

[Shoyakugaku Zasshi, 41, 125 (1987)]

**Pharmacological Study on *Panax ginseng* C. A. MEYER (VII).  
Cardiovascular Effect of Red Ginseng and White Ginseng.**

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The effects of 70% methanolic extracts of Red Ginseng and White Ginseng (RMe, WMe, respectively) on tissue blood flow, blood coagulation and the fibrinolytic system were investigated. RMe increased the tissue blood flow in normal rats and serotonin- and endotoxin-treated rats. RMe was found to inhibit blood coagulation and promote fibrinolysis. The effects of RMe on these experimental models were stronger than those of WMe.

[Shoyakugaku Zasshi, 41, 135 (1987)]

**Pharmacological Study on *Panax ginseng* C. A. MEYER (IX) Protective  
Effect on Red Ginseng on Infection (2) On Phagocytic Activity of  
Mouse Reticuloendothelial System.**

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The effect of a 70% methanolic extract (RMe) from red ginseng (the steamed and dried root of *Panax ginseng* C. A. MEYER) on the phagocytic activity of the mouse reticuloendothelial system was studied. With the use of the carbon clearance method, the K index (phagocytic index) was found to be significantly increased by the oral administration of RMe in mice. RMe increased the lysosomal enzyme activity (acid phosphatase) and the number of peritoneal macrophage ( $M\phi$ ) cell in mice, and promoted the phagocytosis of the latex by peritoneal and pulmonary  $M\phi$  *in vitro*. These results suggested that Red Ginseng promotes the phagocytic activity of the reticuloendothelial system.

[Shoyakugaku Zasshi, 41, 205, (1987)]

**Studies on Resources of Crude Drug (I). Quantitative Analysis of  
Berberine Type Alkaloids and Japanese Coptis Rhizome.**

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Berberastine (1), jatrorrhizine (2), coptisine (3), palmatine (4), berberine (5), are main protoberberine type alkaloids contained in Japanese Coptis Rhizome, and they were found to be efficiently separated from each other by high-performance liquid chromatography. Then this method was applied to the quantitative analysis of Coptis Rhizome produced in various parts of Japan. On the HPLC data, principal components analysis was carried out. It was shown that those samples from Echizen contained 1 but less 3 when compared with rhizome samples from other parts of Japan. Tamba rhizomes and Inshu rhizomes were similar to each other in their alkaloid composition.