

President's Report

As you will see from items and photos in this newsletter, we have had a few different activities, as well as our usual Sunday and Wednesday work days, in the Gardens since the last newsletter.

We greatly appreciate the work the Wednesday work group does. It is really thanks to them that our gardens looks so good. Sadly for us, Rose tells us she will have to give up her involvement with this group later in the year, and we hope to find someone to carry on the good work. Rose is a hard act to follow! Sunday, 27 November, was a work day with a difference, and marked an important milestone in the history of the Gardens. The opening of the footbridge and discovery trail in the Grandis Creek area. The weather was brilliant. The sun came out after several days of rain and the Gardens were sparkling.

When Envite originally offered us the assistance of a Green Jobs Corps, we needed to choose an appropriate project. Rose suggested the development of a Discovery Trail in the Stage 1 area and she and her Wednesday group of volunteers worked hard, planning, clearing, barrowing, weeding, planting - though I will not say completing, because a garden is never completed! The Green Jobs Corps worked on the preparation of the trail and on the planning and building of the bridge. When their time was finished, the management of the Waste Facility arranged for the construction of the handrail. So this has been a truly co-operative effort and we sincerely thank all those who have been involved. We were delighted that one of our long time Friends, the Mayor of Lismore, Jenny Dowell, officially

opened our bridge that morning. Another innovation was the guided tours that were held in the Christmas/New Year period. Geoff Walker put a great deal of work into these and they were highly successful. On Saturday 7 January a ceremony was held at the Gardens to commemorate the lives of Bert and Mary Harris. They were leading lights in the early development of the gardens, and we were saddened by their deaths in recent years. Their three children and their families came to the Gardens to mark the occasion under the Giant Water Gum (*Syzygium francisii*) which has been designated and labelled as their honour tree. Some of the Friends were there, and we



Jenny Dowell, Rose Hand, Garth Kindred Pat Offord & Jan de Nardi about to cut ribbon

were able to farewell them and thank them for their hard work. All this rain has been good to our Gardens, but has encouraged the weeds to flourish, so we are in for a busy year at our work days.

Jan de Nardi

Geoff Walker Lismore's Citizen of the Year!



Geoff with Jenny Dowell and Australia Day Ambassador Alan Whelpton

At the recent Australia Day Celebrations in Lismore our very long term member Geoff Walker was declared Citizen of the Year - public recognition for his dedication in serving the community as a volunteer for over 70 years. Geoff has been involved with the establishment of the Gardens for over 20 years. He was on the steering committee that spent many years searching for a site, establishing goals and writing a mission statement. For the past 10 years Geoff has worked as a member of the Management Committee and as a member of Friends committee which provides the workforce. As well as this he has been a tireless worker on both Sunday and Wednesday workdays and helps with propagation on a Tuesday. He is a fount of good ideas and always an enthusiast. He is also our senior guide. Congratulations Geoff – we are proud of you!!

Some Fungi Observed In our Botanic Gardens

Fungi are a familiar part of any rainforest but the visible part of the fungus is not the whole organism. Most of it is actually underground, consisting of a network of microscopically thin 'threads' called mycelium which spread through the soil. This network is essential for the decomposition of organic matter and plays a fundamental role in nutrient cycling and exchange. Under suitable conditions the organism will fruit and that is when the fungi appear above ground in a variety of shapes, colours and sizes. The function of the visible fruiting bodies is to produce spores and reproduce.

Some interesting fungi sighted recently in our Gardens include:

Cymatoderma elegans var. *lammelatum*

A LEATHERY SHELF FUNGUS



This leathery fungus is quite common on fallen branches in shaded areas of the gardens. The fruiting bodies are funnel shaped and up to 200mm across and owing to its white colour and large size is easily noticed. The leathery tough fruiting bodies persist for a long time and may collect a lot of forest debris in their funnel.

Aseroë rubra Starfish Fungus A STINKHORN FUNGUS



This is a distinctly shaped red starfish like fungus on a short white or pinkish stem. This fungus has a putrid smell of rotting meat. The spores are released as a dark slimy mass which are attractive to flies which spread them. It is found on wood chip mulch used in the gardens; many home gardens will have these fungi in them as it is common in the district.

Cyathus stercoreus BIRDS NEST FUNGUS



A very small ice cream cone shaped fungus growing in dense colonies which are easily overlooked. This fungus is found in rotting woody mulch or animal manure. The spores are contained in shiny black

by Michael Fulloon

peridioles (small capsules of spores) which sit in the cups like eggs in a nest and are spread by raindrops hitting the cups. The immature cups are densely hairy and covered by a thin membrane which disintegrates to expose the lead black interior.

Cyptotrama aspratium GOLD TUFTS



A gilled fungus found on decaying logs. This species has a yellowish orange cap covered with pointed scales. The mature caps are about 50 mm across. This species has proved difficult to photograph due to light reflection from its surface. The photo above was taken at Barrington Tops by Gaye Drady of <http://australianfungi.blogspot.com.au>

Most of our fungi are difficult to identify as there are few books published on Australian fungi and many have not been described.

Further reading

A field guide to Australian Fungi by Bruce Fuhrer, *Bloomings Books*
The Fungi of Australian by A.M. Young, *UNSW Press*

www.anbg.gov.au/fungi
en.wikipedia.org/wiki/Fungus

Visiting Walkers

'.... Our next walk was a major contrast (to Rotary Park) - Lismore Rainforest Botanic Gardens... no bats and no huge trees but how enjoyable, how fascinating and what an achievement - wonderful variety of plantings and landscaping and much in blossom. Alas I won't live long enough to enjoy it in its full mature glory - a fabulous monument to a 'Lismore Community Tower of Strength' - inspirational.'

Extract from article by Len Martin in *The Nimbin Good Times* November 2011



Mary & Bert Harris - leading lights in the early development of the Gardens. Remembered with gratitude.

The making of discovery trail 1 *from Rose Hand*



Most, but not all, of the Wednesday group enjoying a well earned cuppa

This trail has been fraught with trials... and treasures, and it seems we've been at it forever. Maybe we should have called it 'Discovery **Trial** 1.' Still now we are nearing the end we are all very proud of how it looks and how it has improved access and added interest to a part of the gardens that only the volunteers normally went through. The rails are now on the new bridge so we won't fall in the creek trudging across with wheelbarrows loaded up high. We all wished that bridge had been there when we were carting all the heavy rocks up the path, to line the edges of the trail, at times we got into quite a mess when it rained. The Lismore Council dropped off large pile of big rocks and we went personally to pick up all the smaller ones from the quarry. Thanks to the Envite team who helped us get a lot of the big rocks in place.

We all feel that this new area is a treasure, it looks so pretty now. We have been adding the finishing touches, like the fabulous ferns, the orchids, the Violets, Tripladenias, Lilies, ground covers and birds nests ferns, tree ferns and Cordylines.

Lots of trees are still going in and one day it will be really something. All these jewels give the rainforest a soft and finished look, completing the understorey. They break up the look of tree trunks - it's beautiful. I

love just walking up and down the path.

Then we had our official opening recently with Mayor Jenny Dowell in full regalia cutting the ribbon and opening the new bridge and path to the public. We all felt so proud to have started with so little but ended up creating something quite different for the Gardens.

We have recently installed a bench seat for one of our passionate garden volunteers Betty Walker who died in 2010. We have had to clear the area, level out and prepare the formwork for the cement, on which the seat is positioned. We will make a path in to the seat and out the other side- a mini path off the Discovery Trail -adding more interest and intimate views. It's a lovely place to sit and contemplate the world.

On our trail we are also putting in and preparing a tiny wet area that has water running through at times. It will also become an added feature. We could stay in this area forever, but we must move on very soon.

Other areas are screaming out for help and our Wednesday group are ready for a new challenge.

This is a lovely area on a hot day, and Geoff Walker will tell you it's even better in the rain.

Report from Council

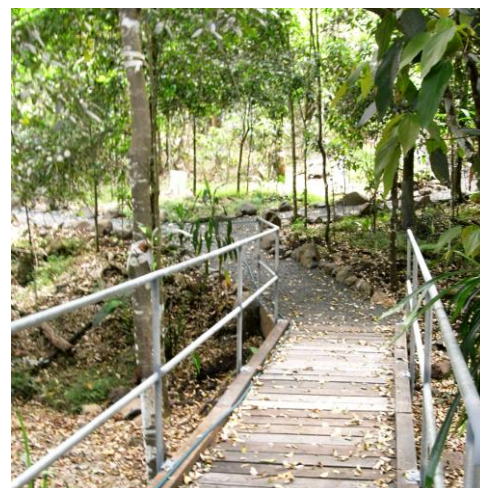
The planned Environmental Education Centre is progressing and a revised Development Application will be submitted following some site zoning issues. The location of the Centre has also been changed to the area in front of the Dog Pound building. This now puts the education centre in the middle of the Waste Facility site and will be linked to the Botanic Gardens via a board walk.

It is planned to install signs indicating the location of the Gardens on the Ballina Road/Wyrallah Road roundabout and near the entrance of the Waste Facility in preparation for official opening of the Education Centre and the Botanic Gardens later this year, subject to Councils traffic committee approval.

There is still a long term plan for a plant nursery on site but no specific time frame has been set for that yet. A site has been selected for an interim nursery near the Waste Facility offices.

Preparation for the phytocapping planting on the left hand side of the entrance road is still in progress and construction will commence once the site dries up a little. Planting occurred beside the creek south of the road last week and this will become an important asset to the Botanic Gardens.

Kevin Trustum Waste Operations Supervisor Lismore City Council; Liaison Officer with FLRBG



Bridge with railing on and ready to go

Rainforest plants and their pollinators by Peter Gould

Pollination, the transfer of pollen from the male to the female parts of a flower, the basic mechanism of sex in flowering plants, can be achieved in a number of ways. Wind, insects, birds, bats and other mammals are all known to pollinate some plants. While the mixing of genes via sexual reproduction offers many advantages to flowering plants but it does come at a cost.

Plants must compete for pollinators and they invest considerable energy in flowering and nectar and pollen production to entice and reward potential pollinators. Rewards can take the form of sugar rich nectar, pollen (containing the basic building blocks for proteins), resins and terpenes for wax making and hive building.

In the subtropical rainforest there is little air movement in the lower strata and wind is not a reliable pollinator. Bird pollinated rainforest species are comparatively unusual in our region. The Blackbean (*Castanospermum australe*) has bright red, nectar-rich flowers, which are presented when the tree is largely bare of leaves. They are highly attractive to birds such as Honey Eaters, Little Wattle Birds, Lorikeets, Friar Birds, etc. who act as pollinators. Pollination by Fruit Bats, Flying Foxes and Blossom Bats is also limited in the subtropical rainforest though bats are important seed dispersers.

However, insects are by far the most common pollinators and many have evolved extraordinary, mutually beneficial relationships

with particular plants.

Identifying plant-pollinator relationships pushes the limits of nature study – pollination often takes place high in the canopy or at night. Plant-animal interactions are not always what they seem and deciphering them requires careful observation and great patience. Not all of the insects, birds or mammals visiting flowers are actually effective pollinators. Some are thieves, feeding on pollen or nectar with no benefit to the plant. They may simply be too big or small to contact the right flower parts and transfer pollen. Others are robbers – they actually break in, chewing through the flowers to get at the nectar or eating flower parts. There are also predators, such as net casting spiders and predatory wasps, who hunt the insects visiting flowers, though sometimes predators may actually be incidental pollinators as well.

Flower structure reflects the type of pollination strategy plants employ. Non-specialists are mass flowering plants, which compete in attracting a range of pollinators, which also visit other species. They tend to have small, white, cream, or greenish, open flowers in clusters. Members of the family Lauraceae (e.g. *Cryptocarya sp.*, *Endiandra sp.* and the introduced Camphor Laurel) are typical mass flowering non-specialist species.

Specialists are only pollinated by one, or a few, very similar pollinators, which sometimes only visit one particular species of plant.

There have evolved a great range of complex flower types through co-evolution with, and adaptation to the needs of, their pollinators. The floristic complexity of subtropical rainforests means trees of the same species seldom occur side



by side, and are more often widely separated.

FIGS

Many large figs for instance occur as isolated canopy emergents, kilometres apart. All species of fig trees are entirely dependent on fig wasps (*Family Agaonidae, Subfamily Agaoninae*) for pollination and survival. They have developed a uniquely complex set of inter-relationships with generally only one species of fig wasp pollinating a particular fig.

The flowers of fig trees are enclosed - enfolded within an urn-shaped structure known as a synconium. The many small flowers, both male and female, are entirely hidden within this structure, apart from a tiny opening called an ostiole at the apex. Female fig wasps carrying pollen enter through this opening and lay eggs in the ovaries of some of the female flowers. The female usually dies at this stage, her body remaining within the fig. Her young hatch from the ovaries. The wingless, ant-like males emerge first and search out and chew their way into the galled ovaries containing females and mate with them. Having mated, the winged females fly off to other figs, picking up pollen from male flowers on their bodies as they leave. The wingless males are unable to leave and die, their bodies remaining within the fig.

The cost to the fig is the loss of about 25% of its seeds; the ovaries consumed by the developing fig wasp larvae. The pay off is that fig wasps are capable of flying 10 to 100 kms, providing an effective genetic link between widely scattered trees.

[continued next page]



Female Fig Wasp
Photo Tyler Christensen

Rainforest plants and their pollinators *cont. from p 4*

PLANTS OF THE UNDERSTOREY

These plants have a different set of challenges - there is little wind movement, low light levels, and they are often widely spaced. So they have developed a range of ingenious mechanisms to attract pollinators.

BOLWARRA



The Small Bolwarra *Eupomatia bennettii*, in bud with its pollinators-Elleschodes weevils

Photo Danya Roseright

Two understory shrubs, the Bolwarra (*Eupomatia laurina*) and Small Bolwarra (*Eupomatia bennettii*) belong to an ancient family the Eupomatiaceae with only one genus and 2 species confined to Australia and New Guinea. They are pollinated by small weevils of the genus *Elleschodes*. The flower, a specialised structure called a synandria, provides both food and shelter to the weevils who lay their eggs there. When the synandria drops to the ground the larval weevils emerge and complete their development in the soil.

WILKIEA

The urn shaped flowers of the understory shrub Veiny Wilkiea (*Wilkiea huegeliana*) have a minute opening at the top and can only be pollinated by thrips, small, winged pollen eaters less than 1 mm long. Brush Muttonwood (*Myrsine howittiana*) has massed small pale flowers with minute openings and is also pollinated by thrips. Not only are they tiny, but thrips also clean themselves before flight and only carry a few grains of pollen to the next flower. This apparent

disadvantage is more than offset by the energy saving the plant gets from being able to produce less pollen.

CUNJEVOI

Cunjevoi (*Alocasia brisbanensis*) an understory plant of moist rainforest, has a columnar flower structure called a spadix with separate masses of male and female flowers enclosed in a spathe. The flowers attract native bees, ants and flies but the true pollinators are mainly small beetles. Only they can access the female flowers at the base of the spadix where they are trapped, unable to leave until the spathe is shed.

Cunjevoi, and some of its relatives in the family Aracaceae, has the ability to generate heat, the spadix becomes 2 – 3° warmer than the surrounding air, probably to help volatise the attractive scent. Some of its relatives, natives of the cool cloud forests of Asia, have developed this ability further. They are able to heat their flowers to as much as 20° above their surrounds and offer their pollinators an energy reward for their services!

NATIVE HIBISCUS

Native Hibiscus (*Hibiscus splendens* and *H. heterophyllus*) flowers last for only one day. They are pollinated by beetles of the family Nitidulidae and small flies in the family Drosophilidae. The beetles remain in the flowers when they drop to the ground then



entering the soil to lay their eggs and complete their lifecycle.

The health of rainforest communities, and the survival of several individual species, is closely tied to the availability of suitable pollinators, and conservation, restoration and management plans need to recognise the need to protect healthy populations of pollinators.

The major threats to pollinators are similar to those faced by all forms of biodiversity: Land clearing and fragmentation of habitat; reduced population size; agricultural practices- poisoning by pesticides, herbicide use, growing of extensive monocultures and invasive species – displacement of native pollinators by feral bees and displacement of native plants by environmental weeds. We need to become more observant, to recognise the interdependence of plants and their pollinators, if we are to ensure these remarkable co-evolved relationships are able to continue.

Main reference source Geoff Williams author of "*The Flowering of Australia's Rainforests - a pollination miscellany*", published by CSIRO Press



Hibbertia scandens



Pavetta australiensis

Two of the many plants that have flowered recently in the Gardens

Organiser's Report

The good news is that we are having another wet summer and we don't have to worry about a water roster. The creeks are running and the drains in the new Discovery Trail are working. The plants are looking very healthy, even the Useful Plants and Uncommon Plants - our newest gardens that are quite exposed to the hot sun - are doing well.

The groundworks to extend the Uncommon Plants garden have been completed and we will be planting some pioneer species very soon. It is necessary to grow these species first so that the Uncommon Plants have the protection they require for healthy growth. Last Sunday a small group worked in this garden weeding and pruning. It's worth a look next time you are out there.

The recent rains have also settled the landfill above the Useful Plants Gardens and we can now work out the drainage lines to the pond. This area will be developed into special Sensory Gardens where plants with special features such as perfume, reaction to external stimuli eg touch or carnivorous habits can be observed. Paths will be wheel chair friendly and seating provided along the paths.

As soon as the weather becomes drier, we can paint the various seats and tables around the gardens including the new picnic tables and seats in Gum Tree Forest. This sort of maintenance is something to keep us occupied on an annual basis in the future.

The next Sunday workday will be held 26 February and we hope to do some furniture painting and maybe planting. Hope to see you there.

Pat Offord

The Friends have for sale postcards stickers and greeting cards. Available at work days or contact Marie



Feeling at home in the Gardens... from Geoff Walker

It took generations for the English landscape painters to feel at ease in Australia's alien bush. And so it was with me as I worked in the first working bee at our Gardens. We were weeding above the Dog Pound where there was a large clearing for us to park our cars. For many visits we only seemed to nibble at this forbidding undergrowth repelled by the lantana, in places four metres high, and the cocksbur creepers that grabbed and scratched us at every opportunity.

One Sunday I slashed a path from Fern Gully to what we now call 'Room Three'. I could not find the other creek rumoured to be in this area and I gave up for that day, dispirited, ill at ease with this proposed site for a Botanic Gardens. I did not feel comfortable working with the camphor laurels and tangled weeds. Most of the flora was unknown, nameless and thus unfriendly. The only plants familiar to me were the Hoop Pines. I just did not feel at home here.

For me at that stage I could only imagine these Lismore Gardens as a sub-tropical clone of the older-style Sydney Botanic Gardens. How could this ever be? Where were the rolling green lawns and where were the formal Gardens to be sited?

How far I have travelled mentally in the intervening ten years. I no longer have to try to visualise what our Gardens are going to look like - I can SEE. The weeds in the planted areas are under control, the indigenous trees are welcoming us as old friends and the landscaping plans are becoming reality. I look expectantly for the new buds and blossoms. I relish the flushes of the new growth as much as I would flowers in my own garden.

After short periods away from the Gardens I return excitedly to see what's new and to seek out the unexpected treasures in this now familiar world. There are Lilly Pillies and Kangaroo Apples to admire and to taste and I photograph the new

blossoms on the native hibiscus. I delight at running water in Fern Gully and feel great at the sight of



Geoff Walker & Denis Matthews strolling through strolling in the Useful Plants Garden

the new footbridge over Grandis Creek and the lush growth of the giant ferns on the creek side. Perhaps the native rainforest plants are making us feel 'at home' in return for stripping away their weedy smotherers, creating instead an environment in which they are happy to thrive?

I don't know how other volunteers feel but I now love these Gardens and feel very much at home there.
Geoff Walker

FRIENDS COMMITTEE

AGM was held in August with a few changes to the committee

President: Jan De Nardi 6629 8244
jande@activ8.net.au

Vice President: Pat Offord

Secretary: Denis Matthews
6689 5261
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Treasurer & Membership:
Mary Harrison

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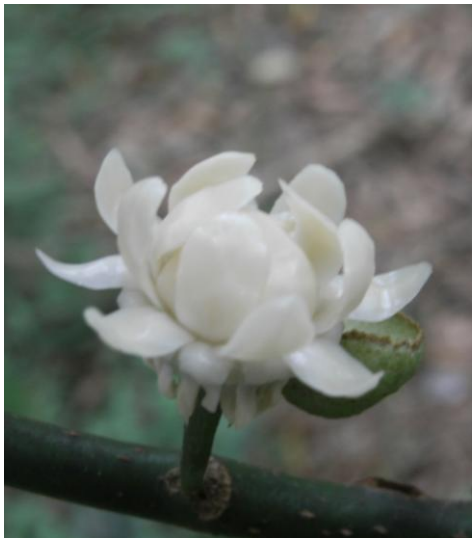
Committee: Annette Deal
Geoff Walker

Website: www.lismore.nsw.gov.au then
>things to do>recreation>Botanic Gardens

Origins of Australia's rainforests

Rainforests cover just two per cent of the Earth's surface yet are home to about half of the world's 5 to 10 million plant and animal species. Many of the foods we eat today originated in rainforests and about a quarter of all medicines have been derived from rainforest plants. Rainforests also have a major impact on the world's climate.

Millions of years before the vegetation that now covers most of Australia evolved, much of the continent was covered with moist forests similar to the rainforests of today. Although hard-leaved, or sclerophyllous, vegetation dominates the continent today, the 'bush' is not Australia's original



Eupomatia laurina Bolwarra - a very ancient rainforest plant which flowered in Room 4 in December.

vegetation. In fact, 60 million years ago, eucalypts and acacias as we know them probably did not exist.

The origins of Australia's unique rainforests have been a matter of dispute in botanical circles for over a century. Until the 1980s, many botanists believed that our rainforests had migrated to Australia in the recent geological past from South-East Asia.

They presumed that the 'alien' rainforests invaded the typical Australian vegetation and colonised the few areas that offered suitable living conditions.

This certainly is true for a small percentage of Australian rainforest species that have relatives in Asia. Recent research has shown, however, that this is only part of the story. It is now known that the majority of plant species in Australian rainforests descended from the ancient forests that covered much of the Australian continent millions of years ago.

Not only did Australia's rainforest plants originate largely in the southern hemisphere but some of the groups that evolved in the southern hemisphere have now spread northwards to other lands.

Over millions of years, a combination of complex climatic and global geomorphological events led to Australia's transformation into a 'sunburnt' country. It was this drying out of the continent that led to the retreat of the ancient moisture-requiring rainforests.

After the theory of continental drift, or plate tectonics, was finally accepted in the 1960s on the basis of palaeomagnetic evidence and the matching of once adjacent continents, the puzzling patterns started to make sense.

Although there are no fossil records of eucalypts older than 38 million years, it is probable that the first hard-leaved plants made an appearance not long after Australia's separation from Antarctica.

Australia's northward journey through 27 degrees of latitude slowed down when its leading edge rammed into the Asian continental plate. The once widespread rainforests had begun their long retreat, unable to survive the increasingly arid conditions.

Living reminders of ancient continental links can be found in the rainforests of the world since rainforests were dominant over much of the super continent while the break-up of Gondwana was in progress.

Thus, the Southern Beech genus (*Nothofagus*) occurs in Australia, New Guinea, New Zealand, New Caledonia, South America and, in fossil form, in Antarctica.

Similarly, close relatives of Australia's Macadamia nut occur in South America and Southern Africa. Adapted with permission from article on Royal Sydney Botanic Gardens website. <http://www.rbgsyd.nsw.gov.au/education/Resources/rainforests>

Rainforest Gully at ACT Botanic Gardens

One of the most beautiful areas in the Botanic Gardens in Canberra is Rainforest Gully. In the naturally dry and cold in winter/ hot in summer climate of the ACT it is amazing that rainforest plants survive at all, but the area is lush. Steps lead down into green moist coolness.



Originally this area was a typical dry gully on Black Mountain. In the early 1970s, in the days when Canberra had an adequate water supply, about 5,000 fine misting sprays were installed to raise the humidity. These have not been often used in recent times because of water restrictions.

Initially fast growing Acacia species were used as nurse plants, however these died before the genuine rainforest plants reached a suitable size and, reluctantly, tall forest eucalypts were planted to give shade. This has proved to be a problem ever since as getting them out now the real rainforest plants have got some height is extremely difficult. For further info contact Murray.Fagg@environment.gov.au

Searching for wound healing compounds at our Botanic Gardens

Researchers from Southern Cross Plant Science, a Special Research Centre of Southern Cross University (SCU), believe the native Australian flora could provide important new wound treatments. The Plant Compounds for Wound Healing project is collaborating with the Lismore Rainforest Botanic Gardens to obtain plant samples for screening for potential wound healing activity.

The research project is part of the Wound Management Innovation Cooperative Research Centre (www.woundcrc.com), which is a large, federally funded initiative involving 22 partner organisations including seven universities, three state health departments and industry partners.

Dr Linda Banbury, a Friend of the Gardens, is a member of a team from Southern Cross University (SCU) working on this research project.

"Wounds, in particular chronic wounds like diabetic ulcers and venous leg ulcers, are an enormous burden on the health system," says Dr Hans Wohlmuth, who leads the research group at SCU. "Chronic wounds affect almost half a million Australians and are estimated to cost the health system in excess of

\$2.5 billion a year."

While the overall objective of the Cooperative Research Centre is to transform all aspects of wound care, including prevention, diagnosis, treatment and services, the research group at SCU focuses on identifying plant compounds that potentially could become new wound treatments.

"We are screening a large number of mostly native Australian plants. We are looking for plant compounds with good anti-inflammatory and anti-bacterial properties, because prolonged inflammation and bacterial infection often play a role in non-healing wounds," says Dr Wohlmuth.

Plants samples for the project are being obtained from a variety of sources, but the team at SCU is particularly happy about the collaboration with the Lismore Rainforest Botanic Garden. "The Botanic Gardens is a wonderful local resource, and we are very fortunate that we are able to access it for our work," Dr Wohlmuth says.

"Plants produce compounds of an astonishing diversity, many produced in order to defend themselves against herbivores and micro-organisms," Dr Wohlmuth explains. "This chemical diversity has been exploited by humans for

thousands of years and explains why many pharmaceuticals are still directly or indirectly derived from plants."

"All societies have had to deal with wounds, so several thousand plants species have been recorded as having been used for this purpose all around the world. In

Australia alone, more than one hundred species are reported in the literature to have been used by indigenous peoples for the treatment of wounds."

The research group at Southern Cross Plant Science is to some extent guided by documented traditional use of plants for wound healing, but also screens native plants that have never been used or investigated before.

"Compared to most other parts of the world, the native Australian flora is very poorly investigated and utilised in terms of medicinal potential," Dr Wohlmuth says. "There is little doubt that there are valuable medicinal plants out there that no-one knows anything about. We hope that our work can unearth native plants that can ultimately improve the quality of life for people with chronic wounds."

Next Work Morning Sunday 26 February

Starting 7.30am

Contact Pat 6629 1435

Wednesday Group

Each Wednesday 8am start

Contact Rose 6622 6558

Bring hat, gloves & something for morning tea.

myrtle rust & koalas

Extract report in The Age Feb 2, 2012

Shadow agriculture minister John Cobb says the koala's habitat is under threat from myrtle rust, which infiltrated Australia in 2010, first in NSW and has since spread to far north Queensland. [This disease affects the leaves of members of the Myrtaceae family including eucalypts]... An expert in koala habitat, Dr Mathew Crowther of the University of Sydney, said the disease would exacerbate the major cause of dwindling koala populations, habitat reduction. He said koalas were restricted in the trees they could eat because of the different levels of toxins in them. "... If myrtle rust gets in and affects the [leaf] quality it might not be worth the koala eating it."



Photo Greg Calvert

Hibiscus tiliaceus is one of the plants obtained for study from the Gardens. It is well documented as a medicinal plant used by indigenous people.