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Two Flavanones in Sophora leachiana and Some Related Structures

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A novel flavanone, leachianone A, with a lavandulyl (5-methyl-2-isoprepenyl-hex-4-enyl) residue was isolated from the roots of Sophora leachiana (Leguminosae) in addition to sophoraflavanone G. The structure was determined to be 5,7,4'-trihydroxy-8-lavandulyl-2'-methoxyflavanone by means of NMR (1H-1H and 1H-13C COSY) spectral analysis. The earlier common names designated the above structure, vexivinol and nor-kurarinone, was proposed to be abandoned, because the structure of their common names has been shown, in fact, 5,7,4'-trihydroxy-6-lavandulyl-2'-methoxyflavanone which had already been named isokurarinone. On the same reasons, 5,7,2',4'-tetrahydroxyflavanone of 6-lavandulate must be kushenol F, and its 8-lavandulate be sophoraflavanone G.

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Flavonoids in the Roots of Euchresta horsfieldii in Thailand

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In addition to known compounds (kushenol E, 6,8-di (3,3-dimethylallyl)-genistein, osajin, warangalone, derron 4'-O-methyl ether, alpinumisoflavone 4'-methyl ether, and feruloyl hexadecayl ester), three new flavonoid compounds were isolated from the roots of *Euchresta horsfieldii* (Leguminosae) in Thailand. By means of the spectroscopic analysis, the structures of new compounds were characterized as 5,2',4'-trihydroxy-6-(3,3-dimethylallyl-6", 6"-dimethylpyrano (2"',3":7,8) flavanone for euchrenone a₉, 5,4'-dihydroxy-6-(3,3-dimethylallyl)-5"'-hydroxyisoproyldihydrofurano (2",3":7,8) isoflavone for euchrenone b₁₀, and 2-methoxymaackiain, respectively.

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Two Flavanones from Euchresta horsfieldii

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The present study was directed at examining possible chemical variation due to different geographical locations (Thailand and China). Dried and powdered roots and stems of E. horsfieldii collected in Yunnan Province, China were extracted with acetone under reflux. The extract was subjected to column chromatography on silica gel to give five compounds including two new flavanones. The known compounds were identified as glabrol, maackiain and feruloly hexadecayl ester. The structures of new flavanones named euchrenones a_7 and a_8 were determined—to be 7,2',4'—trihydroxy- $8-\gamma$, γ —dimethylallyl—and 7,2'—dihydroxy-8,5'—di $(\gamma, \gamma$ —dimethylallyl)—4'—methoxyflavanone, respectively, by means of spectroscopic analysis,