

## UPLC를 이용한 지역별 헛개나무(*Hovenia dulcis*) 플라보노이드의 정량분석

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## Quantitative Analysis of Flavonoids in *Hovenia dulcis* by Region Using UPLC

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*Hovenia dulcis* is a herbal plant, which belongs to the Rhamnaceae family and is a native of Japan, China and Korea. Its fruit stalk is called 'Jiguja' in Korea. It has been traditionally used as a medicinal plant in East Asia. It was reported to have detoxification effects on alcohol poisoning, and antioxidant, antidiabetic etc. Sample of 5 g was extracted with 50 mL of 70% EtOH. The supernatant was filtered by 0.45 µm membrane filter before analysis. The UPLC system was performed on Waters alliance UPLC HSS T3 column (2.1 × 100 mm, 1.7 µm) with a UV detector. The gradient system was a binary eluent of 0.1% formic acid in water(A) and 0.1% formic acid in acetonitrile(B) with gradient conditions as follows: Initial, 10% B; 1 min, 10% B; 4 min, 20% B; 10 min, 25% B; 12 min, 30% B; 14 min, 90% B; 17 min, 90% B; flow rate of 0.2 mL/min. The samples were injected by 2 µL and were detected at UV 355 nm. As a result of analysis, chromatographic patterns appeared in two cases: samples analyzed for ampelopsin and myricetin, and samples analyzed for taxifolin and quercetin. Among the four compounds, the largest regional difference was found to be taxifolin.

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