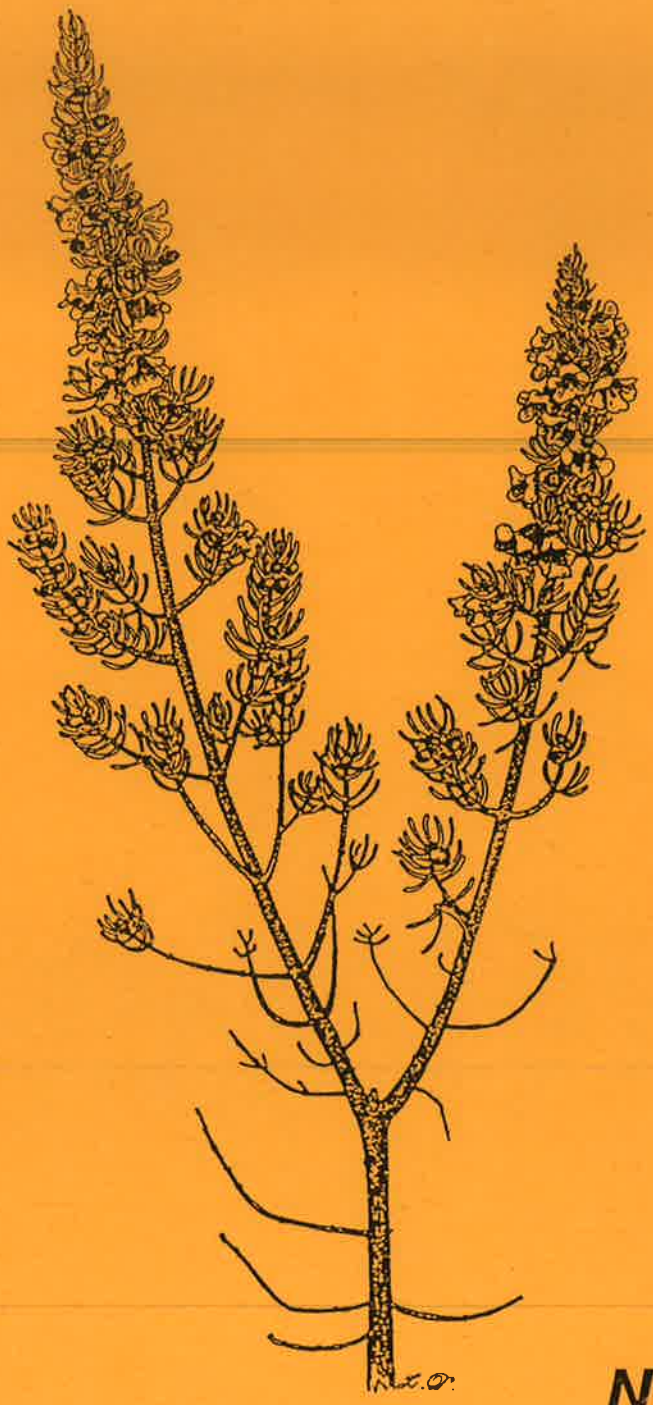
PROSTANTHERA & WESTRINGIA

STUDY GROUP NEWSLETTER



NUMBER 16

PROSTANTHERA & WESTRINGIA STUDY GROUP
NEWSLETTER NO. 16

ISSN 0818 3341

September 1989

PATRON

George Althofer
60 Thornton Street
WELLINGTON, NSW

LEADER

Brian Timmis
"Coach & Horses Inn"
Jellore Street
BERRIMA, 2577, NSW
Ph. (048) 771 242

EDITORS
Barry Conn & Brian Timmis

MEMBERSHIP: The *Prostanthera* and *Westringia* Study Group is for all those who are interested in the cultivation of Mint bushes and Westringias which have been collected from the wild.

FEES: $4:00. Please make sure that you are a financial member.

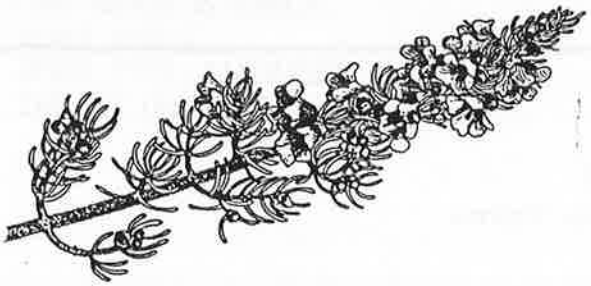
Fees Last Paid: 1 9/1989 DUE ——→

*****

FRONT COVER

The illustration on the Front Cover of this issue of the *Newsletter* is *Prostanthera teretifolia.*

*****



*****

The following comments have been received from several members in response to the article - 'THE STUDY GROUP AND S.G.A.P....' in *Prostanthera & Westringia Study Group Newsletter* **15**, page 3. We here publish extracts from all comments received. [eds]

Like Barry, I really do not want to know about S.G.A.P. politics, only about plants, but I do appreciate that some form of administrative framework is necessary to spread and share what information about plants we have, so there is bound to be some politicking. I think my view of the importance of Study Groups is best illustrated by the fact I belong to 5 and only refrain myself from more by the difficulty of being an active member in all, as well as the cost -they do all fall due together now. As Plant Introduction Officer S.G.A.P. Victoria one thing became clear, plants are introduced by the Study Groups & the nursery trade. Study Groups collect a great deal of information about their plants, but somehow this has to be spread back to members generally. It may take many years of collecting and organising, but sooner or later some form of reporting must come.

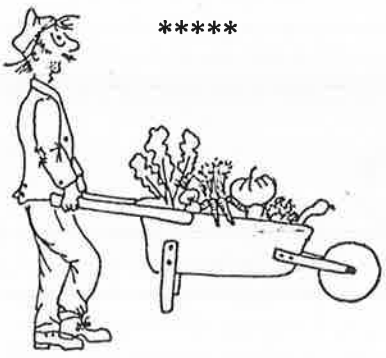
Barbara Buchannan

*****

Many thanks for the Newsletter, as usual you are keeping up the quality of this publication. I feel however, very disturbed by the lack of support for this Study Group from the S.G.A.P. The fact that the group has only received $100 of the $1000 promised should be a matter of great concern to all members. I urge all members that the production of a quality article costs hard cash as well as much hard yakka.

George Althofer

*****



*****

Attached please find cheque for $5.00 being our annual subscription to your

Study Group. We are sorry we cannot make it more, but as a District group our funds are limited and we try to support all Study Groups. I have a great belief in the necessity of Study Groups to the Society and realise they need financial support as well as member participation. I am most impressed with your Newsletter both for its presentation and information. How do you produce it on just a $4 fee, I do not know, but hope you do not have to subsidise it financially yourself.

Jan Sked

*****

We are very sympathetic to the financial status of Study Groups. A point you bring out is that without Study Groups the society has no meaning. Our Study Group, no longer exchanges Newsletters with N.S.W. Region as we were not receiving their magazine and a Study Group cannot afford to be too generous with Newsletters. We exchange with one Region, three Region pay fees and two ignore us. One N.S.W. Local Group subscribes to all Study Groups. This policy needs to be highlighted and commended.

Australian Daisy Study Group

*****

*****

Good luck, may the Groups and coffers be enriched from your plea for better financial consideration from N.S.W. Region. A little help and encouragement is a marvellous incentive to carry out the study groups ultimate projects.

Still a member of N.S.W. Region, I feel it is unrealistic that the body is not supporting Groups with financial help when it is well able to do so. It supports scientific research so why not Study Groups. Enthusiasm of leaders can be dampened when the Executives of the State Regions turn a blind eye on their needs.

Joyce Ward

******

*****

Where are we Going?

I think I am at last convinced that funds in the form of a grant or other will never be forthcoming from S.G.A.P. N.S.W. Region, I have been asking for four years. The N.S.W. region committee agreed that a $25 annual subscription cheque be forwarded to all study groups, I believe the cheques were written then destroyed. Also as requested in writing by the then Treasurer of N.S.W. Region, I prepared and sent a detailed letter to be presented

to the Special Projects Sub-Committee requesting the balance ($900) of the $1,000 promised to me by the then President in a letter dated 10th September, 1987.

I point out that funds and materials have been made available to certain people. I have been unable to obtain a response from the N.S.W. Region. I can no longer financially support my past activities including field trips for collecting and study, propagation and growing on to preserve the species and the cutting exchange to members.

I feel sad when I consider that, on one hand, we have a Regional committee of far too many people controlling large amounts of our money, and on the other hand, a very active Study Group with the resources of the Royal Botanic Gardens' Botanist Dr. Barry Conn who shares all with us. I follow with a list of species, some unknown, some overlooked, most are beautiful and of considerably good horticultural potential.

e.g. *Prostanthera albiflora*
P. althoferi
P. carrickiana
P. centralis
P. splendens
P. verticillata
P. wilkieana
Westringia davidii
W. saxatilis

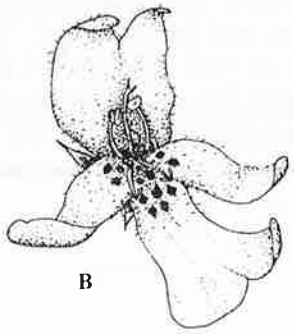
other related genera of enormous horticultural potential include

Hemigenia
Hemiandra
and *Plectranthus*

The botanists will always have their herbarium collections preserved in their archives. We the amateurs are not going to see these plants in our gardens unless heads are pulled from the sand and our money is injected into study groups or some other form of research.

Brian Timmis

*****



Westringia davidii.

*****

Further Observations on Study Group Funding

Robert Miller

I have a few ideas that may solve some of the problems associated with Study Group Funding.

As one of the major custodians of the *Prostanthera* Study Group Living Collection I have an intimate knowledge of the costs associated with the maintenance of a diverse assemblage of forms and species in pots.

The Society's expectations to-date of the role that Study Groups have within the Society is of supplying plants to the Annual Flower Show. This is a worthy goal. But Study Groups are increasingly being recognised as providing a resource

(no matter how amateurish) to the Study of the Australian Flora. I strongly feel that if the Society is to Progress it is through the Study groups becoming increasingly more professional in their approach:

a) keeping precise records
b) providing a quality plant resources for Displays and Botanical Study
c) dissemination of information in a well presented format
d) quality specimens at flower shows create a demand for a greater diversity of species and forms entering the Horticultural Trade
e) and most importantly fostering the recognition of the beauty of our natural heritage increases the likelihood of their conservation.

After all, are not these the major goals of our Society? Funding is essential if an increasingly professional approach is to be implemented. This could be achieved by the appropriate bodies deciding on an agreed amount and this being forwarded to the study groups annually. Additional funding should be made available for specific projects on request (and, of course, on merit).

I feel this form of funding often evokes the response of "what value will we get from our monetary outlay" and accountability is always a problem.

I feel study groups could be paid on a merit basis. Paid commercial hire rates for providing quality plants at Annual Flower Shows. This would alleviate the accountability and value for money worries.

In addition publications formatted in a concise manner should be subsidised.

This is a workable idea which would ensure a dynamic society by encouraging the enthusiastic members who really believe in Growing Australian Plants!

*****

Westringia saxatilis.

****

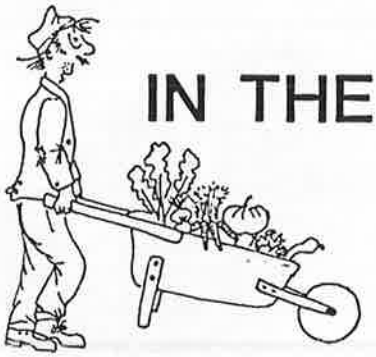
HELP

The Central Highlands Group S.G.A.P., Victoria, are most keen to have a talk on *Prostanthera.* Do we have anyone living nearby who could help out. The contact is:

ERICA NATHAM
R.M.B. N817
BALLARAT, VIC. 3350.

No telephone number given.

****



IN THE BACKYARD

My Garden and Other Problems

Barbara Buchannan

Many thanks for the last Newsletter which has lots of interest, my only trouble is that I virtually need a map of N.S.W. beside me, as indeed with the 'Cradle of Incense', I simply have a blank where N.S.W. is concerned. One day I do hope to get to Burrendong and to lots of other places. I have a *Prostanthera lanceolata* leaf nearly sessile and 3½ - 4" long. George Althofer suggests in the 'Cradle of Incense' that it is a form of *P. ovalifolia.* What is the current position? I also had a *P. cineolifera* but am not too sure if it has come with me. Isn't this moving business sheer murder with the plants. The prostantheras as a group have again struck well and come with me, but the labels got mixed and I'll have to wait for flowers to see how my colour forms have worked out, and I know some are gone. The house should have been finished early December and is still going, hopefully for not much longer, but I have had to try and hold everything in pots and carry water from the tank at first. Only the wet season saved us - me and the plants.

Your conditions at Berrima sound fairly similar. Although last winter was mild we got terrific frosts too, so your notes on frost hardiness are very welcome. How about *P. teretifolia* I wonder? I had 3 plants very similar in leaf - *P. teretifolia*, "P. rhylstonii", and 'from Rhylstone', the first two mauve flowered, the last pink. There was also a plant in Kawarra native garden that flowered much later, round now as I remember. Can you make sense of this quickly or shall I just wait patiently until they flower again?

Your use of "for *P. gilesii*" sent me back to the 'Cradle of Incense' and sorted out another problem for me at the same time. [Incidentally the 'P. gilesii' has survived in cuttings]. It was growing next to what I bought as *P. phylicifolia*, but puzzled me because the flowers are mauve. Now I think that I probably have *P. scutellarioides* and *P.* sp. aff. *phylicifolia.* The leaves are somewhat similar so I am going to have a deal of trouble sorting them out, especially as only some cuttings

are labelled. 'P. gilesii' is a lot shorter to write than the rest!

Now I have a confession and a boast. In Esperance in the spring of 1987, I collected what I now deduce to be *P. canaliculata* - amongst a lot of other things. The real credit goes to Gwenda McDonald who persuaded it to grow, and gave me a very healthy specimen. It flowered for a long period this spring - not a massed display but better than I remember it in the wild. By nipping tips I think I have persuaded it to grow a little more densely too. The leaves are about 15mm long and very narrow, a pleasant dark green. Flowers smallish white, in proportion to give a good dainty small plant. The confession of course is that the records are all only in my memory. It came from Jerdacuttup in a granite outcrop area - how often does one read that in the 'Cradle of Incense'? with I think heavy soil. Heavy for the area, but I did see it elsewhere, possibly on gravel. *Helichrysum obtusifolium var. tephroides* was one associate - but there are so many!

My excuses are 'floral indigestion' - my term for trying to cope with a wealth of unknown wonders, and having to fit my plant hunting into the family activities - distances are so great. However, our son lives in Esperance, so we hope to spend a lot of time there and already I am beginning to sort the plants out a bit. I have a cousin Thelma Daniell who has lived in Esperance over 20 years and has always been a flower person. She collects for various people and told me earlier on that she had only just become aware of the Prostantheras and Westringias in the area. So I hope to be a bit more organized in future, and I also wondered if there were any specific plants/places I could try and get (to) for you - or should I say for Barry. We will be going in April/May probably and I would dearly hope again in the Spring. Apart from the usual flowers we have 3 little granddaughters growing up there. This perhaps explains why I wonder if I'll ever get to Burrendong and the rest. I also have a daughter at Lakes Entrance on the fringe of the Victorian mint area.
I am currently ploughing through a text on 'Plant Breeding Systems' which is heavy going but throws up some interesting ideas. I have just read a section on flower colour variation in a population - a phenomenon which is quite frequent in Prostanthera. I had always just thought a mutation had rather randomly cut the enzyme pathway leading to colour production and no further about its significance, or why such mutants survive and are common in some areas.

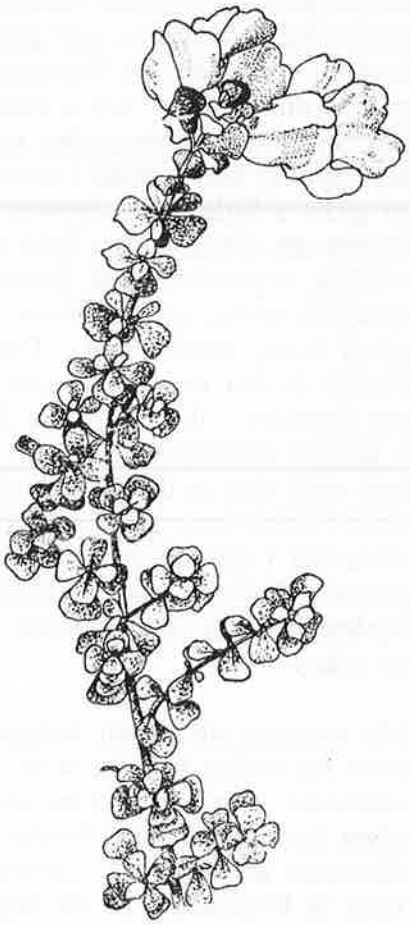
Flower colour polymorphism is most frequent in flowers that are shades of pink, purple or blue due to anthocyanin pigments. In some species there is a distinct cline between white flowers at higher altitudes, through mixed populations, to all coloured lower down. Other species have all populations polymorphic, and yet others just some. The author (A.J. Richards) suggests this is correlated to the pollinators present - most species involved are insect pollinated. In areas rich in pollinators there is an advantage in being all the one colour to encourage specialist pollinators who are less likely to work pollen on another species, whereas a range of colours can attract pollinators when there is either a low density or diversity of pollinators. It has been shown in field work that in various insect species, within that species there may be very selective or non-discriminatory individuals as regards flower colour.

I will be trying to watch for pollinators

next flowering season, although the garden is an artificial situation. I certainly will not have any means of marking individual insects so that I can see what colour they like.

I have remembered too, while doing this summary, about Hydrangeas and pH affecting colour. The Brachycomes tend to have much the same colour range as Prostantheras, when they are not white, and some of these occur in different colour forms. I am not too sure how much mixing of the populations occurs. An experiment has been tried with *B. augustifolia* and iron or alum as used for hydrangeas and with the same result. I have been given pink forms of *B. multifida* which seem to go purple in my soils. Is anything known about colour stability with Prostantheras? My impression is that each form is reasonably stable, but *P. lasianthos* 'Kallista Pink' seems to come with varying strengths of pink, and I had wondered if it depended on the amount of sun received. There are always so many unanswered questions!

*****



Prostanthera cuneata — the Alpine Mint Bush. A shining-leaved divaricate shrub confined to the snowy uplands of three Eastern States. Flowers are large, white with many violet or purple blotches in the throat. It grows to one metre in height.

UNDER THE LENS

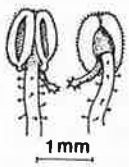
The Stamens of Prostanthera

Barry Conn

The flowers of *Prostanthera* are protandrous (typical of most Labiatae) with 4 epipetalous stamens located between the abaxial and lateral lobes, and between the adaxial lobe-pair and the lateral lobes. They are inserted approximately 8 to 10 mm above the base of the corolla. The stamens are didynamous, with the two abaxial ('lower') ones longer than the two adaxial ('upper') ones.

The staminal filaments are more or less ligulate and 5 to 8 mm long. They are basally curved towards the adaxial surface of the corolla and then extended forward, lying next to the inner adaxial surface of the corolla. The filaments are glabrous, but triangular glandular trichomes are frequently present.

The basifixed anthers are tetrasporangiate and bilocular (having 2 chambers or cells). The basal lobes of the anthers are obtuse or shortly acuminate. Triangular trichomes are frequently present on these lobes. In *Prostanthera florifera, P. grylloana, P. laricoides, P. patens* and *P. aspalathoides* and *P. chlorantha*, the appendage is usually minute (mostly less than 0.3 mm long) and so, frequently appears absent. The appendage usually has a few triangular trichomes, particularly at or near the apex. The anthers are mostly obtuse to slightly emarginate apically. Dehiscence is introrse by longitudinal slits. Further details



stamens- *Prostanthera florifera.-*

on how dehiscence is actually affected is discussed in the article on Pollination.

The anthers are held within the corolla, just short of the apex of the adaxial lobe-pair, and in effect are not exserted, or if so then only partially. The two abaxial anthers are distal to the adaxial pair (Fig.

1). Laterally, one abaxial and one adaxial anther are juxtaposed (Fig. 1B). The two abaxial anthers are positioned such that the ventral surfaces (dehiscence zone) of each are in contact (Figs 1 & 3). The adaxial pair is similarly arranged. The stomium (opening) of each anther remains in contact with its opposite equivalent until dehiscence is completed. The distal abaxial pair matures first and usually completes dehiscence before the adaxial pair. Once dehiscence is completed the stamens separate and relocate (separately) next to the inner surface of the abaxial parts of the corolla tube. This is illustrated in figure 2A-C, for section *Prostanthera*. At this stage, the anthers are often exserted between the lateral and abaxial corolla lobes.

Disc and Gynoecium

The more or less cylindrical disc is usually 0.5 to 1 mm long. The 2-carpellate gynoecium, which is distal to the disc, is superior, glabrous, and 20 to 30 mm long. The 2 locules of the ovary are further divided by a false septum, so that the ovary appears to be 4-locate (i.e. appears to have 4 chambers). The ovary is 4-lobed and, although the style is frequently regarded as gynobasic, it is terminal. This arrangement is found in the Prostantheroideae and in *Ajuga* (Ajugoideae). All other subfamilies of the Labiatae are usually regarded as having the typical gynobasic style. Although the style appears to be gynobasic in the Labiatae, it is the rapid growth of the four ovary lobes that result in the style becoming deeply sunken in between these lobes. The distal lobing of the ovary is often obscure, especially when the ovules abort. Although the placentae appear axile, it has been have shown that the Labiatae have a 'placentation which is neither true axile nor true parietal, but [is] an intermediate condition between the two'. The septum development is typical of that found in flowers with axile placentation, except that the two placental ridges arise from the inner lateral walls of the ovary (at the fused margin of the two carpels), which is typical of parietal placentation. The ovules are anatropous, laterally to sub-basally attached on their ventral surface, two per carpel (appearing solitary because of false-septum), unitegmic and tenuinucellate (which is characteristic of the Labiatae). The stigma is shortly bifid distally.

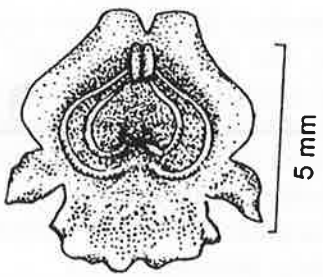


Fig. 3. Flower of *Prostanthera calycina*

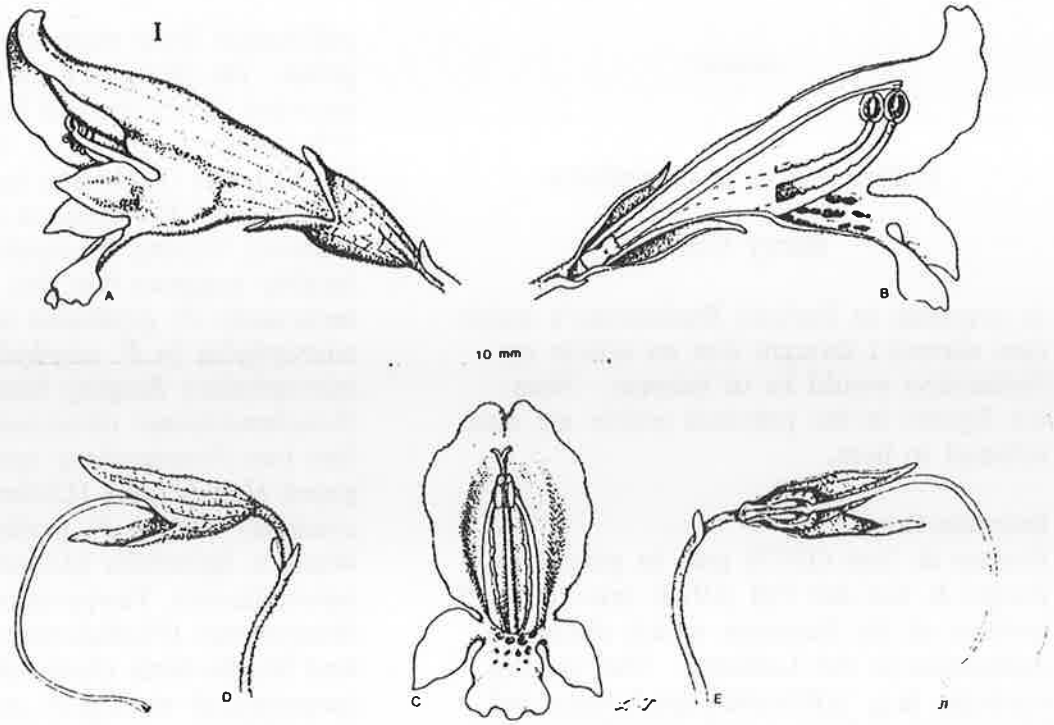


Fig. 1 Flower & fruit of *Prostanthera aspalathoides*

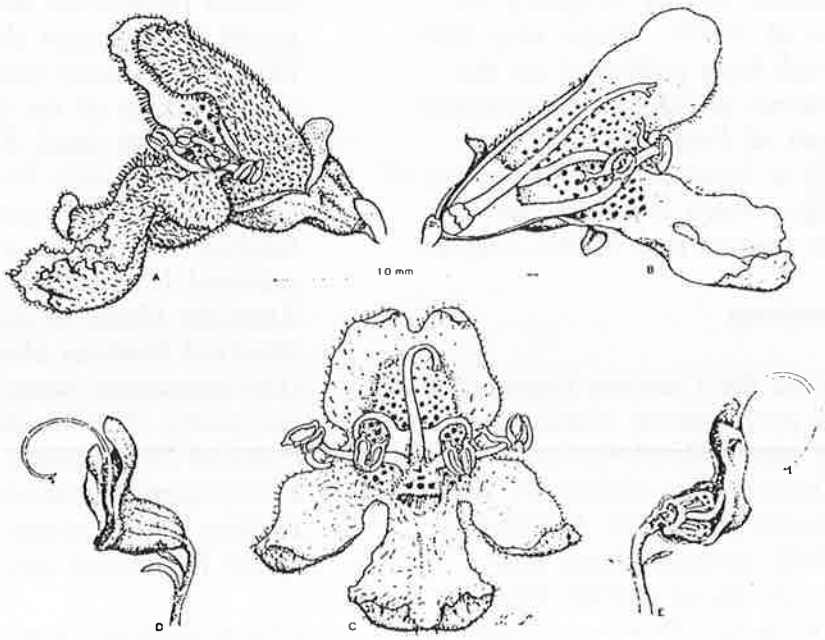


Fig. 2 Flower & fruit of *Prostanthera lasianthos*

*****

Pollination in Prostanthera

Barry Conn

In response to Barbara Buchannan's article (see above) I thought that an article on Pollination would be of interest. Note: the figures in the previous article are also referred to here.

Introduction

Proctor & Yeo (1973) and, in particular, Faegri & van der Pijl (1979) provide brief reviews of the literature which discusses pollination in the Labiatae. The various concepts (e.g. pollination syndromes and blossom types) are mostly based on northern hemisphere species. Neither book mentions *Prostanthera* or the other genera of the Prostantheroideae. The only publication on pollination in the Prostantheroideae was by Keighery (in Armstrong *et al.* 1982). Since very little information has been published on the breeding systems, pollination mechanisms and pollinators of *Prostanthera*, our understanding is incomplete. The extent of our knowledge, which is mostly very superficial, is summarised in this chapter.

Field observations

I have observed the Crescent Honeyeater (*Phylidonyris pyrrhoptera*) visiting flowers of *P. walteri* (sect. *Klanderia*) and unidentified honeyeaters visiting *P. florifera* and *P. monticola* (both sect. *Klanderia*). Keighery (1980) recorded three bird pollinated *Prostanthera* species from the South West Botanical Province (Beard 1980) of Western Australia. However, the method used for determining actual pollination from mere visitation is not given. He (Keighery, *in litt.*) has recorded White-fronted Honeyeaters (*Phylidonyris albifrons*), Brown Honeyeaters (*Lichmera indistincta*) and White-eared Honeyeaters (*Lichenostomus leucotis*) visiting *P. aspalathoides* [the locality suggests that this species is *P. incurvata*]. *P. grylloana* and *P. microphylla* (= *P. serphyllifolia* ssp. *microphylla*); Singing Honeyeaters (*Linchenostomus virescens*) visiting the first two *Prostanthera* species; Purple-gaped Honeyeaters (*Lichenostomus cratitius*) visiting *P. grylloana*; and Western Spinebills (*Acanthorhynchus superciliosus*), Tawny-crowned Honeyeaters (*Phylidonyris melanops*) and Red Wattle-birds (*Anthochaera carunculata*) visiting *P. microphylla* (= *P. serpyllifolia* ssp. *microphylla*). The only other published report was by Ford *et al.* (1979), who recorded bird pollination (at least in one species) in the Labiatae. Ford (*in litt.*) verified that Black-eared Miners (*Manorina melanotis*), Purple-gaped Honeyeaters and White-fronted Honeyeaters have been observed feeding on the nectar of the flowers of *P. aspalathoides* (sect. *Klanderia*). He also collected probable *Prostanthera* pollen from two Purple-gaped Honeyeaters, one Singing Honeyeater and one Tawny-crowned Honeyeater from Monarto, South Australia (Ford, *in litt.*). Watts (*in litt.*) observed Fuscous Honeyeaters (*Lichenostomus fuscus*) and less frequently, Red Wattle-birds, Tawny-crowned Honeyeaters and Yellow-tufted Honeyeaters (*Lichenostomus melanops*) feeding on the nectar of *P. aspalathoides* in the Inglewood area, Victoria.

I have observed bees visiting flowers of *P. behriana, P. lasianthos, P. ovalifolia, P. rotundifolia* and *P. striatiflora* (all sect.

Prostanthera). Keighery (1980) recorded eleven insect pollinated *Prostanthera* species, two of which, *P. eckersleyana* and *P. wilkeana* (both sect. *Prostanthera*), were visited by bees and wasps (Keighery, *in litt.*).

The structural floral differences between the flowers of the two sections (Figs 1 & 2) strongly reflect the presumed pollen vectors. Although the pollen vectors appear to be different for each section, the actual mechanism of pollination is thought to be probably very similar throughout the genus.

Pollination mechanism in section *Klanderia*

Birds feed on the nectar produced by the disc, at the base of the gynoecium. As the beak and part of the forehead of the bird enter the flower, the staminal filaments are displaced laterally. This also causes the anthers to be laterally displaced, thus exposing the pollen within the locules. As the bird's beak and forehead brush past the exposed pollen, which is slightly sticky, the pollen is transferred to the bird's beak. When the bird withdraws from the flower the anthers return to their initial position with the dehiscence zones in contact. The lateral displacement of the anthers (hence filaments) is achieved in two ways. Firstly, the corolla mouth is usually narrowest between the lateral lobes. Therefore, the pollen vector comes in contact with the lateral parts of the corolla. This lateral distortion of the corolla actually shortens the distance between the abaxial and adaxial lobes. This shortening brings the anthers into closer contact with the pollen vector. Secondly, this lateral displacement of the anthers is also achieved by the presence of an anther appendage(s). The appendage is more or less orthogonal to the shortest axis of the corolla mouth. This ensures that the pollen vector will laterally displace these appendages (and hence, the anthers) while probing the flower for nectar. Triangular trichomes are frequently present on the more distal parts of the filaments and on the basal lobes of the anthers. These trichomes probably improve the contact between the stamens and the pollen vector. It is envisaged that this may assist in the dislodgment of the pollen from the locules and so, may result in improved pollen transfer. A similar mechanism occurs in *Dicerandra* (Labiatae) from the southern United States of America. The anther appendages (spurs) in this genus (particularly those of *D. odoratissima* which show many similarities to those of *Prostanthera*) ensure an efficient transfer of pollen.

Pollination mechanism in section *Prostanthera*

The main floral structural difference between this section and sect. *Klanderia* is that the flowers of sect. *Prostanthera* have the shortest axis of the corolla mouth between the abaxial and adaxial lobes, not between the lateral lobes. There is still some lateral distortion of the corolla as the pollen vector enters the flower (particularly with Honey bees). However, further comment at this stage would be premature, since more detailed observations are necessary.

*****

*****

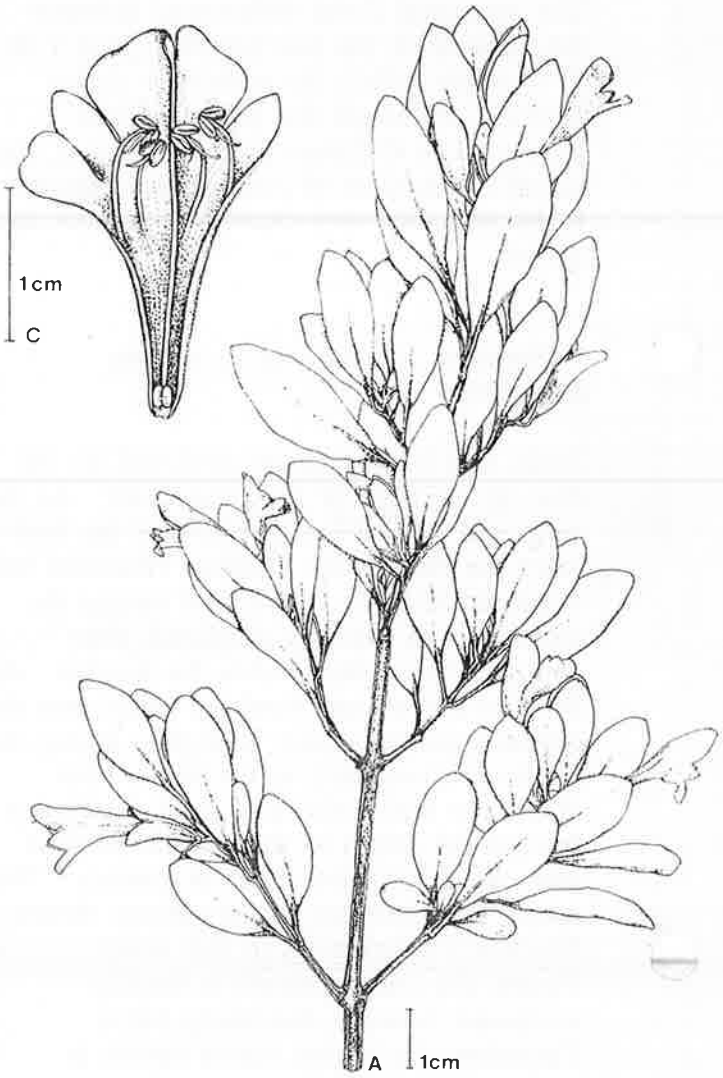
Hemigenia cuneifolia

George Althofer

I have come across this species a number of times over the past 20 years. My first finding was in the Pilliga State Forest just off the Coonabarabran-Narrabri Road. At around 12 miles on the above road, a branch road (unsealed) takes off to Baradine. Approximately 300 yards along this road near the top of a small undulation I noticed this rare plant. There were plants on both sides of the road and they ranged in height from 3 to 6 feet. The plants were rather untidy but at the time were well-covered with many small flowers. I sent a specimen to Sydney Herbarium who quickly identified the plant as *H. cuneifolia*. Since this find my brother Peter came on a goodly number of plants of this species just off the road from Dubbo to Mendooran, Goonoo State Forest. Some years before this I had again found this species west of Goonoo Forest on private property on a track about 3 miles east of the Dubbo-Gilgandra Road. All finds were on sandy country.

*****

Prostanthera porcata Conn, *sp. nov.*



Distribution

New South Wales (South Coast).

Conservation status

The conservation status of this species is not known. However it may be endangered or vulnerable since its distribution is very localized—Risk code = 2K,C.

Ecology

Occurs in open *Eucalyptus agglomerata-E. sieberi* forest, with *Casuarina littoralis* and *Eriostemon myoporoides*, on steep rocky slopes with skeletal sandy loam soils on metamorphosed sandstone and conglomerates. Altitudes 450-500 m.

Notes

This species is characterized by the 4-ridged quadrangular branches. The relatively large leaves and glabrous inner surface of the calyx suggest affinities with *P. walteri*.

CORRESPONDENCE

Dear Brian,

I am prompted to write now because I have been unable to get any reference that may help overcome a problem with *W. fruticosa* at Yamba N.S.W. on coastal sand hill in Salt zone conditions. We have been trying to establish a garden and have *W. fruticosa* as one of our front line plants. To counter the salt I have an automatic spray system that goes for 5 minutes both night and morning whenever there is less than 5 mm of rain in the previous few hours.

One metre high plants previously in good condition now slight yellowing at tip leaves, followed by browning of leaves and stems and the whole branch dies. There has been a lot of rain but with very sandy soil and a steep slope the plants are not waterlogged.

Rob Cuninghame
Deepwater, N.S.W.

[I think Robert Miller's article 'Fertilising Prostanthera & Westringia Study Group Newsletter No.13 Page 6 could explain Rob's problem. Also remember, these plants normally occur within the salt-spray zone, so water should not be a critical factor].

..... this year I have lost three plants of *P. rotundifolia* rosea from attack by root borers. Is *P. rotundifolia* more prone to attack by these pests than others? Remaining Prostantheras are looking healthy and showing promise of a lovely spring show.

Valerie McConchie
Emerald Victoria

[I do not know. Has anyone any experience with this problem?].

Although our garden has a small number of Prostantheras and Westringias scattered through it they reward us magnificently all year round. *Westringia fruticosa* and *Westringia* "Wynabba Gem" make magnificent hedge plants and flower in spectacular fashion for a great length of time. *Prostanthera* "Poorinda David"

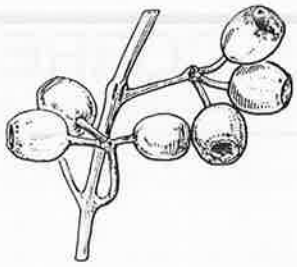
mixed with ferns is truly incredible and *Prostanthera rotundifolia* mixed with *Grevillea lavandulacea* and *Boronia heterophylla* provide a spectacular contrast. As I hack my way out the back door through the "nivea" [? *Prostanthera nivea* - eds] tree I am continually amazed at the length of flowering time of some of the Westringias and Prostantheras. I am also curious to know how Prostanthera discolor received its name. What a magnificent feature it and *P. magnifica* are to any garden. Thanks Brian for keeping us interested and involved.

John Rooke
Casterton, Victoria

[In the case of this plant, *P. discolor* the upper and lower surfaces of the leaves are different colours].

*****

I will put in a few extra notes to the brief article of *Hemigenia cuneifolia* that is published in this issue of the *Newsletter*. These are based on my observations, made some years ago, when I first sighted *H. cuneifolia*. I have since found another group of these plants on private property on the western approaches to Goonoo State Forest, about three miles east of Dubbo N.S.W. Glad to see that *Prostanthera althoferi* is at last official.



Eucalyptus gongylocarpa.

I am also glad to welcome another new *Prostanthera*, *P. verticillata*, and what a find this was, a whorled leafed species! Almost beyond imagining. Glad to see that it was another product of the industrious life of my late dear friend Ken Newbey. May he long rest in peace - the peace of a life well spent. I note that the only record of this was from Ken's collection near Albany. Could we ask that members living in that area keep an eye out for this rarity. I collected extensively in that area on my three trips to W.A. but no sign of this plant. I note that Robert Miller found only the common mauve form of *P. teretifolia* at Torrington but on two of my trips to the area I found plants of the deepest coloured flower form I have ever seen.

George Althofer