

[Plant Science, 116, 233-238 (1996)]

[Lab. of Pharmacognosy]

Organ specific localization of flavonoids in *Glycyrrhiza glabra* L. .

HIROAKI HAYASHI, NOBORU HIRAOKA, YASUMASA IKESHIRO, HIROBUMI YAMAMOTO*

Glycyrrhiza glabra L. (licorise) contains not only glycyrrhizin, the sweet principle of licorice, but also diverse flavonoids such as glabridin in cork layers of the thickening roots, liquiritigenin glycosides and isoliquiritigenin glycosides in the woody part of the thickening roots, pinocembrin and licoflavanone present on the outer surface of the young leaves, and isoquercitrin inside the leaves. Cultured cells of *G. glabra* produced no these flavonoids but produced formononetin, an isoflavonoid, which is commonly distributed in the leguminous plants and in the underground and above-ground parts of *G. glabra*.

[Phytochemistry, 43, 603 - 608 (1996)]

[Lab. of Pharmacognosy]

Absorption and increase in the production of prenylated flavanones in *Sophora flavescens* cell suspension cultures by cork pieces.

HIROBUMI YAMAMOTO*, MAYUMI YAMAGUCHI, KENICHIRO INOUE

Quantitative analysis of prenylated flavanones contents in the protoplasts of *Sophora flavescens* cultured cells revealed that these flavanones were localized mainly in the cell walls. To collect prenylated flavanones from the cultured cells, several absorbents such as liquid paraffin, Amberlite XAD-2, activated carbon and commercially available cork pieces were added to the culture medium. Amberlite XAD-2 collected about 50 % of the total prenylated flavanones from the cells, whereas cork pieces collected more than 70 % of them. By the addition of cork pieces, the production of prenylated flavanones increased by 2 - 5 times compared with that of the control. Reasons of this phenomenon were discussed.

[Planta Medica, 62, 91-92 (1996)]

[Lab. of Pharmacognosy]

Iridoid Glucosides from *Curtia tenuifolia*.

H. KUWAJIMA, S. HAGIWARA, E. FUJINO, K. TAKAISHI, Y. TACHIBANA, K. INOUE*

Seven secoiridoid glucosides from *Curtia tenuifolia* were identified by spectral data.