

A. 계통 및 진화

A101

Redescription of Newly Recorded Ciliates, *Euplotes muscorum* Dragesco, 1970 (Ciliophora: Spirotrichea: Euplotida) and Morphological Comparison with Related Species from Korea

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The euplotid hypotrichs collected from a puddle, Cheju island in 2002 and cultured at laboratory. It was identified as *Euplotes muscorum* Dragesco, 1970. The species is reported for the first time from Korea. The description was based on the observation of living specimens, protogol impregnation and biometric analysis. This species is characterized by following diagnosis : body length 63~80 μm, body width 40~52 μm *in vivo*, 9 frontoventral cirri, 5 transverse cirri, 4 caudal cirri, 1 micro- and macronucleus, adoral zone of membranelles with 32~36 adoral membranelles; covering approximately 2/3 of body length, 8 dorsal kineties; mid-dorsal kinety with 20~24 cilia and dorsal argyrome complex type. This species with 9 frontoventral cirrotype is very similar to *E. muscicola* Kahl, 1932. It is not easy to distinguish between this species and *E. muscicola in vivo*. Moreover, it is very similar that the infraciliature of silver-stained specimens and nuclear configuration. The differences between these two species were investigated and discussed with morphological and biometrical analysis.

A102

One New Record of Thomosid Spider in Korea (Araneae, Thomisidae)

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One thomisid spider, *Ozyptila scabricula* (Westring 1851), is newly recorded to Korean spider fauna. This species is distinctly differentiated from the other Korean *Ozyptila spp.* in some morphological characters of male genital structure. Thus the genus *Ozyptila* Simon 1864 consists of 5 species in Korea so far. Spiders of the genus *Ozyptila* Simon 1864 are characterized by having clavate setae on dorsum of body, long median ocular trapezium, rounded and swirly abdominal pattern, when present, and highly distinctive tibial apophyses. The spiders of the genus *Ozyptila* are mainly similar to representatives of *Xysticus spp.* But they can be easily distinguished from those of *Xysticus* by their distinct clavate setae on the carapace and the abdominal dorsum. Also, the swollen femur and sparse bristle on first leg are characters of *Ozyptila spp.* Approximately 104 species of the genus *Ozyptila* have been described for the world (Platnick, 2002). Among them, four species have been recorded in Korea: *Ozyptila atomaria* (Panzer 1801), *O. gasanensis* Paik 1985, *O. nipponica* Ono 1985, and *O. nongae* Paik 1974 (Kim, 2000; Namkung, 2002). In addition to these four species, *Ozyptila scabricula* (Westring, 1851) is reported as new record to Korea in the present study.

A103

Oral Structure in *Tigriopus japonicus* (Copepoda, Harpacticidae): Evolutionary Trends and Relationships

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A interim report on our ongoing revisional study is given together with a short summary of the current knowledge on the systematics and distribution of the genus *Tigriopus*. A harpacticoid copepod *T. japonicus*, commonly living in rock pools along the sea coast in warm region of Korea and Japan differ in the oral structure with mandible and maxillule which have not been described exactly so far, and is demonstrated by SEM micrographs and drawing.

A104

Molecular Identification of Two Cryptic Species within *Eucyclops roseus s.l.* (Copepoda, Cyclopoida)

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Zooplanktonic crustaceans, like copepods, are difficult to identification because of the microscopic size of distinguishing morphology. Furthermore, recently, it has been cleared that majority of copepods are composed of species 'complex' with morphological undistinguishable several sibling species. For elucidating the species status of *Eucyclops roseus s.l.*, a freshwater cyclopoid, molecular taxonomical study was performed. Sequences of mitochondrial cytochrome c oxidase subunit? (CO?) were obtained from specimens of *Eucyclops roseus* collected from five different localities in Korea. Additionally, a sequence of *Ectocyclops phaleratus*, which belongs to the same subfamily Eucyclopinæ with *Eucyclops roseus*, was also obtained for outgroup comparison. In our phylogenetic analysis of NJ distance, these five geological species of *Eucyclops roseus (s.l.)* were divided into two distinct clades with high bootstrap values. Three and two geographical species of *Eucyclops roseus (s.s.)* were included in population 1 and population 2, respectively. The nucleotide diversity between populations (0.12458) was much higher than those of within populations (0.01178 and 0.00307 for population 1 and 2). Gene flow between the populations was very low (Nm was just 0.01). From these results, the lack of gene flow and the high genetic divergence between the populations suggest that two different groups of *Eucyclops roseus s.l.* are in fact cryptic species rather than differentiated populations of the same species.