staff secondment.	1960
D.22	Israel. Staff secondment.	1959, 1970
D.23	Italy. Bawden's visit to attend VIth International Congress of Microbiology, Rome: Bawden's list of possible speakers for programme on viruses and related correspondence. Bawden's invitation to attend International Seminar on Change in Agriculture (declined); Bawden's visit to Rome for meeting of FAO Sub-Panel of Experts on Organisation and Administration of Agricultural Research; staff secondment and visits.	1953 1959-69
D.24	Japan. Bawden's visit (1970) as member of Royal Society delegation: invitation and correspondence <u>re</u> lectures and visit to Kyushu University, invitations to various research laboratories and experimental stations, itinerary (in English and in Japanese), misc. notes and information.	1969-70

- D.25 Malaya. Staff visits; Bawden's visit to Rubber Institute of Malaya (1967): includes some scientific correspondence. 1966-69
- D.26 Mauritius. Bawden's visit to attend 11th Congress of the International Society of Sugar Cane Technologists; invitation and related correspondence. 1961-62
- D.27 Mexico. Staff secondment. 1962-64
- D.28 New Zealand. Bawden's visit, with lecture in Christchurch. 1967
- D.29 North Africa. Staff secondment. 1965-66
- D.30 Pakistan. Staff secondment and visits, invitations to Bawden (declined). 1961-68
- D.31 Persia. Staff secondment and visits. 1959, 1966
- D.32 Poland. Invitations to Bawden (declined). 1960-61, 1966
- D.33 Rumania. Invitation to Bawden (declined). 1960, 1967
- D.34 South Africa. Bawden's visit to address South African Sugar Technologists' Association Congress: correspondence re planning of visit. 1966
- D.35 South America. Secondment of staff. 1962-71
- D.36 Spain. Staff visit. 1967
- D.37 Sudan. Secondment of staff, Bawden's visit (1969) as member of Scientific Advisory Committee for Agricultural Research, some scientific correspondence. 1958-67 1969
- D.38 Sweden. Secondment of staff. 1959
- D.39 Turkey. Secondment of staff and visits. 1959-66
- D.40 U.S.S.R. Secondment of staff and visits. Invitation to Bawden (declined); Bawden's visit as guest of Academy of Agricultural Sciences to lecture in Moscow, Leningrad, Kiev: invitation and related correspondence, travel arrangements, Bawden's report on visit (sent to ARC). 1958-64 1964, 1967 1971
- D.41-D.42a Visits to USA by Bawden (3 folders). The files include invitations and subsequent correspondence re topics and scheduling of lectures, travel arrangements, hospitality, plans to visit other agricultural research laboratories and institutes.

- D.41 Visit to Yale to deliver course of lectures on plant virology: invitation and related correspondence. 1950
 Invitations from laboratories and universities in USA and Canada and planning of itinerary. Scientific correspondence.
- New York Academy of Sciences conference on Nomenclature and Classification of Viruses (see also C.28). 1952
- International Symposium on Dynamics of Virus Infection, Henry Ford Hospital, Detroit, Michigan. 1953
- Conference on 'Cellular Biology, Nucleic Acids and Viruses' sponsored by NY Academy of Sciences. 1957
 Conference on Latency and Masking in Viral and Rickettsial Infections, Wisconsin.
- D.42 Duquesne University, Symposium on Evolution, Pittsburg, Pa. 1959
- Seminar on Plant Viruses and Virus Diseases, University of Maryland. 1963
- Regents' Lecturer, Department of Botany, University of California. Visit to University of Arizona. 1961
- D.42a Centennial of the University of California, Symposium on 'A Century of Scientific Discovery', with lecture by Bawden on 'The Agricultural Sciences-Retrospect and Prospect'. 1968
- Dedication of Entomology-Plant Pathology Building, Cornell University. Symposium on Potentials in Crop Protection, with talk by Bawden on 'Plant virus research'. 1969
- D.43 USA. Correspondence re staff visits, grants, visas, etc. 1958-67
- D.44 West Africa. Bawden's visit to Ghana (then the Gold Coast) and Nigeria in 1947 to study swollen shoot disease of cocoa: itinerary, agenda and minutes of meetings held in Head Office of Department of Agriculture, Bawden's report, related correspondence (see also A.3, Bawden's diary of this trip describing crops, agricultural institutes, meetings, conversations, etc.). 1954 visit for the same purpose: related correspondence. Later correspondence (1958) re swollen shoot disease. Staff secondment and visits (1958-72). 1947-72
- D.45 West Indies. Bawden's visits to attend meetings of Advisory Technical Committee for Regional Research Centre, Trinidad: correspondence and itinerary, staff secondment and visits. 1958-59
 1962-71
- D.46 Yugoslavia. Bawden's invitation (declined). 1964
- D.47-D.60 'Visits Abroad'. This section consists of correspondence re application to the ARC for travel grants to enable members of the Rothamsted Soil Survey staff to attend conferences abroad. Each file covers one financial year and contains:

- proposals submitted to Bawden by department heads re individuals desiring a travel grant
- Bawden's list submitted to the ARC of grants requested for that year, in order of priority
- correspondence with the ARC re additional grant requests after the original allocation was fixed
- list of all travel grants received by Rothamsted during the course of the year.

D.47	1959
D.48	1960
D.49	1961
D.50	1962
D.51	1963
D.52	1964
D.53	1965-66
D.54	1966-67
D.55	1967-68
D.56	1968-69
D.57	1969-70
D.58	1970-71
D.59	1971-72
D.60	1972-73

E. Correspondence on lectures and conferences

Invitations to lecture, chair meetings and discussions, open or visit laboratories or field stations, attend demonstrations of equipment (mainly scientific and professional, but includes some correspondence with local societies, newspapers, or non-professional bodies, and some social engagements). Not itemised or indexed unless dealing with matters of scientific or personal interest. The correspondence is arranged alphabetically, the first and last name in each file appearing in the list below.

- E.1 Agricultural Adjustment Unit -- Association of British Manufacturers of Agricultural Chemicals (1959-65).
- E.2 Queen's University of Belfast -- British Insecticide and Fungicide Council.
- E.3 British Association for the Advancement of Science (1958-70) re many lectures given by Bawden for the B.A., and also recommendations for B.A. Lecturerships.
- E.4 British Broadcasting Corporation 1958-63 (re Bawden's broadcasts on 'Who knows?' and 'Silent Spring').
- E.5 The British Council 1959-73 (including talk by Bawden on Rothamsted).
- E.6 British Motor Corporation -- Brunel University (1959-72): includes conferment of Hon. degree of Doctor of Technology on Bawden 1967 and biographical note prepared by him for the occasion.

- E.7 Cambridge University -- Colston.
- E.8 The Ciba Foundation.
- E.9 Commonwealth Entomological Conference -- Durham.
- E.10 East Scotland College of Agriculture -- University of Exeter.
- E.11 Farmers' Club -- Guinness.
- E.12 Harpenden -- Imperial Chemical Industries.
- E.13 Imperial College -- John Innes Horticultural Institute.
- E.14 Lawes Chemical Company -- National Inst. Agricultural Botany (includes Leeuwenhock Lecture, Royal Society, 1959).
- E.15 National Inst. Agr. Engineering -- Oxford University (esp. re Oxford Farming Conference, 1972).
- E.16 Reading University; includes also some scientific correspondence on publications, on International Seminar on Change in Agriculture held at Reading 1968, and on conferment of Hon. D.Sc. on Bawden 1970.
- E.17 Research and Control Instruments Ltd. -- Royal Statistical Society.
- E.18 Scottish Horticultural Research Institute -- University College, Swansea.
- E.19 Tate and Lyle Ltd. -- Wye College.
- E.20 Misc. shorter correspondence re invitations to Bawden and his staff to lecture, attend discussions, etc. 1958-71.

F. Correspondence on Publications

General correspondence with editors and publishing houses, presented alphabetically and dated where possible. An indication is given when a manuscript, or any point of special interest, accompanies the correspondence. The index is selective.

- F.1 Addison-Wesley Publishing Co. 1971-72
 Annual Review of Phytopathology 1968-70
 Annual Review of Plant Physiology 1956-59
 Avi Publishing Co. Inc. (includes typescript article by Bawden on history of Rothamsted) 1970
 Bulletin of the Atomic Scientists 1960
 California, University of 1968-70
 Central Office of Information 1960-71 (includes misc. notes for entries on Rothamsted)
 Cornell University 1970.

- F.2 Dictionary of National Biography 1963 (includes Bawden's biographical notice of Tom Goodey)
 Empire Cotton Growing Corporation 1959-63
 Encyclopaedia Britannica 1959-69 (includes Bawden's articles on Sir John Lawes, and Rothamsted Experimental Station)
 Farm Mechanization and Buildings 1967
 Farmer and Stockbreeder 1970
 Farming World 1963, 1968, 1969
 Fox, H. Munro (for Hutchinsons) 1960-61
 Gardeners Chronicle 1964, 1970
 Harpenden Free Press 1970
 W. Heffer and Sons 1958-59
 Herts. Advertiser 1959 (includes Bawden's memorial tribute to Dr. F. Tattersfield)
 L. Higgs 1963 (re Bawden's Plant Diseases)
 International Cane Sugar Journal 1962
- F.3 Journal of Biological Chemistry 1960-61 (correspondence with editors and collaborators, includes some scientific correspondence on Rhoeo Discolor)
- F.4 Journal of General Microbiology 1959
 Journal of Nutrition 1965
 Koren, H. J. 1959
 McGraw-Hill Book Company 1961-62
 T. Nelson and Sons (re Plant Diseases) 1969 (see also F.12)
 New Scientist 1961-72
 Pergamon Press 1958-59 (re Bawden's contribution on 'Viruses' to Vistas in Botany)
 Pettersson, M. 1962
 Plant Pathology 1960
 Plant Virology 1964
 Pleins Champs 1970
 Power Petroleum Co. Limited 1965
- F.5 The Ronald Press Company, New York 1958-64. Correspondence re Bawden's Plant Viruses and Virus Diseases; includes original photographs for figures in re-written 4th ed. published by the Ronald Press Company, 1964
- F.6 Royal Agricultural Soc. of England Journal 1963-66
 Royal Institute of Chemistry 1964 (includes report of a lecture given by Bawden to Conjoint Chemical Council, Dublin 1968)
 Royal Society 1965 (invitation to write biographical memoir of Dr. Hedley Marston - declined)
 Royal Veterinary and Agricultural College, Copenhagen 1968
 Sadasivan, T. S. (for Indian Botanical Society) 1962, 1970
 Science Journal 1966-68
 Scientia 1960-61
 Sunday Times 1959
 Thames and Hudson 1967
 The Times 1961 (with Bawden's Obituary notice of Dr. Harold Mann)
 1964 (with Bawden's Obituary notice of Dr. Herbert Greene)

'Tools for Progress' 1967
 UNESCO 1959
 Virology 1961, 1968 (re articles by Bawden in collaboration with
 R.C. Sinha and B. Kassanis)

- F.7 Misc. shorter correspondence on publications: permission to quote or reproduce published material, requests to write books or articles, supply information, etc. (not indexed).
- F.8, F.9 Misc. correspondence requesting or exchanging reprints or information. Many of the letters also include scientific information on research in progress. 2 Files (not indexed).
- F.10 Book reviews.
 Correspondence with publishers, editors and authors; includes some drafts of reviews by Bawden, and some scientific correspondence arising from books, articles, or reviews.
- F.11 Misc. shorter correspondence with colleagues and members of staff at Rothamsted and field stations, mainly on drafts for publications submitted for approval and comment to Bawden. Correspondents include:
- | | |
|-----------------------|---------|
| S.N. Adams | 1959-61 |
| William J. Byford | 1959-67 |
| C.E. Cornford | 1958-64 |
| A. Philip Draycott | 1967 |
| R. Andrew Dunning | 1960-67 |
| Philip H. Gregory | 1960 |
| Geoffrey D. Heathcote | 1962-68 |
| Raymond Hull | 1967 |
| C.R. Ribbands | 1967 |
| R.K. Scott | 1967-69 |
| C.A. Thorold | 1959-68 |
| P.B. Tinker | 1965 |
- F.12 Correspondence with Thomas Nelson and Sons Limited re Bawden's Plant Diseases, and reprint 1944-51

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