Isolation and identification of intestinal bacteria from mose feces to study biological activities of plant materials

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Intestinal microbiota is strongly connected to health of host. It has been reported that not only metabolic disease like diabetes and obesity, but psychological diseases are affected by composition of intestinal microbiota. To figure it out the importance of the composition and relationship between disease and microbiota, intensive researches have done with human and experimental animals. But, the composition of the intestinal microbiota could be affected by several factors such as experimental environments, feeding, water, and bedding. As a result, the data from each experimental group might be diverse. It also affects experiments about biological activities of plant materials. In this study, mouse intestinal bacteria were isolated from fresh feces and identified by 16S rRNA gene to use in biological activities of natural medicines. The fecal supernatant was anaerobically incubated at 37°C for 48 hours. Colonies were picked up separately and incubated again in same condition to increase quantity to analyze and stock. The bacteria strains were listed up and could be used for many researches including biological activities of plant materials and change in composition of intestinal bacteria itself.

Key words: Mouse gut microbiota, Fecal bacteria, 16S rRNA gene, Plant materials

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