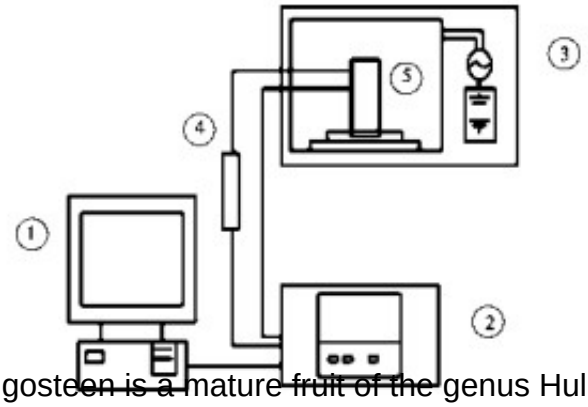
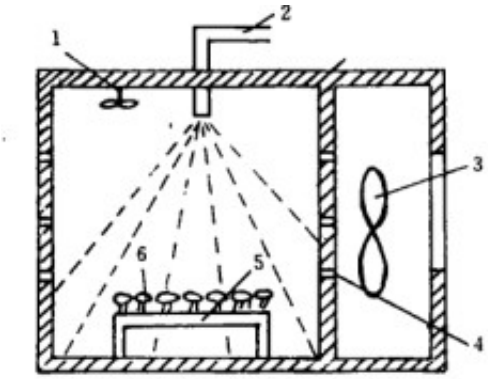
Effect of Different Drying Techniques on the Quality of Mangosteen Fruit Dry

?Abstract? In this study, Luo Han Guo was used as raw material, using five technologies of blast, far infrared, microwave drying equipment, vacuum and microwave vacuum to study the effects of different drying methods on Luo Han Guo, and provide some theory for the processing and production of dried lohen fruit. basis.

?Key words? Luo Han Guo microwave drying; drying technology; saponin V; total flavonoids



Mangosteen is a mature fruit of the genus Huluocarpus. It is a special plant of Guangxi and is a unique economic and medicinal plant in China. Mangosteen is rich in vitamin C, E, fructose, essential amino acids, trace elements and other nutrients, as well as various active ingredients including flavonoids, polysaccharides, sweet sorghum and polyphenols. It is a common medicine used by the people. Dried mangosteen is a commonly used tincture in people's lives, and has a remarkable effect in treating pertussis, chronic bronchitis, and colds.



Drying is an important part of the processing of dried mangosteen, which directly affects the quality of the product and the deep development in the later stage. The dried mangosteen currently sold on the market is generally processed by conventional baking techniques. There are few reports on the effects of traditional methods and modern drying techniques on the quality of dried gro nuts.

In this study, Luo Han Guo was used as a material. After uniform pretreatment, five different drying methods were used to compare the effects of dried mangosteen on the appearance and shape and total intrinsic quality of total flavonoids and saponins V, in order to screen out the better drying. Technology provides theoretical and technical basis for improving and controlling the quality of dried broccoli.

By comparing the appearance comparison and drying microscopic process of different drying methods, the moisture content of the dried fruits obtained by the five drying methods meets the requirements. The content of dried saponins V and total flavonoids prepared by microwave vacuum drying method were the highest, 1.63% and 1.33% respectively. From the retention of active ingredients and sensory evaluation results, microwave drying and vacuum drying methods can achieve good results. The worst effect is the blast drying method.

Therefore, in order to obtain high quality dried mangosteen fruit during processing of mangosteen, microwave vacuum drying and vacuum drying are preferred. There are still some shortcomings in this paper. The dry methods involved are not covered. The influence of some factors and the optimization of dry process technology need to be further explored.