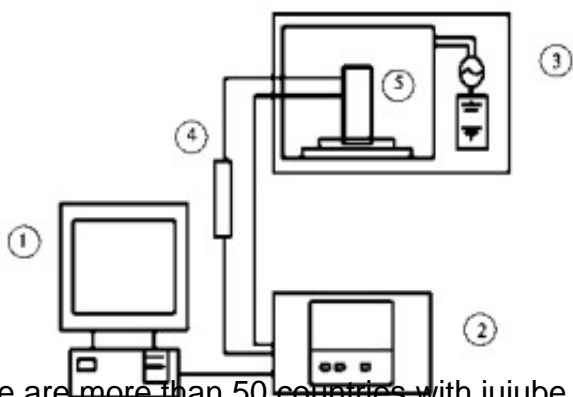


# Research Status and Development Trend of Domestic Red Date Drying Technology

Abstract: With the increase of the annual output of jujube in China, the traditional drying technology has not reached the requirement of drying. To this end, the status quo and development trend of domestic jujube drying technology were introduced. According to the limitations of natural drying of jujube drying tradition, various advantages, disadvantages and working principles of jujube drying technology were expounded.

At the same time, the development trend of Chinese jujube drying technology was pointed out and explained. Finally, it is clarified that combined drying technology is still the future domestic development direction, and [microwave drying equipment](#) is developing towards intelligent and automatic direction.

Key words: [red jujube microwave drying](#); drying technology; current situation; development trend; combined drying



There are more than 50 countries with jujube trees in the world, but they have not formed economic cultivation. In addition to the three northeastern provinces and Qinghai Province in China, there are jujube trees distributed in other provinces, municipalities and autonomous regions in China. At present, the national jujube area is 186. About 70,000 hm<sup>2</sup>, the annual output is 4.47 million tons, calculated according to the population of 1.3 billion, the per capita fresh jujube. 4kg; The drying rate is calculated at 60%, and the per capita is about 2kg.



In the past 10 years, the jujube in the southern Xinjiang region has developed rapidly, the area and output have expanded rapidly, and the level of management technology has been continuously improved. Up to now, China is still the largest jujube in the world. The cultivated area of jujube and the annual output of jujube account for more than 95% of the world's total; and the planting area of jujube has been rising in recent years, and the output has increased year by year. The market dominates.

Jujube has a high sugar content, the sugar content of fresh dates is about 19% to 44%, and the sugar content of dried dates is about 50% to 87%. The caloric content per 100g of jujube is about 1 293kJ, which is close to wheat flour (1 427kJ), and the jujube contains 18 kinds of amino acids needed by the human body. Jujube protein is mainly composed of amino acids, so it is called "woody grain" and "hardcore crop".

It is rich in vitamins, especially Vc, so fresh dates are also known as "vitamin pills" and are also rich in mineral elements such as iron, zinc and calcium. However, the biggest disadvantage of jujube is that it is easy to rot during long periods of time and is easily damaged during transportation. In the processing of jujube products, drying is still the most important primary processing method for jujube. Therefore, the drying technology of jujube is an indispensable part of the processing of jujube.

As people's material living standards continue to improve, the demand for dietary structure continues to improve. As the planting area of red jujube continues to increase, it is necessary to widely promote the drying technology of jujube, and to improve the scale and efficient processing capacity of jujube drying in order to enhance the competitiveness of the market.

At present, the natural drying and hot air drying widely used in China cannot guarantee the color, shelf life and nutritional value of jujube, and the combined drying technology can not only improve the product quality, but also improve the drying rate. Therefore, the advantages of various drying methods are integrated into the future development trend of the multi-functional combined drying technology room.