

## Reversed-Phase Liquid Chromatographic Determination of Tanshinone IIA in *Salvia miltiorrhiza* Bunge (Labiatae)

만효룡, Y. L. Polyakova, 노경호\*  
인하대학교  
(rowkho@inha.ac.kr\*)

Tanshinone IIA is one of active component isolated from the rhizome of *Salvia miltiorrhiza* Bunge which has been used widely in oriental and western medicine to treat coronary heart diseases, neurasthenic insomnia, and myocardial infarction. It reportedly has sedative and tranquilizing effects.

In this work, a simple reversed-phase high performance liquid chromatography (RP-HPLC) method employing a liquid-liquid extraction and UV detection for the rapid qualitative and quantitative determination of tanshinone IIA in roots of *Salvia miltiorrhiza* Bunge is reported. Ethyl acetate, ethanol and methanol were used to compare the extract result and the liquid chromatographic separations of the compounds on a reversed-phase C18 column with water-methanol eluents were performed. The assay demonstrates excellent specificity, linearity, precision and accuracy for tanshinone IIA. The described method can be successfully applied to the routine analysis of tanshinone IIA in roots of Chinese herbal containing cryptotanshinones within 30 min.