



Tarsus

July
2009

Issue
No. 587

CIRCULAR OF THE ENTOMOLOGICAL SOCIETY OF NEW SOUTH WALES Inc

Next Meeting of the Entomological Society of NSW Inc

Where: Meeting Room 2, Ermington Community Centre, River Road, Ermington

When: 7.30 pm on Wednesday, 1st July 2009

There is no speaker scheduled for this meeting, instead we hope you will make a big effort to bring something along to Show & Tell. Be prepared to speak for up to 10 minutes on your contribution. Finding live material might be a challenge in the colder weather but we know our members are up to it.

A data projector and computer will be available if you want to use it.

Ku-ring-gai Festival of Wildflowers 2009

'Rediscover Nature'

Our Society will again participate in the popular nature conservation oriented Festival of Wildflowers, organised by the Ku-ring-gai Municipal Council. The Festival is held on **SUNDAY 30th August ONLY** from 9.00 am – 4.00 pm at the Ku-ring-gai Wildflower Garden, which is accessed through the park gate at **420 Mona Vale Road, St Ives**.

The displays and activities at our Society stall will continue to promote insect admiration and knowledge. The numerous stalls by various societies offer displays of native plants and animals, spectacular floral arrangements, native plants and literature for sale, and there will be guided walks through the adjoining bush. The local Council also offers entertainment for children and Rotary volunteers will be selling BBQ lunch, cakes and drinks. No entry fee for visitors and participating organisations.

For those members of our Society that wish to join at the stall, please phone Gith Strid-Nwulaekwe on 0418-206622 or 9888 9011 (evenings).

<http://www.kmc.nsw.gov.au/www/html/536-festival-of-wildflowers.asp>



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Synopsis of May 2009 Meeting Talk

BUGS IN BACKYARDS AND IN STREETSCAPES DEBORAH S. KENT

This is a summary of a presentation given by Dr Deborah S. Kent to the Entomological Society of NSW on 6th May 2009 highlighting the importance of post-quarantine border surveillance of urban areas for the detection of incursions of Emergency Plant Pests i.e. the surveillance for pests which may have slipped past AQIS quarantine barriers.

As Sydney is the major entry point for most passengers and freight entering Australia and given the high flow of passengers and freight, increased post-quarantine surveillance is important in the Sydney urban area. In recent years two “new” pests have been discovered in the Sydney urban area.

The first was the exotic **Sycamore lace bug**, *Corythucha ciliata*, discovered in the Sydney Central Business District in late 2006 by an overseas scientist visiting the Australian Museum. Initial surveys in 2007 found it distributed across many Sydney suburbs with most trees in the inner city affected. Subsequent surveys have shown it to be widespread throughout the Sydney Basin with surveys in regional NSW finding it as far south as Gundagai, west to Orange and north to Newcastle. At this stage it hasn't been found outside NSW but all other states are maintaining surveillance at both their borders and around airports.



Photo P. Gillespie

The Sycamore lace bug is a native of North America but has also spread to Europe, Japan and South America and now Australia. The main host in Australia is the popular London Plane tree, a hybrid between American and Oriental *Platanus* spp.



Photo DS Kent

The London Plane tree is a common street and park planting especially in the inner suburbs of Sydney. The trees have distinctly deeply lobed or palmate leaves with round burr-like flowers and fruit borne in clusters on a stem. The bark of the trees is usually flaking but in some large trees the bark persists on the lower trunk and becomes thick and furrowed.

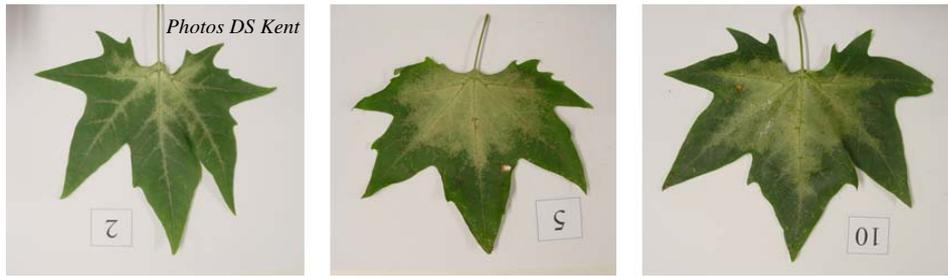


London Plane trees are an important part of the streetscape providing shade and beauty in our urban environment. The trees are popular because they are resistant to disease, can grow rapidly in poor soils and are tolerant of urban pollution. They can also withstand regular pruning without losing structure and shape.

There are extensive plantings of London Plane tree across Sydney. In fact it is probably as important to the Sydney cityscape as elm trees are to Melbourne. It is also common in other urban and rural centres across NSW such as Newcastle, Wagga Wagga and Tamworth to name a few.

Sycamore lace bug damage on London Plane trees can be seen where the leaves turn a mottled white and become droopy. In some cases the symptoms have appeared more dramatic with all leaves turning brown and

shedding earlier than in previous years. No doubt some of these symptoms are a result of the drought conditions experienced in recent years.



The long-term effect of the Sycamore lace bug on the health of London Plane trees is yet to be fully assessed but in times of low rainfall it appears that the bug can reach high populations causing severe leaf damage and reduced growth. Studies are currently underway assessing different methods of control including chemical and biological techniques.

The risk posed by the introduction of this exotic bug to an exotic tree species such as the London Plane tree may seem slightly irrelevant to the forestry industry. But it does highlight the pathway an exotic insect or disease can use to travel from the city, the most likely point of entry, to the bush.



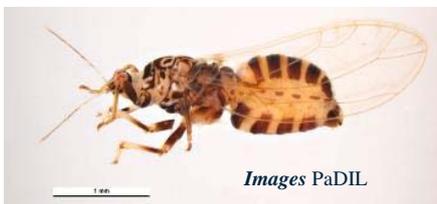
The second “new” pest discovered was a sap-sucking insect causing significant damage to eggplants in a backyard of Sydney. This pest turned out to be a native species of psyllid belonging to the genus *Acizzia*. This is the first record of a pest psyllid on eggplant, and the first record of this genus from the Solanaceae.



The psyllid was initially found on eggplant but while searching for the psyllid in a commercial crop another DPI worker discovered them on the exotic weed *Solanum mauritianum* (wild tobacco bush). This weed, a native of South America, is an agricultural and environmental weed which occurs from Queensland down through coastal NSW and into Victoria and SA.



Surveys in 2008 also found it in a commercial eggplant crop in the Sydney Basin as well as on wild tobacco bushes. The psyllid has now been found on this weed more often than it has on eggplants. Subsequent surveys in late 2008 and early 2009 have now extended its distribution as far north as Coffs Harbour. It has also been found in South Australia on sticky traps adjacent to an eggplant crop just outside Adelaide. A search of insect collections found specimens of the same psyllid which had been collected from wild tobacco bush at Lane Cove in 1978 and in the Royal Botanic Gardens, Sydney in 1936. Surveillance for this psyllid will continue in the Sydney Basin and regional NSW with direct inspections of eggplant and other solanaceous crops as well as solanaceous weeds adjacent to cropping areas.



The importance of these psyllid surveys is two-fold. Firstly, surveys will determine the range of the native *Acizzia* psyllid in NSW. Secondly, they will also enable detection of any new exotic psyllid, in particular the Potato/tomato psyllid a native of North America which has recently become established in New Zealand.

There was an unexpected bonus from Deborah’s presentation to the Entomological Society of NSW. As a result of the presentation a member of the Society, Barbara May, told Deborah that she had found this psyllid on her Cape gooseberry plant. This represents a new host record for this *Acizzia* psyllid.

Secretaries Report

The 55th Secretary's Report of the Council of the Entomological Society of New South Wales Inc. presented at the March AGM

1. The Council for 2008 was:

Honorary President	Mrs Barbara May
Honorary Vice President	Mr Robin Parsons
Honorary Secretary	Dr Mary Ann Terras
Honorary Treasurer	Mr Ted Taylor
Honorary Business Manager	Ms Gith Strid-Nwulaekwe
Honorary Public Officer	Dr Mary Ann Terras
Honorary Editor	Dr Garry Levot
Honorary Circular Editor	Mr Graeme Smith
Councillors	Mr Martin Horwood

2. Membership as of 31st December 2008 was 77 financial and 7 unfinancial members. We said farewell to 4 lapsed and 3 resigned, and welcomed 1 new member.

3. Council Members: Council met formally at Ermington Community Centre on FIVE occasions between March 2008 and March 2009. Members attended: Levot 5, Taylor 5, May 5, Smith 5, Parsons 5, Strid-Nwulaekwe 4, Terras 3, Horwood 2. There was also a an extra meeting organized by Graeme Smith in February 2009 at Reckitt Benckisner, attended by May, Levot, Taylor, Parsons, Horwood and Smith

4. Society Meetings: There were four general meetings between March 2008 and March 2009. These meetings were at the Ermington Community Centre. We had a wide range of interesting speakers who attracted a large number of visitors. The society appreciates the contribution of time and effort made by our monthly speakers.

Date	Topic	Speaker
7th May, 2008	Alpine Ants	Robert McDougall, Macquarie University
2nd July, 2008	Testing Consumer Pest Control Products	Graeme Smith, Reckitt Benckiser
3 rd September, 2008	Cicada capers with an amateur entomologist	Assoc Prof David Emery, Faculty of Veterinary Science, University of Sydney.
5th November, 2008	Museum Pests	Alex Roach, Heritage Pest Management

5. The 55th AGM was held at the Ermington Community Centre on the 5th March 2008.

6. Volume 37 of General and Applied Entomology was published and distributed to all members mid year. In addition, Volumes 31 to 36 are available to the public on the Society's website. Volume 37 can be accessed by members via their login. Thank you to Garry Levot for his continued excellent work in publishing our Journal.

7. Circulars: 6 circulars (no's 580 - 585) were published between March 2008 and February 2009. The circular 'Tarsus' (from Feb 2006 till present) is available on the Society's website. The circular distribution continued to email only with hard copies being made available at meetings. Thank you to Graeme for undertaking this major means of communication within the Society.

8. Society Emblem: The emblem for 2008 was a silverfish, this appeared on the cover of General & Applied Entomology.

9. Other Activities:

- Society's web page. This was launched at this the 54th AGM. Graeme Smith is our web master. I am sure that both the society members and visitors have enjoyed the ever changing, diverse and interesting displays on this site. There has been 8,500 hits since this year.
- Gith Strid-Nwulaekwe co-ordinated our 14th year at the Ku-ring-gai Wildflower festival. Several Ent Soc NSW members attended showing live and pinned specimens and talking to the public about the wonderful world of insects. E Taylor, B. May, H. Greening and G. Smith provide discovery tours of the area.
- Interaction with other Societies Contact has been maintained between Ent Soc NSW and SFIS by the exchange of newsletters.
- Students presentation day was held on the 21st June at the Orange campus of the Charles Sturt University. It was hosted by Professor Geoff Gurr, Professor of Applied Ecology. Talks were given by students from Charles Sturt University, University of Wollongong, Macquarie University, University of Sydney. Abstracts of these were published in 'Tarsus'.

10. Annual Dinner was held by popular demand at The Boatshed Cafe La Perouse. It was enjoyed by all that attended.

Dr Mary-Ann Terras



Australian Entomological Society
40th Annual General Meeting and Scientific Conference 2009
Darwin, Northern Territory
25–28th September 2009

A joint meeting with
The Society of Australian Systematic Biologists
and
The Australian Coral Reefs Society

The Charles Darwin Symposium is an annual event supported by Charles Darwin University and the Northern Territory Government. In 2009, a special symposium will be held to mark the 200th anniversary of the birth of Charles Darwin, the 150th anniversary of the publication of *The Origin of Species* and the 170th anniversary of the visit of *The Beagle* to northern Australia. This symposium will be held 22-24 September leading into the AES joint conference.

Conference Secretariat:

Sally Brown Conference Organiser

Conference Connections

PO Box 108, Kenmore QLD 4069 Australia

CONFERENCE WEBSITE: <http://www.evolutionbiodiversity2009.org/>

Society web site

www.entsocnsw.org.au

I'm still not receiving any contributions to the web site other than our regular posting of Tarsus, but hits are still reaching about 700 per month. Just imagine if we had more information available.

Don't be shy. Send me a new photo for our front page.

I would be more than happy to train anyone who would like to learn how to manage the site. It's not that hard once you get used to a few things. I knew nothing about web pages until I volunteered to set this one up and we now have a manual that leads you through the steps.



For any problems (e.g. lost passwords), submission of photos for publication or suggestions for improvement get in contact with Graeme Smith. (0421 617 377) or le_gbsmith@optusnet.com.au

Book Review

The Entomological Society of Victoria has recently published a booklet *Collecting and Sampling Insects* by Ian Endersby, which I am sure many of our members will find interesting and useful.

Many collecting methods and traps are described and illustrated, for surface and aerial insects, as well as aquatic and soil-dwelling. In addition, hints on breeding out your immature collection are included. The discussion covers comparison of qualitative versus quantitative methods.

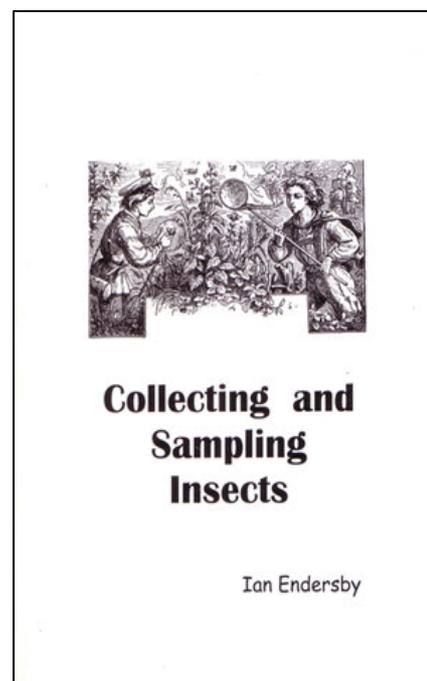
This booklet is intended more for sampling for ecological studies than for personal use, so it complements similar publications such as those of Murray Upton and Courtenay Smithers. It would be an ideal guide for student projects, at high school and early University ecology.

"Collecting and Sampling Insects" is reasonably priced at \$10, with a special price of \$8 extended to our members.

A small number will be available for purchase at N.S.W.Ent.Soc. future meetings.

Otherwise, direct mail orders may be made as per the order form on the following page

Barbara May



Entomological Society of Victoria Inc

Order Form

Name

Address

..... Postcode

email:

Please send me ... copy(ies) of **Collecting and Sampling Insects**

\$8 (Entomological Society of N.S.W. Member)

\$10 (Non-member)

Add Packing and Postage within Australia
1 copy \$2.00 2-3 copies \$2.60 4-6 copies \$3.75
7 or more, or overseas, contact us at
vicmoth@entsocvic.org.au

Mail orders to: Ian Endersby, 56 Looker Road, Montmorency, Vic. 3094
vicmoth@entsocvic.org.au

I enclose a cheque/moneyorder payable to Entomological Society of Victoria

Please debit my MasterCard Visa Amount \$.....

Card Number ----- Expiry Date ___/___

Signature

I have made an EFT payment to BSB 063 185
Account Number 10174297

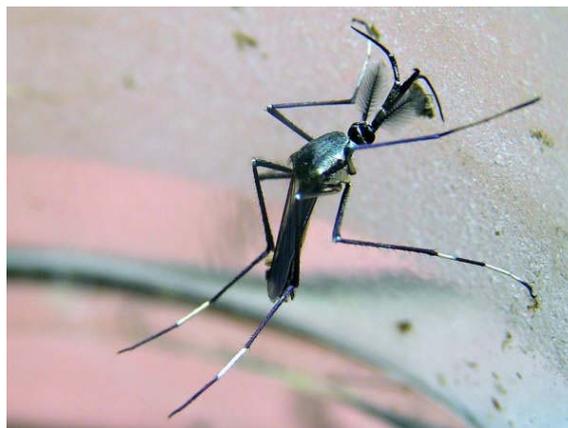
I would like information about EntSocVic membership

Insect of the Month

The predaceous mosquito *Toxorhynchites speciosus* (Skuse) (Diptera: Culicidae) Dinah Hales

At the March meeting, I displayed a large larva of the mosquito *Toxorhynchites speciosus* which subsequently pupated and emerged as an adult male on 23 March. I thought I should find out a bit more about the group, so after some internet research, here it is, with apologies to all our members who really know something about mosquitoes.

Tx. speciosus is the only species of the genus known from NSW, although there are two others in far North Queensland. The ABRIS map shows them as extending to the Victorian border, whilst Richard Russell suggests that Sydney is their approximate southern limit. A colleague in another of my lives has observed them in Wollongong and has kindly provided an excellent photo of a *Tx.* larva with its mouth full of a culicine pupa, and a handsome adult male. The group is known in the USA as mosquito hawks, but I am not sure that the name is used here (they are not tiger mosquitoes – this is a name sometimes given to the dengue fever vector *Aedes albopictus*, now present in the Torres Strait Islands).



Toxorhynchites spp. are unusual in having predaceous larvae, and have even been considered as potential biocontrol organisms for pest mosquitoes. The natural habitat of *Toxorhynchites* larvae is in water-filled tree hollows, where Kitching describes them as "top predators", feeding on aquatic invertebrates such as other dipteran larvae and pupae, and in their early instars on small crustaceans as well. I observed one capture of a culicine larva by a *Tx. speciosus* larva – the latter was lying at the bottom of the container and just flicked itself sideways to capture the culicine as it approached too closely. It is thus an ambush predator rather than an active hunter. Not surprisingly, they are cannibalistic, so if rearing them, you need to keep them in separate containers. On the other

hand, they themselves can be prey of cecidomyiids and dragonfly larvae in their natural habitat. The adults of both sexes feed only on nectar, despite their fearsome-looking curved proboscis.

Photos: Lisa Lawrie

Sources:

Kitching RL (2000). *Foodwebs and container habitats*. Cambridge University Press.

<http://www.arbovirus.health.nsw.gov.au/areas/arbovirus/mosquit/photos/mosquitphotos.htm#tox>

<http://medent.usyd.edu.au/photos/toxorhynchites%20speciosus.htm>

<http://www.environment.gov.au/biodiversity/abrs/online-resources/fauna/afd/taxa/2be6a8bb-381e-4345-b6c5-d097950a5878>

Show & Tell May meeting

Unfortunately I couldn't be at the last meeting to photograph the contributions. Mary Ann has kindly provided the following notes.

Steve Fellenberg gave a Lord Howe Island stick insect update. He had 110 eggs and 10 hatched and now has 2 females left. These have laid 42 unfertilised eggs. Melbourne Museum is also involved in the rearing program. They have put 20 adults back on Lord Howe where they are confined to the Palm Nursery where there is rodent control.

Howard Greening showed photos of the following:

- Australian Crow butterflies
- A robber fly with honey bee
- Insects at Lapstone in the Blue Mountains they were hanging on webbing, that could be Tipulidae (crane flies) or fireflies
- photo taken in 1963 of *Mastotermes darwiniensis* in a timber fence at a cattle field station in the Northern territory.
- very large winged psocid.
- As well as an antique tray – decorated with butterfly wings, design was covered by glass.

Barbara May has been breeding Australian Crow butterflies on oleander and has observed that the pupae are pale green for the first 3 days then turn silver. A day before the butterfly emerges it is possible to see the butterfly inside. She also showed a pale green bug (Flatid) with a parasite.

Dinah Hales displayed a butterfly that had been created in lacework.

GIVE AWAY - insect boxes and rearing cups to give away to a new home.

Robin Parsons showed a wasp which preys on huntsman spiders. The wasp's wing venation matches closely that of *Cryptocheilus* sp. Pompilidae - ref CSIRO Insects of Australia.

-He also showed a thick paper paper-like pupal case containing what appears to be remains of Carabid beetle adult. The pupal case was found in soil with only a small opening at one end.

Ted Taylor presented a photo of a piece of wood from a Casaurina, the neighbours said it had termites but they turned out to be psocids.

Bi-monthly Meetings

The Society meets **BI-MONTHLY** unless otherwise advertised. General meetings with a speaker will generally be held only on the “odd numbered” months (March, May, July, September, November) while the Council will meet more frequently. Speakers tentatively scheduled for the coming general meetings are shown below.

This timing allows us to alternate meetings with the Society for Insect Studies (SFIS) which meets at the Australian Museum at 7.30 on the second Tuesday of the “even numbered” months.

Future Events

Date	Speaker	Title
1 July, 2009 7.30 pm	No speaker this meeting	Extended Show & Tell
Sunday 30 th August 9am til 4 pm	Ku-ring gai Wildflower Festival	
2 Sept, 2009 7.30 pm	Bryce Peters	Flea control
4 Nov, 2009 7.30 pm	TBA	

Venue:

Meeting Room 2
Ermington Community Centre
10 River Road Ermington

Meetings start at 7:30 p.m. (directly following the Council meeting)

Talks run for around 45 minutes, with 10 minutes for questions, followed by a light supper. Guests are most welcome.

Getting there:

By Car: From Victoria Rd turn into Spurway St (head towards Parramatta River). Turn right into Jackson St then left into River Rd. If heading north on Silverwater Rd, turn right into Victoria Rd then proceed as above. If heading south on Silverwater Rd take the Parramatta off ramp, cross Victoria Rd and proceed into River Rd. If you miss the off ramp, turn left into South St, then left into River Rd.

By Bus: Routes 525, 523 and L20 depart from Argyle St near Westfield shopping centre near Parramatta station. Routes 523 and L20 depart from West Ryde station. Get off at the Ermington shops. River Rd passes between the supermarket and the hotel.

SOCIETY POSTAL ADDRESS

C/- ENTOMOLOGY DEPARTMENT
THE AUSTRALIAN MUSEUM
6 COLLEGE STREET
SYDNEY NSW 2000

MEMBERSHIP FEES 2009

ORDINARY MEMBERS	\$50
COMPANY ASSOCIATES	\$60
STUDENT MEMBERS	\$25
CORPORATE MEMBERS	\$50

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