해안깡충거미 시각기의 미세구조에 관한 연구 The Study on the Fine structure of the Eyes of *Psudicius*himenshimensis (Araneae: Salticidae)

Kwon Jung Kyun, Doo Jin Pack, Joo Phil Kim

Department of Electron Microscope Lab, College of Medicine Hanyang University

Department of Biology, Dongguk University

The spiders were collected from Mt. Ungil, Namyangju-si, Kyeonggi-do and Cheju-do. The spiders were fixated with 3% glutaraldehyde and thin section was performed with ultramicrotome. The specimens were observed with light microscopy, transmission and scanning electron microscopy.

Wandering spiders (*P. himenshimensis*) had their eyes in three row. The four eyes of the first row were very large in size. The second row, which had two eyes with small size whith were located about midway between the first and third rows. The third row had two eyes with large size. Eyes of *P. himenshimensis* were composed of cornea, lens, vitreous body and retina. The cornea layer of eye, linked to exocuticle of exoskeleton was composed of homogenous regular fiber layers with no cell type. Lens of eye was biconvex in shape. Retina comprised a well developed microvilli-shape rhabdomeres, unpigmented supporting cells, and pigmented cell. The retinas of anterior median eyes was surrounded by circular cylinder-shaped vitreous body, a photoreceptor and rhabdomeres.

These finding showed that spiders eyes were commnly composed of cornea, lens, vitreous body, retina, and rhabdome.