

A REVISION OF THE *ELEODES* (SUBGENUS *CAVERNELEODES*)
WITH NEW SPECIES AND NOTES ON CAVE BREEDING
ELEODES (TENEBRIONIDAE: AMPHIDORINI)

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Abstract.— Subgenus *Caverneleodes* of the genus *Eleodes* is diagnosed and revised. Six new species from the United States: California (*E. microps*); Utah and Northern Arizona (*E. wynnei*), Central Arizona (*E. wheeleri*), Southern New Mexico (*E. guadalupensis*), and Mexico (*E. thomasi* and *E. grutus*) are described. The biogeography of the subgenus is discussed. Diagnoses and a key are provided to known species of *Caverneleodes*. Relationships with other *Eleodes* are discussed. Cave associated Amphidorini are surveyed.



Key words.— Tenebrionidae, Amphidorini, *Eleodes*, *Caverneleodes*, Cave, Mexico, Utah, California, Texas, Arizona, New Mexico, new species.

***MARIEPSKOPIA ALBOMACULATA* GEN. ET SP. NOV.
(COLEOPTERA: TENEBRIONIDAE: CNODALONINI)
FROM RELICT ARBOREAL HABITATS IN SOUTH AFRICA**

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Abstract.— *Mariepskopia albomaculata* **gen. et sp. nov.** from South Africa is described. The genus is placed into the tenebrionid tribe Cnodalonini and has no closer relative in Africa, but probably in the Oriental Region with the genus *Asbolodes*. The species has a small distribution area in Mpumalanga and KwaZulu-Natal and has probably an arboreal mode of life in the montane forest in 1300–1600 m altitude.



Key words.— Coleoptera, Tenebrionidae, Cnodalonini, *Mariepskopia* gen. nov., new genus, new species, arboreal habitat, relicts, South Africa.

A NEW SPECIES OF THE GENUS *PROBATICUS*
SEIDLITZ, 1896 FROM GREECE (INSECTA:
COLEOPTERA: TENEBRIONIDAE)

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Abstract.— A new species of the genus *Probatiscus* Seidlitz, 1896, *P. (Pelorinus) peslieri* sp. nov., is described from some localities of the island of Lesbos, Eastern Aegean Greece. It is compared to all its Greek relatives.



Key words.— Coleoptera, Tenebrionidae, Helopini, *Probatiscus (Pelorinus) peslieri*, new species, Greece, Island of Lesbos.

CATALOGUE, GEOGRAPHIC DISTRIBUTION AND ECOLOGICAL NICHE MODELS OF THE MELANOCRATOID PLATYNOTINA (COLEOPTERA: TENEBRIONIDAE: PEDININI)

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Abstract.— The catalogue of all known species of the melanocratoid lineage of the subtribe Platynotina Koch, 1953 is presented. Eight genera containing 30 species are listed. The data of primary and secondary types is provided. Distribution of the species is listed and illustrated on 9 maps. New distributional data is published for: *Melanocratus fairmairei* Iwan, 1996, *M. validipes* Fairmaire, 1895, *Sebastianus madagascariensis* Iwan, 1999, *S. magnus* Iwan, 1996, *S. ovoideus* (Fairmaire, 1902), *S. projectus* Iwan, 1996, *Styphacus girardi* Iwan, 2004 and *S. phreneticus* Iwan, 1996. The relationship between species richness and Malagasy ecoregions is analysed and discussed. MaxEnt software was used to model the hypothetical range of chosen species and indicate the most important abiotic factors responsible for observed distribution. Results of MaxEnt analysis suggest that the precipitation has the major limiting impact from all of analysed factors.



Key words.— Platynotina, Pedinini, Tenebrionidae, taxonomy, biogeography, catalogue, Madagascar, MaxEnt, AUC.

THE FIRST FOSSIL BARK-GNAWING BEETLE FROM THE MIDDLE JURASSIC OF INNER MONGOLIA, CHINA (COLEOPTERA: TROGOSSITIDAE)

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Abstract.— A new bark-gnawing beetle genus *Sinopeltis* **gen. nov.**, with two species (*S. jurrasica* **sp. nov.** (type species) and *Sinopeltis amoena* **sp. nov.**), is described based on two well-preserved impression fossils. Specimens were collected from the Middle Jurassic Jiulongshan Formation in Daohugou Village, Shantou Township, Ningcheng County, Inner Mongolia, China from a lacustrine paleoenvironment, making it the oldest fossil of the family. *Sinopeltis* is placed into Peltinae incertae sedis.



Key words.— Coleoptera, Trogossitidae, beetles, insect fossil, Middle Jurassic, Daohugou, China.

ON THE GENUS *ANTHRENUS* GEOFFROY, 1762 (COLEOPTERA: DERMESTIDAE) FROM NEPAL AND NORTH INDIA WITH A DESCRIPTION OF A NEW SPECIES

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Abstract.— *Anthrenus (Florilinus) nepalensis* sp. nov. is described from Nepal. The habitus, antennae, scales, and galea with lacinia are illustrated and compared to related species. Key to *Anthrenus* species from Nepal and North India is presented. Revised checklist of *Anthrenus* species from Nepal and North India is also given.



Key words.— Megatominae, Anthrenini, new species, key, checklist, Nepal, North India.

TAXONOMIC REVIEW OF THE HIMALAYAN SPECIES OF *SELASIA* LAPORTE, 1836 (COLEOPTERA: ELATERIDAE: AGRYPNINAE: DRILINI)

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Abstract.— The Himalayan species of the genus *Selasia* are reviewed. *Selasia atriventris* Pic, 1914 from Darjeeling is redescribed and two new species are described: *Selasia boruckae* **sp. nov.** from Nepal and *Selasia merkli* **sp. nov.** from Pakistan. *Selasia maindroni* Bourgeois, 1903 from India is transferred from Drilini to Lampyridae: Otoretinae incertae sedis. Diagnostic characters of all Himalayan *Selasia* species are illustrated and the identification key to males is provided.



Key words.— Coleoptera, Elateroidea, Elateridae, Drilini, *Selasia*, Himalayas, Lampyridae, taxonomy, distribution, new species.

A NEW SPECIES OF *PICOMICROLYCUS* (COLEOPTERA: LYCIDAE), FIRST RECORD FROM SOUTH AMERICA AND A KEY TO SPECIES

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Abstract.— A new species *Picomicrolycus ireneae* sp. nov. from Brazil is described and *Calleros pilosus* Pic, 1934 is transferred to *Picomicrolycus*, recording this genus for the first time from South America. Diagnostic characters are illustrated and a key to known *Picomicrolycus* species is given.



Key words.— *Picomicrolycus*, new species, net-winged beetles, Neotropical Region

THE PALAEARCTIC GENUS *SHADELPHAX* DING, 2006
(HEMIPTERA: FULGOROMORPHA: DELPHACIDAE)
WITH DESCRIPTION OF ONE NEW SPECIES
FROM XINJIANG, CHINA

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Abstract.— The Palaearctic genus *Shadelphax* Ding, 2006 (Hemiptera: Fulgoromorpha: Delphacidae: Delphacinae: Delphacini) is taxonomically reviewed to include two species: *S. eforiae* (Dlabola, 1961) (China: Neimenggu, Ningxia, Gansu, Qinghai and Xinjiang; Mongolia; Kazakhstan; Ukraine; Middle Asia) and *S. kashiensis* **sp. nov.** (China: Xinjiang). The genus *Shadelphax* is redefined. The main morphological characters including the male genitalia of the two species are described or redescribed and illustrated.



Key words.— Fulgoroidea, taxonomy, Palaearctic region.

***OGCODES FUMATUS* (DIPTERA: ACROCERIDAE)
REARED FROM *PHILODROMUS CESPITUM* (ARANEAE:
PHILODROMIDAE), AND FIRST EVIDENCE OF
WOLBACHIA ALPHAPROTEOBACTERIA IN ACROCERIDAE**

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Abstract.— A first rearing record of the small-headed fly *Ogcodes fumatus* (Erichson, 1846) from the running crab spider *Philodromus cespitum* (Walckenaer, 1802) is reported. Aberrant web spinning activity of the host spider is documented. Molecular work comprises DNA barcoding (COI) for the host and parasitoid as well as PCR assays (16S rRNA, wsp) detecting the presence of at least two strains of *Wolbachia* bacteria in *O. fumatus*. A Neighbour-joining search of the 16S rRNA clusters these strains within supergroup A of *Wolbachia*.



Key words.— Acroceridae, *Ogcodes*, Philodromidae, *Philodromus*, *Wolbachia*, 16S rRNA.

GENUS *ADELPHENALDIS* FISCHER, 2003 (HYMENOPTERA: BRACONIDAE: ALYSIINAE) IN SPAIN, WITH A KEY TO THE WORLD SPECIES

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Abstract.— The Spanish species of the genus *Adelphenaldis* Fischer is reviewed. The description of a new species, *A. maxfischeri* **sp. nov.**, and redescrptions of the recorded for Spain for the first time *A. globipes* (Fischer 1962) (**comb. nov.**) and *A. spiritalis* (Tobias 1992) (**comb. nov.**) are proposed. *Synaldis georgica* Fischer 1993 is synonymised with *S. globipes* Fischer 1962 (**syn. nov.**). The following new combinations are suggested: *Adelphenaldis acutidentata* (Fischer), **comb. nov.**, *A. cultrata* (Belokobylskij), **comb. nov.**, *A. moniliata* (Belokobylskij), **comb. nov.**, *A. pacifica* (Belokobylskij), **comb. nov.**, *A. paraclypealis* (Fischer), **comb. nov.**, *A. parvicornis* (Thomson), **comb. nov.**, *A. ryukyuensis* (Belokobylskij), **comb. nov.**, *A. spasskensis* (Belokobylskij), **comb. nov.** A key to the world species of the genus *Adelphenaldis* is given.



Key words.— Braconidae, Alysinae, Alysini, *Adelphenaldis*, new species, new records, key, Spain.

NEW SPECIES OF MACROCEPHALIC HALICTINE BEES (HYMENOPTERA: HALICTIDAE)

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Abstract.— Two new species of New World halictine bees (Halictidae: Halictinae) are described and figured with extreme forms of female macrocephalism. *Lasioglossum (Evyllaesus) xitle* **sp. nov.** (Halictini: Gastrohalictina) from Cráter del Xitle in Mexico City, Mexico and *Augochlora (Oxystoglossella) empusa* **sp. nov.** (Augochlorini: Augochlorina) from Madre de Dios, Peru are remarkable for not only their greatly enlarged heads and monstrously developed mandibles, but also for their pronotal modifications (both species), propodeal lamellae (*A. empusa*), and genal (*L. xitle*) and hypostomal (*A. empusa*) protrusions.



Key words.— Mexico, Peru, *Lasioglossum*, *Augochlora*, macrocephalism, sociality.

THE TRUE IDENTITY OF *SCHENDYLA FURCIDENS* KACZMAREK, 1962 (CHILOPODA: SCHENDYLIDAE)

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Abstract.— Misinterpreted artefacts and morphological variations are two possible sources of taxonomic synonymies. We have recognized these two in the case of the geophilomorph *Schendyla furcidens* Kaczmarek, 1962, described from Poland and subsequently reported from Germany, the Czech Republic and Slovakia. The species was described based on some differences in the structure of the labrum, maxilla, mandible and last legs as compared to *Schendyla nemorensis* (C. L. Koch, 1837). While studying Hungarian and Polish *Schendyla* specimens we found that the furcate shape of the labral teeth, putatively diagnostic for *S. furcidens*, was an artefact visible under light microscope caused by the forward-turned position of the labrum. Similarly, differential characters in mandibles and maxillae were found to be artefacts emerging during slide preparation, while characters of the legs can be considered as intraspecific variability. Thus, we can conclude that *S. furcidens* is a junior subjected synonym of *S. nemorensis* (**syn. nov.**). Line drawings and SEM micrographs are given to illustrate all the main taxonomic characters and their alterations.



Key words.— centipede, artefact, preparation, taxonomy, morphology.

***EUTOBRILUS OBESUS* SP. NOV. AND *E. BRZESKII*
SP. NOV. (NEMATODA: TRIPLONCHIDA: TOBRILIDAE)
FROM LAKE BAIKAL, RUSSIA**

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Abstract.— *Eutobrilus obesus* sp. nov. and *E. brzeskii* sp. nov. are described and illustrated based on the material collected from Lake Baikal, Siberia, Russia.



Key words.— morphology, Lake Baikal, nematodes, new species, *Eutobrilus*, taxonomy.

***EKTAPHELENCHOIDES SYLVESTRIS* SP. NOV.
(NEMATODA: EKTAPHELENCHINAE) FROM IRAN**

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Abstract.—*Ektaphelenchoides sylvestris* **sp. nov.** is described and illustrated. The new species was recovered from the galleries of bark beetles from a dead *Pinus sylvestris* L. tree and characterized by females with 644–843 μm long body, lip region 7.5–9.0 μm wide, separated from the rest body with a shallow constriction, stylet 18–23 μm long, excretory pore 72–85 μm far from anterior end, postuterine sac short, 5–11 μm long and male absence. By having a short postuterine sac, the new species comes close to four known species of genus namely *E. attenuata*, *E. musae*, *E. pini* and *E. winteri*.



Key words.— Ektaphelenchinae, new species, systematic, Tehran.

NEMATODES OF THE ORDER RHABDITIDA FROM TEHRAN PROVINCE, IRAN. THE GENUS *PSEUDACROBELES* STEINER, 1938.

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Abstract.— A new species of the subgenus *Pseudacrobeles* is described from apple orchard in Tehran province (Iran). *Pseudacrobeles (Pseudacrobeles) iranicus* sp. nov. is characterized by its body length (0.47–0.56 mm in females and 0.45 mm in male) and lateral field that includes three incisures fading out anterior to the phasmid in females and reaching almost to the tail terminus in males. It is further characterized by the lip region with six separate lips, and by labial probolae that are present as low ridges connecting the tips of adjacent lips and continued towards oral opening in a hexaradiate disc-shape, but by the absence of cephalic probolae; the pharyngeal corpus is cylindrical and 2.2–3.4 times longer than the isthmus, the excretory pore at the level of the isthmus; the spermatheca is 20–39 μm long, the postuterine sac is 0.9–1.6 times the corresponding body diameter long; the female tail is conical-elongate (64–75 μm , $c=7.3$ –8.0, $c'=5.0$ –5.6), with phasmids at 36–38% of its length, and the male tail conical-elongate having long mucro (55 μm , $c=8.3$, $c'=3.4$). In addition, *P. (P.) macrocystis* is described for the first time from Iran. Descriptions, measurements and illustrations, including SEM photographs, are provided for the two species.



Key words.— *Pseudacrobeles*, Cephalobidae, description, Iran, morphology, new species, SEM, taxonomy.

DIFFERENTIATION OF EXTERNAL MORPHOLOGY OF ZETOMIMIDAE (ACARI: ORIBATIDA) IN LIGHT OF THE ONTOGENY OF TWO SPECIES

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Abstract.— The morphology of juvenile stages and ontogeny of *Heterozetes palustris* (Willmann, 1917) and *Zetomimus furcatus* (Pearce & Warburton, 1906) are redescribed and illustrated. The juveniles of the former species have most prodorsal and gastronotal setae long, and smooth integument with microtuberculate cerotegument, while those of the latter species have most prodorsal and gastronotal setae short, with three pairs of longer and thicker setae in the posterior part of gastronotum, tuberculate integument, and two darker stripes, transverse and longitudinal, in the shape of letter T, with microtuberculate cerotegument. Most of nymphs of *Z. furcatus* bear one scalp, and rarely 2–3 scalps of previous instars that adhere to the gastronotum, which is observed here for the first time. The adults of both species have several morphological characters of Ceratozetoidea, while their juveniles lack a humeral organ and distinct sclerites, which occur in most Ceratozetoidea.



Key words.— Acarology, oribatid mites, *Heterozetes palustris*, *Zetomimus furcatus*, juvenile stages, ontogeny, carrying scalps.

THE GENUS *BIONYCHIURUS* POMORSKI, 1996 (COLLEMBOLA: ONYCHIURIDAE) IN CHINA

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Abstract.—The diagnosis of *Bionychiurus* Pomorski, 1996 is updated and a identification key to the world species of the genus is given. A new species, *B. changbaiensis* sp. nov., as the first Chinese species of the genus, is described from Northeast China. The new species is diagnosed by pso formulae as 32/133/33343 dorsally and 11/000/01120 ventrally, psx present on subcoxa 1 of legs I, II and III as 1, 1 and 1 respectively, PAO composed with 22–26 granulated vesicles, Th. I with 9-10+9-10 chaetae dorsally, chaetae on subcoxa 1 of legs I–III as 5/6/6, unguiculus 0.8 times as long as inner edge of unguis and anal spines as long as inner edge of hind unguis.



Key words.— Collembola; *Bionychiurus*; new species; taxonomy; China