

[Chem. Pharm. Bull., 46, 900-905 (1998)]

[Lab. of Pharmacognosy]

**Synthesis of Four Possible Intermediates after Secologanin on the Biosynthesis of the Oleoside-, 10-Hydroxyoleoside- and Ligustalosite-type Glucosides in Oleaceous Plants.**

Hiroshi KUWAJIMA, Takao TANAHASHI, Kenichiro INOUE\* and Hiroyuki INOUE

To examine the biosynthetic pathway from secologanin to three types of secoiridoid glucosides characteristic of oleaceous plants, synthesis of two respective stereoisomers at C-8 of 8,10-epoxysecologanin and -secoxyloganin was established and their deuterium-labeled analogues were prepared.

[Phytochemistry, 49, 1333-1337 (1998)]

[Lab. of Pharmacognosy]

**Four Secoiridoid Glucosides from *Fraxinus insularis*.**Takao TANAHASHI, PARIDA, Yukiko TAKENAKA, Naotaka NAGAKURA,  
Kenichiro INOUE,\* Hiroshi KUWAJIMA and Cheng-Chang CHEN

Investigation of the leaves of *Fraxinus insularis* has led to the isolation of four new secoiridoid glucosides, insularoside-3'-O- $\beta$ -D-glucoside, insulaside-3',6''-di-O- $\beta$ -D-glucoside, insularoside and desrhamnosyloleoaeteo-side, together with ligstroside. The structures of the new compounds were determined on the basis of spectroscopic methods.

[Chem. Commun., 43-44 (1998)]

[Lab. of Pharmacognosy]

**Chemoselective Isomerization of Amide-substituted Oxetanes with Lewis Acid to Give Oxazine Derivatives or Bicyclo Amide Acetals.**Tomonari NISHIMURA, Shigeyoshi KANO, Hitoshi SENDA, Toshiyuki  
TANAKA,\* Kohji ANDO, Hiroshi OGAWA and Masatoshi MOTOI

The Lewis-acid catalyzed isomerization of secondary and tertiary amide-substituted oxetanes takes place chemoselectively, giving 5-hydromethyl-5,6-dihydro-4H-1,3-oxazines and reactive amide acetals consisting of a bicyclo[2.2.2]octane skeleton, respectively.

[Chem. Pharm. Bull., 46, 663-668 (1998)]

[Lab. of Pharmacognosy]

**Phenolic Compounds Isolated from Roots of *Sophora stenophylla*.**Masayoshi OHYAMA, Toshiyuki TANAKA, Munekazu IINUMA\* and  
Charles L. BURANDT, Jr.

A new prenylated flavanone glucoside (sophoraflavanone I-7-O-glucoside) and three new resveratrol oligomers, stenophyllols A-C, were isolated from the roots of *Sophora stenophylla* along with six known flavonoids and three known resveratrol oligomers. Their structures were determined by spectroscopic analysis of correlation spectroscopy involving long-range coupling and nuclear overhauser experiments.