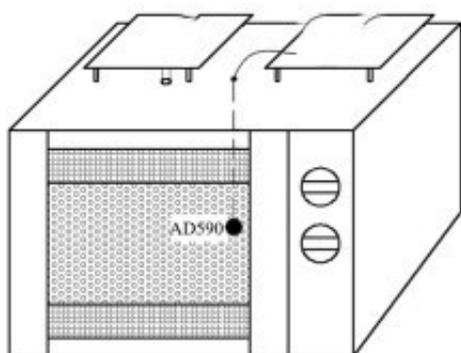


Effect of Different Drying Methods on the Quality of Tremella Dry Products

Abstract: The effects of hot air drying, vacuum drying, [microwave drying equipment](#) and freeze drying on the quality of dried Tremella fuciformis were studied by sensory quality, rehydration ratio, shrinkage and color of Tremella fuciformis.



Schematic diagram of microwave drying temperature control system

The results showed that: 60 °C hot air dried tremella products have the best sensory quality, the rehydration ratio, shrinkage rate and comprehensive score are second only to freeze-drying; vacuum drying effect is lower than hot air drying; microwave drying equipment has the best quality; freeze drying The comprehensive quality of the products is the best, but the drying time is long, and the product structure is loose and brittle. Considering comprehensively, the 60 °C hot air dried tremella dry product has the best comprehensive quality, and the drying method is simple and the cost is low.



Key words: [Tremella microwave drying](#); quality

Tremella fuciformis, also known as white fungus and snow fungus, is a fruiting body of Tremella fuciformis fungus. It is an important edible fungus containing bioactive components such as polysaccharides, phenols, flavonoids and various amino acids. It is known as the king of edible fungi. ", is a high-quality functional ingredient extraction resource.

Fresh Tremella has a high water content, generally 75% to 80%. It is difficult to store and keep

fresh. It can only be stored for about two weeks even if the conditions are suitable. Dehydration and drying is one of the most important methods widely used in food processing. 4. The processing methods mainly include hot air drying, microwave drying, vacuum drying, freeze drying and the like.

At present, the effects of different drying methods on the quality of agricultural products such as carrots, chestnuts, lotus seeds, apple slices and garlic have been reported, but there are still few studies on the processing of white fungus. This experiment uses fresh white fungus as raw material to study hot air. The effects of drying, vacuum drying, microwave drying and freeze-drying on the sensory quality, rehydration ratio, shrinkage and color of the dried Tremella fuciformis products, in order to obtain the processing characteristics of different drying processes of Tremella fuciformis, in order to improve the processing of Tremella dry processing The quality provides a scientific basis.

Hot air drying (60 °C) Tremella dry product has the best sensory quality, its comprehensive score, rehydration ratio, shrinkage rate is second only to freeze-drying, but as the hot air drying temperature increases, its sensory quality and rehydration ratio decrease. , yellowness and shrinkage increase.

The vacuum drying effect is lower than hot air drying, and the drying effect shows the same trend as the hot air drying with the increase of vacuum drying temperature; the microwave drying effect is the worst; the freeze drying effect is the best, but the drying time is longer, and the product The structure is loose and the brittleness is poor, which is not conducive to the packaging and transportation of the product. Considering comprehensively, the hot air drying (60 °C) product has better comprehensive quality and simple drying method, which is a better drying method.