

[P3-40]**Supplementation of *Oenanthe javanica*(Dolminari) Water Extract and Immune Cell Activation in Mice**

Kyung-Ok Kim, Han-a Park, Hea-Sook Ryu, and Hyun-Sook Kim

Department of Food & Nutrition, Sookmyung Women's University

Many investigations for searching the functional substances from natural medicinal plants are going on recently. *Oenanthe javanica*(Dolminari) has long been used for food source in this country. We previously reported that in vitro supplementation of *Oenanthe javanica*(Dolminari) water extract enhanced the splenocytes proliferation in mice. This study was performed to evaluate the immunomodulative effect of *Oenanthe javanica* (Dolminari) water extracts in mice using ex vivo experiments. Six to seven weeks old mice(balb/c) was fed ad libitum on chow diet and water extract of *Oenanthe javanica* (Dolminari) was orally administrated every other day for two weeks at two different concentrations(50 and 500 mg/kg b.w). After preparing the single cell suspension the proliferation of splenocyte was determined by MTT(3-[4,5-dimethylthiazol-2-y]-2,5- diphenyl tetrazolium bromide) assay. The plaque forming cells counting(PFC) was used to evaluate the humoral immune response to sheep red blood cells. After 48hrs of incubation with the mitogen(ConA or LPS) stimulation, the mouse splenocyte proliferation was increased at two different concentrations than that of control group. And the number of plaque forming cells was also increased at the 50 and 500mg/kg b.w supplementation groups. The result of this study may suggest that the supplementation of water extract of *Oenanthe javanica*(Dolminari) could regulate the immune function by increasing the splenocyte proliferation and the number of plaque forming cells in mice.