

together with four known ones (4, 5, 6, 7) were isolated from the methanolysis products of the total saponin mixture, and their structures were elucidated by spectral evidences as follows: 1, 3 β , 15 α , 16 α , 28-tetrahydroxy-olean-12-ene, 2, 22-O-tigloyl-A1-barrigenol, 3, 28-O-tigloyl-A1-barrigenol, 4, primulagenin A, 5, camelliagenin A, 6, A1-barrigenol, 7, 16-O-tigloyl camelliagenin A.

[PD2-3] [04/20/2001 (Fri) 13:30 - 14:30 / Hall 4]

Constituents from the roots of *Sophora flavescens*

Kim JS^o, Han SJ, Byun JH, Xu YN, Yoo SW, Kang SS, Son KH^a, Chang HW^b, Kim HP^c

Natural Products Research Institute, Seoul National University,^aDepartment of Food and Nutrition, Andong National University,^bCollege of Pharmacy, Yeongnam University,^cCollege of Pharmacy, Kangwon National University

Lupenone, hexadecyl ferulate, (-)-sophocarpine and three isoflavonoids such as genistein, calycosin and 3-methoxydaidzein were isolated from the roots of *Sophora flavescens*.

[PD2-4] [04/20/2001 (Fri) 13:30 - 14:30 / Hall 4]

Isolation and Quantitative Determination of Matrine from *Sophorae Radix*

Kim JS^o, Kang SS, Han SJ, Lee KS¹, Chang SY², Won DH²

Natural Products Research Institute, Seoul National University, ¹Dept. of Pharmacy, Chung Buk National University, ²Natural Medicines Standardization Division, Korea Food and Drug Administration

HPLC method was applied to the quantitative analysis of lupine alkaloid, matrine from alkaloid fraction of *Sophorae Radix* (*Sophora flavescens*). The average content of matrine from 20 *Sophorae Radices* showed 0.13 \pm 0.06%.

[PD2-5] [04/20/2001 (Fri) 13:30 - 14:30 / Hall 4]

Effect of the Essential Oil components from *Magnolia sieboldii* on NO and PGE₂ production in murine macrophages

Lim SS^{1o}, Ban HS², Kim YP², Choi YJ¹, Lee YS¹, Cho SH³, Shin KH¹, Ohuchi K²

¹Natural Products Research Institute Seoul National University ²Laboratory of Pathophysiological Biochemistry, Graduate School of Pharmaceutical Sciences, Tohoku University, Japan ³Kong Ju University of Education

The essential oil components of the flowers of *Magnolia sieboldii* was analyzed qualitatively and quantitatively by gas chromatography(GC) and gas chromatography/mass spectrometric (GC/MS) analysis. As a result, sixty compounds were identified, of which β -myrcene(12.72 %), α -terpinene (14.83 %) and β -elemene (18.0 %) were revealed to be the major constituents. The whole essential oil and its major components were tested for their effects on nitric oxide (NO) and prostaglandin E₂ (PGE₂) production in rat peritoneal macrophages induced by lipopolysaccharide