

## Current Situation and Development Countermeasures of Buddhist Hand Yam Industry in Wuxue City

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### Abstract

Based on the systematic analysis of the development status of fingered citron yam industry in Wuxue city, combined with the expectation of industrial economic development at the present stage and during the 14th Five-Year Plan period, this paper puts forward the suggestions of comprehensively improving the processing level of fingered citron yam and increasing the added value of products, and the industrial development countermeasures of "grasping both sides".

### Keywords

Wuxue Buddhist hand yam; Status analysis; Countermeasures; Suggestions.

### 1. Introduction

Wuxue City is located in the east of Hubei Province, with subtropical monsoon climate, which is suitable for planting Chinese yam. The cultivation of Wuxue Buddhist hand yam has a long history and has a history of more than 1,300 years. This kind of Buddhist yam was first planted in a temple called "Buddha Medicine", but it was later discovered and classified as "Yam" by Li Shizhen. Because of its brown color and palm shape (Figure 1), it is called "Buddhist yam", which has been in use ever since. According to the Compendium of Materia Medica, *Dioscorea opposita* has the effect of tonifying kidney and essence, strengthening the spleen and lung. Through modern detection technology research, it is found that Wuxue Buddhist hand yam is rich in 17 amino acids, various vitamins and trace elements, and has a very low soluble sugar content. It is a kind of high-quality food, which has a certain nourishing and health care function.



Figure 1. Schematic diagram of Wuxue Buddhist hand yam

### 2. Present Situation of Chinese Yam Industry in Wuxue Buddhism

#### 2.1. The Planting Scale Has Initially Taken Shape

At present, the planting area of Wuxue bergamot yam is mainly distributed in the northern mountainous area of Wuxue City, concentrated in Yuchuan town and Meijiang town. The total planting area accounts for about 90% of the total planting area of the city. Among them, Luhechang in Yuchuan Town, Henggang and Shitai in Wang Xian, Shi Gan and Huichuan Town have established a number of standardized planting demonstration bases with regional

connectivity (citation). The area reserved for sowing in the whole city is about 10,000 mu, with an annual output of 15,000 tons and an output value of nearly 800 million yuan.

## 2.2. Primary Products Have Wide Sales and High Returns

The local market trading volume of Wuxue Buddha hand yam reached 60% of the total annual output, and the rest of the products were sold to the surrounding Huangzhou, Qichun and even exported to Beijing, Shanghai, Guangzhou and other places. According to the statistics of planting income, the average per-mu yield of Wuxue Buddhist hand yam is 1.5 tons, and the average annual income is about 2500-6000 yuan, which is 3-5 times the average per-mu yield income of other local ordinary crops, and the planting income is relatively high.

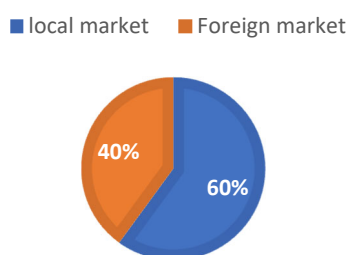


Figure 2. Market transaction share comparison chart

## 2.3. Primary Processing Transformation to Deep Processing

In order to improve the added value of Buddhist yam products and extend the industrial chain of Buddhist yam, some deep processing projects have been launched one after another. The annual processing capacity of the yam processing enterprises under the jurisdiction of Wuxue City reaches 5,000 tons, and at present, the actual annual processing capacity is 2,000 tons. The main products are mainly yam soup and yam noodles. Compared with the traditional sales of primary agricultural products, the annual added value of 10 million yuan is realized.

## 2.4. Brand Influence Is Gradually Expanded

In terms of trademark registration, at present, "Wuxue Buddha yam" series products have a full series of brand trademarks, such as fengshan, Jisheng, Buddha palm, Wanxing and so on. In terms of product publicity, a comprehensive publicity of Wuxue Yam was carried out through various media channels (Table 1). The programs shot and participated in are "Guangji" Yam ", "Golden Land " and so on. In terms of brand management, Wuxue Buddha hand yam has won the geographical identification certification of agricultural products, "Hubei Famous Vegetables", "China International Agricultural Fair" Famous Brand Products and "Chinese Market Famous Brand Products" and other awards.

Table 1. Statistics of Brand Building Events

order number	time	event	unit
1	2003,	Shooting "Guangji" Buddha Hand Yam ""	Central 7 sets
2	2009,	Shooting of The Golden Land"	Central 7 sets
3	2009,	Get the geographical indication certification of agricultural products	Ministry of Agriculture
4	2012,	It was rated as "the first Hubei Famous and Excellent vegetable"	Provincial Department of Agriculture and Rural Affairs
5	2018,	Shooting Source Taste China	Ministry of Agriculture, CCTV-4, and CETV-1

### **3. Problems Arising in the Process of Industrial Development**

#### **3.1. The Promotion of Standardized Planting Bases Lags Behind**

The promotion of Buddha yam standardized planting base is conducive to the implementation of the standardization of planting technology, and greatly improves the product quality and output [2]; crop rotation and recropping in a planned and scientific way is conducive to the rapid recovery of soil fertility, reducing the occurrence of diseases and insect pests and improving the annual output value of land per unit area. At the present stage, the large-area demonstration area is only relatively concentrated, due to the factors of crop rotation and scattered farmers, which affects the promotion of standardized planting bases to a certain extent.

#### **3.2. Lack of Germplasm Resources, And the Risk of Product Degradation**

The long-term asexual crops, virus accumulation in the body year by year, will lead to a decline in crop yield and poor quality. The provenance of Buddhist hand yam is all the reserved species of farmers, and the lack of improvement and maintenance of the varieties makes the excellent yam germplasm resources face a great risk of degradation.

#### **3.3. Low Recognition of the External Consumer Market, and Low Degree of Internal Deep Processing and Transformation**

Under the jurisdiction of Wuxue City is the main consumer market of Wuxue Buddhist yam. Every more than 60% of Buddhist yam products are internal consumption, but the consumption habits in the external market have not been cultivated. In addition, the yam processing enterprises in Wuxue City have not formed a large scale, and the deep processing degree is not high, the storage, preservation and other technologies of the yam are still not mature, the development of new products and new technologies is not enough, unable to ensure the orderly and healthy development of the yam industry to a certain extent.

### **4. Industrial Development Countermeasures**

According to the current economic policy under the characteristics of industrial development, combined with the actual development conditions, in yuchuan, meichuan as the basis of development, the development of high quality ecological natural resources led by yam, yam industry deep processing industry chain, create yam deep processing products diversified, high-end, healthy pattern, driving the development of planting industry, backward promote the market development of yam products. In short: "Grasp the middle, with both ends." Based on good raw materials, deep processing as the starting point, and good products as a sharp weapon, we will strive to build Buddhist yam into a green industry of ten billion yuan, and build Wuxue into a well-known healthy food capital in China.

#### **4.1. Take Breeding as the Core, and Pay Great Attention to the Construction of Raw Material Bases**

Germplasm problem is the core problem of the development of Chinese yam industry. Strictly screen germplasm resources, carry out seed gene map analysis, and speed up the construction of a gene bank of yam germplasm resources [3]. Led by agricultural departments, make full use of the existing planting bases to support enterprises to build a number of standardized fine seed breeding bases. Strengthen the research and development and cultivation of yam varieties, and breed high-yield, high-quality and disease-resistant yam varieties.

#### **4.2. Innovate the Development Carrier, and Build A New Platform for the Development of the Yam Industry**

Take the road of high-quality development of intensive, large-scale and fine deepening of the yam industry, and promptly implement the construction of a healthy food capital. Focus on the development of Chinese yam processing and manufacturing industry. Make use of the foundation of the pharmaceutical industry in the jurisdiction and surrounding areas, develop the effective ingredients of Buddhist yam, give full play to the advantages of the linkage between medicine and food, gather new drivers of the development of yam industry, and build a new platform for the development of yam industry.

#### **4.3. Gather Scientific Research Resources and Establish A Yam Industry Research and Development Platform**

We will pool scientific research resources, break through a number of core technologies, launch a number of profound products, and overcome a number of industrial problems. Led by relevant departments, the scientific and technological resources of major universities and institutes in the province are collected to set up a research and development platform for the yam industry. Launch Chinese yam products with healthy characteristics in the food industry, pharmaceutical industry and daily chemical industry to enhance the added value of Chinese yam products.

#### **4.4. Strengthen the Publicity and Promotion Efforts, and Make the Brand Of "Wuxue Buddhist Hand Yam"**

For the establishment of "Wuxue Buddha hand yam" brand promotion center, unified management of brand promotion and operation, and responsible for strategy development, content design, strategy implementation, effect tracking, and new media platform construction of brand promotion. Give full play to the role of the existing brand operation organization, establish the brand alliance, to realize brand construction, achievement sharing, and avoid vicious competition. The government and enterprises linkage, regularly carry out brand promotion activities, to expand the brand influence of Wuxue Buddha hand yam.

#### **4.5. Grasp the Links and Build A Complete Industrial Chain**

Upstream: the raw material planting is mainly to extend the industrial chain, from the base standardization to the independent and large-scale breeding extension.

Middle stream: production and processing is mainly to enhance the industrial chain, introduce domestic and foreign large drug enterprises, food enterprises and daily chemical products enterprises, enhance the leading capacity of leading enterprises, and develop high-end products.

Downstream: product sales mainly supplement the industrial chain, and establish a modern trading market and yam product experience center.

Through chain extension, chain increase and chain supplement, to establish a complete function of yam industry chain and supply chain with scientific management and strong endogenous power.

#### **4.6. Innovate Market Carriers and Explore the Consumer Market**

Traditional markets will improve their service level and implement standardized and standardized management. By improving the function of e-commerce, with the "Internet +" to promote the transformation and upgrading of the traditional market [4]. Accelerate the supply-side structural reform, innovate and increase new products, create new consumer demand, through the establishment of a new carrier of Chinese Yam Expo, introduce well-known brands at home and abroad, expand the consumption market of Chinese yam products, and meet the

effective supply of consumer demand. Focus on to improve the quality of products and services, constantly release potential consumer demand, through issuing yam consumption vouchers and other measures, increase consumers' purchasing power and consumption desire for yam products, and further explore the yam consumption market.

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