

# Biodegradable Agricultural Mulch Film

1. **Developing Staff Members** :  
Biodegradable Agricultural Mulch Film

## 2. Developing Staff Members

Department	Name	Position
Wood Science and Design	Lin, Sheau-Horng	Professor
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## 3. Development Idea

The traditionally used plastic sheet ( agricultural mulch film ) is not a general waste and is difficult to recycle. It is easily broken and left in the farmland when it is replaced, and the removal process is time-consuming and labor-intensive. When the crops are harvested, they remain in the soil and are difficult to degrade cause pollution and damage. Therefore, in order to prevent the increase of global warming, the plastic reduction policy and the 2050 global net zero carbon emission target have become an irreversible trend. Therefore, the development of biodegradable agricultural mulch film has become the primary agricultural material at this stage to replace the traditional non-decomposable plastic

agricultural mulch film, which can create a two win strategy for agricultural and forestry waste recycling economy and environmental protection issues.

## 4. Technological Competition and

### Industrial Application

The technology of biodegradable agricultural mulch film is to introduce agricultural and forestry waste or its auxiliary materials and compound it with biodegradable plastic to make a film. Technologically, it is completely different from traditional plastic agricultural mulch film. It has high production technology such as formula and product thickness, especially for environmental protection. It is technically competitive. As for industrial applicability, it is widely used in precision agriculture, precision agriculture, sustainable agriculture and plastics industry. It can be said to bring new revolutionary agricultural materials.

## 5. Merchandise Statement of Achievement

This product has completed the research on related properties and disintegration tests. It has the benefit of biodegradation and can be decomposed in the natural environment. After discarding, it can save recycling costs and cause no harm to the global environment.