

S.G.A.P.  
PROSTANTHERA STUDY GROUP NEWSLETTER

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LEADER  
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Dear Study Group Member

NEWSLETTER:- Sorry to have been so long in writing a newsletter but I have not been in good health (open heart surgery) early in the year and have not felt like writing since. Further points on the newsletter is I cannot give you information if you are not prepared to write to me and send any news what-so-ever whether relating to growing mints, new findings or any other news you may consider of interest to other members (see later item). Then again evidently some people do not read their newsletters. As on the last one October 1981 it was stated fees were due for 1982. As of now there are still some members unfinancial I don't intend to say who is or is not, READ your last newsletter and let your conscience tell you whether you have paid or not.

FEES:- In future fees will become payable each March. All new members after this date will automatically receive previous newsletters for current year.

Also owing to the fact I Do Not have a bank A/C for Prostanthera Group would you PLEASE send all cheques or money orders to L.W. Taylor not to S.G.A.P. as I often have trouble cashing same.

CORRESPONDENCE:- Would all members writing or sending money or information PLEASE PRINT NAME & INITIALS & PLANT NAMES as not everyone is a good writer and it is very hard at times to decipher what has been written.

DONATIONS:- Were received from Mr C Tebbutt (U.S.A.), Mrs Leila Huebner Nelson (Vic), and Victoria Region S.G.A.P. Total \$6-00.

CUTTINGS:- Early this year a request for cuttings was received from Mrs Leila Huebner of Nelson Vic.

I sent the cuttings, each set of species wrapped loosely in wet newspaper (usually 2-3 sets to a double newsheet) then the whole lot wrapped again in wet newspaper, then place in a plastic bag. This was then placed in an Australia Post padded bag (which is obtainable from Post Office in various sizes). This was then sealed and sent by Priority Paid post. Two days later I received a letter from Nelson with the following details-

"The parcel arrived with the Wednesday mail when I picked it up the condition of every cutting was excellent. The freshness and turgidity of the leaves and terminal shoots were really crisp. Your method of loosely wrapping damp newspaper around each specie and keeping the actual cuttings loose in their bundles and wrapping further damp newspaper around the lot placing in a plastic bag ensured their normal respiration without loss of moisture vapour. I have no doubt the the cuttings under those conditions would have lasted well in excess of a week without too much loss of vigour.

Years ago, as part of my studies I knew a little about organic chemistry and although I've forgotten the actual details involved in the chain reaction of decarbonylation of fresh green material, I do remember that certain bacteria (Aenairobes) become active when all air is displaced from "ensiled" material, with consequent chemical reactions taking place- heat being initially created, but of a lot lower temperature than in "composting".

The resultant black, dryish sweetish smelling material is called "Sillage".

(We have other name for the spoilt cutting materials).

Les Taylor  
Leader

THE GENUS PROSTANTHERA

Enclosure

by George Althofer.

One or two notes re the essential oils of the Prostanthera have been handed to me by Dr. E. Lassak of the Biological and Chemical Research Institute of Rydalmere N.S.W. (Formerly Museum of Applied Arts and Sciences). I thought some of the results might be of help to you in your study of the GENUS, this is what he had to say:-

"We have now completed the distillation of all of the Prostanthera samples. We have also determined most of the oil Constants. The remaining constants will be determined after a gas chromatographic examination of the oils. Since our gas chromatograph is at present out of action, this may take some time. I am therefore sending you a preliminary copy of what we have done so far. I hope to have the final report ready by the end of the year. (1981).

Some of the more obvious and at the same time most interesting results are:

- A. The genus as a whole seems to be characterised by oils rich in 1,8-cineole; maaliol and limonene may sometimes become major components.
- B. P.granitica and P. sp.aff.granitica are readily distinguishable on essential oil content."  
(This leads me to think that the original notion of placing this Pilliga plant with P.granitica is not correct. P.granitica grows in the area but more towards Spring Ridge and northwards to the Queensland border and north of Goondiwindi. The form found throughout the Pilliga-on oil content alone appears to be closer to the P.hirtula and the denticulata group. Superficially though it seems closer to P.granitica G.A.)
- C. "P.gilesii (P.sp.aff.phylicifolia) has a different oil than P.phylicifolia(scented form)."  
(This is understandable, I have always considered that P.gilesii was quite distinct from P.phylicifolia, though the herbarium has never agreed. G.A.)
- D. "The high maaliol content of P.lepidota oil is consistent with its placing in Klanderia rather than Euprostanthera series Concavae- from an old list of J. Carrick."  
(I quite agree with this finding.G.A.)
- E. "The hybrid 'Pixie' seems to have an oil very similar to those of its parents, (P.incana and P. rotundifolia)."

New Members since last Newsletter

- S.G.A.P. Victoria Region % 4 Homebush Cres Hawthorne East. 3123 Vic  
Mrs Margaret Nelson Johnson Rd Koonwarra. 3954 Vic  
S.G.A.P Geelong Group % Mrs E. Vorrath 365 Ryrie St Geelong. 3220 Vic  
Mr J.H. Benham 12 Somerset Square Goonellabah. 2480 NSW  
Mr Gary Hearnes 6 Hildergarde Court Kilsyth. 3137 Vic  
Mrs Jo Walker Study Group Co-ordinator  
16 Blundell St Queenbeyan. 2620 NSW  
B & L James 22 O'Neill St Banorama. 5041 SA  
S.G.A.P. Caulfield & Districts % Mr B Mylius 318 Bambra Rd Sth Caulfield 3162 Vic



Report by DR E. LASSAK  
 Biological & Chemical Research Institute  
 Rydalmere N.S.W

Prostanthera species	Oil yield %	Refractive index at 20°	Optical Rotation at 20°	Density	Main Constituent
aspalathoides	1.47	1.4747	0°	0.9289	1,8-cineole
baxteri	trace	-	-	-	-
baxteri var. crassifolia	trace	-	-	-	-
cineolifera	1.00	1.4773	-	0.8080	1,8-cineole
caerulea	0.13	1.4709	-	-	-
collina	trace	-	-	-	-
cryptandroides	0.69	1.4692	+9.6°	0.9007	1,8-cineole
aff. cuneata	trace	-	-	-	-
decussata	0.66	-	-	-	1,8-cineole
discolor	1.30	1.4800	-	0.9391	1,8-cineole
gilesii	0.16	-	-	-	limonene
granitica	1.21	1.4674	0°	0.9298	1,8-cineole
aff. granitica	trace	-	-	-	-
hirtula	0.12	-	-	-	1,8-cineole
incana	0.86	1.4761	-	0.9309	1,8-cineole
aff. incana	1.10	1.4890	-	-	1,8-cineole
hybrid "pixie"	0.70	1.4741	-	-	1,8-cineole
incisa	1.40	1.4667	+3.1°	0.9161	1,8-cineole
lasianthos	0.80	1.4689	-0.8°	0.9162	1,8-cineole
lasianthos var. subcoriacea	0.13	-	-	-	1,8-cineole
leichhardtii	2.15	oil partly solidified			maaliol
aff. leichhardtii	2.50	oil partly solidified			maaliol
lepidota	3.25	oil partly solidified			maaliol
marifolia	1.14	1.4843	-1.4°	0.9478	1,8-cineole
nivea	0	-	-	-	-
nivea var. induta	trace	-	-	-	-
ovalifolia var. latifolia	0.23	1.4770	-	-	1,8-cineole
aff. ovalifolia (Brundah)	0.70	-	-	-	1,8-cineole
aff. ovalifolia (Khyber)	trace	-	-	-	-
phylicifolia	0	-	-	-	-
phylicifolia (scented)	trace	-	-	-	-
rotundifolia (small leaf)	1.79	1.4776	+20°	0.9377	1,8-cineole
rotundifolia (large leaf)	1.09	1.4844	-24°	0.9602	1,8-cineole
rotundifolia (Obley)	0.60	1.4800	-	-	1,8-cineole
rugosa	1.80	1.4789	-	-	1,8-cineole
saxicola	trace	-	-	-	-
sieberi	1.87	1.4665	-1.2°	0.9204	1,8-cineole
spinosa	0.14	-	-	-	limonene
striatiflora	trace	-	-	-	-
stricta	1.77	1.4696	-	0.9334	1,8-cineole
teretifolia	2.07	1.4829	+45.2	0.9014	limonene