

**B529** The Effect of Elevated CO<sub>2</sub> on the Growth of Three Woody Species with Different Successional Status

Yeonsook Choung  
Department of Biology, Kangwon National University

In order to study the effect of elevated CO<sub>2</sub> on plant growth, three woody species, *Fraxinus rhychophylla*, *Quercus acutissima* and *Quercus aliena* were grown in CO<sub>2</sub>-controlled chambers. *F. rhychophylla* have had significantly greater leaf numbers in elevated CO<sub>2</sub> since one month growth and its total biomass in elevated CO<sub>2</sub> was nearly double compared with those grown in ambient CO<sub>2</sub>. *Q. acutissima* also showed the same trend, but biomass difference was not significant. However, any growth parameters for *Quercus aliena* was not different between two CO<sub>2</sub>, even though it tended to change. Allocation parameters such as RSR, SLM and LAR for *F. rhychophylla* was not affected by elevated CO<sub>2</sub>, meaning no effect of CO<sub>2</sub> for plant architecture. Based on these results, response of different magnitude for three species might come from their different successional status.

**B530** The Palaeobiogeography of Korean Conifers, Taxads and Dicotyledons

KONG, Woo-seok  
Department of Geography, Kyunghee University

The Vegetation History of the Korean Peninsula(South & North Korea) Has Reconstructed by the Use of Both Macro- & Micro- Fossils Data from 40 Areas for the Confers & Taxads and 75 Areas for the Dicotyledons. The Oldest Conifers of Korea Dates Back to the Permian Period of the Palaeozoic Era, But the oldest Conifer Among the Living Genus is *Pinus* of the Mesozoic Era. The Oldest Dicotyledons Discovered Came from the Cretaceous Period of the Mesozoic & Contains 17 Genera Including 9 Living Ones. The Continuous Appearances of Both Conifers and Taxads as well as Dicotyledons in Korea Despites the Sporadic Hiatus of Fossil Data Indicates the Absence of Catestrophic Environmental Changes in the Past and the Presence of Environmental Diversity. Overall, Palaeogeographical Approach Seems to Provide Useful Informations for the Better Understanding of Present Flora and Vegetation.