

B507**Dictyostelid Cellular Slime Molds in Mt. Surak, Korea**

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The distribution and occurrence of dictyostelid cellular slime molds was investigated in Mt. Surak, Uijeongbu, Kyonggi-do, Korea. Five dictyostelid cellular slime molds were found. Isolates were *Polysphondylium pallidum*, *Dictyostelium firmibasis*, *Dictyostelium crassicaule*, *Polysphondylium tenuissimum* and *Dictyostelium valensternum*.

Dictyostelids were isolated from sample soils of forests with *Pinus densiflora* and *Quercus mongolica*. *Polysphondylium pallidum* was dominant species. This has been found widely in South Korea. In peculiarity, new dictyostelid cellular slime molds, *Dictyostelium valensternum*, occurred in mixed forest with *Pinus densiflora* and *Quercus mongolica* (550m above sea level). Dictyostelid clones and diversity were affected by interactively environmental factors, pH, water content, organics and altitude.

B508**Distribution and Accumulation of Cd and Hg in Shoot and Root Tissues of Tomato (*Lycopersicon esculentum*)**

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Daily added high levels of Cd and Hg (up to 500 μ M) to pots containing vermiculite:peat moss(3:1) soil induced high amount of metal accumulation in roots (<12 mg/g · DW), stem (<1.2 mg/g · DW) and leaves (<0.55 mg/g · DW), and variation in accumulation ability among 4 genotypes used was prominent. Cd and Hg increased or decreased chlorophyll level, shoot fresh and dry weight and stem length depending on genotypes. Our results indicated that reduced growth of plants appeared to be due to high metal accumulation, insufficient peroxidase activity, and subsequently increased thiobarbituric acid reactive substances (e.g. malondialdehyde) in leaves and roots.