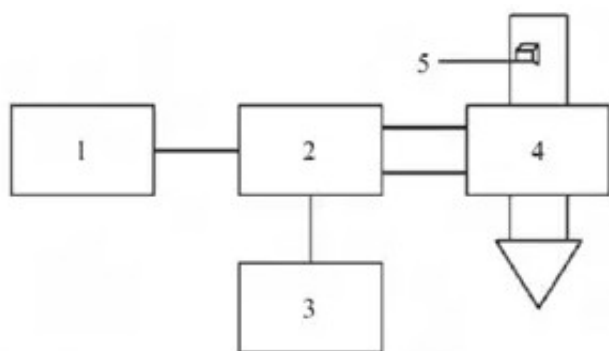


# Effects of Different Drying Methods on the Content of Total Flavonoids in "Wudang No.2 Honeysuckle"

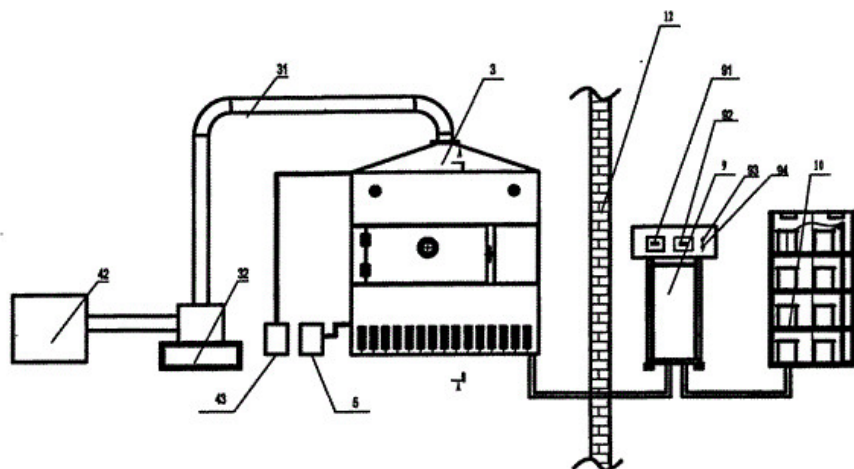


[Abstract] Objective: To investigate the effects of five kinds of [microwave drying equipment](#) on the total flavonoids in "Wudang No.2 Honeysuckle". Methods: The "Wu Dang No.2 Honeysuckle" was dried by steaming + drying method, microwave + drying method, dry method, drying method and drying method. The content of total flavonoids was determined by ultraviolet spectrophotometry. The effect of total flavonoids content in "Wudang No. 2 Honeysuckle".

Results: The content of total flavonoids was as follows: steam drying method > microwave drying method > drying method > dry method > drying method. Conclusion: The drying method of "Wudang No. 2 Honeysuckle" is better by steaming method and microwave drying method.

[Key words] Wudang No. 2 honeysuckle; drying method; total flavonoids; [honeysuckle](#) [microwave drying](#)

Honeysuckle is a commonly used drug for detoxification, and the total flavonoid content in flower buds is directly related to drug efficacy. Flavonoids have anti-inflammatory, anti-free radical oxidation, improve aging, enhance immunity, lower blood lipids, lower blood sugar and other pharmacological activities, and different processing methods may affect the content of



total flavonoids.

"Wudang No.2 Honeysuckle" is a new variety cultivated by Wudang Biomedical Technology Co., Ltd., which is a kind of improved honeysuckle and Wudang Mountain native honeysuckle. It has the characteristics of long flowering period, high yield and strong resistance. It has become Wudang. One of the mainstream varieties of Chinese herbal medicine production in mountainous areas. In order to help the farmers to find suitable processing methods for the processing of honeysuckle origin, the content of total flavonoids in different drying methods of "Wudang No.2 Honeysuckle" was investigated.

Total flavonoids are one of the main components of honeysuckle and the main medicinal ingredient of honeysuckle. The quality control components of the honeysuckle specified in the 2015 edition of the Chinese Pharmacopoeia are chlorogenic acids and luteolin, all of which are flavonoids. Modern studies have shown that flavonoids have a variety of biological activities, such as good antimicrobial activity, as well as antioxidant, anti-free radical, anti-inflammatory effects, while protecting the cardiovascular, digestive, and liver.

Some components of flavonoids contain phenolic hydroxyl groups, which are easily oxidized by polyphenol oxidase and cause a decrease in content. The change in drying temperature and time causes denaturation of polyphenol oxidase, which leads to the total flavonoid content of "Wudang No.2 Honeysuckle". Variety. In this paper, the difference between the traditional drying method (drying method, dry drying method, drying method, steam drying method) and the new drying method (microwave drying) is compared by ultraviolet method. Microwave drying method, steam drying method and other drying methods are compared. Ratio, rapidly increase the temperature and reduce the loss of flavonoids.

The five drying methods compare the phases, and the microwave drying method and the steam drying method maintain good phase. The microwave drying method basically retains the "Wudang No. 2 Honeysuckle" shape, taste, color, and steam drying method. No. Honeysuckle has a good color, oily feel, general odor, and more curls. Microwave drying method is an emerging drying method. It has been shown that the drying method has the least influence on the content of chlorogenic acid in honeysuckle, followed by evaporation method. The flavonoids in the steam drying method and microwave drying method are used in this paper. Quite, it may be related to the mutual conversion of flavonoids.

In summary, the drying method of "Wu Dang No. 2 Honeysuckle" steam drying method has the least influence on the content of total flavonoids, and the microwave drying method has the best quality. Both methods can be recommended for "Wudang No. 2 Honeysuckle". Industrial production.