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Isoflavonoids in Roots of *Sophora fraseri.*

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Six known phenolic compounds [sophoronol, sophoraisoflavanone A, maackiain, sophoracarpan B, calycosin and 2-(2',4'-dihydroxyphenyl)-5,6-methylendioxybenzofuran], and a new isoflavanone were isolated from the roots of *Sophora fraserii*. The structure of the new compound, named fraserinone A, was shown to be 5,7,4'-trihydroxy-5'-(1,1-dimethylallyl)-2'-methoxyisoflavanone by means of spectroscopic analysis.

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Flavonol Glycosides Production in Cell Suspension Cultures of *Vancouveria hexandra.*

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Cell suspension cultures of *Vancouveria hexandra* produce a large amount of des-*O*-methylanhydroicaritin glycosides in additon to a small amount of anhydroicaritin glycosides. These cells also produced large amounts of kaempferol glycosides which do not occur in the original plant. Higher phosphate increased contents of 8-isoprenylated flavonol glycosides, but had pratically no effect on that of kaempferol glycosides. This cell culture required 2,4-dichlorophenoxyacetic acid for the production of flavonol glycosides and high 2,4-D resulted the increase of anhydroicaritin glycoside contents without no effects on the other flavonol glycosides contents.

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Chemical Constituents in the Genus Achlys.

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The structure of a new isocoumarin derivative, achlisocoumarin IV, isolated from the underground parts of *Achlys triphylla* was characterized by means of its spectroscopic properties. The chemical constituents of *A. triphylla* and *A. triphylla* subsp. *japonica* were compared by HPLC to find their chemotaxonomic similarities and differences. Results showed a chemotaxonomically close relationship.