

## Effect of *Glycyrrhiza* Varieties WON-GAM on Composition of Fecal Microbiota in DSS-induced Colitis Model

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*Glycyrrhizae* Radix (GR), commonly known as liquorice, is a medicinal and edible plant widely used in East Asia with its pharmacological properties. Currently, *Glycyrrhiza uralensis*, *G. glabra* and *G. inflata* are used for pharmaceutical purposes in Korea and then the improved *Glycyrrhiza* varieties, WON-GAM (WG) has been developed by Korea Rural Development Administration. To evaluate equivalence of efficacy, several comparative studies between already-registered species and new cultivars have been conducted. To evaluate equivalence of efficacy, several comparative studies between already-registered species and new cultivars have been conducted. The aim of this study was to evaluate the effect of WG on fecal microbiota in DSS-induced colitis model. Fecal microbiota was analyzed by terminal restriction fragment length polymorphism (T-RFLP). The composition of the fecal microbiota did not show a specific pattern based on experimental groups; however, a tendency toward an increase in the proportion of *Lactobacillales* was observed. *Glycyrrhiza* varieties could change composition of fecal microbiota in DSS-induced colitis model. This work was carried out with the support of "Cooperative Research Program for Agriculture Science and Technology Development (Project No. PJ014246022020)" Rural Development Administration.

**Key words:** Improved *Glycyrrhiza* varieties, ulcerative Colitis, fecal microbiota, T-RFLP