

Gypenoside V로부터 minor ginsenosides의 생산

손나리, 민진우, 장미, 김효연, 전지나, 양덕춘*

경희대학교 고려인삼 명품화 사업단 & 인삼유전자은행

Production of Minor Gisenosides from Gypenoside V

Na-Ri Son, Jin-Woo Min, Mi Jang, Hyo-Yeon Kim, Ji-na Jeon, Deok-Chun Yang*

Korean ginseng center for most valuable product & Ginseng Genetic Resource Bank,

Kyung Hee University, Yongin 446-701, Korea

Panax ginseng C.A Meyer is frequently taken orally as a traditional herbal medicine in Asian countries. The major components of ginseng are ginsenoside, which are pharmaceutical activity. The six major ginsenosides, including Rb1, Rb2, Rc, Rd, Re and Rg1 account for 90% of total ginsenosides. Even though the minor ginsenosides, including Rg3, Rh2 and compound K has high pharmaceutical activities, the price of minor ginsenosides is too high. Therefore we isolated the gypenoside V and made it converted to minor ginsenosides. In the plant *Gynostemma pentaphyllum* Makino, gypenoside V was presented as dominant saponin (content about 2.4%), and was similar to protopanaxadol type ginsenosides such as ginsenoside Rb1. In this study, we confirmed that the conversion of gypenoside V to minor ginsenosides after using the various treatment such as heating, acid treatment, commercial edible enzyme, and lactobacillus. Consequently, we optimized the transformation of gypenoside V to minor ginsenoside using Thin Layer Chromatography (TLC), High Performance Liquid Chromatography (HPLC), Time-of-flight Mass Spectrometry (LC/TOF/MS).

Key words : ginsenoside, gypenoside, bioconversion, LC/TOF/MS.