

REVISION OF THE GENUS *THLASPIDULA* SPAETH, 1901 (COLEOPTERA: CHRYSOMELIDAE: CASSIDINAE)

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Abstract.— Species of the genus *Thlaspidula* Spaeth, 1901 are revised, keyed and figured. It comprises six species distributed from Malay Peninsula to Australia. A new species, *T. riedeli* from Irian Jaya (Indonesia, New Guinea), is described.



Key words.— Revision, new species, Coleoptera, Chrysomelidae, Cassidinae, *Thlaspidula*, Oriental Region, Australian Region.

THE PALAEARCTIC SPECIES OF THE GENUS *RHYTIDOCASSIS* SPAETH, 1941 (COLEOPTERA: CHRYSOMELIDAE: CASSIDINAE)

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Abstract.— *Rhytidocassis lopatini* sp. nov. from Iran is described, and *R. iranella* (Lopatin) comb. nov., also from Iran, is redescribed. Both are the only Palaearctic members of the genus, well distinguished from their congeners by whole surface of elytra covered with partly erect setae. An identification key to the genus *Rhytidocassis* is also given.



Key words.— Entomology, Coleoptera, Chrysomelidae, Cassidinae, *Rhytidocassis*, Iran, new species, new combination, key.

A NEW SPECIES OF THE GENUS *CAMPYLOCHETA* RONDANI, 1859 (DIPTERA: TACHINIDAE) FROM POLAND

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Abstract.— A new species *Campylocheta mariae* sp. nov. from north Poland is described. The new species can be separated from all other species of this genus by the characteristic structure of male and female postabdominalia. Habitat information, biological remarks and six drawings of the species are given.



Key words.— Diptera, Tachinidae, *Campylocheta*, new species, Biebrza National Park, Poland.

***FORMICA RUFA* L. PROTECTS INDIRECTLY *F. FUSCA* L.
AGAINST RAIDS OF *F. SANGUINEA* LATR.
(HYMENOPTERA: FORMICIDAE)**

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Abstract.— By protecting their territory against all territorial ants, *Formica rufa* L. indirectly protected *F. fusca* L., nesting within their territory, against *F. sanguinea* Latr. raids. The permanent costs to *F. fusca* caused by highly aggressive *F. rufa* within their territories were outweighed by the benefits obtained by *F. rufa*'s protection against periodic raids of *F. sanguinea*. We interpret our findings in the light of the hierarchy competitive framework as follows.



Key words.— Ants, *Formica fusca*, *F. rufa*, *F. sanguinea*, territoriality, competition hierarchy, interspecific competition, slavery.

**ON THE LARVAL MORPHOLOGY OF *APHODIUS BOREALIS*
GYLLENHAL AND *A. CORVINUS* ERICHSON
(COLEOPTERA: SCARABAEIDAE)**

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Abstract.— Larvae of two *Aphodius* Illiger species, *A. borealis* Gyllenhal and *A. corvinus* Erichson, which feed on deer and elk dung in European forests, are described and illustrated.



Key words.— Scarabaeidae, dung beetles, *Aphodius*, larvae, Europe.

ABDOMINAL TRICHOBOTHRAL PATTERN AND ITS TAXONOMIC AND PHYLOGENETIC SIGNIFICANCE IN CEPHALOCTEINAE (HEMIPTERA: HETEROPTERA: CYDNIDAE)

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Abstract.— The number and arrangements of the abdominal trichobothria of nymphs and adults in the subfamily Cephaloectinae are described and illustrated. Three types of abdominal trichobothrial patterns were recognized (contrary to all previous data indicating a single uniform type for the whole subfamily), and two different numbers of trichobothria on ventrites III–VII were recorded: 2+2 in adults of *Cephaloectus* Dufour, 1843, *Pseudostibaropus* J. A. Lis, 1991, *Scaptocoris* Perty, 1833, and *Stibaropus* Dallas, 1851; 1+1 in adults of *Schioldtella* Signoret, 1882, and *Atarsocoris* Becker, 1967. The abdominal trichobothria of the 5th instar nymphs of *Scaptocoris australis* J. A. Lis, 1999 and *Stibaropus pseudominor* J. A. Lis, 1991 were studied and their number and arrangements were found the same as for adults. The taxonomic and phylogenetic significance of the number and arrangement of abdominal trichobothria in the Cephaloectinae is briefly discussed.



Key words.— Insecta, Hemiptera, Heteroptera, Cydnidae, Cephaloectinae, morphology, abdominal trichobothria, adults, nymphs, taxonomy, phylogeny.

A COMPARATIVE STUDY OF MALE GENITALIA IN OPATRINAE SENSU MEDVEDEV (1968) (COLEOPTERA: TENEBRIONIDAE), WITH NOTES ON THE TRIBAL CLASSIFICATION. PART I.

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Abstract.— A total of 180 species (including 62 type-species of genera) of 111 genera in all the tribes and subtribes included in the Opatrinae sensu Medvedev (1968) [=Opatrini sensu Doyen and Tschinkel (1982)] have been examined. The terminology of the male genitalia within the taxon has been standardized. The use of the aedeagus structure in the classification of Tenebrionidae is discussed. Four main types of aedeagus structure in the Opatrinae have been distinguished: opatrinoid, dendaroid, platynoid and oncotinoid, as well as three additional groups of genera (blapstinoid, melanimoid and dissonomoid), whose appurtenance to the Opatrinae are debatable and requires verification.



Key words.— Entomology, taxonomy, classification, male genitalia, aedeagus, Coleoptera, Tenebrionidae, Opatrinae.

THE GENUS *CLEIDOSTETHUS* ARROW, 1929 REAPPRAISAL AND TRANSFER FROM COCCINELLIDAE TO CORYLOPHIDAE (COLEOPTERA, CUCUJOIDEA)

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Abstract.— The highly modified Cucujoid genus *Cleidostethus* Arrow, 1929 is redescribed and illustrated. The beetle is known to occur in Africa in the nests of the sting less bee *Melipona alinderi* Alfken. The systematic position of *Cleidostethus* is discussed and it is here transferred from Coccinellidae to Corylophidae, Corylophinae, Cleidostethini new tribe.



Key words.— Coleoptera, Coccinellidae, Corylophidae, *Cleidostethus*, Cleidostethini trib. nov.

PSEUDOHEGESIDEMUS, A NEW GENUS FOR *HEGESIDEMUS* *PAULLIANI* DRAKE, 1957 FROM REUNION, WITH A NEW TRIBAL ASSIGNMENT (HETEROPTERA: TINGIDAE: LITADEINI)

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Abstract.— *Pseudohegesidemus* gen. nov. for *Hegesidemus pauliani* Drake, 1957 from Reunion is described, illustrated and compared with *Ogygotingis* Drake, 1948. The species is redescribed and transferred from the tribe Tingini to Litadeini. Froeschner's (2001) key to the genera of Litadeini is expanded to include this new genus.



Key words.— Hemiptera, Heteroptera, Tingidae, Tinginae, Tingini, Litadeini, Reunion, description, taxonomy, new genus, new tribal assignment, new combination, key.

DESCRIPTIONS OF IMMATURE STAGES FOR *MEGISCHYRUS* (EROTYLIDAE: TRITOMINAE) AND A REVIEW OF LITERATURE ON LARVAL EROTYLIDAE

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Abstract.— The first descriptions of immature stages for the genus *Megischyrus* Crotch are provided. Descriptions are given for the final larval instar of *Megischyrus discipennis* Lacordaire and a *Megischyrus* species tentatively identified as *M. nicaraguae* Crotch. The egg of *M. discipennis* is briefly characterized. The descriptive literature on larval Erotylidae is reviewed.



Key words.— Coleoptera, Cucujoidea, larva, larvae, morphology, taxonomy, systematics.

A NEW *FOLSOMIDES* STACH, 1922 FROM NORTH VIETNAM (COLLEMBOLA: ISOTOMIDAE)

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Abstract.— *Folsomides viridescens* sp. nov. is described and illustrated. Taxonomic remarks are given.



Key words.— Entomology, taxonomy, Collembola, Isotomidae, *Folsomides*, new species, North Vietnam.

THE PLACEMENT OF *PERIPTYCTUS* BLACKBURN IN CORYLOPHIDAE (COLEOPTERA: CUCUJOIDEA) WITH DESCRIPTIONS OF A NEW GENUS AND SUBFAMILY

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Abstract.— *Periptyctus* Blackburn, 1895 is redescribed and transferred from Endomychidae to Corylophidae, Periptyctinae **subfam. nov.** *Pakalukodes* **gen. nov.** (type species: *P. bimaculatus* **sp. nov.**) is described from Queensland (Australia) and placed in Periptyctinae. Selected adult and larval features characterizing the subfamily are compared with those of other corylophid taxa and with members of the families Coccinellidae, Endomychidae and Latridiidae.



Key words.— Coleoptera, Corylophidae, Endomychidae, Coccinellidae, Periptyctinae **subfam. nov.**, *Pakalukodes* **gen. nov.**

A NEW SPECIES OF *ISOTOMIELLA* BAGNALL, 1939 (COLLEMBOLA: ISOTOMIDAE) FROM WETLAND AREAS OF POLAND

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Abstract.— *Isotomiella hygrophila* **sp. nov.** from the Biebrza ice-marginal valley in NE Poland is described. Notes on distribution and systematic relationship are given.



Key words.— Collembola, *Isotomiella hygrophila* **sp. nov.**, wetlands, Biebrza National Park, Poland.

***PYRENAEIBUFONARIA* GEN. NOV. FROM THE PYRENEES (HEMIPTERA: MEMBRACOIDEA: ULOPIDAE)**

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Abstract.— A description of *Pyrenaeibufonaria* **gen. nov.** with the type species *Neobufonaria louisaraphaeli* della Giustina and Blasco-Zumeta from the Pyrenees is given. Its taxonomic position, morphological characters and affinities with the genus *Neobufonaria* Koçak, known from the mountains of Central Asia, is discussed.



Key words.— *Pyrenaeibufonaria* **gen. nov.**, *Neobufonaria* Koç., *Neobufonaria louisaraphaeli* d G. et Bl.-Z., Ulopidae, zoogeography, morphology.

***MACROCOMA HORMUZIACA* SP. NOV., A NEW EUMOLPINAE- SPECIES FROM IRAN (COLEOPTERA: CHRYSOMELIDAE)**

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Abstract.— A new species, *Macrocoma hormuziaca* **sp. nov.** from Iran is described and illustrated.



Key words.— Entomology, Coleoptera, *Macrocoma*, new species, Iran, description.