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**Systematics and phylogenetic relationships of Whip snakes (*Hierophis* Fitzinger) and *Zamenis andreana* Werner, 1917  
(Reptilia: Squamata: Colubrinae)**

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**Systematics and phylogenetic relationships of Whip snakes (*Hierophis* Fitzinger) and *Zamenis andreana* Werner, 1917.** - Morphological and molecular data of *Coluber* (sensu lato) *andreas* and all recognised species of the Palearctic whip snake genus *Hierophis* Fitzinger are presented. Morphologically, Andreas' racer shows remarkable similarities to dwarf snakes (*Eirenis* spp., *Pseudocyclophis persicus*). Derived conditions of head and body pholidosis including dorsal scale reduction pattern and the number of apical pits separate *Eirenis* Jan and *C. (s.l.) andreas* from *Hierophis* spp. Character states strongly support sister group relationship of dwarf snakes to Andreas' racer. Molecular analyses confirm monophyly of *Hierophis* spp., *C. (s.l.) andreas*, and dwarf snakes of the genus *Eirenis*, and paraphyly of *Hierophis* auct. MtDNA sequences indicate a basal position of the eastern Palearctic *H. spinalis* vis-à-vis the western species group (*H. cypriensis*, *H. gemonensis*, *H. viridiflavus*). These taxa belong to an early radiation within whip and dwarf snakes. The eastern Mediterranean *H. caspius*, *H. jugularis*, and *H. schmidtii* appear to represent a paraphyletic grouping including *C. (s.l.) andreas* (12S rDNA sequence data). Conflicting molecular and morphological results are discussed and the character phylogeny of external morphological features is reassessed.

**Keywords:** *Coluber (s.l.) andreas* - *Eirenis* - *Hierophis* - morphology - osteology - hemipenis - transformation series - phylogeny - mtDNA.

**Three new species of the genus *Gammarus* from tributaries of the Ili River, China (Crustacea, Amphipoda, Gammaridae)**

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**Three new species of the genus *Gammarus* from tributaries of the Ili River, China (Crustacea, Amphipoda, Gammaridae).** - Three new species of the genus *Gammarus* are

described on the base of specimens collected from Ili River, Xinjiang, China. *Gammarus montanus* sp. n. is characterized by uropod 3 armed with long simple setae and antenna 2 lacking calceoli; *G. brevipodus* sp. n. is distinguished by the peduncle of antenna 2 with long setae along both margins and inner ramus of uropod 3 about one-third of outer ramus. *G. takesensis* sp. n. differs from *G. brevipodus* sp. n. by inner ramus of uropod 3 reaching three-fourths of outer ramus. Distribution data on these gammarids are also presented.

**Keywords:** Amphipoda - *Gammarus* - taxonomy - Ili River - China.

## **Neue orientalische Arten der Gattung *Stenus* Latreille aus dem Genfer Museum (Coleoptera: Staphylinidae)**

### **284. Beitrag zur Kenntnis der Steninen**

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**New Oriental species of the genus *Stenus* Latreille from the Geneva Museum (Coleoptera: Staphylinidae). 284<sup>th</sup> Contribution to the knowledge of Steninae.** - Description of 11 new species: *Stenus (Hemistenus) agostii* sp. n. (Sumatra), *S. (Hemistenus) croceipennis* sp. n. (Sumatra), *S. (s. str.) cuccodoroi* sp. n. (Papua New Guinea), *S. (Hypostenus) exsecratus* sp. n. (Sulawesi), *S. (Hypostenus) kaibesarensis* sp. n. (Moluccas: Kai Besar), *S. (Hypostenus) kerincimontis* sp. n. (Sumatra), *S. (Hemistenus) kurbatovi* sp. n. (Burma), *S. (Hypostenus) radulipenis* sp. n. (Thailand), *S. (s. str.) sannifer* (Java, Lombok), *S. (Hemistenus) schwendingeri* sp. n. (Thailand) and *S. (Hypostenus) tanimbarensis* sp. n. (Moluccas: Tanimbar).

**Keywords:** Coleoptera - Staphylinidae - *Stenus* - taxonomy.

## ***Nesticella marapu* sp. n., a blind nesticid (Araneae: Nesticidae) from Sumba, Indonesia**

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***Nesticella marapu* sp. n., a blind nesticid (Araneae: Nesticidae) from Sumba, Indonesia.** - A new species of the genus *Nesticella* is described from both sexes. It is characterised by the presence of a beak-shaped paracymbium. It has long legs and weak pigmentation but lacks eyes.

**Keywords:** *Nesticella* - Nesticidae - new species - troglobit - caves.

***Dikerogammarus villosus* (Crustacea: Amphipoda):  
another invasive species in Lake Geneva**

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***Dikerogammarus villosus* (Crustacea: Amphipoda): another invasive species in Lake Geneva.** - According to field observations performed in 2002 and 2003, the amphipod species *Dikerogammarus villosus* (Sowinsky, 1894) is now well established in Lake Geneva. The author predicts that this and future invasions by *D. villosus* will have serious effects on freshwater ecosystems.

**Keywords:** *Dikerogammarus villosus* - amphipod - biological invasion - ecological impact.

**Revision of the European athecate hydroids and their medusae (Hydrozoa, Cnidaria):  
Families Oceanidae and Pachycordylidae**

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**Revision of the European athecate hydroids and their medusae (Hydrozoa, Cnidaria): Families Oceanidae and Pachycordylidae.** - This paper reviews the European Hydrozoa species belonging to the families Oceanidae and Pachycordylidae. Emended diagnoses for the Oceanidae, the Pachycordylidae, and for some of their genera are provided. Due to the paucity of suitable characters, the macrotaxonomy of the two families is unsettled and must be regarded as provisional. The family Oceanidae includes the genera *Cordylophora*, *Corydendrium*, *Merona*, *Oceania*, *Rhizogeton*, *Turritopsis*, *Turritopsoides*, and the new genus *Similomerona* gen. n. The family Pachycordylidae includes the genera *Pachycordyle* and *Silhouetta*. *Turritopsis polycirra* and *T. dohrnii* are both regarded as valid species and distinct from *T. nutricula* of the western Atlantic. Histological sections confirmed that *Turritopsis polycirra* is hermaphroditic and larviparous, while *T. nutricula* is dioecious and oviparous. *Turritopsis rubra* (Farquhar, 1895) comb. n. from New Zealand is also regarded as a valid species and removed from synonymy with *T. nutricula*. The known distribution of *Corydendrium dispar* is extended to include the Faroe Islands. A former record of *C. dispar* from Denmark is referred to *Pachycordyle navis* (Millard, 1959) comb. n. *Pachycordyle fusca* Müller, 1913 is regarded as a likely synonym of *Pachycordyle pusilla* (Motz-Kossowska, 1905) comb. n.

**Keywords:** Marine invertebrates - Cnidaria - Hydrozoa - Anthoathecata - Oceanidae - Pachycordylidae - Clavidae - descriptions - revision - taxonomy.

**Redescription of *Ophiotaenia hylae* Johnston, 1912 (Eucestoda: Proteocephalidea), parasite of *Litoria aurea* (Amphibia: Hylidae) from Australia**

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**Redescription of *Ophiotaenia hylae* Johnston, 1912 (Eucestoda: Proteocephalidea), parasite of *Litoria aurea* (Amphibia: Hylidae) from Australia.** - Type material of the proteocephalidean cestode *Ophiotaenia hylae* Johnston, 1912 is redescribed. It is characterised by a globular scolex with uniloculate suckers, a prominent apical organ covered by spiniform microthriches and containing round to oblong cells of finely granular cytoplasm, and by the internal longitudinal musculature composed by 4-5 dorsal and 4-5 ventral bundles of fibres. A similar taxon, *Ophiotaenia* sp. from a closely related host species, *Litoria moorei*, is also studied and compared.

**Keywords:** Eucestoda - Proteocephalidea - *Ophiotaenia hylae* - *Litoria aurea* - *Litoria moorei* - Hylidae - Australia.

**Chiave di determinazione dei Chiroteri (Mammalia) della Svizzera attraverso l'osservazione al microscopio ottico della struttura dei peli**

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**Identification key of bats (Chiroptera) from Switzerland based on hair structure observed through optical microscope.** - The identification of mammalian hairs by microscope remains an efficient and well-known technique, but only a few studies concern bats. We studied hair morphology of the 29 species listed from Switzerland and present a dichotomic identification key based on overhair morphology observed by using optical microscopes. This key allows to identify most of the genera and also some typical species. The final purpose of this key is to give the possibility to analyse and to identify quickly the hairs found in guano, taken from their bat roosts.

**Keywords:** Chiroptera - hairs - optical microscope - identification key - guano - Switzerland.

**Taxonomie der Bernstein-Waldschabe *Ectobius vittiventris* (A. Costa, 1847) (Blattodea: Blattellidae) und ihre Verbreitung in der Schweiz**

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**Taxonomy of the field-dwelling cockroach *Ectobius vittiventris* (A. Costa, 1847) (Blattodea: Blattellidae) and its distribution in Switzerland.** - In this paper we examine the taxonomy of *E. vittiventris* (Ectobiinae) and its distribution and phenology in Switzerland. An illustrated key and a diagnosis are provided to separate the adults from synanthropic cockroaches and from some native *Ectobius* spp. Descriptive notes are included for nymphs and oothecae. We furthermore discuss the taxonomic status of the species and provide information on the type locality and type series, and the same is given for its junior synonyms. In Switzerland *E. vittiventris* is found on both sides of the Alps. In the northern part it is mainly confined to urban areas of the central plateau. On the southern slopes of the Alps it occurs in the cantons Ticino, Valais and Grisons. Our data indicate a rather recent introduction and colonization of urban areas in northern Switzerland, where the species has been recorded mostly after 1985. The altitudinal distribution generally ranges from 260 to about 700 m, with very few records up to 1400 m in the south. Adults are encountered from May to December, with a peak frequency in August. The presence of very small nymphs in summer and of larger nymphs in winter suggests a two-year life-cycle. *E. vittiventris* is frequently encountered inside houses, but apparently it cannot survive under such conditions. A special treatment or control is thus unnecessary. Finally, *E. vittiventris* is recorded for the first time from Germany (Baden-Württemberg).

**Keywords:** Blattodea - morphology - identification - phenology - pests - *Blattella* - *Blatta* - *Ectobius* - *Periplaneta* - *Supella* - Switzerland.

***Amblyrhynchichthys micracanthus*, a new species of cyprinid fish from Indochina (Cypriniformes: Cyprinidae)**

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***Amblyrhynchichthys micracanthus*, a new species of cyprinid fish from Indochina (Cypriniformes: Cyprinidae).** - *Amblyrhynchichthys micracanthus* sp. n. is described from the Mekong, Chao Phraya, Mae Klong and Tapi river drainages in Indochina (mainland Southeast Asia). It can be distinguished from its only congener, *A. truncatus*, in having a more truncate snout (with a straight vs. gently rounded lateral profile), shorter dorsal spine

(15.5–25.7 %SL vs. 26.7–29.9), smaller eye when similar-sized individuals of larger than ca. 70 mm SL are compared (28.7–34.9 %HL vs. 32.7–36.3), and fewer gill rakers (34–37 vs. 39–40).

**Keywords:** *Amblyrhynchichthys* - Cyprinidae - new species - Indochina.

### **The centipedes of the Maltese Archipelago (Chilopoda)**

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**The centipedes of the Maltese Archipelago (Chilopoda).** - The chilopod fauna of the Maltese Islands (Malta, Gozo, Comino) was studied from a faunistic and zoogeographic point of view. A list of the species found on these islands is given, based on recent faunistic investigations as well as on a critical assessment of the few records available in the literature. Twenty-one species are recorded to occur on the islands: 1 Scutigermorpha, 7 Lithobiomorpha, 3 Scolopendromorpha, and 10 Geophilomorpha. Twenty species are confirmed to occur on the island of Malta, 11 on Gozo and three on Comino. The Maltese chilopod fauna mostly consists of species that are widespread in the Mediterranean islands, particularly those of the western Mediterranean. As shown in other studies on the chilopod faunas of other Mediterranean micro-insular systems, that of the Maltese Islands is mainly influenced by ecological factors rather than by paleogeographic and paleoclimatic ones. Zoogeographically the Maltese chilopod fauna is mainly Mediterranean in character, with a very limited representation of Holarctic (22%) and European (11%) species.

**Keywords:** Chilopoda - Maltese Islands - Malta - Gozo - Comino - fauna - biogeography.