



Australian Systematic Botany Society NEWSLETTER

No. 38 MARCH 1984



Amylotheca dictyophleba
(F. Muell.) Tieghem

Price: \$3.00

Registered by AUSTRALIA POST
Publication No. QBH3340

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Report from the Bureau of Flora and Fauna

Delays occurred in getting satisfactory proofs for the cover and frontispiece of Volume 22 of the Flora of Australia. Publication is now expected in April.

Progress with Volume 4 has been more rapid. We expect to send the typeset copy to AGPS at the end of March. Momentum will then increase with Volumes 25 and 46.

In February we held the first in an anticipated series of workshops on the DELTA system for coding taxonomic descriptions and the preparation of keys. We hope that the system, developed by Mike Dallwitz, CSIRO, will be used by contributors to the Flora of Australia. Jocelyn Powell (NSW) and Barry Conn (MEL) attended the workshop, which was supervised by Les Watson at ANU. In the Bureau the system is being used by Alex George in a study of Verticordia (Myrtaceae).

Eucalypts and the Flora of Australia

There is currently much discussion over the classification of eucalypts and the system to be used in the Flora of Australia. Volume 19 of the Flora will contain this group and is now being written by Mr George Chippendale.

Discussion centres on a proposed new generic classification being prepared by Dr Lawrie Johnson and Mr Don Blaxell, National Herbarium of New South Wales. Formal publication is still to be effected, in a separate work.

Because the Johnson and Blaxell system is not yet published, preparation of the eucalypts for the Flora is proceeding on the basis of existing nomenclature and is due for completion in fifteen months' time. Should the Johnson and Blaxell system be published by then, its scientific basis will be taken into account in the Flora. The Bureau of Flora and Fauna has undertaken to arrange a symposium at which the new system will be discussed after its publication.

Loan of Specimens for the Flora of Australia

The program for preparation of over twenty volumes of the Flora of Australia was published in ASBS Newsletter 29: 22-23 (1981) and is updated in this number. Arrangements for contributions to many of these volumes have now been made, and new contributors continue to be added to the list.

Now that the early volumes of the series are written there should be less need for the loan of specimens at short notice. To avoid such situations arising, all contributors are urged to request loans well in advance of their deadlines. This applies in particular to loans from herbaria such as the National Herbarium of Victoria where the backlog of requests may cause a delay of some months in fulfilling a loan. The same consideration should be shown to overseas herbaria.

Australian Botanical Liaison Officer

Mr Clyde Dunlop, Herbarium of the Northern Territory at Darwin, has been selected as Australian Botanical Liaison Officer at the Royal Botanic Gardens, Kew, for the 1985-86 term.

Alex George
Acting Assistant Director
Flora

Flora of Australia

WRITING AND PUBLISHING PROGRAM

The following list updates that issued in ASBS Newsletter 29: 22-27 (1981). The Flora program has slipped by about 15 months but with present resources is likely to maintain 2 or 3 volumes per year from now on. This list covers the program up to 1987, with the addition of volumes 37 and 38, to be issued in 1993. Several other volumes are being planned and details will be given in later newsletters.

Volume 25 10 Families; 51 Genera; 219 Species

Melianthaceae	1 genus, 2 species
Contributor:	H. Hewson (BFF) Completed
Akaniaceae	1 genus, 2 species
Contributor:	H. Hewson (BFF) Completed
Sapindaceae	31 genera, 177 species
Contributors:	J. West (CANB) <u>Dodonaea</u> , <u>Diplopeltis</u> S. Reynolds (BRI) remainder. Completed
Aceraceae	2 genera, 2 species
Contributor:	H. Hewson (BFF) Completed
Burseraceae	2 genera, 5 species
Contributor:	H. Hewson (BFF) Completed
Anacardiaceae	10 genera, 22 species
Contributor:	L.W. Jessup (BRI) Completed
Simaroubaceae	4 genera, 9 species
Contributor:	H. Hewson (BFF)
Deadline	31 March 1984

Volume 46 8 Families; 58 Genera; 189 Species

Iridaceae	33 genera, 85 species
Contributor:	D.L. Cooke (Melbourne) Completed
Agavaceae	8 genera, 17 species
Contributor:	L. Pedley (BRI)
Xanthorrhoeaceae	8 genera, 66 species
Contributors:	D. Bedford (NSW) <u>Xanthorrhoea</u> A. Lee (NSW), T. MacFarlane (PERTH) <u>Lomandra</u> A.S. George (BFF) <u>Acanthocarpus</u> , <u>Baxteria</u> , <u>Calectasia</u> , <u>Chamaexeros</u> , <u>Dasypogon</u> , <u>Kingia</u> R.J. Henderson (BRI) <u>Romnaldia</u>
Hanguanaceae	1 genus, 1 species
Contributor:	H. Hewson (BFF)
Taccaceae	1 genus, 1 species
Contributor:	H. Hewson (BFF)
Stemonaceae	1 genus, 1 species
Contributor:	I.R. Telford (CBG)
Smilacaceae	5 genera, 11 species
Contributor:	H.T. Clifford (BRIU)
Dioscoreaceae	1 genus, 7 species
Contributor:	I.R. Telford (CBG)
Deadline	30 June 1984

Volume 45 12 Families; 101 Genera; 319 Species

- Hydatellaceae 1 genus, 3 species
Contributor: D.L. Cooke (Melbourne) Completed
- Sparganiaceae 1 genus, 2 species
Contributor: H. Aston (MEL)
- Typhaceae 1 genus, 3 species
Contributor: B. Briggs (NSW)
- Musaceae 1 genus, 4 species
Contributor: E. Ross (BRI)
- Zingiberaceae 10 genera, 17 species
Contributor: R. Smith (E) Completed
- Costaceae 2 genera, 2 species
Contributor: E. Ross (BRI)
- Cannaceae 1 genus, 3 species
Contributor: T.D. Stanley (BRI)
- Marantaceae 1 genus, 1 species
Contributor: E. Ross (BRI)
- Phyllidraceae 4 genera, 4 species
Contributor: L.G. Adams (CANB)
- Pontederiaceae 3 genera, 6 species
Contributor: H. Aston (MEL)
- Haemodoraceae 8 genera, 51 species
Contributors: S.D. Hopper (Perth) Anigozanthos, Blancoa, Conostylis,
Macropidia
T.D. MacFarlane (Perth) Haemodorum, Tribonanthes
Phlebocarya
- Liliaceae 68 genera, 225 species
Contributors: N.H. Brittan (UWA) Arthropodium, Dichopogon, Murchisonia,
Thysanotus
I.R. Telford (CBG) Alania, Calostemma, Proiphys
R. Henderson (BRI) Caesia, Chlorophytum, Dianella, Hypoxis,
Sowerbaea, Stypandra
J. Conran (BRIU) Alstroemeria, Asparagus, Drymophila,
Eustrephus, Geitonoplesium, Gloriosa, Kreysigia,
Myrsiphyllum, Parduyna, Petermannia, Schelhammera
D.M. Churchill (MEL) Borya
J.B. Williams (UNE) Astelia, Milligania
G. Keighery (Kings Park) Laxmannia
E. Watson (CANB) Bulbine Completed

Volume 3 9 Families; 37 Genera; 161 Species

- Hamamelidaceae 4 genera, 4 species
Contributor: H. Hewson (BFF)
- Ulmaceae 4 genera, 15 species
Contributor: H. Hewson (BFF)
- Cannabaceae 2 genera, 2 species
Contributor: R. Pearce (ADW)
- Moraceae 10 genera, 69 species
Contributor: W-L. Chew (NSW)
- Urticaceae 11 genera, 26 species
Contributor:

- Balanopaceae 1 genus, 1 species
Contributor: H. Hewson (BFF)
- Betulaceae 1 genus, 1 species
Contributor: H. Hewson (BFF)
- Fagaceae 2 genera, 4 species
Contributor: H. Hewson & J. Busby (BFF)
- Casuarinaceae 3 genera, c. 40 species
Contributors: K.L. Wilson & L.A.S. Johnson (NSW)
- Deadline: 31 December 1984

Volume 18 11 Families; 49 Genera; 296 Species

- Podostemaceae 1 genus, 1 species
Contributor:
- Haloragaceae 7 genera, 84 species
Contributor: A.E. Orchard (HO)
- Gunneraceae 1 genus, 3 species
Contributor: A.E. Orchard (HO)
- Sonneratiaceae 1 genus, 2 species
Contributor:
- Lythraceae 8 genera, 23 species
Contributor:
- Thymelaeaceae 12 genera, 96 species
Contributors: B.L. Rye (PERTH) Pimelea
- Punicaceae 1 genus, 1 species
Contributor:
- Onagraceae 5 genera, 35 species
Contributor: J. Thompson (NSW)
- Melastomataceae 7 genera, 10 species
Contributor:
- Combretaceae 5 genera, 40 species
Contributor: N. Byrnes (BRI) Completed
- Trapaceae 1 genus, 1 species
Contributor:
- Deadline: 30 April 1985

Volume 19 Myrtaceae p.p. (Eucalypts) 1 genus, c. 600 species
Contributor: G.M. Chippendale

Deadline: 30 June 1985

Volume 33 7 Families; 49 Genera; 271 Species

- Myoporaceae 4 genera, c. 180 species
Contributor: R.J. Chinnock (AD)
- Orobanchaceae 1 genus, 2 species
Contributor: H. Hewson (BFF)
- Gesneriaceae 5 genera, 5 species
Contributor: B. Morley (AD)

Acanthaceae 19 genera, 51 species
Contributor: R.M. Barker (Adelaide)
Pedaliaceae 5 genera, 12 species
Contributor:
Bignoniaceae 15 genera, 24 species
Contributor:
Lentibulariaceae 2 genera, 46 species
Contributor: P. Taylor (K)
Deadline: 31 December 1985

Volume 35 2 Families; 17 Genera; 343 Species

Brunoniaceae 1 genus, 1 species
Contributor: R.C. Carolin (SYD)
Goodeniaceae 16 genera, 342 species
Contributors: R.C. Carolin (SYD) and collaborators
Deadline: 30 April 1986

Volume 5 7 Families; 63 Genera; 352 Species

Amaranthaceae 15 genera, 151 species
Contributors: G. Benl (M) Ptilotus
A. Kanis (CANB) remaining genera
Portulacaceae 5 genera, 53 species
Contributor: J. West (CANB)
Basellaceae 1 genus, 1 species
Contributor:
Molluginaceae 3 genera, 9 species
Contributor:
Caryophyllaceae 26 genera, 83 species
Contributor: L. Pedley (BRI) Polycarpaea
Polygonaceae 9 genera, 48 species
Contributors: K.L. Wilson (NSW) Rumex
K.L. Wilson & G. Perry (PERTH) Polygonum
Plumbaginaceae 4 genera, 7 species
Contributor:
Deadline: 31 August 1986

Volume 44 Poaceae p.p.

Contributors: H.T. Clifford (BRIU) family description
L. Watson (ANU) keys to tribes and genera
M. Lazarides (CANB) Triodieae, Eragrostae (except
Sporobolus), Pappophoreae
R. Webster (ANU) Panicaceae
B.K. Simon (BRI) Arundinelleae, Garnotieae, Maydeae,
Isachneae
J.C. Tothill (Brisbane) Andropogoneae (genera with less
than 5 species)
D.E. Symon (ADW) Sporobolus
Deadline: 30 October 1986

Volume 30 7 Families; Genera; Species

Convolvulaceae

Contributor: R.W. Johnson (BRI)

Cuscutaceae

Contributor:

Menyanthaceae

Contributor:

Polemoniaceae

Contributor:

Hydrophyllaceae

Contributor:

Boraginaceae

Contributors: K.F. Kenneally (PERTH) Halgania
L. Craven (CANB) Heliotropium

Verbenaceae

Contributor:

Deadline: 31 January 1987

INCREASED SUPPORT FOR FLORA OF AUSTRALIA PROMISED

In response to an approach by the Council of Heads of Australian Herbaria the Minister for Home Affairs and Environment, Mr Barry Cohen, has acknowledged the need to keep the staff resources of the Bureau of Flora and Fauna at an adequate level to publish the Flora of Australia within a reasonable time-frame.

Mr Cohen expressed disappointment that no volume of the Flora had appeared in 1983, because of temporary staff absences and bottlenecks in the data processing facilities. He affirmed the Government's commitment to achieve a production rate of not less than two volumes per year, and said that it is aiming to produce three volumes per year. He assured the Council of his support for the Flora of Australia, saying that he would attempt to enhance staffing and other resources in the Bureau in the coming year.

Mr Cohen referred also to a substantially improved computer system to which the Bureau would have access early in 1984, with undoubted advantages for the Editor of the Flora.

J.W. Green
Chairman
Council of Heads of Aus-
tralian Herbaria

UNPUBLISHED TRANSLATIONS OF MAJOR TAXONOMIC PAPERS

At the 1983 meeting of the Council of Heads of Australian Herbaria who was given the task of preparing a list of titles of major taxonomic papers and books written in a foreign language and for which unpublished English translations were available in Australia. It had become apparent that at least in a few cases, the same papers were simultaneously being translated at a number of Australian institutions. Translation is often a tedious and time consuming exercise and it was felt that the circulation of titles of papers which have already been translated may be of considerable benefit to fellow workers. It was realised that due to lack of time and expertise some translations would be crudely prepared but the benefits in having these available would still be very welcome.

A search for titles has been instituted through the State and Commonwealth herbaria. However, I would also be pleased to receive information from individuals outside of the major institutions. As titles are received they will be published in the newsletter.

Currently I have been notified of the following unpublished translations:

Western Australian Herbarium

- Benl, G. (1971). Ein Bestimmungsschlüssel für die Gattung *Ptilotus* R.Br. (Amaranthaceae). Mitt. Bot. München 9: 135-176. Translation by G. Selk (1972).
- Diels, L. (1906). Die Pflanzenwelt von West-Australien südlich des Wenderkreises. (Die Vegetation der Erde vol. 7). Translation by W.J. Dakin (1920).
- Diels, L. & E. Pritzel (1904-05). Fragmenta Phytographiae Australiae occidentalis. Bot. Jahrb. Syst. 35: 55-662.

Queensland Herbarium

- Butzin, F. (1969). Die begrannnten Paniceae und ihre Stellung im System. (The awned Paniceae and their position in the System.) Willdenowia 5: 245-270. Copy with B.K. Simon.
- Butzin, F. (1970). Die Blattnervatur der Paniceae in ihrer Bedeutung für die systematische Gliederung dieser Tribus. (The leaf veining of the Paniceae and its significance for the sub-division of the tribe.) Willdenowia 6: 167-178. Copy with B.K. Simon.
- Butzin, F. (1970). Die Systematische Gleiderung der Paniceae. (The Systematic division of the Paniceae.) Willdenowia 6: 176-192. Copy with B.K. Simon.
- Butzin, F. (1973). Die Namen de Supragenerischen Einheiten der Gramineae (Paniceae). (The Names of the Suprageneric Units of the Gramineae.) Willdenowia 7: 113-168. Copy with B.K. Simon.
- Domin, K. (1913). Vorwort to Beiträge zur Flora und Pflanzengeographie Australiens. Biblioth. Bot. 85: I-III. Translated by Mr P. Sharpe (with R. Henderson).
- Domin, K. (1913). Historischer Rückblick auf die Erforschung der Farnflora Queensland's from Beiträge zur Flora und Pflanzengeographie Australiens. Biblioth. Bot. 85: 3-8. Translated by Mr P. Sharpe (with R. Henderson).

- Engler, A. (rev. Melchior H.) (1964). Gramineae (pp 561-579). Syllabus der Pflanzenfamilien. Copy with B.K. Simon.
- Novak, F.A. (1931). Prof. Dr Karel Domin padesatnikem. Prestlia X: 5-41. Translated by Mr H.V. Libl (with R. Henderson).
- Pilger, R. (1954). Das System der Gramineae. Bot. Jahrb. 76: 281-384. Translation by W.G. Dore (with B.K. Simon).
- Prat, H. (1936). La Systématique des Graminées. Ann. Sci. Nat. Bot. ser 10, 18: 165-258. Copy with B.K. Simon.

Royal Botanic Gardens, Sydney

- Huber, H. (1969). Die Samenmerkmale und Verwandtschaftsverhältnisse der Liliifloren. (Seed characteristics and the comparative relationships of the Liliiflorae.) Mitt. Bota. Staatss. München 8: 219-538. Summary and translation by E. Kowal (in RBG library).
- Kausel, E. (1956). Beitrag zur Systematik der Myrtaceen. (Contribution to the systematics of the Myrtaceae.) Arkiv Botanik 3(15): 491-504. (Partial translation [paper occupies pp. 419-516]) with B. Briggs.
- Lehmann, J.G.C. (1844-48). Plantae Preissianae vols I & II - preface translated by A. & K. Wilson (copies with K. Wilson & D. McGillivray).
- Lourteig, A. (1979). Oxalidaceae extra-austroamericanae II. Oxalis L. sectio Corniculatae DC. Phytologia 42(2): 57-198. Key translated by G. Carr for MEL (copy in NSW).
- Mueller, F. (1885). Notizen über die Xanthorrhoea-Arten Australiens. Z. Allg. Österr. Apotheker-Vereines 23(19): 293-295. Translation by J. Seur (with D. Bedford).

Dr R.W. Johnson
Queensland Herbarium

Cladistics, Systematics & Phylogeny Symposium

Friday, 18th May, 1984 - Canberra

The subcommittee of the Canberra Chapter are well pleased with the progress so far in organising the symposium. The contributed paper part of the program is full and we hope that it will encourage lots of people to come. However, there is room for more poster papers. If you still wish to present your research we would welcome your poster. Fill out your green form (which was enclosed with the last Newsletter) or write to us soon.

We plan to have pre-Symposium drinks on Thursday evening during which time posters may be "posted". That will be in the Conference Room at 5.00 p.m. On Friday evening we plan to have a post-Symposium dinner. That will be at 7.00 p.m. at a Restaurant as yet unbooked.

The venue will be the Lecture Room and Conference Room, Admin. Building, Division of Plant Industry, CSIRO, Cnr. Barry Drive & Clunies Ross Street, Canberra.

PROGRAM

Friday, 18th May, 1984

0900-1230 SESSION OF INVITED PAPERS

Prof. Roger Carolin (Univ. of Sydney)	"Mitchell's theorem and its impact on biology"
Dr Vicki Funk (Smithsonian Inst., U.S.A.)	"Dealing with hybrids in botanical cladistics"
Dr Don Colless (CSIRO, Entomology)	"The Wagner Olympics: short is beautiful"
Dr Dan Faith (CSIRO, Water & Land Resources)	"Cladistic algorithms for distance data"

1330-1800 SESSION OF CONTRIBUTED AND POSTER PAPERS

Dr Jim Armstrong (National Botanic Gardens, ACT)	"A predictive cladistic phylogeny for the tribe <u>Boronieae</u> (Rutaceae)"
Dr Lawrie Johnson (Royal Botanic Gardens, NSW)	"The CLAX system of phylogenetic analysis - what and why"
Dr Pauline Ladiges (Univ. of Melbourne)	"Relationships within the stringybark eucalypts of Eastern Australia"
Mr Charles Marshall (Aust. National Univ.)	"Lungfish, cladistics and the determination of synapomorphies"
Dr Robert Raven (CSIRO, Entomology)	"Cladistics and the funnel-web spiders"
Dr Peter Weston (Royal Botanic Gardens, NSW)	"A reappraisal of Nelson's direct method of character analysis"
Dr Molly Whalen (Flinders University)	"A cladistic and biogeographic analysis of the American <u>Frankenias</u> "

POSTERS

Mr Kym Day (CSIRO, Water & Land Resources)	"A reanalysis of Kluge, 1976 'Phylogenetic relationships in the Lizard family Pygopodidae'"
Dr Dan Faith (CSIRO, Water & Land Resources)	"A model for immunological distances in systematics"
Dr Phil Garnock-Jones (DSIR, New Zealand)	"A cladistic analysis of <u>Scleranthus</u> (Caryophyllaceae) in Australasia"
Dr Dale Vitt & Dr Helen Ramsay (Univ. of NSW)	"A cladistic analysis of <u>Macromitrium</u> in Australasia"
Dr Judy West (CSIRO, Plant Industry)	"Cladistics"
Dr Peter Wilson & Dr Peter Weston (Royal Botanic Gardens, NSW)	"A preliminary cladistic analysis of the <u>Metrosideros</u> suballiance (Myrtaceae)"

9th General Meeting & Symposium

The next General Meeting of the Society will be held in conjunction with a

Symposium on

THE ORIGIN AND EVOLUTION OF AUSTRALASIAN ALPINE BIOTA

Probable Dates: 4-7 February, 1985

Probable Venue: A conference facility in the Kosciusko National Park, such as Charlotte's Pass or Thredbo

The meeting will include two days of formal papers on topics including geomorphology and paleoclimatology of Australasian alpine areas; paleobiotas; biotas of special habitats such as lakes and mountain streams; dispersal, diversification and adaptation of plants, invertebrates and vertebrates.

The venue and dates have been chosen to allow two or more days of associated field work, general exploration or sightseeing or workshops for those interested.

Participation by members of several Australasian biological societies is expected. Publication of the proceedings is being investigated.

Intending Contact Dr Bryan Barlow, Herbarium Australiense, CSIRO,
Contributors: G.P.O. Box 1600, CANBERRA. A.C.T. 2601

Provisional
Program: Will be distributed soon, along with anticipated costs.

Chapter News

PERTH CHAPTER

A meeting was held on 21 February, 1984 at the Western Australian Herbarium, attended by 23 people. Terry Macfarlane, W.A. Herbarium, was elected convener.

Professor John Pate, Botany Department, University of W.A., gave an illustrated talk entitled "Stilt plants: biology of a new life form". This life form is found in certain members of the Droseraceae, Stylidiaceae, Haemodoraceae, Liliaceae s.l. and Restionaceae. Stilt plants are best represented in heathlands and woodlands of south Western Australia but a few eastern Australian species are known. Temperature measurements through a vertical profile from below ground to above ground and results of manipulative experiments indicate the adaptive value of the stilt plant life form: avoidance of high ground temperature. Thus the stilt habit is the above ground analogy of the geophytic life form.

T.D. Macfarlane
Convener

CANBERRA CHAPTER

Activity began for us in 1984 with a visit by Professor Pat Brennan, ex-Director, Royal Botanic Gardens, Kew. Professor Brennan spoke to us about the relationships between the floras of Southern Africa and Australia. The talk was illustrated with an excellent set of slides depicting the African flora and vegetation while relying on our knowledge of our own flora and vegetation for the comparisons and contrasts. It was particularly enlightening to those of us who have not had the opportunity to visit Africa.

Helen Hewson
Convener

ADELAIDE CHAPTER

The Adelaide Chapter continued its regular meetings in the second half of the year and had the following programme:

- Aug. 31, 1983 Four short talks on dividing up large genera: Eucalyptus (Haegi); Solanum (Symon); Senecio (Lawrence); Crassula (Tölken)
- Oct. 5 Virus nomenclature and taxonomy: Dr R. Francki
- Oct. 26 Coping with Cassia, hybrids, polyploids and apomicts: Dr B. Randell
- Nov. 30 Free for all; short talks by: R. Barker - Cleistogamy; D. Cooke - Calotis multicaulis and plumulifera; W. Barker - Botanical literature indices available; R. Chinnock - The fern flora of Australia; R. Cook - Survival of Arthropodium in the Waite Institute drive; D. Symon - Personal choice of specific names.

Several recent books of interest were tabled. At the end of the meeting L.A.R. Haegi was elected convener for the next two years.

D.E. Symon
Convener

MELBOURNE CHAPTER

An auspicious beginning to the 1984 season was a well-attended barbecue at Barry Conn's. Hopefully the same enthusiasm will permeate meetings, which began with Rob Park speaking about Leaf Spotting Fungi.

Rob presented a wide array of pathogenic fungi occurring on the foliage of Australian native plants. Few studies have been made on the taxonomy or pathology of these organisms which are largely endemic and are believed to have co-evolved with the native flora. A brief summary of the history of taxonomic work followed and requirements for further study and accessible herbarium collections were pointed out. The diagnostic value of these fungi to higher plant taxonomists was discussed. Rob is finishing a Ph.D. thesis at LaTrobe University on Mycosphaerella and related genera under Philip Kean.

Field work from MEL has been rather restrained over the past few months. Peter Lumley scoured southern Queensland and northern New South Wales for Callistemon where he so impressed Don Foreman (University of New England) that Don flew down to MEL to join the staff. Don replaces Bruce Muir who has retired through ill health.

Barry Conn spent a valuable week at the DELTA workshop in Canberra organised by the Bureau of Flora and Fauna.

Recent visitors include the intrepid David Frodin working through MEL's New Guinea collections, John Williams after Astelia and Peter Kloot alienating some naturals.

Programme

Thursday 15 March, 1984	6.00 p.m.	Herbarium (extraordinary meeting) Barry Conn, MEL 'DELTA workshop report'
Thursday 5 April, 1984	6.00 p.m.	Herbarium Neil Hallam, Monash University. 'A History of <u>Eucalyptus</u> '
Thursday 3 May, 1984	6.00 p.m.	Herbarium Phil Johnstone, Monash University. 'Studies in <u>Eucalyptus radiata</u> '

PILBARA REGIONAL HERBARIUM KARRATHA, WESTERN AUSTRALIA

A reference plant collection used by officers of various State Government Departments in Karratha, 1500 km north of Perth, has become the nucleus for a regional herbarium to be known as the Pilbara Regional Herbarium. The Herbarium will be housed in the Karratha College which is an independent institution established in 1980 under the 1978 Colleges Act. It is expected that the Technical Centre where the Herbarium will be housed will be opened by mid-1984 and that Karratha College will appoint a Lecturer in Biology with curatorial responsibility for the herbarium.

Overseeing the operation of the Pilbara Regional Herbarium is a management committee. This committee includes representatives from the Karratha College, Western Australian Herbarium, Western Australian Dept. of Fisheries and Wildlife, Western Australian Forests Dept., Western Australian National Parks Authority and the mining industry.

The Herbarium itself will comprise two rooms: a specimen storage room (capacity of 15 000 specimens) and a work room. Both rooms will be provided with a CO₂ fire protection system. Specimens will be fumigated using a deep freeze with additional periodic gas fumigations of both rooms (the air-conditioning system to these rooms will be isolated from the rest of the College). Visitor facilities will include a microscope, a small reference library and access to a limited range of maps.

The establishment of a regional herbarium is well suited to the needs of a specific area as it has particular benefits of simplification due to its selective geographic coverage. This facility is especially relevant to the Pilbara which is over 1 000 km from Perth where the only major repository of plant specimens in this State is located.

One of the main functions of the Pilbara Regional Herbarium will be to provide a readily accessible regional reference set of plants (separate from the main herbarium collection) to enable rapid identification of specimens by

Pilbara flora workers. A second important function of the Pilbara Regional Herbarium is to act as a repository for existing Pilbara collections which are currently held by various mining companies, Government Departments and private individuals. It is estimated that about 3 000 such collections are currently in existence and these will form the nucleus collection for the Herbarium. Under the direction of the Western Australian Herbarium this material is being prepared to a standard commensurate with those used in other herbaria throughout the world.

The presence of a regional herbarium in Karratha should act as a stimulus for the continued collection of plants from the Pilbara region. This function is of particular relevance in view of the proposed Flora of the Pilbara project to be undertaken by the W.A. Herbarium. Although this volume is scheduled for completion in 1987 the project should be viewed as one of continuing improvement whereby deficiencies highlighted in the first edition should be redressed in subsequent editions by directional collecting activity (both taxonomically and geographically) in the interim.

B.R. Maslin

Letters to the Editor

Generic Disintegration of Eucalyptus

For some time I have been disturbed by suggestions warranting the split-up of Eucalyptus into a number of segregate genera. An adumbration of such intent appeared twelve years ago in "Evolution and Classification in Eucalyptus" by L.A.S. Johnson (Proc. Linn. Soc. N.S.W. 97: 11-29, June 1972); at the head of page 15, it was admitted that "Division of Eucalyptus would certainly cause considerable inconvenience, even dismay". My worst fears have been realised by perusal of the list of ABRS Grants for 1984 in our Austral. Syst. Bot. Soc. Newsletter of December (p. 8) - \$7,000 to D.F. Blaxell for 'Formal publication of the "eucalypt" genera and consequent new combinations'. Apparently the die is now cast, and the eucalypt section of Myrtaceae for the new Flora of Australia (Vol. 19, 20 or 21), whenever it appears, will adopt this multi-generic concept, leaving only about one-fifth of the currently recognised species of Eucalyptus under the old generic name (sens. strict.).

Such a prospect frankly appalls me and, as an old practicing forester, I can foresee the chaos that this would bring to the Australian timber industry and its documentation, not to mention forensic aspects (rejection of those names already accepted as standard for important timbers). Systematists have never been over-popular with the practical man in the field - I recall my own cynicism after four successive changes to the specific epithet in River Peppermint (now Eucalyptus elata) - and the sheer mental effort of having to master new names for 80% of all our eucalypts would surely be the "last straw" to a large section of forestry personnel; their incredulity at the actions of a handful of botanists could well become overt contempt for the whole profession.

While I fully appreciate the immense amount of morphological, structural, cytological, chemical and biological work that has been carried out on "eucalypts" by dedicated researchers during the past two decades, I fail to see why we can not rest content with a classification of the present genus Eucalyptus into a number of subgenera (lumping Angophora thereunder if needs be); thus is avoided the necessity for such a formidable spate of name changes that can lead only to confusion.

Perhaps I am a solitary "voice crying in the wilderness", but one feels there must be other botanists with a similar concern for the practical implications of nomenclature. The northern hemisphere has a number of quite large and diverse woody genera (for instance Acer, Crataegus, Prunus, Quercus, Salix and Rhododendron), yet no one seems to have seriously contemplated a generic cleavage for any of them. Generic multiplication has indeed become accepted as a way of life among the devotees of certain popular succulent groups, e.g. mesembryanthema and cacti; but a large and economically very important group, like our eucalypts, surely demands the widest consensus of opinion before radical name changes are foisted on the public by means of the Flora of Australia. Anyway, who among all our taxonomists voted for this disruptive scheme and carried the day - was it a majority decision by the Editorial Committee of the new Flora or the Council of Heads of Australian Herbaria? And where did our University taxonomists fit into the picture?

Incidentally, I shall stubbornly continue to use Eucalyptus for all "eucalypts" and hope that someone will make the requisite recombinations under it for any future new taxa described as species of Symphomyrtus, Adnataria, Maidenaria or other derivative genus - perhaps they will also be kind enough to make new eucalyptical combinations for our seven Angophora species.

J.H. Willis

JOHN R. MACONOCHIE (1941-1984)

In the latter days of January, 1984 the Australian botanical community lost one of its most outgoing and likeable botanists, John Maconochie. John was working with a United Nations agency in Somalia when he was killed in a car accident. The exact date of the accident is not clear at present but it is my intention to prepare a more detailed biographical account in the near future.

John had been the longest serving botanist in the Northern Territory, employed continuously at NT from 1967 to 1984. He represented the Territory herbaria on CHAH for many years and was ABLO in 1976-1977.

Although John's primary training was in plant physiology and ecology, he maintained a broad base when he joined the herbarium, working in taxonomy (Acacia, Fabaceae, Trachymene, Cycas) as well as various aspects of desert ecology and range management.

All who knew John will remember most his affability, his helpfulness and his hospitality. His loss to Territory botany will be profound and indeed will be keenly felt throughout the botanical community.

Clyde Dunlop

Recent Publications

Flora of South-eastern Queensland Volume 1: T.D. Stanley & E.M. Ross, pp. iv + 545, 80 figures. Brisbane: Queensland Govt. Printer, 1984. Price \$20.00.

This is the first comprehensive flora produced in Queensland since F.M. Bailey's "Queensland Flora" and was written by staff of the Queensland Herbarium. It covers the region from Coolangatta to Bundaberg and west to the Dawes Range, Jackson (east of Roma) and Talwood on the Queensland New South Wales border.

The systematic arrangement of families is based on that of H. Melchior (ed.) A. Engler - Syllabus der Pflanzenfamilien Berlin (1964). Volume 1 contains a key to all dicotyledon families and descriptions of the families from Casuarinales to Sapindales, as well as general introductory notes on climate and vegetation and a glossary. There are 80 plates of line illustrations in which the authors have attempted to illustrate at least one species from each genus or the diagnostic features used to separate species in the keys to genera and species. More than 1 300 species are described, out of a total of 3 600 for the region.

Volume 2 contains the remaining dicotyledon families and is expected to be submitted to the printer by the middle of 1984. Volume 3 will describe the monocotyledons and gymnosperms found in the region and contains keys to the families genera and species in these groups.

Estelle Ross

Pacific Plant Areas Vol. 4. Edited by M.M.J. van Balgooy. Leiden: Rijksherbarium, 1984. Price: Dfl.50.

Probably only a few Australian plant systematists are acquainted with the serial work of the above name, of which the 4th volume has recently been published by the Rijksherbarium (Leiden).

The 1st volume was published in 1963. It consisted principally of two sections: a bibliography, alphabetically arranged by families and genera, consisting of commented references to published maps and a series of newly composed, original full-page maps. Each map was accompanied by a full-page commentary, including name and synonyms, ecology (habit, habitat, dispersal) and the sources used. In 1968 a second volume appeared, containing new maps 27-173; in 1975 volume 3 was published with the new maps 174-243, and now, January 1984, the 4th volume saw the light, with maps 244-323. The gestation periods are long, as the composition of the maps is tedious, accuracy is ensured by an abundant correspondence with specialists. Contributors are mostly from the Rijksherbarium, but maps from other specialists all over the world are solicited; authors cannot easily be induced to perform the time-consuming task, but frequently maps are based on their work.

In the present volume there are 80 original maps and of these 48 include Australian territory; this ratio is approximately also valid for the preceding volumes and this is the reason why I want to attract the attention of Australian systematists, plant-geographers and plant-ecologists to this endeavour, which deserves a wide attention and publicity which it lacked hitherto, in part due to the long lapses of time between the publication of the volumes.

In order to promote this, the Director of the Rijksherbarium has decided to make a special offer to those who want to purchase the present volume 4 at Dfl.50, in that they can obtain the preceding volumes 1, 2 and 3 at the very reduced price of Dfl.60, that means the complete set of Pacific Plant Areas, 4 volumes, at Dfl.110, in all covering 1 265 pages in print, containing an immense source of original information.

The volumes can be ordered from the Rijksherbarium, Schelpenkade 6, Postbus 9514, 2300 RA Leiden, The Netherlands.

C.G.G.J. van Steenis

Notices

WORLD WILDLIFE FUND AUSTRALIA - INTERNATIONAL PLANTS CAMPAIGN - 1984

On 22 March, 1984 World Wildlife Fund Australia together with World Wildlife Fund International and other National Organisations of the WWF family launched an International Plants Campaign. The Australian launch was at the National Botanic Gardens in Canberra, with state, regional and local launches taking place concurrently in each state.

The campaign aims to increase community awareness of the need for conservation of our plant resources and in particular endangered plant species both here in Australia and throughout the world. Funds will also be raised for the conservation projects, many of which are related to plant conservation.

If you want more information on WWF's activities in Australia contact ASBS secretary.

KIMBERLEY FIELDWORK MAY-JUNE 1984

An expedition to the Vansittart Bay and probably Bungle Bungle regions has been organised and includes Colin Totterdell, photographer, Dr Jim Willis, Stephen Forbes and Evan Chesterfield, botanists, David Howe, land systems analyst and Ken Norris, zoologist. Requests for further details or materials should be directed to Stephen Forbes (MEL).

"Trek to Annapurna Sanctuary, Nepal, 22 September to 11 October, 1984. Persons with keen interest in photography and natural history especially welcome. Price approximately \$A1,150 from Kathmandu. Persons interested please contact

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The Society

The Australian Systematic Botany Society is an association of over 300 people with professional or amateur interest in Botany. The aim of the Society is to promote the study of plant systematics.

Membership

Membership is open to all those interested in plant systematics and entitles the member to attend general and chapter meetings and to receive the Newsletter. Any person may become a member by forwarding the annual subscription to the Treasurer. Subscriptions become due on the 1st January.

The Newsletter

The Newsletter appears quarterly and keeps members informed of Society events and news, and provides a vehicle for debate and discussion. In addition original articles, notes and letters (not exceeding ten pages in length) will be published. Contributions should be sent to the Editor at the address given below, preferably typed in duplicate and double-spaced. All items incorporated in the Newsletter will be duly acknowledged. Authors are alone responsible for the views expressed. The deadline for contributions is the last day of February, May, August and November.

Notes

- (1) The deadline for the next Newsletter is 31st May.
- (2) ASBS Annual Membership is \$13 (Aust.) if paid by 31st March, \$15 thereafter. Students (full-time) \$10. Please remit to the Treasurer.
- (3) Advertising space is available for products or services of interest to ASBS members. Current rates are \$30 per full page, \$15 per half page. Contact the Newsletter Editor for further information.

Mailing List

All address changes should be sent to the Treasurer or the Editor.

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