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Two Steroidal Alkaloid Glycosides from *Veratrum taliense*

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In a previous paper, we reported on the isolation of three steroidal alkaloids from whole plants of *Veratrum taliense* collected in Yunnan province, China. The structure of a new alkaloid among them, vertaline B, was determined by X-ray analysis. In continuation of our chemical investigation of *V. taliense*, we isolated two verazine type alkaloid glycosides. By spectroscopic and chemical evidence, the structure of two new glycosides were determined to be veramiline-3-O- β -D-glycopyranoside and stenophylline B-3-O- β -D-glucopyranoside, respectively.

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5-Hydroxy-6,2'-dimethoxyflavone from *Primula denticulata*

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Within the past three years, the number of unusual flavones reported from the farinose leaf exudate of *Primula* species has increased considerably from eight to 17. From some fractions remaining from our recent studies, we have now isolated another minor component. Based on spectral studies, in particular, on ^1H NMR, it has identified as 5-hydroxy-6,2'-dimethoxyflavone. The structure was confirmed by synthesis. 2'-Hydroxy-2,5,6'-trimethoxychalcone derived by condensation of 2-hydroxy-5,6-dimethoxyacetophenone with 2-methoxybenzaldehyde was oxidized to a flavone by DDQ. This flavone was partially demethylated with boron trichloride to afford the desired flavone. Comparison of the spectral data of the synthetic sample with those of the natural product showed good agreement.

[*Yakugaku Zasshi*, **110**, 179, (1990)]

**Phagocytic Activity of Leaves of *Epimedium* Species on Mouse Reticulo-
endothelial System**

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Effects of a 70% methanolic extract (E-S) from the dried leaves of *Epimedium sagittatum* on a phagocytic activity of reticuloendothelial system were studied by the carbon clearance method in mice. The clearance-rate of carbon significantly increased 1h after the oral administration of E-S (200 or 500 mg/kg, one time/d for 5d). E-S activated the phagocytosis of carbon by Kupffer cells in the liver. Icariin and epimedin C [anhydroicaritin 3-rhamnosyl (1 \rightarrow 2) rhamnoside 7-glucoside] isolated from E-S also activated the phagocytosis. These results suggested that E-S promotes the phagocytic activity of the reticuloendothelial system in mice and has a stimulatory effect on macrophage.