# AUSTRALASIAN HERBARIUM NEWS

## Nº 4 March 1949

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#### Issued by the

#### SYSTEMATIC BOTANY COMMITTEE.

ALL ALL AND ALL AND	Have the state of
Dr. D.T. Patton,	(Chairman), School of Botany, University of Melbourne, VICTORIA.
Dr. H.H. Allen,	Director, Botany Division, Plant Research Bureau, Wellington, NEW ZEALAND.
Mr. S.T. Blake,	Assistant Botanist, Herbarium, Botanic Gardens, Brisbane, QUEENSLAND.
Dr. J.B. Cleland,	Professor of Pathology, University of Adelaide, SOUTH AUSTRALIA.
Miss W.M. Curtis,	Lecturer, Botany Department, University of Tasmania, Hobart, TASMANIA.
A construction of the second	Government Botanist, State Herbarium, Perth, WESTERN AUSTRALIA.
12. 小学校主义·公共	Professor of Botany, Victoria University College, Wellington, NEW ZEALAND.
a stranger of the second	Government Botanist, National Herbarium, Melbourne, VICTORIA.
	Botanist, National Herbarium, Sydney, NEW SOUTH
A State of the state of the	Forest Botanist, Dept. of Forests, Lae, NEW GUINEA.
Miss N.T. Burbidge,	(Secretary), Systematic Botanist, Division of Plant Industry, C.S.I.R., Canberra, AUSTRALIAN CAPITAL TERRITORY.

#### EDITED for the Committee by the Henorary Secretary

The Committee accepts no responsibility for the accuracy of statements made or opinions expressed in contributed articles or letters.

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All communications should be addressed to the

Honorary Secretary.

March, 1949.

No. 4.

### AUSTRALASIAN HERBARIUM NEWS

A journal for the interchange of ideas among the systematic botanists of Australia and New Zealand.

#### CONTENTS.

				<i>v.</i>	Page Number
Editorial Comment	••	••	••	••	1.
Report on the Meeting Committee, Hobart,	s of th 1949	e Systema	tic Bot	any	2.
Botanic Gardens, Adela		2			
				••	4∙
The Symposium on Botar Utrecht, June, 1948	lical No	••	re and	Taxonomy,	7.
News and Notes on Curr	ent Act	tivities	••	••	9.
Recent Publications of	Intere	est	••	••	12.

#### EDITORIAL COMMENT.

During the recent meeting of the Systematic Botany Committee in Hobart, the need for retaining type material within Australia and New Zealand came up for discussion. It was pointed out that, apart from specimens in official Herbaria which are, strictly speaking, government property, there are a number of private collections whose presentation or sale to an overseas institution would mean the loss of valuable specimens. The Committee hoped that an expression of their opinion might help to prevent difficulties in the future. They accordingly passed the following resolution which was later accepted by the General Council of the Australian and New Zealand Association for the Advancement of Science:-

"That all governments in Australia and New Zealand be informed that this Association strongly disapproves of the permanent loss of holotypes of species of Australian and New Zealand plants (at present in the two countries) through presentation or sale overseas."

In proposing this resolution the Committee had no wish to interfere too deeply with the rights of any collector to dispose of his property by sale or presentation. However, so far as types were concerned, it was felt that the collector should place his responsibilities as caretaker of one of the units which form the very basis of our system of botanical nomenclature before his rights as an owner. It would be of the greatest value to systematic botanical research, in both New Zealand and Australia, if type material could be extracted, by a competent authority, from private collections previous to their dispersal. Such types should be presented to an official herbarium, which could be chosen by the owner or collector, where proper care could be taken for their preservation.

It is also hoped that as far as is practicable duplicate material of as many specimens as possible should be retained in the country of origin. Then, in the event of the material being used in a revision by an overseas botanist, isotypes or cotypes will still be available for consultation. This question of the retaining of duplicate material also concerns the collections made by visiting scientific expeditions financed by overseas institutions. In such cases it should be a matter of government policy to see that a set of the specimens obtained is presented to one of our herbaria.

During the preparation of the resolution there was considerable discussion over the word 'type'. In the case of duplicate or other specimens in any particular group being sent over-seas for study by an expert who subsequently bases new species or genera on them, the material remaining in the country of origin may be isotypic or cotypic not holotypic. The Committee felt that such a practice was a normal part of systematic botanical research and hence no strong exception to it was taken. It will, of course, he obvious that the accumulation of the holotypes of his species by an authority, especially if his material is stored at a reputable institution, is an entirely different matter to the loss of types held in private collections which are acquired by large and wealthy herbaria in other countries.

It is understood that this problem of preventing the loss of type specimens has also received considerable attention from zoologists who are perhaps, in a worse position than the botanists. It is possible to have duplicate plant specimens where the material permits subdivision but such is obviously impossible in the case of most zoological material.

We are sure that most collectors will appreciate the need and do their best to avoid creating difficulties for future botanists. It is a matter which requires the vigilant attention of not only the amateur collector but also the members of the staffs of all our herbaria.

#### REPORT ON THE MEETINGS OF THE SYSTEMATIC BOTANY COMMITTEE DURING

#### THE HOBART CONFERENCE OF A.N.Z.A.A.S.

During the Conference in January 1949 the Committee met three times to discuss the activities of the previous year.

#### Australasian Herbarium News -

The Secretary reported the distribution of three issues of A.H.News since the Perth Meeting in August 1947. Since this had exhausted the grant made to us by the General Council of A.N.Z.A.A.S. the Committee decided to apply for a further grant and also to charge a subscription of 5/- per annum. It was felt that a charge was necessary owing to the still rising costs of production. General Council subsequently approved of a grant to us of £15.

The Committee was informed that A.H. News had been favourably received by a number of botanists and scientific institutions overseas. From correspondence received it would appear that the journal can serve a most useful purpose as a source of information concerning systematic botanical research in New Zealand and Australia.

#### Books in Herbarium Libraries -

It was reported that the secretary had commenced the preparation of lists of books in Herbarium Libraries. The lists will not include periodicals which, so far as Australia is concerned, are already dealt with in Pitt's Catalogue. At present there is no reference list of scientific books in Australian libraries. The lists as proposed will include (i) rare publications, (ii) older books dealing with Australian plants or with plants having Australian affinities as well as (iii) some of the more modern works which are in constant demand. The last group will include books on overseas floras which cover plants occurring here as aliens.

A number of books in the Brisbane Herbarium have been listed with the assistance of Mr. S.T. Blake and a list has also been received from the National Herbarium in Sydney.

It is regretted that up to the present no provision for a similar survey of the New Zealand libraries has been possible.

#### Photographing of Type Specimens -

The preparation of lists of type specimens has been one of the concerns of the Committee since its inception. As a step towards the desired goal the Committee proposed the following resolution which was subsequently approved by General Council of A.N.Z.A.A.S. :-

"That the Commonwealth Government be requested to arrange for the photographing of the type sheets of Australian plants (believed to be approximately 400) in the Lindley Herbarium at Cambridge, England."

#### Correspondence of early Australian Botanists -

Miss Vickery reported that, during her recent visit to England, she had noted the existence, in the library of the Kew Herbarium, of a great number of letters written by early Australian Botanists. The Committee requested Miss Vickery to obtain information regarding the possibility of an Australian library procuring copies of at least some of these.

#### Manuscript of Robert Brown's "Flora Novae Hollandiae" -

This manuscript, though never printed, is of considerable value since it contains the full descriptions of the species published in the "Prodromus" without much information of a diagnostic character. After discussion the Committee proposed the following resolution which was later approved by General Council:-

"That the Commonwealth Government be requested to procure a microfilm copy of the manuscript of the "Flora Novae Hollandiae" prepared by Robert Brown but never published and at present held by the British Museum, London."

### Retention of Type Specimens of Australian and New Zealand plants in their country of origin -

(This item is discussed elsewhere in this issue - Ed.)

#### Conference at Utrecht, Holland, June 1948 -

A brief report on the Conference was received from Miss Eardley who was still abroad. After discussion the Committee decided to await fuller information before expressing their opinion on most of the proposals.

However, arising out of the discussion, it was found that the Committee was divided on the question of the decapitalization of specific epithets.

The Committee was in favour of the adoption of the term "taxon" (pl. "taxa") for taxonomic groups of any rank, in the International Rules of Nomenclature as proposed by Dr. H.J. Lam at the Utrecht Conference.

#### International Botanical Congress at Stockholm 1950 -

It was decided to ask Dr. R.T. Patton, Chairman of the Committee to

#### Abbreviation of Fordinand von Mueller's name -

The Committee expressed it's preference for "F. Muell." instead of "F.v.M." as an abbreviation for the name of Ferdinand von Mueller in bibliographical citations. This is in conformity with Recommendation 30 of the International Rules.

#### Personnel of the Committee -

It was decided that Papua-New Guinea should be added to the territories represented on the Committee. Mr. J.S. Womersley, Forest Botanist stationed at Lae, was asked to act as representative.

> NANCY T. BURBIDGE, Hon. Sec. Systematic Botany Committee.

#### THE BOTANIC GARDENS - ADELAIDE - SOUTH AUSTRALIA.

#### Historical -

The Gardens as seen today had their beginning in 1855, when G.W. Francis was appointed the first Superintendent. However the present site was not the original one, two other sites were selected and rejected for various reasons, before the present one was decided upon.

**G.W.** Francis laid out eight acres and planted this during the first year, in a style characteristic of the day. The existing plan of his design shows numerous winding and circular pathways, and a number of parterres. By 1865, when Francis died, most of the 40 acres put aside for the Gardens had been occupied. A good foundation had been laid during Francis' term of office and this was developed fully during the next 25 years.

Dr. Richard Schomburgk who succeeded G.W. Francis was an outstanding personality and a first class botanist. He had travelled extensively, especially in South America. In similar manner as Mueller in Melbourne improved the Gardens of his predecessor, so Schomburgk improved Francis' scheme by modifying the design and plantings. He placed the Gardens on a very high standard, not only on account of the general collections of plants, which he amassed, but because of the large number of horticultural varieties of plants. His catalogue of plants, issued in 1878 gives a total of 8,500 species and over 2,000 varieties of Roses, Pelargoniums, Fuchsias, Chrysanthemums, Camelias etc.. This collection of florists' flowers was considered to be one of the greatest collections of its kind in its day.

He erected the palm house in 1876, and built the Museum of Economic botany in 1879. In addition he founded the National Herbarium, which 16 years ago, after years of neglect, was handed over to the University of Adelaide for safe keeping. Schomburgk died suddenly in 1891. He is probably best remembered as being the only Director of an Australian Botanic Garden to introduce and cultivate successfully the giant water lily of the Amazon - <u>Victoria</u> <u>regia</u>.

Dr. M. Holtze assumed office on 20th June 1891. He was interested in a smaller field than Schomburgk, but was responsible for the magnificent collection of water lilies which is still one of the features of the Gardens. However, in the early nineties, a large number of trees and shrubs were removed and this no doubt is one of the reasons for the present reduced number of species growing in the Gardens today.

In 1917 Holtze retired, and this marked the end of the botanical development of the Gardens. He was succeeded by J.F. Bailey who developed the floricultural side, and in 1932 H. Greaves was appointed. The policy was not altered and today the Gardens present an appearance and carry out the functions of a Public Park, rather than a Botanic Garden.

Unfortunately during the last 25 years two decisions were made, which seriously affected the efficiency and status of the Gardens. As little botanical work was being carried out it was decided to give away Schomburgk's herbarium to the Botany Department, University of Adelaide, where it has been housed for the past 16 years. Then in 1932, an inspection of the Library revealed that it had been seriously attacked by white ants. It was decided that the only way to save the existing volumes would be to donate these to the Public Library of Adelaide. This was done and they were incorporated into the botanical collection.

#### Future Policy -

The primary function of the Botanic Gardens is to carry out botanical research. To allow this to be done such Gardens must be equipped not only with as large a collection of living plants as the environment permits, but should also have a really first class Library, Herbarium and Staff.

The plant collections at the Botanic Gardens are good, but by no means exhaustive. To improve these collections by increasing the species represented, various Botanical Stations throughout the world have kindly forwarded seeds of desired species. By the end of this season, over 500 additional species will be growing. While some of these may prove unsuited to the local conditions, it is anticipated that the greater majority will prove satisfactory. Many of these importations are of botanical interest only, but the greater proportion should eventually provide valuable additions to the garden flora of the State.

As mentioned earlier, both the Library and Herbarium, once forming an integral part of the Gardens, have been disbanded. Through the courtesy of many interested parties, a number of books have recently been donated to the Gardens. These gifts together with the technical publications forwarded by world-renowned Botanical Institutions will, it is hoped, reform a botanical library of some consequence.

The need to re-establish the Herbarium is an urgent one. Of the mainland States which have distinctive Botanic Gardens, South Australia is the 'only one not possessing a State Herbarium. While in South Australia we have several excellent herbaria, in addition to some private ones of some magnitude, their scattered positions makes it difficult for any co-ordinated work to be carried out. It is hoped therefore that interested parties will consider the suggestion that Schomburgk's scheme for a National Herbarium should be furthered. Because of the living collections of plants and the carpological collections in the Museum, the logical place for this Herbarium to be re-established is at the Gardens.

The botanical Museum has also been allowed to remain static, and as preventative measures against pests had not been taken, a large number of the exhibits have suffered. Work has already commenced to re-stage, rearrange and re-label the exhibits, and Mr. E.S. Booth a recognised authority on Coniferae has kindly consented to become the Honorary Curator of the Museum. During the past 12 months he has completely re-staged almost the entire Carpological collections which, when used in conjunction with the Herbarium and Library, will be of great assistance in identifying plants.

Also housed in the Museum is a very fine series of specimens of economic plant products. So that these will be of greater interest they are now being re-grouped and re-staged. At the same time a living collection of economic plants is being made at the Gardens. Examples will include the principal economic plants of the tropics, (glass will be used to assist their cultivation where necessary), and also those of temperate regions. The range includes tea, coffee, sugar, cocoa, oil-bearing plants, plants used for fibre and medicine, food plants, pasture and forage crops, herbs and poisonous plants. Such a collection supplemented by the Museum exhibits will form one of the major features of the Gardens.

The training of young gardeners is also a function which should be carried out at the Botanic Gardens. To this end the Board of Governors has recently instituted a training scheme. Although still in infancy, this allows for financial assistance to selected personnel; such assistance to be used for fees for specified courses. Such a scheme will, it is hoped, eventually bring about a better trained man, as members of the staff, together with the practical training received amongst the plant collections, should produce men with a good understanding of plants and horticultural principles.

The matters touched on in the above briefly outline some of the future work which will be undertaken at these Gardens. Suggestions by allied institutions indicating means of closer co-operation will always be welcome, and assistance within our means will always be given.

> N. LOTHIAN, Director, Botanic Gardens, Adelaide, South Australia.

#### THE SYMPOSIUM ON BOTANICAL NOMENCLATURE AND TAXONOMY.

#### UTRECHT, JUNE 1948.

Miss Eardley has forwarded to the Secretary of the Committee, a copy of the above report. This was prepared from the minutes of the meetings, taken by the Honorary Secretary, Mrs. M.L. Sprague and from those taken by the Assistant Hon. Secretary, Dr. Andreas. As it has not yet been checked by the official delegates the Report is not yet available for general distribution. Under these circumstances the contents, which cover 59 pages, cannot be discussed in full. However the following notes may interest readers.

Art. 2. Following discussion on the meaning of the terms the Committee proposed a new article for insertion in Chap. I. of the International Rules, as follows:- "A legitimate name or epithet is one that is in strict accordance with the Rules. Effective publication is publication in strict accordance with Art. 36. Valid publication is publication in strict accordance with Art. 37-45. A correct name is the legitimate name of a taxon with a particular circumscription, position and rank." This will be added to Art. 8 bis.

Art. 8. Dr. Lam's proposal regarding the term taxon (pl. taxa) for any taxonomic group was carried unanimously.

Art. 14. It was generally agreed that the Rules regarding hybrids are insufficient and that a Committee of taxonomists and geneticists should be appointed to prepare a new set of Rules.

Art. 18. The following Recommendations were accepted: -

"When a name is proposed for conservation the type species should be stated for the name or names to be rejected as well as for the names to be conserved."

"Collectors of herbarium specimens of vascular plants should number their specimens consecutively in order to facilitate the designation of types and comparison of specimens cited in taxonomic revisions. Each number should include only specimens from the same source, and collected on the same date."

<u>Art. 36.</u> There was considerable discussion on the matter of a list of 'specified representative botanical institutions' but the following new wording for the first paragraph of the article was accepted:- "Publication is effected, under these Rules, by distribution, by sale, by exchange or otherwise of printed matter" (It would appear that the exact meaning of the word 'printed' may cause trouble.- Ed.)

The following Recommendation was accepted in principle:- "Botanists and others are urged to avoid scrupulously the publication of new species, names and combinations in ephemeral publications such as newspapers or popular periodicals; in any publication unlikely to reach the general botanical public; or in duplications by mimeograph, hectograph or other devices that use either a poor quality of paper or an ink that is likely to fade."

#### NEWS AND NOTES ON CUPRENT ACTIVITIES.

#### New Zealand -

Dr. H.H. Allan retired from his position as Director of the Botany Division, Plant Research Bureau, Department of Scientific and Industrial Research, at the end of 1948. He will be working on the preparation of a new edition of Cheeseman's "Manual of the New Zealand Flora" after the completion of his work at the Bureau.

The new Director of the Botany Division will be Mr. A.C. Poole, who has been working on floral relationship in Nothofagus.

Dr. W.R.B. Oliver has retired from his directorship of the Dominion Museum, Wellington, but is continuing his work on Dracophyllum,

The herbarium of the Botany Department, Victoria University College, Wellington has recently received the gift of a collection of 1,000 specimens of European plants. The majority of these are from Holland. The presentation was made by Mr. B.D. van't Woudt.

Miss Allison Lush has been appointed Assistant Botanist at the Dominion Museum and took up her duties in December 1948. The position is a newly created one.

Mr. R. Cooper was appointed Botanist at the Auckland Institute and Museum early in 1948.

#### Australia -

#### New South Wales -

Mr. K. Mair has been experimenting with the culture on agar or orchid seeds, especially with <u>Cymbidium</u> and <u>Dendrobium</u> hybrids. The chief difficulty encountered has been that of transference of the seedlings from agar to the potting medium.

Miss J.W. Vickery has completed a revision of the genus <u>Amphipogon</u>, and has prepared a Check-List of the naturalised grasses found in New South Wales. She has also prepared a paper embodying formal descriptions of a number of new species of <u>Danthonia</u>, in anticipation of a more comprehensive revision of the genus.

Miss M. Tindale completed her year as Linnean Macleay Fellow in Botany on the 31st December, 1948, and rejoined the staff of the National Herbarium, Sydney. She continued her revision of the pteridophytes of south-eastern Australia. The following families were studied:- Gleicheniaceae, Psilotaceae, Azollaceae, Ophioglossaceae, Hymenophyllaceae and Marsileaceae.

Miss J. Garden has prepared material for the Flora of New South Wales of the early monocotyledonous families as far as the Hydrocharitaceae (Engler and Frantl system). Her studies of the New South Wales species of <u>Veronica</u> are nearing completion. She has also made some investigation of the genera

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Hardenbergia and Correa, and has devoted some time to the sorting of the material of <u>Callitris</u> in the Herbarium, and there is some evidence that geographic speciation is operating to a significant extent.

Miss N.C. Ford has been engaged in investigating certain taxonomic problems in <u>Dodonaea</u>. She has also devoted considerable time to the preparation of collections of New South Wales plants for exchange with overseas herbaria.

Mr. L.A.S. Johnson has continued his research on the genus <u>Casuarina</u>, and has been studying numerous nomenclatural problems in <u>Eucalyptus</u>. He has also been investigating certain taxonomic problems in the family Araliaceae, and in the family Proteaceae, especially Grevillea.

Mr. H.M.R. Rupp has listed specimens of orchids from Schlecter's collection which are contained in the National Herbarium, Sydney.

The herbarium has been happy to receive visits from a number of interstate and overseas botanists, including Mr. H.E. Holltum, Director of the Singapore Botanic Gardens; Mr. C.T. White, Mr. S.T. Blake and Mr. Cribb of Queensland; Mrs. G. Davis of Armidale, N.S.W.; Miss L. Moore of New Zealand; Dr. R.T. Patton of Victoria; Miss Baird of Western Australia; Miss W. Curtis and Professor N. Barber of Tasmania.

An exchange of herbaria duplicates was carried out with a number of overseas herbaria. Interesting collections received during 1948 were as follows:- 185 specimens of South and Central American pteridophytes including a number of rare and uncommon species, presented by the Smithsonian Institution, Washington, D.C., U.S.A., 200 plants from the Belgian Congo received from the Jardin de l'Etat, Brussels, Belgium; 219 Dutch specimens from the Botanisch Museum, Utrecht, and 54 from the Rijksmuseum, Leiden, Holland; 200 North American specimens from the Bailey Hortorium, 106 from the Missouri Botanic Gardens and 16 from the University of California as well as 50 South African specimens from the Bolus Herbarium, Cape Town. We received the first three volumes of Descole's "Genera et Species Plantarum Argentinarum" and 240 duplicates of South American plants from the Instituto Miguel Lillo, Tucuman.

#### Victoria -

Owing to Mr. Jessep's ill health he was unable to attend the meetings of the Committee in Hobart where he was represented by Mr. P.F. Morris.

Mr. J.H. Willis is continuing his work on the preparation of a new Key to the plants of Victoria.

Dr. E. Gauba, a botanist who formerly worked in the Middle East, has spent some time at the Herbarium.

#### South Australia -

Miss Eardley, who has been studying cytological methods overseas, hoped to return early this year.

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Mr. R. Specht, botanist with the Arnhem Land Expedition, returned from the north in October, 1948. He obtained over 1,000 numbers collected in series of ten. He will spend some months working on his material at the Brisbane Herbarium.

#### Australian Capital Territory -

Recent acquisitions to the herbarium of the Division of Plant Industry, C.S.I.R. include 740 specimens collected in northern Queensland, including the Gilbert River area, by Mr. L.J. Brass; a considerable number of the plants collected by Mr. W. Hartley during his recent visit to South America in 1948; duplicate material presented by the Brisbane Herbarium (Queensland plants) and by Mr. J.S. Womersley (New Guinea species).

Preceding and following the Hobart Conference Miss Burbidge spent approximately three weeks collecting in various parts of Tasmania. 620 numbers were obtained.

Mr. R.A. Perry, botanist with the Northern Australian Regional Survey party had a successful five months on the Barkly Tableland. He obtained 1500 numbers, in series of six. About a third of these have been identified.

#### Queensland -

Mr. C.T. White was in Melbourne from December 16th till January 11th at the University identifying the ethno-botanical collections made in Arnhem Land in 1936-37 by Dr. Donald Thomson. Some species not previously known from the Northern Territory were noted and a record of these will probably be given as a supplement to a series of three papers Dr. Thomson is publishing in the Journal of the Royal Geographical Society (London) this year. While in Melbourne, Mr. White took the opportunity of working for a few days at the National Herbarium on tropical Australian plants, especially the genus Figus.

Mr. S.L. Everist spent some weeks in South-western and North-western Queensland in continuation of field studies of mulga and in connection with investigations into the possible cause of the Georgina River disease in sheep and cattle.

While en route to and from Hobart for the meeting of A.N.Z.A.A.S., Mr. S.T. Blake took the opportunity of studying some types, mainly of Eucalypts, in the Melbourne and Sydney herbaria. He also spent about a week collecting in Tasmania.

#### Tasmania -

Mr. R.G. Brett is continuing his studies of hybridization between species of <u>Eucalyptus</u>. He described some of his very interesting data and the conclusions he has drawn from them, at a session of the Hobart Conference.

Miss Curtis has obtained some interesting results with regard to her cytological study of <u>Dianella</u>. She hopes to follow this with a study of some material from the mainland.

#### RECENT PUBLICATIONS OF INTEREST.

Readers are also referred to "Australian Science Abstracts" published as a regular Supplement to the Australian Journal of Science. The entries given below are designed to fit standard 5" x 3" index cards.

> Beadle, N.C.W. 1948. The Vegetation and Pastures of Western New South Wales, with special reference to Soil Erosion. Govt. Printer, Sydney, 26/-. Blake, S.T. 1948. Studies in Queensland Grasses Proc. Roy. Soc. Q. 59 (7): 153-160. III. Blake, S.T. 1948. Studies in Australian Apocynaceae and Asclepiadaceae I. Proc. Roy. Soc. ". 59 (8): 161-168. Buchholz, J.T. & N.E. Gray. 1948. A Taxonomic Revision of Podocarpus: I. The Sections of the Genus and their subdivisions with special reference to leaf anatomy. II. The American Species of Podocarpus sect. Stachycarpus. Journ. Arn. Arb. 29 (1): 49-63 (1), 64-76 (II) III. The American Species of Podocarpus sect. Polypodiopsis. IV. The American Species of Podocarpus sect. Eupodocarpus. Jour. Arn. Arb. 29 (2): 117-122 (III). 123-51 (IV) Bottomley, A.M. 1948. Gasteromycetes of South Africa. Bothalia 4 (3): 473-810. Burcham, L.T. 1948. Observations on the Grass Flora of certain Pacific Islands. Contrib. U.S. Nat, Herb. 30 (2): 405-447. Burtt, B.L. 1948. The Correct Names of the Australian Bluebell Creepers. Kew Bull. 1. 74. Carter, A.N. 1948. A glossary of Type Nomenclature. Vict. Nat. 65 (4): 92. Cunningham, G.H. 1948. New Zealand Polyporaceae - 6. The genus Coltricia. 7. The genus 8. The genus Fomes. Inonotus. 9. Trametes.

Lenzites and <u>Daedalea</u>. N. Zeal. D.S.I.R. Plant Diseases Div. Bull. 77-80. Dakin, W.J., Isabel Bennett & Elisabeth Pope. 1948. A Study of certain Aspects of the Ecology of the Intertidal Zone of the New South Wales Coast. Aust. Jour. Sci. Res. Ser. B. 1 (2): 176-230. 9 pl.

Davies, W.C. 1947. Some Salient Features of the New Zealand Native Flora - Banks Lecture, 1947. Bull. Roy. N. Zeal. Inst. Hort.

Davis, G.L. 1948. Revision of the genus Brachycome Cass. I. Australian Species. Proc. Linn. Soc. N.S.W. 73 (3-4): 142-241, 8 pl. 124 text fig.

Farmer, J.N., S.L. Everist, & G.R. Moule. 1947. Studies in the Environment of Queensland. I. The Climatology of Semi-arid Pastoral Areas. Q. Jour. Ag. Sci. 4 (3): 21-59.

<u>Gauba, E.</u> 1948. Contributions to the Flora of South Australia. I - Vict. Nat. 65 (5): 109. II. - 1.c. 65 (7): 163. III. - 1.c. 65 (8): 183.

Goodspeed, T.H. 1945. Studies in <u>Nicotiana</u> III. A taxonomic organisation of the genus. Univ. Calif. Pub. Bot. 18 (15): 335-344.

<u>Goodspeed, T.H.</u> 1945. Chromosome number and Morphology in <u>Nicotiana</u> VII. Karyotypes of 55 species in relation to a taxonomic revision of the genus. 1.c. 18 (16): 345-368.

Healey, A.J. 1948. Contributions to a Knowledge of the Naturalised Flora of New Zealand. Trans. & Proc. Roy. Soc. N. Zeal. 77 (1): 172-195.

Hutchinson, J.B., R.A. Silow & S.G. Stephens. 1947. The Evolution of <u>Gossypium</u>. Oxford Univ. Press (includes attempt to validate <u>Gossypium Sturtii</u> which was validly named <u>G. sturtianum</u> J.H. Willis in Vict. Nat. 64 (1), 1947 - Ed.)

<u>Keble, R.A.</u> 1947. Notes on Australian Quaternary Climates and Migration. Mem. Nat. Mus. Vict. 15: 28.

<u>Kiely, T.B.</u> 1948. Preliminary Studies on <u>Guignardia</u> <u>citricarpa</u> n.sp., the ascigerous stage of <u>Phoma</u> <u>citricarpa</u> McAlp., and its Relation to Black Spot of Citrus. Proc. Linn. Soc. N.S.W. 73 (5-6): 249-292. Kuhlmann, J.G. 1946. O genero Eucalyptus no Brasil. Arg. Serv. Flor. Brasil 2 (2): 1-37 26 pl. (with key to genus).

Langdon, R.F.N. 1948. Records of Queensland Fungi. V. Univ. Q. Papers (Dept. of Biol.) 2 (9).

Langdon, R.F.N. 1948. Notes on some Fungi from New Guinea. 1.c. 2 (10).

Lee, A. 1948. The Gemus <u>Swainsona</u>. Contrib. Nat. Herb. N.S.W. 1 (4): 131-271.

May, V. 1948. The Algal Genus Gracillaria in Australia. (Division of Fisheries Rep. 15.) C.S.I.R. Bull. 235.

May, V. 1948. Studies on Australian Marine Algae IV. Further Geographical Records. Proc. Linn. Soc. N.S.W. 73 (5-6): 293-297.

<u>Newmann, I.V.</u> 1948. Aerobiology on Commercial Air Routes. Nature 161: 275. (Route followed was New Zealand / England - Ed.)

Merrill, E.D. 1948. Neolitsa (Bentham) Merrill nomen conservandum propositum. Jour. Arn. Arb. 29 (2): 198. ((N.dealbata (R. Br.) Merrill comb. nov. = Tetranthera dealbata R.Br.))

Merrill, E.D. 1948. Nomenclatural Notes on Rafinesque's published papers 1804-1840. Journ. Arn. Arb. 29 (2): 202. ((<u>Thryptomene Endlicher</u> (1838) listed as synonymous with <u>Gomphotis</u> Raf. (1838). - Ed. ))

Merrill, E.D. & L.M. Perry. 1948. Notes on some Papuan collections of Mary Strong Clemens Jour, Arn. Arb. 29 (2): 152-168.

Muir, E.T. 1947. A dry land form of <u>Pterostylis</u> longifolia. Vict. Nat. 64 (8): 151.

<u>Micholls, W.H.</u> 1947. The genus <u>Diuris</u> in Western Australia. Vict. Nat. 64 (6): 111.

<u>Micholls, W.H.</u> 1947. Additions to the Orchidaceae of Western Australia I. Vict. Nat. 64 (7): 135. also II. 1.c. 64 (9): 172. Nicholls, W.H. 1947. Two new species of Orchids from Tasmania. Vict. Nat. 64 (12): 231.

i

Nicholls, W.H. 1948. Re-appearance of a 'lost' orchid (<u>Prasophyllum brachystachyum</u> Lindl.) Vict. Nat. 65 (5): 120.

Reeder, J.R. 1948. The Gramineae-Panicoideae of New Guinea, Jour. Arn. Arb. 29 (3): 257 and 1.c. 29 (4): 321.

Rickett, H.W. 1948. Orthography in Botanical Nomenclature. Brittonia 6 (3): 365-8. (Prop. amend. Int. Rules Art. 70, Rec. xliv. - Ed.)

Rupp, H.M.R. 1947. A review of the species Caladenia carnea R.Br. Proc. Linn. Soc. N.S.W. 71 (5-6): 278.

Rupp, H.M.R. 1947. Notes on Australian Orchids V. 1.c. 71 (5-6): 287.

Rupp, H.M.R. 1947. The epiphytic orchids of Victoria and Tasmania. Vict. Nat. 64 (6): 117.

Rupp, H.M.R. 1948. A natural hybrid between two orchid genera. Vict. Nat. 64 (10): 186.

Rupp, H.M.R. 1948. Taxonomic difficulties in the genus Diuris. Vict. Nat. 64 (12): 241.

Rupp, H.M.R. 1948. The monotypic orchids of Australia and Tasmania. Vict. Nat. 65 (2): 35.

Rupp, H.M.R. 1948. The section <u>Genoplesium</u> in the genus <u>Prasophyllum</u>. Vict. Nat. 65 (6): 141.

Sherff, E.E. 1947. Further Studies in the genus Dodonaea. Chicago Field Mus. Nat. Hist. Bot. Ser. Publ. 612. - 23 (6): 269-317.

Smith White, S. 1948. A survey of Chromosome Numbers on the Epacridaceae. Proc. Linn. Soc. N.S.W. 73 (1-2): 37-56.

Smith White, S. 1948. Cytological Studies in the Myrtaceae II. Chromosome Numbers in the Leptospermoideae and Myrtoideae. Proc. Linn. Soc. N.S.W. 73 (1-2): 16-36. Souster, J.E.S. 1948. A short botanical history of King George's Sound. W. Aust. Nat. 1 (6): 113.

Stearn, W.T. 1947. Endlicher's "Genera Plantarum", "Iconographia Genera Plantarum" and "Atakta Botanika". Jour. Arn. Arb. 28 (4): 424. (dates of publication and notes on contents - Ed.)

van Coststroom, S.J. 1948. Additional Notes on the Convolvulaceae of New Guinea. Jour. Arn. Arb. 29 (4): 414.

<u>Mhite, C.T.</u> 1948. A new species of <u>Austrobaileya</u> (Austrobaileyaceae) from Australia. Jour. Arn. Arb. 29 (3): 255.

Wilde, M.H. & A.J. Eames. 1948. The ovule and <sup>1</sup>seed<sup>1</sup> of <u>Araucaria bidwillii</u> with discussion of the taxonomy of the genus I. Morphology. Ann. Bot. new ser. 12 (47): 311-326.

<u>Willis, J.H.</u> 1948. On the nature and distribution of 'Moonah' <u>Melaleuca pubescens</u> Schauer. Vict. Nat. 65 (4): 76.

Willis, J.H. 1948. The spelling of Meissner. Vict. Nat. 65 (5): 122.

<u>Willis, J.H.</u> 1948. Winter Botanizing on the Mugga Mugga, Canberra. Vict. Nat. 65 (8): 192.

1948. Directory of New Zealand Scientists. Edited by Lyndon Bastings - N. Zeal. Assoc. Sci. Workers, Wellington.