

**SOME OBSERVATIONS ON *CAMPYDORA* COBB, 1920
(NEMATODA), WITH DESCRIPTION OF MALE *CAMPYDORA*
DEMONSTRANS COBB, 1920**

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Abstract.— Redescription of *Campydora demonstrans* Cobb, 1920 is provided. Male is described and illustrated for the first time in the genus; it is characterized by one testis, presence of caudal alae and gubernaculum. Observations on this species are given on the basis of material collected in Poland.



Key words.— Nematodes, *Campydora*, taxonomy, Poland.

DESCRIPTION OF *ASPIDONEMA SCHEUCHERAE* (SACHS, 1949) ANDRÁSSY, 1958 FROM TURKEY (NEMATODA: BUNONEMATIDAE)

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Abstract.— The description of a population of *Aspidonema scheucherae* (Sachs, 1949) from Turkey is provided on the base of light and scanning electron microscopy. Comparison of the structure of cuticular ornamentation as seen under the light microscope and SEM is given. The use of the characters of the cuticular ornamentation in the phylogenetic and taxonomical studies of the group is discussed.



Key words.— *Aspidonema*, Bunonematidae, Nematoda, morphology, SEM.

ON TWO NEW SPECIES OF THE MILLIPEDE FAMILY
PARADOXOSOMATIDAE FROM JAVA, INDONESIA,
WITH REVIEWS OF THE GENERA *OPISTHODOLICHOPUS*
VERHOEFF, 1941 AND *NESORTHOMORPHA* JEEKEL, 1980
(DIPLOPODA: POLYDESMIDA)

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Abstract.— Two new paradoxosomatid species are described from Java, Indonesia: *Opisthodolichopus similis* **sp. nov.**, differing from congeners in the usually non-contrasting colour pattern combined with the presence of male tarsal brushes, the particularly high sternal lamina between the male coxae 4, the absence of pleurosternal carinae from somite 8 on, and in certain minor details of gonopod structure, and *Nesorthomorpha communis* **sp. nov.**, distinguished from congeners in the absence of a colour pattern combined with smooth teguments, the particularly high and distally enlarged sternal lamina between the male coxae 4, the well-developed and caudally produced paraterga, the pleurosternal carinae present until somite 7, the apically emarginate epiproct, the trapeziform subanal scale, and certain minor details of gonopod structure. Reviews of both *Opisthodolichopus* Verhoeff, 1941 and *Nesorthomorpha* Jeekel, 1980 are presented, and keys to all their species given.



Key words.— Diplopoda, Paradoxosomatidae, taxonomy, new species, Java, Indonesia

***QUISQUEYAAPHIS HEIEI* GEN. AND SP. NOV. (HEMIPTERA:
APHIDINEA: GREENIDEIDAE), NEW SPECIES OF APHID
FROM DOMINICAN AMBER**

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Abstract.— *Quisqueyaaphis heiei* **gen. and sp. nov.** is the third aphid species (the other two are *Mindazerius dominicanus* Heie et Poinar, 1988 and *Dominicaphis succini* Heie et Poinar 1999) known from Oligocene/Miocene amber of the Dominican Republic. *Q. heiei* **gen. and sp. nov.** belongs to the recent family Greenideidae, which has not yet been represented in amber inclusions.



Key words.— *Quisqueyaaphis heiei*, new genus, new species, Greenideidae, Oligocene/Miocene Dominican amber, fossils, Aphidinea, Hemiptera.

THE FIRST RECORD OF FOSSIL MILEEWINAE FROM EOCENE BALTIC AMBER (HEMIPTERA: MEMBRACOIDEA: CICADELLIDAE)

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Abstract.— The first record of fossil representatives of Mileewinae (Hemiptera: Membracoidea: Cicadellidae), from Eocene Baltic amber is given. *Youngeewa bicolorata* **gen. and sp. nov.** and *Eomileewa eridani* **gen. and sp. nov.** are described and their taxonomic features are discussed



Key words.— *Youngeewa bicolorata*, *Eomileewa eridani*, new genus, new species, Mileewinae, Eocene Baltic amber, taxonomy, phylogeny, *Orsalebra robusta*.

***CANTACADER IRANICUS* SP. NOV. FROM IRAN WITH REMARKS
AND A KEY TO THE WEST PALAEARCTIC SPECIES OF THE
GENUS *CANTACADER* AMYOT ET SERVILLE, 1843
(HEMIPTERA: TINGOIDEA: CANTACADERIDAE)**

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Abstract.— *Cantacader iranicus* sp. nov. from Iran is described, illustrated and compared with *Cantacader tenuipes* Stål, 1866. *Cantacader curtulus* Linnavuori, 1977 is synonymized with *Cantacader divisus* Bergroth, 1908, and *Cantacader angulipennis* Horváth, 1906 with *Cantacader laticollis* Horváth, 1906. Lectotype is designated for *Taphrostethus staudingeri* Baerensprung, 1858. *Cantacader divisus* Bergroth is recorded for the first time from Egypt, *Cantacader quadricornis* (Lepeletier et Serville) from Tunisia, and *Cantacader tenuipes* Stål from Saudi Arabia. Notes and corrections of the data regarding the genus *Cantacader* Amyot et Serville, 1843 in the “Catalogue of the Heteroptera of the Palaearctic Region” are given. A key to all West Palaearctic species of the genus is also provided.



Key words.— Insecta, Hemiptera, Heteroptera, Cantacaderidae, new synonyms, taxonomy, new species, key, West Palaearctic, Iran.

METATHORACIC WINGS VENATION IN CYDNIDAE (HEMIPTERA: HETEROPTERA) AND ITS BEARING ON THE CLASSIFICATION OF THE FAMILY

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Abstract.— The metathoracic wings venation in 160 species representing 65 genera of Cydnidae is studied, described and figured. Three main types of venational pattern are recognised, contrary to five types proposed by Froeschner (1960); the taxonomic and phylogenetic significance of the hindwing venation in the Cydnidae is briefly discussed. The metathoracic wing venation in Cydnidae is also compared with that known for other families of Pentatomoidea. Synapomorphies found in the structure and venation of six genera (*Garsauria*, *Garsauriella*, *Blaena*, *Peltozys*, *Nishadana*, *Nishocoris*) allowed treating them as a natural evolutionary group. As a consequence, *Nishadana* Distant, 1899 and *Nishocoris* J. A. Lis, 1997 are proposed to transfer from Cydninae to Garsauriinae.



Key words.— Insecta, Hemiptera, Heteroptera, Pentatomoidea, Cydnidae, Parastrachiidae, *Dismegistus*, morphology, metathoracic wings, taxonomy, classification, phylogeny.

ABDOMINAL TRICHOBOTHRAL PATTERN AND ITS TAXONOMIC AND PHYLOGENETIC SIGNIFICANCE IN CYDNIDAE (HEMIPTERA: HETEROPTERA). II. AMNESTINAE AND GARSURIINAE

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Abstract.— The paper present results of the studies on the abdominal trichobothria in two sub-families of Cydnidae, namely Amnestinae and Garsauriinae; their number and arrangements in adults are described and illustrated. Two types of abdominal trichobothrial patterns were recognized in Amnestinae, and a single type in Garsauriinae. The abdominal trichobothria of the 3rd–5th instar nymphs of *Garsauriella haglundi* (Bergroth) were also studied and their number and arrangements were found the same as for adults. The results of the study (supported by unpublished data on the spermathecae and mesothoracic wings venation) allowed to transfer *Blaena* Walker, 1868 and *Peltoxys* Signoret, 1880 from the subfamily Cydninae to the Garsauriinae. The taxonomic and phylogenetic significance of the abdominal trichobothria in Amnestinae and Garsauriinae is briefly discussed.



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

HEAD STRUCTURES OF ADULTS OF *SPERCHEUS* (COLEOPTERA: SPERCHEIDAE): THEIR FUNCTION AND POSSIBLE SIGNIFICANCE TO STAPHYLINIFORM PHYLOGENY

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Abstract.— Internal and external head structures of adults of Hydrophiloidea and some other representatives of Staphyliniformia were examined. The head of *Spercheus cerisyi* is described in detail. A functional interpretation is presented and character states are compared to those found in other members of staphyliniform families. The head of adults of *Spercheus* is characterised by many autapomorphic features, which are partly correlated with the unusual filter feeding habits. Dense clypeal, labral and premental fringes of hairs, modifications of the apical parts of the maxilla, tubular glands in the labrum and labium, and the proventriculus are autapomorphies of Spercheidae. Antennae with breathing function, a large, plate-like mentum and a fimbriate galea are derived features shared by adults of Hydraenidae and adults of Hydrophiloidea. The presence of tube-like mandibular glands is a potential synapomorphy of Hydrophiloidea and Histeroidea (= Hydrophiloidea s. Lawrence and Newton 1995). A labio-hypopharyngeal complex, which is strongly narrowed between the maxillae, with the mesal walls attached to each other, is a characteristic feature of adults of Staphyliniformia. A preoral feeding apparatus with mandibles with a pubescent subapical lobe, ventromesal longitudinal brush and a large mola, a median ridge of the epipharynx, and a median ridge or process of the hypopharynx is considered as a ground-plan feature of a clade comprising Myxophaga and Polyphaga.



Key words.— Head morphology, Hydrophiloidea, *Spercheus cerisyi*, filter feeding, phylogeny

A REVIEW OF THE GENUS *BOLBOMORPHUS* GORHAM, 1887 (COLEOPTERA: ENDOMYCHIDAE)

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Abstract.— World species of the genus *Bolbomorphus* are reviewed, keyed and illustrated. *Bolbomorphus quadriguttatus* Mader, 1938 is synonymized with *Bolbomorphus serpunctatus* Arrow, 1920 and *Bolbomorphus undulatus* Pic, 1925 with *Bolbomorphus mediojunctus* (Pic, 1921). The lectotypes are designated for *Bolbomorphus gibbosus* Gorham, *B. theryi* Gorham, *B. subovatus* Pic and *Eucteanus* (= *Bolbomorphus*) *mediojunctus* var. *disjunctus* Mader. *Bolbomorphus subovatus* Pic is transferred to the genus *Eucteanus*. Distribution, nomenclatural history and diagnoses are provided for each species. *Bolbomorphus chinensis* Mader, is treated here as species *incertae sedis*, because of unavailable material.



Key words.— Entomology, taxonomy, revision, Coleoptera, Cucujoidea, Endomychidae, *Bolbomorphus*.

SYSTEMATICS OF THE MADAGASCAN GENERA *CLASTOPUS* FAIRMAIRE, 1898 AND *LECHIUS* IWAN, 1995 (COLEOPTERA: TENEBRIONIDAE: PLATYNOTINI)

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Abstract.— Two Madagascan genera of the Platynotini are revised: *Clastopus* Fairmaire, 1898 and *Lechius* Iwan, 1995. New synonymies are proposed: *Clastopus eurynotoides* Fairmaire, 1898 [type species of monotypic *Clastopus* Fairmaire] (= *Selinus punctipennis* Fairmaire, 1902) [type species of *Hovademulus* Iwan], and consequently *Clastopus* Fairmaire, 1898 (= *Hovademulus* Iwan, 1995). *Hovademulus madagascariensis* Iwan, 1998 is reinterpreted and transferred to the genus *Lechius* Iwan, 1995. Keys for species determination are provided.



Key words.— Coleoptera, Tenebrionidae, Platynotini, *Clastopus*, *Lechius*, new synonymies, Madagascar.

**TWO NEW SPECIES OF *BANTODEMUS* KOCH, 1955
(COLEOPTERA: TENEBRIONIDAE: PLATYNOTINI)
FROM SOUTH AFRICA**

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Abstract.— *Bantodemus rudebecki* sp. nov. and *B. montanus* sp. nov. are described and illustrated. The species belong to the generic group of trigonopoid Platynotina from South Africa.



Key words.— Coleoptera, Tenebrionidae, Platynotini, *Bantodemus*, new species, South Africa.

TAXONOMIC NOTES ON THE GENUS *ZOPHOHELOPS*
REITTER, 1901 WITH DESCRIPTION OF A NEW SPECIES
FROM TADZHIKISTAN AND A NEW GENUS
PSEUDOPROBATICUS GEN. NOV.
(COLEOPTERA: TENEBRIONIDAE: HELOPINI)

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Abstract.— A new species *Zophohelops michajlovi* **sp. nov.** is described from Tadjhikistan. Generic position of *Zophohelops humeridens* (Rtt.), **comb. nov.** is specified. Genus *Zophohelops* has found to be distributed not only in Tien-Shan, but also in Hissaro-Darvaz and Southern Armenia. A new genus *Pseudoprobaticus* **gen. nov.** (type species *Helops granipennis* Allard, 1876) is described. Relationships and position of the new genus in tribe *Helopini* is discussed.



Key words.— Coleoptera, Tenebrionidae, Helopini, *Zophohelops*, new species, Tadjhikistan, *Pseudoprobaticus*, new genus, taxonomy, distribution.

REMARKS ON JUMPING SPIDERS OF THE GENUS *DAMOETAS* RELATED TO *MYRMARACHNE* (ARANEAE: SALTICIDAE) WITH DESCRIPTION OF TWO NEW SPECIES

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Abstract.— The genus *Damoetas* Peckham et Peckham, 1908, a non ant-like jumping spider, is suggested as a sister genus to the ant-like *Myrmarachne* MacLeay, 1839. The relative importance of taxonomic characters is discussed. Two new species of *Damoetas*: *D. christae* and *D. galianoae* from Borneo are described.



Key words.— Jumping spiders, Salticidae, ant-like, *Damoetas*, *Myrmarachne*, taxonomy.

A NEW GENUS OF ANT-LIKE JUMPING SPIDER FROM AFRICA (ARANEAE: SALTICIDAE)

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Abstract.— *Eburneana*, **new genus** of ant-like salticid is described. This genus includes two species: *E. magna* **sp. nov.** from western Ivory Coast and *E. scharffi* **sp. nov.** from eastern Tanzania.



Key words.— Arachnology, Araneae, Salticidae, new genus and species, ant mimicry, Afrotropical Region.