

# Development Prospect of Organic Agriculture

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**Abstract:** There are a variety of farming methods, from traditional methods to new and high technologies. In recent years, organic agriculture has attracted much attention. It is a holistic production management system that promotes the health of agroecosystem including biodiversity, biocycling and soil bioactivity. Organic agriculture emphasizes long-term sustainable development and aims to establish a balanced ecology while agricultural production to keep soil fertility and solve pest problems, and it is necessary to take forward-looking measures to prevent them in the first place. In this article, the definition and characteristics of organic vegetables are briefly introduced, and then the cultivation techniques of organic vegetables are discussed. Finally, the existing problems and development prospects of organic vegetables are comprehensively considered.

**Keywords:** Organic Agriculture; Problem; Prospect

## 1. Overview of organic agriculture

### 1.1 Definition of organic agriculture

Organic agriculture refers to the farming industry that uses organic fertilizers, pesticides, growth regulators and animal feed additives to meet the nutritional needs of crops, or the breeding industry that uses organic feed to meet the nutritional needs of poultry, without using those are artificial completely or basically. The development of organic agriculture can help solve a series of problems brought by modern agriculture, such as serious soil erosion and land quality decline, environmental pollution and energy consumption caused by the numerous uses of pesticides and fertilizers, and species diversity reduction. It also contributes to increasing farmers' income and developing rural economy, which has great development potential.

### 1.2 Characteristics of organic food

Organic food is a relatively unified term for pollution-free natural food in the world. Organic food usually comes from the organic agricultural production system. It is produced and processed in accordance with international organic agricultural production requirements and corresponding standards. All agricultural and sideline products certified by independent organic food certification bodies, including grain, vegetables, fruits, dairy products, livestock and poultry products, honey, aquatic products. With the gradual improvement of people's environmental awareness, the scope of organic food is gradually expanded to include textiles, leather, cosmetics, furniture and so on.

## 2. Organic farming techniques

Organic farming does not only depend on a good atmosphere, pollution-free soil and irrigation water, but also requires the support of good farming techniques to

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grow qualified organic vegetables<sup>[1]</sup>. The following four aspects should be applied to high-quality organic farms.

### 2.1 Selection species

Many will simply understand organic agriculture as a kind of crops, but this system actually starts with the planting of crops are careful screening. In the screening process, the author first will get “DNA fingerprint” before sowing seed in the ground, to explore its nutrient composition, finally get the best combination of raw materials, and selected the most pure, no doping, no cross contamination of plant variety.

### 2.2 Seed screening

Not all seeds meet the requirements of planting. Its basic characteristics, purity and germination rate are crucial factors. Finally, the selected seeds have the highest nutrient content and are clean and pollution-free.

### 2.3 Selection of farm

The best raw material comes from the best farm and grows in the best conditions and climate conditions. The nutrient content in plants could also reach the optimal. The implementation of the soil improvement promotes the development of the flora and fauna, and improves the soil structure. It creates a more stable ecosystem, nutrient cycle and energy cycle and the soil’s ability to maintain the nutrition and moisture also further strengthened. Soil and water quality need to be tested regularly to ensure that they are clean, safe and nutritious.

### 2.4 The principle of sustainable farming

It means the absence of chemical pesticides and the assurance of healthy and healthy plant growth, and uses the beneficial insect, animal and natural weed control to plant protection. In every sense, organic growers are guardians and beneficiaries of biodiversity, the diverse mix of plants and animals that optimizes nutrition and energy cycles in agricultural production. Today, agricultural experts continue to use rotation, mulch, and a variety of sustainable farming methods, including the four steps above which are to select species, select seeds, select farms and plant, to promote the growth and growth of nutrient-rich plants.

## 3. Current status of organic agriculture

### 3.1 Similarities and differences between traditional agriculture and organic agriculture

		Traditional agriculture	organic agriculture
Similarities		There are no differences in appearance, taste and nutrition	
Differences (mainly due to differences in production methods)	Planting	The seeds of conventional crops will include some genetically modified crops with insect resistance, drought tolerance, and so on.	The seeds of organic crops, usually the parent plant seeds of organic crops, will comply with the organic standards set for them
	Growth	It uses manure as a fertilizer, but it also uses artificial fertilizer with the same nutrients.	It uses natural fertilizer, which is common manure, animal manure contains nitrogen and minerals and other nutrients needed by plants
	Pests and weeds	Crop rotation, cover crops, and etc., use standard pesticides	Crop rotation, cover crops, and etc., use standard pesticides, but the selection of pesticides is limited to non-synthetic pesticides
	Demand for food	Mainly rely on traditional business satisfaction	Organic agriculture supplements food demand

### **3.2 Problems and causes of organic agriculture**

Since the 1990s, organic agriculture has had a development history of nearly 30 years. In recent years, the concept of organic agriculture has been familiar to more and more people. However, in terms of the actual situation, organic agriculture has not been developing smoothly in China. From proposed to the present, the development of organic agriculture has always been controversial. In China, although the area of the organic farm is more and more extensive, certification of organic agricultural products quantity is increasing, but whether it is organic farm management, and organic agricultural products market. Most of them are in a state of chaos. Looking very broad market prospect of organic agricultural products, it is now facing a situation that farmers don't want to plant and consumers don't want to buy. This also makes a person rethink that why development of organic agriculture in China is not up to? In the countryside, who try to do the organic agricultural products is home business, but among them, the real organic farming methods of farmland are few. Many farmers, due to no method, can't back to the investment for several years, and finally can only bear the loss. So many farmers become more concerned and even give up. On the other hand, the prices of these organic products tend to be five or six times or even dozens of times higher compared with ordinary vegetables, a little expensive for most people. It leads to limited consumer group of organic agricultural products. More importantly, domestic organic product on the market lacks credit system, and is also the main reason of the consumers to pay reluctantly. In our daily life, almost everywhere fills with organic agricultural products, in addition to the special organic vegetables and organic food counter, flood the same ecological agriculture products of various electric business platforms, even the roadside vendors. Most of them claim that their fruit and vegetables are organic. Such chaotic market makes consumers don't know how to choose. Those who sell high-priced produce under the banner of organic is chemical fertilizers mostly. In common sense, before organic vegetables and organic agricultural products entering the market, they will through the organic food certification institution of appraisal and have the relevant certificates. However, there is a lot of chaos. The level of the certification body is uneven, and organic

certificates have been developed commercially. It will be able to do a card by 6000 yuan. In this case, more and more farms and businesses are producing organic produce that can not be trusted. It is because of the above reasons that the development of organic agriculture in China has been delayed. It seems that in addition to the cooperation between farmers and consumers, the whole industry and the market should also find the reasons in order to solve the obstacles to the development of organic agriculture. There is still a long way to go in terms of organic agriculture.

## **4. Future prospects of organic agriculture**

### **4.1 Food safety and other safety aspects**

Food safety and other safety issues have gradually become a necessary factor in the development of national economy. With the continuous improvement of people's living standards, people's requirements for the quality of life are gradually improved. They are no longer just satisfied with food, clothing and warmth, but are pursuing a higher level of life. The current social background is an important opportunity for the development of organic agriculture. Different from traditional agriculture, organic agriculture uses environment-friendly fertilizers, such as straw and organic fertilizers, and does not use chemical synthesis reagents, such as pesticides, fertilizers and herbicides, to prevent the occurrence of toxic and harmful substances from harming human health. On the basis of adhering to the concept of environmental protection, organic agriculture ensures the quality of products without damaging the soil fertility structure.

### **4.2 Stimulation of the international market**

As a traditional agricultural country, organic agriculture started late in China and lagged behind many foreign countries. Under the traditional agricultural mode, many grains, vegetables and fruits are prohibited from export, because their quality inspection is difficult to meet the requirements, while organic agriculture promotes the development of China's export products with its safety advantages. In today's increasingly severe domestic and international situation, environmental protection and development are the absolute principle, and or-

ganic agriculture has undoubtedly become a powerful driving force to promote the sustainable development of modern agriculture. In addition, the need for international markets has stimulated the development of organic agriculture.

## 5. Conclusion

Organic agriculture arises at the historic moment when environmental problems become increasingly prominent, which fully embodies the concept of ecological protection and sustainable development. With people's increasing needs for a better life and increasing

attention to food safety, organic agriculture is bound to be the new direction of China's agricultural development in the future, and will also face more opportunities and challenges<sup>[2]</sup>.

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