Enhanced extraction of Phytoestrogen compounds in Sophoraflavescens Aiton using Ultrasonic wave

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Recently, other good effects of Sophora flavescens Aiton have been studied. They may contribute to many of the health benefits attributed to Sophora flavescens Aiton foods. A modern method used to release the bioactive constituents from herbs is ultrasonic enhanced solvent extraction. In this work, we the ettect on extraction amounts and general composition content of phytoestrogen genistein and formononetin extracted from Sophoraflavescens Aiton by various ultrasonic waves (35, 72, 170 KHz) and extraction time (30, 60 min) were compared using extraction solvent water 100%. The experimental results, general composition carbohydrate (0.255 - 0.413%) excepts, other ingredients was confirmed almost similarly. Also, The highest yield of extraction amount 3.17g was obtained by ultrasonic waves with a frequency of 170 KHz and an extraction time of 60 min. This work offers would be useful for chemical and biological studies of Sophoraflavescens Aiton and its products.