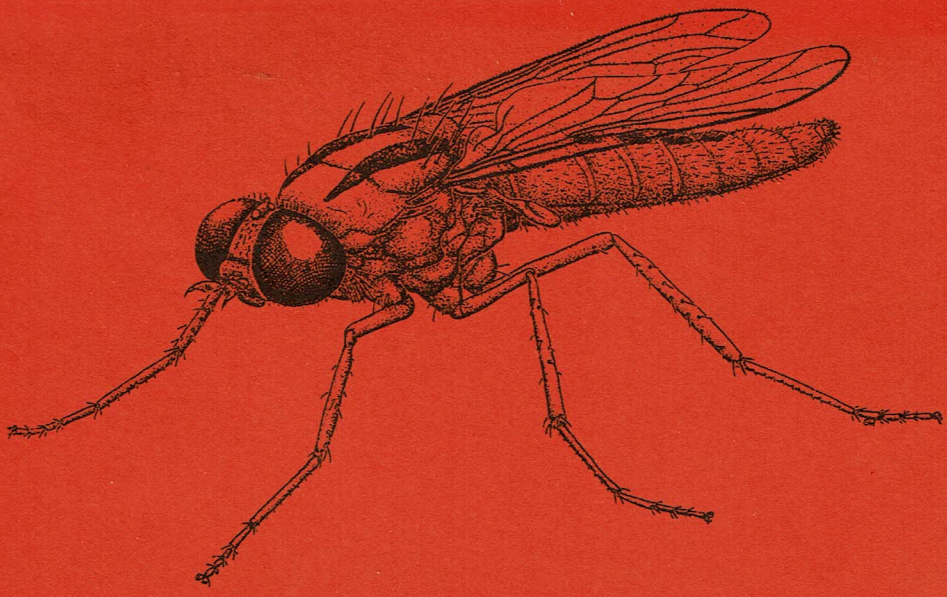
ENTOMOLOGICAL SOCIETY OF QUEENSLAND

NEWS BULLETIN



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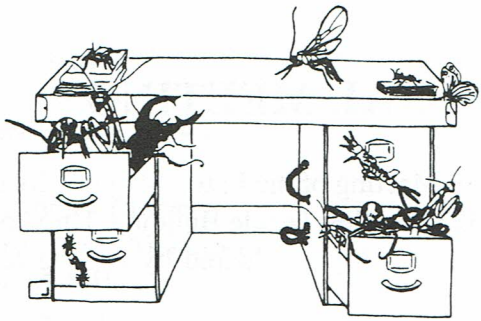
The **ENTOMOLOGICAL SOCIETY OF QUEENSLAND**, since its inception in 1923, has striven to promote the development of pure and applied entomological research in Australia and particularly in Queensland. Membership is open to anyone interested in Entomology. The Society promotes liaison among entomologists through regular meetings and the distribution of a *News Bulletin* to members. Meetings are announced in the *News Bulletin* and are normally held in the Entomology Department, The University of Queensland at 6.30 pm on the second Monday of each month (March to June, August to December each year). Visitors and prospective members are welcome. Membership information can be obtained from the Honorary Secretary or other office bearers.

Contributions to the ***NEWS BULLETIN*** such as items of news, trip reports, announcements, etc are welcome and should be sent to the *News Bulletin* Editor.

The Society publishes ***THE AUSTRALIAN ENTOMOLOGIST***. This is a refereed, illustrated journal devoted to entomology of the Australian region, including New Zealand, Papua New Guinea and islands of the south western Pacific. The journal is published in four parts annually.

EMBLEM: The Society's emblem, chosen in 1973 on the 50th anniversary of the Society, is the king stag beetle, *Phalacrognathus muelleri* (Macleay), family Lucanidae. Its magnificent metallic purple and green colouration make it one of the most attractive of all Australian Coleoptera. It is restricted to the rainforests of northern Queensland.

COVER: A stiletto fly belonging to an undescribed genus and species of Therevidae (Diptera: Asiloidea) drawn by Shaun Winterton. Shaun and David Yeates are currently working on the systematics on this family, which is extremely diverse in the woodland and semi-arid habitats of Australia.



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The issue of this document does **NOT** constitute formal publication for the purposes of the "International Code of Zoological Nomenclature 3rd edition 1985". Authors alone are responsible for the views expressed.

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ANNUAL GENERAL MEETING

Minutes of the 1997 Annual General Meeting of the Entomological Society of Queensland Inc. held in Room 323, Hartley Teakle Building, University of Queensland, on 10 March 1997, at 6.30pm. Chaired by J. King & D. Yeates.

Attendance: L. Barton Browne, C. Burwell, M. De Baar, V. Davies, S. Evans, E. Exley, D. Foley, M. Griffiths, T. Heard, D.S. Kettle, C. King, J. King, C. Lambkin, J. Lamy, A. Loch, P. Mackey, E.N. Marks, G. Maywald, D. Merritt, L. Muir, H. Nahrung, E. Reye, M. Schneider, C. Simpson, R. Wylie, D. Yeates.

Visitors: J. Holt

Apologies: T. Withers

AGM Minutes: The Minutes of the last Annual General Meeting were circulated in News Bulletin Vol. 24, Issue 1. It was moved E. Reye, seconded C. Burwell that the Minutes be accepted.

Nominations:

Jack & Sue Hasenpusch
Australian Insect Farm
PO Box 26
Innisfail Qld. 4860

Nominated: R.I. Storey
Seconded: R. Huwer

Peter Misic
PO Box 97
Sebastopol Vic. 3356

Nominated: L. Muir
Seconded: G. Maywald

WA Palmer
AFRS
Qld. Dept. Natural Resources
PO Box 36
Sherwood Qld. 4075

Nominated: H. Nahrung
Seconded: C. Simpson

Stephen Frances
Aust. Army Malaria Inst.
Gallipoli Barracks
Enoggera Qld. 4052

Nominated: L. Muir
Seconded: D. Yeates

Carolyn Ditchfield
50 Beatrice Street
Taringa Qld. 4068

Nominated: D. Walter
Seconded: D. Yeates

Claudina Rodriguez
35 Green Terrace
Windsor Qld. 4030

Nominated C. Burwell
Seconded: J. King

In accordance with the Society's rules, these candidates will be considered for election at the next General Meeting.

General Business:

Congratulations to Society member Neil Heather for his award from the Council of Gatton College of the University of Queensland for services to entomology.

Annual Reports and Financial Statements

The Society's Annual Reports and Financial Statements were published in the News Bulletin Vol. 24, Issue 10. The President invited comments. It was moved by L. Barton Browne, and seconded by P. Mackey, that the Annual Reports and Financial Statements be accepted with the following

amendments to p170: diseased should read deceased; P. Mackay should read P. Mackey; and G. Hancock should read D. Hancock.

Election of Office Bearers for 1997

The following nominations for Society positions were received by the Honorary Secretary and published in Vol. 24, Issue 10:

President	David Yeates
Senior Vice-President	Gordon Gordh
Honorary Secretary	Lynda Muir
Honorary Treasurer	Gunter Maywald
News Bulletin Editor	Cathy Simpson
Councillors	Helen Nahrung
	Chris Burwell
	Dave Merritt

Only one nomination was received for each position, therefore, all nominees were elected without a ballot.

The outgoing President welcomed new Council member, Dave Merritt and thanked the 1996 Council for their hard work. She thanked Jennifer Marohasy also, for providing the refreshments for meetings during 1996.

Introduction of the new President

Judy King invited David Yeates to take the Chair and retired to the body of the meeting.

As his first duty, David invited Judy to deliver her Presidential Address.

Main Business:

The Presidential Address

"Forestry and Entomology: Snapshots"
by Dr. Judith King

Presidential Address to the Entomological Society of Queensland 10 March 1997

Probably the first export cargo to leave Australia was a shipment of cedar from the Hawkesbury River. This was sent to England in 1795, seven years after the arrival of the first fleet. Trees and timber have been political, economic and community issues ever since.

In the early 1800s logging spread rapidly north and south from Sydney. Many people were involved in the industry, and the removal of timber was rapid. Shortly after large stands of cedar were discovered on the Macleay River, in 1840, two hundred cutters were working the area, 18 months later most of the cedar had gone and only 12 cutters were left. The newspapers did not always look favourably on the loggers, commenting on their behaviour, moral character and the mess they left behind.

By 1859, when Queensland became a separate colony with its own Government, cedar cutters were working in the Tweed valley and most of the accessible cedar south of the Tweed had been cut out. The loggers took other timbers as well, but cedar was the most prized. Large areas of trees were destroyed in getting the timber out, and trees that could not easily be moved were left to rot. The new Queensland Government, in 1860, introduced as one of its first acts, legislation on timber harvesting, requiring timber cutters to pay for a licence and limiting the amount cut on crown lands. However there was no way of policing the law, and it was really a revenue raising exercise. In spite of the legislation the destruction of forests continued.

Concern was expressed in some parts of the community. The Acclimatisation Society of Queensland met in 1873 to discuss conservation of the timber resources. The meeting was addressed by the President,

L.A.Bernays, the who talked about the problems of introducing conservation measures. The next year, Walter Hill, Curator of the Botanic Gardens, added his voice to those protesting the poor practices in the timber industry. In 1875 a committee set up by the Government found that much State forest was coming under private ownership, where timber licensing provisions did not apply. The timber was being harvested and sold and a lot of the profits were going south.

The conservation issue was raised periodically, but logging continued unabated. By 1880 all the cedar had gone from the Daintree and Mossman. The loggers moved inland, and cedar from Ravenshoe and the surrounding country made its way to the coast via the Barron Falls.

Apart from cedar, there was plenty of timber left, and politicians were more concerned about money. Timber sales to NSW were worth 74007 pounds in 1880, timber imports were negligible. Land clearing for settlement was also an issue, settlement in north Queensland was strongly supported by the Government, but settlement meant more clearing of forest.

At that time licensing and other timber issues were the responsibility of the Lands Department, which continually pushed the need for a separate Department of Forestry. Eventually, in 1900, a forestry section with three members of staff, was set up within the Lands Department. In 1906 legislation was enacted which enabled crown lands to be reserved for State Forests and National Parks. These protected areas would, theoretically, provide a never ending supply of timber.

The years up to 1920 saw increases in staff and, most importantly, professional foresters appointed to head the Department of Forestry. Recognition that native forests could not provide an inexhaustible supply of timber led to experimental plantings of a variety of native trees and the establishment of nurseries. The first commercial hoop pine plantations were begun in 1920. Experimental plantings of exotic pines were made in 1924 and large scale *Pinus* plantings began in 1930.

There had been some very early experimental plantations, *Agathis robusta*, Kauri pine, was planted in the late 1800s but failed, and red cedar was planted in 1902. By 1913 the young cedar was affected by cedar tip moth, *Hypsipyla,* and by 1916 planting was abandoned.

In 1924 Forestry became a separate Department.

Until the early 1930s entomological problems of trees and timber were handled by staff temporarily seconded from the Department of Agriculture and Stock, Division of Entomology and Plant Pathology. Walnut bean (also called Queensland walnut) is a north Queensland rainforest cabinet wood which was being exported to America in large amounts. The Americans were upset by the amount of damage caused to logs by ambrosia beetles, which attacked the newly felled tree and continued to tunnel in the logs for some months. J. Harold Smith studied the beetles at Gadgarra near Atherton, and suggested a range of practical methods of reducing beetle activity, many of which still apply today. Listed on the inside cover of Smith's publication, as 'assistant to entomologists', is the name A.R. Brimblecombe.

Dr Alf Brimblecombe, although he was never employed by the Forestry Department, was responsible for forest insect problems from the mid-1930s until the 1960s, as part of his duties with the department which became Primary Industries. He researched many problems and published extensively on forest and timber insects. He was the first forest entomologist in Queensland. A major study concerned kauri pine.

Kauri pine, *Agathis robusta*, is very valuable timber. In 1920 plantations of *A. robusta* were started in the Mary Valley, close to its natural distribution. Apart from attacks by Kauri thrips in the 1930s, the trees grew well. In 1959 the first outbreak of a coccid pest occurred. Within two years all the Mary Valley plantations were affected, and tree deaths were recorded the following year. The insects attack the new growth, causing browning, distortion and leaf fall. By 1965 the damage was so great that salvage logging began. Brimblecombe described the kauri coccid as *Conifericoccus agathidis* and determined its life history. His studies, over several years, showed the insect was present in natural stands of trees, without ill effects.

The plantations were slightly out of natural distribution and it was concluded that natural enemies were missing. Breeding resistant strains, chemical control and identification of the coccids' natural enemies were considered as management methods. However, Kauri is not grown at present as a monoculture plantation, but it is included in mixed plantings in north Queensland.

Although exotic pines grew well, there were some problems, trees in southern Queensland have been damaged and killed by Psychidae (bag moths).

The first full time entomologist employed by the Forestry Department was Neil Heather, who was mentioned earlier this evening. His work included kauri coccid, the bag moth *Hyalarctia heubneri*, and the West Indian drywood termite, which was discovered in Maryborough in 1966.

Robin Yule replaced Neil, at the time when *Cryptotermes brevis*, the West Indian drywood termite, was becoming an issue. The insect is a destructive pest of timber and was well established in Queensland by the time it was discovered. It is thought to have been introduced during the war years. Some buildings in Maryborough were fumigated, and then the termite was discovered in Brisbane, in the early 1970s. Surveys began to map its distribution.

Ross Wylie joined the Department in 1974. Murdoch DeBaar joined the section just before Ross, and became Ross's technician. Ross and Murdoch both took part in the drywood termite surveys which continued through the 1970's, as did discussions on eradication. Some of the forest problems Ross looked at included eucalypt defoliating stick insects and the biology of the longicorn beetle, *Strongylurus decoratus*, which prunes the branches off hoop pines, and he began his research on dieback. Along with his other duties Murdoch has had responsibility for the Forest insect collection, which now includes about 10,000 specimens.

Decisions were made about the eradication of West Indian Drywood termite,

and Brenton Peters joined Forestry in 1979 to implement the programme. The first large scale fumigations were carried out in Brisbane in 1979. The monitoring and fumigation programme is continuing, although Brenton spends most of his time now on subterranean termites.

Ross Wylie followed Robin Yule as entomologist in charge, and in 1982 another exotic pest arrived in Queensland.

Ips grandicollis, the five-spined bark beetle, is a pest of exotic pines and was accidentally introduced into South Australia from North America. It was first detected in Queensland in 1982. In Queensland the beetles do not attack healthy pines although they had moved onto healthy trees in other areas when populations were high. Here they bore into stressed or damaged trees, for example drought stressed or fire damaged trees, newly felled logs and pruning or logging trash. Beetle activity, both adult and larval, is confined to the tissues below the bark, and does not penetrate the log. However the adults introduce a fungus, which may slowly kill the tree, but also permanently stains the timber blue. This degrades the timber, greatly reducing its value. The distribution of the beetle was mapped, and quarantine boundaries imposed to prevent infested material being taken north from the south east corner of the state. Studies were carried out on its life history in subtropical climates. Several predators and parasites were released and two are now established and help to control the beetles. A regular monitoring and inspection programme is continuing. The beetles are slowly moving north, and the quarantine boundary is now in central Queensland.

The impact of *Ips grandicollis* was graphically illustrated after the plantation fires at Beerburrum in spring, 1994. We were left with dead and scorched trees as far as the eye could see, and a huge incubator for the beetles. In lightly burned areas, with slash on the ground, beetles survived and could move onto dead and damaged trees, bringing the problems of timber degradation due to sap stain, and a possible population explosion followed by attack on healthy trees. The decision was made to salvage the trees and store them under water spray to protect them. The stored timber would then be released over a number of years as it was needed. Within seven weeks

of the fires, between Christmas and New Year, the first reports of *Ips* activity were made. It became a race against time, with logging teams from all over mainland Australia and Tasmania working during daylight, 7 days a week. Four hundred thousand cubic metres of timber were moved into the Log Storage Area. We inspected tree plots regularly and plotted the advance of the beetles until logging was finished. The beetles did not move into healthy trees, and *Ips* infestations in logs quickly died out under water spray.

However the problems were not over. Long term storage in subtropical conditions had not been attempted often, and little information was available. Problems developed after about a year, when there was a massive outbreak of the ambrosia beetles *Xyleborus ferrugineus* and *X. perforans* in logs which were not thoroughly wet. Both these species introduce sap stains into timber, and tunnel extensively inside the log, greatly reducing the value of the logs. As well a fungus, *Rigidoporous lineatus* was found, which thrived in the wet conditions. We began a twice weekly inspection programme, and water application was increased where necessary. We also trapped beetles. The beetle activity slowed and then stopped with the increased water application and then the onset of winter. The inspections are continuing once a fortnight, and there is very little beetle activity. Most of the salvaged timber has now been sold. The site is being used to store fresh logs, so the monitoring continues.

Chris Fitzgerald and I joined the Forestry Department in late 1989. Shortly afterwards the Department became part of DPI. The new Forest Service was then restructured, and there were some difficult years for the entomologists and pathologists, together called Forest Protection, with the loss of some scientific and technical positions. However the formation of the Queensland Forest Research Institute within DPI Forestry has brought new opportunities. The Forest Protection section is increasing in size, with greater recognition of the effect that insects and diseases can have on the value of trees and timber. There are now three permanent entomologists, one entomologist on contract and three and a bit technicians. We are in a much better position than most other states.

In the past we were dependant to some extent on District staff to report pest and disease problems, particularly in more remote areas. We now have a Forest Health Surveillance team, consisting of a pathologist and an entomology technician. Their role is to systematically inspect all the plantations, the nurseries and as much of the state forest as possible every year, and report on health conditions. Inspections are carried out on foot, by vehicle, and from the air. The team covers an enormous area and they are on the road more than 100 days a year. Any problems are followed up with more detailed investigations. They have just completed their first year. We are developing a data base of pests and diseases, and liaising with NSW Forestry, who have also adopted the system.

What of the future - the future from an entomologist's point of view is exciting. Our responsibilities for the existing plantations and state forests continue. The long awaited move into hardwood plantations has begun, with an unknown number of insect pests waiting in the wings. Involvement in joint research projects, nationally and internationally, is increasing, and there are potential problems with exotic insects.

Native and exotic pine plantations will continue to be a major responsibility. With limits on the land available for increased plantings, the emphasis will move towards tree breeding and clonal techniques to produce fast-growing, high yielding lines, and intensive protection to minimise losses.

Of great concern is the movement north of *Sirex noctilio*, the introduced wood wasp, last seen close to Tamworth and heading north. It will inevitably reach Queensland. *Sirex* is a major pest in southern states and New Zealand, where it lays eggs in exotic pines, usually unhealthy trees, and introduces a fungus which kills them. The larvae feed in the dying tree. In the southern states many trees were lost before management measures were introduced. These include insect and nematode parasites. Queensland Forest Service has traps in *Pinus* plantations near the border, and surveillance is increasing. We are liaising with NSW Forestry, and will be attending *Sirex* management training courses.

The development of native hardwood plantations is being supported by research grants from the State and Federal governments. The aim is to "promote the development of a viable private forestry plantation industry in Queensland". Trees will be planted by private land owners, or as joint ventures with DPI. The plantations may be for uses as diverse as pulp wood, structural timber or high value cabinet woods. The landowner is advised of the best species to plant for a particular purpose in their area and the trees are supplied by DPI. Plantings are chosen from a list of preferred species. Research is being undertaken by QFRI to support the initiative and experimental plantations are in place in several areas throughout Queensland. Topics include species selection: the right tree for the right site; tree breeding: selection for growth rate, straightness of stem, stability in wind and other factors such as timber quality and bow and spring - sawing properties, and even insect resistance. Clonal techniques are being used in the same way as for other crops, and silvicultural techniques for native hardwoods are being developed. Having planted their trees, the land holders are advised on care, and are given varying amounts of assistance.

The trees will be harvested at 20, 30, 40 or 50 years, depending on species, how they grow and end use. In that time they are subject to a variety of insect pests which feed on or lay eggs in just about every part, and different tree species often have different suites of pests. Entomological research and extension is an integral part of the program. A hardwoods entomologist has been appointed to identify pests, sort out their life cycles and biology, develop integrated pest management programmes and prepare manuals and other advisory materials. This is an enormous task in the time available. If major pests can be understood and controlled, other management techniques can assist in keeping the trees in good health so that they can recover from minor and opportunistic pests. All the entomology section are involved to some extent in this research, it promises to be a very challenging project.

QFRI entomologists are collaborating with other organisations, and in the last year we have had Mannon Griffith working in the section with Ross Wylie, as part of an international project on Red Cedar. Red cedar and some of its relatives are very valuable, but are almost impossible to grow in some

countries because of tip moths. We hope the project will be on-going. In addition, Ross will be undertaking several trips to S.E.Asia this year, as an organiser or member of research teams.

The incursion of exotic tree and timber pests is a threat to the forest and timber industries, and we maintain close contacts with AQIS. Asian gypsy moth, a noctuid, is of major concern at present, its establishment in Australia would be a disaster.

Asian gypsy moth is a strain of *Lymantria dispar* which is more dangerous than the European strain. The caterpillars feed on more than 600 tree species. Heavy infestations of caterpillars will defoliate trees, and after repeated defoliation trees will die. The moth is a major threat, not just to forest related industries but to all our trees. It has spread rapidly from its native areas in SE Asia. Eggs masses are felty and pale brown, rather like the clusters of grass moth eggs often seen under house eaves. The egg masses can be carried on machinery, containers and other cargo coming in to Australia. If the eggs hatch after unloading, or caterpillars or moths escape, it is likely a host will be found, since they feed on so many species.

Some time ago eggs were found on a container on a Russian ship visiting New Zealand. The ship had already called at an Australian port. This illustrates how easily such pests can travel.

AQIS now has a trapping program in place, using pheromone traps, at ports and airports and the surrounding areas. In Brisbane 41 pheromone traps are in place. They were deployed, and are emptied fortnightly by forestry staff, and we identify the insects. There are traps at other points of entry. This is an early warning system. Eradication measures can be applied quickly if moths are trapped. It is in everyone's interest that this destructive moth never becomes established in Australia.

What do forest entomologists do? The role of our group is protection, we try to find answers for insect problems, and we try to foresee problems. I spend time in native forests, native and exotic plantations, nurseries and saw mills. In the laboratory I can use my taxonomic skills to identify tree and

timber pests for a variety of Government, commercial and public. I prepare information literature, contribute to conferences and workshops and talk to meetings. I am involved in research projects. I answer enquiries on insect and tree problem, anything from termites in houses to how to stop a horse chewing the bark off a tree. I travel around Queensland and have visited some most beautiful places and some I never want to see again. Field work in the summer is hard, I hate having leeches on my ankles and spear grass in my socks and I have a lot of trouble with some of the more imaginative barbed wire gates designed by sadistic Forest Rangers. It is an interesting life, and a discipline which I hope will expand and provide employment for more entomologists in the future.

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The President announced that the next Meeting is on 14 April and the speaker is Julia Playford.

There being no further business, the President closed the meeting.

The New President

Dr David K. Yeates

David graduated with first class honours from UQ (1981), and worked as a research assistant at the Queensland Museum for two years. He began studies for a Doctor of Philosophy at the University of Queensland in 1984, studying the systematics and behaviour of the Australian bee flies (Diptera: Bombyliidae). The degree was conferred in 1988. David then worked as an Entomologist with the Western Australian Department of Agriculture in Perth for two years. In 1990-92 he was Roosevelt Postdoctoral Fellow at the American Museum of Natural History, New York, studying the phylogeny and classification of asiloid Diptera, a topic which he pursued in Canberra during a CSIRO postdoctoral fellowship in 1993. He began lecturing in the Department of Entomology at the University of Queensland in 1994.

David has served as Assistant Treasurer of the Australian Entomological Society and is a Research Associate of the American Museum of Natural History. His research interests include:

- Phylogeny and classification of the insects, especially Diptera;
- Methods of phylogenetic analysis;
- Behavioural ecology of insects; and
- Computer-assisted identification.

David's research has been supported by the American Museum of Natural History, Schlinger Foundation, University of Illinois, the Australian Research Council and the National Science Foundation of the USA. David has conducted field work in North and South America, Africa, Europe and Australia. He is currently co-authoring an article for the *Annual Review of Entomology* on the phylogeny of Diptera. He is Program Leader of the Identities group at the Cooperative Research Centre for Tropical Pest Management. The identities laboratory conducts research on the molecular genetics and evolutionary relationships of pest organisms.

NOTICE OF FUTURE MEETINGS

14 April: Julia Playford, 'Pollination biology of primitive angiosperms'

PEOPLE AND PROJECTS

NEWS FROM THE QUEENSLAND INSTITUTE OF MEDICAL RESEARCH
Mosquito Control Laboratory, Brisbane.

Marc Klowden is currently on sabbatical with Richard Russell's group at Westmead Hospital in Sydney. Marc, a well known Insect Physiologist from the University of Idaho, will visit the QIMR on the 15th April. All are welcome to attend the malaria and arbovirus unit seminar held in the D Floor seminar room at 1pm to hear Marc discuss his latest research on 'Regulation of host seeking in mosquitoes'.

Lynda Muir has returned to work part-time and is continuing her research on improving the surveillance of *Aedes aegypti* mosquitoes. This project is funded by the PRDC.

Ann Marie Boyd has joined the team at the Mosquito Control Laboratory to investigate the interactions between vertebrate hosts and vectors of Ross River virus. Ann Marie is originally from James Cook University of North Queensland where she completed a Bachelor of Science (Honours) degree. Ann Marie obtained First Class honours for her study on the 'Phenology and ecology of mosquitoes of urban and rural Townsville'.

NATURAL RESOURCES

NEWS FROM QDNR
Alan Fletcher Research Station, Sherwood.

The lantana project is currently reimporting insects from Mexico and Brazil for mass-rearing and release as potential biological control agents of *Lantana montevidensis* and *L. camara*. DNR contract entomologist from Columbia, Cesar Garcia is collecting *Ectaga garcia* in Brazil as a biocontrol agent of creeping lantana. Ricardo Segura of CSIRO, Mexico, is currently collecting more larvae of *Aerenicopsis championi*, a cerambycid for the biocontrol of *L. camara*. John Winder, who previously worked with lantana insects for CSIRO is the 1970's, is currently collecting a chrysomelid, *Alagoasa parana* in Brazil, as a potential biological control agent of *L. camara*.

Conotrachelus sp is established on parthenium in Central Queensland, and releases of this insect continue. A new biocontrol leaflet illustrating all released parthenium agents has been produced and is available from DNR and the CTPM. Some *Thecesternus hirsutus* , a root-feeding weevil have been sent to quarantine at TWRC, Charters Towers, for rearing and host-testing as a potential biological control agent of parthenium.

Allan Tomley has been flying around distributing rubbervine rust in the Richmond area, inspecting further release sites and avoiding cyclones.

Graham Donnelly is heading to Central Queensland to study the effects of *Penthobruchus germaini* , a seed-feeding beetle, on parkinsonia infestations.

DPI QUEENSLAND

NEWS FROM DPI MAREEBA

Barry Moore spent several weeks on his Jullaten property until mid February, continuing his survey of the included insect fauna. He is planning a longer stay in the coming winter months.

Henry and Anne Howden spent several weeks recently visiting Ross Storey in Mareeba and continuing their sampling of the local beetle fauna. Though beetle activity was less than hoped, socialising with old friends made the trip, possibly their last to Australia, worthwhile.

Geoff Monteith spent a week with Ross Storey at Mareeba DPI as part of their involvement with a large dung beetle databasing project financed by CRC-TREM. Time was spent processing several thousand specimen and discussing some joint revisionary work. They were also joined by Chris Reid of JCU, Townsville who is also strongly involved with the project. Chris received word of a possible transfer to the Cairns JCU campus, which would allow more contact with Ross and the large Mareeba Coleoptera collection.

Paul Zborowski returned north late in February to further develop his insect photography business. Paul had a week long visit by Ed Ross (USA), a fellow insect closeup specialist and also tied in with several visiting European hemipterists who were working in the Chillagoe and Undara areas after a international conference in southern Australia.

Sharyn Foulis, formally from Adelaide, started work in entomology at DPI Mareeba. Amongst other things Sharyn will be continuing the work of Keith Halfpapp (now full time with the papaya fruit fly program) on palm leaf beetle.

Ted Fennar visited Mareeba as part of a further organisation of the AQIS quarantine program.

NEWS FROM CRC FOR TROPICAL PEST MANAGEMENT, Brisbane

Bob Sutherst attended the GCTE Scientific Steering Committee meeting in Bogor during March. Bob reported that it was exciting times seeing the international modelling community moving towards collaborative, modular and generic modelling approaches.

Bob then attended a GCTE agroforestry Workshop in which there was a large need to consider pest related issues. The highlight was a visit to a typical Javanese home-garden where we found 64 different types of fruit in the one village. Hardly any pests, but a more tolerant threshold than we would accept of course. IPM par excellence!

An international short course on "Beneficial organisms in pest management systems" is to be held at CTPM, 17-28 November, 1997. The course aims to provide participants with an understanding of the theory and value of beneficial organisms in pest management, and skills in their integration into an overall management strategy. For further information contact: Lynne Grbin, CTPM, Ph: (07) 3365 1874, Email: L.Grbin@ctpm.uq.edu.au.

NEWS FROM UNITED STATES DEPARTMENT OF AGRICULTURE Australian Biological Control Laboratories

Unfortunately Charley Turner has had to return to the United States in January due to serious illness.

In February, Matthew Purcell rejoined the ABCL after working for over 2 years on water hyacinth.

The group is eagerly awaiting the release of the Melaleuca leaf weevil, *Oxyops vitiosa*, in the United States.

Kylie Galway and Jeff Makinson are busy working on new agents, a tube-dwelling moth and a gall fly.

SOCIETY SUBSCRIPTION RATES

ORDINARY: Persons resident within the municipality of Brisbane - $23pa ($20 if paid by AGM).

COUNTRY: Persons resident elsewhere - $21 pa ($18 if paid by AGM).

JOINT: Couples in either of the above categories who share a copy of the *News Bulletin*, but each otherwise have full membership privileges.

Ordinary - $30 pa ($27 if paid by AGM).

Country - $27 pa ($24 if paid by AGM).

ASSOCIATE: Students and others at the discretion of the Society Council - $15 pa ($12 if paid by AGM). Associate Membership conveys full membership privileges except the right to vote on the conduct of affairs of the Society, to hold office and to nominate new members.

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AUSTRALIA:	Individuals A$16 pa	Institutions A$20 pa
ELSEWHERE:	Individuals A$20 pa	Institutions A$22 pa

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NOTICE OF NEXT MEETING

The next meeting of the Society will be held at 6.30 pm on **Monday 14 April** in Room **323**, Hartley Teakle Building, UQ. The main business will be: **Julia Playford**, 'Pollination biology of primitive angiosperms'. Refreshments will be served before the meeting at 6.00 pm in the Tea Room (510).

VISITORS ARE WELCOME