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A NEW SPECIES OF THE GENUS *ISOMIRA* MULSANT, 1856 FROM CYPRUS (INSECTA: COLEOPTERA: TENEBRIONIDAE)

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Abstract.— A new species of the genus *Isomira* Mulsant, 1856, *I. aliquoi* **sp. nov.**, is described from the island of Cyprus. It is compared to all its relatives of the Eastern Mediterranean Basin.

Key words.— Coleoptera, Tenebrionidae, Alleculinae, *Isomira aliquoi*, new species, Cyprus.

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STICHOLOTIS RUFICEPS WEISE: NEW SYNONYMIES AND DESCRIPTION OF ITS MATURE LARVA (COLEOPTERA: COCCINELLIDAE: STICHOLOTIDINI)

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Abstract.— The adult and larval stages of a scale insect predator, *Sticholotis ruficeps* Weise, 1902 are described and illustrated. *Sticholotis madagassa* Weise, 1909 and *Mesopilo soufrierensis* Duverger, 2001 are synonyms of *S. ruficeps* (new synonyms). *S. ruficeps* has been used in biocontrol programs against various scale insects and it is here recorded from USA (Hawaii), Guadeloupe, Madagascar, Mascarene and Mauritius (Réunion Islands), Singapore, Indonesia, New Caledonia, Australia (Christmas and Cocos-Keeling Islands) and Cook Islands.

Key words.— biological control, Coccinellidae, Hemiptera, introduced species, larvae, scale insects, Sticholotidini, taxonomy.

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TWO NEW SPECIES OF *CHUJOCHILUS* SASAJI, 2005 (COLEOPTERA: COCCINELLIDAE) FROM CHINA

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Abstract.— The genus *Chujochilus* Sasaji from China is reviewed. The following two species are described as new to science: *C. sagittatus* **sp. nov.** and *C. parisensis* **sp. nov.** A diagnosis of the genus and a key to known species are provided.

Key words.— Coleoptera, Coccinellidae, Chilocorinae, Chujochilus, new species, China.

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NEW AND LITTLE KNOWN SPECIES OF THE TRIBE MEGAPENTHINI GURJEVA, 1973 (COLEOPTERA: ELATERIDAE) FROM SULAWESI

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Abstract.— Eight new species of the tribe Megapenthini from the Indonesian island Sulawesi are described and illustrated: *Abelater bosi* **sp. nov.**, *A. buechei* **sp. nov.**, *A. dongalaensis* **sp. nov.**, *A. jakubi* **sp. nov.**, *Cateanus sulawesiensis* **sp. nov.**, *Friedrichiellus bosi* **sp. nov.**, *Simodactylus saetosus* **sp. nov.**, and *Xanthopenthes dongalaensis* **sp. nov.** New records of further eight species of the tribe Megapenthini from Sulawesi are given. *Abelater brandti* Schimmel, 2004, and *A. jaechi* Schimmel, 2004 are recorded from this island for the first time.

Key words.— Coleoptera, Elateridae, Megapenthini, new species, distribution, Sulawesi.

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REMARKS ON THE GENUS *PSEUDAORIA* JACOBY, 1908 WITH DESCRIPTION OF A NEW SPECIES FROM CHINA (CHRYSOMELIDAE: EUMOLPINAE)

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Abstract.— The paper contains some remarks on the genus *Pseudaoria* Jacoby, 1908, a key to determining of all known species and the description of a new species *Pseudoaoria petri* **sp. nov.** from Sichuan.

Key words.— Coleoptera, Chrysomelidae, Eumolpinae, *Pseudaoria*, key to species, new species, Southeast Asia.

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REVISION OF THE GENUS *CALVARIUM* PIC, 1918 (COLEOPTERA: SCIRTIDAE). PART 1. REDESCRIPTION OF THE GENUS AND CATALOGUE OF DESCRIBED TAXA

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Abstract.— The genus *Calvarium* Pic is redescribed and morphological characters discussed. A catalogue of the world species is presented and several new combinations are proposed. *Indiocyphon* Pic is regarded as a junior synonym of *Calvarium* Pic. *Calvarium maxi* Pic is designated the type species of *Calvarium* Pic. *Calvarium inimpressum* Pic, 1955 and *Calvarium semiobscurum concoloripenne* Pic, 1953 are junior synonyms of *Calvarium latithorax* (Pic, 1950). Several species are transferred from *Cyphon* to *Calvarium*: *Calvarium carolinense* (Blair) **comb. nov.**, *C. cautum* (Klausnitzer) **comb. nov.**, *C. dentatum* (Klausnitzer) **comb. nov.**, *C. foncki* (Pic) **comb. nov.**, *C. fouqueti* (Pic) **comb. nov.**, *C. gredleri* (Klausnitzer) **comb. nov.**, *C. hashimotorum* (Yoshitomi) **comb. nov.**, *C. johorense* (Yoshitomi et Satô) **comb. nov.**, *C. latithorax* (Pic) **comb. nov.**, *C. longior* (Yoshitomi et Satô) **comb. nov.**, *C. notabile* (Yoshitomi et Satô) **comb. nov.**, *C. paui* (Pic) **comb. nov.**, *C. primitum* (Klausnitzer) **comb. nov.**, *C. rotundatum* (Klausnitzer) **comb. nov.**, *C. rufopacum* (Klausnitzer) **comb. nov.**, *C. samuelsoni* (Yoshitomi et Satô) **comb. nov.**, *C. sulawesicum* (Yoshitomi et Satô) **comb. nov.**, *C. takahashii* (Yoshitomi et Satô) **comb. nov.** Two species are transferred from *Calvarium* to *Cyphon*: *Cyphon massarti* (Pic) **comb. nov.** and *C. semiobscurum* (Pic) **comb. nov.**

Key words.— Coleoptera, Scirtidae, *Calvarium*, *Indiocyphon*, *Cyphon hashimotorum* species group, redescription, new combinations.

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TWO NEW SPECIES OF THE GENUS *NAZERIS* FAUVEL OF FUJIAN PROVINCE, CHINA (COLEOPTERA: STAPHYLINIDAE: PAEDERINAE)

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Abstract.— Two new species of the genus *Nazeris* Fauvel collected from Meihuashan Nature Reserve, Fujian Province, are described under the names of *N. fujianensis* **sp. nov.** and *N. xuwangi* **sp. nov.** The male sexual characters are described and illustrated.

Key words.— Coleoptera, Staphylinidae, *Nazeris*, Fujian, China, new species.

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NOTES ON THE TAXONOMY AND BIOLOGY OF SMARIDIDAE (ACARI: PROSTIGMATA: PARASITENGONA)

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Abstract.— Rearing of larvae from eggs deposited by adults in laboratory proved *Pilosoma pluto* Southcott, 1961 (based on larva) and *Fessonia papillosa* (Hermann, 1804) (based on adult) to be conspecific. *Clipeosoma* Southcott, 1961 (larva) and *Hirstiosoma* (Berlese, 1887) (adult) are congeneric. The validity of *Hirstiosoma latreillei* (Grandjean, 1947) is confirmed, the larva of *Hirstiosoma ampulligera* Berlese, 1887 is described for the first time. Data on egg development and nutrition of postlarval instars are provided. Causal reasoning for the exclusion of Phanolophinae from Smarididae is provided.

Key words.— Taxonomy, life cycle, diapause, Erythraeoidea, *Phanolophus*, *Hirstiosoma*, *Fessonia*, *Clipeosoma*, *Pilosoma*.

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A NEW SPECIES OF PTYCTIMOUS MITE (ACARI: ORIBATIDA: EUPHTHIRACARIDAE) WITH NOTES ABOUT SOME KNOWN SPECIES

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Abstract.— One new species of the ptyctimous mite *Microtritia pinarensis* **sp. nov.** is described from Cuba. Some morphological notes about some known species – *Mesotritia maerkeli* Sheals, 1965, *Mesotritia nova* Starý, 1992, *Indotritia nuda* Mahunka, 1988, *Euphthiracarus* (*Pocsia*) *microseta* (Starý, 1993) and *Microtritia glabrata* Starý, 1993 – are given.

Key words.— Oribatid, ptyctimous mites, new species, taxonomy, morphology.

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MORPHOLOGY OF JUVENILE STAGES OF *PEDROCORTESELLA AFRICANA* PLETZEN, 1963 AND *ALEURODAMAEUS AFRICANUS* MAHUNKA, 1984 (ACARI: ORIBATIDA)

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Abstract.— The morphology of juvenile stages of the oribatid mites *Pedrocortesella africana* Pletzen, 1963 and *Aleurodamaeus africanus* Mahunka, 1984 is described and illustrated. The juveniles of *Pedrocortesella africana* are characterized by: cuticle with reticular ornamentation and folds; body with microgranular cerotegument; prodorsal setae leaf-shaped, sensilli petiolate, tuberculate blades with a rounded distal margin; gastronotic region flat; larva and nymphs with nine pairs of leaf-shaped gastronotic setae; scalps folded, larval scalp with seven pairs of setae, nymphal scalps with six pairs of setae; leg famulus sunken. The juveniles of *Aleurodamaeus africanus* are characterized by: cuticle smooth; body with filamentous cerotegument and with very not numerous granules; prodorsal setae setiform (except short interlamellar setae in nymphs); gastronotic region convex in lateral aspect; larva and nymphs with 12 of setiform gastronotic setae; scalps with reticular ornamentation, larval scalp with nine pairs of setae, nymphal scalps with ten pairs of setae; leg famulus emergent. The comparative analysis between known juveniles in Plateremaeoidea and Gymnodamaeoidea are given.

Key words.— Oribatid mites, Plateremaeoidea, Gymnodamaeoidea, *Pedrocortesella africana*, *Aleurodamaeus africanus*, morphology, juvenile stages.

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TWO NEW SPECIES OF ORIBATID MITES (ACARI: ORIBATIDA) FROM ETHIOPIA

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Abstract.— We described *Machadobelba shtanchaevae* **sp. nov.** and *Microtegeus khaustovi* **sp. nov.**, collected in Bale Mountains National Park (Africa, Ethiopia). The first new species is similar to *Machadobelba symmetrica* Balogh, 1958 (Distribution: Africa, Congo) and to *Machadobelba ceylonica* Balogh, 1970 (Asia, Sri Lanka), but differs from the former species by body size, length of costulae and length of notogastral setae, and from the latter species by body size, morphology of cristae and position of adanal setae ad_3. *Microtegeus khaustovi* **sp. nov.** is similar to *Microtegeus variabilis* Mahunka, 1988 (Africa, Tanzania) and *Microtegeus rugosus* Mahunka, 1982 (Africa, Ethiopia), but differs from the former species by body size, number of prodorsal tubercles, length of notogastral setae *c*, and morphology of the notogaster; from the latter species it differs by morphology of lamellar setae, the number of prodorsal tubercles, and morphology of the notogaster.

Key words.— Oribatid mites, new species, Machadobelbidae, Microtegeidae, *Machadobelba shtanchaevae*, *Microtegeus khaustovi*, Ethiopia.

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A NEW DATA ON BIOLOGY AND TAXONOMY OF *NEOTROMBICULA INOPINATA* (OUDEMANS, 1909) AND *LEPTOTROMBIDIUM RUSSICUM* (OUDEMANS, 1902) (ACARI: ACTINOTRICHIDA: TROMBICULIDAE)

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Abstract.— The results of experimental rearing of *Neotrombicula inopinata* and *Leptotrombidium russicum* and of field studies aiming at finding the hitherto unknown habitats occupied by active postlarval forms are presented. Diagnoses of deutonymphs reared from field-collected larvae of both species are provided. Literature interpretation of deutonymph of *N. inopinata* is inconsistent with the characteristics of deutonymph of *N. inopinata* obtained from larvae by experimental rearing. Larvae of *L. russicum* and *L. silvaticum* can be separated only on the base of host spectrum. Considering the biology of the parasite and host species, it is likely that postlarval forms of bat-parasitizing species may be confined to tree and cave habitats, whereas those species that are known as parasites of rodents inhabit the soil habitats.

Key words.— Parasitengona, systematics, deutonymphs, hosts, parasitism, life cycle.

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MYRMECOPHILOUS PARASITENGONA (ACARI: PROSTIGMATA) – ACCIDENT OR ADAPTATION?

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Abstract.— Hitherto data on ecological relations between terrestrial Parasitengona mites and ants are summarized and supplemented with the characteristics of two observed cases, which confirm the specific feeding adaptations of some Erythraeidae. Altogether, 21 species representing six Parasitengona families have been recorded as displaying permanent, temporary or accidental relationship with ants. Of those only the parasitic larvae of *Forania mentonensis* (André, 1929), *F. sendrai* Mayoral et Barranco, 2010, *Makolia crimeaensis* Saboori, Khaustov et Hakimitabar, 2009, *Leptus clarki* Southcott, 1989 and *L. debeauforti* (Oudemans, 1905) may be regarded as specialists. The verified diagnosis of *M. crimeaensis*, based on the material originating from Crimea (Ukraine) is proposed.

Key words.— Parasitengona, Formicidae, ecological relationship, host specificity.

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A REDESCRIPTION OF *BALAUSTIUM MURORUM* (HERMANN, 1804) (ACARI: PROSTIGMATA: ERYTHRAEIDAE) WITH NOTES ON RELATED TAXA

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Abstract.— *Balaustium murorum* (Hermann, 1804) is redescribed. Characteristics of active postlarval forms and first characteristics of larvae, supplemented with data on biology of the species, are provided. Female of *B. murorum*, from which larvae were obtained by experimental rearing, has been designated as neotype. Key characters, hitherto used by different authors in order to distinguish between members of *Balaustium* are discussed. Seventeen species known from larvae are presently assigned to *Balaustium*, at the total number of 41 members of the genus known worldwide.

Key words.— Acarology, Parasitengona, taxonomy, biology, *Balaustium*.

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FIRST DESCRIPTION OF THE LARVA OF *TRISCHIDOTHROMBIUM* FEIDER, 1952 (ACARI: ACTINOTRICHIDA: MICROTROMBIDIIDAE)

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Abstract.— *Trischidothrombium discrepans* (Willmann, 1950) is redescribed basing on postlarval instars. The larva of the genus is described for the first time. Data on habitat specificity and phenology of the species as well as on larval developmental time are given. A female, from which larvae were obtained by experimental rearing, has been designated as neotype. The distribution of the genus, hitherto known from Austria and Hungary, is extended for Poland. The phylogenetic position of *Trischidothrombium* within the Microtrombidiidae is discussed.

Key words.— Acarology, Parasitengona, taxonomy, habitat specificity, phenology, life cycle.

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CIRCANNUAL GONAD ACTIVITY IN TWO SPECIES OF THE GENUS *VESTIA* P. HESSE (GASTROPODA: PULMONATA: CLAUSILIIDAE)

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Abstract.— *Vestia gulo* and *V. turgida* are iteroparous simultaneous hermaphrodites. In the wild they are active from April till October; they reproduce in the spring and summer (egg retention from May to August), and hibernate from November till March. Their gonads show the greatest activity in the spring and summer (maturation of oocytes, intensive vitellogenesis: March–May, numerous mature oocytes: May–July; production and maturation of spermatozoa: March–May; numerous packets of mature spermatozoa: May–October), which coincides with the reproductive season. The onset of reproduction is determined by the size of the pool of vitellogenic and mature oocytes; oocyte production starts in the summer of the previous vegetation season and lasts till next spring. Mature spermatozoa are present in the gonad from spring till autumn which indicates an ability to mate during the whole active period. During hibernation the gonads contain no spermatids, mature spermatozoa or advanced vitellogenic oocytes.

Key words.— land snails, Clausiliidae, *Vestia*, species biology, ovotestis, gametogenesis.