A109 Key to the suborder Mygalomorphae

Joo-Pil Kim
Department of Applied Biology, Dongguk University,
and The Arachnological Institute of Korea

In 1998, 3 suborders of the order Araneae are known on the earth. But only 2 suborders, Mygalomorphae, Araneomorphae have been reported in Korea. The author would give an account of taxonomic and pictorial key to suborder Mygalomorphae and understand them easily.

A110 Biogeograhy, Genetic structure, and Speciation in Striped Field Mice, *Apodemus agrarius*, in Southern Korea

Myung Hee Yoon*, Iksoo Kim**, and Byung Yoon Min**
*Department of Biology, Kyungsung University
**Department of Environmental Protection, Kyungnam University

The biogeography and population genetic structure in *Apodemus agrarius* was investigated on the southern Korean mainland, coastal islets of Wan, Keoje, and Kaduk and Cheju Island. DNA sequences from the mitochondrial cytochrome *b* protein-coding gene were used to test hypotheses. 28 mtDNA-sequence-based haplotypes with maximum divergence of 2.0 were found. A PAUP analysis revealed at least six lineages with a strong southwest (Cheju Island) to northeast (the Korean mainland) polarity. The hypothesized oldest haplotypes were obtained on Cheju Island. Considering of the data in context of Late Pleistocene-Holocene landforms suggests that present-day Cheju Island is the remnant of a refugium for *A. agrarius*. The wan and Keoje islet hapotypes were monophyletic, whereas those on Cheju Island were not. In the broad view, significant genetic structuring was found among Cheju Island, islets, and mainland, but on the mainland itself there was no regional structuring. Overall, the data set is consistent with an earlier hypothesis that speciation has occurred, but our interpretation is that mainland *A. agrarius coreae* was derived from a coastal islet and offshore species, A. "*chejuensis*". This conclusion is a rare instance in which present-day island populations were the source of a mainland species.