

Determination of *Paronychiurus kimi* Age Distributions Based on the Headcapsule Width

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With the primary consumer and decomposer soil dwelling Collembolans play an important roles in soil ecosystems. *Paronychiurus kimi* (Lee) is a common collembolan species found in paddy soil in Korea. Because of their abundance and ecological role, *P. kimi* is very useful bioindicator to understand the effect of pollutants on the soil ecosystem. In spite of their importance in soil ecosystems, very few studies have been done about biology and ecotoxicology of *P. kimi*. The main objective of the study was to find the relationship between headcapsule width and age of *P. kimi* on reared on charcoal plate. collembolan age based on the headcapsule width. Using H_{CAP} program, we could divide *P. kimi* population into several age groups. The find significant differences between instars and determined the age distribution. Therefore, measurement of long-term effects of soil pollutants on *P. kimi* was feasible at population level.