

The Plant Press

Western Australian Regional Herbaria Newsletter

Volume 6 August 1999



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Weeds

We have applied for a NHT Grant for a Network parallel to the Regional Herbarium Project to try to capture information about WA Weeds.

There is still a lot to learn; in most cases there are very few records in the herbarium so we do not yet know the geographic distribution of many of our weeds. You will know much more than we do about the aliens in your district. In many cases we are really not certain about the correct botanical name. The names database, WACENSUS, has over 1300 species of alien plant recorded. This is about 10% of our total flora. I believe that we have about 600 or 700 weed species, perhaps less, the other herbarium records are garden plants, the specimens of which were never labelled properly to indicate that they were cultivated.

A project is under way to try to tidy up our information about WA's weeds. Herbarium Librarian, Beng Siew Mahon, has started to examine all records in WAHERB to see if she can develop a reliable list of weed species of bushland (so-called "environmental weeds"). She will analyse the date of collections to tell us if the record may still be growing in the State and if the labels give any indication that the weed is naturalised. She will also indicate which of our weeds are pests in other States.

The project for which we are awaiting funding, a Weed Information Network (WIN!), will train collectors in the regions to properly document the weed flora. The usual recommendations for taking plant specimens can be followed but we need to gather very special data for the specimen label. It is absolutely essential to record details of the habitat. Is it disturbed bushland? Or is it more or less undisturbed? What is the nature of the disturbance? How many plants are there if it is in bushland? And, how does the species reproduce at the site?

Until we obtain funding please continue to send in weed specimens, after all they are now part of our flora, like it or not. You will need to give very complete data for the label; we are currently compiling a special field notebook for weed collecting, so, watch this space.

Neville Marchant



New Herbaria

Since the last 'Plant Press' came out, we have received first boxes from Bannister Creek, Men of the Trees and Woolgorong Station, Leonora. Welcome aboard! We look forward to working with you.

We hear some other groups are ready to send boxes too.

Newsletter of the Community Regional Herbarium Volunteer Program

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WA Herbarium, Locked Bag 104, Bentley Delivery Centre WA 6983

1999 Wildflower Displays in WA

KINGS PARK FESTIVAL 17-27 September
See the FloraBase display and Regional Herbaria posters

WESTERN AUSTRALIAN WILDFLOWER DISPLAY
25 September - 2 October
Centenary Pavilion, Perth Royal Showgrounds

MULLEWA

22-29 August
Mullewa Town Hall
Open daily 9.00am-5.00pm
ENQUIRIES: 9961 1505

CALINGIRI Annual Wildflower Walk

Sunday 29 August, 9.30 am
Barbecue lunch \$10.00
ENQUIRIES: 9628 7029, 9628 7121

RAVENSTHORPE

4-19 September
Senior Citizens' Hall, Morgan Street
Open daily 9.00am-5.00pm
ENQUIRIES: 9838 1277, 9838 1034

AUGUSTA ORCHID SHOW

10 & 11 September
Open 10.00am-4.00pm
ENQUIRIES: 9757 2258

DALWALLINU WATTLE WEEK

11-19 September
Street stall: Saturday 11.00am
Bush Dance later in the week
ENQUIRIES: 9664 2044

ESPERANCE Gum Nut Wildflower Festival

16-19 September
Anglican Parish Centre, Andrew Street
Open 9.00am-9.00pm (Thurs);
9.00am-5.00pm (Fri, Sat, Sun)
ENQUIRIES: 9071 2443, 9071 7347

ONGERUP Aboriginal Food Display

17 September-10 October
Ongerup & Needilup District Museum
Open daily 9.00am-4.00pm
ENQUIRIES: 9828 2076, 9828 2037

BINDOON

18-25 September, Bindoon Hall
Open daily 10.00am - 4.00pm
ENQUIRIES: 9576 1100

ALBANY

22-25 September
St John's Church Hall, York Street
Open: 9.00am-6.00pm (Wed-Fri);
9.00am-1.00pm (Sat)
ENQUIRIES: 9844 3490

BUSSELTON

23 & 24 September
Uniting Church Hall, Kent Street
Open daily 9.00am-6.00pm
ENQUIRIES: 9752 3992, 9752 1884, fax 9752 3304

CRANBROOK

25 September-10 October
Old Co-op Building
Open daily 9.30am-4.30pm
ENQUIRIES: 9826 1008 (during working hours)

KOJONUP Festival Weekend 25-27 September

25 Sep-3 Oct Wildflower Display
RSL Hall, Albany Highway
Open daily 10.00am-4.00pm
ENQUIRIES: a/h 9831 1511

WALPOLE ORCHID SHOW

25 September - 10 October
Walpole Tourist Bureau, Pioneer Cottage
Open 9.00am-4.00pm
ENQUIRIES: 9840 1111

PORONGURUP

2 & 3 October
Karribank Conference Centre
Open daily 9.00am-5.00pm
ENQUIRIES: 9853 1153

DOMESTICATING SPECIES FROM THE WILD

Harnessing our flora resources has not had a high priority until recently. Steps are now being taken to evaluate various species for the purpose of domesticating them and bringing them into cultivation for use in urban plantings, landscaping and home gardens. The current range of species available in nurseries is very limited and a new range of our plants is required to give planners, landscape architects and gardeners the opportunity to present a 'West Australian' look to our cities, towns and suburbs.

The challenge is to identify plants in the wild which have the potential to be spectacular garden plants. Once they have been identified, then it is the role of the Centre for Australian Plants to carry out the development and arrange to bring them into use.

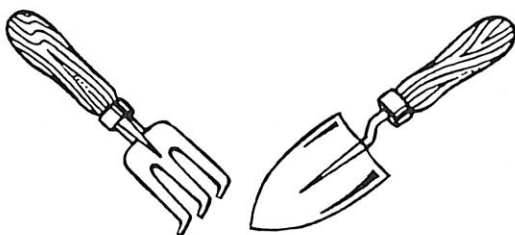
The Centre is a formal partnership established in Western Australia in 1995, combining the resources of key research and educational organisations and industry. Through collaboration, the Centre incorporates extensive knowledge and expertise resulting in the largest single national resource for the development of the Australian native plant floriculture industry.

It brings together the key players in the development and conservation of this important natural resource - three State Government agencies - Agriculture Western Australia, Kings Park & Botanic Garden, Conservation and Land Management, together with the University of WA (and other partner universities) and industry participants from flower growers, nursery and flora export sectors, namely FLOWER-SWEST (representing the Flower Producers of WA Inc), the Nursery Industry Association and the Flower Export Council of Australia. Dr Neville Marchant is one of the Centre's Board Members.

The Centre is a partnership between researchers and industry, providing industry with regular and direct input into the direction of research and development projects. Concentration is placed on activities that directly benefit industry such as identifying new plant selections, releasing hybrid plants from a world-class breeding programme, developing effective and efficient management and production systems, and resolving post-harvest issues.

The Centre is inviting suggestions from members of Regional Herbaria on local plants that they feel have horticultural potential. Suggestions should be sent to Mike Hislop at the Plant Identification Unit, who will co-ordinate the activity and pass them on.

Tom Alford
Chairman
Centre for Australian Plants



Ravensthorpe, 26-27 June 1999

A new venture

This workshop was the first of its kind in that it was initiated and financed in part by the Ravensthorpe Regional Herbarium.

They requested a workshop that would help them identify different genera in the field. This meant becoming really familiar with the characteristics of different plant families.

Representatives of the Myrtaceae, Proteaceae, Epacridaceae and Asteraceae, mostly from around Perth, were collected and pressed. The Perth people attending the workshop had the opportunity to study these to be really well-prepared for their 'teaching' role at Ravensthorpe.

The workshop itself was two days of intense concentration and hard work. More than 60 specimens were studied, not only to genus but for most, to species! Still everybody seemed to enjoy the activities. I and the other Perth visitors - Gillian, Thelma, Pat, Bill, Margaret, Mike - really appreciated Ravensthorpe's generous hospitality and would have loved to stay longer and explore more.

Jan Gathe

A very invigorating Workshop

Rather daunting on Saturday morning to see so many folk, men and women, enter the hall seeking our assistance.

After being introduced around the group, Jan spoke of the order of the workshops, then we all took our places, two or three to a microscope; there were 9 in all. Each of us were in charge at a table or supposed to be. Many of those attending were not members of the Regional Herbarium. After discussion regarding Keys, we started with *Hibbertia* to find the parts of a flower.

Jan, Margaret and Mike were available to answer queries that we couldn't explain and I found that there were some in this category. First day we did *Hibbertia*, Myrtaceae and a little on Epacridaceae. Sunday was taken up with Proteaceae and, if time, Asteraceae and plants brought in by those attending.

I enjoyed the whole weekend being looked after, but I don't think I will be allowed to travel with the group again, as I was too disturbing. I blame the two men I had to instruct!

Pat Angel

Corrigin Workshop, 12-15 July

There is a very active Regional Herbarium at Corrigin organised by Robin Campbell. The aim of the workshop was to look over the collection and to add to it by collecting from the large Water Reserve adjoining the town; at the same time to consider the feasibility of developing a Wildflower Trail within the reserve. Dr Neville Marchant was particularly keen to assist the Corrigin community in their plans to encourage tourism, as well as the possibility of using the reserve as a teaching resource for schools and universities.

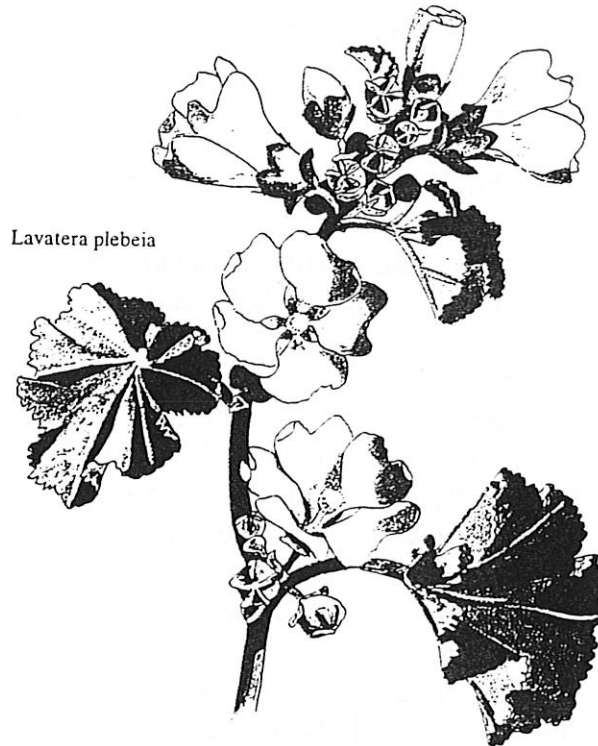
The 1000 hectare reserve is in a very healthy condition and is a wonderful asset to the community. At present there are relatively few vouchers from this reserve in the WA Herbarium collection. Documentation of the species growing in the reserve would enable a management plan to be developed and would help ensure the protection of the reserve.

More than 20 volunteers and Herbarium staff participated in the workshop and more than 60 vouchers were collected. It is hoped the Corrigin community will continue with their plans for this water reserve.

Jan Gathe

CAN ANY ONE HELP?

Lavatera plebeia (Australian Hollyhock or Native Marshmallow)



Lavatera plebeia var. *tomentosa* has been collected on the islands between Rockingham and Rottnest. It seems that this subspecies only grows on islands where there are no grazing animals (rabbits or wallabies) and where the soil is very rich in guano. The plant copes comfortably with high levels of salinity. The island variety has white flowers in this area, but pink flowers at the Abrolhos Islands.

We understand that *L. plebeia* is also found on the mainland, but is not common in Western Australia. It occurs along the coast between Eucla and Shark Bay and inland around Kalgoorlie and east across the Nullarbor. The inland form has pink flowers.

We would love to hear from any person or group that has come across this species, on islands or inland, and to find out -

Any details about the plants - how large they grow, whether they are upright or prostrate, how tomentose (hairy) and how fleshy the leaves are, the colour of the flowers, etc. The habitats in which they grow. Do they occur in areas with richer soil (e.g. sheep pens or old rubbish tips)?

Any evidence that they are palatable to grazing animals.

Any help would be greatly appreciated.

Elizabeth Rippey

Friends of Shoalwater Islands Marine Park/Rottnest Voluntary Guides Association

TEDDY BEARS' PICNIC

The revision of *Lysiosepalum* was ready to submit to Nuytsia when Mike Hislop passed over a strange specimen from Narrogin for ID. It was so unusual the hapless taxonomist desperately tried to place it in genera other than *Lysiosepalum* or contemplated cross-generic hybrids. It had ovate leaves rather than linear, flowers 4-5 merous rather than consistently six, spicy-smelling rather than odourless, bright red anthers rather than dark red etc....There was no option but to travel to Narrogin to view the beast, hopefully one plant surviving Roundup.

With husband John, the fearless field assistant, we drove to Narrogin and met Gwen Warren, the collector of the anomaly, who had an obvious intimate knowledge of every plant in Narrogin and possibly the world! Gwen outwitted any plans of disposing of her and the plant at the remote Teddy Bears' Picnic site, where she takes her grandchildren, by bringing two friends Carol and Pat. The young 81-year-old refused offers of a lift, leapt into her small, red chariot and disappeared over the horizon in a cloud of dust to the Highbury State Forest. Gwen stopped at a magnificent granite outcrop surrounded by



Allocasuarina woodland and rocketed through the bush and over the hilltops with us in hot pursuit.

There were ~200 plants in the population.....You'd need a D9 to eliminate all that evidence!! Ah well, resigned to a magnificent new species, it was back to rewrite the generic description, species descriptions, redo maps and cladistic analysis.

Thanks again Gwen for discovering and naming an exciting new species *Lysiosepalum aromaticum* ms and I can't wait to be 80, it looks like fun.

Carol Wilkins, Department of Botany, UWA

Identification Workshop at Herbarium 14-15 October 1999

An Identification Workshop, similar to that conducted at Ravensthorpe, will be held at the WA Herbarium, Perth on Thursday 14th and Friday 15th October, 1999. The large and widespread families Proteaceae and Myrtaceae will be studied using our dried, pressed specimens. Stereo microscopes, dissecting instruments and identification keys will be available. Morning and afternoon tea and lunch provided. Bring some fresh material from these families with you for identification.

Open to any Regional Herbarium volunteers but places are limited, so book early and in any case before mid-September. To book or for more information ring Jan or Margaret on 9334 0587.

Voyage of Discovery: William Dampier Tricentennial Exhibition

See the oldest known Botanical Specimens from the Australian Continent, collected by William Dampier from Shark Bay and the north-west coast in August 1699. On display at the WA Museum, Perth, through August and September, and perhaps later. Ring 9427 2700 for details.

Pest Management Control - Keep it dry!

Longterm preservation of herbarium specimens involves vigilance against any potential pests. But care in specimen preservation is a most important step in the preservation of specimens. It is often a temptation that if something is good then more would be better. So if one sheet of newspaper is good to absorb moisture then 2 or 3 or 4 must be better. If too many sheets of paper are used, the problem that may arise is that the moisture will invariably take longer to dry out. In WA this may not be a serious problem; in general the moisture content of our plant material tends to be low and with warmer air temperatures and lower relative humidity, specimens can dry out even without drying ovens. However, if specimens are succulent or if several leafy and floriferous specimens are sandwiched between multiple sheets of newsprint, a composting situation may develop. Not only will the specimens go black but it would also promote an ideal situation for any saprophytic fungi present on the specimens to grow on the mix of moisture and nectar present in the flowers. Even in the short time of a week the fungi may produce copious numbers of spores. This is an excellent food source for the book lice (Psocids). These insects appear when warm and moist conditions prevail. They feed mainly on fungal spores and glues. As they graze on the spores they invariably damage the specimens and also the paper.

As a rule therefore use the minimum amount of newspaper; one sheet, maybe two is best. Change the paper regularly if specimens are very succulent or have a high moisture content. If humidity is a problem in the storage room, heating the room will discourage the pest developing.

Fang Chang Sha
Collections Manager



FloraBase Images



Following our previous request we have been delighted to receive good slides and prints from the Regional Herbaria. We are hopeful you may be able to help us again, this time with images from the following genera:

Synaphea (vouchered if possible)

Dodonea

Chamaelaucium (except *C. megapetalum*)

Cryptandra (except *C. micrantha*)

Olearia

As you know, we keep the slides and prints locked away and return them to you as soon as they are scanned.

We very much look forward to hearing from you

Kath Napier

Critically Endangered Taxa Posters

Posters for a further 13 taxa are now available (29 in all). If you would like the ones applicable to your area, let me know, as I have some stocks of all the posters. Margaret: ph. 9934 0587.

Regional Herbaria Locations

Ten more Regional Herbaria have let us know where their specimens are located and when they are available for viewing. Do consider visiting the local Regional Herbaria if you are in the area.

- Albany:** CALM Albany District Office, 120 Albany Highway Albany
Open 9.30am-12 noon Mon-Thur. Herbarium phone 9842 4545
- Bunbury:** Contact: S. Fisher 9795 7181
- Cape Naturaliste:** Lot 1 Commonage Road, Dunsborough (temp)
Contact: Brian Clay 9755 3384
- Carnarvon:** Agriculture WA, South River Road, Carnarvon
Open: 8am-5pm Mon-Fri. Contacts: John Stretch, David Blood, 9956 3333
- Corrigin:** Corrigin Conservation Centre, Station Square, Corrigin
Open: usually 8.00am-4.00pm, Mon-Fri. Contact: Stephen Lloyd 9063 2662
- Morawa:** Morawa Shire Council Office, Prater Street, Morawa, phone 9971 1204
Shire open 9.30am-4.00pm, Mon-Fri. Contact Robyn Stephens 9972 3001
- Mount Marshall:** "Wongaburra", Bimbijy Road, Beacon (temp)
Private home, please contact Marian Kirby, phone 9686 4023, fax 9686 4053
- Murchison:** Murchison Museum, Murchison Settlement, Mullewa/Carnarvon Road
Open: any time within reason. Contact: Hon. Curator, Marie Wendland, who lives behind museum.
- Narrogin:** AGWA building, Cnr. Doney & Heath Streets, Narrogin.
8.00am-5.00pm Mon-Fri. Phone 9881 0222
- Useless Loop:** Bay Salt Joint Venture, Useless Loop, Community Mail Agency, via Denham
Viewable by arrangement with Jeff Millgate or Grant Cramb, Shark Bay Salt Joint Venture, Useless Loop. Phone: 9948 1226

Correct mailing address

When sending items by mail to us, please add to the address:

- a) one of our names or
- b) 'Regional Herbarium Program' or
- c) 'Plant Identification Unit' so it will come straight to us.

WA Herbarium, Locked Bag 104, Bentley Delivery Centre WA 6983