

UNIVERSITI MALAYSIA PERLIS

DIPLOMA PROGRAMME COORDINATION UNIT

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GREENHOUSE FOR TRANSGENIC PLANT

SUMMARY OF INVENTION

The greenhouse is invented for transgenic plant which needs cool environment. The greenhouse system is equipped with an automatic photosynthesis system as well as a cooling system. This system is a low cost and simple as compared to other available greenhouse in the market. The cost to develop this greenhouse is about RM 10,000 per house while others are among RM 120,000 to RM 150,000. Also, it definitely will help farmers in Malaysia to produce transgenic plant in hot and dry climate such as in Perlis.

PROBLEMS STATEMENT

In northern of Malaysia, there will be a drought season and it usually happens almost for three to four months. In that time, the trench, river and other water sources will dry slowly and caused the plant and even grass dry and die. Hence, this low cost and simple greenhouse is invented to help farmers and breeders to continuously produce agro product and food for livestock without depended on outside produce.

ADVANTAGES OF THE GREENHOUSE FOR TRANSGENIC PLANT

- Easier to design
- Easier to assemble
- Ready with an automatic 24 hours photosynthesis system
- Ready with a cooling system
- Ready with a fodder solution system
- Low cost product

PRODUCT ACHIEVEMENT

Currently, this product is used for barley plant at KM 28, border of Perlis and Kedah. In this house, the barley is able to grow and the tree can be harvested in six days once the seed is planted. The barley tree has full of nutrition and very good for livestock such as cow and goat. This may replace other bran which is quite expensive and also it continuously provides food for the livestock during the drought season.

NOVELTY OF INVENTION

This is a new design which has two novelty methods in order to make it available for the transgenic plant to grow in hot and dry climate. The first method is the automatic 24 hours photosynthesis system and the second method is the cooling system.



Figure 1. The greenhouse drawing

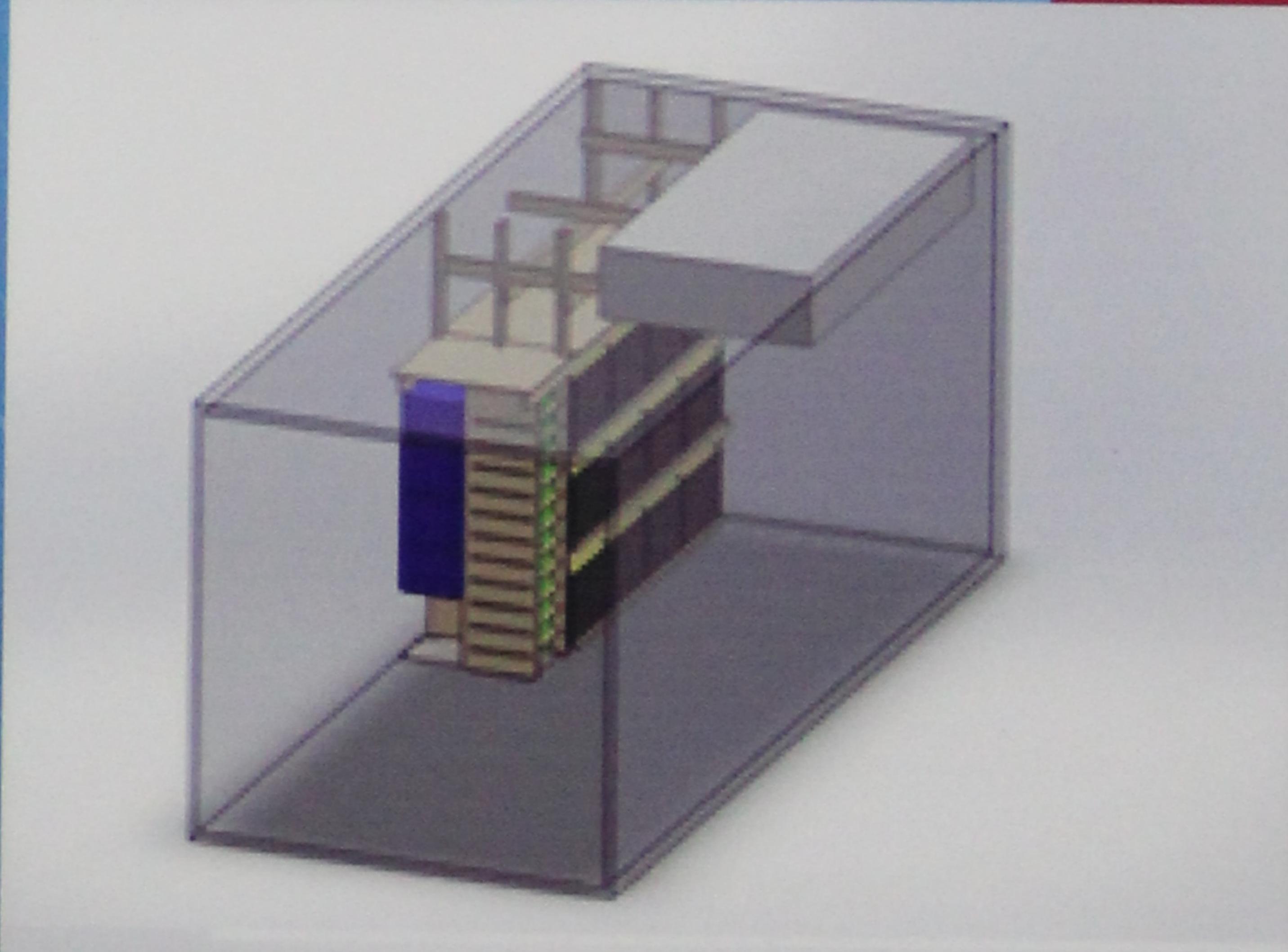


Figure 2. Inside the greenhouse: the fodder solution, the cooling and the 24 hours photosynthesis system



Figure 3. The barley plant in the developed greenhouse