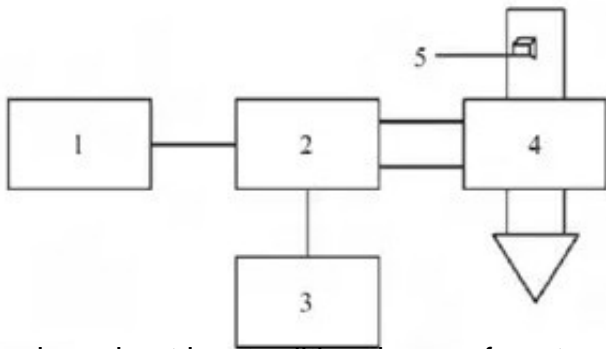
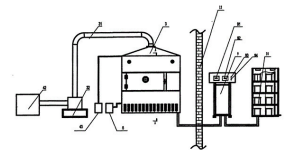


Bamboo Shoot Drying Technology and Its Effect on Bamboo Shoot Quality



Bamboo shoot is a traditional green forest vegetable with abundant nutrition. Drying is one of the main processing methods of bamboo shoots. In this paper, the application of hot air drying, vacuum freeze drying and [microwave drying equipment](#) in bamboo shoot drying was summarized, and the effects of different drying technologies on the color, texture, nutrient composition and rehydration of bamboo shoots were also discussed. The existing problems in current research were pointed out. The development prospect of bamboo shoot drying technology was prospected.



Key words: [bamboo shoot microwave drying](#); drying technology; quality

Bamboo shoots, also known as bamboo sprouts, bamboo buds and bamboo embryos, are the generic name of the tender buds of many plants in the Bambusoideae of Poaceae, which are

sprouted from the underground stem (bamboo whip) of bamboo. The edible part of bamboo shoots accounts for about 27% of the fresh weight, and because of its low fat, high dietary fiber, rich in vitamins and other nutrients, bamboo shoots become a favorite food for consumers.

However, bamboo shoots have short harvest period and poor storage resistance, and are prone to dehydration and aging soon after harvest. Only 40% of bamboo shoots produced annually in China are used for fresh food and fresh sales, while the remaining 60% are used for processing. There are many processing methods for bamboo shoots, such as boiling, drying, canning and fermentation. Drying and dehydration is a common method in fruit and vegetable processing. At present, hot air drying, vacuum freeze drying and microwave drying are the main methods used for dehydration and drying of fruits and vegetables.

Drying technology is one of the most important preservation methods of bamboo shoots. With the development of society, people's demand for the quantity and quality of bamboo shoots is getting higher and higher. Traditional hot air drying can no longer meet the needs of people's lives. In bamboo shoot drying methods, in addition to hot air drying, there are vacuum freeze-drying, combined drying and so on.

There are many kinds of bamboo shoots, and the drying technology of different bamboo shoots is not the same. Therefore, it is necessary to optimize the drying process parameters and water conversion points in order to achieve the best drying effect. Secondly, the improvement of multi-functional drying equipment, with the development of science and technology, all kinds of drying equipment are constantly improving and optimizing. However, there are few multi-functional drying equipment, so this is the future direction of development. Finally, the automation of combined drying process. On the basis of determining the optimum drying process, realizing automatic production can not only reduce the cost, but also increase the output.