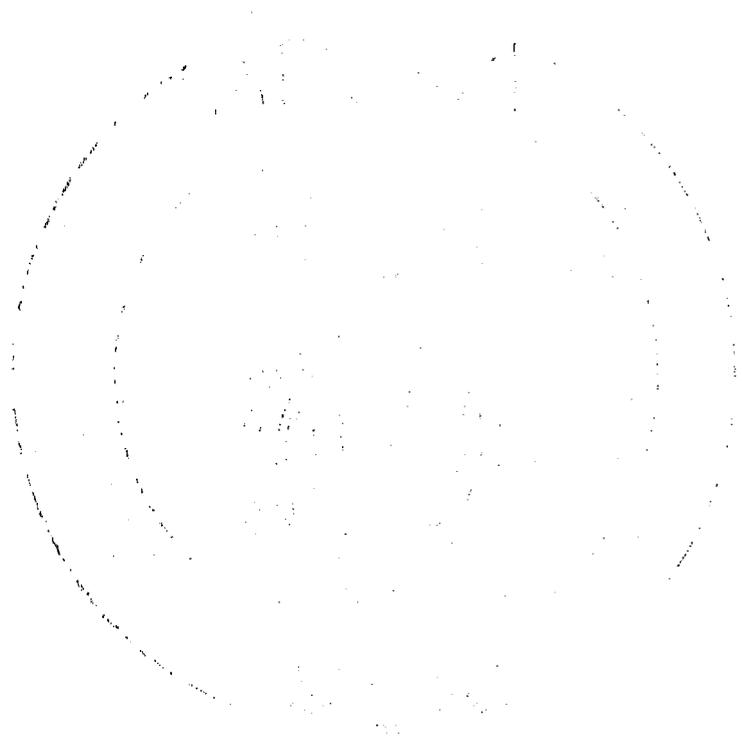




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SHOP AND DON
EARLY
FOR CHRISTMAS

MR L G ADAMS
CSIRO HERBARIUM AUSTRALIENSE
P.O. BOX 1600
CANBERRA CITY ACT 2601



AUSTRALIAN SYSTEMATIC BOTANY SOCIETY

NEWSLETTER

Newsletter No. 7

March 1976

A.S.B.S. Council

- President** Dr. Trevor Whiffin, Department of Botany, La Trobe University, Bundoora, Victoria, 3083.
- Vice-President** Mr. Rod Henderson, Queensland Herbarium, Meiers Road, Indooroopilly, Queensland, 4068.
- Secretary** Mrs. Karen Wilson, National Herbarium, Royal Botanic Gardens, Sydney, NSW, 2000.
- Treasurer** Mr. Mike Lazarides, Herbarium Australiense, C.S.I.R.O., Box 1600, Canberra City, ACT, 2601.
- Councillors** Mr. Jim Armstrong, National Herbarium, Royal Botanic Gardens, Sydney, NSW, 2000.
- Mr. Alex George, Western Australian Herbarium, Department of Agriculture, Jarrah Road, South Perth, Western Australia, 6151.

This publication, the official newsletter of the Society, is produced three times each year and deadlines for copy are 20th February, 20th June and 20th October. The editor is pleased to receive any articles, preferably typed and in duplicate, or newsworthy items from any source for incorporation with acknowledgement in the newsletter.

*Please note: next deadline is 20th June 1976.
Fees for 1976 are now due.
Note also the President's call for contributed papers for ANZAAS in May.*

Rod Henderson
Editor (address above)

Affiliated Society: Papua New Guinea Botanical Society

ASBS Meetings at the ANZAAS Congress, Hobart, Tasmania

The 47th ANZAAS Congress will be held in Hobart on 10-14 May 1976. The Society will be organising a number of associated activities during this time. These will include:

General Meeting

The next General Meeting of the Society will be held at 8 p.m. on Tuesday 11 May. This will be followed by the Presidential Address entitled "Geographic variation in Australian rainforest trees".

Botany Programme

There will be two meetings organised by the Society jointly with Section 12 Botany of ANZAAS:

1. Symposium on Plant Biogeography

There will be a symposium on plant biogeography on the afternoon of Monday 10 May. The papers will refer particularly to Australia and New Zealand and to surrounding areas where relevant. Participants are being invited so as to cover a fairly wide geographic (and taxonomic) area; therefore the symposium should be of general interest.

2. Session of Contributed papers

There will be a session for contributed papers in systematic and general botany.

Call for Papers

Members of the Society are encouraged to present papers in the session of contributed papers at the ANZAAS Congress (see above). Papers may deal with any area of systematic or general interest. There will be a time allocation of 15 or 20 minutes for each paper, including discussion.

Please send the title and abstract (up to 500 words) to Dr. R.K. Crowden, Department of Botany, University of Tasmania, Box 252C, G.P.O., Hobart, Tasmania 7001, to arrive before 1 April 1976; this must represent an absolute deadline.

AUSTRALIAN BOTANICAL LIAISON OFFICER, KEW

When this issue comes out I shall have spent more than half my allotted time here already. So far I've been quite busy, for others as well as myself. I am planning to visit France, Italy, Switzerland, Austria, Czechoslovakia, Germany and the Netherlands over about six weeks after Easter. A visit to Edinburgh is scheduled for this summer. Anyone who would like to have something checked or copied from a continental institution, please let me know without delay.

Andrew Kanis, A.B.L.O.
Royal Botanic Gardens,
Kew, Richmond, Surrey, England.

INDEX OF CURRENT TAXONOMIC RESEARCH
ON THE AUSTRALIAN FLORA (ICTRAF)

The Society is compiling an index of current taxonomic research on all aspects of the Australian flora. This index aims to cover research on the taxonomy, floristics, phytogeography and bibliography of all groups in the Australian flora, including lower plants, fungi and palaeobotany. It is hoped that this index will comprehensively cover all research of relevance to the Australian flora, including research involving perhaps only one or a few taxa of Australian plants.

The first issue of the index will be completed for distribution in July 1976 and will be revised at frequent intervals. The index will be sent free to all members of the Society. It will be produced in approximately the same format as the list prepared for the Heads of Herbaria by Nancy Burbidge in December 1973.

Please fill in and return the form on page 18 with descriptive title(s) of your research project(s).

T. Whiffin
President

A comprehensive index depends on a good response from everyone working on any aspect of the flora. This means we want to hear from you. - Ed.

MARGARET STONES - BOTANICAL ARTIST

A retrospective exhibition of botanical paintings by Margaret Stones was held in the Melbourne University Art Gallery from 20 October to 28 November 1975. Botanical artists are rare enough these days and of the quality of Margaret Stones, even rarer. We must be grateful to Professor Carrich Chambers for conceiving the show and to Mrs. B. Clarke and the Melbourne University for mounting it.

Miss Stones now works in London; Australian botanists will be familiar with her work in *Curtis's Botanical Magazine* and in the series of sumptuous volumes *Endemic Flora of Tasmania*. While local botanists and friends have rallied splendidly to collect the rare plants for the Flora, it has required an Irish lord to be patron and Croesus to publish it.

About 80 splendid paintings were on show and the only quibble would be that too few early works were shown so that developments in style and technique were difficult to assess. Very few paintings from the first half of Miss Stones' career were seen and in fact two-thirds of the paintings were of the last 10 years. One or two examples of her black and white work associated with the colour plates in *Bot Mag* were on show and these were as impeccable as the coloured paintings. These perhaps showed more variation of line and technique than those by Stella Ross Craig whose strong clear line is well known.

Miss Stones has painted a wide range of plants and it is to her credit that her works include grasses, *Isoetes* and *Centrolepis* as well as more obvious showy plants. I find it difficult to fault any of them. One is amazed at her skill in painting white flowers on white paper and at the incredible detail in many of the small sclerophyllous-leaved Australian species which must be an artist's nightmare. Imagine the numerous flowers of a billowing *Olearia* or *Milligania* and the tedious work in the leaves of *Epacris* or *Leucopogon*! Surprises were the fine drawings of two *Stipas* which one would hardly consider likely subjects. Perhaps an even more unlikely subject was *Myriocephalus rhizocephalus* (a little *Asteraceae*) a couple of centimetres high, for which part of the working sketches were displayed as well as the finished drawings. The leaves of the *Eucalyptus* tended to be thin in texture and somewhat flat in surface response (which one may attribute to the duller, softer lights in London) but they will make me look closely again at *Eucalyptus* leaves. This difficulty with relatively large flat green leaves was also evident in the early painting of *Brachychiton discolor*.

Purely personal favourites included *Milligania densiflora*, *Anopterus glandulosus* and *Senecio brunonis*. The reproductions of these in *Endemic flora of Tasmania* are good but the originals are better. Add to these a voluptuous *Paeonia suffruticosa*, and Don Blaxell's *Dendrobium ruppianum* and most of the rest!

The exhibition was a triumphant display of the virtues of botanical artistry compared with much photography, which, although superior for some tasks, has not yet exceeded the artist's ability to combine a lively display of a plant with its botanical details. The exhibition was a tribute to the skill, technique and plain slogging work which have culminated in these often miraculous effects.

David Symon
Waite Research Institute
Adelaide, S.A.

Brief history of the botanical collections in the Forest Research Institute, Canberra

The first botanist in the Forestry and Timber Bureau was Mr (later Dr) R.D. Johnston who was appointed in 1951. At that time the Bureau herbarium consisted of specimens which had accumulated in the Australian Forestry School since its establishment in 1927. No accurate count of specimens is known but a register of specimens started by Mr Johnston showed approximately 8,000 specimens before his collecting commenced. Many of these specimens were donations from the Sydney and Melbourne Herbaria, including a great number specially sent from Sydney by W.F. Blakely, the noted eucalyptologist.

In mid-1966 Mr G. Chippendale transferred from the Territories Department to work in what had become the herbarium of the Forest Research Institute. At that time the herbarium had 13,000 registered specimens. Since 1969 Mr Chippendale has been in charge of the Botany sub-section following Dr Johnston's promotion to another position. Mr M.I.H. Brooker joined the staff on 28 September 1970.

Important in the herbarium are many isotype specimens among those from Blakely. In 1974 a donation of 123 historical specimens from the British Museum of Natural History, collected by Robert Brown (1802-5) and Allan Cunningham (1817-30), was received. Further isotype specimens of taxa described by Mr Brooker are also in the herbarium.

On 15 February 1971 an estimate of specimens in the herbarium showed 16,627. Since that time the additions of specimens collected and of those received as donations have been recorded, so that the total on 16 May 1975 was 21,213; of these approximately 16,000 are of *Eucalyptus*.

On 1 July 1975 this herbarium together with all sections of the Forest Research Institute was transferred to the new CSIRO Division of Forest Research.

G. Chippendale
CSIRO Division of Forest Research
Canberra, ACT.

CITATION OF SPECIMENS

There are obviously differences of opinion on the citation of specimens in taxonomic publications and this brief note is offered in the hope that it will stimulate some discussions or contributions to the ASBS Newsletter.

Ideally full label detail of all specimens gives the most information to the most people. In well collected species this may run to several hundred citations, which is rarely acceptable to editors. Such solid chunks of compact typography are usually daunting to read and follow especially when set in smaller type as often happens.

The questions are: Who does read them and for what purpose? Let us assume that a revision of a widespread Australian genus has been completed and the loans returned to various herbaria. The sheets should have been annotated, so that the author's concept of the species can readily be checked and if you have not got a specimen or duplicate that has been annotated a long list does not help.

If your material has not been borrowed (and this certainly applies to many overseas collections) the lists can be used to check holdings. Partial or reduced lists or selected specimens would then be less useful.

A comprehensive list can be used to study distributions. This may well be more readily seen from spot maps of distribution and if these are sensibly done they take little more space than is needed to cite the collections. One certainly gets an impression of distribution more quickly from a map than from a slab of citations.

How to arrange citations?

- (1) Geographically? By State, by province, north to south, east to west? However it is done you will find it hard to track down the collection you want.
- (2) Under collectors? It is easier to find specific collections but this leaves geography in chaos.
- (3) Chronologically? Historical collections come to the fore and the spread of aliens can be followed. Dated collections can be found quickly, but this has not been a popular method of citation.

Ecological notes are often minimal in early collections and may be voluminous in some recent ones. These data are better incorporated in a paragraph on "Ecological notes" than left buried in citations.

A good statement on distribution combined with a spot map would supply much information in a useful and comprehensible form.

The number of specimens seen can be stated.

An index to collectors and a code to the identification would supply all the needs of those people wanting to check their collections and which (*sic*) were not used by the author of the revision.

David Symon
Waite Research Institute
Adelaide

CYTOLOGICAL OBSERVATIONS IN AUSTRALIAN EUPHORBIAS

As commonly accepted, *Euphorbia* is the largest genus in the Euphorbiaceae and with over 1,500 species is among the largest in the Angiosperms. In Australia the genus is represented by approximately 43 species, of which 39 are endemic, and is distributed throughout the continent. In this communication, observations on chromosome numbers and sizes are reported and compared with similar data available for other regions.

Unfortunately, the large numbers of species and great diversity of form amongst Euphorbias has led to many taxonomic difficulties and in this study the generic limits of the group have been considered in their broadest sense.

The most comprehensive accounts of chromosome numbers in the genus have been by Perry (1943) and Hans (1973). Their data together with that from a number of smaller reports are summarised in Table 1, along with the chromosome counts for Australian species. The counts are arranged both according to base number and to continent of origin. According to Perry *Euphorbia* is the only genus in the Family with such a large degree of variability in chromosome numbers and size. Hans found that the species form an aneuploid series of haploid numbers of $x = 6, 7, 8, 9$ and 10 ; interspecific polyploidy is common in each series. Among the Australian species studied to date, however, there is a disproportionately large number with a base number of $x = 11$ (Table 2). These taxa, including the *Euphorbia drummondii* Boiss species complex, have relatively small meiotic chromosomes of 1-2 micrometres in length. Furthermore, *E. drummondii* displays intraspecific polyploidy, with both diploid ($n = 11$) and tetraploid ($n = 22$) cytotypes being found. If Hans is correct in doubting the validity of most of the published records for $n = 11$, then the occurrence of this series in Australia is of considerable interest.

The succulent Euphorbias, most common in Africa and Asia, comprise the $n = 10$ series whose diploid taxa have relatively large mitotic chromosomes up to 12 micrometres in length (Perry 1943). This series is so far unrepresented in Australia. Instead, the Australian species of *Euphorbia* with large chromosomes belong to an $n = 7$ series. These plants are small, semi-succulent shrubs found in the semi-arid and arid regions and belong to the Section *Eremophila* Boiss. In *Euphorbia stevenii* F.M. Bail and *E. eremophila* A. Cunn. ex Hook., the meiotic chromosomes are most easily distinguished at anaphase II, when the largest is up to 7.9 micrometres long. These Australian species do not appear to be closely associated with any European or American taxa in the same chromosome series. Thus the Australian species of *Euphorbia* are also cytologically diverse but the variation in both chromosome number and size involves different base number series than those reported by Perry and Hans.

Preliminary numerical classificatory studies, scoring cytologically known species for 52 attributes, have resulted in good agreement between cytological and morphological groups within the genus. Continuing studies of this type may help to elucidate the taxonomic relationships of *Euphorbia* within Australia and with the genus in other regions.

The author would like to thank Dr. H.T. Clifford for suggesting the project and for many subsequent and helpful discussions.

Voucher specimens have been lodged in the State Herbarium of Queensland. Details of the chromosome counts will be provided on request.

References

- HANS, A.S. (1973). Chromosomal conspectus of the Euphorbiaceae. *Taxon*, 22: 591-636.

PERRY, B.A. (1943). Chromosome number and phylogenetic relationships in the Euphorbiaceae. Am J Bot 30: 527-543.

Loc Base	Europe	Asia	Africa	Americas	Australia	Totals
6	7	4	1	11	1	24
7	12	4		27	4	47
8	11	3		1	8	23
9	10	4		2	1	17
10	11	10	21	7		49
11	1	2		1	8	12
13	1			6		7
15				1		1
Totals	53	27	22	56	22	180

Table 1. Continental distribution of number of species of *Euphorbia* L. with different base numbers.

Taxon	n
<i>Euphorbia coghlanii</i> F.M. Bail.	6
<i>Euphorbia boophthona</i> C.A. Gardn.	c.28
<i>E. eremophila</i> A. Cunn.	7
<i>E. stevenii</i> F.M. Bail.	21,42
<i>E. sp.nov.</i>	7
<i>Euphorbia atoto</i> Forst.f.	8
<i>E. biconvexa</i> Domin	8
<i>E. filipes</i> Benth.	8
<i>E. macgillivrayi</i> Boiss.	8
<i>E. mitchelliana</i> Boiss. var. <i>stenophylla</i> Benth.	8
<i>E. mitchelliana</i> Boiss. var. <i>hirta</i> Boiss.	8
<i>E. sparmannii</i> Boiss.	8
<i>E. vachellii</i> Hook. et Arn.	8
<i>E. hirta</i> L. — (<i>E. pilulifera</i> L.)	9
<i>E. alsiniflora</i> Baill.	11
<i>E. australis</i> Boiss.	11
<i>E. drummondii</i> Boiss. sp. complex	11,22
<i>E. inappendiculata</i> Domin	11
<i>E. muelleri</i> Boiss.	11
<i>E. myrtoides</i> Boiss.	11
<i>E. schultzii</i> Benth.	11
<i>E. wheeleri</i> Baill.	11

Table 2. Chromosome numbers in Australian Euphorbias.

D.C. Hassall,
 Botany Department,
 University of Queensland,
 St. Lucia.

O.D. EVANS 1889-1975

Obed David Evans died on 26 July 1975 at the age of 86. His name will be familiar to two groups of people: firstly to all those who passed through the Botany School of the University of Sydney between its foundation in 1916 and O.D. Evans' retirement in the early 50s; secondly to readers of works on the botany of New South Wales published from 1961 onwards.

Evans was associated with plants from the time of his birth which took place at Shepherd's Nursery in Redfern. At the University he served as Laboratory Attendant, later Chief Laboratory Attendant, being responsible in particular for organising material and arrangements for practical classes. He also made a major contribution to the building-up of the John Ray Herbarium of the Department. For many years he certainly knew the flora of the Sydney district much better than any member of the teaching staff, a fact which the students soon discerned, but which was officially recognised only with the advent of the newer generation of professors and lecturers after the Second World War. In 1952 the University gave him a grant to assist in writing a students' key to the flowering plants of the Sydney region. The well-known handbook by Beadle, Evans and Carolin of 1963, and its successor in 1972, developed from this work, incorporating of course substantial contributions by the other authors, as well as a treatment of the pteridophytes and part of *Acacia* by Mary D. Tindale.

Obed's contribution to science was recognised by the award of a degree of B.Sc. in 1957. As he would point out, with modest pride, this was not an honorary degree but was awarded after examination by thesis.

During these first years of his retirement he also assisted materially in building up the herbarium of the Botany Department of the then new University of New South Wales.

In April 1959 he began a new career, this time as a professional botanist, at the National Herbarium of New South Wales where he was employed on a part-time basis until June 1971. During or following these years he published, alone or in co-authorship with L.A.S. Johnson, nine research papers as well as the treatments of Arecaceae (Palmae), Araceae, Flagellariaceae, Restionaceae, Xyridaceae, Eriocaulaceae, Pontederiaceae and Philydraceae, for the *Flora of New South Wales*. He left *Flora* manuscripts on the substantial genera *Cyperus* (s. lat.) and *Eleocharis* of the Cyperaceae, and on Commelinaceae and Centrolepidaceae. These are being rewritten in the light of more recent knowledge and will appear in due course with O.D. Evans as one of the authors.

Unassuming but positive in his approach to life and to his work, Obed's personality was deeply influenced by his quietly held religious

beliefs. For all those who worked closely with him their associations were happy and productive, and he was universally respected and held in much affection by all who knew him. His mind remained clear into old age and he will be remembered not only for the intrinsic value of his work but also for his unusual success in taking up professional research at an age when most men are ready to lay down their tools.

A fuller obituary and a bibliography will appear in Telopea 1, no.2.

L.A.S. Johnson
NSW National Herbarium
Sydney

NEWS ITEM

Dr. Bernard Verdcourt of the staff of the Royal Botanic Gardens, Kew, England, has been seconded for two years to the Papua New Guinea Government under the auspices of the Commonwealth Fund for Technical Cooperation, to produce an *Handbook of the Legumes of New Guinea*. As a preliminary, Dr. Verdcourt spent two weeks in Australia in December 1975 (3 days at CANB and the remainder at BRI) looking at specimens of New Guinea Legumes prior to a stay of one week in Port Moresby and two to three months at the herbarium in Lae. Though most of the work is to be done at Kew, Dr. Verdcourt aims to examine at least some of the plants in the field and use the library and herbarium facilities at Lae. The illustrations for this work are to be done by artists from New Guinea.

REQUESTS FOR MATERIAL

Karen Wilson (National Herbarium of NSW) would be pleased to receive dried specimens of *Cyperus* spp. for studies currently being carried out. Specimens from areas other than NSW would be particularly welcome.

Laurie Haegi (Waite Agricultural Research Institute) is revising the genera *Anthocercis*, *Anthotroche* and *Duboisia* (Solanaceae) and would be grateful to receive any material, especially for propagation (cuttings, seeds), with collection details of any voucher specimen and the name of the herbarium in which the voucher has been lodged.

Judy West (Botany Dept., Adelaide University) would appreciate material of *Dodonaea*, particularly pickled buds and flowers. Pienaar's fixative (6 parts methanol: 3 chloroform: 2 propionic acid) is preferred but if unavailable female material can be pickled in FPA and male buds are best in 3:1 60% ethanol: acetic acid.

Dave Christophel (Botany Dept., Adelaide University) would be extremely grateful to receive material of *Neocallitropsis* (Cupressaceae) for fossil comparisons. He mainly wants leafy twigs suitable for cuticle study and a twig of pencil diameter or greater for wood sections, but cones would be delightedly received!

Bob Chinnock (SA Herbarium) is revising *Eremophila* and related genera and would appreciate herbarium collections and preserved material. Specific notes on habit, flowers, habitat and associated species would be especially appreciated with the collections.

Munir A.A. (SA Herbarium) has submitted his revision of *Cyanostegia* Turcz (Chloanthaceae) for publication and is currently working on the genus *Spartothamnella*. Flowering material of *S. juncea* and *S. puberula* from Qld. and NSW is scarce and Munir would be very grateful for collections of these species.

ANNOUNCEMENT

Action Group on Tropical Eucalypts

A group with the above title was formed as a result of discussions at the combined meeting of the two working parties of the International Union of Forestry Research Organisations (Tropical Species Provenances and Breeding Tropical and Subtropical Species) in Nairobi, Kenya, in 1973.

The group presently consists of 90 members from 46 countries including Australia. Members are persons interested in flowering, pollination, seed production, seed biology, provenance research, population improvement, bibliographies, monographs, distribution maps, taxonomy, biochemistry, wood properties and economic aspects of fast growing tropical Eucalypts who wish to actively cooperate with each other by exchange of ideas, information and materials (seeds, pollen, scions, etc.).

The group's first newsletter appeared in June 1975 and the second issue in September 1975.

A meeting of this group is planned for the third FAO/IUFRO World Consultation on Forest Tree Breeding to be held in Canberra in 1977.

Anyone interested in participating in this Action Group is asked to contact the Convenor, Prof. John Davidson at Department of Forestry, Papua New Guinea University of Technology, P.O. Box 793, Lae, Papua New Guinea.

ALL MEMBERS PLEASE NOTE

ASBS SUBSCRIPTIONS FOR 1976 ARE NOW DUE

Members in Australia: \$6 or
\$4 if paid by 31 March 1976

Members overseas (individuals and institutions): US\$8

Payment to be sent to the Treasurer (address on page 1)

CHAPTER NEWS

SYDNEY

At the December 1975 meeting, John Waterhouse and Karen Wilson were elected as convenors for 1976. After business discussions were concluded, Don Blaxell showed slides of the vegetation of New Caledonia and Madagascar.

The first portion of this year's programme is as follows:

- 10 March Various members from National Herbarium of NSW will speak on their current research work.
- 4 April Dr. B. Briggs on the taxonomy of Restionaceae.
- 5 May Mr. J. Armstrong on the tribe Boronieae of the family Rutaceae.

Karen Wilson
Convenor

BRISBANE

The first meeting of the chapter for 1976 was:

- 24 February "The monsoon flora of Australia and Southern Africa - comparisons and contrasts" by B.K. Simon and N. Byrnes, Queensland Herbarium.

The next meeting is:

- 27 April "Towards an Understanding of Queensland's lichen flora" by Dr. R.W. Rogers, Botany Dept. University of Queensland.

Venue: tea room (G38/40) of the Botany Department,
University of Queensland, at 7.30 p.m.
Visitors are welcome.

Yvonne Brouwer
for the Committee

ADELAIDE

Programme for first part of 1976:

- 25 February Mr. John Womersley, former Chief of Division of Forest Botany and Director of Botanic Gardens and Herbarium in Lae will be speaking on certain aspects of the New Guinea flora.

- 27 March To supplement a discussion on leaf epidermal characters we shall spend a day studying fossil and living material of plants (the Eocene flora) and to a lesser extent, weather permitting, animals at Maslins Beach.
- 28 April It is planned to continue a discussion theme which we began last year involving the particular problems or points of interest or current state of two or three individual members' work. Other topics for general discussion include the use of infraspecific taxa.
- 28 May Dave Blackburn, Postgraduate student, Botany Department, Adelaide University - "The relevance of leaf architectural characteristics to taxonomy".

General News

Elise Wollaston is making an algal collecting trip to the subtropical region of Queensland coast within the Barrier Reef (approx. Rockhampton northwards) late June-early July.

Laurie Haegi will be collecting in W.A. (mainly the south west) in September and October.

Dave Christophel and Dave Blackburn plan to spend most of April visiting Melbourne, Canberra, Sydney, Newcastle and Brisbane on their way to collect Cretaceous and Tertiary conifers at Winton in Queensland.

David Symon is presenting papers at the Solanaceae conference in Birmingham in July.

Bob Chinnock will be spending about six weeks during August - September collecting in central W.A.

Judy West
Convenor

RECENT PUBLICATIONS

HALGORACEAE

ORCHARD, A.E.: Taxonomic revisions in the family Haloragaceae.

I. The genera *Haloragis*, *Haloragodendron*, *Glischrocaryon*, *Meziella* and *Gonocarpus*. (Bulletin of the Auckland Institute and Museum, Number 10, 1975. 299 pages, 326 figures.)

Obtainable from: The Auckland Institute and Museum, Private Bag, Auckland 1, New Zealand.

Price: NZ\$19.00.

This is another major contribution to the botany of Australian and New Zealand plants by Dr. Orchard. It is, as he states, the first part of a monograph of the predominantly southern hemisphere family Haloragaceae. The account consists of a discussion of previous work on the family, a survey of morphological and biosystematic criteria of use in taxonomic treatments of the group, and the first part of a proposed taxonomic revision of the family which covers all genera in Schindler's (1904, 1905) tribe Halorrhageae excepting *Laurembergia* and *Proserpinaca*.

One new genus (*Haloragodendron*), 40 species, 6 subspecies, 4 varieties and 16 forms are newly described or have new names proposed for them.

On the whole this is a worthy scholarly effort. Its value from the applied point of view will be established, as with all such taxonomic papers, by use over time. There is little to fault. Perhaps in such an account where infraspecific variants are named seemingly inconsistently, in subspecific, varietal and/or forma ranks, a separate section dealing with the author's philosophy for allocating plants to such categories might have been a useful addition for readers interested in more than identifying specimens.

The paper illustrates the amount of space taken up for full citation of specimens mentioned elsewhere in this newsletter by David Symon.

The rather high price of NZ\$19 may have the unfortunate consequence of restricting its acquisition mainly to institutions.

RUTACEAE

A series of articles by Jim Armstrong of the NSW National Herbarium dealing with aspects of Rutaceae were published in Australian Plants 8 (65), December 1975. The following titles are included: "An introduction to the plant family Rutaceae"; "The family Rutaceae" (distribution, classification and characteristics; sub-family and tribal classification); "*Acradenia* - the forgotten genus"; "The family Rutaceae in Australia" (the tribes and genera); "The current status of the sub-family Aurantioideae".

AUSTRALIAN ALGAE

"A collection of Wm. H. Harvey's Australian Algae at West Chester, Pennsylvania, U.S.A.", by Robert B. Gordon. Taxon 24: 628 (1975). Apart from at least 200 carefully labelled sheets collected about 1847, in West Chester, the only other institutional herbarium which contains Harvey's Australian Algae is the one at Trinity College, Dublin.

PROTEACEAE

"On the Proteaceae - the evolution and classification of a southern Family", by L.A.S. Johnson and Barbara G. Briggs. Botanical Journal of the Linnean Society, 70: 83-182 (1975).

Drs Johnson and Briggs of the NSW National Herbarium have in this very interesting paper derived a scheme of phylogeny in the Proteaceae from analysis of new and previously available data on morphological, anatomical and chromosomal characters. They concluded that this family has no close present-day relatives although it possibly diverged early from the Rosifloreal line.

The Proteaceae with 75 genera are divided into 5 subfamilies comprising 14 tribes which are further subdivided into 33 units of subtribal level. Eight new genera are described and new combinations for the names of their type species are made.

It is to be hoped that a further paper making the necessary combinations for other species in these new genera is not long following.

Rod Henderson

INDEX OF CURRENT TAXONOMIC RESEARCH
ON THE AUSTRALIAN FLORA (ICTRAF)

Name:

Institution (if relevant):

Mailing address (if different
from above):

Research project(s):

Title(s):

Please return to: Dr. Trevor Whiffin
Department of Botany
La Trobe University
Bundoora
Victoria 3083

by 30th June 1976

M E M B E R S H I P

Membership in the Australian Systematic Botany Society is open to all those interested in plant systematics. This includes persons overseas and also overseas institutions. Membership can be effected by mailing this form or by sending relevant information to the Treasurer at the address given on page 1, together with proper fees for the current year.

I wish to become a member of the Australian Systematic Botany Society. I enclose remittance of \$____, being the subscription for the current year.

Name: Dr/Mr/Mrs/Miss/Ms

Address:

.....

Address for newsletter

.....

Fees: Australia and Papua New Guinea A\$6 (\$4 if paid by 31 March 1976 or for members who join after that date in 1976)

Elsewhere US\$8 or equivalent

ASBS COUNCIL ELECTIONS 1976/77

An election is necessary to fill the positions of President and two (2) Councillors. The positions of Vice President, Secretary and Treasurer have been filled unopposed.

Please fill in the ballot paper at the bottom of the page, detach it and place in an envelope. That envelope should be sealed and placed inside another envelope which has the sender's name and address written on the back flap.

Send ballot papers to the Secretary, Mrs. K.L. Wilson, National Herbarium of NSW, Sydney NSW 2000, by Friday, 30th April 1976.

Counting of votes will be by the preferential system.

The new Council will be announced at the General Meeting to be held during ANZAAS in Hobart.

ASBS BALLOT PAPER 1976/77

PRESIDENT

(number boxes 1-2 in order of preference)

Carolin, R.C.

Carr, D.J.

COUNCILLORS

(number boxes 1-7 in order of preference; two Councillors to be elected)

Armstrong, J.A.

Crisp, M.D.

George, A.S.

Haegi, L.A.R.

Henderson, R.J.F.

Latz, P.K.

Marchant, N.G.

STATE OF NEW YORK

The undersigned, Clerk of the Court of Sessions for the County of ...

do hereby certify that the within and foregoing is a true and correct copy of the ...

of the ...