

## Simultaneous determination of matrine and oxymatrine in *Sophora Flavescens* Ait. by high performance liquid chromatography

만효룡, 정용안<sup>1</sup>, 노경호\*  
인하대학교; <sup>1</sup>한국기기유화시험연구원  
(rowkho@inha.ac.kr\*)

Following a detailed study, a reversed-phase high performance liquid chromatographic method (HPLC) has been developed and validated for analysis of two bioactive alkaloids, matrine and oxymatrine, in *Sophora flavescens* Ait.. HPLC separation of the alkaloids was performed on a C18 column and detected by ultraviolet absorbance at 210 nm. A mobile phase composed of 0.01 mol/L KH<sub>2</sub>PO<sub>4</sub> buffer-methanol-triethylamine in the ratios 65:35:0.01 (v/v) was found to be the most suitable for this separation at a flow-rate of 0.5 mL/min and enabled the baseline separation of the two analytes free from interferences with isocratic elution. The method has been successfully applied to the simultaneous determination of matrine and oxymatrine in *Sophora Flavescens* Ait..