

Controlled-Environment Greenhouse



Agriculture, Fisheries
and Conservation Department

Newsletter-December 2002

Growing Cucumber



From the Editor

The tasty and refreshing mini-cucumber, which can be eaten raw or used in salads, is a very popular vegetable of high economic value. It can grow all year round in a controlled-environment greenhouse and is featured here as an example to demonstrate the production technology involved.



Selection of Varieties

- High yield
- Disease-resistant
- Heat/cold-tolerant varieties that can be grown in greenhouse



Growth Conditions

Optimum Temperature for Germination : 25 ~ 30

Optimum Temperature for Growth : 18 ~ 25

Lighting and Humidity : The cucumber can tolerate weak lighting but not high humidity. The planting medium should contain sufficient water and should neither be too dry nor too wet.



Cultivation Management

Transplanting or Direct Sowing : Grow seedlings in plug trays and transplant them to the planting medium (sandy loam, peat moss or other medium) in the greenhouse when they come into true leaves, with a row spacing of about 30 cm. Besides transplanting, direct sowing can also be used.



Application of Fertilizer & Hanging of Stems : Use drip irrigation systems to distribute appropriate amount of water and prepared liquid nutrients to the planting medium for absorption by crops. When the seedlings grow to about 10 cm, support the stems by the hanging method.

Training : Keep the fruits on the main stems, and one or more can be kept on one node, depending on the varieties and seasons. Normally, no flowers or fruits will be kept on stems of less than 70 cm long. During the growth period, irregular stems, old leaves and abnormal fruits should be picked.

Harvesting : Start harvesting 4 ~ 5 weeks after transplanting. Straight fruits with a length of about 15 cm are the best.



Note : In growing greenhouse cucumber, the humidity of the medium should be maintained at an appropriate level, and side shoots and old leaves be picked to prevent their overlapping from affecting the lighting. The pH value of the medium should be maintained at 5.5~6.5 and the electrical conductivity (EC) at 2.5~3.5.



Coming Next

Growing Lily Cut Flower

For more information and visits to greenhouses, please contact :
Crops Development Section, AFCD (Tel : 2668 0295)

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