

protein level. In cells transiently transfected with nuclear factor- $\kappa$ B (NF- $\kappa$ B) promoter-luciferase reporter construct, this compound clearly inhibited the LPS-stimulated NF- $\kappa$ B activation. Moreover, this compound inhibited I $\kappa$ B- $\alpha$  degradation in a concentration and time-dependent manner. These results indicate that FPP-3 inhibits NO production via inhibition of degradation of I $\kappa$ B- $\alpha$  through a NF- $\kappa$ B activation.

[PC1-39] [ 2003-10-10 09:00 - 13:00 / Grand Ballroom Pre-function ]

### **Anti-Inflammatory action and Cellular Toxicity of Resina Pini on Human Gingival Fibroblast**

Suk Kui-Duk, Suh Young-Ah<sup>o</sup>, Chang Su-Jin  
College of Pharmacy, *Catholic University of Daegu*

This study was carried out to evaluate the cytotoxicity and anti-inflammatory effects of Resina Pini on cultured human gingival fibroblasts. We carried out a study of cytotoxic effects of Resina Pini on cultured cells by MTT assay. Various treatments on Resina Pini reduced its toxicity on cultured cells in order of natural Resina Pini, water extracted mixture of Resina Pini and Ramus Mori Albae and recrystallized Resina Pini. However, Resina Pini showed harmless levels of cytotoxicity to cultured human gingival fibroblast. Anti-oxidative activity was evaluated by DPPH radical scavenging test, and PGE<sub>2</sub> by PGE<sub>2</sub> EIA system. Resina Pini suppressed productions of free radicals and PGE<sub>2</sub>, which causes tissue inflammation and clinical pain. Interestingly, Resina Pini extract samples displayed superior inhibitory activity upon PGE<sub>2</sub> synthesis, compared to contrast group aspirin. This fact may suggest safe and efficient periodontal hygienic and therapeutic uses of Resina Pini.

[PC1-40] [ 2003-10-10 09:00 - 13:00 / Grand Ballroom Pre-function ]

### **Differentiation and authentication of Panax ginseng (Korea and China), Panax quinquefolius, and development of genetic marker by AFLP analysis.**

Jeong Jae-Hun<sup>o</sup>, Jung Su-Jin, Yun Doh-Won, Yoon Eui-Soo, Choi Yong-Eui  
*Chung-ang University, Korea Ginseng Institute, Kongju National University, Department of Biology, RDA, National Institute of Agricultural Biotechnology*

Panax ginseng is one of the most important medicinal plants in the Orient. The international trade of ginseng is increasing yearly. The disguise of Chinese and American ginseng into Korean ginseng became a problem in recent years in Korea and abroad. Obviously, an effective method of authentication of Korean ginseng from others at a DNA level, is necessary for the healthy development of the ginseng market. In order to develop convenient and reproducible methods for the identification of Korean ginseng, amplified fragment length polymorphism (AFLP) analysis was applied within Panax species (Korean cultivated and wild ginseng, Chinese wild ginseng, American cultivated and wild ginseng). The genetic distance coefficients between the P. ginseng and P. quinquefolius were high, ranging from 0.573 to 0.692, whereas samples of P. ginseng (cultivated and wild type) from the different area in Korea and China were very low, ranging from 0.056 to 0.164. By detailed AFLP analysis, some important different bands between wild type of P. ginseng from Korea and China were obtained. These results support that this approach could be applied to distinguish Korean ginseng (Panax ginseng) from others (Chinese and American ginseng) and to authenticate cultivated and wild ginseng at the molecular level.

[PC1-41] [ 2003-10-10 09:00 - 13:00 / Grand Ballroom Pre-function ]

### **Antioxidative effect and anti-apoptosis effect of extract from Betula platyphylla var. japonica**

Ju Eun Mi, Kwon Hee Young, Kim Jeong Hee<sup>o</sup>  
*Kyung Hee University*

The antioxidant and anticancer properties of a medicinal plant, *Betula platyphylla* var. *japonica* were