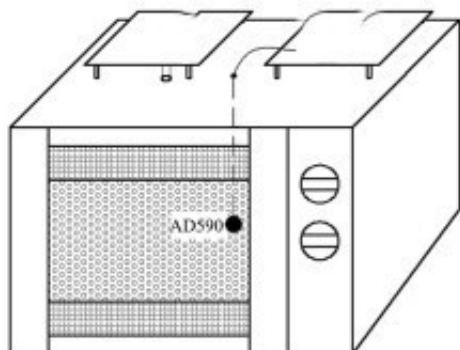


Study on Microwave Vacuum Drying Technology for Tremella Chips



Schematic diagram of microwave drying temperature control system

Abstract: Using Tremella fuciformis as raw material, the processing technology of instant snack food with Tremella fuciformis chips was studied. According to the nutritional, physicochemical and processing characteristics of Tremella fuciformis, the optimum formula and technological conditions of the leaching solution before microwave drying were optimized, and the technological conditions of [microwave drying equipment](#) were optimized according to the sensory characteristics of Tremella fuciformis chips.

Through single factor test and orthogonal test, the optimum formula of impregnating solution in the processing of Tremella chips was determined as follows: sugar content 10%, acid content 0.03%, boiling time 15 min, microwave power 750W, microwave drying time 20 min. The Tremella chips prepared by this method had good taste. In the determination of physical and chemical indexes, the moisture content of Tremella fragile tablets was 14.4%, the content of lipid control was 1.2%, and the content of tremella polysaccharide was 23.08%.

Key words: [Tremella fuciformis microwave drying](#); tablets; microwave vacuum drying



Tremella fuciformis, also known as white fungus and snow fungus, is a kind of high-grade edible fungus, which has the reputation of "king of edible fungus". Tremella fuciformis contains 17 kinds of amino acids, including 8 kinds of essential amino acids for human body, Tremella fuciformis polysaccharides and various vitamins. It has the functions of reducing blood lipids, anti-aging, anti-swelling and improving immunity. Therefore, it is known as the key food, "health and longevity" medicine.

With the development of economy and science and technology in our country, Tremella has also entered ordinary people's homes. However, Tremella fuciformis is inconvenient to eat and needs to be boiled for 6-8 hours, which consumes time and energy and is not suitable for modern fast-paced life, thus affecting the further consumption of Tremella fuciformis. Today, people are pursuing nutritional value, but also more and more in favor of fashionable and leisure ready-to-eat food.

At present, the main processing varieties of Tremella are Tremella fudge, solidified Tremella yoghurt, Tremella beverage and Tremella fuciformis, with relatively few varieties. In this paper, Tremella fuciformis was used as raw material, mixed with appropriate proportion of sugar and citric acid, and dried by microwave vacuum to produce the snack food of Tremella fuciformis crisp chips with good integrity, suitable crispness and sweet and sour taste. Tremella chips have unique taste, rich nutrition, easy to carry, convenient health, and good market prospects.