University of California, Riverside

No. 13, Winter 2002

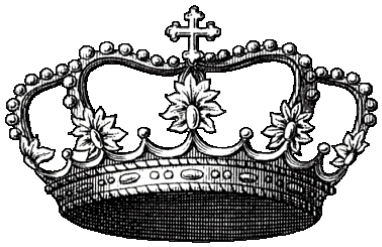
Friends of the Entomology Research Museum

Newsletter

Editor: Rick Vetter Proofing Editors: G. Ballmer, D. Hawks, D. Yanega

Wanted: Victorian Insect Drawings (or other line drawings)

Recently a flat-bed scanner was set up in my lab which means that now I can scan drawings of insects for the FERM newsletter. I would be most interested in Victorian line drawings but any other line drawings will, of course, also be of interest. Just bring them to me and I will scan them for future use in the newsletter.



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)

FERM Annual Meeting
Winter Speaker 2002
Saturday, February 2nd
6 pm, UCR Botanic Gardens

Ron Leuschner

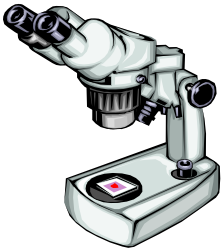
Please join the Friends of the Entomology Research Museum (FERM) on February 2, at 6:00 PM at the UCR Botanic Gardens for our Annual Meeting. We are proud to announce this year's speaker, Mr. Ron Leuschner, who will present his talk, "PLEASURES, PITFALLS and PRATFALLS of ENTOMOLOGICAL STUDIES." In his talk, Ron will aim to convey the excitement of describing a new species and the process of naming an insect or getting one named after you.

Mr. Leuschner, who was employed in the aerospace industry for more than 30 years, has cultivated a lifelong interest in entomology. He has been associated with the Los Angeles County Museum of Natural History since 1955 and is currently a volunteer research associate at the museum. The main focus of his work has been on Noctuid and Geometrid moths. During almost 50 years of research, Mr. Leuschner has collected extensively in our area and has done considerable work on moth taxonomy. Mr. Leuschner is author of several technical publications on the taxonomy of various moths. His most recent work (see reference below) describes fifteen new taxa of Noctuidae, mainly from southern California. He is also a supporting consultant on an upcoming volume "Noctuids of Southern California" by Tomas Mustelin.

In addition to getting tips on how amateur entomologists can contribute to the field of entomology, we hope to get a firsthand update on the progress of the much anticipated handbook on noctuids. Please join us February 2 at 6:00 for another festive evening. Our gathering will begin with a scrumptious buffet dinner coordinated by Cissy Pratt and proceed to a short business meeting followed by our guest speaker.

Reference:

Mustelin, T., Leuschner, R., Mikkola, K. Lafontaine, J. D. Two new genera and thirteen new species of owlet moths (Lepidoptera: Noctuidae), mainly from Southern California**. Proc. San Diego Soc. Nat. Hist**. 15 August, 2000. (36): 1-18.



NEWS FROM THE MUSEUM

by Doug Yanega

This fall has been fairly busy in the Museum, thanks to a number of visitors and some hard-working student helpers. Especially notable are a number of beetle researchers, such as Andrew Smith, and Henry & Anne Howden, plus the Mymarid wasp expert John Huber, all of whom stayed for several days and did a number of identifications. Meanwhile, student helper George Peck has been putting database labels on thousands of specimens, including the bulk of our Mojave National Preserve vouchers (Granite Mountains, Kelso Dunes, Zzyzx, etc.), which have been maintained as a separate collection, but can now be incorporated into the main collection. Janel Freeman has been working on the Lauren Andersen immatures collection, and has been able to get about a third or more of the entire collection transferred into leak-proof vials.

The Museum database now has records for over 39,000 specimens, and the taxonomic authority files have been greatly improved, now listing over 15,000 genera and 71,000 species names. These numbers will continue to grow, as more contacts are made with other institutions that have similar authority files. Dr. John Heraty and I organized this year's Entomological Collections Network meeting in San Diego, and I ran a special symposium which included some of the leading people in authority file development, and hopefully it will lead to some increased collaboration.

Got an idea for a FERM article???

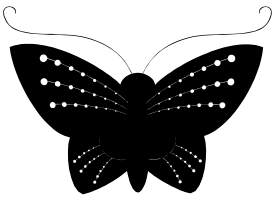
Do you have anything buggy-related that might be of interest for the FERM newsletter? We really would be tickled pinkish if you would send "stuff" in. Remember, this newsletter won't have much in it unless we have material submitted from you folks that we can publish. Feel free to send in photos, articles, 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 March 10th*****

BOOK AUCTION AT FERM ANNUAL MEETING

Coincidentally with the occurrence of our FERM speaker on moths, there will be an auction of moth material at the annual meeting from the Moths of America North of Mexico, with color plates (as if it mattered with moths).

- **Hodges, RW.** 1974. Gelechioidea, Oecophoridae Fascicle 6.2
- 3 books by **Munroe E.** 1973. Pyraloidea Pyralidae Fascicle 13.1A, 13.1B, 13.1C
- Franclemont, JG. 1973. Mimallondoidea Mimallonidae AND!!!!! Bombycoidea Apatelodidae, Bombycidae Lasiocampidae Fascicle 20.1
- 2 books by **Ferguson DC.** 1971. Bombycoidea Saturniidae Fascicle 20.2A, 20.2B
- **Hodges RW.** 1971. Sphingoidea Fascicle 21
- **Ferguson DC** 1978. Noctuoidea Lymantriidae Fascicle 22.2
- **Hodges RW**, et al. editors 1983. Checklist of the Lepidoptera of America North of Mexico



Also, as the FERM newsletter was getting ready to be printed, we received a call from Ted Fisher stating that he was sending over several boxes full of books because he sold his house. As of now, we have no idea how many, what they are, nothing. But we hope to get them sorted out, remove the ones we want for the Museum and then have lots of them for sale and auction at the Annual Meeting.

PINE : PARTNERS IN NATURE EDUCATION

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

A Field Study of Birds: Winter $185 (13P23)
[Orientation Tue. 7:30-9:30 pm, Jan. 8/ Field trips all day Sat., Jan. 12, 19, Feb. 2, 16, 23]
Earthquakes and California $95 (13N11)
[Sat. 8 am-5 pm, Jan. 26]
Mammals of the Colorado Desert $185 (13P20)
[Fri. 5-8 pm, Feb. 1/Sat. 9 am-5 pm, Feb. 2/Sun. 9 am-4 pm, Feb. 3] New Dates!
Geology of Northern Death Valley $150 (13N26)
[Sat. 8 am- 5 pm, Feb. 23/Sun. 8 am-5 pm, Feb. 24]
Natural History of the Mojave National Preserve $250 (14N31)
[Fri. 8-10 pm, Apr. 5/Sat. 7:30 am-5:30 pm, 7-8 pm, Apr. 6/Sun. 7 am-3 pm, Apr. 7]

Ecology of Southern California Butterflies $195 (14N29) *** taught by G. Pratt

[Wed. 6-9 pm, Apr. 10, 24; May 15; June 5/Three Sat. field trips to be arranged, 9 am-3 pm]
Deserts of the World $185 (14P20)
[Fri. 5-8 pm, Apr. 12/Sat. 9 am-5 pm, Apr. 13/Sun. 9 am-4 pm, Apr. 14]
A Field Study of Birds: Spring $185 (14P23)
[Orientation Tue. 7:30-9:30 pm, Apr. 16/ Field trips all day Sat., Apr. 20, 27, May 4, 18, June 1]
Geology and Natural History of the Eastern Sierra $150 (14N22)
[Sat., Sun. 8 am-5 pm, Apr. 27, 28]

Tick Identification Workshop ***taught by Rick Vetter**

Date/Time: Sat. 9 am-4 pm, April 27. Fee: $95 / $86 each for couples and family members / $76 each with PINE discount (1 meeting) EDP 14P

Intermediate Spider Identification ***taught by Rick Vetter**

Date/Time: Sat. 9 am-4 pm, July 27-Aug. 24. Fee: $215 / $175 UC students with ID (includes materials, 5 meetings) EDP 21P03

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

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Last minute announcement: Yet another Rick Vetter television appearance. Not all details are in but tentative information says that the show "Mostly True Stories: Urban Legends Revealed" will premiere on the Learning Channel on March 19th with Rick debunking the old spiders-in-the-beehive-hairdo myth. Check your local TV listings!!!!

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Recent Publications by FERM members:

(Please submit titles of your recently published taxonomy and natural history articles to FERM editor!! FERMmembers are in boldface type)

Berezovskiy, V. V. & S. V. Triapitsyn. 2001. Review of the Mymaridae (Hymenoptera, Chalcidoidea) of Primorskii krai: genus *Acmopolynema* Ogloblin. Far Eastern Entomologist 105: 1-11.

Triapitsyn, S.V. 2001. Review of the Australian species of Anagrus (Hymenoptera Mymaridae). Belgian J Entomol 3:267-289.

Accidental Naturalist

by Rick Vetter

For the first time in a decade, I am reading a book that has nothing to do with bees, wasps, spiders or ticks. I don't plan to make this a habit but I am delving into My First Summer in the Sierra by John Muir which is about Muir's travels driving a sheep herd into the grazing areas of the Yosemite Valley. It was on this trip that Muir fell in love so dearly with the area that he eventually came to protect for future generations. The book is the result of a diary that Muir kept while he accompanied a herd of sheep whom he referred to as "hooved locust". In chapter 5, "The Yosemite", he describes the shepherd of the flock who was apparently an accidental naturalist.

"Following the sheep he carries a heavy six-shooter swung from his belt on one side and his luncheon on the other. The ancient cloth in which the meat, fresh from the frying-pan, is tied serves as a filter through which the clear fat and gravy juices drip down on his right hip and leg in clustering stalactites. This oleaginous formation is soon broken up, however, and diffused and rubbed evenly into his scanty apparel, by sitting down, rolling over, crossing his legs while resting on logs, etc., making shirt and trousers water-tight and shiny. His trousers, in particular, have become so adhesive with the mixed fat and resin that pine needles, thin flakes and fibres of bark, hair, mica scales and minute grains of quartz, hornblende, etc., feathers, seed wings, moth and butterfly wings, legs and antennae of innumerable insects or even whole insects such as the small beetles, moths and mosquitoes, with flower petals, pollen dust and indeed bits of all plants, animals, and minerals of the regions adhere to them and are safely imbedded, so that though far from being a naturalist he collects fragmentary specimens of everything and becomes richer than he knows. His specimens are kept passably fresh, too, by the purity of the air and the resiny bituminous beds into which they are pressed. Man is a microcosm, at least our shepherd is, or rather his trousers. These precious overalls are never taken off, and nobody knows how old they are, though one may guess by their thickness and concentric structure. Instead of wearing thin they wear thick, and in their stratification have no small geological significance."

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	☐
Sustaining Member $25.00+	☐
Donor $100.00+	☐
Benefactor $500.00+	☐
Patron $1000.00+	☐

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.)

Curious Arthropod Scientific Names Part I: "Who's Who", Honorifics, & Medical Terms

compiled by Doug Yanega

The following is a list of arthropod genus names that also happen to be the names of real or fictitious people, honorifics of various sorts, or familiar medical and anatomical terms, excerpted from my webpage at http://entmuseum9.ucr.edu/staff/yanega.html. I only have authors and years of publication for a subset of them.

Who's Who:

Andromeda Gistel 1834 (buprestid beetle; synonymized)
Angela (mantis)
Anubis Thomson 1864 (longhorn beetle)
Aquarius (water strider)
Baalzebub (spider)
Balboa Distant 1893 (seed bug)
Barbara Heinrich 1923 (tortricid moth)
Caligula (silkmoth)
Camilla (fly)
Celina (diving beetle)
Cinderella Steyskal 1949 (heleomyzid fly)
Clarissa Kirby 1894 (wasp)
Croesus Leach 1817 (sawfly)
Delilah Dillon & Dillon 1945 (longhorn beetle)
Diana Laporte & Gory 1837 (buprestid beetle; synonymized)
Drusilla Leach 1819 (rove beetle)
Eros Newman 1838 (lycid beetle)
Esmeralda Thomson (longhorned beetle; now a subgenus)
Esperanza Barber 1906 (stink bug)
Francesca (planthopper)
Freya Thery 1943 (buprestid beetle)
Gilda Giglio-Tos (mantis; synonymized)
Greta (butterfly)
Hades (butterfly)
Hermione (stratiomyid fly)
Hilda Kirkaldy (planthopper)
Iris (mantis)
Lara (riffle beetle)
Leia (fungus gnat)
Livia Latreille 1805 (psyllid bug)
Marietta Motschulsky (chalcidoid wasp)
Melba Casey (rove beetle)
Nyx Heppner 1982 (pyralid moth)
Orion Guerin-Meneville 1844 (longhorn beetle)
Osiris Smith 1854(bee)
Phoebe Serville 1835 (longhorn beetle)
Pinocchio Pagliano & Scaramozzino 1990 (chalcidoid wasp; synonymized)

Plato (spider)
Pluto (aphid wasp)
Polyphemus (water flea)
Priscilla Thomson 1864 (longhorn beetle)
Semiramis Becker 1913 (bee fly)
Spartacus (leaf bug)
Sterculius (rove beetle; also the Greek god of the latrine, and a plant genus)
Vanessa (butterfly)

Honorifics:
Gollumiella Hedqvist 1978 (Eucharitid wasp; Gollum is one of the central characters in Tolkien's Middle Earth books)
Gwaihiria Naumann (diapriid wasp; "Gwaihir" is the lord of eagles from Tolkien's Middle Earth books)
Smeagolia Hedqvist 1973 (pteromalid wasp; synonymized; "Smeagol" is another name for Gollum in Tolkien's Middle Earth books)

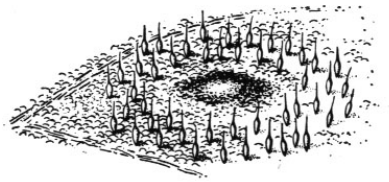
Medical terms:
Anemia Laporte 1840 (darkling beetle; synonymized)
Anthrax Scopoli 1763 (bee fly)
Dialysis Walker (coenomyiid fly)
Emesis (metalmark butterfly)
Oestrus (bot fly)
Sepsis Fallen 1810 (dung fly)
Systole Walker (chalcidoid wasp)
Thymus Girault (chalcidoid wasp)
Trachea (noctuid moth)

A Malaysian Adventure
by John Heraty

Tuesday, September 11. Do you remember what you were doing? I was having dinner in a food stall in downtown Petaling Jaya in Malaysia. I was eating Nasi Ayam (rice and chicken) and watching the shop television when I saw the tower explode. As the dialog was in Malaysian, I assumed it was just another bad day in Beirut and went back to my meal. This was, after all, a celebration. I had just discovered the eggs of *Gollumiella longipetiolata*!

First of all, a bit of background. Eucharitid wasps, a specialized group of ant parasites are the love of my life (at least as far as insects go). Dubbed the "ornate ant-killers" by John Pinto, these are a unique group within the Chalcidoidea. Adults lay their eggs away from the host into or on plant tissue, and the minute first-instar larvae (planidia) must gain access to the ant nest. There they settle on and parasitize the ant larvae. Development is completed on the ant pupa, and pupation occurs in the nest. Adults emerge in the ant nest and are known to be well treated by the adult ants - fondled, fed and protected - at least for a few days. Mating and egg laying all take place outside of the nest. The adults of most eucharitids are gorgeous monstrosities! Often the thorax has long spines, the antennae are branched and oddly shaped, and many have rare or peculiar structures, such as the nipple-shaped eyes of *Isomerala*. My research over the last 20 years has focused on the taxonomy, classification and evolution of eucharitids, with a focus on trying to uncover the phylogenetic associations with their ant hosts and traits associated with egg laying and gaining entrance to the ant colony. After all, eucharitids are the single most diverse group of parasitoid Hymenoptera attacking the brood of a eusocial insect!

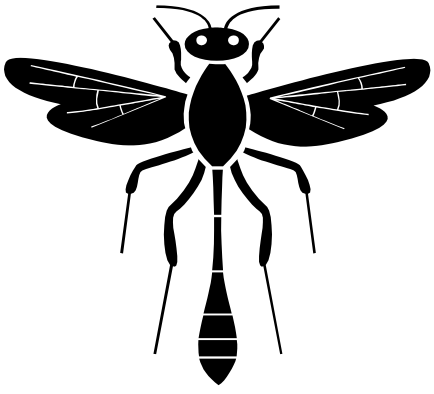
Why Malaysia? C.P. Clausen, in 1940, described a peculiar behavior for *Gollumiella antennata*. Adults lay a ring of about 100 erect eggs around a freshly deposited thrips egg on leaves of mango (see figure to left). He described a simultaneous hatch of both thrips and wasps, with the planidia latching onto the passing thrips. End of story. I suppose he was so sick of describing eucharitids by that time, why bother with the details of one more! Well, this just turned out to be the most important genus for postulating relationships and behavioral changes in Eucharitidae. Because of its morphology, *Gollumiella* is the basal most-related group (sister group) to the Eucharitini. Within the family, this tribe is the most diverse, with 43 genera and more than 700 estimated species. None of these have ever been associated with a thrips. In contrast, the sister tribe Psilocharitini (2 genera) and the only other subfamily Oraseminae (4 genera), are morphologically simple, and within Oraseminae, an association between planidia and immature thrips is common. Thrips presumably act as an intermediate host for the planidia, which are ultimately parasitic on myrmicine ants (*Pheidole, Solenopsis*, etc.) that are known to be predators of minute insects, including thrips.



Gollumiella took on an even greater importance recently when our analyses of relationships based on molecular characteristics strongly suggested that it was the sister group of all Eucharitidae (Oraseminae + Eucharitinae) and not just a tribe within Eucharitinae (see figure at end of text). Its behavior mattered!

So, it was back to Malaysia. I was there with my wife and daughter in 1990 on the same quest for *Gollumiella*. At that time, I found two species in the botanical gardens (Rimba Ilmu) of the University of Malaya in Kuala Lumpur. On mango and fig trees where I collected adults, I stripped the trees of leaves to examine in the lab, but there was no sign of eggs, and the ants I collected had no eucharitid parasites. Dejected, I left. Finally, 11 years later, I was able to return and hopefully finish my quest.

I left for Malaysia on August 28, arrived on a Wednesday, and was promptly informed by my colleagues that Friday was a holiday and I could not get into the gardens over the weekend. Argh. Wednesday was Bureaucracy Day, with visits to the Economic Planning Unit and the Immigration Authorities for my proper permit and passport documents. One day of collecting left for the week. Have you ever collected in a sauna? Over 90 degrees and 90% humidity. I went through my four bottles of water in less than an hour, and I was a real mess. Six hours later, disoriented by 10 years of plant growth in the gardens, I was having no luck at all, and I was hot, wet and frustrated. Luckily, about three in the afternoon I came across about 20 specimens on leaves of a mango, a tree fern and leaves of *Eugenia*. Luck at last! Too bad the gardens closed at four, with no exceptions for a crazed sweaty smelly entomologist, and it was back to the Rumah Universiti (=University Accommodations).



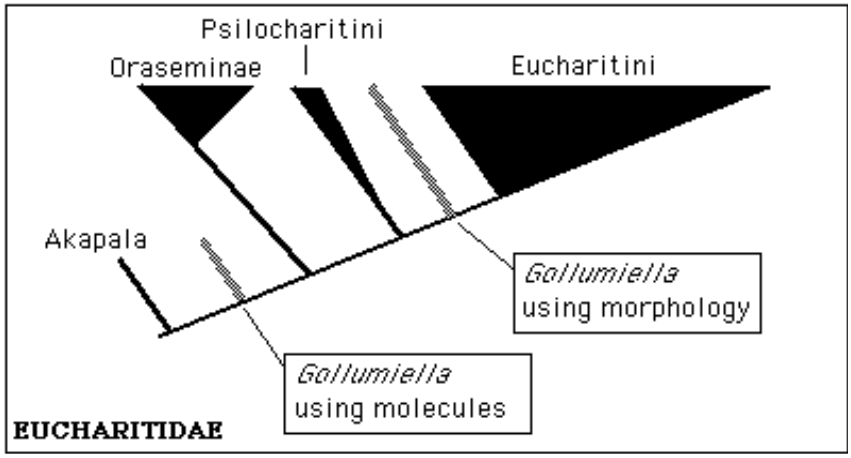
The next week was scheduled for another old haunt: the universities' Forest Research Center in the Gombak Forest Reserve just east of Kuala Lumpur. I spent a great week there with Klaus Peschke and Jutta Hofman from the University of Frieberg. They was holidaying and collecting some information on beetles at the reserve. I was on a return quest here for another genus, *Anorasema*, that I collected in a narrow strip of weeds. The strip was still there but now only about 20 feet from the edge of a new gravel quarry! Ahhh, progress. It was a bit noisier than I remembered, but I did manage to collect a single female of *Anorasema*, which is enough for molecular work but not enough for biological observations. I capped the trip with collections of several other genera of eucharitines for the molecular grinder. I did pay for my pleasures. A land leech nailed me on the shin. Ruined a perfectly good pair of pants with the blood that continues to flow after the leech has departed. Even more interesting was the secondary fungal infection in the wound that took more than two months to get out of my system. The infection 'migrated' almost three inches up my shin. I still think that land leeches are cute.

One aspect of Malaysia that I love: Klaus, Jutta and I went to breakfast in the village east of the station. It was a full buffet breakfast with cooked squid, curry chicken, rice, peanuts with anchovies, and untold other delicacies. With this we had hand-squeezed juice and coffee, and I loaded up with some specialized rice desserts for lunch. At the counter, I was charged 12 ringet (3 dollars for breakfast). When I asked how much to cover my two colleagues, the lady looked at me quizzically and informed me that I had already paid for it all!

Back to KL. Thankfully, the *Gollumiella* were still flying. It was pretty easy to narrow down the candidate host plants to the single shrubby tree fern under the mango tree. I collected several leaf samples and trudged back to the lab to look for eggs on the leaf blades, again. After several hours, I had just about given up, when there they were! Erect eggs placed in clusters at the base of the leaf branches. Each patch of about 60-100 eggs was laid in a cluster, sometimes with a few eggs laid onto the basal leaf blades. The erect eggs were just as Clausen had drawn them in 1940, but they were nowhere near a thrips egg or any other insect. This was my September 11.

Over the next few days, I was able to observe and collect the minute first instars. After another long frustrating day, I was also able to collect the host (*Paratrechina*, a formicine ant), a pupa of the wasp, and a parasitized ant larva with a planidium embedded into the thorax (a behavior typical of all known Oraseminae). I celebrated this last find with an exotic sirloin steak at the local TGIFriday in downtown Petaling Jaya, which was right around the corner from the Pizza Hut, MacDonalds, Kentucky Fried Chicken and Starbucks!

It was time to go. I had some great help from local colleagues (Azih Azidah, Dr. Hamish Rosli and Dr. H.S. Yong), and these collections would not have been possible without their help. Now, if only I have the same luck with collecting the Mallee Monster (*Akapala*) this February in Australia!



St. Urho's Day

Communicated by Laura Merrill

Editor's note: Apparently St. Urho's Day is a concoction by Americans of Finnish descent who lamented the lack of national legends and heroes and hence, fabricated this one. However, apparently it is celebrated by some folks. Then again, think of all the other symbolic figures associated with holidays and how their images have been inflated over the decades and centuries. The information below was lifted from a St. Urho's website.

One of the lesser known, but extraordinary legends of ages past is the legend of St. Urho, patron saint of entomologists and Finnish vineyard workers.

Before the last glacial period, wild grapes grew with abundance in the area now known as Finland. Archeologists have uncovered evidence of this scratched on the thigh bones of the giant bears that once roamed northern Europe. The wild grapes were threatened by a plague of grasshoppers until St. Urho banished the lot of them with a few selected Finnish words.

In memory of this impressive demonstration of the Finnish language as a pest management tool, Finnish people and entomologists celebrate on March 16, the day before St. Patrick's Day. It tends to serve as a reminder that St. Pat's Day is just around the corner and is thus celebrated by squares. At sunrise on March 16, Finnish women and children dressed in royal purple and Nile green gather around the shores of the many lakes in Finland and chant what St. Urho chanted many years ago:
"Heinasirkka, heinasirkka, menetaalt hiteen."
(Translation: "Grasshopper, grasshopper, go away!")

Entomologists dressed in green costumes gather on the hills overlooking the lakes, listen to the chant and then kicking out like grasshoppers, they slowly disappear to change costumes from green to purple. The celebration ends with singing and dancing polkas and schottishes and drinking – er – grape juice. Though these activities may occur in varying sequences.

Colors for the day are royal purple and Nile green.
(The above information from Sulo Havumäki.)

Hooray! for Urho Poika!

Oooksi kooksie coolama vee
Santia Urho is ta poy for me!

He sase out ta hoppers as pig pirds,
Neffer peefor haff I hurd dose words!
He reely tole dose pugs of kreen
Braffest Finn I effer seen!

Some celebrate for St. Pat ant hiss nakes
Put Urho Poyka got vhat it takes!
He got tall and trong from feelia sour
Ant ate culla moyakka effery hour.

Tat's vhy dat guy could sase does peetles
Vhat crew as tick as chack bine needles.
So let's give a cheer in hower pest vay
On the 16 of Marts
St. Urho's Tay!