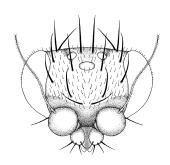
Phorid Newsletter



Brian V. Brown, editor
Drawing of *Cyrtophorina* sp. by Brian Koehler
also available at http://www.phorid.net/phoridae/phornews.html

Number 11 April 4, 2006

Dear Friends,

There is much new to report from Los Angeles since the last newsletter. The joint proposal to study the non-Metopininae has been funded by the US National Science Foundation (NSF). Entitled "Basal Lineages of the Phoridae", it is a collaboration between me and my colleague Dr. Paul Smith at California State University Bakersfield. The project is a combined molecular and morphological analysis of the genera of non-metopinine phorids on a worldwide scale, with Paul doing the molecular part and me doing the morphology. Many taxa need to be freshly collected for this project, so that intact DNA can be extracted, and we have already made great strides in obtaining rarely collected and important phorids. One collecting trip for this project is described below; others will follow.

Another piece of news is that I am co-principal investigator on another NSF project that has been recently funded, this one a 3-year survey project in Thailand. Collecting in southeast Asia is sure to result in strange and wonderful new phorids, as well as material for the Basal Lineages project.

Enclosed with this Newsletters are reprints of papers that have appeared since the last issue. Many of these are now also available at my website: http://www.phorid.net/phoridae/phorpub.html

Phorid collecting in New Zealand

In February of 2006 I realized a long-standing dream of mine, to visit my long-time correspondent (and fellow phorid enthusiast) Hugh Oliver in New Zealand. We began writing each other around 22 years ago, and planned a couple of trips together, but they never came to fruition. This year, however, I was able to travel to New Zealand, funded by the Basal Lineages of the Phoridae grant.

The New Zealand phorid fauna is of particular interest because it is rich in non-Metopininae, and includes several endemic genera. In particular, there are a number of phorid genera I classified in my subfamily Hypocerinae in my 1992 phorid revision, a group that might

be the most primitive extant phorids (other than those formerly classified as Sciadoceridae). These peculiar phorids are important constituents of the Basal Lineages project that Paul Smith & I are conducting, and we needed fresh material for sequencing. Ultimately, we wish to establish their place in the phylogeny of phorids, amongst an ever-growing matrix of other genera for which we have material.

A further incentive to sample in New Zealand is that there are at least 3 undescribed genera that Hugh has encountered there, two of which are non-Metopininae, as well as some interesting new species in already known genera (such as a new *Kierania*). We were looking forward to getting more material of them as well.

Hugh & his wife Molly were great hosts. After picking me up at the airport in Auckland,



Hugh drove me to his house in Hamilton, and the next day the three of us drove to visit some friends of theirs at Waihi, near the east coast (all our travel was on the North Island). There, we placed a Malaise trap for nearly the entirety of my three-week visit in some native forest owned by Colin & Irene Willcox.

Next, we traveled to Hugh & Molly's cottage near Raglan, on the west coast. Here, we put up Malaise traps and did some sweeping, bringing in a number of the New Zealand natives. I also enjoyed seeing the native birds, and listening to Hugh's vast store of information about native New Zealand vegetation. One interesting find at Raglan was a new parasitoid phorid on the introduced ant *Technomyrmex albipes*, certainly a surprise as the ant wasn't native to the New Zealand fauna, and no other parasitoid phorids are known from this country. We still have some work to do on this interaction, however, as the identity of the ant is questionable (because of taxonomic problems in

Technomyrmex), and specimens are on their way to Barry Bolton to examine. The phorid, also, is of unusual form and although it is similar to *Pseudacteon*, we haven't arrived at an accurate identification yet.

After a couple of days at Raglan, we went on a larger excursion, to the Taupo Region and Tongariro National Park. There, we put up Malaise traps, swept, looked at New Zealand flax for *Kierania* phorids (as Hugh is doing in the photo, above), and put out baited (with rotting liver) and unbaited yellow pan traps. One day in particular, when we walked and swept around Lake Rotopounamu, was extraordinarily productive. On this walk we collected all but 2 genera known from New Zealand, including two of the undescribed ones, and the extremely rare *Ceratoplatus fullerae*. Hugh's use of rotting liver in the pan traps was a revolting, but productive modification of this collecting technique, and after throwing out the hundreds of blowflies, yielded a number of interesting genera including lots of *Sciadocera rufomaculata*.



Lake Rotopounamu

Our final major locality was on the Coromandel Peninsula, in the northeast, where we collected around Mt. Moehau. The collecting was less productive here, but by then I already had everything I needed, and we enjoyed the scenery and natural history of the area.

Back in Hamilton we poured over our finds, and sorted through some of Hugh's impressive collection, the result of some 40 years of phorid collecting. The final results of the trip are yet to be summarized, but the Basal Lineages project is greatly enriched by the material we collected during my brief stay. Spending time with another phoridologist (and his wife) was also an all-too-short experience that I hope to repeat soon in a second trip (to the South Island).



Brian & Hugh in Hamilton, New Zealand, 23 February 2006

Phoridologists' Directory

The following is a list of the names, addresses and interests of phorid workers on my mailing list. Any additions, corrections or updates would be greatly appreciated. Those wanting to discuss their projects and interests at even greater length are welcome to do so.

Forbes P. Benton, moved, address no longer available. *Interests*: Natural history, identification and faunistic surveys of Brazilian Phoridae. Elucidation of phorid life cycles. Behavioral interactions between parasitic species and their hosts.

James Bonet, Övre Bergsvägen 2, 126 34 Hägersten, Sweden. Telephone: 08-669 21 39. Email: james.bonet@nrm.se.

Marcos A. L. Bragança, Fundação Universidade do Tocantins, Instituto de Biologia, Rua Luiz Leite Ribeiro, s/n, 77500-000, Porto Nacional, TO, BRAZIL. Telephone: 55-63-363 1701. Fax: 55-63-363 1283. E-mail: malbr@uol.com.br. *Interests*: Interactions of phorids and leaf-cutting ants.

- Brian V. Brown, Entomology Section, Natural History Museum of Los Angeles County, 900 Exposition Boulevard, Los Angeles, CA, 90007, U.S.A. Telephone (213) 763-3363. FAX (213) 746-2999. E-mail bbrown@nhm.org. *Interests*: Taxonomy, evolution, reconstructed phylogeny, biogeography and natural history of world Phoridae. I have a long-term project to revise the New World, ant-decapitating genus *Apocephalus*, but I am also working on a revision of the bee-parasitizing genus *Melaloncha*. I am interested in collecting methods for phorids, and in biodiversity surveys, especially those conducted in the tropics.
- Matthias Buck, Dept. Environmental Biology, University of Guelph, Guelph, ON, Canada, NIG 2W1. Email mbuck@evbhort.uoguelph.ca *Interests*: Ecology and biology of Phoridae; community structure; ecology and biology of small saprophagous (especially necrophagous) Diptera breeding in small-sized and buried vertebrate and invertebrate carrion. Other interests are anatomy of the reproductive organs, larval morphology, phylogeny and hymenopterous parasitoids of small, necrophagous Diptera. So far, I have only worked in the Palaearctic Region.
- **R. Henry L. Disney**, Dept. Zoology, University of Cambridge, Downing Street, Cambridge, CB2 3EJ, United Kingdom. Telephone 0223 336654. FAX 0223 336676. Email rhld2@cam.ac.uk. *Interests*: Taxonomy of phorids with novel biological data, Revision of world's *Chonocephalus*, Phoridae of Seychelles, Arabia, British Isles and other Atlantic islands. Revision of keys to world genera.
- **Ewa Durska**, Museum and Institute of Zoology, PAS, Wilcza 64, 00-679 Warszawa, Poland.Email edurska@robal.miiz.waw.pl. *Interests*: Biology, taxonomy, faunistic surveys of Phoridae; behavioral interactions between parasitic species and their hosts; species of *Phalacrotophora* as parasitoids of Coccinellidae.
- Donald H. Feener, Jr., Department of Biology, University of Utah, Salt Lake City, UT, 84112, U.S.A. Telephone (801) 581-6444. FAX (801) 581-4668. Email: feener@bioscience.utah.edu. *Interests*: Ant-phorid interactions in general. Specific projects include: 1) chemical ecology of host location in phorid parasitoids of ants; 2) phorid parasitoids as biological control agents of pest ants; 3) evolution of host specificity of phorid parasitoids; 4) behavioral ecology of ant defenses against phorid parasitoids. I work mostly in the New World temperate and tropical regions, especially the southwestern U.S.A. and Central America (Costa Rica, Panama).
- Patricia J. Folgarait, Unidad de Investigación en Interacciones Biológicas, Centro de Estudios e Investigaciones, Universidad Nacional de Quilmes, Roque Saenz Peña 180, 1876 Bernal, Buenos Aires, Argentina. Telephone: 54-1 365-7100, ext. 225. FAX 54-1 365-7101. Email pfolgarait@unq.edu.ar. *Interests*: 1) Ant- parasitoid interactions, in particular for ant pests, 2) biological control of ant pests, and 3) effects of phorids in structuring ant communities. I am currently doing research on phorids of *Solenopsis* and *Camponotus* but I am also interested in phorids of leaf-cutter ants.
- **Mauro Gori**, Via Del Cronaca 19, 50142 Firenze, Italy. Telephone 055/700588. *Interests*: Italian phorid fauna; life histories.
- **Tadao Gotô**, Tohoku Research Center, Forestry and Forest Products Research Institute, 92-25 Nabeyashiki, Aza-Shimokuriyagawa, Morioka, 020-0123 Japan. Telephone +81-19-648-3962. FAX: +81-19-641-6747. Email: tgotoh@ffpri.affrc.go.jp
- **David H. Kistner**, California State University, Chico, CA, 95929-0515, U.S.A. Telephone (916) 898-5116. FAX (530) 894-7609. *Interests*: Mostly interested in Phoridae inhabiting the nests of social insects or preying on social insects. I am interested in all biogeographic regions, but have minimal taxonomic interests. I am currently working in collaboration with Henry Disney on Termitoxeniinae and a study of Phoridae of the upper Sacramento River, based on cantara spill collections.

- Victor A. Kolyada, Department of Entomology, Zoological Museum of the Moscow State University, 6 Herzen Str. Moscow 103009, Russia. *Interests*: Taxonomy of the genus *Megaselia* and its fauna in the Palaearctic Region. Interested in exchanging for determined specimens from other biogeographical regions. Also interested in collecting methods.
- **Ed LeBrun**, University of Texas, Brackenridge Field Lab, 2907 Lake Austin Boulevard, Austin, TX, 78703-4201. Telephone: (512) 471-0191. Email: elebrun@mail.utexas.edu. *Interests*: Interactions of phorids and ant communities.
- **Guangchun Liu**, College of Biological and Environmental Engineering, Shenyang University, No. 21, Wanghua Street, Dadong District, Shenyang, 110044, D. R. China. Telephone +86-24-62268204. FAX +86-24-88112793. Email liugc18@mail.sy.ln.cn. *Interests*: Taxonomy of phorids; Chinese phorid fauna; phorids associated with mushrooms in China.
- Marina Michailovskaya, Laboratory of Insects, Gornotaezhnaya Station, AN RAN, Ussurijsk District, Primorye Territory, 692533, Russia. Email root@ssursk.vladpost.marine.su. *Interests*: Taxonomy of phorids; Far East phorid fauna, including Primorskiy kraiy, Chabarovskiy kraiy, Sachalin, Kamchatka; phorids associated with dead animals.
- **Lloyd Morrison**, Department of Biology, Southwest Missouri State University, 901 S National Ave, Springfield, MO, 65804, USA. Telephone (417) 836-3119. Fax: (417) 836-8886. E-mail: LloydMorrison@smsu.edu. *Interests*: Effects of phorid parasitoids (genus *Pseudacteon*) on ant foraging and interspecific competition (genus *Solenopsis*); ant host species-specificity of *Pseudacteon* phorids; introduction of South American *Pseudacteon* species to the U.S. (Texas) as biological control agents against the imported fire ant, *S. invicta*.
- Mikhail B. Mostovski, Department of Arthropoda, Natal Museum, P. Bag 9070, Pietermaritzburg 3200, South Africa. E-mail mmostovski@nmsa.org.za. *Interests*: Phorid fauna of former USSR.
- **Hiroto Nakayama**, Biosystematics Laboratory, Graduate School of Social and Cultural Studies, Kyushu University, 4-2-1 Ropponmatsu, Chuo-ku Fukuoka 810-8560, Japan. Telephone 092-726-4818. Fax 092-726-4644. Email youngrcb@mbox.nc.kyushu-u.ac.jp.
- **E. Hugh A. Oliver**, 172 Dinsdale Road, Hamilton 2001, New Zealand. Telephone 84 79541. FAX 64 7 838 5085. *Interests*: New Zealand phorid taxonomy and natural history.
- Matt Orr, University of Oregon, Chandler Building, 1027 NW Trenton Ave, Bend, OR 97701, USA. E-mail matorr@darkwing.uoregon.edu *Interests*: Influences of phorids on ant foraging ecology, especially pest ants. Ant taxa of interest include *Atta*, *Solenopsis*, and *Linepithema*.
- **Sanford D. Porter**, USDA-ARS, CMAVE, 1600 SW 23rd Drive, P.O. Box 14565, Gainesville, FL, 32604, U.S.A. Telephone (352) 374-5914. FAX (352) 374-5818. E-mail sdp@nervm.nerdc.ufl.edu. *Interests*: Ant-parasitizing phorids, especially *Pseudacteon*: oviposition behavior, growth and development of larvae and pupae, host specificity, responses of ant hosts, biocontrol.
- **Sabine Prescher**, Hinter der Masch 26, 38114 Braunschweig, Germany. Telephone 05 31 57 90 92. Email s.prescher@gmx.de. *Interests*: Phoridae of a crater in la Palma (Canary Islands), of Iceland, and of agricultural land with maize in Germany.

- **Athayde Tonhasca**, Universidade Estadual do Norte Fluminense, Centro de Ciências e Tecnologias Agropecuarias, Avenida Alberto Lamego, 2000, Campos dos Goytacazes, RJ, Brazil. *Interests*: Phorids attacking leaf-cutting ants.
- Walther Traut, Institut für Biologie, Medizinische Universität zu Lübeck, Ratzeburger Allee 160, 23538 Lübeck, Germany. Telephone (+49) 0451-500-4100. Fax (+49) 0451-500-4034. Email traut@physik.mu-luebeck.de. *Interests: Megaselia scalaris*, predominantly with respect to the genetics of sex determination and the evolution of chromosomes.
- **Sven-Olof Ulefors**, Färgerivägen 9, 380 44 Alsterbro, Sweden. Telephone 46-481-50462. Email so.ulefors@swipnet.se. *Interests*: Palaearctic species of *Megaselia*; separation of *M. pulicaria*-group species.

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