

## GREVILLEA STUDY GROUP

Newsletter N<sup>o</sup> 28

### A Message from the Leader

Welcome to 1991 which we hope will be another interesting year for the Grevillea Study Group.

This is an appropriate time to reassess the function and aims of the Group and its constituency. In recent times the Group has not achieved its goals, partly because I, your leader, have failed to give sufficient direction. Thanks to an extremely competent editor in Christine Guthrie and the large number of members offering supporting correspondence, we manage to produce a fine newsletter (in my opinion).

Of late, the view seems to have emerged amongst the Society for Growing Australian Plants generally that the Study Group exists to answer questions, supply display plants and correspond with all and sundry about identifications, hybrid parentage and "how to grow, where can I buy and why did it die" type questions. Most of this burden falls on the leader and while it is understandable to a limited degree, especially in view of the popularity of the genus *Grevillea*, this type of correspondence and function are essentially peripheral and do not add anything new to our knowledge. This is not what the Group was designed to achieve. The leader is a coordinator, and organiser if you like, not the fount of all knowledge.

Really it is the member's written report which makes the greatest contribution. Sure, we gathered in a group because we love the genus and want to grow them in our gardens. We enjoy talking to those with similar interests and lasting friendships often result. But we could achieve much more.

Some years ago, I tried to encourage members to take up the study of one species. The report from Neil Marriott on *Grevil-*

*lea aquifolium* and Ian Evans on *Grevillea obtecta* were outstanding and a model for others to copy but where are the rest?

I would like to re-encourage members to begin this task. Perhaps, you feel unqualified. Then, I can give you guidelines and provide information on distribution etc.

Still too daunting? What about a short report of a trip you have undertaken and the Grevilleas you saw. What are the birds which visit your Grevilleas or, more importantly, what birds have you observed visiting wild plants in your area? In what soil and conditions do you grow your plants? How long have they lived? Which one is your favourite and why?

#### Our current situation

The Grevillea Study group is by far the largest study group with over 220 members at a recent survey. It consists of members who correspond by way of a newsletter with reports of their activities, their studies and their interests.

Study Groups thrive on their active membership and while passive members are necessary to finance the operation, they are secondary to its main function (none the less, you would be surprised how many passive members need to have questions answered). The results of the Groups' achievements are documented for all to read. Even if written observations are wrong, this will provoke some discussion, which will, one hopes, eventually lead to the truth.

(Continued inside)

#### INSIDE

- A MESSAGE FROM THE LEADER (cont)
- *Grevillea calliantha*
- IN YOUR GARDEN
  - On *Grevillea alpina*
  - Grevilleas in SE Queensland
- NEWS IN BRIEF
- VALE HARVEY SHAW
- PARTS OF THE FLOWER
- BUSINESS REPORT

#### ACTIVITIES

##### Saturday May 11

from 4.00pm at the home of Christine Guthrie and Bruce Moffatt, 32 Blanche St, Oatley 2223. A chance to get together at last. Neil Marriott will be in Sydney, so here's an opportunity to view some of his magnificent slides. Bring your own BBQ dinner if you come early or just come for the slides at 7.00pm

##### October

We are hoping to organise a garden crawl to some of our members' gardens in the Blue Mountains. More details in the next newsletter.

So then, in what direction should our work proceed. Your suggestions are invited. Some projects which could be of lasting value might include:-

#### **Pollination:**

a study of the likely pollinator of a wild species in your area, requiring observations on bird and insect visitation, including collection of all insects and their subsequent identification (perhaps by the Museum).

For example, it is widely held in the Sydney area that *Grevillea sericea* is bird-pollinated and this may be true. Yet I have never seen a honey-eater attend the flowers on plants in my garden even though the species is endemic locally. Yet the plants do set seed there. Perhaps a simple experiment might assist. Cover the flowers with bird wire and see if they set seed. We know that *Grevillea sericea* hybridises with *G. speciosa* in certain areas of earth disturbance. But how is the pollination effected and by what?

All wild species can be studied along these lines. As your study proceeds, send in the reports for publication.

#### **Seedlings:**

We can possibly learn a great deal about evolution from seedlings. Indeed we can identify species from their seedling leaves. Yet, very little work has been done in this area in *Grevillea*.

One project envisaged entails the collection of wild seed (perhaps even using seed from the seed bank). Germinate it and press the seedlings at various stages of their development. These could then be forwarded and become part of our expanding herbarium.

#### **Seed Germination:**

Another project involves experimenting with germination times of seed.

Take 100 seeds of a species and germinate. How long does each seed take to germinate? What is the viability in percentage terms? This would involve a daily count, determining what constitutes a successful germination etc. Fairly basic and easy to organise.

#### **Reference collection:**

Recently, Tony Cavanagh produced a computer list of all articles written in the last few years in which the genus *Grevillea* was mentioned. Perhaps someone could follow this up, photocopy the relevant articles, and forward them to the leader/newsletter editor. Better still, you could summarise the findings and forward an article usable in the newsletter as well as the original. Provided due accreditation to the original researcher is acknowledged, a valuable service would be rendered to the group. (See article on dispersal of seed by ants in next newsletter)

#### **Seed Collection:**

We need a collection of seed for all *Grevillea* species to be incorporated in our herbarium. This seed should be collected from wild sources, or from known wild source plants in the garden and should include a mounted dried specimen of the foliage, flowers, fruit and seed. Can you contribute towards this collection?

#### **Wood Collection:**

In addition to seed, we need a collection of bark and wood of all *Grevillea* species for the herbarium collection. The wood should preferably be cut in thin cross-sections and mounted.

#### **Audio-Visual:**

For some time we have talked of getting together an audio-visual, hopefully of the same standard as that produced by Mr Fred Johnston and Ms Betty Rymer on *Banksias* for the Sydney Wildflower Exhibition in March 1988. This could be loaned to Groups, individuals and State bodies for use in their activities. Perhaps a member would try to coordinate this. I can provide slides. NSW Region will supply funds.

#### **Species Report**

Why not attempt a species study culminating in a written report or project.

Areas to cover might include:

#### **History:**

Who discovered the species, who first described it, where is the Type specimen located, who collected it.

#### **Synonymy:**

Have any other species been described which have later been placed in synonymy? Do these represent populations which for this species are in fact quite distinct horticulturally?

#### **Variation:**

What does the variation encompass? Flower colour, size, foliage, habit etc. should be noted. This may entail the visitation of all known sites, the collection of dried specimens there and taking measurements, as well as taking cuttings for propagation. Plants could be donated to the *Grevillea* Park or to Mt Annan Botanic Garden. The study could perhaps extend over many seasons.

Slide collection of all variation.

Specimen collection to include all variants, collection at the Type locality, seeds, fruits, wood, bark - all mounted and labelled - an interesting project.

#### **Distribution:**

Mapping the distribution of the species would be useful.

#### **Pollinator:**

Why have flowers developed the way they have? What are they designed to attract in order to effect their pollination? How is it effected?

#### **Conservation status:**

If the population is rare, how many plants can be found?

#### **Propagation tests:**

Graft the species onto several rootstocks and report the result yearly after planting out.

#### **Local experiences:**

Report on the age, condition of all cultivated specimens in your area and draw inferences on the reasons for their successful cultivation or otherwise.

Yes, I know, this would be a challenge, yet perhaps, someone can achieve it. Surely this could be a most interesting project for a retired member with time to research. The collection of specimens alone would take you into many new areas. I am available to assist serious researchers.

Perhaps one of our passive Local Group SGAP members could tackle this, using the skills of various members of their group. All you need to do is select a local species.

Please write and let me know your feelings on this subject or with your ideas for areas of future research. For instance, to date, I have deliberately kept hybrids on a low profile. Should they be featured more widely in future newsletters. □

## A new species of *Grevillea* (Proteaceae: Grevilleoideae) from south-west Western Australia

R.O. Makinson & P.M. Olde

### Abstract

Makinson, R.O.<sup>1</sup> & Olde, P.M.<sup>2</sup> (<sup>1</sup> National Herbarium Of New South Wales, Royal Botanic Gardens, Mrs Macquaries Rd, Sydney, NSW, Australia 2000; <sup>2</sup> Society for Growing Australian Plants, Grevillea Study Group, 138 Fowler Rd, Illawong, NSW, Australia 2234) 1991. A new species of *Grevillea* from south-west Western Australia. *Telopea* 4(2): 351-355. *Grevillea calliantha* R. Makinson & P. Olde, a new species closely allied to *G. hookeriana* Meisn., is described from the Cataby area of Western Australia, c. 140 km NNW of Perth, with notes on affinities and conservation status.

### Introduction

This species was first brought to botanical attention by the *Grevillea* Study Group of the Society for Growing Australian Plants, who were provided with material by Alec Hooper of 'Zanthorrea' [sic] Nursery near Perth, W.A. The material had originally been gathered by Mr N. Foote 'in sandplain north of Perth'. Subsequent searches by Dr S.D. Hopper of the W.A. Wildlife Research Centre have located five small populations. Precise collection localities are omitted from this paper to minimize casual collecting of this endangered species; locality details may be obtained through the Western Australian Department of Conservation and Land Management.

*Grevillea calliantha* R. Makinson & P. Olde, sp. nov.

*Grevillea hookeriana* Meisner affinis, sed pistillis longioribus (28-40 mm longis), inflorescentiis decurvis et fructibus adultis, trichomis biramosis omnino exutis, pilis glanduliferis erectosque solum gerentibus differt.

HOLOTYPE: WESTERN AUSTRALIA: Irwin: ... near Cataby, B.J. Conn 3283 & J.A. Scott, 27 Sep 1989 (NSW 225106).

Spreading flat-topped shrub c. 1 m tall, 2-3 m wide; branches spreading or slightly ascending, somewhat secund on older plants; bark rough, grey over red-brown; branchlets (younger) flattened, strongly ridged, and tomentose with wavy hairs; when older the branchlets more terete, ridged, sublanate with curled hairs; branchlet indumentum whitish with reddish brown stripes corresponding to ridges and decurrent from the leaf-bases. Leaves greyish yellow-green, ascending, subsessile (appearing petiolate) or with petioles up to c. 3 mm long, pinnatipartite (almost pinnatisect), 4.0-7.5 cm long with (3-) 5-7 (-11, cultivated) entire ascending linear lobes, lobes 1-4.5 cm long, 1.0-1.1 mm wide, basal lobes longest; apex and apices of lobes acute with a sometimes-pungent point; margin smoothly revolute, enclosing the lower surface except for the midvein(s) of leaf and lobes; upper surface of leaves and lobes with an inconspicuous midvein; young leaves with an open to dense indumentum of wavy to curly hairs on upper surface and the exposed veins of the lower surface, older leaves becoming glabrous and faintly granulate on these parts; texture chartaceous. Inflorescences on older plants largely confined to a zone beneath and at the edge of the

layered foliage, terminal and simple but sometimes on short lateral branchlets arising from successive nodes and appearing branched, decurved to sigmoid from near the base of the peduncle, conspicuous, many (15-30) flowered, secund, centripetal, (220-) 50-70 mm long; peduncles bracteate, densely tomentose, 5-15 mm long; rachises densely tomentose to sublanate with whitish hairs only, ridged beneath the indumentum, up to c. 60 mm long; bracts spreading (spreading to recurved, and conspicuous, on very young bud-bearing rachises), ovate-acuminate, 2.2-2.9 mm long, 1.3-1.8 mm wide, outer and inner surfaces tomentose with straight to wavy hairs, bracts persistent at anthesis; pedicels 1.0-2.5 (-3.5, cultivated) mm long, tomentose; torus oblique at 15°-30°, 1.3-2.1 mm across, projecting strongly at the ventral side where it is adnate to the prominent nectary; perianth obliquely ovate to rather saccate below the curve, 2.2-3.0 (-4.0, cultivated) mm across, outer surface tomentose with white and reddish two-armed hairs (and rarely, cultivated NSW 228067, some simple erect multicellular glandular hairs), the indumentum longer (to villous) on the limb; inner surface of perianth glabrous; limb of bud spheroidal, 1.7-2.2 mm long, 2.4 mm wide; dorsal tepals (10.5-) 11.3-12.8 mm long, 1.8-2.6 mm wide; nectary conspicuous, prominent, spreading, linguiform, sometimes decurved at tip, usually partly enclosed within the torus, 0.7-1.9 mm long, projecting 0.3-0.6 (-0.8, cultivated) mm beyond the rim, margin entire; pistil (28.5-) 30-40 mm long; stipe absent or obscure, up to c. 0.5 mm long; ovary subsessile, 1.3-1.6 mm long, subvillous with two-armed hairs only, some reddish blotching evident in the indumentum; ovules attached about the medial position; style appearing glabrous but occasionally with two-armed hairs extending for about 2-3 mm above the ovary, and sometimes with few to many short (c. 0.1 mm) inconspicuous erect multicellular glandular hairs, especially on the ventral side, or glabrous throughout; apical c. 2 mm of style dilating smoothly into the back into the style-end; pollen-presenter ovate, oblique at c. 45°, strongly and obliquely convex, 1.1-1.5 mm long, 1.0-1.2 mm wide, 0.3-0.5 mm high, stigma distally off-centre. Fruits 2-seeded, more or less spreading from the rachis, erect to somewhat reflexed at the apex of the decurved pedicel, obliquely oblong-ellipsoid, somewhat laterally compressed, 13-18 mm long, 8-9 mm wide, c. 6 mm thick; styles persistent; surface with a dense matted tomentose indumentum of multicellular glandular hairs, sometimes interspersed with a few two-armed hairs (most or all of the two-armed hairs of the ovary shed as the fruit matures); on young fruits up to c. 8 mm long [e.g. Hopper 6354] two-armed hairs still predominate, with longitudinal reddish striping of the indumentum; mature fruits with surface beneath the indumentum unevenly pitted; pericarp 0.3-0.4 (-0.7, Conn 3278) mm across at the suture, 0.4-0.8 mm thick at centre-face, 0.5-0.8 mm thick at the dorsal side, texture weakly crustaceous. Seeds slightly curved, obliquely elliptical, 12.5 mm long, 5.0 mm wide, 2.0-2.5 mm thick; outer face convex, with a slight submarginal ridge, tissue outside the ridge paler than the central elliptical area; inner face with a central more or less flat elliptical area c. 6.0 mm long and 1.0 mm wide, surrounded by an outer ring of radially-oriented upright lamellae of papery or waxy tissue. Figure 1.

The epithet is derived from the Greek *callos*, beauty, and *anthos*, a flower.

VARIATION: Minute glandular hairs occur on the style (usually confined to the ventral side in the middle third) in some collections (e.g. Conn 3278, NSW 225098); these can be almost undetectable on dry or reconstituted material. In some (cultivated) material (e.g. Olde, NSW 228067), these hairs are numerous and form an open indumentum over most of the style. Occasional glandular hairs may also occur in the indumentum of the outer surface of the perianth.

Leaves of some cultivated plants differ from wild-source collections in having up to 11 lobes (as opposed to 3-7).

The collection Conn 3278 has many digynous flowers interspersed with normal flowers.

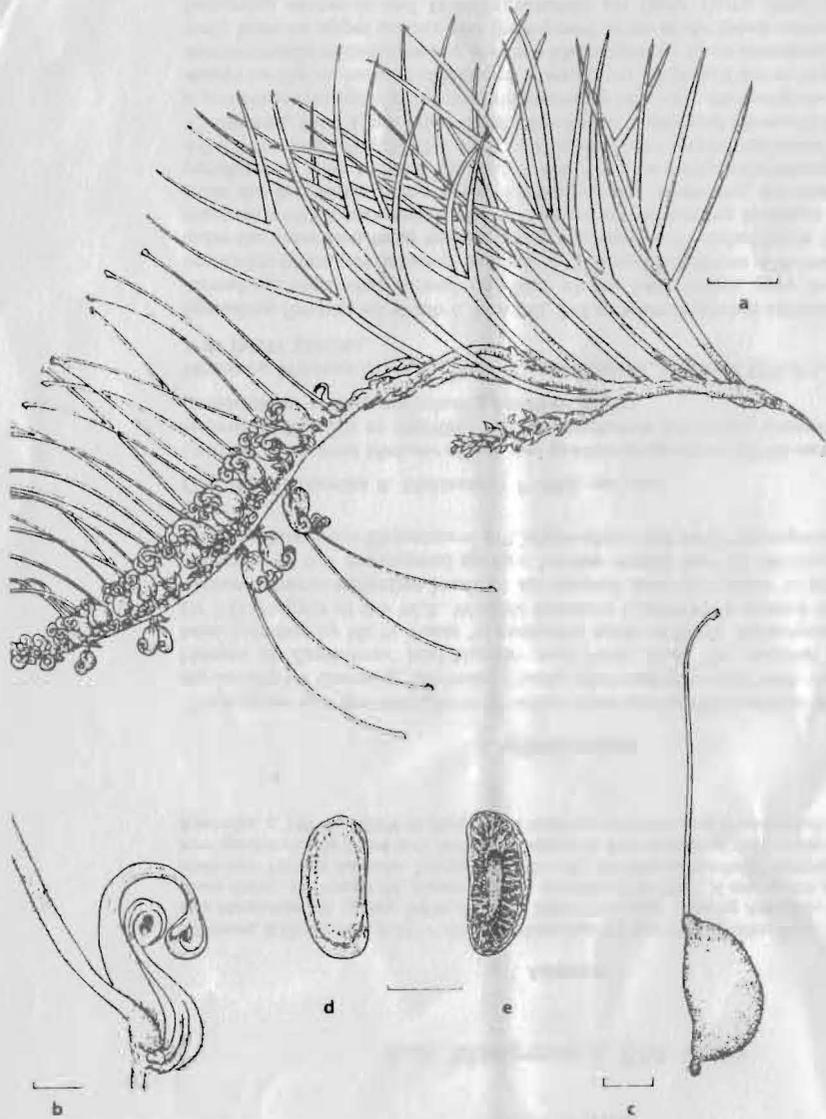


Figure 1. *Grevillea calliantha*. a, flowering branch, scale bar 10 mm; b, flower, half perianth moved to show ovary and nectary, scale bar 2.5 mm; c, fruit, side view, scale bar 5 mm; d, e, seed, outer and inner faces respectively, scale bar 5 mm. (All from Conn 3278).

FLOWER COLOUR: Perianth outside greenish-yellow, ageing to apricot orange; limb often reddish; exposed inner surface of 'throat' region (just below limb) reddish.

DISTRIBUTION AND CONSERVATION STATUS: WESTERN AUSTRALIA: known from five small vulnerable populations in the Cataby area, c. 140 km NNW of Perth. Four of these are of a few plants only, confined to narrow road verges. A larger population of c. 50 plants has been reported (S.D. Hopper, pers. comm.) on private property in the same area.

*G. calliantha* is listed and illustrated in Hopper et al. (1990: 19, and t. 173) as '*G. sp.* (Dandaragan) Hopper 6350, 'Foote's *Grevillea*'. The species is omitted (perhaps inadvertently) from the appendices of that work which assign conservation priority ratings. The species is not known to occur in any reserve and should receive a 'Priority One' listing according to the criteria given there. In the scheme of Briggs & Leigh (1988) an appropriate grading would be 2E (restricted distribution of < 100 km, endangered); see summary of codes at back of issue.

HABITAT AND ECOLOGY: In remnant heaths on low rises on lower valley slopes in grey to yellow-brown sandy soils over lateritic gravel; associated species include *Eucalyptus todtiana*, *Allocasuarina humilis*, *Lambertia multiflora*, *Acacia saligna*, *Calothamnus quadrifidus*, *Castrolobium spinosum*, *Hakea trifurcata*, *Dianella revoluta*, *Pericalymma sp.*, *Paterstonia sp.*, *Conospermum sp.*, *Acacia ?pulchella*.

IN CULTIVATION: The species has definite horticultural potential; it is fairly fast-growing with conspicuous and attractive inflorescences. It has been grown successfully in Western Australia, western and north-eastern Victoria, and in central New South Wales; its hardiness in summer-humid situations is still being evaluated. A clone held by 'Zanthorrea' nursery is particularly attractive. Some clones have been sold commercially in recent years as *Grevillea* 'Black Magic'.

AFFINITIES: *G. calliantha* is a member of the group of species defined by Bentham (1870: 419) as Series Hebegynae (type species: *G. pteridifolia*); the group is best characterized by a declined perianth tip, a glabrous inner surface of the perianth, a hairy ovary, and indumentum of late ovary and fruit with light and dark-coloured two-armed hairs arranged to form stripes or blotches (the colour deriving from dark cell contents). The group includes several south-west Australian species around the complex defined by McGillivray (in press) as *G. hookeriana* Meisn. Races 'a' and 'b' (sensu McGillivray) of *G. hookeriana* (no synonyms) are the closest relatives of *G. calliantha*. The two species share the apomorphic characters of large spreading ovate floral bracts, dark purple to blackish style, a spreading linguiform nectary, and seeds with a complex sub-marginal lamellate structure on the inner face. *G. calliantha* differs from *G. hookeriana* in having longer pistils (28–40 mm as opposed to 18–22 mm), decurved inflorescences, and the developing fruits shedding all, or nearly all, two-armed hairs and acquiring a dense indumentum of simple glandular hairs (*G. hookeriana* retains both hair types on the mature fruit).

The presence of scattered glandular hairs on the style is a feature which also occurs sporadically in the *G. hookeriana* complex, in several allied species, and more prolifically in the rather more distantly related group of species around *G. bipinnatifida* R. Br. The closest known occurrence of *G. hookeriana* to Cataby is within 50 km, and an undescribed taxon related to *G. bipinnatifida* (Hopper 6333, PERTH) occurs only 10 km away, at Mt Misery. Either these taxa or others may have been in closer proximity before European settlement.

SELECTED SPECIMENS: WESTERN AUSTRALIA: Iwirit: ... Cataby [area], Hopper 6350 et al., 23 May 1988 (PERTH, AD, BRI, CBG, DNA, HO, NSW), 6351, 6352, 6353 (PERTH); ... near Cataby, Conn 3278 & Scott, 27 Sep 1989 (NSW 225098, AD, BRI, CANB, CBG, HO, MEL, PERTH).

#### References

- Bentham, G. (1870) *Flora Australiensis* vol. 5 (L. Reeve, London).  
 Hopper, S.D., van Leeuwen, S., Brown, A. & Patrick, S. (1990) *Western Australia's endangered Flora* (Dept of Conservation & Land Management, Wanneroo, W.A.).  
 Briggs, I.D. & Leigh, J.H. *Rare or threatened Australian plants*. Australian National Parks & Wildlife Service Special Publication no. 14.  
 McGillivray, D.J. *A revision of Grevillea (Proteaceae)*, in press, Melbourne University Press, publication expected 1991.

355

#### Acknowledgements

Thanks to Felicity Green for the illustration, to Peter G. Wilson for assistance with the Latin diagnosis, and to Jocelyn Powell for comments on the manuscript.



# IN YOUR GARDEN



## On *Grevillea alpina*

by Rodger and Gwen Elliot

Most Victorian SGAP members will be familiar with *Grevillea alpina* — or at least with one of its many forms. It is a widespread species, with a seemingly larger wardrobe of garments than many very fashion conscious humans.

Perhaps the greatest variety in form and flower occurs in the area of central Victoria known as the Goldfields region. Here we can find plants with the familiar red with cream, apricot, yellow or orange flowers. There are also some in which the flower colour can be gold or pink. The plants are sometimes compact, rounded bushes, or they may have a semi-erect and somewhat open growth habit.

If we move to the Grampians we find a further range of forms, some of which have now become popular in gardens and nurseries. *Grevillea alpina* "Grampians low form" is well known in cultivation and grows only to around 0.6m x 1.5-2.5 m. It has proved one of the most reliable forms, tolerating a high degree of shade or an open, sunny aspect. It was collected originally from the Halls Gap-Zumsteins area where it tended to cascade down a rockface.

The cultivar *G. alpina* "Grampians Gold" is not very common in cultivation. Its deep golden yellow flowers are profuse over winter and spring. Generally it develops into a fairly compact, low shrub of about 0.6m x 0.6-1.5 m. This outstanding selection originated from the Victoria Valley region of the Grampians.

The Mt Zero form usually grows 1-2.5m tall by 0.5-1 m wide. It is not readily available but is worth seeking because it displays its large clusters of red and yellow flowers very well.

*Grevillea alpina* "Mt Dandenong" occurs in the ranges around 40km east to north-east of Melbourne. Here it is seen usually as a low shrub of about 1m tall, or occasionally as an upright plant to 1.5m, if it has struggled to compete for light with other forest vegetation. Imagine our surprise recently when we came across a plant of this Mt Dandenong form, grown from cuttings we had supplied from these small, bushy plants, but now matured into a dense, bushy shrub of nearly 2m x 2.5m, growing in dry, stony soils in a low rainfall area.

Life is full of learning experiences and this to us was certainly one of them. The interesting thing was that our own local *Grevillea alpina*, from near our own back door, was absolutely thriving, many thousands of miles from home, in a garden near the coast of California in USA.

Right beside this *G. alpina* were two large plants of *G. alpina* from the Warby Ranges, near Wangaratta. Their clusters of red and orange flowers stand out brightly, particularly on a dull day. The parent plants of this form were about 1.5m tall, and relatively narrow, however, it is stated that some plants in the natural habitat can be upright to 8m tall. In cultivation in this outstanding US-Australian garden, *G. alpina* "Warby Ranges" is growing as an open, bushy shrub of around 2.5m x 4 to 5 m.

We were fortunate to spend just over a month (off-and-on) in the Arboretum at the University of California in Santa Cruz (which is just south of San Francisco) during the recent Northern Hemisphere spring. "Mr Agfa" and "Mr Kodak" will have appreciated the time we spent there, and we also

made copious mental and written notes regarding the over 1,500 species and forms of Australian native plants being grown in the garden, which has specialised in Australian plant cultivation.

These thoughts regarding *Grevillea alpina* include but a brief glimpse into the collection at the Santa Cruz Arboretum, but they re-emphasized to us how open our minds must always be to the new experiences and lessons nature seems to have in store for us.

For any SGAP members contemplating a visit to USA this Arboretum is to our minds an absolute must. There are not a lot of gardens in Australia where we can find a wider range of our native species being grown — and this garden is supported and maintained to a very large extent by volunteer labour.

During our visit we were guests at a weekend Symposium on Australian plant cultivation, which was both enlightening and enjoyable. A second such Symposium is proposed for around April 1991 and we can't help feeling that this event, plus the Arboretum gardens at Santa Cruz would be of considerable interest to many SGAP members. There are of course also many other private and public gardens in California where Australian plants are grown, sufficient to ensure a fascinating trip for anyone able to make a visit. There are also some wonderful natural areas of absorbing interest.

In the meantime, don't be surprised if one day you find *Grevillea alpina* or other plants in your garden which haven't read the textbooks, and grow larger, or even twice as big, as you expected them to do. They do incidentally respond very well to pruning, provided it is done regularly from an early stage. Cutting into old and sometimes leafless wood is not recommended for *G. alpina*, although there are some grevilleas which respond very well, eg *G. speciosa* ssp. *dimorpha* — but that is another story! □

## Footnote

The director and manager of the Arboretum at the University of California in Santa Cruz are members of our study group, as well as Bill Grant who is on the Governing Board and has promised us an article on Grevilleas.

Bill has an article "*Grevilleas in my Garden*", in the latest edition of *Pacific Horticulture* vol 52, No 1.

The third Harry O Warren Symposium on south Pacific Horticulture is to be held in Santa Cruz, April 26-28, 1991. The symposium is focusing on Australian flora, with presentations being given by Trevor Blake, David Jones, Gwen Elliot and Rodger Elliot. For further details contact :- Arboretum, University of California, Santa Cruz, CA 95064.

It seems Australian flora is being grown widely in California as it adapts readily to their dry conditions, where they are very conscious about saving water.

# IN YOUR GARDEN (continued)

## Grevilleas in S.E. Queensland

by Norm McCarthy

I became interested in growing native plants as far back as 1960 and I have been in SGAP ever since. As an ex-citizen of Sydney suburbia (born and bred), living in Toowoomba these many years, was a much desired alternative, for which I'll never be sorry.

Gardening has always been in my blood and for as long as I can remember, even as a boy, I've loved growing plants of all sorts. My entry into SGAP changed that format somewhat and now, of course I'm an addict with incurable "Native Plantitis". That has been going on now for about 30 years. Amazing how quickly time goes!

At one time our garden boasted some 90 Grevilleas of various species. At present, there is to my surprise on counting up, some 70, but of course some originals are no longer in existence, while others have been added. Mostly, this was a mixed bag and many of them grown before realizing the very distinct advantages of grafting for the growing of many more species.

Now I have 4 grafted plants in the ground and 16 in one gallon pots, growing on for future planting.

No, I haven't grafted any myself. However, I intend doing so, but not just yet, as when I do, they will get my undivided attention, which I feel they deserve.

The garden is on a one acre block and besides growing Grevilleas, there are many others of other families including many rainforest species. I suppose if I came to make a head count it would be a couple of thousand of all sorts of natives.

Over a period of 30 years, many of these have been grown from seeds and cuttings collected in the wild. I now spread the word with talks and lectures to groups of gardeners and clubs of various types.

Last week, our garden played host to our Grevillea Study Group (S.E.Qld) chaired by Merv Hodge who is a great inspiration to us all. The recent meeting in the garden at home was well attended with 23 members.

We usually meet every second month and try to keep it evergreen with a variety of garden aspects pertaining to Grevilleas and other plants as well.

Our bi-monthly meetings are farmed around to different gardens in S.E. Qld and is becoming more popular, attracting more people and encouraging them, we hope, to join the parent body of the Grevillea Study Group. □

## Vale Harvey Shaw

by Peter Olde

The death in 1989 of this remarkable retired orchardist was reported in the Queensland SGAP magazine. However, I inadvertently omitted to record his passing in our newsletter.

On several occasions, I was treated to the genuine hospitality which Harvey offered to his friends. His quiet, deliberate manner underscored his determination, but did not mask his genuine nature.

Harvey's contribution to an understanding of the genus Grevillea was great, especially to the growing of grafted plants. Prompted by his wife Pat who remains one of our strongest supporters, Harvey was diverted from the grafting of *Prostantheras* (which never flowered in Brisbane anyway).

Harvey's record in grafting members of the genus Grevillea was remarkable. Using the rootstock *G. robusta*, he specialised in the Top Wedge Graft which he tied up with Nescofilm and covered with a press-seal plastic bag. Literally hundreds of grafted plants stood on shelves in his shade house. Many of the plants which we collected during our trip to the West in 1988 were successfully grafted by Harvey and now reside in Merv Hodge's garden.

He was far and away the most successful grafter operating in the Group at that time and was successful with wild as well as cultivated plants.

How many plants did he give away? Countless. He just liked to see the smile on your face. His contribution to an understanding of growing Grevilleas was enormous and we record his passing both with gratitude and sorrow.

## News in Brief

When will the Grevillea book be available, you may ask. Well, it is probably better not to ask. Mr P Olde (P for Perfectionist!) is currently re-writing some of the chapters in a quest for the ultimate Grevillea book. You can be sure that when it is finally available, you will read about it in this newsletter!

\* \* \* \* \*

Edgar and Pat Burt from Glasshouse Mountains in Queensland are new members of the study group. They have become very involved in the propagation of Grevilleas and have been fortunate in becoming close friends with Mrs Pat Shaw and several Queensland members of the Grevillea Study Group.

Collectively, Edgar and Pat have about 200 Grevilleas growing, with a majority of their own grafted species, as well as cultivars. Their humid summer months are severe, but with *Grevillea robusta* as root stock for their grafts, they have achieved pleasurable success with many species from other states.

\* \* \* \* \*

Grevillea Study Group members in S.E. Queensland meet bi-monthly. For further information regarding dates and places, contact Merv Hodge, Lot 36 Loganview Rd, Logan Reserve, 4114.

\* \* \* \* \*

Remember, if collecting seed or cuttings in the wild, you should have a permit. Max McDowall from Bulleen, Victoria, reports that he had no trouble getting a general Collector's Permit from National Parks and Wildlife and from the State Forestry Department.

\* \* \* \* \*

# NEWS IN BRIEF (from Peter Olde)

Angus Stewart has recently moved to Sale in Victoria where he is starting to explore for Grevilleas. One that he has located is *G. chrysophaea* found growing on sandy hills in the Gippsland Lakes National Park. The soil is derived from old sand dune systems and is quite close (a couple of hundred metres) from the beach. This is possibly a good Grevillea for coastal gardens.

\* \* \* \* \*

SGAP Tamworth Group is one of our new members. They have 50 acres of land for planting on the shores of Chaffy Dam, Dulegal Arboretum. They are hoping to get propagating material and knowledge from our group and various other study groups for their planting project.

\* \* \* \* \*

The recent re-discovery of *Grevillea scabra* by Greg Keighery has highlighted the need for close observation of plants in the field, especially as we become more familiar with them and have a good key with which to identify them (available shortly in the McGillivray revision). *G. scabra* was thought to be extinct, having not been collected since 1941 near Bolgart by Charles Gardner. There have been several other new discoveries recently and two re-discoveries (*G. flexuosa* and *G. scapigera*).

\* \* \* \* \*

*Grevillea flexuosa* (Lindl.) Meissn. was first collected by James Drummond and described by John Lindley as *Anadenia flexuosa*. Subsequently, Carl Meissner synonymised all *Anadenias* under *Grevillea*. *G. flexuosa* is regarded by McGillivray as a form of *G. synapheae*. However, in my opinion (for what it is worth), this species is quite distinct.

The population came to light as a result of the recent publication of Western Australia's Endangered Flora by S. Hopper et al. Only about 50 plants were found near Toodyay by Ms Gwen Abbott and the actual rediscovery was made in August 1985. The leaves on this taxon with their unusual flexuose rachis (see fig 1) are amazing and in many ways, resemble those of *G. bipinnatifida* in their size and leaf division.

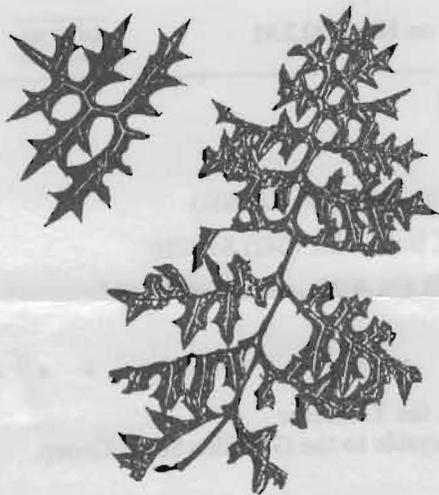


Fig 1. *Grevillea flexuosa* Meissn

ex WESTERN AUSTRALIAN HERBARIUM, PERTH  
(Flora of Western Australia)

Another species which I found in 1988 has been recently photographed by Margaret Pieroni and appears to represent a separate taxon, again related to *G. synapheae*. This plant occurs near Cataby and is being studied at present.

\* \* \* \* \*

A beautiful black-flowered *Grevillea*, known in the nursery trade as *Grevillea* "Black Magic" also occurs in the Cataby area. Its description by R O Makinson and myself was published in Feb 1991 in *Teloopa*. This species is closely related to *G. hookeriana* but is clearly distinct from it. We have called it *G. calliantha* meaning "beautiful flower".

In the last few weeks I have received a suite of specimens of another new species related to *Grevillea* "Black Magic" which occurs near Darkan (WA). This population was discovered by Mrs Val Crowley, an interested amateur who has offered to assist the Study Group with the collection of specimens and in the re-location of rare species.

One taxon, related to *G. curviloba*, which I discovered north of Collie in 1986, was investigated by her and may be extinct there now because of a recently completed dam. All plants of this in cultivation need to be carefully monitored and re-propagated in case the worst has occurred. The last thing we need is another extinct *Grevillea*.

\* \* \* \* \*

The contribution of interested amateurs continues with collections of *G. sp aff fistulosa* on Mt. Lindesay by Mrs Brenda Hammersley of Denmark (WA). She is busily engaged in making a reference herbarium of all the plants which occur in the Denmark area. She also sent specimens of *G. trifida*.

\* \* \* \* \*

Bob Makinson, from the Sydney herbarium, has recently (Feb 1991) been offered a job in Canberra as curator at the National Botanic Gardens. We wish him well in his new job. Bob has been closely involved in getting McGillivray's revision to publication stage. He has a good knowledge of the genus, especially the botanical side (as you would expect) and his absence from Sydney will be keenly felt.

Peter Abell has also accepted a new position with the Wheat Board. Peter has long been a staunch Study group supporter, doing valuable grafting work and maintaining rare plants for us at the Sydney Botanic Gardens. We wish him well and have been invited to see his garden in the Blue Mountains later this year. This has many rare, grafted Grevilleas.

Peter has promised to write another report for us one day. He recently informed me that *Grevillea scapigera* has been re-discovered in the west near Corrigin. The population is small but completely different genetically from the one which we have in cultivation. Hopefully material can be distributed to Study Group members one day.

## Seed Bank

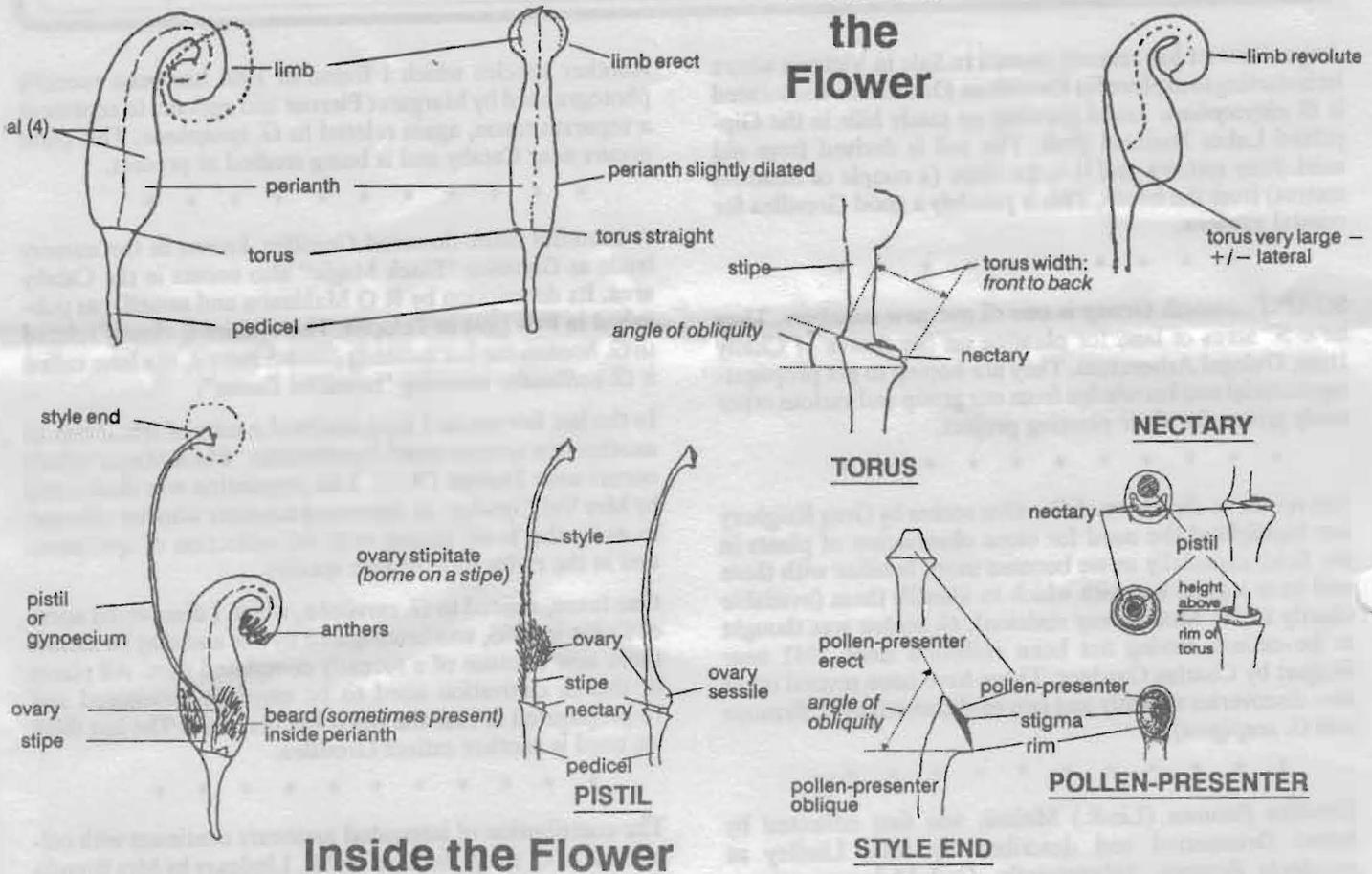
We have a new seed bank officer. Judy Smith of Mortdale in Sydney has agreed to take over from Phil Congdon. Judy may be moving house shortly, so in the meantime, all enquiries and requests for seed should be sent to me, Christine Guthrie, 32 Blanche St, Oatley 2223, and I will pass them on to Judy.

The seed bank will be replenished during the next couple of months, so an updated seed list will be in the next newsletter. Donations of *Grevillea* seed are always gratefully received.

# Parts of the Flower — GREVILLEA

P. Olde

Drawings: C. Woolcock



This is the first in a series compiled by Peter Olde to help members identify parts of the genus — Grevillea, particularly those parts mentioned in botanical descriptions

## FINANCIAL REPORT

### MARCH 1991

<b>Income</b>	
Subscriptions	\$235.00
	<hr/>
	\$235.00

<b>Expenditure</b>	
Newsletter Expenses	200.00
Postage	101.89
	<hr/>
	\$301.89
Balance on Hand 20.2.91	<hr/>
	\$470.88

## OFFICE BEARERS

**Leader:** Peter Olde, 138 Fowler Road, Illawong 2234. (02) 543 2242

**Treasurer and Newsletter Editor:** Christine Guthrie, 32 Blanche Street, Oatley 2223. (02) 579 4093

**Curator of Living Collection & Herbarium:** Ray Brown, 29 Gwythir Avenue, Bulli 2516. (042) 84 9216

**Seed Bank:** Judy Smith, c/- Christine Guthrie, 32 Blanche St, Oatley 2223 (02) 579 4093

**Cuttings Exchange:** Hessel Saunders, Box 31, P.O. Bulli 2516.

\* \* \* \* \*

If a cross appears in the box, your subscription of \$5.00 is due. Please send to the Treasurer, Christine Guthrie, 32 Blanche Street, Oatley 2223. Please make all cheques payable to the Grevillea Study Group.

1990

1991