

REVUE SUISSE DE ZOOLOGIE

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Additions à la faune des scorpions de l'Etat du Amapá, Brésil (Chelicerata, Scorpiones)

Wilson R. LOURENÇO¹ & Jian-Xin QI²

¹ Département de Systématique et Evolution, USM 0602, Section Arthropodes (Arachnologie), Muséum national d'Histoire naturelle, CP 053, 61 rue Buffon, F-75005 Paris, France. E-mail: arachne@mnhn.fr

² Department of Biological Sciences, National University of Singapore, 14 Science Drive 4, Singapore 117543, Singapore. E-mail: free8wind@yahoo.com.cn

Addition to the scorpion fauna of the Amapá State in Brazil (Chelicerata, Scorpiones). -

This paper presents the results of our study of a small collection of neotropical scorpions now deposited in the Geneva Museum. The collection is composed of specimens of 6 species in 5 genera and 2 families. One new species, *Auyantepuia amapaensis* sp. n. (Chactidae), is described from the region of the Monte Tipac in Brazil.

Keywords: *Auyantepuia* - new species - Brazil - Amapá State.

***Aphanius almiriensis*, a new species of toothcarp from Greece (Teleostei: Cyprinodontidae)**

Maurice KOTTELAT¹, Roberta BARBIERI² & Maria Th. STOUMBOUDI²

¹ Route de la Baroche 12, Case postale 57, CH-2952 Cornol, Switzerland (address for correspondence) and Raffles Museum of Biodiversity Research, National University of Singapore, Kent Ridge, Singapore 119260. E-mail: mkottelat@dplanet.ch

² Institute of Inland Waters, Hellenic Centre for Marine Research, P. O. Box 712, 19013 Anavyssos, Greece. E-mail: robertab@ath.hcmr.gr, mstoum@ath.hcmr.gr

***Aphanius almiriensis*, a new species of toothcarp from Greece (Teleostei: Cyprinodontidae).** - *Aphanius almiriensis*, new species, is described from a brackish water spring and from a lagoon (and its inflowing freshwater spring) in the Peloponnese (Greece). It is distinguished by the yellowish caudal fin of the male that has a wide faint grey margin and by the colour pattern of the female (7-11 dark, roundish blotches on the side, more or less connected by an irregular dark midlateral stripe). *Aphanius almiriensis* is critically endangered; it is possibly extinct at the type locality and the second locality is much impacted. The identity, type material and type locality of *A. fasciatus* are discussed, and a neotype is designated. Several species are possibly confused under the name *A. fasciatus*.

Keywords: fish - Cyprinodontidae - *Aphanius* - Peloponnese - extinction.

Pupal morphology in the subfamily Paussinae (Coleoptera: Carabidae)

Andrea DI GIULIO¹, Andreas KAUPP², Simone FATTORINI³, Augusto VIGNA TAGLIANTI⁴ & Peter NAGEL²

¹ Dipartimento di Biologia, Università degli Studi “Roma Tre”, Viale Guglielmo Marconi 446, I-00146 Roma, Italy. E-mail: digiulio@uniroma3.it

² Institut für Natur- Landschafts- und Umweltschutz / Biogeographie, Universität Basel, Basel, Switzerland.

³ Via Casal dei Pazzi 49, I-00156 Roma, Italy.

⁴ Dipartimento di Biologia Animale e dell’Uomo, Università di Roma “La Sapienza”, Roma, Italy.

Pupal morphology in the subfamily Paussinae (Coleoptera: Carabidae). - Pupae of the Ozaenini lineage (*Pachyteles vignai* Deuve, 2000, *P. digiulioi* Deuve, 2000 and *Physeia setosa* Chaudoir, 1868) and the Paussini lineage (*Platyrhopalopsis melleii* (Westwood, 1833) and *Paussus kannegieteri* Wasmann, 1896), are described and shown in figures, and compared with other adaphagan taxa. In contrast to the customary assumption that pupal characters are uninformative with regard to systematics, this analysis shows the importance of pupal characters for phylogenetic reconstruction at different levels. Differences between basal and derived Paussinae occur in the arrangement of setae and in the folding of gonothecae, while some characters, like the microsculpture, the inversion of the last abdominal segments and perhaps the reduction of the 7th abdominal spiracle, support Paussinae monophyly. The extent of pubescence is a morphocline among Adephaga, with reduction in several unrelated taxa. Finally, the possibility of recognising distinct abdominal segments and antennal articles at the pupal stage, in taxa where they appear fused at the adult stage, may provide an ontogenetic basis for elucidating phylogenetic relationships.

Keywords: Coleoptera - Carabidae - Paussinae - pupae - morphology - phylogeny.

***Chionea austriaca* in caves and artificial galleries of Slovenia (Diptera, Limoniidae)**

Tone NOVAK¹, Ignac SIVEC², Franc JANŽEKOVIČ¹ & Erhard CHRISTIAN³

¹ Department of Biology, Faculty of Natural Sciences and Mathematics, University of Maribor, Koroška 160, SI-2000 Maribor.

E-mail: tone.novak@uni-mb.si; franc.janzekovic@uni-mb.si

² Slovenian Museum of Natural History, Prešernova 20, SI-1000 Ljubljana.

E-mail: isivec@pms-lj.si

³ Institute of Zoology, Department of Integrative Biology and Biodiversity Research, University of Natural Resources and Applied Life Sciences, Vienna (BOKU), Gregor Mendel Str. 33, A-1180 Wien. E-mail: erhard.christian@boku.ac.at

***Chionea austriaca* in caves and artificial galleries of Slovenia (Diptera, Limoniidae).** - We sampled 54 caves and galleries in north and east Slovenia methodically for ecological data and the invertebrate fauna. The snow fly *Chionea austriaca*, recorded in 37% of the cavities, proved indifferent with regard to most of the abiotic factors, but occurred in significantly higher individual numbers in caves on north and east slopes. The subterranean sojourn of *Ch. austriaca* appears merely weather-mediated. No indications of larval development in the caves were found.

Keywords: abiotic factors - speleobiology - distribution - snow fly.

A new genus and species of the spider family Agelenidae from western Sichuan Province, China (Arachnida: Araneae)

Xiang XU^{1, 2} & Shuqiang LI^{1, 3}

¹ Institute of Zoology, Chinese Academy of Sciences, Beijing 100080, China.

² College of Life Science, Hunan Normal University, Changsha 410081, Hunan, China.

³ Corresponding author. E-mail: lisq@ioz.ac.cn

A new genus and species of the spider family Agelenidae from western Sichuan Province, China (Arachnida: Araneae). - *Ageleradix sichuanensis*, a new genus and new species, is reported based on specimens from western Sichuan, China. *Ageleradix* gen. n. is distinguished from the other genera of Agelenidae by having a special sclerite between tegulum and embolus in males, a well-developed posterior plate in the epigynum and a broad copulatory bursa in females. Two species are included in the new genus, the type species and *Ageleradix cymbiforma* (Wang, 1991) comb. n.

Keywords: Taxonomy - *Ageleradix* - *Agelescape* - new combination.

Continued massive invasion of Mysidae in the Rhine and Danube river systems, with first records of the order Mysidacea (Crustacea: Malacostraca: Peracarida) for Switzerland

Karl J. WITTMANN

Department of Ecotoxicology, Center of Public Health, Medical University of Vienna, Währinger Strasse 10, A-1090 Wien, Austria. E-mail: karl.wittmann@meduniwien.ac.at

Continued massive invasion of Mysidae in the Rhine and Danube river systems, with first records of the order Mysidacea (Crustacea: Malacostraca: Peracarida) for Switzerland. - A survey of invasive species belonging to the Mysidae in the Rhine and Danube Rivers and adjacent freshwater systems revealed that certain species have invaded the waters of many more countries than previously known. First records of *Hemimysis anomala* G. O. Sars, 1907 are given for Switzerland, Slovakia, Hungary, Croatia and Serbia. The same holds true for *Katamysis warpachowskyi* G. O. Sars, 1893 in Croatia and Serbia, and for *Limnomysis benedeni* Czerniavsky, 1882 in Switzerland. New or first records are also given for *L. benedeni* in the systems of artificial inland waterways of northern Germany, France and Serbia. *L. benedeni* and *H. anomala* are the first representatives of the order Mysidacea (or Mysida according to certain authors) in Switzerland. A single specimen of *Paramysis lacustris* (Czerniavsky, 1882) serves as a first record for the upper Danube in Austria. The observed spreading of *L. benedeni* in inland waterways of France suggests that it probably will soon arrive at the Mediterranean coast, with unknown consequences for indigenous populations of the closely related species in the genus *Diamysis* Czerniavsky, 1882. *H. anomala*, a top invader of continental waters in Europe, could become a potential threat at the ecosystem level if its invasion continues into large lakes, such as those connected with the Rhine system in Switzerland.

Keywords: *Hemimysis anomala* - *Limnomysis benedeni* - *Katamysis warpachowskyi* - *Paramysis lacustris* - invasive aquatic species - Ponto-Caspian invaders - continental Europe - distribution - anthropogenic dispersion - ecological impact.

Les *Phlyctimantis* et *Kassina* du Cameroun (Amphibia, Anura, Hyperoliidae)

Jean-Louis AMIET

48, rue des Souchères, F-26110 Nyons, France.

The *Phlyctimantis* and *Kassina* of Cameroon (Amphibia, Anura, Hyperoliidae). - The Cameroonian batrachofauna includes one species of *Phlyctimantis* and five species of *Kassina*, which are reviewed in this paper. *Phlyctimantis* have been found in only five 10 minutes side squares; the discussion of the status of the southernmost population shows that all known Cameroonian populations must be referred to *P. boulengeri*. In the genus *Kassina*, *K. maculosa* and *K. decorata* were tentatively synonymised by authors. Although they share a great number of morphological characters, they exhibit constant differences in cephalic and dorsal maculation and occupy different distribution areas. Thus, distinction at specific level appears to be the most appropriate status for these taxa. A new species, *Kassina wazae*, is described; it superficially resembles *K. senegalensis* but differs by several distinctive features, as vocal sac, lateral head maculation, presence of a small tarsal tubercle. For each species, many original data on distribution, ecology and phonocenes are given. Finally, attention is drawn on the unexpected lack of a true forest-species of *Kassina* in the Cameroonian fauna.

Keywords: Africa - Cameroon - batrachology - systematics - ecology.

Redescription of *Protaphorura octopunctata* (Tullberg, 1876) and *Protaphorura quadriocellata* (Gisin, 1947) with description of two new related species from Siberia and Europe (Collembola: Onychiuridae)

Romuald J. POMORSKI¹ & Ighor KAPRUS²

¹ Department of Biodiversity and Evolutionary Taxonomy, Zoological Institute, Wrocław University, Przybyszewskiego 63/77, PL-51-148 Wrocław, Poland.

E-mail: onychus@biol.uni.wroc.pl

² State Museum of Natural History, Ukrainian National Academy of Sciences, Teatral'na St. 18, UA-79008 L'viv, Ukraine.

E-mail: kaprus-i@museum.lviv.net

Redescription of *Protaphorura octopunctata* (Tullberg, 1876) and *Protaphorura quadriocellata* (Gisin, 1947) with description of two new related species from Siberia and Europe (Collembola: Onychiuridae). - *Protaphorura octopunctata* (Tullberg, 1876) and *Protaphorura quadriocellata* (Gisin, 1947) are redescribed based on type specimens and new materials. *Protaphorura flavorufula* (Martynova, 1976) is a junior synonym of *P. octopunctata*. *Protaphorura tolai* sp. n. and *Protaphorura saltuaria* sp. n. two new, closely related species from Yakutia and East Carpathians are described. An identification key to all Palearctic *Protaphorura* species with 4 and more pseudocelli at base of antenna is provided.

Keywords: Collembola - Onychiuridae - *Protaphorura* - taxonomy - Europe - Siberia.

Cestodes of the genus *Biuterina* Fuhrmann, 1902 (Cyclophyllidea: Paruterinidae) from passeriform and piciform birds in the Ivory Coast, with a key to the species of the genus

Boyko B. GEORGIEV^{1,2} & Jean MARIAUX³

¹ Central Laboratory of General Ecology, Bulgarian Academy of Sciences, 2 Gagarin Street, 1113 Sofia, Bulgaria. E-mail: bbg@ecolab.bas.bg

² Department of Zoology, Natural History Museum, Cromwell Road, London SW7 5BD, UK.

³ Natural History Museum, P.O. Box 6434, 1211 Geneva 6, Switzerland.
E-mail: jean.mariaux@ville-ge.ch

Cestodes of the genus *Biuterina* Fuhrmann, 1902 (Cyclophyllidea: Paruterinidae) from passeriform and piciform birds in the Ivory Coast, with a key to the species of the genus.-

On the basis of recently collected material from the Ivory Coast (République de Côte d'Ivoire) and other specimens from the collections of Geneva Natural History Museum, we review the species of *Biuterina* (Paruterinidae) known from that country. Five species are recorded, among which two are new: *B. pogoniuli* sp. n. from *Pogoniulus scolopaceus* (Piciformes: Capitonidae) and *B. petroniae* sp. n. from *Petronia dentata* (Passeriformes: Ploceidae). *B. africana* Joyeux & Baer, 1928, from *Tchagra* spp. (Passeriformes: Laniidae), is redescribed on the basis of the type material from Benin, as well as of specimens from Angola, Guinea and the Ivory Coast. The species is reported for the first time from the latter two countries. *B. pentamyzos* (Mettrick, 1960) from *Prionops plumata* in Zimbabwe is recognised as a synonym of *B. africana* (new synonymy). *B. cordifera* Murai & Sulgostowska, 1983 and *B. triangula* (Krabbe, 1869) are reported from new hosts (*Acrocephalus arundinaceus* and *Anthus leucophrys gouldii*, respectively) and for the first time in Africa. An identification key to the 34 species of *Biuterina* presently recognized worldwide is given.

Keywords: Parasite - helminths - Paruterinidae - *Biuterina* - Africa - Ivory Coast - systematics - morphology - Laniidae - Ploceidae - Capitonidae - Sylviidae - Motacillidae.