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[Lab. of Pharmacognosy]

**Two Flavonol Glycosides, Hexandrasides C and D, from the Underground Parts of *Vancouveria hexandra*.**MIZUO MIZUNO\*, YOKO KANIE, MUNEKAZU IINUMA,  
TOSHIYUKI TANAKA, FRANK A. LANG

In addition to four known glycosides, icariin, epimedin B, epimedesides A and E, two new glycosides of a flavonol with isoprenyl group were isolated from the underground parts of *Vancouveria hexandra*. The structures were determined to be des-O-methylanhydroicaritin 3-O- $\beta$ -D-xylopyranosyl (1-2)- $\alpha$ -L-rhamnopyranoside 7-O- $\beta$ -glucopyranosyl (1-2)- $\beta$ -D-glucopyranoside and anhydroicaritin 3-O- $\alpha$ -L-rhamnopyranosyl (1-3)- $\alpha$ -L-rhamonopyranoside 7-O- $\beta$ -D-glucopyranoside by means of spectral analysis.

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[Lab. of Pharmacognosy]

**Mearnsetin 3,7-Dirhamnoside from *Asplenium antiquum*.**MIZUO MIZUNO\*, YOSUKE KYOTANI, MUNEKAZU IINUMA,  
TOSHIYUKI TANAKA, HIROYUKI KOJIMA, KUNIO IWATSUKI

The taxonomy of the genus *Asplenium* (Aspleniaceae) is ambiguous because of its morphological variability. In previous studies we have described the occurrence of flavonol glycosides in the fronds of *A. prologatum* and *A. scolopendrium*. In continuation of the chemotaxonomic studies of this genus, a new flavonol glycoside from the fronds of *Asplenium antiquum* was isolated. The structure was elucidated as mearnsetin (3,5,7,3',5'-pentahydroxy-4'-methoxyflavone) 3,7-O-dirhamnopyranoside by means of spectral analysis.

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[Lab. of Pharmacognosy]

**Complex Flavonoids in Farinose Exudate from *Pityrogramma calomelanos*.**

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From the farinose exudate of *Pityrogramma calomelanos*, three new complex flavonoids named calomelanols A-C were isolated in addition to two known dihydrochalcones. The structures were characterized as 8-[3-(4-methoxyphenylpropionyl)]-5,7-dihydroxydihyroneoflavone for calomelanol A, 8-[3-(4-hydroxyphenylpropionyl)]-5,7-dihydroxydihyroneoflavone for calomelanol B, and 8-(3-phenylpropionyl)-5,7,4'-trihydroxydihyroneoflavone for calomelanol C, respectively, by spectroscopic evidence. The CMR assignment and the mass spectral fragmentation of complex flavonoids are also described.