

**Relation of the Bioaccumulation of Lead (Pb) and  
Cadmium (Cd) in Body and Egg of *Padosa astrigera*  
(Araneae: Lycosidae) in Fields**

**Myung-Pyo Jung, Seung-Tae Kim, Hun-Sung Kim, Joon-Ho Lee**

Entomology Program, School of Agricultural Biotechnology, Seoul National University

The accumulation of lead (Pb) and cadmium (Cd) in soil, and body and egg of *P. astrigera* was investigated in 2004. Soil samples and *P. astrigera* with egg sac were collected in 9 sites. The amount of Pb and Cd in soil, and body and egg of *P. astrigera* was detected using Inductively Coupled Plasma Emission Spectrometer. In case of Pb, the estimated coefficient of determination ( $r^2$ ) were 0.61, 0.33 and 0.75 for soil-body, soil-egg and body-egg, respectively. Also they were 0.21, 0.91 and 0.80 for soil-body, soil-egg and body-egg, respectively, in case of Cd. The bioaccumulation ratios (egg/body) for Pb and Cd were 2.88 and 0.2, respectively. Although the coefficient between body-egg of *P. astrigera* was higher for Cd, the bioaccumulation ratio was higher for Pb.