Weird scarabs from Cretaceous Lebanese and Myanmar amber

Frank-T. Krell1, Alberto Ballerio2, Ron T. Buckley3 & Dany Azar3

1Department of Entomology, The Natural History Museum, Cromwell Road, London SW7 5BD, U.K.; f.krell@nhm.ac.uk
2c/o Museo Civico di Scienze Naturali “E. Caffi”, Piazza Cittadella 10, I-24129 Bergamo, Italy
39635 Sunter Ridge, Florence, KY 41042, U.S.A.
4Department of Natural Sciences, Faculty of Sciences II, Lebanese University, PO Box 26110217, Fanar-Matn, Lebanon

In his 'Biography of the Coleoptera', Roy Crowson published a photograph of a scarabaeoid from Lebanese amber which he believed to show 'features suggestive of termitophilous habits'. The whereabouts of this specimen remained unknown until Dany Azar or rediscovered it in the Paris Museum a few years ago. He then found a second specimen in Lebanese Amber, and four specimens of similar shape appeared from the recent mining of Myanmar amber. These six specimens belong to five species and show the following possible synapomorphies:

- two parallel, longitudinal rows of denticles on outer margin of fore tibia (unique within Scarabaeoidea)
- large, protruding eyes in anterior half of the head
- head as large or larger than pronotum

We will erect a new family for the species since they cannot be placed in any of the established extant or fossil family-group taxa. A cladistic analysis to determine the sister group is underway. The body shape of these tiny scarabs (1–2.6 mm) resembles subterranean carabids of the tribe Scartini, with enlarged fore-coxae and thin hind legs, a large head in relation to the pronotum, and a waist between pro- and mesothorax. They probably lived within a substratum, but the legs with two rows of small teeth and long tarsi would be suboptimal digging tools, and the protruding eyes at the anterior border of the head (unprotected since canthus is missing) would not be useful to push any substratum.

I am looking forward to any ideas about possible habits of these weird creatures.
The Third, Highly Irregular, Scarab Workshop

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Program and Abstracts

Workshop Organization
Dr. Michael Klein, The Ohio State University, klein.10@osu.edu.
Dr. Harry Kaya, The University of California-Davis, hkkaya@ucdavis.edu.
Dr. Marshall Johnson, The University of California-Riverside, mjjohnson@uckac.edu.
Dr. Lynn LeBeck, Center for Biological Control, The University of California-Berkeley, liebeck@nature.berkeley.edu