

Friends of the Entomology Research Museum Newsletter

Editors: Connell Dunning and Robert Wepler

FERM Field Trip to Sweeney Granite Mountains Desert Research Center Saturday, 26 September 1998

- Rick Vetter

We are planning a FERM collecting trip to the UCR Sweeney Granite Mountains Desert Research Center (SGMDRC) for Saturday, September 26th. We have been invited to contribute to the Reserve's arthropod inventory and voucher collection.

SGMDRC is about 160 miles from UCR, 5 miles north of I-40 on Kelbaker Road, halfway between Barstow and the Arizona border. Because of the altitude it never gets as hot as Riverside and by September the temperatures should be bordering on gorgeous. SGMDRC is a locked facility so drunken yahoos on ATVs won't drive up, look at your insect net, lob a beer can at your head and then drive off spewing Beavis and Butthead dialogue. So inside the confines of the gate, only pure research is carried on. Yowza!!

Reserve facilities border on extravagant. The main building has enough beds to sleep 14 in the loft (some are bunk). Downstairs there is a full kitchen (2 large refrigerators, 2 sinks, 4-burner stove, a microwave oven, pots, pans, dishes, cups, and condiments), 2 bathrooms (each with a sink, shower and flush toilet), and a spacious classroom/dining room with 2 tables that seat about 14 folks. There is an outdoor picnic table and barbecue area as well as two additional cottages which sleep 2 each. Tents are allowed if you feel the desire (or if there are too many folks). Do not expect to rough it. There is also a limited lab where we might sprawl if need be, but the dining area should be sufficient. Most importantly, there are no janitorial services so we have to clean up everything and take our trash with us.

Plan to arrive Saturday around noon (although some eager folk can head up Friday night). We will get an orientation lecture on which areas to avoid (research projects and Native American archeology sites). But we are free to collect any and every six- and eight-legged critter we find. Last year, leaving the lights on in the kitchen at night attracted many moths and other insects to the large windows, so collecting could be ideal for those couch entomologists among us. Because we are doing the Research Center a service by supplying voucher specimens, the facilities are free. Finally, because this is a collecting trip, it is necessary that everyone will be actively involved in entomological collecting. This is not a resort where you can bring the spouse, 3 kids, grandma and the one-eyed dog unless everybody is swinging a net or beating the bushes; space is limited.

So come on out to the Granite Mountains with us. See the breathtaking Mojave Desert. Marvel at the nighttime sky in the middle of nowhere. Collect insects in an undercollected area. Wake up in the middle of the night and see Dave Hawks raiding the fridge whilst wearing his shiny gold *Phasiotis* boxers.

Contact Rick Vetter by the 10th of September, 1998, at 909-787-3550 or at vetter@citrus.ucr.edu to have your name put on the list and to receive more details.



Illustration by Rick Vetter

Updates from the Museum

- Serguei Triapitsyn, Principal Museum Scientist

With this article the Museum personnel begin a regular section which we name "Updates from the Museum". **Saul I. Frommer**, Curator and Senior Museum Scientist for the past 34 years, retired on July 1st. Until the new Senior Museum Scientist is hired (the Department of Entomology has already advertised this important position), the Museum will be a little bit short-handed as I am the only permanent staff member, and part of my responsibilities is to supervise the quarantine facility. Luckily for all of us, Saul Frommer's intentions are to come several times a week to do volunteer work in the Museum.

There have been many exciting developments in the Museum during the past year. Some of these are as follows:

- The Museum invited **Dr. John Noyes** (The Natural History Museum, London, UK) for three weeks to sort about 30 drawers full of encyrtid wasps. Our Museum is home to a large collection of this diverse family, which is very important for biological control. Thanks to Dr. Noyes' extraordinary efforts, we now have almost all the specimens sorted at least to genus. There are approximately 500 genera in the Encyrtidae!

- The Museum made arrangements with **Dr. Lubomir Masner** (Canadian National Collection, Ottawa), the world's foremost authority on the systematics of Platygastroidea and Proctotrupoidea (Hymenoptera) to visit Riverside in the fall of 1998. Thousands of parasitic wasps are anxiously waiting for him to come and have them named!

- The National Science Foundation's Collection Improvement Program funded our grant proposal aimed at remediation and curation of the Museum's collection of *Aphytis* (Aphelinidae); total funding received is \$138,000 for three years starting 1 May 1998. PI's of this project are **John Heraty**, **John Pinto** and myself. Work on this project is now progressing quite well.

- Four graduate students were assigned to the Museum during the spring quarter of the 97/98 school year, and with their help we achieved good progress in curation of the collection. More than 10,000 specimens were mounted, labeled and curated.

- The last specimens from the P. H. Timberlake collection were incorporated by **Jung-Wook Kim** from the temporary storage boxes. It took us more than three years to complete this project, which was initiated by Saul Frommer. Timberlake's collection of wild bees alone is comprised of more than 300,000 specimens.

- We are proud to announce that the Museum library, including the large collection of reprints, is now in near-to-perfect order. My special thanks to Saul Frommer and **Hannah Gould**, who made this happen.

- So far during 1998, the Museum has accommodated over 200 individual visitors or groups of visitors, including many professional entomologists.



Editors' Note

We would like to welcome you to this, the first edition of the Friends of the Entomology Research Museum Newsletter. The Newsletter is to be published quarterly and will contain articles of interest to collectors, taxonomists, and others interested in the Entomology Research Museum at U. C. Riverside. Each Newsletter will contain a center pull out with detailed information on a particular insect or other arthropod. In this issue the featured insect is *Acanthocalcis nigricans* a parasitic wasp. It is our hope that this section will be saved, and that over the years members will compile "fact sheets" on a wide variety of arthropods. We encourage you to begin a collection with this first issue.

This Newsletter relies on member contributions. We welcome articles and news items of interest to the Friends. Send submissions by email (dunnic01@student.ucr.edu or weppler@calalum.berkeley.org) or regular mail (Rob Weppler, 3024 Flanders Rd., Riverside, CA 92507). Contributions to the "featured insect" section should include a photo or drawing along with the text. We are excited to be a part of this new organization and hope you enjoy the Newsletter.

Try *Pleocomma* for those Rainy Day Blues!

By Mike Gates



Pleocomma puncticollis Rivers, male.

Illustration by Lai Shan Mai

It's been a long day at work or school but for some reason, fatigue is slow to set in. Thoughts turn to a fun afternoon in the autumn sun collecting insects and expending pent-up energies. As you race out the door with your collecting gear, you sense a change in the air: the western sky is embroiled with sullen clouds full of moisture and the temperature is falling. Are your collecting plans to be dashed by the first storm of the season? Never!

This is the wet 'n' wild beginning of the Rain Beetle (*Pleocomma*) collecting season! If luck is with you, this storm will be a product of a "pineapple express" in which the jet stream whips warm, tropical moisture from the Hawaiian Islands northeast toward southern California. Although probably not the only signal coordinating the emergence of the various *Pleocomma* species, rain plays a vital role in eliciting beetle activity. For most species, the patter of rain drops and saturation of the soil awaken these beetles from their subterranean slumber; however, occasional specimens have been taken during the summer and fall before the rains begin.

Rain Beetles are fairly large, fuzzy, scarab beetles of the subfamily Pleocominae. This subfamily contains only the single genus, *Pleocomma*, which contains 33 species, all of which are known only from western North America from northern Baja California to British Columbia, mostly at higher elevations (3,000-8,000 ft.).

Rain Beetle larvae (grubs) feed on the roots of various trees, shrubs and grasses, and may take several years to reach adulthood. The adult beetles do not feed, and have atrophied mouthparts. Adult males fly about, often in the rain, seeking the larger, flightless female waiting near the entrance of her burrow. Once mated, the female descends back underground to lay her eggs, filling in her burrow behind her. Only a fortunate few collectors are lucky enough to

find females on the surface of the soil. More often than not, a persistent collector seeking a female must track a burrow up to four or five feet underground before reaching the female beetle. In certain situations, searching roadcuts through suitable habitat can yield male and female specimens.

For those interested in trying to collect *Pleocomma* (and who don't mind getting wet and cold!), the best method for males is to use a mercury vapor light in the evening and early morning (pre-dawn) hours on rainy nights. Additionally, examining mercury vapor or fluorescent lights in remote localities or small mountain towns can produce specimens. Males of many species will fly if it has recently rained (e.g. *P. australis*), while others fly only while it's raining (e.g. *P. puncticollis*). For a first rain beetle excursion, I recommend trying for *P. australis* in the San Jacinto Mountains during the first two or three storms of the season (usually in October or November). The gas station lights at Mountain Center usually attract a few and the light we set up near Keen Camp Summit yielded over 80 males. This could be a great season if La Niña hits as predicted. As for digging for females, well that's another story...

Director of Bohart Museum Addresses Special Meeting of FERM

Dr. Lynn S. Kimsey, Professor of Entomology and Director of the R. M. Bohart Museum of Entomology, U. C. Davis, enthusiastically became our first guest speaker on 9 April 1998. Lynn provided us with valuable information about the highly successful Bohart Museum Society (the Bohart Museum's "Friends" organization), as well as presenting a fascinating seminar entitled "Trans-Antarctic Travelers: The Life & Times of Tiphids". FERM sends special thanks to Lynn for sharing her expertise and experiences with us.

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We invite you to become a Charter Member of the Friends of the Entomology Research Museum!

The primary purpose of the Friends organization is to support and promote the goals of the UCR Entomology Research Museum by voluntary and financial assistance. As such, the Friends will enhance the development of our Museum as an academic resource and as a source for community outreach. The Friends also will sponsor programs, special events, field trips and other activities for members and fellow entomophiles. A newsletter will be published quarterly, chock-full of fascinating "bug facts" and Museum news.

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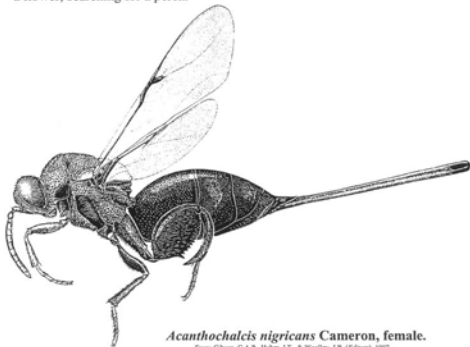
Dues and other contributions are payable by check to the UCR Foundation, noting "Entomology Museum" on the memo line on your check. All dues and contributions are tax-deductible. Please submit your membership form and dues to:

Martin M. Barnes, Treasurer
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Department of Entomology - 041
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Acanthochalcis nigricans Cameron (Hymenoptera: Chalcidoidea: Chalcididae)

by Mike Gates

- Size:** Up to 27mm in length (One of the largest chalcidoids in North America!).
- Color:** Black with red/brown legs and smokey or yellowish wings.
- Biology:** Parasite of the larvae of metallic wood-boring beetles (Buprestidae) on the following plant hosts: Saltbush (*Atriplex*), various Brooms (*Baccharis*), Oaks (*Quercus*), and Ocotillo (*Fouquieria*).
- Distribution:** Southwestern United States north to Kansas and south into northern Mexico.
- Collection:** Not commonly collected. Mainly acquired by sweeping flowering vegetation or host-inhabiting shrubs.
- Notes:** I have collected this impressive parasitic wasp on two separate occasions, both of these in southeastern Arizona. I first saw this species in 1997 hovering around stands of *Baccharis sarothroides* where the males did most of the hovering and attempted to copulate with females approaching the branch tips. The females, on the other hand, typically walked leisurely up and down the main stems, pausing only occasionally, drumming their antennae constantly. My most recent encounter with these beasts was this year when I was observing the hymenopteran fauna that was visiting a blooming Gray Thorn (*Condalia lycioides*). Suddenly, I heard a loud (for a chalcidoid) buzzing and saw a female *A. nigricans* approaching a flower, searching for a perch.



Acanthochalcis nigricans Cameron, female.

From Gilson, G.A.P., Huber, J.T., & Wasley, J.B. (Editors) 1997.
Annotated Keys to the Genera of Nearctic Chalcidoidea (Hymenoptera).
NRC Research Press, Ottawa, Ontario, Canada.