

Z 115 **Phylogenetic Relationships of Eight Korean *Alopecosa* Spiders (Araneae, Lycosidae): Detailed Observations on Male Genital Structures**

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The limitation of the genus *Alopecosa* belonging to the family Lycosidae is mainly based on somatic characteristics such as body size, carapace pattern, and dentation on chelicerae. It is known that such characters are insufficient to find lycosid phylogeny because of their arbitrariness. Whereas palpal sclerites of male genitalia have been used as decisive characters for spider identification because intraspecific variation of those character states occurs very rarely. Thereby we employed morphological data matrix constructed with various palpal sclerites and some important somatic characters for elucidating phylogenetic relationships among eight Korean *Alopecosa* species (*A. albostriata*, *A. auripilosa*, *A. cinnameopilosa*, *A. licenti*, *A. moriutii*, *A. pulverulenta*, *A. virgata*, and *A. volubilis*). Phylogenetic analyses performed by maximum parsimony (MP) and neighbor joining (NJ) methods revealed that the *Alopecosa* spiders formed a monophyletic group except *Alopecosa cinnameopilosa*. It strongly suggests the possibility that *A. cinnameopilosa* belong to the other genera or that a new genus be established for the species. The relationship among the others was ((*A. albostriata*, *A. auripilosa*, *A. moriutii*), (*A. licenti*, *A. volubilis*), *A. pulverulenta*, *A. virgata*). It is likely that cladistic approaches by morphological evidences (particularly male genital characters) are valuable for examining relationships among *Alopecosa* species.

Key words: Phylogeny, *Alopecosa*, *Alopecosa cinnameopilosa*