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[Lab. of Pharmacognosy]

Six Flavonostilbenes and a Flavanone in Roots of *Sophora alopecuroids*.

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Six novel flavonostilbenes, alopecurones A-F, were isolated from the roots of *Sophora alopecuroides*, in addition to a new 5-deoxyflavanone with a lavandulyl group, alopecurone G. The structures of alopecurones A-F, which are flavonostilbenes composed of a flavanone (sophoraflavanone G) or its 2'-methylether (leachianone A) condensed with a hydroxystilbene (resveratrol) through the A ring of the flavanone skeleton, were established by spectroscopic analysis. Chemical relationships between *S. alopecuroides*, *S. leachiana* and *S. moorcroftiana* are discussed on the basis of their phenolic components.

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Flavonoids in the Roots of *Sophora prostrata*.

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In studies on the chemosystematics of the genus *Sophora*, we had already reported the isolation and characterization of flavonoid compounds. In our previous paper, we described three new isoflavanones, prostratols A-C, isolated from the roots of *S. prostrata* native to New Zealand. Further chemical investigation of the roots of this species afforded 14 phenolic compounds, including four new compounds. These new compounds (prostratols D-G) were characterized by means by spectral data involving 2D techniques.

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Five Resveratrol Oligomers from Roots of *Sophora leachiana*.

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Five novel oligostilbenes, named leachianols C-G, were isolated from the roots of *Sophora leachiana*. Their structures were established by means of 2D NMR spectroscopic analysis, including HMBC, COLOC and PSNOESY, to be a resveratrol tetramer with a 2-cyclohexen-4-one ring (leachianol C), a resveratrol trimer with a dihydrobenzofuran ring (leachianol D), a regioisomer of leachianol D (leachianol E), a resveratrol dimer (leachianol F) and a stereo isomer of leachianol F (leachianol G), respectively. These oligostilbenes in *S. leachiana* derived from pallidol and different from those in *S. moorcroftiana*, which are derived from ϵ -viniferin.