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THE CANBERRA MEETING OF THE SYSTEMATIC BOTANY COMMITTEE HELD DURING

THE A.N.Z.A.A.S. CONFERENCE OF JANUARY, 1954.

The following items should be of general interest:

DISCONTINUATION OF A.H.N.

It was agreed to discontinue the publication of the journal, Australasian Herbarium News, after this final Number, No. 14. This number will be issued free to 1953 subscribers and no further subscriptions will be payable. The decision to close A.H.N. was prompted by the difficulty of finding an editor and by the problem of financing future numbers in view of increasing costs.

ELECTION OF HONORARY SECRETARY.

Miss N.T. Burbidge was elected Honorary Secretary. Owing to Miss Burbidge's absence from Australia Miss J. Garden was appointed Acting Honorary Secretary until November 1954.

TYPE-REGISTER CARDS.

Following a discussion of the form to be adopted for the cards for the projected Type-register a temporary subcommittee was set up to draw up a standard card. (The results of their deliberations are given below.) The Secretary is to be responsible for issuing to each Australasian herbarium a final standard card ready for printing. It is hoped that these will then be printed by each herbarium, the details filled in as Type specimens come to hand in the course of herbarium work and duplicate cards forwarded to the Honorary Secretary who will keep a central catalogue.

SCHEME FOR COMPLETING TYPE-REGISTER CARDS.

It is hoped that this sample and the accompanying explanatory notes will meet all requirements but if any questions arise they should be addressed to the Acting Honorary Secretary, Systematic Botany Committee, Botanic Gardens, Sydney.

Name: The original valid name as originally published, with author-citation, e.g. Grevillea pumicea R.Br., Casuarina nana Sieb. ex Spreng. Separate cards may be made out when the current name or names differ from the original, with a reference to the basonym but omitting the details, e.g. Maytenus cunninghamii (Hook.) Loesen. see Catha cunninghamii Hook.

Locality & date: As given on sheet. Information indirectly obtained may be given under "Comments".

Collector: As given on sheet. Supplementary details may be given in brackets, e.g. E. B [etche], [R.C.] Gunn.

No. Collector's number (not herbarium number). In the case of, say, a Milligan specimen bearing a Gunn number the entry might be:

Collector: J. Milligan [in Gunn] No. 470

Status as specimen: Holotype, isotype (duplicate of holotype), syntype, paratype, lectotype, neotype (substitute type), or part or duplicate of any of these. ("Cotype" is an indefinite term and should not be used, except possibly --

AN OVERLOOKED BOTANICAL PAPER.

On July 1st, 1874, a "Report of the Brisbane Botanic Garden" by Walter Hill was tabled in the Queensland Parliament and ordered to be printed. Among other matters, this paper of seven pages contains an account of an ascent of Mt. Bellenden Ker undertaken as part of the Queensland North East Coast Expedition of 1873 commanded by G.E. Dalrymple, with descriptions of seven new species of plants discovered during the expedition. The publication of these names is both effective and valid (International Code of Botanical Nomenclature Arts. 39 and 42), but the "Report" seems to have been almost unknown to botanists, including the compilers of "Index Kewensis" and the names have been generally overlooked. With their original spelling and arrangement these names are :

Page 6:

Areca Minor, W.H. This is quoted as a synonym of Kentia minor F. Muell. by F. Mueller, Fragm. 8 : 235 (Sept. 1874) and as "Areca minor, W. Hill, ex F. Muell. Fragm. viii. 235 = Kentia minor" in Index Kewensis 1266 (Addenda et Emendanda). The species is now referred to Linospadix as L. minor (W. Hill) Burrett.

Cocos Normanbyi, W.H.; cited as a synonym of Areca normanbyi Hill et Mueller by F. Mueller, Fragm. 8 : 235 (Sept. 1874) and of Ptychosperma normanbyi F. Muell. Fragm. 11 : 56 (1878). L.H. Bailey cited "Cocos Normanbyi W. Hill, Rept. Brisbane Bot. Gard. 1874, p.6, apud Von Mueller" when making the combination Normanbya normanbyi (W. Hill) L. H. Bail. Gentes Herb. 187 (1930) and in Gentes Herb. 3 : 436 (1935). In Index Kewensis 576, the name is cited as (Cocos) "Normanbyi, W. Hill, Rep. Brisb. Bot. (1876)6; ex F. Muell. Fragm. viii. 235 = Areca Normanbyi."

Dicksonia Herberti, W.H. Not listed in Christensen, Index Filicum and supplements. Hill's specimen is undoubtedly the one from Bellenden Ker cited by Bentham Fl. Austr. 7 ; 713 under Dicksonia youngiae C. Moore, and Bentham made use of Hill's notes in drawing up the description, though he was evidently unaware that Hill had described the plant under another name. Moore's name has priority.

Oreocallis Wickhami, W.H. The entry in "Index Kewensis", is "Oreocallis Wickhami, F. Muell, Fragm. viii. 164." This part of the "Fragmenta" was published in April, 1874, and the passage concerned reads:

Embothrium Wickhami

Hill et Mueller. Oreocallis Wickhami, H. et M. Mueller's publication has two to three months' priority over Hill's.

Page 7.

Dendrobium Nindi, W.H. Not in Index Kewensis. In their review of the Australian species of Dendrobium in Proc. Linn. Soc. N.S.W. 72: 233 - 251 (1947), Rupp and Hunt state (p. 235) that they could discover no subsequent reference to the name in botanical literature.

Musa Jackeyi, W.H. In Index Kewensis this is cited as (Musa) "Jackeyi, Kurz. in Journ. Hort. Soc. Ind. N.S.V. (1878) 163 = Hillii?" F. Mueller, Fragm.

9 : 170 (1875), following his description of Musa hillii on p. 169, mentioned that Walter Hill had discovered this or an allied species and had called it M. jackeyi, but because this plant was unrecognisable from the description and the specific epithet was not good Latin ("nomen specificum praeterea linguae latinae contrarium") he could not use Hill's name. I have not seen Kurz's paper.

Musa Charlioi, W.H. The author is quoted as E. Hill in Index Kewensis 1293 (Addenda et Emendanda).

Hill's report is dated 8th May, and since it was the 1st July when Parliament ordered it to be printed, it is safe to assume that it was printed on or soon after the latter date. F. Mueller must have had a copy before he wrote fasc. 69 of his "Fragmenta", published early in September of the same year, because he cited the page-number for both Areca minor and Cocos normanbyi. There is no reference to Mueller in Hill's "Report" in spite of the fact that the account of Embothrium Wickhamii was published before the report was written. There are no specimens of any of the species mentioned now in Brisbane and it is highly unlikely that any were prepared of Dendrobium and Musa.

S. T. BLAKE,
Brisbane.

THE COLLECTIONS OF QUEENSLAND MOSSES IN THE QUEENSLAND HERBARIUM.

Following requests for loans of specimens of certain mosses from the Queensland Herbarium, an examination of the specimens of Queensland species showed that many labels did not give the collector's name although initials were often present. Most of these specimens were collected by F.M. Bailey and his correspondents prior to 1911, the great majority before 1900. Bailey usually sent his collections or duplicates to V.F. Brotherus for identification (C.T. White, Proc. Roy. Soc. Qd. 61 : 108 (1950)) though some were sent to W. Mitten, C. Mueller and F. Kiaer. Nearly all Bailey's correspondence with these bryologists has been preserved and from it we learn that Brotherus passed on a number of specimens to C. Mueller. Bailey numbered nearly all the specimens sent; the numbering was consecutive and covered specimens not collected by Bailey himself. Further, Bailey sent numbered specimens of other groups of cellular cryptograms to various specialists, the groups being numbered independently. For precision it would therefore be desirable to use some such phrase as F.M. Bailey, moss coll..... when citing specimens. From the correspondence and handwritings it has been possible to determine collector and locality for almost all the specimens, and it seems worth while to place these on record. Many of the localities are now parts of the City of Brisbane and since some of these appear in the early literature the word Brisbane has been added in the list below.

COLLECTOR	LOCALITY	DATE
F.M. Bailey	"Brisbane R."	1880
	Brisbane R. scrubs	
	"Tropical Queensland" in coastal scrubs	1882
	Ithaca Creek (Brisbane)	1884
	Cunningham's Gap	
	Bunya Mts.	May 1885
	Mt. Mistake	June 1885
	Maroochie (Maroochy)	1886-94
	Eumundi	
	Brisbane	1887-8
	Taylor's Range, (Brisbane)	
	Bellenden Ker	1889
	Whelanian Pools, (slopes of Bellenden Ker).	1889
	Palm Camp (slopes of Bellenden Ker.)	1889
	Tringilburra Creek (slopes of Bellenden Ker.)	1889
	Harvey's Creek	1889
	Mulgrave R.	1889
	Granite Creek	1889
	Freshwater Creek (near Cairns)	1889
	(also Adelaide and neighbourhood and Sydney, 1880, and Brighton, Victoria (with Mrs. Martin), 1888.)	
E.J. Banfield	Dunk Is.	1910
S.T. Blake	McPherson Range	1947-
L.J. Brass	Various localities in North Queensland from Bellenden Ker Range to Cape York	1948
K. Broadbent	Rockingham Bay	
H. Flecker	Numerous localities in North Queensland from Tully, Cairns and Herberton to Thornton Peak near Daintrie; also Iron Range.	1933 -
C.J. Gwyther (F.M. Bailey, moss coll. 845-862)	} Gladfield (between Allora and Cunningham's Gap)	
C.H. Hartmann	Severn River (near Wallangarra)	about 1886
	Toowoomba	1886
	Cunningham's Gap	about 1886
	Main Range	about 1886
George Jacobson	Musgrave Telegraph Station (S W. of Princess Charlotte Bay)	4.4.1892
J. Keys (ex herb. C.J. Wild)	} Mt. Perry Burnett River	about 1891
		1889
H. Longman (with C.T. White:	Tamborine Mtn.	1917
A. Macpherson	Enoggera (Brisbane)	

COLLECTOR	LOCALITY	DATE
C.T. Musson	Burpengary (N. of Brisbane) Near Brisbane Brisbane R. North Pine R. (near Brisbane) Gympie Dawson R. and Burnett R. Mt. Archer (near Rockhampton) Coldstream Mt. Miriam Vale Gladstone and Port Curtis	August 1887
H. Schneider	Nerang Creek Burleigh Heads	1885
B. Scortechini	Logan R.	
J.F. Shirley	Yandina McPherson Range Maroochie (Maroochy)	1891
J.H. Simmonds (Senr.)	Near Brisbane One Tree Hill (Mt. Coot-tha, Brisbane.) Ithaca Creek (Brisbane)	1887, 1891 1887
Mrs. Sparvell	Upper Mowbray River Beachview, Milla Milla Murray Prior Range Woolkoo, Upper Murray R.	1938-9 1939 1937 1938
H. Tryon (ex Herb. C.J. Wild)	Moreton Island Woolston scrub (Wacol, Brisbane) Enoggera scrub (Brisbane) Victoria Park, (Brisbane) Ipswich Road, (Brisbane) Milton, (Brisbane) North Quay, (Brisbane) West End (Brisbane) Breakfast Creek (Brisbane) Brisbane R. near St. Lucia Estate (Brisbane) Petrie's Quarries (Brisbane) Three Mile Scrub (Brisbane)	1888 1888 1885 ? 1890 1890 1890 1890 1890 1890 ? ? ?
W. W. Watts (nos. 200-700 approx.)	Cairns, Mt. Bartle Frere, Russell River, Josephine Creek, Babinda, Atherton, Malanda, Yungaburra, Lake Barrine, Frenchman's Creek, Kuranda, Stony Creek, Millstream Falls, Tully Falls.	July-Aug. 1913.
C.T. White	Various places in S E. Queensland	1915-1917

COLLECTOR	LOCALITY	DATE	
C.J. Wild	Beenleigh	Aug.~June 1887	
	Mudgerabah	March-April 1889	
	Pimpama Scrub (near Brisbane)	July-Aug. 1887	
	Burpengary (N. of Brisbane)	1887 (?)	
	Highfields (near Toowoomba)	Dec. 1888	
	Toowoomba	Nov. 1883	
		Dec. 1888	
	Ashgrove (Brisbane)	May, 1888	
	Queen's Park (Brisbane)	Aug. 1887	
	Three Mile Scrub (Brisbane)	July 1888	
	Enoggera Creek (Brisbane)	Aug. 1887	
	Woolston Scrub (Wacol, Brisbane)	Aug. 1888	
	North Quay (Brisbane)	Aug. 1887	
	Hamilton (Brisbane)	Aug. 1887	
	Kedron Brook (Brisbane)	April 1888	
	Enoggera (Brisbane)	June 1885	
	Bulimba (Brisbane)	Dec. 1886	
	Helidon	July and Dec., 1888	
	Caboolture	Sept. 1888	
	Near Nerang	March 1889	
	Sandy Creek (? near Helidon)	May-June, 1888	
	(Queensland) Field Naturalists	Indooroopilly and other parts of Brisbane	1880-1894
		Eudlo	

Claire Gillam and S.T. Blake.
Brisbane.

TROPICAL EUCALYPTS.

In the nineteen years which have passed since the appearance of Blakely's "A Key to the Eucalypts" (1934) the only important papers of a taxonomic bearing dealing with more than a few species of Eucalyptus have been those of Brett (1938) on the Tasmanian species and Burbidge (1947) on the South Australian species. Despite this a great deal of work has been, and is being, carried out and it is safe to say that several workers have attained to a clear and realistic view of many groups of species within the genus, and many of their conclusions will probably be published during the next decade.

S.T. Blake's long- and eagerly-awaited "Studies of Northern Australian Species of Eucalyptus"¹ is the first of these contributions, and is by far the best piece of work yet published on Eucalyptus.

¹ No. 1 of Botanical Contributions of the Northern Australia Regional Survey, in Austral. Journ. Bot. 1, No.2 (1953) 185-352.

Although it is customary to restrict reviews to books as distinct from papers, the importance and worth of Mr. Blake's study are so great that it calls for some critical appreciation.

Blake deals with most, but not quite all, of the Eucalyptus species found in tropical Australia and New Guinea, and includes revisions of the newly defined Clavigerae and of most of the Corymbosae (Bloodwoods), both much needed and admirably treated here.

Some idea of the author's task (and also of his service) can be gained from my estimate that of the 50 species treated in the paper 31 were confused in concept, delimitation or nomenclature, misdescribed or misplaced in Blakely's "Key". Though a good proportion of Blake's clarifications has been made possible by field experience and access to more extensive materials, it is evident that a larger part is the result of bringing a keen and unprejudiced intelligence to bear on much the same facts as were available to the earlier botanists. It is indeed refreshing not to have to treat many printed statements as suspect and in need of personal confirmation, as has usually been necessary in Eucalyptus.

To me, it seems that Mr. Blake in his introductory remarks has been comparatively severe in his judgment of Maiden's contributions, and has tended to be less critical of Blakely's. This assessment may be justified if the tropical species alone are considered, but I have found that in many ways Maiden's work on Eucalyptus is far more reliable than Blakely's, especially where specific concepts are concerned.

Descriptions of the species are admirable, but the citation of specimens is unfortunately restricted. It is a pity that editors are disinclined to allow more space for lists of specimens examined; their value to the serious worker is inestimable, especially when duplicates are widely distributed. Synonymy is complete, and complexities of nomenclature, when necessary, are discussed rather fully, and serious workers will be grateful to Mr. Blake for his painstaking research in this direction.

Discussion of the species as natural populations is perhaps too brief, but the taxonomic framework is soundly constructed by Blake, and future workers will be able to fill in the details with confidence that his species really are assemblages of populations clearly marked off from other assemblages, even though minor groupings, clines and so forth within the species, are not very illuminatingly discussed. This may be due to excessive caution, to a disinclination to deal in theories, or to a quite justifiable determination to state only the facts as the author sees them. Some general theoretical discussion is, however, provided in an appendix, including a suggestion that introgressive hybridisation (though not so termed) may be responsible for racial differences in E.microtheca. Although introgression has undoubtedly played a part in the evolution of many groups of Eucalyptus, I doubt whether E.microtheca has been affected by gene flow from E.largiflorens, as suggested by Blake. The appendix also includes a brief but soundly suggestive discussion of evolutionary trends in the Myrtaceae and in Eucalyptus in general. The diverse nature of the operculum, in particular, is touched on, an important matter since the possession of the operculum has been the traditional diagnostic character of Eucalyptus. It seems quite probable that this organ has independently evolved more than once in different ways and that there are in fact several genera at present included in Eucalyptus. The great majority of species, however, would seem to belong to one

phyletic line and to one genus, only some of the "early" series, and perhaps the E.deglupta group, being generically separable.

In accordance with contemporary fashion some statistical analysis of certain differences between a few of the species has been added, but I cannot see that in this instance more has been revealed by this than by conventional procedures.

Few criticisms of detail are necessary. The case for distinguishing E.bigalerita from E.alba (within which marked races - subspecies of many workers - could doubtless be distinguished) is not convincingly stated, though prolonged study of the material, even in the herbarium, has ultimately led me to agree with Mr. Blake that E.bigalerita is at least on the borderline of specific distinctness. The photographs of the barks of E.foelscheana and E.confertiflora in Plate 5 appear to have been transposed. The statement on page 188 that "undoubtedly the first specimen of Eucalyptus to be collected is E.gummifera", though perhaps true in a sense, is apparently made without consideration of Rumphius's description and figure of a species in Herbarium Amboinense (1743) which is undoubtedly the first published description of a Eucalypt.

Although Eucalyptus is doubtless taxonomically no more refractory than many other large genera, the species are notoriously difficult to key out in an infallible manner. Mr. Blake has obviously spent much thought and care on his keys in order to overcome this difficulty. As an example the key to the Corymbosae was tested by submission of adequate herbarium specimens of most of the species to a botanist unacquainted with the group. Despite critical use of the key less than 50% of the determinations were correct to the species. This disappointing result illustrates the great difficulty in constructing a useful key, even when the key characters are as long as diagnoses, as many of Mr. Blake's are. Of course, by checking with the descriptions and especially the localities, many of the misdeterminations could have been corrected, and I confess I do not know of any existing keys to the species of Eucalyptus that are much, if at all, better than Mr. Blake's. Nevertheless, users of the keys should be warned that great care and much checking and, above all, considerable experience of the groups covered are essential to the accurate determination of specimens.

It is sufficient tribute to Mr. Blake's work to say that despite the keen and critical interest which will be taken in it, and the high expectations held of it, none of its readers is likely to be disappointed.

- Brett, R.G. (1938). A survey of Eucalyptus species in Tasmania. Pap. & Proc. Roy. Soc. Tasmania 1937, 75-109.
- Burbidge, N.T. (1947). Key to the South Australian species of Eucalyptus L'Herit. Trans. Roy. Soc. S.Austral. LXXI, 137-163.
- Rumphius, G.E. (1743). Herbarium Amboinense III, 122, t.80.

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Sydney.