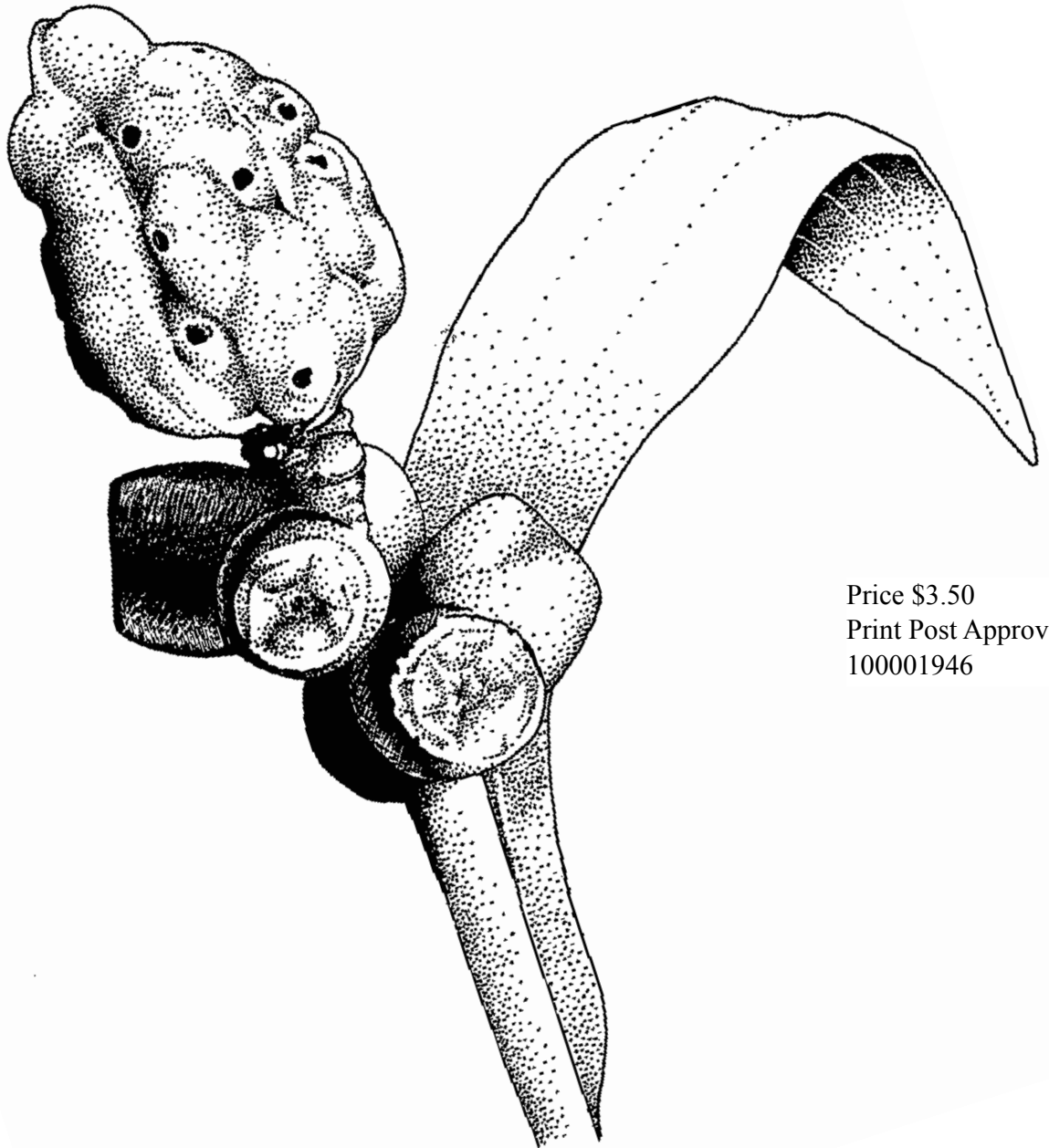


Entomological Society of Queensland

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Entomological Society of Queensland

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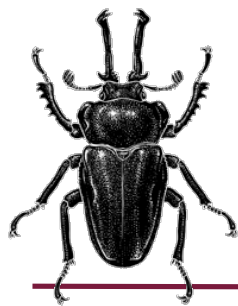
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Front Cover Illustration: This beautiful illustration is by Andrew Moore when he was employed with the Australian Biological Control Laboratory at Townsville, James Cook University. The Fergusoninidae gall fly, *Fergusonina turneri*, forms galls on the broad-leaved paperbark tree *Melaleuca quinquenervia* in a symbiotic relationship with *Fergusobia quinquenerviae* nematodes. The galls, located at the top of the stem, show adult fly exit holes. Although this insect was highly specific, it failed to establish after being released in Florida as a biological control agent.

ISSN 1037-2989



Entomological Society of Queensland

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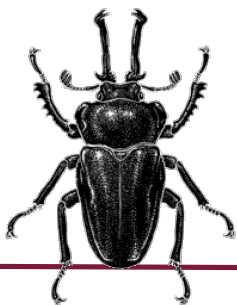
The **ENTOMOLOGICAL SOCIETY OF QUEENSLAND**, since its inception in 1923, has striven to promote the development of pure and applied entomological research in Australia, particularly in Queensland. The Society promotes liaison among entomologists through regular meetings and the distribution of a *News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

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 in the Australian region, including New Zealand, Papua New Guinea and the 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 (Coleoptera). Its magnificent purple and green colouration makes it one of the most attractive beetle species in Australia. Other common names include Rainbow, Golden and Magnificent Stag Beetle. It is restricted to the rainforests of northern Queensland. Emblem illustration by Sybil Curtis.

The issue of this document does **NOT** constitute a formal publication for the purposes of the "International Code of Zoological Nomenclature 4th edition, 1999". Authors alone are responsible for the views expressed.



Entomological Society of Queensland

Minutes for General Meeting

Tuesday, September 13th, 2016

Held in the Seminar Room, Ecosciences Precinct,
Boggo Rd, Dutton Park.

Meeting open: 1:03pm

Attendance (24): Giovanni Fichera, Andrew Hayes, K. Dhileepan, D. Leemon, James Dorey, Andy Wang, Mark Schutze, Desley Tree, Chris Lambkin, Noel Starick, Pauline Wyatt, Shannon Close, Brenton Peters, Li Xin Eow, Mona Morandi, Penny Mills, Brogan Amos, Austin McLennon, Andrew Maynard, David Holdom, Claudia Schipp, Bradley Brown, Kathy Ebert, Geoff Monteith.

Visitors (18): M. Healy, D. Baker, S. Ride, M. Elmer, Ania Gauowicz, Katharina Merkel, Laura Jones, Lara Senior, Brendan Missenden, Suk-Ling Wee, Boyang Shi, Florian Schwarzmuller, Ramandeep Kaur, Thelma Peek, Chloe Jacobs, Ted Pettgrove, Barton Loechel, Anthony Clarke.

Apologies: Tim Heard, Lyn Cook, Ross Kendall, Julianne Farrell, Susan Wright, Don Sands

Minutes: The minutes of the last meeting were circulated in News Bulletin 44[5] August 2016. Moved the minutes be accepted as a true record: Christine Lambkin
Seconded: Penny Mills
Carried: all

Nominations for membership approved by council:

1. Philip Price (general)
2. Katrina Louise Nolan (general)

General Business:

Geoff Monteith announced to members that Max Moulds was the successful recipient of the 2016 Australian Natural History Medallion, as awarded annually by The Field Naturalists Club of Victoria. Max was nominated by the ESQ in recognition of his remarkable contribution to the field of Australian Entomology, and will be awarded the medal at a ceremony on Monday November 7, where he will also present a talk.

Main Business:

Presentation by Kumaran Nagalingam on “Functional role of male lures of *Bactrocera* fruit flies: potential to maximize their use in pest management”. A vote of thanks was given by K. Dhileepan.

Next meeting: The next meeting will be on the 11th of October, presented by Madaline Healey on “Barefoot entomology – working as an entomologist in Laos”, ACIAR Biocontrol in the Mekong.

Meeting closed: 2pm



Madaline Healy working in Laos.

At our next meeting...

"Barefoot entomology – working as an entomologist in Laos"

*presented by Madaline Healy
University of the Sunshine Coast &
Australian Centre for International Agricultural
Research*

Agriculture employs over 70 % of the workforce in Laos, providing approximately 27 % total GDP. Working towards their goal to meet the World Trade Organisation's requirements for exports to the ASEAN economic community and international markets, vegetable production intensification will see increased plant pest pressure and significant on-farm losses to the majority subsistence and small-holder cooperative farmers. This will be a major challenge in the horticultural production areas of Savannakhet and Champasak as little crop health capacity exists to support farmers.

In collaboration with Provincial Government authorities, the Australian Government volunteer program AVID, and the Crawford Fund, a long-term capacity building program in crop health, biosecurity and food safety has been implemented in Laos. The program engages early-career scientists as volunteers to deliver insect diagnostics and pest management training to increase the capacity of local staff to provide crop protection advice to local vegetable growers.

Combining hands on participatory learning in the laboratory, classroom and field allows for context specific training to take place during field surveys, collection curation and the development of pest

About our speaker...

Madaline Healey works for the University for the Sunshine Coast on an ACIAR project looking at biological control of eucalyptus galling insect pests in the Mekong Region, South East Asia. She has previously worked with the QDAF plant protection team to develop sustainable integrated pest management programs in vegetable production systems, and as an entomology and IPM advisor at the Provincial Agriculture and Forestry Office, Savannakhet, Laos. Madaline is coming to the end of her PhD looking at the population dynamics of thrips in vegetable agro-ecosystems.



**Tuesday, October 11th at 1pm, Seminar Room at EcoSciences, afternoon tea following.
All welcome!**

checklists. This includes working alongside local growers to develop and apply sustainable and cost effective integrated pest management strategies on farm. This is a long-term commitment to capacity building in insect pest management in the horticulture sector in Laos, contributing to rural economic development of the smallholder farm sector by increasing crop protection capacity and decreasing on farm crop loss.



Madaline Healy working in Laos.



A MESSAGE FROM THE TREASURER – September 2016

Membership subscriptions are due 1st January annually.

ESQ has 320 Paying Members: 289 (90%) had paid by 31st August 2016. Many thanks to those of you who have paid.

Forgotten to pay? An increasing number of Members are paying their membership subscriptions by Direct Deposit to:

Account Name: ENTOMOLOGICAL SOCIETY OF QUEENSLAND
Branch number (BSB): 06 4141
Account number: 00901185

****Please use member's name as reference.**

CAUTION: Without “member's name as reference” (e.g. Peter Allen) I cannot recognise you!

NOTE: A recurring Annual Direct Deposit is easily set-up and your Treasurer will thank you! Contact me to find out how.

If you think you have not used “member's name as reference” correctly during August, please contact me: I know that you are out there!

Dr Brenton Peters
petersbc@tpg.com.au



*Functional role of male lures of *Bactrocera* fruit flies: potential to maximize their use in pest management*

presented by Nagalingam Kumaran

*Earth, Environmental and Biological Sciences, Queensland
University of Technology, GPO Box 2434, Brisbane, QLD, Australia 4001*

Bactrocera fruit flies (Diptera: Tephritidae) are one of the most important horticultural pest groups globally. In these flies the parental female deposits eggs directly into host fruit, where the subsequent larvae feed and develop before leaving the fruit to pupate. Many of the pest fruit flies are polyphagous and most commercially significant fruits and vegetables are susceptible to fruit fly damage. Fruit flies cause economic losses not only through direct crop damage and associated control costs, but also through lost market opportunity and quarantine costs.

Male annihilation technique (MAT) is an important management option for *Bactrocera* fruit flies, which utilises natural or analogue

plant secondary compounds (commonly known as male lures) such as methyl eugenol and raspberry ketone/cuelure, combined with smaller amount of insecticides to attract and kill male flies. The use of male lures and a toxicant against fruit flies dates back to the early 1900s, and since then various attractants have been investigated and utilized for fruit fly management. While male lures have been used in pest management over a century now, questions on the effect of the male lures on tephritid's biology and ecology are largely ignored, and this significantly impeded the use of male lures in fruit fly pest management.

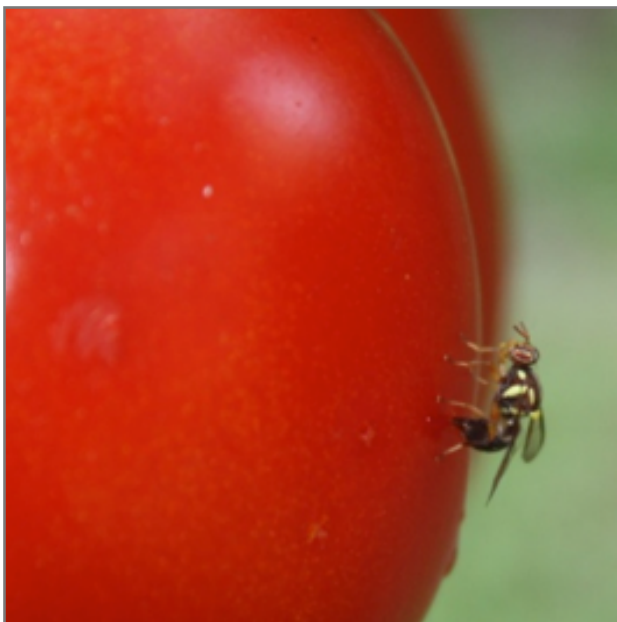


Figure 1. Ovipositing female *Bactrocera tryoni* (photograph courtesy: Mrs Linda Clarke)

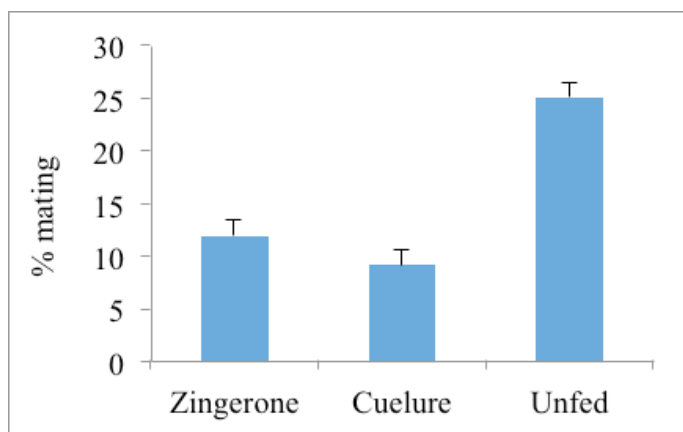


Figure 2. Proportion of females re-mating after first mated with males fed on cuelure, zingerone or unfed males

The olfactory responses of *Bactrocera* flies to male lures are very strong, and flies upon responding to the lure sources feed on them. Males that have fed on the lures commonly have a mating advantage over males that have not fed on lures, positively shown to be a result of releasing more attractive pheromone volatiles and being subsequently selected by females for copulation. In the Queensland fruit fly, *Bactrocera tryoni*, the male flies fed on cuelure

and zingerone show greater mating success and mate multiple times compared to normal males. In addition, the lures exert significant indirect effects in females: females mating with the lure-fed males produce more eggs and show reduced re-mating propensity (i.e.) females do not mate again or takes longer time to re-mate. The lure effect in *B. tryoni* is not just current generational that the offspring sired by the females mating with lure-fed males show a greater foraging ability towards lure compounds.

Male *B. tryoni* fed on cuelure and zingerone accumulate ingested lure compounds in their rectal glands (the site of pheromone synthesis) and release along with endogenous pheromones during mating, which subsequently attract more number of females when compared with the pheromonal compounds of normal unfed males supporting the ‘sexier pheromone’ hypothesis. In addition to releasing sexier pheromonal compounds, lure-fed males become physically active after feeding on lures: male *B. tryoni* fed on zingerone demonstrated significant upregulation of functional genes associated with energy metabolisms and also that

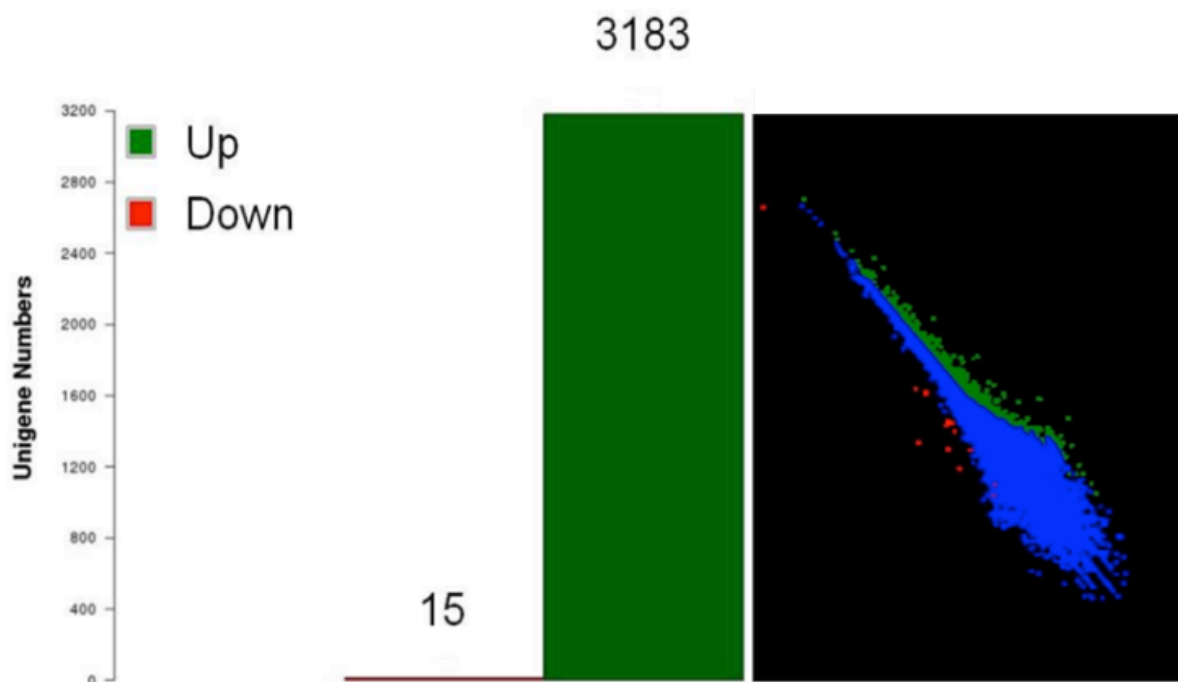


Figure 3. Upregulation of genes after male *Bactrocera tryoni* fed with zingerone. Upregulated genes (3183) included transcripts associated with energy metabolisms, oxido-reductase activity, ATPase activity and Nutrient reservoir activity

males fed on cuelure and zingerone walked a longer distance. Overall, these scenarios suggest male lures are increasing fly's short term energy levels that can help males achieve greater mating success through effective participation in the behaviours associated with sexual calling and male-male competition.

The behavioural, physiological and genetic modifications noticed in lure-fed *B. tryoni* suggest the possibility that we can maximise the use of males lures in *Bactrocera* pest management. By advancing our theoretical understanding of lure-*Bactrocera* interaction, these observations help us to use the lures better in the MAT programs. Further, the lure induced male physical fitness and reduction in the female re-mating propensity in particular proposes that the lures can be used in the Sterile Insect Technique (SIT) program to avoid potential problems of the SIT.

A key limitation in SIT is the quality of sterile males and their inability to compete with wild males for

female mates. For instance, sterilisation coupled with mass rearing under laboratory condition lead to various selection pressures to which the flies respond and alter their genetic makeup. The change in the genetic makeup lead to loss of qualitative traits that are necessary for their competitiveness with rival males: the outcome that heavily compromises the success of the SIT. However, the results explained above in *B. tryoni* demonstrate that exposing male fruit flies to lures make them physiologically active. Hence, exposing or feeding sterilised males to lures before releasing in SIT program can make male flies fitter so that they can better able to compete with wild males to achieve mating with females.

In addition, reduced re-mating propensity in *B. tryoni* females after mated with lure-fed males suggests that if females mate with quality sterile males that are fed on lures, then their re-mating with wild fertile males can be possibly avoided that can make the SIT program more effective. The results demonstrated in *B. tryoni* thus strongly suggest that

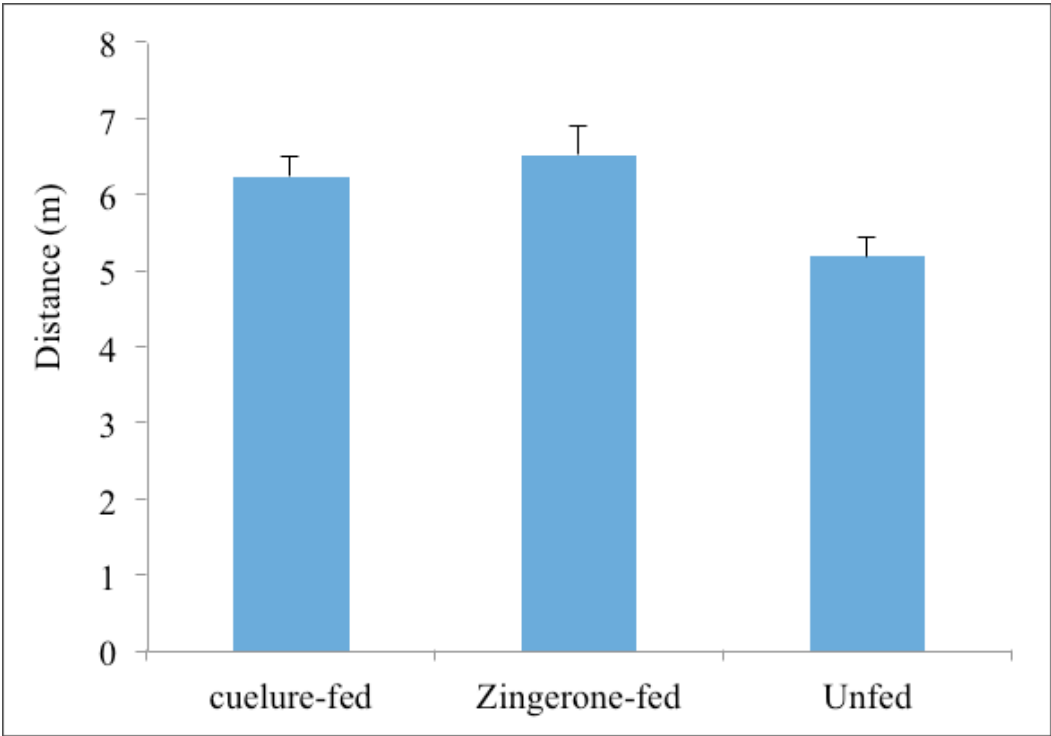
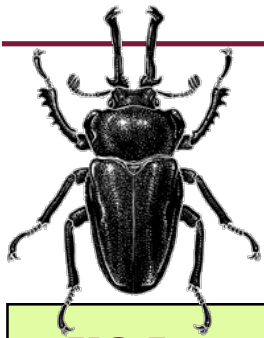


Figure 4. Distance walked by the *Bactrocera tryoni* males fed with cuelure, zingerone and unfed males over 10 minutes period. Significantly longer distance walked by fed males suggesting flies become physically active after lure feeding.

there is a potential to combine the MAT and SIT programs together that can possibly produce additive effects in controlling the pest fruit flies.



UQ Insect Science Field trip: Saturday 8 October

Kathy Ebert is organising a field trip for the UQ Insect Science students to Gold Creek Reservoir at the end of Gold Creek Road in Brookfield on Saturday the 10th of October from 10am. We will be using the Moggill Creek Catchment Group's cottage on site as our base. The cottage has electricity, toilet & water.

We will start the day with introductory information and collecting demonstrations. After lunch, it will be free collecting time, and students are free to explore the area which has tracks through remnant vegetation including spotted gum, grey ironbark, narrow leaf ironbark (*E. crebra*) open forests, with open forest of brush box and tallowwood in gullies and exposed ridges as well as small areas with hoop pine vine forests. There are also opportunities for aquatic collecting in the creek. At dusk, we will set up light traps.

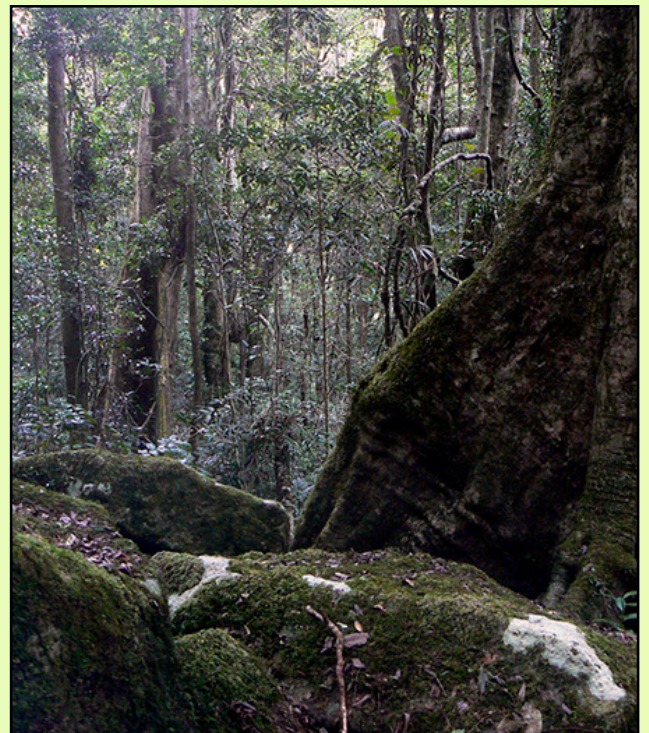
While this event is separate from the BugCatch this year, ESQ members are welcomed and encouraged to join us to share your knowledge and expertise with these enthusiastic students.

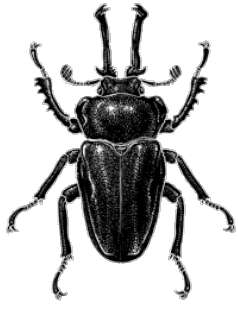
This is also a great chance for other students and interested families to come along and learn about insects and collecting.

If you are interested in attending, please contact Kathy Ebert at k.ebert@uq.edu.au
For more information about the area see: <http://www.moggillcreek.org>

Springbrook BugCatch weekend: November 19-20

This is a reminder that the next ESQ BugCatch will be on the weekend of November 19-20 to the Springbrook Plateau. Springbrook is a high wet tableland lying between Lamington and the Gold Coast and is about 90 minutes drive from Brisbane on good roads. We will be guests of the Australian Rainforest Conservation Society and our basecamp will be on their extensive wilderness property called Ankida which has several hundred hectares of rainforest with running creeks and waterfalls. We will have the use of a vacant house with showers, kitchen and lots of good camping areas right beside. Mains power is available at several spots for running light traps. Kathy Ebert and Geoff Monteith will be leading the camp with the help of Aila Keto and Keith Scott of the ARCS. Kathy and Geoff will be running a dung beetle survey with participation from local residents and ESQ members are welcome to help with that. Full details will be in the next News Bulletin.





Entomology News

from Queensland and beyond...

Tawny Coster arrives in Queensland

--Peter Wilson
Bundaberg

The Tawny Coster (*Acraea terpsicore*) is now well established in the Kowanyama area on the Gulf of Carpentaria, Queensland, and represents a significant range extension from the recorded range in the Northern Territory.

Acraea terpsicore (Lepidoptera: Nymphalidae) was first recorded in the Darwin area of the Northern Territory in April 2012 and had spread to Kakadu National Park, the east Arnhem Land and near Kalumburu in the Kimberley by mid-2013 (Braby, *et al.*, 2014). In Braby's latest Field Guide for Australian Butterflies (2016), the eastern range for

the Tawny Coster was still well within the Northern Territory extending west to include most of the Kimberley in Western Australia.

A recent field trip on 8th to 19th August 2016 to the lower Mitchell River Catchment, including Dunbar Station, Rutland Plains Station, Koolatah Station and the community lands of Kowanyama, revealed that the Tawny Coster was abundant throughout the area. Records range from very common (20 individuals/hr) at the Mitchell River Crossing at Dunbar Station (Fig 1); very common (20 individuals/half hr) while feeding at *Melaleuca* flowers at a creek crossing 2.7 km NNE of Koolatah Station; uncommon (4 individuals/6 hrs) on Rutland Plains Station from the homestead to 30 km south on the Nassau River; and common (20 individuals/5 hrs) on Kowanyama community land from the coast 22 km west of the

town to 30 km north east of town.

The very rapid expansion of the butterfly's range from the Northern Territory to Queensland over a very short period would indicate further extensions are likely through Cape York Peninsula and the Gulf of Carpentaria (if not already there) to the east coast over the next couple of years.

References

Braby MF, Thistleton BM, and Neal MJ. 2014. Host plants, biology and

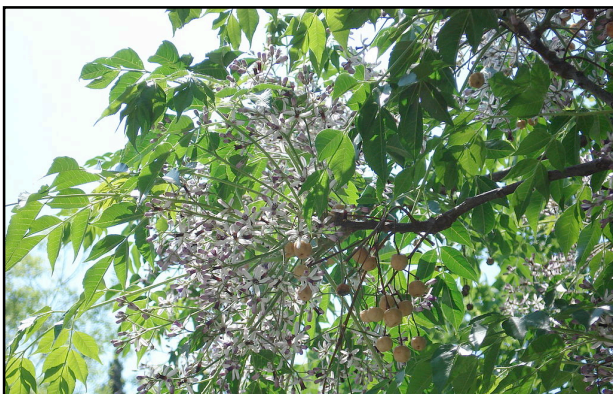




Figure 1. Left and above: The Tawny Coster feeding on flowers at the Mitchell River Crossing, Dunbar Station, 90 km south east of Kowanyama, Queensland.

distribution of *Acraea terpsicore* (Linnaeus, 1758) (Lepidoptera: Nymphalidae): a new butterfly for northern Australia with potential invasive status. *Austral Entomology* **53**, 288–297.

Braby, MF. 2016. The Complete Field Guide to Butterflies of Australia. 2nd edn. CSIRO Publishing, Melbourne; 382 pp.



Melia asedarach - white cedar
Photo: Paolo Fisicaro-Wikipedia

Information needed on White Cedar pests or biocontrol agents

Stefan Naser and Ntemsie Dube, entomologists with ARC-PPRI in Cedara, S Africa, are interested in knowing which insects have been recorded attacking white cedar *Melia azedarach* in Australia. They are looking at possible biocontrol agents and want to start by listing the known insects and where they might be found. They are aware of the caterpillar *Lepocneria* but it is unsuitable as a biocontrol agent because of the issues from its setae and the irritation they may cause people and other animals. If anyone has information on insects which attack *Melia* in Australia, whether they are believed to be specific to it or not, could you please send the information directly to Ms Ntemsie Dube at DubeN@arc.agric.za.

Thank you for your assistance in this.

--Rachel McFadyen



Whitley Awards for ESQ members

Each year the Royal Zoological Society of New South Wales hosts the Whitley Awards. These awards are a tribute to Gilbert Whitley, an eminent Australian ichthyologist. The awards are presented for outstanding publications (in printed or electronic form) that contain a significant amount of information relating to the fauna of the Australasian region. On the recommendations of the Whitley Review Committee, a number of publications are selected for presentation of a Certificate of Commendation at the Whitley Awards ceremony.

New Guinea Dragonfly Field Guide

Congratulation to ESQ member Albert Orr, of Currimundi, who has won **another** Whitley Award, this time for best Field Guide. The winning book is *Field Guide to Dragonflies of New Guinea*, co-authored with Vincent Kalkman and published in Holland as a special volume of the the journal *Brachytron* (Supplement 17, 2015). The book was reviewed in *Australian Entomologist* 43(1):38, and copies are available from the email address nabestelling@brachytron.nl

Bert, who did the magnificent colour paintings and line drawings, as well as much of the text, receives the award at the big Whitley Award night in Sydney on September 22. Another ESQ Member, Stephen Richards, contributed a lot of colour photographs of species alive in the field in New Guinea.

The Australian Native Bee Book

Tonight I am at the Australian Museum in Sydney at the presentation ceremony of the Whitley Awards (photo below). The Whitley Awards are awarded annually by the Royal Zoological Society of New South Wales, and are presented for outstanding publications that contain new information about the fauna of the Australasian region. The Australian Native Bee Book earned a commendation in the Whitley Awards list for the category of Practical Zoology. I accepted the award on behalf of the Sugarbag Bees team and others who contributed to production of this book. Sharing the moment were Elke Haege, an award winner landscape architect and director of Native Stingless Bees Sydney and Dr Ros Gloag, University of Sydney bee researcher.

--Tim Heard



At the Whitley Awards in Sydney: Elke Haege, Tim Heard, Ros Gloag



Moth Night 2016

--David Rentz

<http://bunyipco.blogspot.com.au>

Photos: Peter Shanahan & Buck Richardson

The first Australian Moth Night was held in Cairns at the Botanical Gardens under the auspices of the Friends of the Botanic Gardens. The purpose of the night was to celebrate the diversity of moths. Living in the tropics, we have an extraordinary array of these insects. Over 3,000 species are estimated to exist in the Cairns environment. These range in size from those of only a few millimetres to the giant Hercules Moth. Over 75 people attended.

The evening commenced with a short talk about the history of the event.



Then trips to the light sheets which were placed at the start of the Red Arrow Trail and in the Gondwanan section.



The Hendersons brought some living caterpillars from their local MiniBeast Wildlife business.



A selection of books on moths and other insects written by resident authors were available.



A tray of Cairns area moths added a bit of colour to the displays.



MOTH NIGHT: Lymantriidae: *Dasychiroides* sp.

Two new genera of Stiletto Fly described from Australia

Two new genera of stiletto flies (Diptera: Therevidae) have been discovered in Australia and described in ZooKeys 618:97-128, Sept 2016. The new genera, *Sidarena* and *Zelothrix* are endemic to Australia. Eight new species within these genera are also newly described in the paper.



Adult male *Zelothrix yeatesi* sp. n.; Warrumbungle National Park, New South Wales. (Photo credit: Shaun L. Winterton). ZooKeys 618: 97-128 (19 Sep 2016)



New stamps from Australia Post feature jewel beetles

Australia Post released its new jewel beetle stamps on September 6th. These beautiful stamps depict 4 different species of jewel beetle (Buprestidae): *Stigmodera gratiosa*, *Castiarina klugii*, *Temognatha alternata* and *Julodimorpha bakewellii*.

The illustrations were done by Owen Bell using specimens from the Museum of Victoria as guides.

Stigmodera gratiosa is a bright green jewel beetle from Western Australia

Castiarina klugii is found in Victoria and New South Wales and is metallic deep blue or purple with yellow or orange markings.

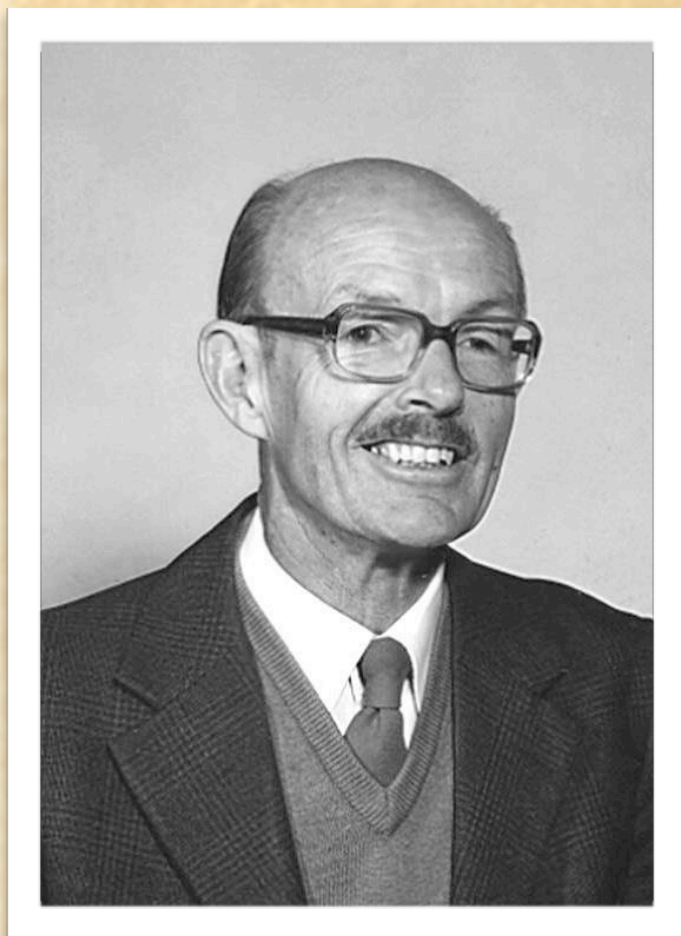
Temognatha alternata has yellow, green and red bands and is found along the east coast of Australia.

Julodimorpha bakewellii is orange-brown and is found in dryer areas of New South Wales, Queensland, South Australia, Victoria and Western Australia.



MOTH NIGHT: Lacturidae: *Exstixis* sp.

The History Corner...

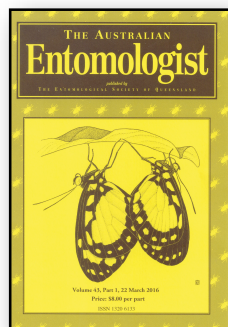
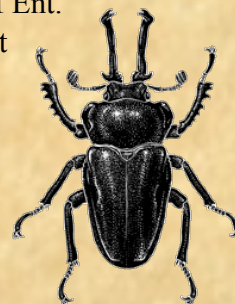


Ian Francis Bell COMMON (1917-2006)

Ian Common was born Scotland during parents' visit and returned with family to Australia after WW1, first to Pittsworth dairy farm and later to Toowoomba. Interested in Lepidoptera from boyhood. Matriculated from Toowoomba Grammar in 1937 then attended University of Qld, gaining B.A. with Hons in Philosophy 1941 and B.Agr.Sc 1945 (Hons. 1947). Appointed to Qld Dept of Agric. and Stock in 1944 (also part-time with CSIR Division of Economic Entomology to study clothes moth problem in Brisbane wool stores). Continued at UQ, gaining M.A in Philosophy (1946) and M.Agr.Sc.(1953). Stationed at Biloela (1944-45) and Rockhampton (1945-48); worked on cotton and tomato pests with comprehensive study of yellow-winged locust. Joined CSIRO 1948 and moved to Canberra to pursue a taxonomic career, developing the CSIRO Lepidoptera collection to global significance and publishing widely, first on much needed revisions of economic species and later on wider taxonomic aspects of both butterflies and moths. Gifted illustrator. Gained D.Agr.Sc. from UQ in 1969. Retired to hometown Toowoomba in 1982 and continued his research, especially overviews of the mega-diverse Australian

Oecophoridae, for almost 20 years. Was Secretary (1942-43) and Life Member (2004-) of Ent. Soc. Qld., President (1978-79) and Life Member (1987-) of Aust. Ent. Soc., and President (1978-79) and Life Member (1987-) of the international Lepidopterists Society. Honours include Karl Jordan Medal in (1996) and Order of Australia (2001).

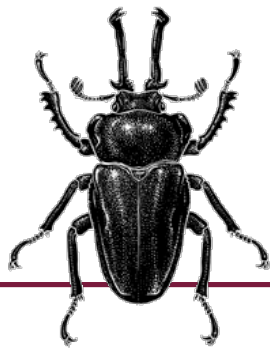
Biographies: Edwards, E.D. 2008. Obituary. *Journal of the Lepidopterists Society* 62(2): 111-113; Park, W. 2010. *Beyond Adversity* pp.156-157. Bigsby Publishing, Newport, NSW.



AN INVITATION TO SUBSCRIBE

"The Australian Entomologist": A quarterly scientific journal devoted to entomology of the Australian-Pacific Region. This journal was commenced in Sydney in 1974 by Max Moulds and is now published by the Entomological Society of Queensland. It is one of the leading outlets for research on native insects in Australia and adjacent areas. For subscription forms and Price list for 2016 see:

<http://www.esq.org.au/publications.html>



Announcements and Notices

Science and Innovation Awards for young people now open

Grant applications are now open for the 2017 Science and Innovation Awards for Young People in Agriculture, Fisheries and Forestry. If you're 18-35, this is your chance to apply for a grant of up to \$22,000 to fund your project on an innovative or emerging scientific issue that will benefit Australia's primary industries.

The Science Awards encourage young scientists, researchers and innovators with original projects that will contribute to the ongoing success and sustainability of Australia's agricultural, fisheries and forestry industries. The Science Awards have already helped more than 210 young Australians make their ideas a reality and showcase their talent to the world.

There are 11 industry Science Award categories open for applications: cotton; dairy; established, new and emerging rural industries; fisheries and aquaculture; grains; health and biosecurity; meat and livestock; pork; red meat processing; viticulture and oenology; and wool. Each category includes a \$22,000 grant, and is generously supported by the research and development corporations and industry organisations as our Science Award partners.

Winners of the industry category Science Awards are then invited to apply for the Minister for Agriculture and Water Resources Award, which provides additional funding for an extended research project. Interested? See the following website for information about eligibility:

<http://www.agriculture.gov.au/abares/conferences-events/scienceawards/info-for-applicants>

Applications close 5pm AEDT Friday 14 October 2016.

Need advice? Contact the Science Awards team at scienceawards@agriculture.gov.au or phone 02 6272 2260 / 02 6272 2303.

ABRS Taxonomy Research Grants now open

The Australian Biological Resources Study (ABRS) National Taxonomy Research Grant Programme (NTRGP) provides funding to support taxonomic research. The 2017-18 NTRGP Research and Capacity-building Grant funding rounds are **NOW OPEN** for applications.

The Research Grants stream provides support to Postdoctoral Fellows and established career researchers to undertake taxonomic research on the Australian biota. The Capacity-building stream of the NTRGP supports training and/or recruitment of taxonomists, especially for research on critical taxonomic groups.

Both the Research and Capacity-building funding streams will close for applications on **Thursday 2pm (AEDT) 3 November 2016**

To access the grant round Programme Rules, application smartform and other key information, please visit <http://www.environment.gov.au/science/abrs/grants>. If you have any questions, please don't hesitate to contact the ABRS Grants mailbox (abrs.grants@environment.gov.au)

Meetings & conferences

XXV International Congress of Entomology: Entomology Without Borders

September 25–30, 2016

Orlando, Florida, USA

<http://ice2016orlando.org/>



Australian Entomological Society and Entomological Society of New Zealand 47th AGM and Scientific Conference

27-30 November 2016

Melbourne, AUSTRALIA

<http://www.aesconferences.com.au/>

Gordon Research Conference SPECIATION 2017

February 19–24, 2017

Renaissance Tuscany Il Ciocco Lucca (Barga), ITALY

<https://www.grc.org/programs.aspx?id=16903>

3rd Hemipteran-Plant Interactions Symposium

June 4–8, 2017

Madrid, SPAIN

<http://www.hpis2017.csic.es/>



The 5th International Forum for Surveillance and Control of Mosquitoes and Mosquito-borne Diseases

May 22-26, 2017

Nanjing, Jiangsu Province, China.

www.asiansvmc.org or www.mosquitoforum.net.

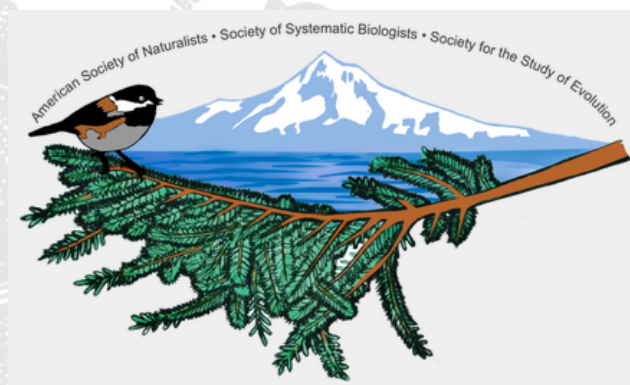
EVOLUTION 2017

Joint Congress between the American Society of Naturalists (ASN), The Society of Systematic Biologists (SSB) and the Society for the Study of Evolution (SSE)

23-27 June 2017

Portland, OR

<http://www.evolutionmeetings.org/future-meetings-2017.html>



3rd BioSyst.EU meeting

August 15–18, 2017

University of Gothenburg, SWEDEN

<http://www.conferencemanager.se/BiosystEU2017/>



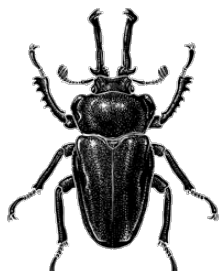
16th Congress of the European Society for Evolutionary Biology

20-25 August 2017

Groningen, the Netherlands

<http://www.esb2017.nl/>





Diary Dates for 2016

Meetings held on the second Tuesday
of the respective month

MARCH 8	Federica Turco	AGM and Presidential Address: “ <i>Not only darkling beetles: a professional and personal journey among Tenebrionoidea beetles</i> ”
APRIL 12	Nigel Stork	“ <i>How many species are there on Earth</i> ”
MAY 10	Michelle Gleeson	“ <i>Little Bug-ers: educating and inspiring the next generation of budding entomologists</i> ”
JUNE 14	Notes and Exhibits	Student Award Presentation/ Notes & Exhibits
AUGUST 9	Julianne Farrell	“ <i>Processionary caterpillars: their ecology and relationship to equine foal deaths</i> ”
SEPTEMBER 13	Kumaran Nagalingam	“ <i>Functional role of male lures of Bactrocera fruit flies: potential to maximise their use in pest management</i> ”
OCTOBER 11	Madaline Healey	“ <i>Barefoot entomology – working as an entomologist in Laos</i> ”, <i>ACIAR Biocontrol in the Mekong</i>
NOVEMBER 8	Romina Rader	“ <i>To be announced</i> ” on <i>Community Ecology</i>
DECEMBER 13	Notes & Exhibits	Notes and Exhibits/Christmas Afternoon Tea

SOCIETY SUBSCRIPTION RATES

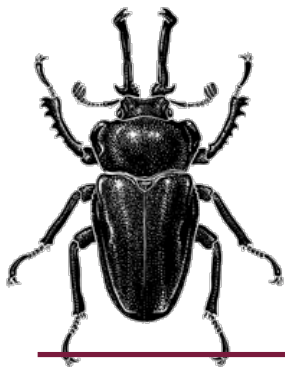
GENERAL	Person who has full membership privileges	\$30pa
JOINT	Residents in the same household who share a copy of the <i>News Bulletin</i> , but each otherwise have full membership privileges.	\$36pa
STUDENT	Student membership conveys full membership privileges at a reduced rate. Students and others at the discretion of the Society Council.	\$18pa

ESQ membership subscriptions should be sent to the Treasurer, PO Box 537, Indooroopilly, QLD 4068
<http://www.esq.org.au/membership.html>

THE AUSTRALIAN ENTOMOLOGIST SUBSCRIPTION RATES

AUSTRALIA	Individuals/Institutions	AU\$33pa/AU\$37pa
ASIA/PACIFIC	Individuals/Institutions	AU\$40pa/AU\$45pa
ELSEWHERE	Individuals/Institutions	AU\$45pa/AU\$50pa
ELECTRONIC	Individuals/Institutions	AU\$25pa/AU\$30pa

Journal subscriptions should be sent to the Business Manager, PO Box 537, Indooroopilly QLD 4068
<http://www.esq.org.au/publications.html>



Entomological Society of Queensland



Notice of next meeting:

Tuesday, October 11th, 2016, 1:00 pm



Madaline Healy

from University of Sunshine Coast & Australian Centre for International
Agricultural Research

will present

*Barefoot entomology - working as an
entomologist in Laos*

All welcome! Join us for tea and coffee following the meeting.

Ground floor Seminar Room, Ecosciences Precinct, Boggo Road, DUTTON PARK

More venue details available at <http://www.esq.org.au/events.html>

Next News Bulletin:

Volume 44, Issue 7 (October 2016)

CONTRIBUTIONS WELCOME

Deadline Thursday, October 20th, 2016.

Send your news/stories/notices to the editor at: k.ebert@uq.edu.au