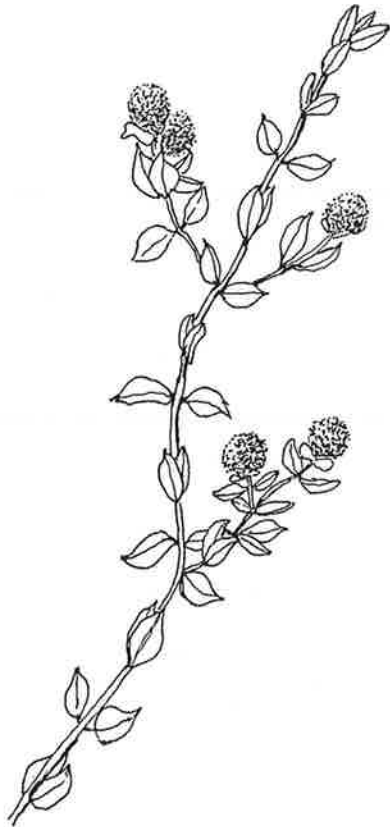


MELALEUCA AND ALLIED GENERA STUDY GROUP

NEWSLETTER NUMBER ONE
ISSN 1030 6633



Conothamnus aureus

MELALEUCA AND ALLIED GENERA STUDY GROUP

Group Leader, Allan Foster
40, Fairfax Road,
Warners Bay 2282.
Phone 049 58 3941

I N D E X

	PAGE
UPDATE	2
LANDSCAPING - GENERAL NOTES AND DESCRIPTIONS	3
- DESCRIPTIONS	4
- PLANT COMBINATIONS IN LANDSCAPING	6
CONOTHAMNUS, A BRIEF DESCRIPTION OF THE GENUS AND THE SPECIES	7
BOTANICAL NOTES	9
BOTANICAL DESCRIPTIONS	10
SEED BANK	14

* * * * *

UPDATE

Well members it has been some time since the last newsletter, my apologies for the delay, it was due to a number of factors; finance, time and changes to the structure of the Study Group.

The financial problems experienced in putting out the newsletter have been alleviated due to a generous donation from one of our members, Derek Arnall and my sincere thanks go to Derek for his donation. Also our financial situation has been enhanced by the proceeds of plant sales. These proceeds have been used to purchase extra seed for the seed bank. We have now started a Slide Library with a donation of \$50 from the Newcastle Group, and our thanks go to the Newcastle Group for this donation and their assistance with the plant sales.

The time factor has been and will continue to be influenced by family, work and study commitments - I am sure members understand my predicament.

The structural changes have already been foreshadowed and we are now a new study group "The Melaleuca and Allied Genera Study Group" and this is the first newsletter. At the present time there is an investigation by the Federal and NSW Councils into study groups and ways and means of improving them, with the NSW Council aiming to complement and supplement any Federal decisions, by supporting Groups with the Group Leader resident in NSW. There is a realisation by both bodies that Study Groups contribute significantly towards a better understanding of Australian Plants, through their study programs, their collection and supply of plant material for propagation, their collections of photographic material and sources of information.

The investigations are looking at ways of funding slide collections, possibly live collections of wild source materials, possibly field trips, seed purchases, reports and newsletters, data banks and any other matters which will improve Study Groups.

I will keep you up-to-date on the progress of these investigations and decisions as they are made. I would invite any member to make suggestions as to how we may improve our Study Groups.

Could members please note that subscriptions are due in June.

LANDSCAPING

When we talk of landscaping we must bear in mind a basic rule which applies to landscaping - select the right plant for the right place! It sounds basic and we must bear in mind, what is the right plant and what is the right place? The right plant is the plant which best suits the functions desired, whether it be a screen plant, a foliage plant, one selected for flower, aroma or leaf texture. The right place is the set of conditions under which the plant grows best, considerations include sun, shade, drainage, soil type, aspect, traffic and other related criteria.

Let us now look at some of the functions and conditions under which plants of the Genera we study have been proven.

GROUNDCOVERS: There are only a few suitable, they include:

Melaleuca violacea,

Callistemon citrinus 'white prostrate form' and

Callistemon phoeniceus 'prostrate',

the latter being a very interesting plant with its rich red flowers, growing 1m high by 3m wide and if pruned hard when young, it will provide a dense cover.

ROCKERY PLANTS: Includes many of the dry country Melaleucas including M. glabberima, holosericea and platycalyx, the latter being a dense shrub .6 - 1.2m, with blue-green leaves, rose-pink to mauve flowers between October and January.

SCREEN PLANTS: Quite an extensive list of plants all of which are dense to the ground and include:

Callistemon citrinus and salignus,

Melaleuca armillaris, bracteata, decora, decussata,

densa, elliptica, ericifolia, huegelii,

incana, lanceolata, laterita, linariifolia,

nesophila, nodosa, radula, squarrosa,

uncinata,

also several others need particular mention:

* Callistemon pachyphyllus .5 - 3.5m x .5 - 1.5m, it likes a moister position, flowers are red (a green form has been recorded), flowering Spring to Autumn,

* Callistemon shiresii 4 - 9m x 3- 4m, very hardy, tolerating all sorts of conditions, may be slow growing, white to cream flowers, Spring and Summer,

* Melaleuca conothamnoides 1m x 1m, needs a well drained position, it has purple to red flowers, which fade to white during Spring, and lastly Melaleuca hamulosa 2 - 3m x 2m, flowers are white to cream or pink to mauve, in Spring and Summer, with medium green leaves, adapts to most soils and positions.

HEDGE PLANTS: These are dense to the ground and respond well to pruning, they include:

Melaleuca densa, fulgens, micromera, pulchella,
steedmanii, thymifolia wilsonii,
Callistemon siberi and subulatus.

Melaleuca densa is an interesting plant, being compact 1 - 2m x 2 - 3m, with small dense heads of cream to yellow flowers, in Spring and Summer, very hardy in most positions.

WINDBREAKS: These are plants which disperse the wind, rather than block it, they include:

Callistemon acuminatus, citrinus, linearis,
pallidus, paludosus, phoeniceus,
salignus, shiresii sieberi,
Melaleuca acuminata, armillaris, bracteata,
decussata, elliptica, ericifolia, incana,
laneolata, laterita, neglecta,
nesophila, pentagona, radula,
squarrosa viminalis.

Several interesting species are:

Melaleuca (syn Callistemon) viminalis, being a variable species with many interesting forms, some of which are:

'Captain Cook' a 2m x 2m dense bush with red flowers in Spring and Autumn,

'Cedar Creek' 2 - 4m x 2m, a small weeping tree from Mt. Tamborine in Queensland,

'Luster Creek' 4m x 2 - 5m, an erect plant with large leaves, with purple-pink to red brushes in Spring, from Mt. Molloy in Queensland,

'Running River' .5m - 1m x 1 - 2m, with bronze new leaf growth, dense and tolerating dry conditions;

Melaleuca acuminata 3.5 x 2m, cream to white flowers in Spring, very hardy;

Melaleuca pentagona, a very variable shrub with a number of forms, the coastal form being 60 - 90cm x 2m, the inland forms 3m x 2m, with arching branches, all forms have pink to purple flowers in Spring and have bright green, dense foliage.

BADLY DRAINED SOILS: Just about all Callistemons and many Melaleuca's including:

Melaleuca acerosa,	basicephala,	bracteata,	decussata,
densa,	elliptica,	ericifolia,	globifera,
glomerata,	huegelii,	incana,	laneolata,
macronycha,	nesophila	nodosa,	polycephala,
polygaloides,	specigera,	suberosa,	raphiophylla,
retifolia	wilsonii.		

Melaleuca acerosa is a plant of interest, being 1 - 2m x 1 - 2m, with yellow to white flowers (some reports of red flowers have been made), flowering in Spring and Summer preferring a well drained sunny position. Another interesting plant is Melaleuca polygaloides, this is a very hardy plant preferring a moist position, varying in size from 45cm to 3m x 2 - 3m, with spectacular deep yellow flowers in Spring and Summer.

CLAY SOILS: Almost all Callistemons, Melaleuca densa, erubescens, fulgens, micromera, platycalyx, pulchella, spathulata, steedmanii, striata and thymifolia. Melaleuca striata is a many branched shrub 1.5 x 2m, with deep pink flowers in Spring and Summer, a hardy plant apart from needing good drainage.

SANDY SOILS:

Callistemon citrinus,	macropunctatus,	phoeniceus	teretifolius,
Melaleuca calothamnoides,		conothamnoides,	citrina,
cordata,	laxiflora,	leptospermoides	megacephala,
pentagona,	seriata,	striata,	suberosa.

Several of these are very interesting plants;

Melaleuca calothamnoides, an erect shrub 1.2m x 2m, with large green flowers changing to red in summer, it needs full sun and very good drainage;

Melaleuca leptospermoides, a compact shrub to 1m rich purple-mauve flowers in Spring, prefers a well drained, sunny position; and

Melaleuca suberosa, 20 - 50cm x 30 - 60cm, open woody shrub, with spectacular mauve flowers, with yellow anthers in Spring, a very hardy species, which also grows on clay.

DRY CONDITIONS:

Callistemon brachyandrus	macropunctatus	phoeniceus	teretifolius,
Melaleuca densa	fulgens	gibbossa	macroncyha
scabra	sclerophylla	thymifolia	wilsonii

Most interesting is *Melaleuca scabra*, a variable species, which may be divided into several separate species or sub-species. It varies in size from .2m - 1.2m by .6m, with rough grey-green leaves and deep pink to reddish purple flowers in Spring - it requires good drainage.

We can find from the above plants listed under various headings that there are a large number of plants which we can grow under varying conditions.

PLANT COMBINATIONS IN LANDSCAPING

Below are some plant combinations using the Genera we study combined with other Genera.

Callistemon paludosus with Grevillea dimorpha and sericea.

Melaleuca viminalis and Grevillea paludosus with Grevillea linearifolia and sericea.

Melaleuca erubescens, laterita, wilsonii and Callistemon brachyandrus with Calothamnus gilesii, quadrifidus.

Melaleuca decussata, gibbosa, thymifolia, violacea with Darwinia citriodora.

Melaleuca squarrosa, huegelii, steedmanii, violacea, wilsonii with Leptospermum squarrosum, Regelia ciliata.

These are a few of the many combinations, perhaps members would like to pass on some of their favourite plant combinations using Study Group species.

CONOTHAMNUS, THE GENUS - A BRIEF DESCRIPTION

Small shrubs with small rigid, opposite leaves, 1 - 3 nerved; terminal flowers with globular heads, with 5 orbicular petals; prominent stamens; 3 celled capsules, enclosed in an enlarged calyx - differs from *Melaleuca* which have only 1 ovule in each cell of the ovary, an endemic genera of 3 species from Western Australia, in the Southwest Botanical province.

THE SPECIES

CONOTHAMNUS QUREUS (syn *divaricutus*)

.3 - .5m x .5 - 1m, a dwarf shrub, with many branchlets; leaves ovate-lanceolate, rigid and blunt 1cm x .5cm, opposite, with 1 nerve, hairy; globular flower heads, terminal 1cm in diameter, golden yellow in colour, no petals, flowers August to November.

It occurs in deep sandy soils, so will require a well drained position in the garden or a large container, prefers full or partial sun. Tolerates dry periods. Responds well to pruning.

Propagates from seed or cutting, is the most commonly cultivated species of the Genus.

CONOTHAMNUS NEGLECTUS

.3 - .6m x .5 - 1m., a dwarf shrub with many branchlets; leaves oblong-lanceolate, 1m - .2 - 3cm, opposite, silking hairy; globular flower heads, terminal, 1 - 2cm across, yellow in colour with petals, flowers August to October.

Grows from the coast to the Stirling and Porongaries Ranges. Needs a light to medium well drained soil, in dappled shade to full sun, may be tried as a container plant.

Propagate from seed or cutting, not commonly cultivated.

CONOTHAMNUS TRINERVIS

.3 - 1m x 1m, a dwarf shrub, with many rigid branches; leaves lanceolate to oblong-lanceolate 1 - 3cm x .5cm, 3 nerved, rigid, with a pungent apex; globular to avoid flower heads, terminal, 3cm across, white in colour sometimes white and purple, with a hairy calyx tube.

Grows in the sandplains north of Perth, hence it will require a very well drained soil.

Propagates from seed or cutting.

Sources: Flowering Plants in Australia, edited by B. Morley, H. Toelken, Rigby: Adelaide 1983.

Encyclopaedia of Australian Plants, Vol. 3, R. Elliot, D. Jones: Lothian, Melbourne 1984.

BOTANICAL NOTES

As I reported in the last newsletter, I will be explaining botanical terms. I will select special species and do a separate sheet on each species with botanical and cultural notes and I will explain the botanical terms used in the description. The species selected are:

Melaleuca groveana, thymifolia, viminalis (syn Callistemon viminalis)
viridiflora var subriflora (syn quinquervia),

below are the terms which are used:

- acute - The apex or end of the leaf forming a short point.
axillary - Growing from between the leaf stem and the branch, stem or other leaf stem.
calyx - The sterile appendage of a flower receptacle, made up of sepals, the sepals being the leaf-like, petal-like lobe or tooth or scale below the petal.
claws In this case a connotation of fusing of filaments, the stem supporting the anther.
elliptical- a leaf which tapers equally at both ends, the broadest in the middle, and from 2 - 3 times as long as broad.
glabrous - without hairs, smooth.
opposite - two or more leaves joined at the stem exactly opposite the other.
ovate - A leaf which is almost elliptical, except the basal or bottom half is broader than the top half.
stamens - The male section of the plant flower consisting of the pollen bearing anther and filament.
terminal - At the tip of the apex, the end.

Acknowledgements:

- Format Alex George, "The Banksia Book", Kangaroo Press 1985
Ivan Halliday, "Descriptions of Melaleuca for South Australia"
- Botany Norm Byrnes, "A Revision of Melaleuca in Northern and Eastern Australia" 1, 2 and 3, Austrobaileya 1984-86.
Weir, Stocking, Barbour, 1974, John Wiley and Sons, Sydney.
Beadle, Evans and Carolin, "Flora of the Sydney Region", 1978
Reed, Sydney
C. Debenham, "Language of Botany", bound with volume 5
Australian Plants 1968-70.

MELALEUCA GROVEANA.



Description.

A shrub or a small tree to 10m. high, bark layered, papery and fibrous; becoming hard.

Leaves flat narrowly elliptical and acute. 3 veined, oil glands visible underneath.

Inflorescence an open terminal spike, petals white, broadly ovate, stamens white; claw 1-3mm long.

Fruit barrel-shaped, 4-7mm. long and wide.

Distribution.

Eastern Australia on central and coastal highlands from central Qld. to north coast of N.S.W., widely scattered, in very disjunct populations.

Cultivation.

Not widely grown, generally grows in well drained sites, but may grow in other situations. Flowers well during Spring and is a fairly densely foliated bush, so it definitely has horticultural potential. Propagation by seed or cutting has proven successful at limited times of the year, but more work needs to be done to determine optimum time and method.

MELALEUCA THYMIFOLIA.



Description.

A shrub usually to 1m. tall, occasionally to 6m., multibranched from a lignotuber, bark corky and flaking. Leaves are opposite, flat and concave above 5-15mm long, 1-3mm wide, glabrous or thinly pubescent, 3 veined. Flowers are usually in a few flowered dense axillary spike, often on older wood. Petals pink to purple, occasionally white, ovate with a distinct claw, 4-5mm. long, the main flowering period being Spring, but with occasional periods during the year. Inland forms usually have larger flowers. Fruit cup or barrel shaped, 4-5mm. long and wide, including persistent calyx lobes.

Distribution.

Occurs in Eastern Australia from central coastal Qld., inland to the Carnarvon Ranges and south to the south coast of N.S.W.

Cultivation.

Naturally occur in a variety of soils in moister situations, and has adapted well as a garden specimen. Flowers best in a sunny position. Light tip pruning will assist in retaining bushy shape. Propagation is by seed or cutting, seed can be set most of the year, but Spring seems to be the best time, use the oldest capsules to obtain seed, the "bog method" seems to be the best method of propagating from seed. Cuttings are best taken outside of the flowering period, during the growing season, I have found the best time to be late Winter or early Spring, as this sometimes coincides with the flowering period I have to remove buds,, small cuttings 100mm. are taken with a large cut being made, hormones do assist