# Controlled-Environment Greenhouse

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Agriculture, Fisheries and Conservation Department

# Cultivation of Ice plant



### From the Editor

The Horticulture Section of the Crop Development Division continues to grow crops on three-dimensional A-shaped multi-layered stands in controlled-environment greenhouses with a view to exploring the feasibility of this production mode. Multi-layered plantation is not only clean and hygienic, but can also boost production by fully utilising the space. Better still, it is easy for operation and management. In this issue, we will introduce how to grow ice plant using this planting method.



#### **Ice Plant**

Ice plant is characterised by many large bladder cells on its foliage and stems. These enlarged epidermal cells, which are filled with fluid, look like ice crystals when reflected under the sunlight. This is how ice plant gets its name. It is also a salt-tolerant plant that can grow on seashores. The foamy cells of ice plant contain relatively high salinity, giving a salty taste. The optimal temperature for the growth of ice plant ranges between  $20 \sim 30^{\circ} \text{C}$ . It is drought tolerant and therefore can be watered only when the soil surface is dry. If grown in a controlled-environment greenhouse with a favourable environment, the stems and leaves of ice plant can be kept harvesting. The harvesting period can last as long as four months.





#### **Seedlings**

About 20 to 40 days after sowing, the seedlings can be transplanted when they come into 4 to 5 leaves.



#### Growth

The growth cycle of ice plant is about half a year.



## Harvesting

Lateral stems, which are ready to be harvested about a month after transplanting, can be cut down simply with scissors.





#### **Advantages of Three-Dimensional Plantation**

Growing plants in multi-layered plantation can reduce bending operation, facilitate management and enhance work efficiency. In addition, greenhouse plantation can significantly reduce the infection of pests, thereby boosting the production and quality of ice plant.

AFCD Home Page: http://www.afcd.gov.hk

For more information and visits to greenhouses, please contact: Horticulture Section, AFCD (Tel: 2679 4294)