

with Taxol showed a significant increase of CD11b+ cells including macrophages, indicating that Taxol has similar biological effect to lipopolysaccharide in primary macrophages. Additionally, synergistic effect of RGAP and Taxol was found to exhibit the increased tumoricidal activity of macrophages. These above results suggest that clinical trials of RGAP as an adjuvant in cancer chemotherapy of Taxol are highly feasible.

[PD2-66] [ 10/19/2001 (Fri) 14:00 – 17:00 / Hall D ]

### **Antitumor and Immunoenhancing activities of Cambodian *Phellinus linteus***

Lee HyoJung<sup>o</sup>, Han GyuYeon, Kim SungHoon

Graduate School of East-West Medical Science, Kyunghee university, 1 Seochunri, Kiheungeup, Yonin 449-701, South Korea

*Phellinus linteus* from Cambodia was confirmed to have a homologous DNA sequence to *Phellinus linteus*. Antitumor and immunomodulatory activities were evaluated with aqueous extract of Cambodian *Phellinus linteus*(CPL). CPL didn't show any significant cytotoxicity on HT1080, Sarcoma 180 and B16BL6, whereas it inhibited the relaxation of DNA topoisomerase I from the concentration of 250ug/ml. In the pulmonary colonization assay it inhibited pulmonary metastasis by B16BL6 in C57BL6 mice to 36%, 36.9% and 55.5% at various doses of 10 mg, 20 mg and 50 mg. From FACS analysis with splenocytes pretreated with PAE, it significantly increased CD3 and CD4 and induced production of IL-2. These results indicate Cambodian *Phellinus linteus* has antitumor and immunomodulatory activities still suggesting more study on its mechanism and effective compound in detail.

[PD2-67] [ 10/19/2001 (Fri) 14:00 – 17:00 / Hall D ]

### **Hepatoprotective and Chologogic Effects of Tectorigenin Isolated from the Flower Extract of *Pueraria thunbergiana***

Park HeeJuhn<sup>o</sup>, Jung HyunJu, Lee SangKook, Lee KyungTae, Park KunYoung, Choi JongWon

Division of Applied Plant Sciences, Sangji University, College of Pharmacy, Ewha Womans University, Department of Food and Nutrition, Pusan National University, College of Pharmacy, Kyung-Hee University, College of Pharmacy, Kyungsung University

The flower of *Pueraria thunbergiana* has been traditionally used for the treatment of alcohol intoxication and diabetes mellitus. We have previously reported that tectorigenin and kaikasaponin III have antimutagenic and antidiabetic activity and tectorigenin induces apoptosis and differentiation by signal transduction. In this study, the hepatoprotective effects of the MeOH extract, partitions of *P. thunbergiana* and tectorigenin were evaluated. The MeOH extract and BuOH fraction prevented the CCl<sub>4</sub>- and D-galactosamine-induced hepatotoxicity in rats. In particular, the treatment of tectorigenin (10 mg/kg, i.p.) significantly prevented hepatotoxicity by 51% (p<0.05). The MeOH extract (250 mg/kg, p.o.), BuOH extract (250 mg/kg, p.o.) and tectorigenin (10 mg/kg, i.p.) also showed potent chologogic effects by measuring the amount of bile flow, total bilirubin and cholic acid. From this result, the hepatoprotective activity of the extract of flower of *P. thunbergiana* was confirmed, and tectorigenin is considered as one of active principles. The most active fraction, BuOH fraction, contained tectorigenin in glycosidic forms with other constituents, saponins and isoflavone glycosides.

[PD2-68] [ 10/19/2001 (Fri) 14:00 – 17:00 / Hall D ]

### **Antioxidative activity of flavonoid compounds from leaves of *Salix hallaisanesis***