

**Analysis of matrine, oxymatrine, sophoridine and sophocarpine in sophora favescons  
ait. by RP- HPLC**

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A simple, reliable and effective reverse-phase high performance liquid chromatography method was developed for simultaneous separation of four alkaloids including matrine, oxymatrine, sophoridine and sophocarpine from sophora favescons ait.. The extraction condition such as the components of extraction solvents, procedure, time and temperature were optimized. The four compounds were completely separated on a C<sub>18</sub> column with the mobile phase of 0.01 M KH<sub>2</sub>PO<sub>4</sub> buffer/methanol (65:35, containing 0.01% triethylamine, v/v). The flow rate was 0.5 mL/min with an operating temperature of 25 °C and the UV wavelength was 210 nm. Excellent recovery and reproducibility values were achieved. The proposed method appears to be suitable for use as a tool for safety assurance and quality control for commercially available suspect samples containing these compounds.