

# NEMATODES PARASITES OF TESTUDINIDAE (CHELONIA): LIST OF SPECIES AND BIOGEOGRAPHICAL DISTRIBUTION

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**Abstract.**— One hundred and four Nematodes parasites of Testudinidae have been recorded. A list of all valid species within orders, superfamily, family and genus are given. For each species the host-type, locality-type and other records are presented. The subspecies are raised to level of species. The highest number of taxonomic studies concerned the Palaearctic region and the Ethiopian region; but a lower number of studies were devoted to the other regions: Oriental, Neotropical and the Nearctic. The parasite species diversity of nematodes seems to be linked to the species diversity of hosts. A good significant relationship between the number of taxonomic studies and the species diversity of hosts was noted and a significant relationship between the species diversity of parasites and the generic diversity of the parasites was also observed. The host specificity does not differ between the oxyurida species and the ascaridida species.



**Key words.**— Nematoda, Oxyurida, Ascaridida, Testudinidae, biogeographical distribution, relationship.

# TWO NEW SPECIES OF THE GENUS *PRIONCHULUS* COBB, 1916 (NEMATODA: MONONCHINA)

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**Abstract.**— *Prionchulus hygrophilus* sp. nov. and *P. bogdanowiczi* sp. nov. are described based on the material collected from Ukraine and Taiwan.



**Key words.**— Taxonomy, new species, Nematoda, *Prionchulus*, Taiwan, Ukraine.

# FOUR NEW EARTHWORM SPECIES BELONGING TO *AMYNTHAS* KINBERG AND *METAPHIRE* SIMS ET EASTON (MEGASCOLECIDAE: OLIGOCHAETA) FROM GUANGDONG, CHINA

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**Abstract.**— In this study, we described two new species of the genus *Amynthas* with one pair of spermathecal pores in segment 8/9 from the riparian forest in Mt. Dinghu and two new *Metaphire* species with two pairs of spermathecal pores in segment 6/7–7/8 from a coniferous forest and an evergreen broadleaf forest in the Dadingshan station of the Nanling National Natural Reserve, Guangdong, China. The former two *Amynthas* species appear to be closely related to *A. antefixus* (Gates, 1935), Sichuan, China. However, *A. dinghumontis* is much smaller, and its slightly convex ellipse-shaped male porophores are in XVIII or XVII about 0.17–0.25 body circumferences ventrally apart. In addition, there is always a slight twist at about midway of the spermathecal duct from where the slender, twisted diverticulum passed into. Finally, there are no genital markings or papillae in male pore and spermathecal pore regions, instead of the presence of a median, presetal genital marking at the midventral line on segments III, IV and V as in *A. antefixus*. As to *Amynthas liaoi* sp. nov., it is characterized by the constant presence of two horizontal rows of three to eight presetal and postsetal papillae in segment XVIII, and one horizontal row of about five postsetal papillae in segment IX. The ampulla shape and size are also different between this new species and *A. antefixus*. The two *Metaphire* species are *M. nanlingmontis* sp. nov. and *M. dadingmontis* sp. nov. *M. nanlingmontis* sp. nov. appears to be related to *M. jianfengensis* (Quan, 1985). They have the same spermathecal pore number and position, and similar male pore copulatory chambers. However, *M. nanlingmontis* is much smaller in body size than *M. jianfengensis*. In addition, there is a special ring-like swelling at the border between the duct and the chamber in the spermathecal diverticulum, and a mushroom-like accessory gland present beside the duct. *M. dadingmontis* sp. nov. appears to be closely related to *M. nanlingmontis* sp. nov. However, it is also easy to distinguish them from their different diverticulum shape and accessory genital glands in prostatic region. A comparison among the 10 similar *Metaphire* species with two pairs of spermathecae in VII and VIII has been made.



**Key words.**— Earthworms, *Amynthas*, *Metaphire*, Megascolecidae, Mt. Dinghu, Nanling mountain range China, new species.

# A NEW SPECIES OF THE GENUS *ANURIDA* LABOULBÉNE, 1865 FROM RIVER FLOODPLAINS OF POLAND (COLLEMBOLA: NEANURIDAE)

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**Abstract.**— *Anurida riverina* sp. nov. from river floodplains of Poland is described. Notes on distribution and systematic relationship are given.



**Key words.**— Collembola, Neanuridae, *Anurida riverina*, new species, wetlands, floodplains, “Ujście Warty” National Park.

THREE NEW SPECIES AND A NEW RECORD OF  
*APOPHYLLIA* THOMSON, 1858 FROM EASTERN INDIA  
(COLEOPTERA: CHRYSOMELIDAE: GALERUCINAE)

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**Abstract.**— Three new *Apophyllia* species (*A. pesai*, *A. halberstadtii* and *A. dembickyi* spp. nov.) are described from Indian provinces Meghalaya, Assam and Arunachal Pradesh. *Apophyllia vietnamica* Samoderzhenkov, 1988, is recorded for the first time in India. Male genitalia are figured for all species.



**Key words.**— Taxonomy, new species, Coleoptera, Chrysomelidae, Galerucinae, *Apophyllia*, Oriental Region.

# REVISION OF THE AUSTRALIAN COCCINELLIDAE (COLEOPTERA). PART 6. TRIBE CHILOCORINI

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**Abstract.**— The Australian members of the coccinellid tribe Chilacorini are revised, keyed and illustrated. Chilacorini in Australia consists of 23 species classified in 6 genera: *Brumoides*, *Chilocorus*, *Erochomus*, *Halmus*, *Orcus* and *Trichorcus*. Five new species are described: *Brumoides piae*, *Chilocorus maculatus*, *Chilocorus micrus*, *Halmus hilli* and *Halmus viridis*. The following new synonyms are proposed: *Chilocorus malasiae* Crotch, 1874 (= *Chilocorus australasiae* Gadeau de Kerville, 1884; = *Chilocorus baileyi* Blackburn, 1890; = *Chilocorus flavidus* Blackburn, 1892b; = *Chilocorus diadema* Weise, 1898; = *Chilocorus meijerei* Weise, 1913; = *Chilocorus nasicornis* Korschevsky, 1944); *Orcus coelestris* Blackburn, 1891 (= *Orcus ovalis* Blackburn, 1892b; = *Orcus splendens* Blackburn, 1892b; = *Orcus clypeatus* Weise, 1923); *Orcus citri* Lea, 1902 (= *Orcus coxalis* Weise, 1917); *Orcus cyanocephalus* Mulsant, 1850 (= *Orcus lecanii* Blackburn, 1895; = *Orcus purpureocinctus* Lea, 1902); *Orcus punctulatus* Blackburn, 1892b (= *O. beneficus* Weise, 1913). *Parapriasmus* Chapin, 1965 is also considered as a synonym of *Orcus* Mulsant, 1850. Lectotypes are designated for: *Chilocorus australasiae* Gadeau de Kerville, 1884; *Ch. baileyi* Blackburn, 1890; *Ch. flavidus* Blackburn, 1892b; *Halmus cupripennis* Weise, 1923; *Orcus beneficus* Weise, 1913; *Orcus coelestris* Blackburn, 1891; *Orcus citri* Lea, 1902; *Orcus clypeatus* Weise, 1923; *Orcus coxalis* Weise, 1917; *Orcus evelynensis* Weise, 1923; *Orcus lecanii* Blackburn, 1895; *Orcus ovalis* Blackburn, 1892b; *Orcus punctulatus* Blackburn, 1892b, *Orcus purpureotinctus* Lea, 1902; *Orcus quadrimaculatus* Gadeau de Kerville, 1884 and *Orcus splendens* Blackburn, 1892b.



**Key words.**— Coleoptera, Cucujoidea, Coccinellidae, Chilacorini, revision, Australia.

**REVISION OF THE EURYBRACHIDAE (VI).  
THE AUSTRALIAN GENUS *NIRUS* JACOBI, 1928  
(HEMIPTERA: FULGOROMORPHA: EURYBRACHIDAE)**

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**Abstract.**— The Australian genus of Eurybrachidae (Hemiptera: Fulgoromorpha) *Nirus* Jacobi, 1928 is redescribed and reviewed. Lectotype and paralectotype for *Nirus corticeus* Jacobi, 1928 are designated. The male genitalia is illustrated and photos of habitus and distribution map are provided.



**Key words.**— Australian region, Eurybrachidae, revision, *Nirus*, lectotype, paralectotype.

A NEW SPECIES OF *CHILLCOTTOMYIA* FROM  
GUIZHOU, WITH A KEY TO SPECIES FROM CHINA  
(DIPTERA: EMPIDOIDEA: HYBOTINAE)

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**Abstract.**— The genus *Chillcottomyia* Saigusa is recorded from Guizhou, China for the first time. One species is described as new to science: *Chillcottomyia zhuae* **sp. nov.** A key to the species of the genus from China is presented for the first time.



**Key words.**— Diptera, Empididae, *Chillcottomyia*, new species, Guizhou, Southwest China



# NEW SPECIES OF *TEUCHOPHORUS* FROM CHINA (DIPTERA: DOLICHOPODIDAE)

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**Abstract.**— The following three new species are described from China: *Teuchophorus guangdongensis* Wang, Yang et Grootaert, **sp. nov.**, *T. yingdensis* Wang, Yang et Grootaert, **sp. nov.**, and *T. zhuae* Wang, Yang et Grootaert, **sp. nov.** *Teuchophorus ussuriamus* Negrobov, Grichanov et Shamshev, is recorded from China for the first time. A key to separate the Chinese species is presented.



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

# A NEW SPECIES OF *PARAMEDETERA*, WITH A KEY TO SPECIES FROM CHINA (DIPTERA: DOLICHOPODIDAE)

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**Abstract.**— *Paramedetera elongata* **sp. nov.** from China is described and illustrated. A key to the species of the genus from China is presented.



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

**SPECIES OF THE GENUS *MICROCHELONUS*  
SZÉPLIGETI, 1908 WITH VERY SMALL APICAL  
METASOMAL APERTURE IN MALES (HYMENOPTERA:  
BRACONIDAE: CHELONINAE)**

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**Abstract.**— Four Palearctic species of the genus *Microchelonus* Szépligeti, 1908 with very small apical metasomal aperture in males are reviewed. Both the male and the female of *Microchelonus minifossa* Tobias, 1986 and *M. luzhetzkji* (Tobias, 1966) are redescribed. Males of two species (females unknown), *M. vickae* **sp. nov.** and *M. gracilis* **sp. nov.**, are described from Central Europe (Czech Republic).



**Key words.**— Hymenoptera, Braconidae, *Microchelonus*, Palearctic, redescrptions, new species.

# ON SPECIES OF THE GENUS *THERMOCYCLOPS* (COPEPODA: CYCLOPIDAE) OCCURRING IN NORTHERN QUEENSLAND, AUSTRALIA

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**Abstract.**— The paper reports on the occurrence of five *Thermocyclops* species in urban subterranean habitats in North Queensland, Australia: *T. crucis* **sp. nov.**, *T. pseudoperculifer* **sp. nov.**, *T. rylovi* (Smirnov), *T. crassus* (Fischer), and *T. decipiens* (Kiefer). Females and males of *T. operculifer* (Kiefer), a supposedly close relative of the Australian taxon *T. pseudoperculifer*, is redescribed based on the holotype (Lombok) and non-type material (Sulawesi) from Indonesia. *Thermocyclops crucis* **sp. nov.** and *T. pseudoperculifer* **sp. nov.** (tropical coast of Queensland) share the caudally spinulose ornamentation of P2–P4 couplers and bare P1 coupler with *T. operculifer* (Indonesia: Lombok, Sulawesi) and *T. uenoi* (Japan: Kyushu, Tomogashima Island). Diagnostic values of the morphological characters used to define the ‘*schmeili*-group’ sensu Mirabdullayev and Fiers, to which both new Australian taxa might be allocated, are discussed. Finding of *T. rylovi* known so far from East Africa, Central and South Asia, in a semiarid inland locality in Queensland, is the first record of the species in Australia. Descriptions and illustrations of the diagnostic characters of *T. crassus* and *T. decipiens* are provided, and the morphology of the Australian specimens is compared with that in the European and Southeast Asian representatives. An identification key to all *Thermocyclops* species occurring in Australia is added.



**Key words.**— Copepoda, Cyclopidae, *Thermocyclops*, taxonomy, *operculifer*-group, Australia.

# REDESCRIPTION OF *THERMOCYCLOPS KAWAMURAI* KIKUCHI, 1940 (COPEPODA: CYCLOPOIDA)

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**Abstract.**— *Thermocyclops kawamurai* Kikuchi, 1940, a poorly-known cyclopoid from northern China is redescribed. Data on variability are given. Proposed synonymy of *T. kawamurai* Kikuchi, 1940 and *Thermocyclops orientalis* Dussart et Fernando, 1985 (Defaye *et al.* 1988) is rejected.



**Key words.**— Copepoda, Cyclopidae, *Thermocyclops kawamurai*, redescription, China.

# A REVISION OF THE SPIDER GENUS *OHILIMIA* STRAND, 1911 (ARANEAE: SALTICIDAE)

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**Abstract.**— The genus *Ohilimia* Strand is revised to include *O. scutellata* (Kritscher, 1959) and *O. albomaculata* (Thorell, 1881) comb. nov. Both species are diagnosed, described and illustrated. A key to the species and map of distribution are given. *Diolenius venustus* Thorell, 1881, *Diolenius bifasciatus* Thorell, 1881 and *Discocnemius coccineopilosus* Simon, 1884 are newly synonymised with *Ohilimia albomaculata* (Thorell, 1881). *Diolenius vittatus* Thorell, 1881 and *Discocnemius albocingulatus* Simon, 1884 are transferred to *Ohilimia*, but considered nomina dubia. The genus is closely related to *Diolenius* Thorell, 1870 and *Chalcolecta* Simon, 1884. Its range is restricted to rain forests of NE Cape York Peninsula in Australia, New Guinea and The Moluccas (Ternate, Kai).



**Key words.**— Salticidae, *Ohilimia*, taxonomy, new synonyms, Australia, New Guinea, The Moluccas.

# A REVISION OF THE SPIDER GENUS *DIOLENIUS* THORELL, 1870 (ARANEAE: SALTICIDAE)

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**Abstract.**— The genus *Diolenius* Thorell is revised to include 14 species, 9 of them new to science. *Diolenius carinifer* Strand is synonymised with *D. armatissimus* Thorell. A female of *D. armatissimus* is described for the first time. *Diolenius bicinctus* Simon is considered *nomen dubium*. Four species: *D. albomaculatus* Thorell, *D. bifasciatus* Thorell, *D. venustus* Thorell and *D. vittatus* Thorell hitherto included in *Diolenius* are transferred to *Ohilimia*. For *D. phrynoides* a neotype specimen is designated. All species of *Diolenius sensu stricto* are diagnosed, described and illustrated. A key to the species of *Diolenius* and distributional maps are provided. The genus is closely related to *Chalcolecta* Simon, 1884 and *Ohilimia* Strand, 1911 and its range is restricted to rain forests of New Guinea, New Britain, The Moluccas and some adjacent islands.



**Key words.**— Araneae, Salticidae, *Diolenius*, Dioleninae, taxonomy, New Guinea, New Britain, The Moluccas.

**A NEW GENUS OF ANT-MIMICKING SALTICID  
SPIDER FROM AFRICA (ARANEAE: SALTICIDAE:  
LEPTORCHESTINAE)**

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**Abstract.**— *Ugandinella*, new genus of ant-like salticid is described. The genus includes one species, *Ugandinella formicula* **sp. nov.** from Uganda.



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



***SPHAERODERMA ANCORA*, A NEW ASIAN SPECIES  
OF THE SUBFAMILY ALTICINAE (INSECTA:  
COLEOPTERA: CHRYSOMELIDAE)**

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**Abstract.**— *Sphaeroderma ancora*, **sp. nov.** from Vietnam is described and illustrated.



**Key words.**— Entomology, Coleoptera, *Sphaeroderma ancora*, Vietnam, new species, description.