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REVISION OF THE *OMASPIDES AUGUSTA* GROUP (COLEOPTERA: CHRYSOMELIDAE: CASSIDINAE: MESOMPHALIINI)

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Abstract.— *Omaspides augusta* group is revised. *Omaspides augusta* Boheman, 1856, *O. bivittata* Baly, 1872, and *O. tenuicula* Boheman, 1862 are redescribed. Two species are described as new: *O. confusa* **sp. nov.** (Ecuador) and *O. picaflorensis* **sp. nov.** (Peru). Two genera of Convolvulaceae plants, *Merremia* Dennst. ex Endl. and *Turbina* Raf., are recorded as hosts for the genus *Omaspides* Chevrolat, 1836 for the first time.

Key words.— Entomology, taxonomy, new species, Coleoptera, Chrysomelidae, Cassidinae, Mesomphaliini, *Omaspides* s. str., Neotropical Region.

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REVISION OF THE AUSTRALIAN COCCINELLIDAE (COLEOPTERA). GENUS *DIOMUS* MULSANT. PART 2

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Abstract.— This paper is the second in a series designed to cover taxonomically all Australian species of *Diomus* Mulsant. Nomenclatural history, diagnoses, digital illustrations and distribution maps are provided for each species. Thirty species are treated in this paper, among those 14 are new: *D. bunya* **sp. nov.**, *D. carbine* **sp. nov.**, *D. circus* **sp. nov.**, *D. gingera* **sp. nov.**, *D. gilvus* **sp. nov.**, *D. hebes* **sp. nov.**, *D. kioloa* **sp. nov.**, *D. leai* **sp. nov.**, *D. lord* **sp. nov.**, *D. micrus* **sp. nov.**, *D. pisinus* **sp. nov.**, *D. prodigialis* **sp. nov.**, *D. tasmanicus* **sp. nov.** and *D. villus* **sp. nov.** *Diomus hypocrtus* Weise, 1923 is synonymised with *Scymnus mareebensis* Blackburn, 1895 **syn. nov.** Lectotypes are designated for the following taxa to stabilize their taxonomic positions: *Diomus hypocrtus* Weise, 1923; *Scymnus cowleyi* Blackburn, 1895; *S. elutus* Lea, 1902; *S. flavifrons* var. *norfolcensis* Lea, 1929; *S. frater* Lea, 1902; *S. impictus* Blackburn, 1895; *S. inaffectatus* Blackburn, 1892; *S. insidiosus* Blackburn, 1889; *S. macrops* Lea, 1929; *S. maestus* Lea, 1926; *S. mareebensis* Blackburn, 1895; *S. obumbratus* Blackburn, 1895; *S. sublatus* Blackburn, 1892; *S. triangularis* Lea, 1902; *S. whittonensis* Blackburn, 1892; *S. victoriensis* Blackburn, 1892 and *S. yarrensis* Blackburn, 1895.

Key words.— Taxonomy, Cucujoidea, Coccinellidae, Diomini, *Diomus*, Australia.

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NEW SPECIES OF *ANTHRENUS* GEOFFROY, 1762 (COLEOPTERA: DERMESTIDAE: MEGATOMINAE) FROM ANGOLA

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Abstract.— *Anthrenus* (*Nathrenus*) *maltzi* **sp. nov.** is described from Angola. The habitus, antennae, and aedeagus are illustrated and compared with a related species. Key to the species most similar to *A.* (*N.*) *maltzi* is presented.

Key words.— Taxonomy, new species, Coleoptera, Dermestidae, *Anthrenus*, *Nathrenus* Africa, Angola.

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PHYTODIETUS (*WEISIA*) *QUEENSLANDICUS*, A NEW SPECIES FROM AUSTRALIA (HYMENOPTERA: ICHNEUMONIDAE)

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Abstract.— A new ichneumonids species from Australia, *Phytodietus* (*Weisia*) *queenslandicus* **sp. nov.**, is described and illustrated. A key to the Australian, Ethiopian and Oriental species of the subgenus *Weisia* Schmiedeknecht, 1907 is presented.

Key words.— Tryphoninae, Queensland, Australian Capital Territory, new species, key.

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NEW SPECIES OF *HERCOSTOMUS ABSIMILIS* GROUP FROM YUNNAN, CHINA (DIPTERA: DOLICHOPODIDAE)

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Abstract.— Two species of *Hercostomus absimilis* group are described as new to science: *Hercostomus gongshanensis* **sp. nov.** and *H. mengyangensis* **sp. nov.** A key to the species of the *absimilis*-group from China is given.

Key words.— Diptera, Dolichopodidae, *Hercostomus*, new species, China.

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FIVE NEW SPECIES OF THE SUBGENUS *OXYPHORTICA* FROM THE ORIENTAL REGION (DIPTERA: DROSOPHILIDAE: STEGANA)

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Abstract.— Five new species discovered from the Oriental region: *Stegana* (*Oxyphortica*) *crassiforcipata* **sp. nov.**, *S* (*O.*) *curvata* **sp. nov.**, *S.* (*O.*) *monoacantha* **sp. nov.**, *S.* (*O.*) *wanglei* **sp. nov.** and *S.* (*O.*) *wuliangi* **sp. nov**. are described. All are morphologically similar to *S.* (*O.*) *subconvergens* Okada, 1988 from Sri Lanka and *S*. (*O.*) *enigma* Sidorenko, 1998 from Vietnam. A key to the species that similar to *S.* (*O.*) *subconvergens* is provided.

Key words.— Drosophilidae, Oriental region, *Oxyphortica*, *Stegana*, new species.

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PAICI CASSANI GEN. ET SP. NOV. (HEMIPTERA: RICANIIDAE) FROM NEW CALEDONIA

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Abstract.— The new endemic planthopper genus *Paici* **gen. nov.** with one new species, *P. cassani* **sp. nov.** from the New Caledonia is described and illustrated. An association of *Paici* with the environmental conditions where it lives is suggested.

Key words.— New Caledonia, Ricaniidae, new genus, new species, entomology, taxonomy, biological note, distribution.

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NEW PLANT BUGS OF THE TRIBE HALLODAPINI (HETEROPTERA: MIRIDAE: PHYLINAE) FROM THE EOCENE BALTIC AMBER

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Abstract.— A new extinct genus and two new fossil species of the tribe Hallodapini (Miridae: Phylinae) are described from the Baltic amber: *Leptomimus jonasdamzeni* **gen**. et **sp. nov.** and *Hallodapomimus krzeminskiorum* **sp. nov.** The species *Hallodapomimus elektrinus* Herczek is redescribed. New diagnostic characteristics for the genus *Hallodapomimus* is given.

Key words.— Heteroptera, Miridae, Phylinae, Hallodapini, new fossil genus and species, Baltic amber.

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TAXONOMIC NOTES ON *WILLMANNELLA* FEIDER, 1952 (ACARI: ACTINOTRICHIDA: MICROTROMBIDIIDAE) WITH REDESCRIPTION OF ADULT *W. RACOVITZAI* (FEIDER, 1949) FROM HUNGARY

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Abstract.— *Willmannella racovitzai* (Feider, 1949) is redescribed based on adults. A male, collected in Hungary has been designated as neotype. *Willmannella franzi* (Willmann, 1950) is regarded the subjective junior synonym of *W. racovitzai*. The taxonomy and distribution of the genus are discussed and a key to all species known from postlarval instars is provided.

Key words.— Acarology, Parasitengona, morphology, biology, distribution.

ANNALES ZOOLOGICI (Warszawa), 2010, 60(4): 599-616

MORPHOLOGY OF JUVENILE STAGES OF *METABELBA GLABRISETA* MAHUNKA, 1982 AND *DAMAEUS AURITUS* KOCH, 1835 (ACARI: ORIBATIDA: DAMAEIDAE)

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Abstract.— The morphology of juvenile stages of the oribatid mites *Metabelba glabriseta* Mahunka, 1982 and *Damaeus auritus* Koch, 1835 (Damaeidae) is described and illustrated. The juveniles of *Metabelba glabriseta* are characterized by: cuticle smooth, with rare folds and also with slightly developed reticulate ornamentation dorso-laterally; cerotegument of body with conical or strongly oblong granules, that of some body setae cloud-like; rostral and lamellar setae of approximately identical length, with hardly developed barbs; sensilli with long flagellate tips, smooth; gastronotic region rounded posteriorly; almost all gastronotic setae with small flagellate tips, barbed, setae *lp* longest in larva, setae c_1, c_2, h_1 longest in nymphs; cornicle *k* of nymphs long, slightly curled, distally slightly swollen and longitudinally split; all legs of juveniles shorter than body; setae *d* and *v''* on trochanter III appear in adult; famulus emergent. The juveniles of *Damaeus auritus* are characterized by: cuticle smooth, with rare folds; cerotegument of body with spherical granules, body setae without cerotegument; prodorsal setae barbed, setae *ex* and larval setae *in* short, strong, sensilli thickened, but with thin, bent tips; gastronotic region truncate (in larva) or rounded (in nymphs) posteriorly; some gastronotic setae vane-like; cornicle *k* of nymphs short, strong, conical; all legs (except II in nymphs) of juveniles longer than body. Famulus sunken. Juveniles are compared among the known species of *Metabelba* and *Damaeus*, and also among the genera *Metabelba*, *Damaeus* and *Epidamaeus*.

Key words.— Oribatid mites, Damaeidae, *Metabelba glabriseta*, *Damaeus auritus*, morphology, juvenile stages.

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TWO NEW SPECIES OF *AUSTROCARABODES* (*ULUGUROIDES*) FROM ETHIOPIA (ACARI: ORIBATIDA: CARABODIDAE)

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Abstract.— Two new species of oribatid mites of the subgenus *Austrocarabodes* (*Uluguroides*), *A.* (*U.*) *arboreus* **sp. nov.** and *A.* (*U.*) *aethiopicus* **sp. nov.**, are described from Ethiopia. The former species was obtained in mosses on trees from Cholomu Forest (10 km to the south from Ginchi city); the second species was obtained from soil from Harenna Forest (Bale Mountains National Park). Both new species differ from all known species of the subgenus by presence of eight to nine pairs of genital setae (five-six in other species). A diagnostic key to African species of *Austrocarabodes* (*Uluguroides*) is presented.

Key words.— Oribatid mites, new species, *Austrocarabodes* (*Uluguroides*), Ethiopia, key.

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DESCRIPTION OF A NEW SPECIES OF *ASETACUS* FROM SOUTH CHINA AND A REDESCRIPTION OF *RHYNCAPHYTOPTUS ACER* (ACARI: DIPTILOMIOPIDAE: RHYNCAPHYTOPTINAE)

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Abstract.— A new species, *Asetacus linderae* **sp. nov.**, infesting *Lindera* sp. (Lauraceae) is described and illustrated, and *Rhyncaphytoptus acer* Chen, Wei et Qin, 2004 is redescribed. A key to the species of *Asetacus* from China is provided.

Key words.— Eriophyoidea, eriophyoid mites, new species, *Asetacus*, *Rhyncaphytoptus acer*, taxonomy, China

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PARENTAL CARE IN *CLINOPODES FLAVIDUS* KOCH (CHILOPODA: GEOPHILOMORPHA: GEOPHILIDAE)

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Abstract.— Parental care in the centipede *Clinopodes flavidus* Koch (Chilopoda: Geophilomorpha: Geophilidae) is described for the first time: the female coils round the brood with the sterna outwards, as do the females of most geophilomorphs. Also the variation in body length and major external morphological characters of the early post-embryonic stadia are described. The peripatoid and foetus stadium are easily distinguished by the degree of segmentation of the trunk and the appendages, and by the capability of making 'writhing' movements. The variation in the number of leg-bearing segments in mother–offspring broods is analyzed and discussed.

Key words.— Centipedes, Phylactometria, Adesmata, breeding behavior, sternal glands, peripatoid, foetus, body length, segment number.

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ASSESSMENT OF INTRASPECIFIC MTDNA VARIABILITY OF THE WATER FROG *PELOPHYLAX SAHARICUS* IN EASTERN NORTH AFRICA

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Abstract.— The water frog *Pelophylax saharicus* is the most widespread anuran in North Africa and thus subjected to widely differing environmental conditions in different parts of its distribution range. In this paper we examined genetic structure of species 15 populations across Tunisia and eastern Algeria. We evaluated a potential role of mountain ranges as significant barriers to gene flow, using a partial sequences of the mitochondrial cytochrome oxidase I gene (*COI*). Twenty haplotypes were recorded in a total sample of 38 individuals, whereas, an overall low genetic variation of 0.4% was observed. AMOVA revealed no significant genetic structuring related to the 4 groups across the studied area. Unimodal mismatch distributions and significantly negative values of Fu's Fs and Tajima's D statistics support a recent expansion of populations from a smaller founder population as the most plausible explanation of the observed significant deviations from neutrality in the North-East African green frog populations.

Key words.— *Pelophylax saharicus*, North Africa, COI, genetic variation.

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MOLECULAR IDENTIFICATION OF *HETERAKIS SPUMOSA* SCHNEIDER, 1866 (NEMATODA: ASCARIDIDA: HETERAKIDAE) WITH COMPARATIVE ANALYSIS OF ITS OCCURRENCE IN TWO MICE SPECIES

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Abstract.— *Heterakis spumosa* Schneider, 1866 is a typical and widespread parasite of *Rattus* sp. Recently published reports on its presence in rodents other than rats and house mice (e.g. *Apodemus agrarius* and *A. flavicollis*) may suggest acquisition of new host or the existence of two distinct species parasitising within the subfamily Murinae in Europe. The first aim of our study was to examine the taxonomic status of *H. spumosa* isolated from three host species (*Rattus norvegicus*, *Apodemus agrarius* and *A. flavicollis*) by analysing the partial sequence of small subunit (18S) of ribosomal DNA (rDNA). The second aim was to investigate the pattern of occurrence of *H. spumosa* within the two species of *Apodemus*. As a result of partial sequencing of 18S rDNA we obtained three sequences, 977 bp (*A. agrarius*), 867 bp (*A. flavicollis*) and 873 bp (*Rattus norvegicus*) long. Multiple alignment showed that the nucleotide composition of DNA from all the hosts was identical, which may suggest that the nematodes isolated from the three host species are conspecific. Parasitological and statistical analysis of *H. spumosa* showed a high prevalence of infection and lower degree of nematodes overdispersion in *A. agrarius*. Comparative analysis of aggregation level in infrapopulations and metapopulations of *H. spumosa* indicate that *A. flavicollis* is not typical host for this species. Our results showed that the factor affecting the presence of *H. spumosa* is the host's age, but we did not observe any influence of the host's sex or collecting season.

Key words.— *Heterakis spumosa*, molecular identification, Nematoda, rodents, *Apodemus agrarius*, *Apodemus flavicollis*, *Rattus norvegicus*, Poland.