

## Application of Preparative Extraction and Purification of Glabridin from Licorice by RP-HPLC

최두영, 노경호<sup>1,\*</sup>

육군 3 사관학교; <sup>1</sup>인하대 화공과  
(rowkho@inha.ac.kr\*)

Glabridin as a known whitening and antioxidant reagent is a main ingredient in the licorice root (*Glycyrrhiza glabra*). The purpose of this research is to establish the extraction process of the glabridin from licorice root. So, we try to offer a basis analytical index for commercial process and to find an optimized separation procedure of glabridin by HPLC. By optimizing the extraction solvents, the extraction methods and the extraction times, an optimum extraction method was developed. Finally, the ethyl acetate extraction by one-hour ultrasonic extraction method was applied to RP-HPLC for further purification and preparation. The preparative and analysis HPLC was carried out under an optimized condition with acetonitrile/water (50/50, vol. %) as the mobile phase, UV wavelength 230 nm and flow rate 1.0 ml/min. Quantitative result showed that under the above optimized extraction and separation methods, 1.26 g glabridin per kg licorice root. This work could provide useful procedure both for cosmetic and pharmaceutical industries.