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Analysis of Flavonols in *Vitex rotundifolia*

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Objectives

In Korea, the fruits of *Vitex rotundifolia* (L.fil), well known as 'Man Hyung Ja', have been traditionally used as a medicine for cold, headache, migraine, sore eyes and myalgia in the Asian countries (Ko et al. 2000; Jung 2000). In order to search the effective components for the medicined property, we analysed flavonol composition of this plant.

Materials and Methods

1. The leaves and fruits of *V. rotundifolia* were collected from "Sinduri" in August 2004.

2. Flavonols were extracted in MeOH, and the extract was separated with chloroform and ethyl acetate. Purified flavonoids were analysed employing a combination of Rf values, retention times, and co-chromatography with standards using HPLC(Shimadzu SCA-10A system) by the methods of Harbone (1980) and Markham (1982).

Result and Discussion

In this study, six flavonols were confirmed in leaves. We compared the relative amounts of these flavonols, and discriminated three major compounds, one medial compound and two minor compounds. In fruits, five flavonols were confirmed as minor compounds. It is reported that the main ingredients of leaves in *V. rotundifolia*, camphene, pinene and luteolin-7-glucoside, while vitexcarpin(casticin) and artemetin in fruits.

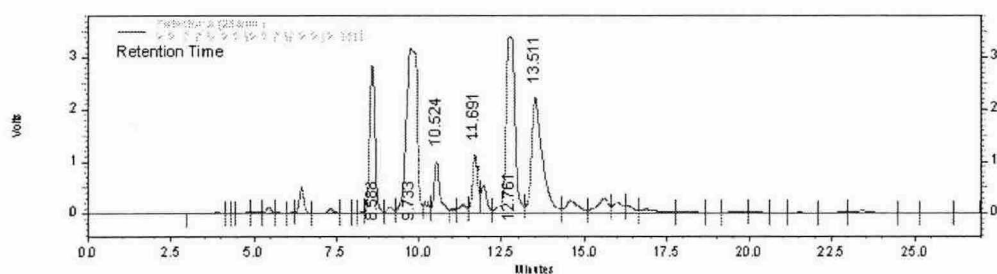


figure 1. Separation of flavonols in leaves of *V. rotundifolia* by HPLC

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