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Newsletter of the Australasian Arachnological Society

THE AUSTRALASIAN ARACHNOLOGICAL SOCIETY

We aim to promote interest in the ecology, behaviour and taxonomy of arachnids of the Australasian region.

MEMBERSHIP

Membership is open to amateurs, students and professionals, and is managed by our Administrator:

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Status box on the envelope indicates the last issue paid for.

Previous issues of the newsletter are available at $2 per issue plus postage.

ARTICLES

The newsletter depends on your contributions! We encourage articles on a range of topics including current research activities, student projects, upcoming events or behavioural observations.

Please send articles to the editor:

Volker Framenau
Department of Terrestrial Invertebrates
Western Australian Museum
Locked Bag 49
Welshpool, W.A. 6986, Australia.

volker.framenau@museum.wa.gov.au

Format: i) typed or legibly printed on A4 paper or ii) as text or MS Word file on CD, 3½ floppy disk, or via email.

LIBRARY

The AAS has a large number of reference books, scientific journals and papers available for loan or as photocopies, for those members who do not have access to a scientific library. Professional members are encouraged to send in their arachnological reprints.

Contact our librarian :

Jean-Claude Herremans
PO Box 291
Manly, New South Wales 1655.
Australia

email: jclh@ihug.com.au

COVER PHOTOGRAPH:
'Lycosa' perinflata ♀ (South Australia)
V.W. Framenau

EDITORIAL

This is it, my first issue! As Tracey announced in the editorial of the last *Australasian Arachnology*, it's now my turn 'at the helm' of our newsletter. Everybody will agree that Tracey did a tremendous job over the last five years, editing 15 wonderful issues (numbers 55 – 69). Parallels of the current change to her take-over from Mark Harvey as previous editor are evident. As then Mark, Tracey embraces a new role as parent and her increasing family duties do not allow as many arachnological activities at this stage. Thanks again, Tracey!

Australasian Arachnology now available as a pdf-file!

You won't find too many changes in the layout of the newsletter (although I couldn't resist putting a wolf spider on the title page of this issue **J**). However, as from this issue, *Australasian Arachnology* will be available not only as hardcopy, but also in a 'software' version (pdf-file). In doing so, we follow the leading examples of the American Arachnological Society, the Ecological Society of Australia, and the Australian Entomological Society, who have been issuing their respective newsletters in this 'soft' format for quite some time. Pdf-issues have a number of advantages, such as the option to include colour photos and graphs, and the option to upload the newsletter to our new web site which is currently under development. The society will also save some money, as we don't have to print issues for those individuals who prefer a pdf-version.

I have contacted subscribers of *Australasian Arachnology* to determine, which format (hardcopy and/or pdf) is preferred. If you didn't receive an email, please get in touch with me (contact details on page 2) if you would prefer a pdf-version of our newsletter. THANKS!

This issue

This issue contains two feature articles. Julianne Waldock reports on migid spiders of the genus *Moggridgea* in Western Australia (pp. 5-6), and Mark Harvey and Cor Vink compiled a report on the 16th International Congress of Arachnology that was held in Gent/Belgium in August this year (pp. 9-12). Those who know Mark and Cor will agree that they were extremely qualified authors of this report on a meeting in one of the beer drinking capitals of the world! Thanks to all authors for their contributions!

Finally, I already want to apologise in advance for harassing arachnologists world-wide and repeatedly for contributions to our newsletter!

Cheers for now!

Volker

MEMBERSHIP UPDATES

Change of Address

Mark S. Harvey, Julianne M. Waldock, Volker W. Framenau

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UPCOMING EVENTS 1

Fourth Meeting of the Australasian Evolution Society

Esplanade Hotel, Fremantle (Western Australia)

27th – 30th September 2005

For information check the new webpage of the Australasian Evolution Society: http://www.evolutionau.org/

LIBRARY UPDATE

Our library has moved!

Although Jean-Claude Herremans from Manly (NSW) remains our librarian, the AAS library has physically moved into the caring hands of Rob Raven at the Queensland Museum.

This has some practical consequences for the users of the library: Reprints should still be sent to Jean-Claude Herremans (address on page 2) who will database all new entries. Jean-Claude will then send these reprints to Rob Raven (robertr@qm.qld.gov.au), who is responsible for loan requests.

The library is a considerable source of information in particular for all our non-professional members who do not have easy to a university or museum library. As of 27th September 2004, the library includes the following number of holdings per arachnid group:

arachnid group	*No. of holdings*
Acari	2,897
Amblypygi	99
Araneae	8,195
Opiliones	532
Palpigradi	86
Pseudoscorpiones	782
Pycnogonida	70
Ricinulei	61
Schizomida	80
Scorpiones	644
Solifugae	129
Uropygi	72

Migidae in south-western West Australia (Araneae, Mygalomorphae)

Julianne M. Waldock

Department of Terrestrial Invertebrates, Western Australian Museum, Locked Bag 49, Welshpool DC, WA 6986, email: waldockj@museum.wa.gov.au

The mygalomorph family Migidae had not been recorded in Western Australia until the early 1990's. This is mainly because the species that occur here are very small and stay very close to their preferred environments: moist, shaded uncleared forests and gullies in the south-west.

Dr Valerie Todd Davies (curator of spiders at the Queensland Museum) was visiting the Western Australian Museum in 1989 and offered to sort some of our unsorted material. She came across a single male migid from a malaise trap run by S. and J. Peck in the tingle forests of Walpole-Nornalup National Park in 1980. Further material was collected by Barbara and Bert Main from this area and this material was described and named *Moggridgea tingle* by Dr Barbara York Main in 1991 (Main, 1991).

Further searches revealed migids at several sites in the Stirling Ranges and Porongurup National Parks and recently at a site on private property west of Margaret River.

The Stirling Ranges species (Fig. 1) has been listed as critically endangered which caused the West Australian Department of Conservation and Land Management (C.A.L.M.) to commission the Western Australian Museum (specifically Dr Mark Harvey and myself) with Barbara Main to survey for further sites and to try to clarify the number of species involved (see Harvey and Main, 1996).

The family Migidae has a classic Gondwanan distribution that includes Australia, South America, Africa, Madagascar, Tasmania, Norfolk Island, New Zealand, and New Caledonia. The eastern Australia species are confined to the genera *Heteromigas* (eastern Australia and Tasmania) and *Migas* (Chile, eastern Australia, Tasmania and Norfolk Island). *Moggridgea* occur in south-western Western Australia, Kangaroo Island (South Australia) and southern Africa and Socotra. This division between the eastern and western Australian genera of migids exists also on the subfamily level (Main, 1991).

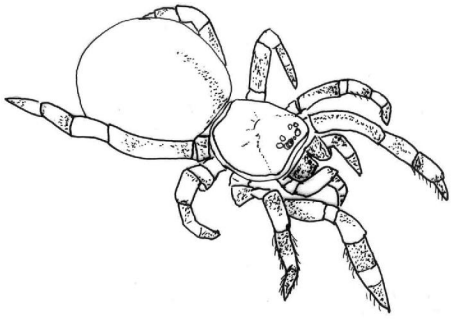

Figure 1: ***Moggridgea* sp. (undescribed) from the Stirling Range National Park, Western Australia** (illustration J. M. Waldock) The body length of this small mygalomorphs is generally less than 10mm.

Specific identification and description of these spiders is based on the male genitalia and so far we only have males from the Stirling Ranges, Walpole-Nornalup National Parks and west of Margaret River, so the specific status of the Porongurup National Park population is still uncertain and there may be more than one species in the Stirling Ranges.

In an attempt to clarify this issue, fresh material has recently been collected to use DNA techniques. Samples were collected from several populations in the Stirling Ranges, Porongurup and Walpole-Nornalup National Parks (under the auspices of C.A.L.M.) and the Margaret River west population. This material has been sent to Dr Steve Cooper at the Evolutionary Biology Unit at the South Australian Museum in Adelaide.

Hopefully we will also be able to include material from southern Africa and Kangaroo Island, South Australia.

Watch this space for further news …

References

Main, B.Y. 1991. Occurrence of the trapdoor spider genus *Moggridgea* in Australia with descriptions of two new species (Araneae: Mygalomorphae: Migidae). *Journal of Natural History* **25**: 383-397.

Harvey, M.S. and Main, B.Y. 1996. The status of the trapdoor spider genus *Moggridgea* in the Stirling and Porongurup Ranges. Unpublished report to the Department of Conservation and Land Management, 48 pp.

POSTGRADUATE PROJECTS

Spider community dynamics in agricultural cropping systems of south-east Australia

Anna R. Cutler
(annareecutler@hotmail.com)

Thesis: Ph.D.

Institution: The University of Melbourne

Supervisors: Mark A. Elgar, Alan Yen

The initial aims of this project, that commenced earlier this year, are to determine community composition, species richness, diversity, and distributions of spiders inhabiting field crops in south-eastern Australia. After the exploration of basic system dynamics, such as the most common species, life-cycle (phenology), key periods of activity, and seasonal changes in abundance of species, Anna plans to gain some mechanistic understanding of predator-prey dynamics between spider predators and pest insects.

BOOK REVIEW

Andy D. Austin, Duncan A. McKay, & Steve J. B. Cooper (eds): 'Invertebrate Biodiversity and Conservation - Special Issue'. *Records of the South Australian Museum Monograph Series* **7** (2003). 341pp. AU$ 40.00. (Available through the South Australian Museum Bookshop).

It has been a while in the making, but finally I found my copy of the Proceedings of the 5th Invertebrate Biodiversity and Conservation Conference (1st-4th December 2001, Adelaide) in the mail earlier this year. With nearly 350 pages it is a very impressive volume. Forty contributed papers are organized in eight very diverse sections: 'Impacts of invasive species', Marine Invertebrate Biodiversity', Invertebrate Biodiversity of the Arid Zone and Ephemeral Waters', 'Habitat Fragmentation and Plant-Invertebrate Relationships', 'Legislation, Education & Community Involvement', 'Biodiversity of Selected Groups and Habitats', 'Biodiversity Case Studies', and 'Sampling & Surveying Biodiversity'.

The dominance of ants (Formicidae) in Australia is reflected in the number of papers dealing with this insect family. Not less than eight contributions deal mainly with ants. Arachnids fare less well, however, a number of interesting studies focus at least partly on arachnids (in alphabetical order of the authors):

Ballinger, A., **MacNally, R**. and **Lake, P.S.** 2003. The effect of coarse woody debris and flooding on terrestrial invertebrate assemblages in river red gum *Eucalyptus camaldulensis* (Dehnh.) floodplain forest. *Records of the South Australian Museum Monograph Series* **7**: 145-151.

Main, B. Y. 2003. Demography of the shield-back trapdoor spider *Idiosoma nigrum* Main in remnant vegetation of the Western Australian wheatbelt. *Records of the South Australian Museum Monograph Series* **7**: 179-185.

Shield, J.M. 2003. Spiders (Araneae) of irrigated pasture with and without shelterbelt of native vegetation near Cohuna, Victoria. *Records of the South Australian Museum Monograph Series* **7**: 187-191.

Steggles, T.A., **Walker, K.F**. and **Austin, A.D.** 2003. Burrow fidelity of *Lycosa leuckartii* (Araneae: Lycosidae) on the River Murray floodplain in South Australia. *Records of the South Australian Museum Monograph Series* **7**: 291-295.

Walter, D.E. & **Shaw, M.** 2003. The importance of being earnest: exotic invasive mites (Arachnida: Acari) on Australian vertebrates *Records of the South Australian Museum Monograph Series* **7**: 25-30.

Yeates, D.K., **Harvey, M.S.** and **Austin, A.D.** 2003. New estimates for terrestrial arthropod species-richness in Australia. *Records of the South*

Australian Museum Monograph Series **7**: 231-241.

I found the paper by D. Yeates *et al.* particularly intriguing. The author's new estimates of species richness suggest a total of more then 42,000 species of arachnids in Australia. Spiders (Araneae) and mites (Acari) are thought to contribute 20,000 species each to this diversity. Opilionids (estimated 1,200 species), pseudoscorpions (750), schizomids (80), amblypygids (10) and palpigrades (5) play only a minor role.

Overall, I enjoyed reading through this well edited volume, that represents a very interesting source of information on invertebrate biodiversity and conservation in Australia. Naturally, due to the very wide range of topics, not all papers may be interesting for a single reader. But it certainly provides a valuable addition to the bookshelf of any invertebrate biologist in Australia.

Volker W. Framenau
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Western Australian Museum

INTERNATIONAL ARACHNOLOGICAL SUBSCRIPTIONS

In January, our society's administrator Richard Faulder collates subscriptions to international journals and/or societies listed below. Members have the benefit of paying in Australian dollars to avoid a bank draft fee. Our fellow societies also appreciate a co-ordinated subscription and payment. When existing members receive their notices they can forward these with payment to Richard (see page 1 for details) by 30 January, 2005.

- Acta Sinica
- American Arachnol. Society
- Arachnol.Society of Japan
- Arthropoda Selecta
- British Arachnol. Society
- Internat'l Soc. of Arachnology
- Revue Arachnologique

Those members who wish to join a society or to subscribe to a journal can email Richard who will advise you of the relevant 2005 fee once it is available.

WEB VIBES

Arachnological Societies Webpages

(Any links you would like to see listed here? Let me know! Volker)

International Society of Arachnology
http://www.arachnology.org/
American Arachnological Society
http://www.americanarachnology.org/
European Society of Arachnology
http://www.european-arachnology.org
British Arachnological Society
http://www.britishspiders.org.uk/html/bas.php
ARAGES – Arachnologische Gesellschaft (German) http://www.arages.de/

CONFERENCE REVIEW

16th International Congress of Arachnology

-

2nd – 6th August 2004
Gent (Belgium)

International Arachnological Congresses are a three yearly highlight in an arachnologist's life and the 16th Congress in Belgium in August was no exception. Jean-Pierre Maelfait and his colleagues at Gent University and other Belgian institutes hosted an excellent meeting from the 2nd to the 6th of August. More than 250 keen arachnologists traveled from around the world to talk arachnids and drink the excellent Belgian beers. As usual, Australasia was well represented by about a dozen participants. Listed below are the talks on Australasian arachnids or by Australasian arachnologists:

Mike Gray – A redescription and new species of the spider genus *Taurongia* Hogg (1901) from south-eastern Australia.

Matthew Lim and **Daiqin Li** – Extreme sexual ultraviolet dimorphism in jumping spiders.

Barbara Baehr – The generic relationships of a new endemic Australian zodariid genus (Araneae): where does it fit in?

Vladimir Ovtsharenko – The Australian ground spider family Gnaphosidae (Araneae, Gnaphosoidea): a review at the generic level.

Daiqin Li – Predator-induced life-history changes in subsocial spitting spiders: predation on egg-carrying females induces hatching.

Mark Harvey – What does the phylogeny of the Old World Schizomida tell us about the Malagassy schizomid fauna?

Marek Zabka – The jumping spiders (Araneae: Salticidae) of different floristic formations of Australia.

Cor Vink – Lycosid systematics: a molecular approach.

Volker Framenau, Nick Murphy, Andy Austin, Steve Donellan, Mark Harvey – How many times did the wolves lose their web? A molecular phylogeny of the Lycosidae (Araneae).

Domir De Bakker, **Léon Baert** and **P. Grootaert** – Papua New Guinea: a biodiversity hotspot after all? Preliminary results on spider biodiversity in canopies of a tropical rainforest.

Sarah Boyer and **Gonzalo Giribet** – Systematics and biogeography of New Zealand Pettalidae (Arachnida: Opiliones: Cyphophtalmi).

Linda Rayor, **A Pfeffer**, **R. Walsh**, **L. Cahoon** and **David Rowell** – Living with cannibals: conflict and cooperation in social huntsman spiders (*Delena cancerides*: Sparassidae).

Ximena Nelson – Bloodlust of an East African jumping spider, *Evarcha culicivora*.

Simon Pollard – Diving crab spiders in the hanging stomachs of Borneo.

(Part of) The Australasian Delegation in Gent 2004.
From left: Joseph Koh, Simon Pollard, Helen Smith, Matt Bruce, Sarina Pearce, Graham Milledge, Barbara Baehr, Cor Vink, Volker Framenau, Rob Raven, Mark Harvey (Photo: Greta Binford)

Robert Raven – The Australian redback (Araneae: Theridiidae: *Latrodectus hasselti*) a cosmopolitan tramp of concern.

Cor Vink *et al* - The effects of preservatives and temperatures on arachnid DNA.

Helen Smith – *Poltys* and the Poltyae (Araneae: Araneidae).

Sarina Pearce and M. Zalucki – Lycosidae: dispersal, movement and spatial abundance in Australian grain crops.

The scientific program and abstracts for the Congress can be downloaded at: http://allserv.rug.ac.be/~jpmaelfa/scientific%20programme.htm.

The festivities got off to a great start on the Sunday afternoon with registration and everybody heading off into the marvelously picturesque city of Gent. After sampling the Belgian beer and the fine Belgian cuisine, Monday morning started with the first of several invited plenary talks, with **David Wise** from the University of Kentucky speaking on "Spider ecology: state of the art and future prospects", a wonderfully thought-provoking review of a diverse and hotly debated topic. David quickly became famous during the Congress for coining the phrase "lycosid mafia". The remainder

of the day had us running between three concurrent sessions which were luckily situated adjacent to each other so that we didn't have to break into a sweat to get to your favourite speaker. Monday evening boasted a wonderful reception in the Botanic Gardens associated with the University making it the perfect opportunity to catch up with friends, make new friends, and drink Belgian beer.

Day two – Tuesday – kicked off with **Rosie Gillespie** from University of California, Berkeley bringing us up to speed on her research on the spiders of the Pacific Ocean islands, "Evolution of spiders on Oceanic Islands: the venture of few and gain of many". Rosie must be one of the few people alive who is able to announce a recent publication in *Science* and retain a modest demeanor. The three-session system started again but with too many good talks on view, it was hard to choose. **Volker Framenau**'s symposium on wolf spiders started after morning tea and proved to be a crowd pleaser, despite **David Wise**'s provocative stand (see above). Prior to heading off for a meal, the conference organizers presented a very helpful talk on "Belgian Beers: an introduction". Now if they had given us this talk on Sunday some of us might have not had such raging headaches! The evening once again saw us descend upon the Botanic Gardens to lambaste old friends, lambaste new friends, and drink Belgian beer. The major difference between Monday and Tuesday nights was the provision of a variety of cheeses, some of which were beautifully textured and delicate in flavour, whilst others had the kick of a mule and smelt like a dead animal. One of your correspondents showed true Aussie grit when he accepted the challenge to eat a particularly virulent cheese and didn't even show a hint of disgust during its consumption; although he did hurry off to drown the taste with some more fine Belgian beer.

The giant orb-web at Gent's castle 'Gravensteen'

Caught in the web (from left) Paula Cushing, Simon Pollard, Chris Buddle, Jeremy Miller, Greta Binford (Photo: M. Harvey)

Wednesday was mid-congress excursion day but your ever-faithful

correspondents failed to make the bus and opted for a quiet stroll with friends around the city. Gent boasts a spectacular medieval castle that is adorned with an orb-web on the front lawn – we're not joking, look at the picture! The web is not medieval, actually it looks like 1987, and we have no idea what it is meant to signify. The displays within the castle are easier to understand with many examples of what people do to other people when they don't like the other people – torture racks, plunging wells, knifes, swords and armour. The remainder of the city post-dates the castle but is just as beautiful.

Thursday started with an invited lecture by **Bernhard Huber** from the Zoological Research Institute and Museum Alexander Koenig entitled "Sexual selection in spiders: progress and bias" bringing together several different streams of research. The regular talks kept us busy all day, with the by now infamous wolf spider symposium in full swing. The day ended with the General Assembly of the International Society of Arachnology where the new officers were elected. **Ansie Dippenaar-Schoeman** was elected President, and **Mark Harvey** was elected Vice-President. Further Aussie links on the Council are **Tracey Churchill** and **Barbara Baehr**. It was also announced that the next ICA will be held in São Paulo, Brazil, to be hosted by **Ricardo Pinto-da-Rocha** and his colleagues.

And Thursday night was … ummm, oh, we remember, more Belgian beer!

The final day was a bleary-eyed start for some, but **Paul Selden** from the University of Manchester held our attention in his invited lecture "What light do fossils shed on spider phylogeny". The concurrent talks lasted all day and culminated in the Congress Dinner in an old building (Het Pand) in the centre of town. The buffet style evening allowed for the mingling of delegates and the imbibing of some fine wine (hey, where was the Belgian beer?). Some intrepid soles ventured out at midnight to a nightclub where we danced until dawn or thereabouts. Lots of Belgian beer there!!

Posters were on display for the entire week and **Matthew Bruce** picked up the runner-up student prize for best poster. His poster, co-authored with **Mariella Herberstein**, was on "Web decoration polymorphism and phylogenetics in *Argiope*".

It was a wonderful week and we were all sorry to see it end. Some headed out on planes and trains straight away, whilst others had a slow, quiet weekend prior to heading home. The conference organizers should be proud of the Congress which was held in a truly beautiful city. We can't believe that we must wait three long years until the next congress in São Paulo!

Mark Harvey
Department of Terrestrial Invertebrates
Western Australian Museum

Cor Vink
Department of Biology
San Diego State University

Australasian Arachnological Publications in 2004

This column aims to collate arachnological publications that were issued (but not those 'in press') since the last volume of *Australasian Arachnology*. I am particularly interested to list entries of publications that are not easily trackable through the common library search engines. Please provide me with information on your latest publications for the next issue.

Baehr, B. 2004. Revision of the new Australian genus *Holasteron* (Araneae, Zodariidae): taxonomy, phylogeny and biogeography. *Memoirs of the Queensland Museum* **49**: 495-519.

Banks, J.C., **Sirvid, P.J**. and **Vink, C.J.** 2004. Whitetailed spider bites: arachnophobic fallout? *The New Zealand Medical Journal* **117** (1188): 7pp.

Bjorkman-Chiswell, B.T., **Kulinski, M.M**., **Muscat, R.L.**, **Nguyen, K.A.**, **Norton, B.A.**, **Symonds, M.R.E.**, **Westhorpe, G.E.** and **Elgar, M.A.** 2004. Web-building spiders attract prey by storing decaying matter. *Naturwissenchaften* **91**: 245-248.

Blest, A.D. 2004 New Zealand spiders: the implications of current information concerning Stiphidiidae and Linyphiidae for biodiversity studies. *Canterbury Museum Bulletin* **10**: 1-14.

Bowie, M.H., Marris, J.W.M., Emberson, R.M., Andrew, I.G., Berry, J.A., Vink, C.J., White, E.G., Stufkens, M.A.W., Oliver, E.H.A., Early, J.W., Klimaszewski, J., Johns, P.M., Wratten, S.D., Mahlfeld, K., Brown, B., Eyles, A.C., Pawson, S.M., and **Macfarlane, R.P.** 2004. A terrestrial invertebrate inventory of Quail Island (Otamahua): towards the restoration of the invertebrate community. *New Zealand Natural Sciences* **28**: 81-109.

Bruce M.J., **Heiling A.M.** and **Herberstein M.E.** 2004. Alternative foraging strategies in the orb-web spider *'Araneus' eburnus* (Araneidae, Araneae). *Annales Zoologici Fennici* **41**: 563-575.

Churchill T.B. and **Ludwig J.A.** 2004. Changes in spider assemblages in relation along grassland and savanna grazing gradients in northern Australia. *The Rangeland Journal* **26**: 3-16.

Elgar, M.A. and **Allan, R.A.** 2004. Spider chemical mimics acquire colony-specific cuticular hydrocarbons from their ant model prey. *Naturwissenschaften* **91**: 143-147.

Fitzgerald, B.M. and **Sirvid, P.J.** 2004. Notes on the genus *Phycosoma* Cambridge, 1879, senior synonym of *Trigonobothrys* Simon, 1889 (Theridiidae: Araneae) *Tuhinga* **15**: 7-11.

Gray, M.R. and **Smith, H.M.** 2004. The "striped" group of stiphidiid spiders: two new genera from north-eastern New South Wales, Australia (Araneae:

Amaurobioidea: Stiphidiidae). *Records of the Australian Museum* **56**: 123-138.

Harland, D.P. and **Jackson, R.R.** 2004 *Portia* perceptions: the Umwelt of an araneophagic jumping spider. In: Complex Worlds from Simpler Nervous Systems (F.R. Prete, ed.). MIT Press, Cambridge, Mass.

Heiling, A.M. and **Herberstein M.E.** 2004. Floral quality signals lure pollinators and their predators. *Annales Zoologici Fennici* **41**: 421-428.

Heiling, A.M. and **Herberstein, M.E.** 2004. Predator-prey co-evolution: Australian native bees avoid their spider predators. *Proceedings of the Royal Society London B. (Suppl.)* **271**, S196-S198.

Heiling, A.M., **Cheng, K.** and **Herberstein M.E.** 2004. Exploitation of floral signals by crab spiders (*Thomisus spectabilis*, Thomisidae). *Behavioral Ecology* **15**: 321-326.

Hill P.J.B., Holwell, G.I., **Göth A.** and **Herberstein M.E.** 2004. Preference for habitats with low structural complexity in the praying mantid *Ciulfina* (Mantidae*). Acta Oecologia* **26**: 1-7.

Nelson, X.J., **Jackson, R.R.**, **Edwards G.B.** and **Barrion A.T.** 2004. Predation by ants on jumping spiders (Araneae: Salticidae) in the Philippines. *New Zealand Journal of Zoology* **31**: 45-56.

Pearce S. 2004. The use of naturally occurring arthropod predators for the control of *Helicoverpa* spp. in grain crops in southeast Queensland. Ph.D. abstract. *Bulletin of the Ecology Society of Australia* **34**: 30-32.

Pearce S., **Hebron W.**, **Raven R.J.**, **Zalucki M.P.** and **Hassan E.** 2004. The spider fauna of soybean crops in Southeast Queensland and their potential as predators of *Helicoverpa* spp. *Australian Journal of Entomology* **43**: 85-93.

Pollard, S.D. and **Jackson, R.R.** 2004. Snail-eating Araneae *In*: Natural Enemies of Terrestrial Molluscs (Barker, G.M., ed.). CAB International.

Rousseau, M.E., **Paquin, M.C.**, **Separovic, F.**, **Herberstein, M.E.** and **Pezolet P.** 2004. Molecular orientation in silk fibers studied using Raman microspectroscopy. *Biophysical Journal (Suppl)* **86**: 321A-321.

Vink, C.J., **Teulon, D.A.J.**, **McLachlan, A.R.G.** and **Stufkens, M.A.W.** 2004. Spider and harvestmen population density and diversity in arable crops and grasses in Canterbury, New Zealand. *New Zealand Journal of Zoology* **31**: 149-159.

UPCOMING EVENTS 2

Combined Australian Entomological Society, Society of Australian Systematic Biologists and Invertebrate Biodiversity and Conservation Conference

Australian National University, Canberra
(Australian Capital Territory)

4-9 December 2005

For information check:
http://www.invertebrates2005.com/

There are some preliminary discussions to organise an Australasian Arachnology Symposium as part of the above conference. Check with Mariella Herberstein (m.herberstein@bio.mq.edu.au) or myself (volker.framenau@museum.wa.gov.au) on any advances of that idea or if you are interested in helping to organize such a symposium.

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