

Compare, distinguish and explain what is the difference between conventional and organic farming. Comparison and Differences.

Conventional and organic farming both share the same priority: producing safe, nutritious food and supporting farmer's livelihoods. Both organic and conventional farming affect the environment in different ways - and farms don't divide neatly into two simple categories. Conventional farms aren't all the same, and organic farms aren't all the same - some farms even use both conventional and organic practices, depending on the choice of crops.

Conventional utilizes modern technologies to optimize efficiency while preserving natural resources. Conventional farmers generally use modern technologies like GMOs, chemical crop protection, synthetic fertilizers and other practices. Organic is focused on an ecological production management system that minimizes farm inputs. Organic requirements differ between countries, but they generally aim to control pests, diseases and weeds with approaches such as crop rotations, disease resistant crop varieties, and the use of non-synthetic pesticides (whenever available), and fertilize the soil using recycled organic materials, like animal manure.

## **Difference between Conventional and Organic Farming**

1. In conventional farming, chemical fertilizers are applied to promote plant growth. In organic farming, natural fertilizers are used such as manure or compost, to feed soil and plants.
2. In conventional, we spray insecticides to reduce pests and disease. In organic, we use beneficial insects and birds, mating disruption or traps to reduce pests and disease.
3. In conventional farming, herbicides are used to manage weeds. In organic farming, we rotate crops, till, hand weed or mulch to manage weeds.
4. In conventional, animals antibiotics, growth hormones and medications is given to prevent disease and spur growth. In organic, animals organic feed are give and allow them access to the outdoors. Also, use of preventive measures such as rotational grazing, a balanced diet and clean housing is taken to help minimize disease.

## **Some Important Facts about Organic Farming and Conventional Farming**

### **Conventional and organic foods are equally nutritious**

Stanford University completed a massive review of 237 studies on multiple crops over four decades. It found no health or nutritional benefits from eating organic foods when compared to conventionally grown foods.

### **Conventional farming produces higher yields**

While organic production methods have improved, studies show they provide an average of 34 percent lower yields across most crops when compared to similar agricultural practices.

### **Farmers need customized agronomic solutions**

Technologies and management practices should be tailored to fit each farm and optimize its productivity. Chemical and biological solutions can help farmers protect crops while preserving natural resources.

### **Conventional food is just as safe as organic food**

Consumers sometimes buy organic food because they think it's safer. However, government regulators set limits for traces of pesticide residues found in conventional food and closely monitor residues to protect human health. Research shows that the benefits of eating a healthy diet outweigh any risk of residues in food. In addition, residue analysis in the U.S. has shown that 80 percent of the residues detected on conventional crops are at levels low enough that they would not be considered as a violation of the organic rules because they are 20 times lower than the allowed levels set by EPA.