

## General Pharmacological Activities of Catus Seed(II)

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This investigation was designed to general pharmacological activities from catus(*Opuntia ficus-indica* var *saboten Makino*) seed by dry powder from Cheju Island. All of the catus seed extract showed the measurable non-contractile on the isolated rat duodenum and not influenced the normal mean BP in anesthetized rat. And we are measured phenobarbital-induced sleeping time, locomoter activity, rotarod test, body tempreture, MES-induced seizure, strychnine-induced seizure and PTZ-induced seizure which were influence CNS did not effected by the treatment of catus seed. Carrageenan-induced paw edema and hot plate test in rats and acetic acid-induced writhing test in mice were used as animal models to search antiinflammatory and analgesic activities. Respectively, the treatment of catus seed showed an inhibitory effect on acetic acid-induced writhing and hot-plate test indicating that it also contained analgesic activity and showed an inhibitory effect on carageenan-induced paw edema.

[PA1-23] [ 04/21/2000 (Fri) 10:30 - 11:30 / [1st Fl, Bldg 3] ]

### Effect of Polygalae Radix on Cerebral Ischemic and Reperfused Injury

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The present study was undertaken to determine whether Polygalae Radix administration could improve cerebral metabolism during ischemia and subsequent reperfusion. Brain ischemia induced by bilateral common carotid artery(CCA) occlusion in Mongolian gerbil. After 10min occlusion, brains were recirculated for 30 min. 5 Fractions(Methanol, n-hexane, EtoAC, n-BuOH, H<sub>2</sub>O) of Polygalae Radix were administered orally 2hrs before CCA occlusion respectively. The animals were killed by decapitation and isolated brain was homogenized and centrifuged. ATP content, lactate content and lipid peroxide were measured in brain homogenate. In ischemic control animals, the level of ATP significantly dropped after ischemia and reperfusion. This decrease significantly suppressed by n-BuOH treatment. The content of lactate significantly increased in ischemic control animals. This increase was prevented by all Polygalae Radix fractions except n-Hexane fraction. The Lipid peroxidation, malondialdehyde(MDA), a end product of lipid peroxidation, markedly increased by cerebral ischemia and reperfusion. This increase was inhibited by n-BuOH fraction. These results indicate that n-BuOH fraction has the highest potency in cerebral ischemic injury.

[PA1-24] [ 04/21/2000 (Fri) 10:30 - 11:30 / [1st Fl, Bldg 3] ]

### Effects of Samultang on Immune Function during the late stage of Pregnancy in Mice

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The purpose of this research was to investigate effects of Samultang water extract (SMT) on cytokines production from immune cells during the late stage of pregnancy in BALB/c mice. SMT (500 mg/kg) was administered p.o. once a day for 7 days, and then thymocytes and peritoneal macrophages were separated. At the late stage of pregnant mice, the proliferation of thymocytes and the production of gamma-interferon in thymocytes were decreased as compared with normal