〔Shoyakugaku Zasshl, **39**, 71 (1985)〕

A Botanical Origin and Berberine Content of Indo-ohbaku (*Berberis asiatica*). MIZUO MIZUNO, TOSHIHIRO TANAKA*, TSUNEO NAMBA, SHINTARO TAKAHASHI

Crude drug called Indo- ohbaku has been imported from India as a raw material for the pre-paration of berberine. This crude drug often includes, as contaminats, broad obovate and coarsely serrate leaves with coriaceous and remarkable reticulate veins. We obtained twigs with such leaves and inflorescences from the producing center of the crude drug, and identified the botanical origin of the crude drug as *Berberis asiatica* Roxb. This material was contain 2.45-2.55% of berberine (J.P.X method), jatrorrhizine, palmatine, magnoflorine and unidentified alkaloid on TLC. The result showed, that this crude drug was useful as a material for the preparation of berberine.

〔Phytochemistry, **24**, 626 (1985)〕

Lignan from Calyces of Diospyros kaki. SHIN MATSUURA, MUNEKAZU IINUMA*

Calyces of *Diospyros kaki* are used both in Japanese folk medicine and in traditional Chinese medicine for the treatment of hiccough. In our previous work, we revealed as the constituents of the calyces, 18 compounds comprising flavonol and their glycosides, triterpenoids and aromatic acids. The present paper deals with the structural elucidation of a new lignan, (-) divanillyltetrahydrofuran ferulate, by spectroscopic methods and total synthesis.

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Synthesis and Revised Structure of the Flavone Brickellin MUNEKAZU IINUMA, MARGARET F. ROBERTS*, STEPHEN A. MATLIN, VIVIEN E. STACEY, BARBARA N. TIMMERMANN, TOM J. MABRY, RICHARD BROWN

The flavone called brickellin isolated from *Brickellia veronicaefolia* and *B. chlorolepis* was assigned 5,6′-dihydroxy-2′,3′,4′,6,7-pentamethoxyflavone on consideration of its UV, ^{1}H-NMR and ^{13}C-NMR, MS and NOE data, However the lack of suitable methods at the time made the positional assignment of the B-ring methoxyl groups difficult. In this report, the structure of the flavone brickellin has been revised and confirmed by synthesis. The correct structure is 5,2′-dihydroxy-3,4′,5′,6,7-pentamethoxyflavone.