

[Phytochemistry, 30, 3095-3097 (1991)]

[Lab. of Pharmacognosy]

Four Flavonoids in the Roots of *Euchresta formosana*.MIZUO MIZUNO*, NOBUYASU MATSUURA, TOSHIYUKI TANAKA,
MUNEKAZU IINUMA, FENG-CHI HO

Four new flavonoids from the roots of *Euchresta formosana* were characterized as 5,5'-dihydroxy-8-isoprenyl-{6'',6''-dimethylpyrano-(2'',3'': 7,6)}-{(6''',6'''-dimethylpyrano (2''',3''': 4',3'))-coumaronochromone (euchretin D), 5,5'-dihydroxy-6-isoprenyl-{6'',6''-dimethylpyrano (2'',3'': 7,8)}-{(6''',6'''-dimethylpyrano (2''',3''': 4',3'))-coumaronochromone (euchretin E), 5,2'-dihydroxy-8-isoprenyl-{6'',6''-dimethylpyrano (2'',3'': 7,6)}-{(6''',6'''-dimethylpyrano (2''',3''': 4',5))} flavanone (euchrenone a₁₁) and 5,2'-dihydroxy-6-isoprenyl-{6'',6''-dimethylpyrano (2'',3'': 7,8)}-{(6''',6'''-dimethylpyrano (2''',3''': 4',5'))} flavanone (euchrenone a₁₂) by means of spectroscopic analysis.

[Phytochemistry, 30, 3153-3154 (1991)]

[Lab. of Pharmacognosy]

An Isoflavanone from Roots of *Echinosophora koreensis*.MUNEKAZU IINUMA*, MASAYOSHI OYAMA, TOSHIYUKI TANAKA,
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Among the chemical constituents of *Echinosophora koreensis* Nakai, the presence of lupin alkaloids, isoflavanones and 3-hydroxyisoflavanones were confirmed. The antimutagenic and the immuno-relating activities of the plant extract have been investigated, but the biological principles were not determined. To clarify the unidentified phenolic components in *E. koreensis*, we investigated the chemical constituents in the root to result the isolation of a new isoflavanone, 5'-geranyl-5,7,2',4'-tetrahydroxyisoflavanone (kenusanone A) in addition to some known phenolics.

[J. Nat. Prod., 54, 1144-1146 (1991)]

[Lab. of Pharmacognosy]

Two C-Methylated Flavonoid Glycosides from the Roots of *Sophora leachiana*.MUNEKAZU IINUMA*, MASAYOSHI OYAMA, TOSHIYUKI TANAKA,
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In succession to a characterization of sophoraflavonone G and a new flavanone, named leachianone A, 5,7,4'-trihydroxy-6-methylflavone (poriol), its 7-O-glucopyranoside (poriolin), and a new flavonol glycoside were isolated from the roots of *Sophora leachiana*. Spectroscopic analysis established the structure of the new flavonol glycoside to be 8-methylkaempferol 7-O-glucopyranoside. The C-methylated flavonoids occur abundantly in ferns, gymnosperms, and the Ericaceae but are rarely found in leguminous plants.