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AUSTRALASIAN HERBARIUM NEWS

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

CONTENTS.

	Page Number
Botanical Conference in Utrecht, Holland, June 1948.	1.
Systematic Botany in Eastern South America. ..	2.
The Lichen Flora of the Australian Sector of the Antarctic.	4.
Item for presentation at the 1950 International Congress.	5.
The Second Edition of Part II. of Black's "Flora of South Australia.	5.
Letters to the Editor -	
(i) Standardisation of Plant Names ..	9.
(ii) Isolated Descriptions of New Species ..	10.
(iii) Presentation of Data in Taxonomic Papers	11.
News and Notes on Current Activities	12.
Report on the State of Taxonomic Botany and Botanical Collections in some areas of Germany since 1939 - (an extract)	16.
APPENDIX I.	
Botanical Literature published during the War Years • (Selection only, N.T.B.)	23.
APPENDIX II.	
List of New Species of Phanerogams described in German Publications during the War Years.	34.
APPENDIX III.	
Index of German Botanists (Selected names only - N.T.B.)	44.

BOTANICAL CONFERENCE - UTRECHT, HOLLAND - JUNE, 1948.

Shortly before Miss Eardley left for her study leave in England early this year she received a letter from the Secretary of the Standing Committee for Urgent Taxonomic Needs of the International Botanical Congresses. Dr. Lanjouw inquired whether it would be possible for any Australian botanist to be present. As a result of this the Systematic Botany Committee asked Miss Eardley if she would consent to act on our behalf, and she gladly consented to do so.

Miss Eardley, whose visit to Holland was made possible by a travel grant from the University of Adelaide, writes that she found the conference most interesting though it entailed much concentrated study of the International Rules of Nomenclature. There were five and a half days of committee sessions during which the atmosphere was most friendly. The work of the Symposium was to prepare matter for submission to the Stockholm Conference. Proposed alterations to the International Rules, from about thirty different sources were considered and arranged appropriately under the different Articles. Dr. Lanjouw hopes to have an official report published in *Chronica Botanica*.

The botanists attending the Conference were as follows:-
Professor Skottsberg - President (Sweden); Dr. Lanjouw - Secretary (Holland); Mrs. T.A. Sprague - Recording Secretary (England); Professor E.D. Merrill (U.S.A.); Professor H.J. Lam (Holland); Professor Ramsbottom (England); Dr. Hyllander (Sweden); Dr. Fulle (Holland); Dr. Robijns (Belgium); Dr. van Steonis (Holland - Java); Dr. T.A. Sprague (England); Dr. H.W. Rickett (U.S.A.); Dr. Fosberg (U.S.A.); Dr. Baehni (Geneva - one day); Dr. Chatterjee (Kew - India); Dr. Humbert (Paris); Professor Westerdijk (Holland); Miss Andreas (Holland) and Miss Eardley (Australia).

Miss Eardley speaks highly of the kind reception given to the visitors by the Dutch who were most hospitable in every way. Despite the close rationing of the population Miss Eardley writes of the "excellent and imaginative cooking". She also visited Leiden and the Rijksherbarium. Later at the final celebration dinner given at the end of the Conference Miss Eardley was asked to speak. She referred, in her remarks, to the isolation of Australian botanists and to our recent attempts at collaboration and co-ordination.

The invitation for an Australian to attend this conference is, we feel, a compliment of a high order which will be appreciated by all botanists in this country. Consequently we are happy to express our gratitude to the Standing Committee for their kindness to our representative.

SYSTEMATIC BOTANY IN EASTERN SOUTH AMERICA.

In the course of a recent visit to eastern South America, as a member of a small plant collecting expedition, it was found possible to visit some of the leading herbaria and to meet botanists of international renown. Some comments on systematic botany in the countries visited may be of interest, though it should be emphasized that no attempt can be made to present a complete, or even perhaps a well-balanced, picture as taxonomic studies did not form a primary objective of the expedition.

One can hardly fail to be impressed by the importance and high status of systematic botany in Argentina. A much higher proportion of the total botanical effort is devoted to systematics than in Australia, and systematic botanists are recognised leaders in the scientific work of the country. Indeed there is a pronounced tendency to concentrate on the descriptive sciences rather than the experimental ones throughout the country. Nevertheless, there are relatively few "pure" taxonomists, and most of the leaders in this field have also made outstanding contributions to descriptive ecology and in many instances to agronomy. Conversely many of those whose primary interest is in agronomy do a considerable amount of taxonomic work as a sideline, or, as is frequently the case, occupy two positions, as agronomist in the Ministry of Agriculture and as taxonomist at a University or Museum. Thus several members of the staff of the Division of Plant Exploration and Introduction are also specialists in one or more of the plant families.

There is no recognised central herbarium, and even in Buenos Aires there are several important collections, some of a private or semi-private nature. Professor L.R. Parodi, one of the leading world authorities on the Gramineae and an outstanding Argentine scientist, has a large private herbarium and a library which filled me with envy, whilst in his grass garden in the Agronomy Department of the University of Buenos Aires he has under cultivation most of the Argentine grasses and many exotics in fascinating - if rather haphazard - profusion.

The "Darwinion" Institute, a fine building in the suburb of San Isidro, is a semi-private foundation under the direction of Professor A. Burkart, well-known as an authority on the Leguminosae. The herbarium is not very large, but includes the important Hicken collection of about 90,000 species, and the building itself is very well equipped, with an excellent library. Most of the taxonomic work is published in the journal "Darwiniana".

It was unfortunately not possible to pay more than a very brief visit to the museum of the National University at La Plata, which has a large herbarium directed by Professor A.L. Cabrera, who may be regarded as the third member of the outstanding botanical triumvirate in Buenos Aires Province. Some reference must, however, be made to the important provincial herbaria at Cordoba and Tucuman. The Botanical Museum at Cordoba houses one of the largest and most valuable herbaria in South America, but owing to lack of technical staff little work is done there. At

SYSTEMATIC BOTANY IN EAST SOUTH AMERICA (Continued).

Tucuman, the Miguel Lillo Institute has become a leading research centre, with a large herbarium especially rich in specimens from north-western Argentina. The staff is principally engaged in the preparation and publication of the monumental "Genera et Species Plantarum Argentinarum".

In contrast to Argentina, systematic botany is in the doldrums both in Uruguay and in Paraguay. Dr. W.G. Herter is no longer active in Uruguay, and perhaps the only full-time official taxonomist is Dr. Legrand of the Botanical Section of the Natural History Museum at Montevideo. Dr. Bernardo Rosengurtt is also interested in taxonomy, and has a large grass garden at the Faculty of Agronomy of the University of Montevideo, but his main work is in applied agrostology.

At the beginning of the century, the work of the Swiss botanists Hassler and Chodat added greatly to the knowledge of the very interesting flora of Paraguay. It is rather tragic to find that today hardly any of their collections, and few even of their publications, are available in the country in which they worked. However, Senor T. Rojas, a former collaborator of Hassler and the present Director of the Botanic Garden at Asuncion, is still active, although greatly handicapped by the lack of funds, reflecting the general impoverishment of the country. He has made extensive collections, many of which have been determined by foreign specialists.

Our travels in Brazil were restricted to the southern parts, but provided opportunity for visits to two of the outstanding centres for botanical work in the country - the Botanic Gardens at Rio de Janeiro and the Botanical Institute at Sao Paulo. The gardens at Rio, established in 1808, must surely be among the most beautiful in the world, with an unrivalled situation at the foot of Mount Corcovado, famous in botanical history as the type locality for many of the species of Martius. The gardens are exceptionally well maintained, and include representatives of much of the very rich forest flora of Brazil, whilst there is also a carpological collection which is claimed to be the largest in the world. The present Director of the Gardens, Dr. J.G. Kuhlmann, has published many papers on the trees of Brazil, including a recent key to the numerous species of Eucalyptus cultivated there.

Dr. F.C. Hoehne, the Director of the Botanical Institute at Sao Paulo, is probably the leading Brazilian systematic botanist. The Institute has a large herbarium, and a very fine living collection of orchids. Dr. Hoehne has in preparation a "Flora Brasilica", intended to replace the great - but now unobtainable - "Flora Brasiliensis" of Martius. Several parts have already been published, including beautifully illustrated volumes on the Orchidaceae.

Only passing reference can be made to other institutions whose principal activities are in fields other than taxonomy, such as the Agronomy Institute at Campinas and the Eucalyptus Research Station at Rio Claro.

SYSTEMATIC BOTANY IN EAST SOUTH AMERICA (Continued).

Although active systematists can be found in most parts of the country, one is left with the impression that taxonomy is less well supported financially than in Argentina, and also, unfortunately, that the dusty seclusion of the herbarium is no adequate protection against political witch-hunts.

"Everywhere great interest was expressed in Australian systematic botany, and a desire to exchange publications and specimens with specialists here. Reprints would be greatly appreciated, especially perhaps, insofar as Brazil is concerned, any dealing with Eucalyptus or with the Australian Antarctic genera which occur also in South America. In return, the institutions can offer excellent publications, many of which are inadequately known in Australia.

WILLIAM HARTLEY,
C.S.I.R., Canberra, A.C.T.

THE LICHEN FLORA OF THE AUSTRALIAN SECTION OF THE ANTARTIC AND
THE SUBANTARCTIC ISLANDS KERGUELEN, HEARD ISLAND, AND
CROZET'S AND MACQUARIE ISLANDS.

The lichens collected by the Australasian Antarctic Expedition 1911-14, and the British, Australian, New Zealand Research Expedition 1929-31, were forwarded to Dr. Carroll W. Dodge of the Missouri Botanic Gardens, St. Louis, U.S.A. for identification and report. This report, accompanied by a review of previous collections from these areas, is now nearing publication, in Adelaide, by the Committee of the latter Expedition. It will amount to nearly 300 pages. Dr. Dodge is describing three new genera of lichens, 115 new species, three new varieties and a new form. The report also deals with the plant parasites of lichens.

J. B. CLELAND,
University of Adelaide,
South Australia.

ITEM FOR AUSTRALIAN REPRESENTATIVE TO BRING FORWARD

AT THE 1950 INTERNATIONAL CONGRESS

The genus Plagiobothrys Fisch. & Mey. 1835 (Boraginaceae) has been divided by Brand (1931) into a number of segregate genera, one of the principal being Allocarya with more than 80 species, almost wholly distributed along the Pacific States of U.S.A., but with three Australian representatives.

If, as Dr. Ivan Johnston of the Arnold Arboretum believes, our several Australian species of Allocarya should be classified under Plagiobothrys, then our nomenclature will have no complications. But, if we follow Brand in maintaining the segregate genus Allocarya (as many botanists do in western U.S.A.), trouble arises over the legitimacy of the name Allocarya.

Allocarya was first published by E.L. Greene in America in 1887, but it is antedated by Maccoya - published by F.von Mueller for the same group in Victoria in 1859. Thus Maccoya is the only legitimate name for all species placed under Allocarya by Brand (q.v. Pflanzenreich, IV, 253, 1931). Brand dismisses the genus Maccoya on the ground that it was based on a monstrosity, but there is certainly nothing monstrous about the type in the Melbourne Herbarium - Dr. Ivan Johnston has examined it and says, "Brand is entirely incorrect in speaking of Maccoya as a freak plant; it happens to be variable in the number of floral parts, which, though unusual, is certainly not unnatural."

Several American botanists will make a determined bid to have Allocarya conserved over Maccoya at the next Botanical Congress - probably because of having to recombine so many American species under an unfamiliar generic name. Are Australian botanists just as determined that the legitimate claims of Maccoya be recognised?

J. H. WILLIS,
National Herbarium,
South Yarra, Victoria.

THE SECOND EDITION OF BLACK'S FLORA OF SOUTH AUSTRALIA.

PART II.

On May 3rd, 1948, almost coinciding with the 93rd birthday on April 28th of Mr. J.M. Black, the second edition of Part II of his Flora of South Australia was on sale at the Government Printing Office, Adelaide.

THE SECOND EDITION OF BLACK'S FLORA OF SOUTH AUSTRALIAPART II (Continued)

His work comprises pages 255 to 521, and covers the same ground as did the original Part II, namely from the beginning of the Dicotyledons to the end of the Euphorbiaceae. Additions and corrections to Part I appear on the first two pages and on the last page of the text. Mr. Black has carefully revised every species, and the additions and alterations are, in consequence, very considerable. The original Part II was published in 1924, 24 years ago, and during that time a number of additions have been made to the Native Flora of the State, and what is perhaps of still more consequence to Australia, many new introductions have appeared, some of them very undesirable.

The number of Families treated is sixty-eight, the two additions being 45a. Cactaceae and 65a. Meliaceae (which did appear at the beginning of Part III, but out of place.) The work comprises 240 genera as against 205 in the first edition and 928 species with 93 varieties in addition, contrasted with 790 species. In these totals the introduced species consist of 203 with 4 varieties in addition as against 137 and 2 varieties. Thus the number of native plants herein described are 725 with 89 varieties.

The following is a summary of the more important additions and alterations. It does not seem necessary here to append the names of the authors of the various species.

The inclusion of Casuarina Decaisneana raises the number of species of Casuarina to 10. C. cristata replaces C. lepidophloia. In the Proteaceae, Hakea Ivoryi and Grevillea biternata are additions to the State's flora and Mr. Black's new G. umbellifera appears as an appendix at the end. Hakea Muelleriana replaces H. ulicina var. flexilis. Two new varieties of Hakea appear.

In the mistletoes, Phrygilanthus (Ph. celastroides) is a new genus for the State. Loranthus diamantinensis is an addition. Viscum articulatum becomes Korthalsella Opuntia.

Polygonum lanigerum and P. glabrum and the introduced ornamental Rumex roseus are additions to the Polygonaceae. The last-named species has already reached the Musgrave Ranges near Ernabella and seems destined to spread over much of our Far North.

There are 22 additional species in the Chenopodiaceae. Chenopodium now has 18 species (previously 15), Atriplex 30 (22), Bassia 31 (28) and Kochia 24 (19). Dysphania myriocephala is now separated from D. littoralis. The genus Malacocera is added to take Bassia tricornis

THE SECOND EDITION OF BLACK'S FLORA OF SOUTH AUSTRALIA.

PART II (Continued)

(now M. tricornis). Babbagia scleroptera has now been found within the State. Enchylaena villosa is now Kochia crassiloba. We are glad to see Mr. Black's name in Salicornia Blackiana though it replaces his own species name of S. pachystachya.

In the Amaranthaceae, the species are increased from 32 to 38, 6 being introduced as against 3 previously. Trichinium is now placed as a section of Ptilotus. Achyranthes is included though A. aspera has not yet been actually found in South Australia. The other 5 additional species belong to Amaranthus which embraces all the exotics.

By the appearance of the introduced Phytolacca octandra, the Phytolaccaceae are increased by a genus and a species.

The genera of the Aizoaceae are increased from 8 to 14 by the splitting up of Mesembryanthemum. Carpobrotus Pulleinei is now placed under Sarcozona. The two other additions to the family are the introduced Aptenia cordifolia and the native Trianthema Maidenii (from near Port Lincoln).

The family Cactaceae is an addition with two introduced species of Opuntia.

The genus Montia (M. fontana) is an addition to the Portulacaceae and the other five additional species in this family comprises Portulaca interterranea (for P. oleracea var. (?) grandiflora), the introduced Claytonia perfoliata and three species of Calandrinia.

The genus Drymaria disappears from the Caryophyllaceae, D. filiformis being transferred to Stellaria, and the introduced genera Tunica (two species), Lychnis (1) and Paronychia (1) are added. There are two additional introduced species of Silene, and Scleranthus diander is now accepted for the State.

Delphinium and Adonis are added introduced genera and Ranunculus repens an introduced species to the Ranunculaceae.

In the Papaveraceae, Argemone and Roemeria are added introduced genera and the Opium poppy an additional introduced species.

In the Cruciferae, the genus Hutchinsia is replaced by Caphonotus, Hymenolobus and Phlegmatospermum. The other six genera are of exotic plants. The species have increased from 55 to 73. Already two new introductions, London Rocket (Sisymbrium Irio) and Brassica Tournefortii, have spread widely.

THE SECOND EDITION OF BLACK'S FLORA OF SOUTH AUSTRALIA

PART II (Continued)

The Resedaceae are increased to three by the introduced Reseda luteola (which appeared in Part IV)

In the Rosaceae, the introduced genus Poterium (P. Sanguisorba) and Rubus moluccanus (also introduced) are additions.

In the Leguminosae, one genus Albizzia (A. lophantha) is added to the Mimosoideae. This species is not 'starred' as an introduced species though the text states that it is spontaneous in places from planted ornamental trees. The occurrence of this Western Australian plant on Rodondo Island near Wilson's Promontory suggests the possibility that it may have been overlooked here as a native species.

The species of Acacia now number 89 as against 80 in the first edition of Part II. Two of these appeared in the addenda to Part IV.

In the Papilionatae, the three introduced genera of Robinia (R. pseudoacacia), Sutherlandia (S. frutescens) and Alhagi (A. Camelorum) are additions. There are two species added to Pultenaea and one removed (P. cymbifolia = Gastrolobium elachistum). Templetonia stenophylla has now been found in South Australia at Bordertown. The introduced genus Trifolium has 21 species as against 17, and two introduced species of Trigonella, two of Melilotus, three of Medicago and two of Lotus have appeared. Lotus australis var. parviflorus is now L. coccineus. The two additions to Indigofera and one to Tephrosia appeared in Part IV. Sesbania aegyptiaca in Part IV does not appear. There are 30 species of Swainsona as against 23, three of which were added in Part IV. Vicia angustifolia (introduced) now appears as a species instead of a variety of V. sativa.

In the Geraniaceae, Pelargonium inodorum takes the place of the inland P. australe var. erodioides. The introduced Oxalis flava is added to the Oxalidaceae. Zygophyllum ammophilum appears now as a species as it did in Part IV, Tribulus astrocarpus and T. macrocarpus and the introduced genus Peganum (P. Harmala African Rue) are additions in the Zygophyllaceae.

Cornea calycina, C. minor and Phebalium stenophyllum are additions to the Rutaceae. The introduced genus Polygala (P. myrtifolia) is an addition to the Polygalaceae. Euphorbia Stevensii and E. Paralias (Sea Spurge, introduced) and the genus Chrozophora (Ch. tinctoria, introduced) raise the species in the Euphorbiaceae from 39 to 42. Micranthemum Tatei is replaced in Phyllanthus.

J. B. CLELAND,
University of Adelaide,
Adelaide, South Australia.

STANDARDISATION OF PLANT NAMES.

In No. 2 of the Australasian Herbarium News the suggestion was made that the names given in the "Check List of British Vascular Plants" be adopted for general use in Australia unless there are very strong reasons for doing otherwise.

Although we fully realise the authoritative nature of the list there seem to be serious objections to its indiscriminate application to the Australian exotic flora.

In many cases there is doubt as to whether those plants naturalised in Australia and Great Britain are conspecific and we feel that the policy of sending specimens of naturalised plants overseas for redetermination is a more satisfactory method of dealing with the problem. This procedure is being followed systematically with the exotic plants of New South Wales in connection with the new Flora and we should like to suggest that as these specimens are determined they be cited in the Herbarium News. If other State Herbaria adopt the same policy we shall ultimately have a check list for Australia.

A second objection is that the changes involve altered concepts of generic limits. In these cases species other than those in the British Check List and the Standardised Plant Names Bulletin are affected, thus necessitating a review of each genus as it occurs in Australia. The British list is too incomplete to justify changing the names of some species of a genus while uncertainty remains as to the taxonomic position of others.

The problem of inconsistency in the names applied in Australia to naturalised plants is too great to be solved merely by adopting the nomenclature of a standardised list prepared for use in Great Britain.

National Herbarium, Sydney.

N.C. FORD
J. GARDEN
L.A.S. JOHNSON

(There will be no disagreement with the view expressed by the signatories of the above letter that a careful comparison of Australian and overseas specimens is desirable to ensure that Australian exotic plants are correctly determined. However, this in itself does not conflict with the proposal to adopt the "Check List of British Vascular Plants" as a provisional standard. It may be, for instance, that the plant which has been known in Australia as Cerastium glomeratum Thuill. is really some other species. If this is so, the fact will presumably be revealed by careful comparison of material at Kew or elsewhere. In the meantime there seems to be no logical case for retaining the name Cerastium glomeratum Thuill. rather than Cerastium viscosum L., which, in the opinion of the British Ecological Society advisers - accepted as authoritative by the writers of the letter - is "the best binary name"

STANDARDISATION OF PLANT NAMES (Continued)

for this plant. It is surely absurd to retain a name which, in authoritative opinion, is certainly wrong, merely on the grounds that the alternative proposed may possibly prove to be wrong also. Is it not better to accept the British List as a standard now, and to modify it as required later when specimens are critically compared?

The second objection, on the grounds of the altered generic limits, is perhaps more important in theory than in practice. The great majority of the genera affected have their centres of distribution in Europe or other parts of the north Temperate region. It will not be disputed that botanists working in this region and with the resources of Kew and the British Museum at their disposal are better able to form an opinion on appropriate generic limits than are Australian botanists who may be familiar with only three or four species. A complete review of each genus as it occurs in Australia is certainly desirable, but, to take again a specific instance, it does not seem necessary to postpone adoption of the name Cardaria draba (L.) Desv. for Lepidium Draba L. on the grounds that other species of Lepidium occurring in Australia may perhaps also be better transferred to other genera. Cardaria has in fact been adopted by some Australian botanists, and the disadvantages to agricultural scientists of having two botanical names in general use for a common weed far exceed the disadvantage to the systematists of some possible slight inconsistency in the treatment of generic limits.

One further point should be mentioned in connection with the proposal to publish in "Australasian Herbarium News" the determinations of exotic plants sent to Kew or elsewhere for examination. This is certainly desirable in itself, but the possibility should not be overlooked that a plant known by a particular name in one part of Australia may not be identical with a plant known by the same name in another part. It would be best, therefore, if plants to be sent away for critical determination should be collected in sufficient quantity to enable duplicates, with the corrected name attached, to be distributed to all Australian Herbaria - William Hartley, Canberra)

ISOLATED DESCRIPTIONS OF NEW SPECIES.

I would like to put in a plea for an Armistice in the description of isolated new species of plants until such time as the results of taxonomic work during the last 50 years or so have been co-ordinated. There are two main reasons for this, firstly, the fact that even the common plants cannot now be determined with certainty. The strong possibility always exists that a name has been replaced by an earlier synonym, that its status has been altered, or that new species have been described in any of a number of scientific journals both in Australia and abroad, since the publication of the flora in use. Secondly, I am

ISOLATED DESCRIPTIONS OF NEW SPECIES (Cont.)

strongly of the opinion that the specific concept is not absolute, but varies from family to family, perhaps, even, from genus to genus. From this, it follows that only by the handling and comparison of large numbers of specimens of a particular genus can the specific limits be defined. Therefore, no one can say whether a species be new or merely represents one of the extremes of variation, except when a revision of the whole genus is undertaken.

The description of isolated new species can only be justified on the grounds of expediency, e.g., a plant hitherto unknown becomes a pest and for this reason must be named. Since, however, the Australian flora is now fairly thoroughly known, the chances of such a plant reaching pest proportions are remote.

As a practical suggestion for herbaria confronted, as frequently happens, with specimens which may be new, I would suggest segregating against such time as that genus is revised.

In conclusion I would draw attention to F.A. Bather's remarks (as quoted by Mayr, "Systematics and the Origin of Species" 1942, p. 16): "a name once published is irrevocable, a permanent addition to the labour of future investigators. Let us beware of adding needlessly to the burden of posterity."

GWENDA L. DAVIS,
New England University College,
Armidale, N.S.W.

PRESENTATION OF DATA IN TAXONOMIC PAPERS.

In any scientific publications purely taxonomic papers are commonly passed over except by the few who are interested in the particular group. The reason for this is not hard to seek, in fact it is obvious, for the majority of such papers, even to other taxonomists, are "dry as dust". Yet this should not be so, for, apart from the fact that taxonomy is fundamental to all biological sciences, it has a basic continuity, and the problems encountered in one family of plants will almost certainly be paralleled by corresponding problems in another. For this reason the methods of treatment of one worker cannot fail to be of interest to others, and the fault must then lie in the presentation of the data.

Every taxonomist is aware of certain developmental trends within his group; he forms opinions as to whether resemblances between genera and species represent actual phylogenetic relationship or are expressions of organic convergence. Yet, how often do these opinions, the result of considerable experience and thought, find their way into his published work? Short discussions of this type would be of considerable interest

PRESENTATION OF DATA IN TAXONOMIC PAPERS (Cont.)

to all workers, even those in another field.

I would suggest that every taxonomic paper contain an introductory section in which the author clearly states his "creed", formulates his guiding principles and discusses his method of treatment of the particular group.

Such a custom would do away with the element of uncertainty experienced by a reader who has not closely studied the genus under discussion, and authors actions in describing new species or rejecting existing ones take on some meaning. The author, on the other hand, would have an opportunity of stating and discussing his views on the correct treatment of his group, instead of this being left to the reader to deduce - perhaps incorrectly.

In short, brevity and conciseness, while highly desirable, have been carried to extremes in the majority of taxonomic papers, which consequently tend to be little more than a series of technical descriptions - in fact "dry as dust."

Perhaps more important still, is the fact that the benefit of the workers' experience which is now only available through personal discussion, would then become available to innumerable contemporary and future taxonomists.

GWENDA L. DAVIS,
New England University College,
Armidale, N.S.W.

NEWS AND NOTES ON CURRENT ACTIVITIES.

AUSTRALIA.

New South Wales

Miss J. Vickery of the National Herbarium, Sydney, has spent three months at Kew where she examined the types of several genera of the Australian Gramineae including Danthonia and Poa. Type specimens from Paris and Florence were lent to Kew especially for her study.

Mr. L.A.S. Johnson, B.Sc., a recent honours graduate of Sydney University has been appointed Assistant Botanist at the National Herbarium. He replaced Mr. D.O. Cross, B.Sc.Agr., who resigned last February in order to take a medical course at Sydney University.

New South Wales (Cont.)

Miss M. Tindale, Linnean Macleay Fellow, who is working at the National Herbarium, has completed a provisional revision of the Australian species of the families Cyatheaceae, Dicksoniaceae, Osmundaceae and Angiopteridaceae.

A second and much enlarged edition of "The Trees of New South Wales" by R.H. Anderson, Government Botanist for New South Wales was published recently. Amongst the improvements are keys to the species of Eucalyptus, found in the various climatic regions of the state, and to the species of Acacia occurring in New South Wales. The latter key was prepared by Miss Tindale.

Owing to the appointment of an official plant and seed collector (Mr. E.F. Constable) to the staff, a large number of seeds and pressed specimens have been accumulated for exchange with overseas herbaria and botanical gardens. About 1500 duplicates of plants collected in New South Wales, including many species from the western plains, have been forwarded to institutions in Europe, North and South America. In return several Dutch, Swedish and American Herbaria have donated specimens.

Requests for Herbarium Specimens - Material of Zieria spp., especially from inland districts of Queensland are requested by Miss J. Garden, National Herbarium, Sydney. Mr. L.A.S. Johnson would be grateful for dried specimens of Casuarina spp. particularly from Western Australia (same address).

Dr. G.A. Llano, Associate Curator, Division of Cryptogams, Smithsonian Institution, U.S. National Museum, Washington 25, D.C., U.S.A., wishes to borrow herbarium material of the Australian Umbilicariae (lichens) on a six months loan basis.

Queensland.

Last year an attempt was made to record the number of specimens received at the Brisbane Herbarium, for determination from various sources. For the year ending 30th June, 1948, this record showed that about 10,000 specimens were dealt with, but for various reasons this number is thought to be rather conservative.

Mr. C.T. White has been preparing for distribution his 1945 collection of plants from the Solomon Islands.

Mr. W.D. Francis made studies of the species of Annona cultivated in Queensland for their fruit. The genus produces marketable fruit such as the custard apple and the cherimoya. He identified a large collection of plants from Adel's Grove, North-west Queensland. He continued to make additions and emendations to the MS. of the second edition

Queensland (Cont.)

of "Australian Rain-Forest Trees".

Mr. S.L. Everist has continued his field work on the life-history of mulga in South-west Queensland and has prepared a tentative check list of the Australian species. He has recently commenced a search for forage plants for semi-arid regions.

Mr. S.T. Blake has been labelling and determining portion of the collection of plants made by him in the Northern Territory in 1946 and 1947 and the distribution of duplicates has commenced. As a result there has been a revision or partial revision of material in the herbarium of several genera from various families, including Myristica, Tristania, Eucalyptus (in part), Barringtonia and Cryptocarya (in small part). The account of the Cyperaceae collected in New Guinea by L.J. Brass is nearly completed.

Mr. L.S. Smith has accompanied Mr. L.J. Webb (C.S.I.R. - Pharmacological Survey) on a number of short journeys in South-East Queensland. Much of his time has been spent in determining the specimens collected on these trips and in completing the determination of a large collection made in North Queensland in 1947. In August - September he will again visit North Queensland.

Early in the year Mr. R.W. Johnson was appointed to the staff as a cadet.

Working visitors to the herbarium included Miss N.T. Burbidge (Canberra), Mr. R. Specht (Arnhem Land Expedition) and Mr. F.W. Hely (C.S.I.R.)

Victoria.

Mr. A.W. Jessep succeeds Dr. A.S. Thomas as President of the National Rose Society of Victoria.

Mr. P.F. Morris was recently in Hobart and collected hybrid Eucalyptus. The multiflowered form of E. viminalis was compared with that of the mainland. The Tasmanian form is almost certainly a hybrid of E. viminalis and E. salacifolia or E. linearis. E. unialata is evidently a first generation cross from E. globulus and E. viminalis. Seedlings of these forms are being grown for further investigation. Mr. Morris has distributed seed of Eucalyptus linearis with the object of planting it as a new street tree.

Mr. J.H. Willis is engaged on the preparation of a new key to the species of Victorian plants.

Victoria (Cont.)

Mr. P.N. Bibby is preparing a bibliographical list of Hepaticae of Australia.

Western Australia.

The publication of Mr. Gardner's book of the grasses of Western Australia has been officially approved.

Australian Capital Territory.

Mr. W. Hartley returned from South America in May. Some notes on his impressions of botanical organisation in the countries visited are included in this issue.

Miss N.T. Burbidge is engaged on a study of the eastern species of Triodia R. Br. This will cover the species occurring in the areas other than Western Australia whose representatives have already been considered.

In response to a request from the Division of Fisheries, C.S.I.R., Cronulla, N.S.W., the Lucas Collection of Marine Algae, which was left to the Commonwealth Government by Professor A.H.S. Lucas, has been moved to Sydney from the Division of Plant Industry, C.S.I.R. Canberra where it was formerly housed. Previous to the removal the collection was listed, more than 14,000 sheets being counted. The responsibility for the care of the Collection has been accepted by the National Herbarium, Sydney.

New Guinea.

Mr. J.S. Womersley, Forest Botanist with the Department of Forests, reports that he recently visited Morobe on the north coast of New Guinea near the Papuan border. The botany of this region is extremely interesting. The vegetation may be grouped as follows:- (i) Mangrove swamps in the tidal mouths of the rivers and the related, but rather different, mangrove communities on the edges of inlets, (ii) sago swamps, (iii) littoral vegetation of the sandy shores, (iv) some rocky headlands which have a very characteristic flora and finally the ridges which flank the harbour and rise to just over 1500' and are clothed in Anisoptera (Dipterocarpaceae) forest with a good sprinkling of other trees. There are two distinct types of valley vegetation, one a true rain forest which probably suffers a rainfall approaching 200" a year and secondly, only a few miles away but separated by a ridge of 800' is a relatively dry savannah, having probably less than 50" rainfall per year. It must seem ridiculous to speak of dry savannah under this precipitation

New Guinea (Cont.)

but the drainage and high temperatures are such that this is the case. The very little known Eucalyptus Schlechteri was collected here in flower. So far as Mr. Womersley knows, this has only been previously collected by Schlechter from the type locality just over the Papuan border, about thirty miles away. It has been assumed that this species was synonymous with E. deglupta. The new material leaves no doubt in Mr. Womersley's mind that it represents a good species.

It is proposed to visit Finschafen later in the year when the problem of the synonymy or otherwise of Araucaria Klinkii, A. Hunsteinii and A. Schumanniana will be studied in the field.

General.

Sessions of particular interest to systematic botanists visiting the Hobart meeting of the Australian and New Zealand Association for the Advancement of Science will be (i) Joint Session with Section C. when Dr. O.H. Selling of Stockholm will deliver a paper on "Cainophytic Floras round the South Pacific Basin". Other papers will also be presented at this meeting. (ii) Session on Evolutionary Genetics when papers will be presented by Professor H.N. Barber, Mr. R.G. Brett and Mr. L. Johnson. (iii) Session in Section K. on the Systematics of Eucalypts.

Since the last subject is one which, in some aspect or other, has been discussed at almost every meeting of A.N.Z.A.A.S. it has attained the status of a hoary perennial. Unfortunately little genuine advance in our solution of this problem has, as yet, arisen from all these discussions. It would seem that the situation is more complex than can be adequately treated by any one worker dealing with merely a portion of the species of this great genus. The suggestion is made that a sub-committee should be appointed, the members being drawn from at least a number of the states and familiar with (a) modern concepts in the delineation of species (b) the variability of the species in the field (c) the possible consequences, economically, of alterations of names.

REPORT ON THE STATE OF TAXONOMIC BOTANY AND BOTANICAL COLLECTIONS INSOME AREAS OF GERMANY SINCE 1939.

Brit. Intell. Objectives Sub-Comm. Report No. 1520 - A.H.G. Alston
(Brit.Mus.)

November, 1946.

(EXTRACT: Reprinted by permission of the Acting Director, Division of

REPORT ON THE STATE OF TAXONOMIC BOTANY AND BOTANICAL COLLECTIONS (Cont.)

Industrial Development, Ministry of Post War Reconstruction - N.T. Burbidge, Editor A.H. News.)

"BERLIN

"Botanischer Museum und Garten, Berlin-Dahlem, Konigin-Luise-Str. 6/8.

"The Herbarium building was destroyed in an air attack on the night of 1-2 March, 1943, and further damage was suffered by the Museum wing during the capture of Berlin. The bulk of the Herbarium was destroyed by fire consequent on the air raid, but about 400,000 sheets in 1100 boxes and 20,000 books were saved or acquired subsequently, and eventually evacuated to Bleicherode in Thuringia, where they were stored in a mine with the collections of the Ethnographical Museum.

" The Fungi imperfecti and rusts were evacuated to Bleicherode, while the Kirschstein collection of Ascomycetes remained at Berlin and is safe. The remainder of the Fungi were destroyed. The Algae and lichens were all lost. The latter included the Herbarium of Dr. Heinrich Sandstede, which was at Berlin. The collection of Pteridophyta is safe, but has not yet been returned to Dahlem. The Palm collection was evacuated and suffered some damage, but has been re-arranged and repaired and has returned to Dahlem. The types of the Monocotyledons (with the exception of a part of the Grasses) and of the earlier families of dicotyledons (less than one third), were evacuated to Bleicherode. A large number of grass types, and the specimens of Impatiens remained at Berlin for study and are saved. The collection of succulents is stated to have been lost. Many of the duplicates of the Herbarium Peter, including the Sympetalae and Leguminosae, remained at Berlin and are safe. The Monocotyledons were burnt, but duplicates of the grasses had been sent to Kew and Geneva. Part of the Bornmuller Herbarium remains at Berlin and part was evacuated to Bleicherode. Drinter's S.W. African herbarium has been acquired. All the material sent to Bleicherode, and later Nordhausen, about 400,000 sheets, was removed by the Soviet Authorities to an unknown destination on the 19th March, 1946. The library was destroyed in the air attack, but a second library was formed during the war and evacuated to Bleicherode, where it suffered the same fate as the botanical collections. A nucleus of a third library has now been acquired. It contains the principal periodicals published in Germany and a large collection of separates. The collection of samples of woods has returned from Ballenstedt.

.....

" A large quantity of systematic work was published during the war, and included valuable studies on the Gramineae, Palms, Myrtaceae, Ericaceae, etc., as listed in the appendix. These works will be necessary for all workers on tropical systematic botany. The staff now consists of

REPORT ON THE STATE OF TAXONOMIC BOTANY AND BOTANICAL COLLECTIONS (Cont.)

Prof. Pilger (Director), Dr. Mattfeld, Dr. J. Mildbraed, Dr. Weredermann, Dr. Melchior, Dr. Burret, Prof. Dr. H. Sleumer, and Dr. G. Schule. Prof. Markgraf is at Munich and Dr. Mansfeld at Gartensleben. Dr. Reimers is now at Tharandt, but will return. Dr. Sleumer collected plants in the Pyrenees during the war, and Prof. Markgraf was attached to the Army in Slovenia and employed on making vegetation maps.

" Without large collections or library, it is hardly possible for further research work to be published at present, but the Herbarium is being arranged and specimens incorporated

" The last number of the Notizblatt (Vol. xv. No. 7.) was published in October, 1944. It is still available, but the stocks of the early numbers have perished.

"

" The Herbarium of Tartu (Dorpat) University (Esthonia) which had been removed to Veronezh in Southern Russia, by the Soviet Authorities, after the incorporation of Esthonia in the Soviet Union, was stored at the Botanical Museum during the war and has now been restored to the Soviet authorities. Its present location was not known. Dr. H. Kaho of Tartu is at Gottingen. The Herbarium from Kiev was taken to Poznan.

" The buildings are in fair shape and the staff work in plant pathology and the development of disease resistant strains of economic plants. The staff consists of Dr. Schumberger (Director), Dr. Richter (mycologist), Dr. Voelkel, Dr. Tomaszewsky, and Dr. Klumm.

"

" Camillo Schneider has abandoned his work on Berberis, and is now living in the British Sector (Berlin-Schonberg, Salsburgerstr. 16 III), and writing a book on trees for the Russians.

"FRANKFURT

"The building of the Senckenburg Museum is very badly damaged especially the botanical wing. The zoological collections survived almost intact. The exhibition galleries are ruined, and about nine tenths of the herbarium has been destroyed. The Herbarium contained the types of plants found in Abyssinia by Ruppel and described by Fresenius. There are also algae which had been studied by Agardh. The bundles examined contained only European plants of little interest. No Botanist has been employed there recently

REPORT ON THE STATE OF TAXONOMIC BOTANY AND BOTANICAL COLLECTIONS (Cont.)"GIESSEN

" The Herbarium of the Botanisches Institut (Untere Karspule 2) has survived, but is still packed up and stored in the basement. It contains Grisebach's types, and, it is believed, some of Peter's specimens.

" The town is almost undamaged and the building of the University Library is intact. The books on systematic botany, together with duplicate books from the University Library, were evacuated to a salt mine and were buried 600 metres underground by an explosion. As they were not packed in boxes it is probable that they have suffered..... The Botanical Garden, which is also at Untere Karspule 2, has lost some of its glass, notably the large palm house. It contains the following features of special interest: (1) a collection of succulents growing in the open ... Tillandsia usneoides is growing as an epiphyte on one of these (2) a fine collection of South African succulents such as Mesembrythemum and Stapelias....

"HAMBURG

"Institut für allgemeine Botanik der Universität, Jungiusstrasse 6.

"The building of the Institute was seriously damaged by bombing, but most of the collections had been evacuated and did not suffer from air attack. However, 135 bundles belonging to the Reineck and teratological herbarium are buried under the ruins. The Cryptogams (Ferns 200 bundles, Mosses 450 bundles, Lichens 200 bundles, Fungi 350 bundles and Algae 140 bundles) and part of the Dicotyledons (viz. Dilleniaceae (in part) to Umbelliferae 250 bundles, and Clethraceae to Compositae 1080 bundles) were evacuated to Tannenhof, Ahrensberg. These are safe and some of them have returned to the remaining wing of the institute, which is now shared with the Institute for Applied Botany and the Zoological Institute, but have not been unpacked. Others are stored in underground shelters in Hamburg. A number of collections, which had not been incorporated in the General Herbarium, are also intact. These include the following collections:-

"....., Clemens - Borneo 90, Dietrich A. (herb. Godeffroy) - Australia 250, Domin - a few, Meebold - Australia etc., - 70, ... Preiss - Australia, 70, Schlechter - N. Caledonia - a few

" The remainder was evacuated to Schloss Mutzschen, near Leipzig, but according to a report which has reached Hamburg, these specimens have been removed to an unknown destination by the Soviet authorities. This part of the Herbarium included the Gymnosperms (about 70 bundles), Monocotyledons (about 400 bundles), and part of the Dicotyledons (viz. Piperaceae to Cruciferae 480 bundles, Crassulaceae to Connaraceae 170 bundles, Leguminosae 220 bundles, and Oxalidaceae to Dilleniaceae (in part) 360 bundles) in addition to the Herbarium of Brandis - India 90

REPORT ON THE STATE OF TAXONOMIC BOTANY AND BOTANICAL COLLECTIONS (Cont.)

bundles; Junge - Schleswig-Holstein 100 bundles; Prahl - Schleswig 100 bundles; and Timm - Schleswig-Holstein 100 bundles, which have not been incorporated.

" The Institute publishes *Mittelungen*, of which the last, volume 10, appeared in 1939, and contains the important "Flora des tropischen Arabien" by O. Schwartz.

" Prof. Hans Winkler, the former Director, died in Dresden in 1944. Dr. O. Schwartz, a baltic german, who followed Irmischer as Kustos of the Herbarium, committed suicide after the end of the war, aged 44. The present Director is Dr. W. Mevius ... Dr. H. Klebahn the mycologist, is dead, as is the lichenologist, C.F.E. Erichsen. The herbarium of the latter was purchased by the Institute. Dr. Domke, formerly of the Botanisches Museum, Berlin-Dahlem, is now Kustos of the Herbarium but no systematic work has been done recently.

"KIEL

" The building of the Botanisches Institute was burnt and the staff and collections are now accommodated in a wing of the Zoologisches Institut at 3, Hegewisch-strasse. The Professor is Dr. Georg Tischler, who works on polyploids and on Karyology (the study of the nucleus). He recently completed a text book on the latter subject, which forms Vol. II. of Lindauer, Tischler and Pascher's - *Handbuch der Pflanzenanatomie*.

" The bulk of the Herbarium was saved from the bombed building and is now stored in the attic of the Zoological Institute. It is without cabinets and therefore liable to deteriorate. The collection has been used for teaching purposes and not as a research herbarium. There are some old specimens, but those seen were not from the herbaria of well known botanists. (The collections at Kiel are listed in *Beih. Bot. Centralblatt* xxxviii pt. 1. pp. 389-398 (1921)) There are a number of valuable Australian specimens sent from Melbourne by Sir F. von Mueller in the last century The older books in the library were evacuated and have been saved but the recent periodicals were destroyed.....

" Prof. G. Schwantes, who did some systematic work on succulents before the war, is still at the Museum fur Vaterlandische Altertumskunde, Kiel.

"MUNICH

" Botanischer Museum und Garten, Munchen 38, Menzingerstrasse 13.

" With the exception of Prof. Sussenguth's work on the *Amaranthaceae*,

REPORT ON THE STATE OF TAXONOMIC BOTANY AND BOTANICAL COLLECTIONS (Cont.)

no systematic work has been done at Munich recently. Since the war Prof. Markgraf, after war service at Laibach (Austria) where he was making vegetation maps, has been appointed to Munich and has worked at the Apocynaceae, and has been revising the classification of the plants in the Garden. The building is virtually unharmed and the herbarium is the largest, and perhaps the only one in Western Germany, which is now replaced, after evacuation, and available for study. The library is also intact, but, like others, lacks modern foreign publications The Herbarium, of about 350,000 sheets, contains the algal collections of Reinbold, Brazilian specimens from Martius, and Reidel, also specimens from J.A. Schultze, Siebold, Zuccarini, Hohenhacker, Hugel, Krauss, Chamisso, Sello, Poeppig, and C.C. Schmidel.

"PLOW"

" The present Director of the Hydrobiologisches Anstalt zu Plon is Dr. Thienemann. Dr. F. Hustedt, the leading authority of Diatoms in Germany works there but is not a member of the staff. He has been dismissed from his post in Bremen. The collection of 50,000 microscopic slides of Diatoms is his own property and is the largest in Germany. Dr. Hustedt is unable to carry on his work because microscope slides and cover slips are unobtainable. He has been engaged for many years on two standard works on this group: (1) The continuation of A. Schmidt's - Atlas der Diatomaceenkunde, which has now reached plate 460. The 8th series is now complete, the 9th partly published and some plates are ready for the 10th. (2) Kiesselalgen, which is vol. 7 of Rabenhorst's Kryptogamenflora. This has not progressed beyond part 2. fascicle 5 (1937) Dr. Hustedt made a study of the structure of diatoms . . . through an electromicroscope . . . no previously unknown structures were visible. now working on Diatoms collected in the East Indies by Dr. O. Jaag, of Zurich, and a collection from the Belgian Congo made by Damas.

" As for the workers in this group in Germany, F. Legler was killed in the war, but G. Krasske is alive. Work under the electromicroscope was also completed by R.W. Kolbe and E. Golz. G. Huber-Pestalozzi has now published three parts of "Das Phytoplankton des Susswassers" and the part dealing with the Diatoms is complete.

Information related to Botanical Institutions in Western Germany which were not visited.

BRITISH ZONE.

Bremen-Museum f. Natur- Volker- und Handelskunde, Bahnhofplatz (formerly Deutsches Kolonial- und Uebersee- Museum or Stadisches Museum) The Museum was partly destroyed but some of the collections were saved

Information related to Botanical Institutions in Western Germany which were not visited. (Cont.)

..... The Herbarium contains Focke's Rubi and probably some of Bitter's Solanaceae.

.....

Hanover - The Botanical Collections are now at Stolznau an der Weser.

.....

FRENCH ZONE.

Freiburg im Breisgau - Botansches Institut (Schanzleweg 9/11) is partly destroyed. It contained the study set of grasses used in the preparation of the Flora Brasiliensis.

.....

U.S. ZONE.

.....

Stuttgart - Wurttembergischen Naturaliensammlung (Archivstr. 3) Building now a hollow shell. Some of collections evacuated.

SOVIET ZONE.

Dresden - Lichens of Reichenbach Herbarium reported destroyed.

.....

Weimar - Haussknecht Herbarium, Amalien-Str. 27. The collections are safe and it is possible to work there. Dr. O. Schwarz from Dahlem is Curator and Professor at Jena.

APPENDIX I.

Botanical Literature published during the War Years (selection only)
N.T.B.)

General:

Köstler, Dr. J. - Bibliographia Forestalis.
Berlin - C.I.S. Wannsee 1942 (Copy in Brit. Mus.)

Economic:

Hackbarth, J. - Die Oelpflanzen Mitteleuropas.
Stuttgart: Wiss. Verlagsges. (1944) pp. 378.

Kempski, K.E. - Die insektiziden Pflanzen
(Pyrethrum, Derris u. Barbasco). Hamburg.
Thaden. 1940. 48 pp.

Kirchner, O. von (dead) E. Loew (dead), C. Schöter (dead), W. Wagerin (dead), and Th. Schmucker - Lebengeschichte der Blütenpflanzen Mitteleuropas. Spezielle ökologie de Blütenpflanzen Deutschlands, Österreichs und der Schweiz. Lief 61-62, Vol. III. Abt. 2. Bog. 18-28.

Leguminosae (end) by W. Christiansen, E. Ulmer
Stuttgart (1942)

Morstalt, H. - Die Landwirtschaftlichen Nutzpflanzen Afrikas. Berlin, de Gruyter, 1942. Vol VIII of series "Afrika" by Ritter von Epp and E. Obst.

Ecology.

Firbas, F. - Systematische und genetische Pflanzengeographie, in Fortschritte der Botanik XI. pp. 92-127 (1944). (Brit. Mus.) Report on the years 1941-43.

Taxonomy.

Aellen, P. - Revision der australischen und neuseeländischen Chenopodiaceen II. Atriplex (1. Nachtrag) in Engl. Bot. Jahrb. LXXI, pp. 228-232 (1940) (Kew)

Aellen, P. - Atriplex und Blackiella in Südafrika, in Engl. Bot. Jahrb. LXX, pp. 383-401. (1940) (Kew)

Backeberg, C. - Cactaceae, in Jahrb. Deutsch. Kakteenges, 1941, pt. 2. (1942)

Benl, G. - Nomina nova vel emendata generis Gahniae Forst., in Fedde Repert. XLIX, pp. 30-34 (1940). (Brit. Mus.)

Benl, G. - Die Systematik der gattung Gahnia, Forst., in Bot. Arch. XL., pp. 151-257 (1940) (Brit. Mus.)

Bornmüller, J. - Beitrag zur Kenntnis der Astragalus - Arten Persiens, einschliesslich einigen Arten der Flora Turkestan, in Fedde Repert. L. pp. 151-177 (1941)

Bornmüller, J. & E. Gauba - Florae Keredjensis
fundamenta in Fedde Repert. L. pp. 365-376
(1941); LI. pp. 33-47 (1942); LI. pp. 84-112
(1942); LI. pp. 209-239 (1942)

Burret, M. - Palmen und Tiliaceen von der
Sudsee aus der Sammlung des Bernice P. Bishop
Museums, Honolulu, Hawaii, in Notizbl. Bot. Gart.
Berlin XV., pp. 85-96. (1940).

Burret, M. Indomalayische Palmen, in Notizbl.
Bot. Gart. Berlin XV, pp. 164-210 (1940)

Burret, M. - Interessante Palmen aus dem
Botanischen Garten Buitenzorg, in Notizbl. Bot.
Gart. Berlin XV. pp. 210-213 (1940)

Burret, M. - Myrtaceenstudien II., in Fedde
Repert., L. pp. 50-60 (1941)

Burret, M. - Bemerkungen zur Palmengattung
Livistona R.Br., in Notizbl. Bot. Gart. Berlin
XV. pp. 319-327 (1941).

Burret, M. - Myrtaceen-Studien, in Notizbl.
Bot. Gart. Berlin XV.

Czeczott, H. - A Contribution to the Knowledge
of the Flora and Vegetation of Turkey. Fedde
Repert. Beihefte CVII. 2. (1939)

Engler, A. u. Prantl - Die Natürlichen Pflanzenfamilien, 2nd. ed. Vol. 14c - Angiospermae; Glumiflorae Gramineae III. (Unterfamilie Panicoideae) R. Pilger, Leipzig (1940) Vol. 19b I. - Meliaceae and Akanaceae by H. Harms, Leipzig (1940) (Kew). Vol. 20b. - Angiospermae Sapindales. Cyrillaceae, Pentaphyllaceae, Corynocarpaceae, Aquifoliaceae, Celastraceae, Hippocrateaceae, Salvadoraceae, Stackhousiaceae, Staphyleaceae, Icacinaceae, Peripterygiaceae, Erythropalaceae. Leipzig (1942)
Vol 1B. - Schizophyceae by L. Geitler (1942)
Band 5a I. - Thumycetes by Hans Greis (1943)

Engler, A. - Das Pflanzenreich. 106. Heft - IV 276 b.
Campanulaceae - Lobelioideae by F.E. Wimmer. Leipzig. W. Engelmann. (1943) (Kew).

Gilg, C. - Beiträge zur Morphologie und Systematik der Gentianoideae - Gentianeae - Erythraeinae, in Notizbl. Bot. Gart. Berlin. XIV pp. 417 - 430 (1939).

Harms, H. - Meliaceae novae, in L. Diels ; Beiträge zur Flora von Papuasien XXVI. No. 148, in Engl. Bot. Jahrb. LXXXI. pp. 159-206 (1942) (Kew)

Harms, H. - Adfzählung der von J.H.L. Waterhouse auf den Salomons - Inseln gesammelten Araliaceen, in Notizbl. Bot. Gart. Berlin XV. pp. 677 - 680 (1942)

Hegi, G. - Illustrierte Flora von Mitteleuropa,
Ed. 2. Vol. 2. (Monocots) Munchen, Lehmann 1939.
Dr. Suessenguth is now Editor.

Hermann, F. - Einiges über Carex contigua
Hoppe und die ihr verwandten Arten, sowie über
Carex buxbaumii, in Mitt. Thuring. Bot. Ver. L.
pp. 87-97 (1943)

Houtzagers, G. - Die Gattung Populus und ihre
forstliche Bedeutung; ins Deutsche übersetzt
von W. Kemper, Hannover (1941) (Translated
from the Dutch).

Knuth, R. - Elaeocarpaceae novae, in Fedde
Repert. XLIX. pp. 66-73 (1940) (Brit. Mus.);
XLVIII pp. 72-79 (1940) (Brit. Mus.); L. pp.
81-88 (1941) (Brit. Mus.)

Kükenthal, G. - Neue Cyperaceae aus Neuguinea
in L. Diels: Beiträge zur Flora von Papuasien
XXV. No. 143, in Engl. Bot. Jahrb. LXX. pp. 465-
466 (1940) (Kew)

Kükenthal, G. - Vorarbeiten zu einer Mono-
graphie der Rhynchosporoideae VIII, in Fedde
Repert. XLVIII. pp. 49-72 (1940) (Brit. Mus.)

Kükenthal, G. - Vorarbeiten zu einer Monograph-
ie der Rhynchosporoideae IX, in Fedde Repert.
XLVIII. pp. 195-250 (1940) (Brit. Mus.); X. in
Fedde Repert. L. pp. 19-50 (1941); XI. in Fedde
Repert. L. pp. 112-128 (1941); XII, in Fedde
Repert. LI. pp. 1-17 (1942); XIII. in Fedde
Repert. LI. pp. 139-193 (1942); XII (Contd.? -
N.T.B.) in Fedde Repert. LII. pp. 52-111 (1943)

Kükenthal, G. - Neue oder nicht genügend bekannte Cyperaceen, in Mitt. Thüring. Bot. Ver. L. pp. 1-13 (1943)

Kükenthal, G. - Cyperaceae novae, in Fedde Repert. LIII. pp. 72-75 (1944)

Kükenthal, G. - Vorarbeiten zu einer Monographiae der Rhynchosporoideae, in Fedde Repert. LIII. p. 85-100 (1944).

Kükenthal, G. - Neue oder pflanzengeographisch beachtenswerte Cyperaceenfunde aus dem Malayischen und papuanischen Gebiet, in Fedde Repert. LIII. pp. 100-111 (1944). Reprinted from Bull. J. Buit. ser. 3. XXX. pp. 301-323 (1940).

Markgraf, F. - Neue Apocynaceen aus Neuguinea, in Notizbl. Bot. Gart. Berlin XV. pp. 130-131 (1940)

Mattfeld, J. - Eine neue Caryophyllaceae aus Neuguinea, in L. Diels : Beiträge zur Flora von Papuasien XXV. No. 144, in Engl. Bot. Jahrb. LXX. p. 468 (1940) (Kew). ; l.c. No. 145. Eine neue Saxifragacee von Neuguinea, op. cit. pp. 409-470 (1940) (Kew) ; l.c. No. 146. Einige Neue Compositen aus dem Gebiet. des Saruwaged-Gebirges in Neuguinea, op. cit. pp. 470-482. (1940) (Kew)

Orlov, AA. and E. Aberg - The classification of subspecies and varieties of *Hordeum sativum* Jessen, in Fedde Repert. L. pp. 1-5 (1941)

Pilger, R. - Gramineae III. in Die natürlichen Pflanzenfamilien Bd. 14, pp. 1-208. Leipzig (1940)

Pilger, R. - Über die Gattung *Scleropezom* Phil. in Notizbl. Bot. Gart. Berlin XV. pp. 15-22 (1940).

Poellnitz, K. von - Zwei neue *Portulaca* Arten, in Fedde Repert. XLVIII pp. 117-118 (1940) (Brit. Mus.)

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von Papuasien XXVI, No. 150, in Engl. Bot. Jahrb.
LXXII. pp. 209-268.

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und bemerkenswerte Rhamnaceen aus den Herbarien
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325-332 (1941).

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Zell. & Mor., in Engl. Bot. Jahrb. LXXIII, pp.
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bryanthemum, in Notizbl. Bot. Gart. Berlin XV.
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des Ophioglossaceen-Blatter, in Ber. Deutsch.
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Characeen, in Protoplasma XXXVII pp. 293-299
(1943)

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 VI. Die Lebermose - K. Müller - Lief. 1. (1939)
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 (1940) (Brit. Mus.) to be contd.
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 (Brit. Mus.) complete.
 XII. Abt. 4 - Oedogoniales - K. Gemeinhardt
 Lief 2 (1939) 3 (1940) (Brit. Mus.)
 complete.
 XIII. Abt. 1 Teil 2 - Die Desmidiaceen - W.
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 contd. (Brit. Mus.)
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 Süßwassers, which is vol. XVI of E. Naumann
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 series not complete, 10th series partly ready.

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Engler's Botanische Jahrbucher, contd. to LXXIII, heft 4 (3.3.44) Publisher now E. Schweitzerbart'sche Verlagsbuchhandlung, Stuttgart. Kew have some from the war years.

Fedde's Repertorium - contd. at least to LIII heft 2 (1st June 1944) Rothmaler now Ed.

Notizblatt des Botanischen Gartens, Berlin -
 Contd. to XV (No. 7) 1st October, 1944. (Brit.
 Mus. have to 124 (1939) Stock destroyed.

APPENDIX II.

List of New Species of Phanerogams described in German Publications
during the War Years.

(All the Australian, New Zealand and New Guinea Species with a
 few others - N.T.B.)

Abryanthemum edule (L.) Rothm. in Notizbl. Bot. Gart Berlin XV. 413
 - Mesembryanthemum edule L.

Aglaia araeantha Harms in Engl. Bot. Jahrb. LXII (?LXXII - N.T.B.) p. 162
 (1942) - New Guinea.

A. acariseantha Harms in Engl. Bot. Jahrb. LXXII p.170 (1942) - New Guinea

A. boanana Harms l.c., p.163 - New Guinea.

A. Caroli Harms l.c., p.176 - " "

A. Carrii Harms l.c., p.163 - " "

A. cedreloides Harms l.c., p.164 " "

A. Docteriana Harms l.c., p.170 " "

A. euryanthera Harms l.c., p.171 " "

A. gracillima Harms l.c., p.171 " "

A. haplantha Harms l.c., p.172 " "

A. Janowskyi Harms l.c., p.176 " "

A. Lauterbachiana Harms l.c., p. 164 - New Guinea

- A. Ledermannii Harms l.c., p. 165 - New Guinea
- A. Leeuwenii Harms l.c., p. 172 - " "
- A. leprodopetala Harms l.c., p. 177 - " "
- A. lepiorrhachis Harms l.c., p. 165 - " "
- A. mamborana Harms l.c., p. 173 - " "
- A. phaeogyna Harms l.c., p. 167 - " "
- A. pycnoneura Harms l.c., p. 179 - " "
- A. Rudolfii Harms l.c., p. 173 - " "
- A. Schraderiana Harms l.c., p. 168 - " "
- A. Schultzei Harms l.c., p. 177 - " "
- A. Schumanniana Harms in Engl. Pflanzenfam. XIXb. I. p. 146 (1940)
= A. simplicifolia Harms 1902 non 1896.
- A. spaniantha Harms in Engl. Bot. Jahrb. LXXII p. 168 (1942) - N. Guinea
- A. trichostama Harms l.c., p. 169 - New Guinea
- A. urophylla Harms l.c., p. 174 - " "
- A. vulpina Harms l.c., p. 175 - " "
- Alyxia multistriata Markgraf in Notizbl. Bot. Gart. Berlin XV. 131 (1940)
- New Guinea : van Leeuwen 11340, 11293.
- Ammophila littoralis (Beauv.) Rothm. in Fedde Repert. LII. 269 (1943):
= Psamma littoralis
- Atriplex cryptocarpa (?cryptocarpa - N.T.B.) Aellen in Engl. Bot. Jahrb.
LXXI. p. 228 (1940). S. Australia : Hubbard 8398
- A. fasciculifera Aellen l.c., p.229 (1940) - S. Australia : Hubbard 8383.
- A. novae-zealandiae Aellen l.c., p.230 - New Zealand.
- Austromyrtus (Nieden zu) Burret in Notizbl. Bot. Gart. Berlin XV. 500 (1941)
Myrtaceae. (Myrtus sect. Austromyrtus)
- A. acmenoides (F. Muell.) Burret l.c. p. 501 (1941) = Myrtus acmenoides.

- A. acutiuscula Burret l.c., p. 502 - N.S.Wales
- A. alaternoides (Brongn. & Gris) Burret l.c., p. 504 = *Myrtus alaternoides*
- A. aneityensis (Guillaumin) Burret l.c., p. 506 - *Myrtus aneityensis*
- A. apthosa (Veill. ex Brongn. & Gris) Burret l.c., 504 = *Eugenia apthosa*
- A. Bidwillii (Benth.) Burret l.c., 501 = *Myrtus Bidwillii*
- A. cataractarum (Guillaumin) Burret l.c., 503 = *Eugenia cataractarum*
- A. clusioides (Brongn. & Gris.) Burret l.c., 503 = *Eugenia clusioides*
- A. conspicua (Veill. ex Guillaumin) Burret l.c., 505 = *Myrtus conspicua*
- A. decaspermoides (Domin) Burret l.c., 502 = *Myrtus decaspermoides*
- A. diversifolia (Brongn. & Gris) Burret l.c., p.503 = *Eugenia diversifolia*
- A. exaltata (F.M.Bailey) Burret l.c., 501 = *Myrtus exaltata*
- A. fragantissima (F.Muell. ex Benth.) Burret l.c., p. 501 = *Myrtus fragantissima*
- A. gatopensis (Guillaumin) Burret l.c., 505 = *Eugenia gatopensis*
- A. gonoclada (F.Muell. ex Benth.) Burret l.c., p.501 = *Myrtus gonoclada*
- A. gyrosepal (E.G.Baker) Burret l.c., p. 505 = *Eugenia gyrosepala*.
- A. Hillii (Benth.) Burret l.c., p. 501 = *Myrtus Hillii*
- A. horizontalis (Pauch. ex Brongn. & Gris) Burret l.c., p. 504 = *Eugenia horizontalis*.
- A. inophloia (J.F.Bailey & C.T.White) Burret l.c., p. 502 = *Myrtus inophloia*
- A. kanalaensis (Hochr.) Burret l.c., p.504 = *Eugenia kanalaensis*
- A. lotoides (Guillaumin) Burret l.c., p. 504 = *Myrtus lotoides*.
- A. luteo-viridis (E.G.Baker) Burret l.c., p. 505 = *Myrtus luteo-viridis*
- A. Mendute (Guillaumin) Burret l.c., p. 505 = *Eugenia Mendute*
- A. metrosideros (F.M. Bailey) Burret l.c., p. 501 = *Myrtus metrosideros*
- A. minutiflora Burret in Notizbl. Bot. Gart Berlin XV. p. 502 - Queensland.

- A. nigripes (Guillaumin) Burret l.c., p. 505 - *Myrtus nigripes*
- A. Pancheri (Brongn. & Gris) Burret l.c., p. 503 = *Eugenia Pancheri*
- A. ploumensis (Daniker) Burret l.c., p. 504 = *Eugenia ploumensis*
- A. poimballensis (Guillaumin) Burret l.c., p. 503 = *Myrtus poimballensis*
- A. proluxa (E.G.Baker) Burret l.c., p. 505 = *Myrtus proluxa*
- A. racemulosa Burret l.c., p. 501 = *Myrtus racemulosa* Benth. non Mart.
- A. stricta (Panch. ex Brongn. & Gris) Burret l.c., p. 505 = *Eugenia stricta*
- A. styphelioides (Schlechter) Burret l.c., p. 504 = *Myrtus styphelioides*
- A. tenuifolia (Sm.) Burret l.c. p. 501 = *Myrtus tenuifolia*
- A. Vieillardii (Brongn. & Gris) Burret l.c., p. 503 = *Eugenia Vieillardii*
- Calamus amischus Burret in Notizbl. Bot. Gart. Berlin XV p. 800 (1943) -
Queensland : Poland 203.
- C. multisetosus Burret l.c., p. 807 (1943) - New Guinea : Brass 5422
- C. myriocarpus Burret l.c., p. 806 - " " : Clemens 4372
- C. polycladus Burret l.c., p. 802 - " " : " 9132
- C. sessilifolius Burret l.c., p. 7 (1940) - New Guinea : " 8542
- C. stipitatus Burret l.c., p. 814 (1943) - Solomons (S.Christoval);
Brass 2719
- Calypetrocalyx Clemenseiae Burret l.c., 9 (1940) - New Guinea : Clemens 8629
- Diplycosia lysolepis Sleumer in Engl. Bot. Jahrb. LXXII p. 209
(1942) - New Guinea.
- D. morobeensis Sleumer l.c., p. 210 - New Guinea
- Didymocheton Carrii Harms in Engl. Bot. Jahrb. LXXII p. 190 (1942) -
New Guinea : Carr 13877. 14346.
- Dysoxylum brachycalycinum Harms in Engl. Bot. Jahrb. LXXII p. 192 (1942)
- New Guinea.
- D. dempoense (Bak. f.) Harms in Engl. Pflanzenfam. XIXb, I. p. 166 (1940)
= *Chisocheton dempoense*

- D. enantiophyllum Harms in Engl. Bot. Jahrb. LXXII p. 192 (1942) -
N. Guin.
- D. haplanthum Harms l.c., p. 193 - New Guinea
- D. kaniense Harms l.c., p. 194 - " "
- D. ledermanii Harms l.c., p. 194 - " "
- D. leptorrhachis Harms l.c., p. 195 - " "
- D. microstachyum Harms l.c., p. 196 - " "
- D. monticola Harms l.c., p. 197 - " "
- D. pachystachyum Harms l.c., p. 197 - " "
- D. phaeotrichum Harms l.c., p. 198 - " "
- D. sericopetalum Harms l.c., p. 201 - " "
- D. thaumastianum Harms l.c., p. 202 - " " Carr. 15162
- Elaeocarpus albiflorus Knuth in Fedde Repert. L. p. 81 (1941) - N. Guin
- E. azaleifolius Knuth l.c., p. 81 - New Guinea
- E. boridiensis Knuth in Fedde Repert. XLVIII p. 73 (1940) - New Guinea
- E. Brassii Knuth l.c., p. 73 - New Guinea
- E. breviracemosus Knuth l.c., p. 73 - " "
- E. crenulatus Knuth l.c., p. 74 - " "
- E. densiflorus Knuth in Fedde Repert. L. p. 82 (1941) - New Guinea
- E. eucalyptifolius Knuth in Fedde Repert. XLIX p. 73 (1940) - Queensland
- E. filiformi-dentatus Knuth " " XLVII p. 74 (1940) - N. Guinea
- E. firmus Knuth l.c., p. 75 - New Guinea
- E. fuscoides Knuth l.c., p. 75 - " "
- E. glabriuscula Knuth in Fedde Repert L. p. 83 (1941) - New Guinea
- E. lingualis Knuth " " " XLVIII p. 76 (1940) - New Guinea

- E. multiscissus Knuth in Feddes Repert. L. p. 86 (1941) - New Guinea
Clemens 5019 (type), Carr 13840.
- E. novo-mecklenburgensis Knuth in Fedde Repert. XLVIII p. 77 (1940) -
Ins. Bismarck; New Guinea.
- E. papuansis Knuth in Fedde Repert. L. p. 86 (1941) - New Guinea
- E. patens Knuth " " " XLVIII p. 77 (1940) - New Guinea
- E. populneoides Knuth l.c., p. 78 - New Guinea
- E. rugulosus Knuth l.c., p. 78 - " "
- E. salomonensis R. Knuth in Fedde Repert. L. p. 87 (1941) - Ins. Sol.
- E. Schlechteri R. Knuth " l.c., p. 87 - New Guinea : Clemens 637
- E. ulapensis R. Knuth l.c., p. 88 - " " : " 6680
- Epicharis alata (Harms) Harms in Engl. Nat. Pflanzenfam. XIXb. I p. 169
(1940) = Dysoxylum alatum
- E. brachybotrys Harms in Engl. Bot. Jahrb. LXXII p. 203 (1942) - N. Guinea
- E. hyacinthiodora Harms l.c., p. 204 - New Guinea
- Epimeredi inodorus (R.Br.) Rothm. in Fedde Repert. LIII p. 12 (1944) -
Anisomeles inodora
- E. moschatus (R.Br.) Rothm. l.c., = Anisomeles moschata
- E. salviaefolius (R.Br.) Rothm. l.c., = " salviaefolia
- Fenzlia Beccarii (F. Muell.) Burret in Notizbl. Bot.Gart.Berlin XV. p.500
(1941) = Myrtella Beccarii
- F. Bennigseniana (Volkens) Burret l.c. - Leptospermum Bennigsenianum
- F. hirsutula (F. Muell.) Burret l.c., = Myrtella hirsutula
- Gasoul crystallinum (L.) Rothm. in Notizbl. Bot.Gart. Berlin XV p. 413
(1941) = Mesembryanthemum crystallinum
- G. nodiflorum (L.) Rothm l.c., Mesembryanthemum nodiflorum
- Gaultheria arfakana Sleumer in Engl. Bot. Jahrb. LXXII p. 215 (1942) -
New Guinea :

- G. leiostheca Sleumer l.c., p. 213 - New Guinea : Carr 15292
- G. tanythrix Sleumer l.c., p. 214 - " "
- Gomphandra Carrii Sleumer in Notizbl. Bot. Gart. Berlin XV p. 239 (1940) -
New Guinea : Carr 14605, 13173, 13301, 14483.
- G. papuana (Becc.) Sleumer l.c., p. 238 = Platea papuana
- G. pseudoprasina Sleumer l.c., p. 240 - New Guinea ; Clemens 2012 (type)
and Schlechter 16706.
- G. schoepfiifolia Sleumer l.c., p. 241 - New Guinea : Clemens 5160, 4766,
Hyacinthoides Heist ; Rothm. in Fedde Repert. LIII p. 14 (1944) : Liliaceae
- H. aristides (Coss.) Rothm l.c., p. 15 = Scilla aristides
- H. hispanica (Mill. emend. Baker) Rothm. l.c., p. 14 = Scilla hispanica
- H. italica (L.) Rothm. l.c., p. 15 : = Scilla italica
- H. kabylica (Chab.) Rothm. l.c., p. 15 = Scilla kabylica
- H. lingulata Don) Rothm. l.c., p. 15 = " lingulata
- H. non-scripta (L.) Rothm. l.c., p. 14 = " non-scripta
- H. patula (Lam.) Rothm. l.c., p. 15 = " patula
- H. vincentina (Link & Hoffm.) Rothm. l.c., p. 15 = Scilla vincentina
- Hypsela rivalis E. Wimm. in Engl. Pflanzenfam. IV, 276b p. 121 (1943) -
New Zealand : T. Kirk 464.
- H. sessiliflora E. Wimm. l.c. - N.S.Wales : F. Bauer
- H. tridens E. Wimm. l.c. Australia
- Lepidosperma floribundum Kukenthal in Fedde Repert. L. p. 43 (1941) -
W. Australia.
- L. obtusum Kukenthal l.c., p. 120 - W. Australia : F. Mueller
- L. pauperum Kukenthal l.c., p. 125 - N. Caledonia - Schlechter 14959
- L. pruinatum Kukenthal l.c., p. 115 - W. Australia : Meebold 10988, 6661.
- Leucosyke australis Unruh in Engl. Bot. Jahrb. LXXIII p. 220 (1943)) New
Heb. and Sol. Is.

- L. Clemensii Unruh l.c., p. 230 - New Guinea : Clemens 3452, Carr 13158
- L. solomonensis Unruh l.c., p. 217 - Sol. Is.
- Licuala Beccariana Burret in Notizbl. Bot.Gart. Berlin XV p. 330 (1941)
= Dammera ramosa Lauterb
- L. macrantha Burret l.c., p. 327 - New Guinea : Brass 1140
- Livistona Beccariana Burret l.c., p. 326 - New Guinea (Louisiades) 1888
Wendland
- Lophomyrtus Burret in Notizbl. Bot. Gart. Berlin XV. p. 489 (1941) -
Myrtaceae
- L. obcordata (Raoul) Burret l.c., p. 490 = Myrtus obcordata
- L. Ralphii (Hook. F.) Burret l.c., p. 490 = Myrtus Ralphii
- Maytenus bilocularis (F.Muell.) Loes. in Engl. & Prantl, Nat. Pflanzenf.
Aufl. 2 Xxb p. 135 (1942) = Celastrus bilocularis
- M. Cunninghamii (F.Muell.) Loes. in Engl. & Prantl. Nat. Pflanzenf. Aufl.
2 Xxb 136 (1942) - Celastrus Cunninghamii
- M. disperma (F. Muell.) Loes. l.c., p. 135 - Celastrus disperma
- M. Fournieri (Panch. & Seb.) Les. l.c., p. 137 - Celastrus Fournieri
- Myrtastrum Burret in Notizbl. Bot. Gart. Gerlin XV. p. 494 (1941)
Myrtaceae
- M. rufo-punctatum (Panch. ex Brongn. & Gris) Burret l.c., - Myrtus rufo-punctata
- Orania Clemensiae Burret in Notizbl. Bot. Gart. Berlin XV. p. 8 (1940) -
New Guinea : Clemens 8713.
- Oreobolus Clemensiae Kuenthal in Fedde Repert. XLVIII p.69 (1940) - N.
Guinea.
- Phytocrene interrupta Sleumer in Notizbl. Bot.Gart. Berlin XV. p. 252 (1940)
- New Guinea : Carr 12612
- P. malacothrix Sleumer l.c., p. 361 - New Guinea : Clemens 8620
- Piliostigma Burret in Notizbl. Bot.Gart. Berlin XV. 547 (1941) - Myrtaceae

- P. cuneatum Burret l.c., p. 549 - N.S.Wales : R.T. Baker
- P. glabrum Burret l.c., p. 548 - N.S.Wales : Meebold 3399, Richmond R.,
Maiden
- P. parviflorum Burret l.c., p. 549 - N.S.Wales : Boorman
- P. rhytisperma (F.Muell.) Burret l.c., p. 550 - Myrtus rhytisperma
- Platea Ledermannii Sleumer in Notizbl. Bot. Gart. Berlin XV. p. 360 (1941)
- New Guinea : Ledermann 11236.
- P. microphylla Sleumer l.c., p. 361 - New Guinea : Ledermann 9300
- Plerandra hogkugu Harms in Notizbl. Bot. Gart. Berlin XV p. 678 (1942)
Ins. Sol. (bougainville) : Waterhouse B 669
- Portulaca terrae-reginae Poelln. in Fedde Repert. XLVIII p. 117 (1940) - Q.
- Pratia darlingensis E. Wimm in Engl. Pflanzenreich IV. 276 b. p. 108 (1943)
N.S.Wales : Prager - Victoria : Mueller
- P. Gilletii (De Wild.) E.Wimm. l.c., p. 115 - Lobelia Gilletii
- P. surrepens (Hook.f.) E.Wimm. l.c., p. 108 (1943) = Lobelia surrepens
- Pseudocarapa inopinata Harms in Engl. Bot. Jahrb. LXXII p. 160 (1942) -
New Guinea
- Rhodoblaste micrantha Burret in Notizbl. Bot. Gart. Berlin XV. p. 10. (1940)
- New Guinea : Clemens 7987
- Rhodomertus locellata (Guillaumin) Burret in Notizbl. Bot. Gart. Berlin XV.
p. 496 (1941)
- R. paitensis (Schlechter) Burret l.c., p. 496 = Myrtus paitensis
- R. sericea Burret l.c., p. 497 - Queensland : Sayer
- R. turbinata (Schlechter) Burret l.c., p. 496 = Myrtus turbinata
- R. Vieillardii (Brongn. & Gris) Burret l.c., p. 496 = Myrtus Vieillardii
- Salacicratea australis Loes in Engl. & Prantl Pflanzenf. Aufl. XX b
p. 216 (1942), germanice, - N. Guinea; Austral (Queensland)
- S. ledermanni loes. l.c., - New Guinea.
- S. sororia (Miq.) loes. l.c., - Salacia sororia

Salaciopsis megaphylla (Poiss. ex Guillaumin) Loes. in Engl. & Prantl.
Nat. Pflanzenf. Aufl. 2. XX b p. 156 (1942) = Lecardia megaphylla

Sandoricum Ledermannii Harms in Engl. & Prantl Nat. Pflanzenf. XIX b, I.
p. 172 (1940) (nomen), in Engl. Bot. Jahrb. LXXII p. 204 (1942) - N.Guin.

Schefflera bougainvilleana Harms in Notizbl.Bot.Gart.Berlin XV p.679
(1942) - Ins Solomon (Bougainville) : Waterhouse 163.

S. pachystyla Harms in Engl. Bot.Jahrb. LXXII p. 205 (1942) - New Guinea

S. pileomatophora Harms l.c., p. 206 - New Guinea

S. spaniodon Harms l.c., p. 206 - New Guinea

S. Waterhousei Harms in Notizbl.Bot.Gart.Berlin XV. p. 678 (1942) -
Ins. Solomon (Bougainville) : Waterhouse B782

Stereocaryum Burret in Notizbl.Bot.Gart Berlin XV. p. 546 (1941) - Myrtaceae

S. ovigerum (Brongn. & Gris) Burret l.c., p. 547 = Eugenia ovigera

S. rubiginosum (Brongn. & Gris) Burret l.c., p. 546 - Spermolepis rubiginosa

Trymalium vaccinoides Suessng. in Fedde Repert. L. p. 329 (1941) - W.Australia

Tylecarpus coriifolius Sleumer in Notizbl.Bot.Gart. Berlin XV. 236 (1940) -
New Guinea : Peekel 1064

T. Peekelii Sleumer l.c., p. 237 - New Guinea : Peekel 1056.

Uromyrtus Burret in Notizbl. Bot.Gart.Berlin XV. 490 (1941) - Myrtaceae

U. artensis (Montr.) Burret l.c., p. 490 = Helianthemum artense

U. curvipes (Gandoger) Burret l.c., p. 491 = Myrtus curvipes

U. emarginata (Panch.) Burret l.c., p. 492 = Myrtus emarginata

U. gomonenensis (Guillaumin) Burret l.c., = Myrtus gomonenensis

U. paulotchensis (Guillaumin) Burret l.c., = Myrtus paulotchensis

U. supra-axillaris (Guillaumin) Burret l.c., = Myrtus supra-axillaris

U. thymifolia (Guillaumin) Burret l.c., = Myrtus thymifolia

Vaccinium adenanthum Sleumer in Engl. Bot.Jahrb. LXXII p. 288 (1942) -
N. Guinea

- V. albicans Sleumer in Engl. Bot. Jahrb. LXXI p. 445 (1941) - New Guinea
- V. ampullaceum Sleumer " " " LXXII p.261 (1942) - " "
Carr 12650
- V. arenarium Sleumer l.c., p. 232 - New Guinea
- V. Brassii Sleumer l.c., p. 251 - " "
- V. cardiophorum Sleumer l.c., p. 240 - New Guinea
- V. collivagum Sleumer l.c., p. 227 - " "
- V. chionostomum Sleumer l.c., p. 221 - " "
- V. cornigerum Sleumer l.c., p. 259 - " "
- V. cryptodon Sleumer l.c., p. 236 - " "
- V. debilescens Sleumer l.c., p. 257 - " "
- V. disteriginoides Sleumer l.c., p. 232 " "
- V. dominans Sleumer l.c., p. 269 - " "
- V. fissiflorum Sleumer in Engl. Bot. Jahrb. LXXII p. 219 (1942) - New Guinea
- V. haematanthum Sleumer l.c., p. 226 - New Guinea
- V. Hellwingianum Sleumer l.c., p. 260 = V. acutissimum F. Muell ex Warb.
- V. ingens Sleumer l.c., p. 220 - New Guinea : Carr. 15008, 13641
- V. lividum Sleumer l.c., p. 233 - " "
- V. malacothrix Sleumer l.c., p. 241 - New Guinea
- V. marginellum Sleumer l.c., p. 229 - " "
- V. megalophyes Sleumer l.c., p. 253 - " "
- V. minusculum Sleumer l.c., p. 264 - " "
- V. mollissimum Sleumer l.c., p. 266 - " "
- V. montis-Ericae Sleumer l.c., p. 267 - " "
- V. obovalifolium Sleumer l.c., p. 249 - " "
- V. oreites Sleumer l.c., p. 239 - " "

- V. oreomyrtus Sleumer l.c., p. 233 - New Guinea.
V. otophyllum Sleumer l.c., p. 263 - " "
V. prostratum Sleumer l.c., p. 230 - " "
V. psammogenes Sleumer l.c., p. 260 - " "
V. psittacobium Sleumer l.c., p. 255 - " "
V. pugionifolium Sleumer l.c., p. 230 - " "
V. stabilipes Sleumer l.c., p. 218 - " "
V. stricaule Sleumer l.c., p. 256 - " "
Vavaea Ledermannii Harms in Engl. und Prantl Nat. Pflanzenf. XIXb I. p. 98, f. 25
 (1940) germanice ; in Engl. Bot. Jahrb. LXXII p. 159 (1942) - New Guinea.

APPENDIX III.

Index of German Botanists - (Selected names only - N.T.B.)

- Bolle, Dr. W. - (24) Kiel, Geibelalle 24 (works on Geum)
- Börnmueller, Prof. J. - formerly Conservator of Herbarium Hausknecht
 Weimar, Cranachstr. 12 (retired)
- Burret, M. - Botanisches Museum, Berlin-Dahlem, Königin Luise Str. 6/8
- Diels, Dr. L. - formerly Director of Botanic Gardens and Museum, Berlin,
 died 30.11.45.
- Erichsen, C.F.E. - Lichenologist at Hamburg, Died November 1945. His
 collection was bought by the Institut.
- Fedde, Dr. F. - Formerly Berlin-Dahlem. Died 2.3.42.
- Graebner, D.P. (Junior) - Westfälische Provinzialmuseum. f. Naturkunde,
 Münster (now editor of Ascherson and Graebner)
- Haberlandt, Prof. Dr. G. - of Berlin, died during the war, aged nearly 90.

Hahmann, Prof. Dr. Kurt - Institut f. angewandte Botanik, Hamburg, 6 Jungius str. (studies fungi and preservation of wood)

Harms, Dr. H. - of Botanische Museum, Berlin-Dahlem, died 14.3.42

Herrig, Dr. F. - (editor of Bot. Zentralblatt) still at Pflanzenphysiologischen Institut, Berlin Dahlem, Konigin-Luise Str. 1.

Herter, G. - formerly in Cracow, now in Uruguay

Hillmann, Johannes (lichenologist) was killed in an air raid on Berlin. His lichen herbarium was stored in a church at Buckow in the Mark of Brandenburg and was burned.

Hueck, Dr. K. - now Prof. of Agricultural Botany, Berlin University, Agric. Inst. Invaliden-Str. and Forest Institute in Eberswald.

Jost, Dr. L. - Botanisches Institut, Heidelberg, died 22.2.47.

Knuth, Dr. R. - (worked on Geraniaceae) retired.

Kükenthal, Dr. G. - still at Coburg; Untere Klinge 6, now 83. His herbarium of Cyperaceae, 70,000 sheets was destroyed in an air raid.

Meusel, Prof. H. - Head of Botanic Gardens at Halle.

Pilger, Dr. R. - Direktor der Botanisches Museum, Berlin-Dahlem, Konigen Luise Str. 6/8.

Poellnitz, Dr. K. von - (authority on succulents) killed by a bomb in Altenburg, Thuringia. His Herbarium was destroyed.

Preis, K. - (lichenologist) dead.

Rathjens, Prof. Dr. C. - (collector in Arabia) Museum f. Volkerkunde, Hamburg.

Rothmaler, W. - Gartensleben near Dessau (19), editor of Fedde Repert.

Sleumer, Prof. H. - Botanisches Museum, Berlin-Dahlem, Konigin-Luise Str. and home address Balbronnen Str. 9 Berlin-Dahlem.

Suessenguth, Prof. Dr. K. - Botanisches Museum, Menzingerstr. 13. Munich.

Sydow, H. - late of Berlin w.30, Luitpoldstr. 33. died 6.6.46. Private herbarium was destroyed.

Unruh, Dr. Martin - (20) Celle, Windmühlenstr. 71, bei Diederich.

Zahn, Prof. K.H. - worked on Hieracium of Karlsruhe, died 8.2.40.

Zamells, A. - of Riga (worked on Alchemilla) died at end of the war.