

Friends of the Entomology Research Museum



Newsletter

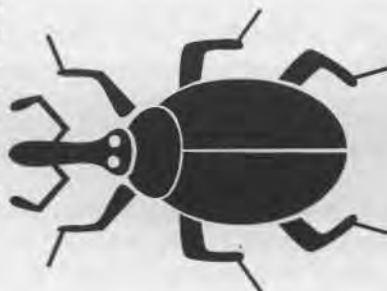
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Future Bug o' the Months

In attempting to make the editor's job easier (and after all, isn't that what we are all here for??), I am soliciting Bug o' the Month contributions from folks. If only 8 people would provide a high-caliber photo and a paragraph narrative, I would have a two-year supply on hand from which to choose. If you don't have a photo but would like to do a paragraph, contact us because we might already have a decent photograph in our collection. Or conversely, if you have a very nice photograph of an arthropod of general interest or importance, contact us and maybe we will use your photo and get somebody to write up a paragraph for the Newsletter. Either way, I am trying to get more people involved in helping with the Newsletter so it is more of a communal project such that it isn't the same folks writing all the time.



FERM Membership and Budget Update

By Dave Hawks, FERM Treasurer

Fiscal year 2001-2002 was a good one for FERM membership growth. We currently are 157 members strong, and 14 of you are new since July 2001. I think this is outstanding and a bit amazing considering that the institution that we support is not big, flashy, or a major attraction for visitors. Many of our members are not professional or avocational entomologists, and a fair number don't even live near Riverside (some are from as far away as Australia, Honduras, Canada, Washington DC, Hawaii, and a few other states). So, we deserve a collective pat on the back!

Once again, we spent very little money this past year. We provided a \$335 collecting grant to UCR PhD students (and FERM members) Matt Buffington and James Munro as support for their collecting and research driving trip to Nebraska in May 2002. Matt convinced



us (i.e., the FERM Board of Directors) that the trip would benefit not only their research interests but those of the Museum, plus Matt will now get to (i.e., must!) write an article for the FERM Newsletter describing his and James' adventures. Otherwise, FERM expenses consisted of less than \$2000 spent on printing the Newsletter, meetings, and a few other minor purchases. Within a few months we will buy \$6000 worth of new museum drawers as our contribution that was cited in the Museum's (now funded) NSF Museum Improvement Grant proposal. Even after this purchase, we'll still have about \$20,000 in our UCR Foundation account, so we're doing just fine. Many thanks to all of you for continuing to support our worthwhile cause!

The FERM Newsletter is published quarterly and contains articles written by FERM members. If you would like to submit an article, please send it as a Word/Wordperfect file using one of the following two methods: (1) an attachment via email to the editor (see below) or (2) a hard copy version on disk. Submissions will be published in the order they are received in accordance with space availability and relevancy to the FERM general readership. If you have questions please contact the FERM Newsletter editor:

Rick Vetter (vetter@citrus.ucr.edu)

Curious Arthropod Scientific Names

Part III: Species Names

compiled by Doug Yanega

The following is a list of arthropod species names from various categories used in earlier installments of this series. These are excerpted from my webpage at <http://entmuseum9.ucr.edu/staff/yanega.html> (which may soon be moving, due to a hacker assault on the server). I only have authors and years of publication for a subset of them.

PLAYS ON WORDS/PHRASES

- Agra phobia* Erwin (carabid beetle)
Amblyoproctus boondocksius Ratcliffe (scarab beetle from the middle of nowhere)
Apopyllus now Platnick & Shadab 1984 (spider)
Bombylius aureocookae Evenhuis 1984 (bee fly)
Cephise nuspesez Burns (skipper; pronounced "newspecies")
Colon forceps Hatch 1957 (leiodid beetle; genus includes species such as *Colon rectum*, *Colon monstrosum*, *Colon grossum*, *Colon horni*, and other suggestive combinations)
Cyclocephala nodanotherwon Ratcliffe (scarab beetle)
Eubetia bigaulae Brown (tortricid moth; pronounced "yubetchabygolly")
Heerz lukenatcha Marsh 1993 (braconid wasp)
Heerz tooya Marsh 1993 (braconid wasp)
Ohmyia omya Thompson 1999 (syrphid fly)
Panama canalia Marsh 1993 (braconid wasp)
Pieza pi Evenhuis 2002 (bee fly; also *Pieza rhea*, *Pieza kake*, *Pieza deresistans*)
Strategus longichomperus Ratcliffe (scarab beetle with longmandibles)
Taumacera sucki Weise 1922 (leaf beetle)
Tyrannasorus rex Ratcliffe & Ocampo 2001 (fossil scarab beetle)
Verae peculya Marsh 1993 (braconid wasp)
Ytu brutus Spangler 1980 (beetle)

INTERESTING HONORIFICS

- Anophthalmus hitleri* (blind cave beetle)
Baeturia laureli and *B. hardyi* De Boer 1986 (cicadas)
Bobkabata kabatabobbus (parasitic copepod named after Bob Kabata)
Calponia harrisonfordi Platnick (spider)
Ceraeochrysa michaelmuris Adams & Penny (lacewing whose abdominal apex looks like a Mouseketeer hat)
Dicrotendipes thanatogratus Epler 1987 (midge; epithet means "Grateful Dead")
Draculoides bramstokeri Harvey & Humphreys 1995 (spider)
Erechthias beebblebroxi Robinson & Nelson 1993 (tineid moth with false head; after Zaphod Beeblebrox, character from "Hitchhiker's Guide to the Galaxy" with two heads)
Eubetia boop Brown (tortricid moth)
Hortipes terminator Bosselaers & Jocque 2000 (spider; male palpi resemble a "futuristic gun")
Lasioglossum gattaca Danforth & Wcislo (sweat bee; named after part of its DNA base sequence, GATTACA)
Lycaena fascista Turati 1927 (butterfly; synonymized)
Madeleinea lolita Balint 1993 and *Pseudolucia humber* Balint & Johnson 1995 (lycaenid butterflies in a group studied by Nabokov, who first named the genus *Pseudolucia*)
Mozartella beethoveni Girault 1926 (Encyrtid wasp)
Pachygnatha zappa Bosmans & Bosselaers 1994 (spider "with a Zappa-moustache-like black mark on the ventral side of the abdomen")
Sorolopha bruneiregalis Tuck & Robinson 1994 (tortricid moth; after Royal Brunei Airlines)
Strigiphilus garylarsoni Clayton (owl louse)
Villa manillae Evenhuis 1993 (bee fly)
Walckenaeria pinocchio Kaston 1945 (spider with a long "nose")
Xenox simson Fabricius 1805, followed up by *Xenox delila* Loew 1869 (bee flies)



SIMPLY PLAYFUL, ACCIDENTAL HOMOPHONES, etc.

Abracadabrella birdsville Zabka 1991 (jumping spider)

Alaptus ah & *Alaptus oh* Girault 1930 (mymarid wasps)

Carynota stupida Walker (treehopper)

Desmatomyia jambalaia Hall & Evenhuis 1987 (fly)

Dorcus titanus (stag beetle; a casual reading might suggest "Titanic Dork")

Dziwneono etcetera Dworakowska 1972 (leafhopper; in addition to the unusual epithet, the generic name means "It is strange" in Polish)

Evylaeus fartus Vachal 1904 (sweat bee)

Liogenys gayanus Solier (scarab beetle)

Monochamus titillator Fabricius (longhorned beetle)

Orizabus subaziro Ratcliffe (scarab beetle; palindrome)

Papagona papoosa Ball 1935 (planthopper)

Rhyacophila tralala Schmid (caddisfly)

Xela alex Thompson 1999 (syrphid fly; another palindrome)

RECORD-SETTERS

Gammaracanthuskytodermogammarus loricatobaicalensis Dybowski 1926 (amphipod; at 50 characters, the longest binomial in history)

Cartwrightia cartwrighti Cartwright (scarab beetle; the only scientific name where the genus, species, and author names form a sequence using successive subtraction of the last letter to form the next word)

SPECIAL MENTION

An interestingly symmetrical synonymy pointed out to me by Valery Kornayev:

Paroxyna cleopatra, Hering 1937 (a fruit fly) turns out to be synonymous with *Paroxyna babayaga*, Hering 1938; Cleopatra, of course, was an Egyptian queen fabled for her beauty, while Baba Yaga was an evil and extremely ugly Russian witch in fables. Seems Hering couldn't decide whether this fly species was beautiful or ugly. Moreover, BOTH names are synonyms of *Paroxyna messalina*, Hering 1937. Also seems Hering couldn't tell he was looking at only one fly species, instead of three. These things happen.

A case of going too far with the honorifics:

The (in)famous A. A. Girault coined many colorful names for his parasitic wasps (publishing his works privately, in fact), many of which were genera or species epithets honoring artists, poets and writers (even politicians); his over 500 genera included many such as *Davincia*, *Shakespeareia*, *Beethovena*, *Mozartella*, *Emersonia*, *Emersonella*, *Emersonopsis*, *Raphaelana*, *Goetheana*, *Goethella*, *Lutheria*, *Marxella*, *Marxiana*, *Thoreauia*, *Tennysoniania*, *Lincolna*, *Lincolnanna*, *Keatsia*, *Whittieria*, *Plutarchia*, *Haeckelia*, *Schillieria*, *Aligheria*, *Aligherina*, *Rubensteinia*, *Carlyleia*, *Grotiusomyia*, *Grotiusella*, *Finlayia*, *Boudiennyia*, *Richteria*, *Ratzeburgella*, *Delisleia*, *Lomonosoffiella*, *Giorgionia*, and *Froudeana*, plus numerous epithets such as *longfellowi*, *shakespearei*, *goethei*, etc., etc. As if all these new wasps weren't enough, he also named, for some unfathomable reason, the parasitic mymarid wasp *Shillingsworthia shillingsworthi*, and described it as an ephemeral creature with no head, thorax, abdomen, legs, antennae, or wings, found in "the chasms of Jupiter" - in other words, a nonexistent wasp. Perhaps Girault would have been excited to see that in 1999, a person offered on eBay a meteorite they claimed was from Mars, and had found, contained within it, a small parasitic wasp, accordingly purported to be extraterrestrial. The starting bid was 1 million U.S. dollars.

Dr. James Adams passed along the following, which is in a class by itself:

"One simply needs to look at the Checklist of the Lepidoptera North of Mexico (Hodges) and you will see that Kearfott used several assemblages of letters over and over again, simply changing the first letter. For example, in the genus *Epipotia*, are the valid species *zandana* and *xandana*, in *Pelochrista* is *vandana* and *randana*, in *Epiblema* *tandana*, in *Eucosma* *gandana*, *handana*, *nandana*, *wandana*, *mandana*, *pandana* and *landana*, and *candana* in *Cydia*. He does something similar with *bobana*, *cocana*, *dodana*, *fofana*, *momana*, *lolana*, *totana*, and *hohana* in *Eucosma*, as well as *popana* and *rorana* in *Pelochrista*, *sosana*, in *Epiblema*, *zozana* in *Rhyacionia*, and *kokana* in *Phaneta*. He's described the valid species *tomonana*, *zomonana*, *womonana*, *momonana*, and *lomonana* in various genera, and *raracana*, *daracana*, *baracana*, *naracana*, *haracana*, *faracana*, *maracana*, *laracana*, *saracana* in others. The Cochyliidae has one of my favorites, the genus *Hysterosia*, which has two groups named by Kearfott: *riscana*, *biscana*, *dis-cana*, *viscana*, *wiscana*, and *ziscana*; and *foxcana*, *toxcana*, *voxcana*, and *zoxcana*. It also includes the species *waracana*, *zaracana* and another *baracana*, as well as *bomonana*, *romonana* and *nomonana*."

NEWS FROM THE MUSEUM

by Doug Yanega



This past quarter has marked another milestone, in that the L.D. Anderson immatures collection has now been completely transferred into leak-proof vials, a process finished by grad student Dave Popko. We'll now be able to fit the collection into about two-thirds of the space it previously occupied, and have many fewer problems with loss of specimens due to alcohol evaporation.

Other preparations for our upcoming renovation include an inventory of the contents of each cabinet, so we can plan the amount of space in the compactors that needs to be set aside for each family. This is necessary because the families are presently in alphabetic order, but will be moved back in phylogenetic order. The Museum's assortment of rearing cages and other paraphernalia associated with keeping live insects has been passed on to the Entomology grad students, who will apparently be taking over the care of live displays in the new Entomology building. We also recently received a donation of 6 drawers of insects, primarily bees, asilids, and bee flies, from Eric Eaton - the specimens are mostly from Missouri, Ohio, Oregon, and northern California, and include some interesting new additions to our collection.

Negotiations continue regarding the actual purchase of the compactors, but signs are more promising than they were, and we may indeed be looking at a late September or early October moving date. It looks as if we will try to organize a FERM Moving Day once the compactors have been installed, and you can expect a notice here or in a special flyer about this as time draws near. It also looks as if surplus 24-drawer Cal Academy cabinets will be available for sale to FERM members once the moving is over, possibly in November or December.

Got an idea for a FERM article???

Do you have anything buggy-related that might be of interest for the FERM newsletter? We really would be tickled pinkish if you would send "stuff" in. Remember, this newsletter won't have much in it unless we have material submitted from you folks that we can publish. Feel free to send in photos, articles, recent publications related to insect taxonomy or natural history and even stories about how the Entomology Research Museum has assisted you in your bug-related endeavors. Send them to vetter@citrus.ucr.edu, preferably as attachments (not in email text). Additional information is on the front page of this newsletter.



*****Deadline for submission of material is Sept 15th*****

RECENT PUBLICATIONS BY FERM MEMBERS:

Beardsley, J. W. & S. Triapitsyn. 2001. The discovery of *Anagyrus agraensis* Saraswat in Hawaii (Hymenoptera: Encyrtidae). *Proceedings of the Hawaiian Entomological Society* 35: 141-142.

Mousa, S. F., A. H. El-Heneidy, A. S. Hendawy, D. Adly, D. Gonzalez and S. V. Trjaptsyn [sic]. 2001. Pink hibiscus mealybug, *Maconelicoccus hirsutus* (Green), parasitoids in Egypt. 1 - Preliminary record. *Egyptian Journal of Biological Pest Control*, 11 (2): 195-196.

Vetter, R. S. and A. L. Antonelli. 2002. How to identify (and misidentify) hobo spiders. Washington State University Pest Leaflet Series #116 <http://pep.wsu.edu> (this is a PDF version, a website version is in the works)





PINE: PARTNERS IN NATURE EDUCATION

FERM members are entitled to 20% discounts* on the following UCR Extension field nature study courses:

Field Study of the San Andreas Fault: San Bernardino to Palmdale \$95 (21N31)

[Sat. 8 am- 5 pm, Aug. 10]

Introduction to Bird Banding \$170 (22P21)

[Tue. 5:30-9:30 pm, Sept. 10/Sat., Sun. 6 am-3 pm, Sept. 14, 15]

Field Study of Birds: Fall \$185 (22P23)

[Tue. 7:30-9:30 pm, Sept. 17/Sat. all-day field trips, Sept. 21; Oct. 5, 19; Nov. 2, 16]

Geology and Natural History of Yosemite: A Weekend of Discovery \$125 (22N19)

[Sat. 9 am-6 pm, Sept. 21/Sun. 8 am-3 pm, Sept. 22]

Natural History of the California Deserts \$185 (22P67)

[Fri. 5-8:30 pm, Sept. 27/Sat. 9 am-5 pm, Sept. 28/Sun. 8 am-4 pm, Sept. 29]

Birds of Anza-Borrego \$155 (22P24)

[Fri. 7-9 pm, Oct. 4/Sat. 7 am-5 pm, Oct. 5/Sun. 8 am-2 pm, Oct. 6]

Mammals of Joshua Tree National Park [Enroll through the Desert Institute: (760) 367-5525]

[Fri. 7-10 pm, Oct. 4/Sat. Sat. 6-10 am, 4-6 pm, 7-9 pm, Oct. 5/Sun. 7 am-noon, Oct. 6]

ALSO OF INTEREST:

Astronomy \$60 (21P67)

[Sat. 5-10 pm, Aug. 3, 10]

Archaeology of the Joshua Tree National Park [Enroll through the Desert Institute: (760) 367-5525]

[Fri. 7-9 pm, Sept. 27/Sat. 9 am-4 pm, Sept. 28/Sun. 9 am-12 noon, Sept. 29]

For current listing of courses at any time, bookmark

www.unex.ucr.edu/ns/fns1/classes in your web browser. For further information, contact:

Natural Sciences UCR Extension 909.787.5804 909.787.2456 (fax)

*some restrictions apply



Friends of the Entomology Research Museum Membership Form

Check here if you are renewing (renew by July each year)

Name _____

Address _____

Interests _____

Telephone _____ Email _____

MEMBERSHIP CATEGORIES:

Please Check

| | | |
|-------------------|------------|--------------------------|
| Basic Membership | \$10.00 | <input type="checkbox"/> |
| Sustaining Member | \$25.00+ | <input type="checkbox"/> |
| Donor | \$100.00+ | <input type="checkbox"/> |
| Benefactor | \$500.00+ | <input type="checkbox"/> |
| Patron | \$1000.00+ | <input type="checkbox"/> |

Submit your membership form and dues to:

David C. Hawks, Treasurer
Friends of the Entomology
Research Museum
Department of Entomology - 041
University of California
Riverside, CA 92521-0314

Dues and other contributions are payable by check to the **UCR Foundation**, noting "**Entomology Museum**" on the memo line on your check. (It is very important to note "Entomology Museum" in order for your donation to be deposited in the Friends' UCR Foundation account.)

The 26th Annual meeting of the American Arachnological Society at UCR

By Saul Frommer, ERM Curator Emeritus



The 26th Annual Meeting of the American Arachnological Society took place on the UCR campus on 25-29 June 2002. Riverside is now on the arachnological map of the world, largely due to the efforts of Rick Vetter, editor of this newsletter and spider enthusiast.

The members of FERM may not realize that the Entomology Research Museum has long had an interest in the Arachnida as well as the Myriapoda, but I can say that there has been such an interest going back to the museum's very beginning. Evert Schlinger, a former member of the Dept. of Entomology and once its chairman, set the museum in motion many years ago, and Ev had a very strong interest in spiders, especially the tarantulas since they were the host of the acrocerid flies which were and remain his passion.

In more recent years, thanks to the energy and enthusiasm of Rick Vetter, the museum is making great strides in this field of arachnology. And we are fortunate in having another UCR scientist, Tom Prentice, also a member of FERM and associated with the museum, who has a strong interest in spider systematics.

The meetings, which took place on our campus (for the first time in the history of the American Arachnological Society's existence), brought together individuals from points as distant as Australia and Taiwan.

There was a Tuesday night informal reception but the meetings began officially with the introduction and welcome given by Rick. I feel certain that all who attended appreciated Rick's humor, a sample of which was provided by his running down the aisle and onto the auditorium stage carrying a faux torch in hand with which he would light the arachnological fires of this grand meeting as the Olympic torch bearer does at the start of the Olympic games. This flare of humor brought the house down and it was a good omen for what would now officially follow.

The program was divided into several areas of interest: Arachnids of Medical Importance, Evolution, Ecology, Behavior, Physiology/Anatomy, Poster Session, as well as two choices of field trips: Laguna Beach environs and Desert/Mountain. A bound text containing abstracts of the presented talks and posters was provided to all attendees. This text provided additional information such as a directory of participants as well as other helpful data. Again Rick's humor and industry were evident in the form of a guide "Rick's Picks Restaurant Review" to dining in Riverside. I feel this document has lasting value, after all Rick is a gourmet cook in addition to being a spider enthusiast and so his opinions on such culinary matters carry some weight. In addition there was a Tex-Mex BBQ held at the UCR Barn. Good refreshments were provided for attendees during breaks. There was a silent auction where individuals could bid on various texts and arachnological memorabilia. I noticed some volumes written by Roewer that are desired by anyone working with spiders, especially from the perspective of systematics.

Had you attended these meetings, you would have learned from Sean P. Bush, M.D. about aspects of envenomation by Black Widow spiders. I learned that calcium gluconate is now relegated to the dust bin of treatments for spider bites. And that is a treatment long entrenched.

Then there was an informative update regarding envenomation by the scorpion *Centruroides* presented by Leslie Boyer, M.D. Currently there is no scorpion antivenom approved for use in the United States, but efficacy has been demonstrated both with an Arizona State University goat immunoglobulin product and, in Mexico, with an equine F(ab)2 product. Efforts are underway to demonstrate cross-protection using the Mexican antivenom against envenomation by the US species.

W. Van Stoecker, M.D., spoke on behalf of himself and two associates, Hernan Gomez and Jennifer L. Parks, and presented a talk entitled "Diagnosis and therapy of *Loxosceles reclusa* (brown recluse spider) bites". Particularly interesting and valuable were the photographs shared with the audience. One quickly comes to the realization that there is a considerable amount of training that is required before one can feel confident of a diagnosis. Lesions which many might misdiagnose and are due to other causal agents rather than one of the recluse spiders were shown by means of close-up photographs.



Rick Vetter presented a paper with collaborating scientists on the distribution of the hobo spider, *Tegenaria agrestis*, in North America. I feel that the work reported on is necessary in order to provide a current and accurate assessment of this spider as well as to point an accusing finger at those who spread misinformation due to a lack of knowledge - which really must be appreciated as both careless and detrimental.

I chose to mention these papers because, in my own experience during a good many years as curator, the area of medical arachnology proved to be of great interest to the public and I, like Rick, have always sought to dispel mythology.

Diana Silva presented a talk entitled "A glimpse into the Diversity and Endemism of Malagasy Spiders". Malagasy refers to the country (Malagasy Republic) occupying the island of Madagascar. The data presented clearly indicated the great necessity for preserving the fauna, and, I might add, flora of this island.

The provision of the abstracts as well as the addresses of the contributing scientists make it possible to follow up subjects for those interested in doing so.

Thanks were offered *in absentia* to Ken Prestwich of Holy Cross College for the hundreds of hours he put into the Society's website, creating the registration forms as well as other assistance. These thanks appeared in the text that provided the abstracts. Another special act was carried out by Rick who thought to record a vocal thank you to this individual, including the thundering applause of the grateful members. I thought this a very special "Thank you" conceived and carried out by a very special person.

I will close this report by telling you that insect enthusiasts among you that are drawn to the Arachnida, as well, might care to have a look at the AAS's website. It is found on the World Wide Web at www.americanarachnology.org.

I left the meetings with a strong dose of inspiration as well as the knowledge that I need to do a lot of work because the science is moving at a healthy clip.

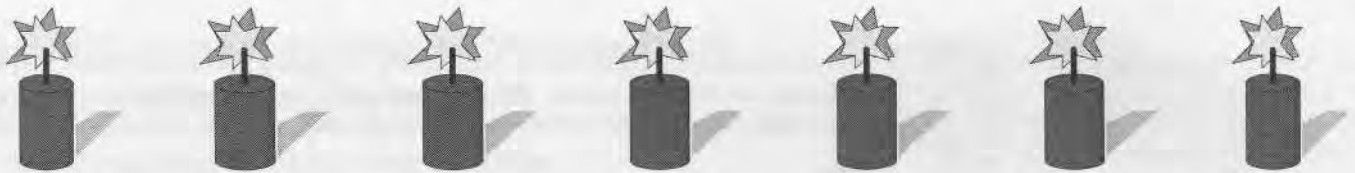


Future Articles for the FERM newsletter

By Rick Vetter

The stress and strain of publishing four issues of the FERM newsletter has led to indiscretions. I have been going around bending the tips of Dave Hawks' #4 Elephant pins, cutting escape holes in Ken Osborne's insect nets and scribbling "eat pollen or die" on the walls of the bathroom stalls. Basically each issue of our Pulitzer Prize winning newsletter..... Wait, ... wait a minute, check that. It should be Pullet Surprise winning newsletter ... has been a struggle to produce because we don't get enough material for publishing. Therefore, this is both a plea for material and pro-active excuse for the future. We would REALLY like to have more people involved in writing articles for the newsletter or sending in entomological quotes or things of interest. However, from now on, if we don't get enough material, we may just be forced to skip a newsletter once in a while and schmoosh the material together with other stuff that we accumulate later. Therefore, please send in contributions whenever you can. If we have some time-sensitive material like the announcement for a meeting or field trip and can't produce a full-sized newsletter we will just (sob) have to (sniff sniff) send out notices instead of newsletters (snurk) and wait for more stuff to show up.

Postscript: It appears that my complaining to FERM members is already reaping benefits as you can see by the bounteous thickness of this issue. Keep those cards and letters coming. Don't stop now.



Class, can you tell me what this man did wrong?

Transmitted by Rick Vetter

Here is an article that appeared in the June 2002 issue of the American Bee Journal. They have a column where they go back through their old issues (25, 50 and 100 years prior) to give you an idea of what beekeeping was like in the good ol' days. This is the entry for what was happening in 1902.

Hiving Swarms with Dynamite!

Mr. Adrian Getaz sends us the following sad account of an attempt to hive a swarm of bees with the use of dynamite, as given in a Knoxville, Tenn., newspaper, date June 6:

"While attempting to hive a swarm of bees at his home on the Sevierville pike, 6 miles south-east of the city, Thursday afternoon, Matt Lopasser, a farmer, suffered the loss of his right arm near the elbow, several injuries about the face and body and internal injuries which may result in death.

"Lopasser had been experiencing some difficulty in hiving a large swarm by the usual methods of beating on tin cans, ringing bells, throwing water on the bees and other commonly in use (**editorial note from Rick — this is all garbage. None of these should have any effects on bees except to irritate them**). He secured several sticks of dynamite, and had been exploding these near the bees, thinking that the jar would cause them to settle, and hiving them would then be an easy process.

"A stick of dynamite, which Lopasser was intending to throw among the bees, exploded prematurely before leaving his hand, and his right arm and hand were blown off below his elbow. His face was badly bruised and torn by the explosion, and it is believed that he also suffered internal injuries, which may result in his death.

"Lopasser was rendered unconscious by the explosion, and was picked up and carried into his home, where medical aid was summoned. Physicians, who attended the injured man, pronounced his injuries to be of a very serious nature, apt to result in his death. Lopasser is yet very nervous from the shock given his physical system, and is suffering intense pain. He is known to many people in this city, and has the heartfelt sympathy of many friends.

"We hope that no one else will ever be so foolish as to try to use dynamite to make a swarm of bees settle. About the only thing likely to be "settled" is the beekeeper himself, as was Lopasser. Of course, we are all sorry for him, though no one will be able to understand how he could take such a fearful risk."



Synonymy or Chresonymy? A Brief Guide

By John Pinto

All who know the difference between synonymy and chresonymy please raise your hand. Hmmmm. I don't see many hands up out there. Not to wonder considering that "chresonymy", a term proposed by Hobart and Rozella Smith in 1972 (Syst. Zool. 21: 445), has not exactly been embraced by taxonomists. The christening of "chresonymy" by the Smiths was prompted by the ambiguity embodied in the term "synonymy". We all know what it means when nominal taxa are placed in synonymy – it indicates that two or more distinct names are believed to apply to the same taxon. The various names (including the valid name) then are referred to as synonyms. It is in this sense that the International Code of Zoological Nomenclature generally employs the term. But "synonymy" also is used in another way in taxonomy, namely for the listing of all occurrences of names in the literature that refer to a particular taxon. As many of you know, these listings are common for genera and species. The completeness of this name-usage summary varies in taxonomic works from a simple listing of synonyms only (characteristic of catalogs) to a more or less exhaustive compilation of all references associated with a taxon regardless of the name used (characteristic of taxonomic revisions). In revisionary works, this listing typically introduces taxon treatment. In species treatments it occurs before presentation of the description, type information, geographic records, etc. The Smiths believed that the sense of name "usage" was not adequately implied here by the term 'synonymy' and that another term was needed. Thus they proposed "chresonymy", derived from the Greek "chresis" in the sense of "use", for the listing of names. Regardless of our choice of terms (I will use chresonymy) it is important that all users of taxonomic literature understand the significance of this name usage summary and what the various entries in such a listing imply. The purpose of this contribution is to provide a brief guide to "chresonymies" by means of a single example. If you find the term "chresonymy" odious or strange, simply substitute "synonymy" every time it is used.

Below is an example of a typical species chresonymy, the type one often finds in taxonomic revisions. It is taken in part (with some deletions and an invention or two) from my 1991 revision of *Epicauta* (Coleoptera: Meloidae). It is more complete than some you might find in that it includes all names and name combinations used in the literature, but is less complete than others in that it is not as fully annotated as it could be. Although there is no space to discuss generic chresonymies, also very common in taxonomic studies, the general guidelines presented for species also would apply.

The important things to remember about chresonymies is that a reasonably complete one will list (a) all synonyms of concern and (b) all names used to refer to the taxon of interest whether they are synonyms or not. In other words, they also should include misidentifications that have worked their way into the literature. Obviously, if we are interested in species 'x', we want all information associated with the biological species 'x'. We don't care if this information was published under the name 'x' 'y' or 'z'. A useful species chresonymy will provide the reader with all the references that apply to species 'x' regardless of the name used. The same goes for genus, or family for that matter.

Epicauta cupraeola (Dugès) (a)

Cantharis cupraeola Dugès, 1869. (b)

Cantharis rufipedes Dugès, 1870, **new synonymy**. (c)

Lytta subvittata Haag-Rutenberg, 1880. Pinto, 1982 (lectotype designation). (d)

Cantharis cupreola: Horn, 1885. Vásquez and Zaragoza, 1979. (misspellings). (e)

Epicauta insignis Horn, 1885. Werner, 1945. Dillon, 1952. Werner et al. 1966. Pinto, 1977. (f)

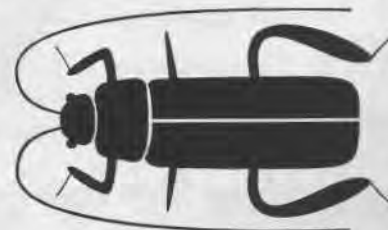
Epicauta rufipedes: Dugès, 1889. Champion, 1892. Denier, 1935. Vaurie, 1950. Selander, 1954. Pinto, 1982. (g)

Epicauta vittula Beaugard, 1889 (n. repl. name for *E. subvittata* (Haag-Rutenberg) *nec* Erichson, 1848. (h)

Epicauta cupreola: Champion, 1892 (i)

Epicauta sp: Vaurie, 1950:38 (j)

Epicauta crassitarsis: Jones, 1989. Smith, 1990. (misidentifications) (k)



This chresonymy lists the various names, in chronological order, that apply to *Epicauta cupraeola*. Explanation of entries follow.

- (a) This is the current valid name for the species. The placement of Dugès in parentheses tells us that the species was originally described in a different genus.
- (b) This is the name applied to the species as described by Dugès. It was originally placed in *Cantharis*, as were many meloids in the 19th century. This citation is the first known reference to *Epicauta cupraeola*. It is possible that there were earlier references under other names (i.e. early misidentifications) but none have been discovered. If found, these citations would be listed before entry (b) in a chronological listing.
- (c) A second nominal species, *Cantharis rufipedes*, described by Dugès a year later is herein (i.e. in the 1991 revision) treated as a junior synonym of *cupraeola*. Sneaking a peak at entry (g) we see that several authors had considered *rufipedes* (after it had been correctly associated with *Epicauta*) to be a distinct species. Because these citations also referred to what is now *cupraeola*, they are listed here (at g).
- (d) A third nominal species, *Lytta subvittata*, was described by Haag-Rutenberg. It had long been considered a junior synonym of *rufipedes* (since Champion 1890). A more fully annotated chresonymy might give us this information in entry (d) (i.e. indicate 'treated as a junior synonym by Champion, 1892'). This one doesn't. The relatively recent entry (Pinto 1982) refers to a lectotype designation. Because lectotype designations should be tied to the original combination (i.e. *Lytta subvittata*) the reference is placed here, even though Pinto agreed at the time that *Lytta subvittata* was not a valid name.
- (e) These citations simply show that the name *cupraeola* was sometimes apparently unintentionally misspelled *cupreola*. Note the colon (:) after the name and before the first author cited (Horn). This indicates that we are dealing with a usage of the name by Horn, not a name attributed to Horn as author. All previous entries lacked the colon and thus the individuals (i.e. Dugès, Haag-Rutenberg) are to be considered authors of the species names that they follow. A comma or semicolon is often used instead of a colon. I should mention that in some cases a different subsequent spelling would indeed be considered a name attributed to its author. These are unjustified but purposeful emendations of the name. You can learn more about these in Article 33 of the Code if interested.
- (f) Here we have another nominal species that we now treat as a junior synonym of *cupraeola*. Note there is no colon between *insignis* and Horn, so here Horn is to be considered the author. Several authors over the years have treated *insignis* as a valid species. Note also that 1885 is the first time an author assigned anything we now believe to be *cupraeola* to *Epicauta*. This was a **new combination** in 1885.

Because there is no "new synonymy" indicated for entry (f) we assume that the synonymy was proposed earlier. A completely annotated chresonymy would indicate that *insignis* was synonymized with *rufipedes* by Pinto in 1982. Some authors would include that information here. Others might place it in entry (g). Pinto (1982) is cited in (g) but you have to go to the paper (or perhaps elsewhere in the text) to find out that it involved a new synonymy.

- (g) This entry lists the various publications that used the name *rufipedes* for this species. They are listed separately from entry (c) because the specific name is tied to *Epicauta* not *Cantharis*. Again, the colon tells us that this name is not to be attributed to Dugès (1889). "Dugès, 1889" refers to usage of the name, not an original description. Several later authors also considered *rufipedes* a valid species. Note that entries (f) and (g) include the majority of publications that actually refer to our species – although they did so using names now considered invalid.
- (h) In 1889 Beaugard discovered that *subvittata* (see entry d) had been used in combination with *Epicauta* in 1848 by Erichson. The name *subvittata* was fine as long as it was in *Lytta* but once moved to *Epicauta* (as many *Lytta* were in the late 1800s) a case of secondary homonymy was created. Remember, homonymy is defined as the same name for two or more distinct taxa and results in ambiguity (we can't have two occurrences of *Epicauta subvittata*). Consequently, Beaugard gave the name *vittula* as a replacement for *subvittata*. Beaugard takes authorship of the name and this is indicated by the absence of a colon after *vittula*.
- (i) This entry simply shows another misspelling of *cupraeola*. It is not listed with the other misspellings (entry e) because the name combination is unique.
- (j & k) These entries are quite important. Entry (j) shows a case where an author published on our species but couldn't identify it. It was simply listed as *Epicauta* sp. However, because it was determined later that the information provided refers to *cupraeola*, it belongs in a chresonymy that includes all references to the species.

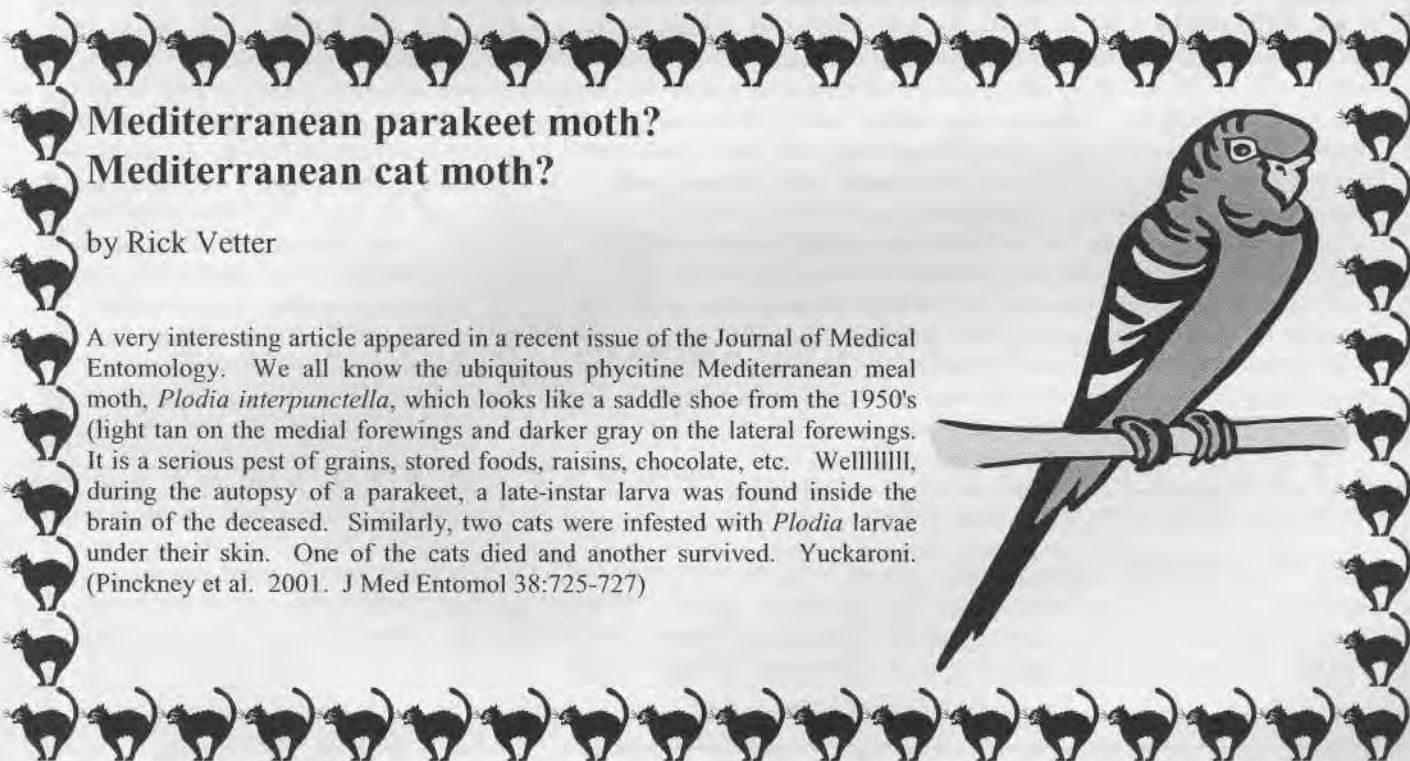
Entry (k) refers to misidentifications. As indicated before, we don't care what name is used for our species. We want to have in one place (our chresonymy) all references to what we now consider *Epicauta cupraeola*. This includes publications by Jones and Smith who both misidentified the species as *crassitarsis*. *E. crassitarsis* is a valid species but it was discovered that Smith and Jones actually were looking at *cupraeola* so the citations belong in this chresonymy. This entry notes that these publications involve misidentifications but often this information is not given. Simply seeing the colon between the name and author should be enough to signal misidentification to the reader.

Miscellaneous notes on chresonymies.

We assume that authors of chresonymies will have verified all entries. For example, how did Pinto know that Champion (1892) (entry i) and Dillon (1952) (entry f) actually had specimens of *cupraeola* before them? A reviser shouldn't just assume that because they used a particular name (the current valid name, or a junior synonym of the species) that their identification was correct and that the citation belongs in the chresonymy of *E. cupraeola*. Ideally, the author will have examined the specimens Champion and Dillon had (these are available in the British Museum and at Texas A&M, resp., and were examined). If specimens are not available, information or illustrations in the publication, or the reputation of the author, can be used to help decide if the specimens were correctly identified or not. Unfortunately some taxonomic works (catalogs in particular) often are guilty of simply including in a chresonymy all references that cite the taxon name. If these citations involved a misidentification, the error is perpetuated.


Although the chresonymy above does not include any, one frequently finds names in these summary lists that are not recognized by the International Code of Zoological Nomenclature. Most of these would be *nomina nuda* (names failing to conform to ICZN articles 12 [if published before 1931] or 13 [if published after 1930]). For example, it is possible that a published name was not accompanied by a description or definition. If the author of the chresonymy knew that this name definitely applied to the species of concern it should be included. These entries generally carry appropriate annotation indicating that the names listed are unavailable.

It's worth stressing again, that a chresonymy is to include **only** those references that pertain to the biological entity being treated (in our case *cupraeola*). It is possible that some authors used the name *cupraeola* but actually had another species. Some taxonomists (hopefully few) erroneously include all uses of the name and do not filter out misidentifications. For example, suppose Brown (1990) published a paper on what she thought was *Epicauta cupraeola* but we know was actually *E. basimacula*. It would be incorrect to include this citation in the *cupraeola* chresonymy. It belongs in the *E. basimacula* chresonymy entered as --- *Epicauta cupraeola*: Brown (1990) (misidentification). Agreed?



Mediterranean parakeet moth?
Mediterranean cat moth?
by Rick Vetter

A very interesting article appeared in a recent issue of the Journal of Medical Entomology. We all know the ubiquitous phycitine Mediterranean meal moth, *Plodia interpunctella*, which looks like a saddle shoe from the 1950's (light tan on the medial forewings and darker gray on the lateral forewings). It is a serious pest of grains, stored foods, raisins, chocolate, etc. Welllllllll, during the autopsy of a parakeet, a late-instar larva was found inside the brain of the deceased. Similarly, two cats were infested with *Plodia* larvae under their skin. One of the cats died and another survived. Yuckaroni. (Pinckney et al. 2001. J Med Entomol 38:725-727)



Desert-Mountain Field Trip for the American Arachnological Society National Meeting

by Rick Vetter



As part of my host duties for the 26th annual American Arachnological Society meeting, I scheduled collecting trips for the participants on 29th June. FERM member Lenny Vincent organized a contemporaneous trip down to the cool, coastal Laguna Beach area (his hometown), relieving me of some burden as host, and I organized a trip out to two UCR natural reserves, one desert and the other montane.

For the desert-mountain trip, about 32 of us headed east into the brutal sun, led by myself and drivers Tom Prentice, Gail Van Gordon (both FERM members) and Kathleen Campbell. The weather all week in Riverside had been a pleasant low 90°s meaning that the desert would probably be around 100°. It was a short 45-minute drive out to Oasis de los Osos (1600 feet elevation), a very unique desert habitat at the northern base of the San Jacinto Mountains. It has a perennial stream from mountain runoff and other sources, so the entire collecting trail was about 1 mile long with a waterfall at the end. The stream was lined with 8-foot high *Salix* sp. so it offered shade, running water and lots of green plants to beat for spiders. Two weeks prior to our visit, Tom Prentice and I went out there and buried 8 pitfall traps in hopes of getting something after this least-rainfall-on-record winter season. When we arrived, the pitfalls were divvied up amongst those who were interested. Spiders were sparse (*Scytodes* and *Xysticus* immatures) in the pitfalls but there were some very cute lizards including a banded-tail gecko in Mark Harvey's (Western Australian Museum, Perth) and a small banded snake and several lizards in Paula Cushing's (Denver Museum), all of which were liberated into the brush. G.B. Edwards (Florida Dept. Agriculture), beating sheet in hand, quickly set upon the vegetation like a vindictive Catholic school nun and was rewarded with the ant-mimicking jumping spider *Peckhamia*. By the waterfall, Jeremy Miller (Smithsonian Institute) collected *Tidarren sisyphioides* (Theridiidae) including 3 males, which is a special find because the males are tiny and have the curious habit of being singularly palped, chewing off the other after molting to maturity. Serendipitously, on the day of the field trip, it was calm - which is rare for this place, which is so routinely windy that they have windmills generating electricity nearby. It made for better collecting (not having all your stuff blow around) but was a bit toasty in the sun. No one perished in the desert heat so I didn't have to fill out all kinds of UCR administrative paperwork. Much appreciated.

We then scurried away at 11 AM to the mountain retreat of the James Reserve, by Lake Fulmor, a gated UCR reserve at 5600 feet elevation with pine-oak forest, and a lovely cooling breeze on the day of our visit. We had a filling lunch, washed down with cold beverages and some of the cheeses left over from the Tuesday night reception. Despite the dry winter, we had very good collecting. The team of Tom Prentice, Mike Draney (Univ. Wisconsin-Green Bay) and Jeremy Miller set about sifting moist oak-pine duff near a slow-flowing stream and were rewarded with many specimens of *Ceratinops inflatus* (Linyphiidae) and *Cybaeota nana* (Cybaeotidae). Jeremy and Tom are working on reassigning "*Ceratinopsis*" *palomara* (Linyphiidae) to another genus and these spiders have been collected at the James Reserve but, alas, not on our visit. Once again, G.B. Edwards, with his keen salticid search image, was pulling in lovely specimens. Darrell Ubick (California Academy of Sciences) collected the tiny *Filistatinella* (Filistatidae) in leaf duff. The group found several specimens of the mygalomorph *Megahexura fulva* (Mecicobothriidae) but because they were years from maturity, some were released back into the reserve so they could continue their life cycle.

We returned to campus by 5 PM, the participants were happy to have had the chance to collect in some unique southern California habitats and I was ecstatic because this was my last duty as host, my two years of planning had come to an end (except for residual paperwork) and I was toasted as having an excellent meeting, with only gracious praise being lofted upon my head. I then checked right into the Betty Ford Clinic sensory deprivation tank for a week to clear out the skull. I was whopped.

The Next FERM newsletter: We are hoping to make the next FERM newsletter sort of a collecting trip extravaganza with collecting reports from Jeremiah George in South Africa, Doug Yanega and the Van Dams in Central America (Doug came back in one piece this year, which is better for him but leads to less exciting tales), and Matt Buffington's trip to the wild outback of exotic Nebraska. Hooooo-weee!!



photo: P. Kirk Visscher©



photo: Rick Vetter©

Daddy Long-legs (Arachnida: Opiliones) and Daddy Long-legs Spiders (Arachnida: Araneae; Pholcidae)

by Rick Vetter

Daddy long-legs are members of a separate order of arachnids (Opiliones), just as spiders, scorpions, and mites/ticks are all separate orders. Daddy long-legs are also known as harvestmen and opilionids. They are often thought to be spiders but they have 8 long and flimsy legs attached to a single pill-shaped, segmented body part with 2 squinty eyes mounted atop (top photo). In contrast, the family of spiders with which they are often confused (daddy long-legs spiders or cellar spiders, family Pholcidae) have two body parts, an unsegmented abdomen and a cephalothorax (the front part) to which eight legs are attached, and with eight closely-set eyes (bottom photo).

Daddy long-legs occupy different niches, with most being detritus feeders, although some are predatory. They cannot make silk so they are found in webs only when they become prey of spiders.

A widespread myth associated with daddy long-legs is that “they are extremely poisonous but their fangs are so small they can’t bite you”. Well, that is quite a trick considering that, first of all, they don’t have fangs and, secondly, they don’t have venom glands. Daddy long-legs have, indeed, nipped people with their mouthparts, however, the nip is not painful and any reaction to this nip is minor. Even if you consider pholcid spiders, there is no basis for any venom ever being tested on mammalian tissue. Venom toxicologists have no idea where this oft-told myth started.