Controlled-Environment Greenhouse

Agriculture, Fisheries and Conservation Department

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Growing Tomato

From the Editor

Tomato, a common greenhouse crop with many species varying in shape, size and colour, can grow all year round in a controlled-environment greenhouse. Cherry tomato is featured here as an example to demonstrate the production technology involved.

Selection of Species

- Indeterminate type
- Disease-resistant
- High quality and yield
- Heat-tolerant species should be chosen in summer

Growth Conditions

Temperature : The optimum temperature for germination is 28 ~ 30 ℃, for flowering 15 ~ 30 ℃, for fruit colouration 18 ~ 26 ℃.

Lighting : A daily lighting of at least 12 ~ 14 hours to facilitate flower development but prevent excessive growth of the stem.

Humidity : A relative humidity between 45% and 50% provides the most favourable environment for pollination.

Cultivation Management

Nursery and Planting : Raise seedlings in plug trays and transplant them to the planting medium(sandy loam, moss peat or other medium materials) in the greenhouse when they come into 4 pairs of true leaves.
Plant spacing is 30 cm.

Application of Fertilizer : Use drip irrigation system to distribute appropriate amount of water and prepared liquid nutrients to the planting medium for absorption by crop

Training : To train the plant by the one stem method and support the stem by the hanging method .

Harvesting : Start harvesting 6 ~ 8 weeks after transplanting. Pick the fully-coloured fruits, which are more delicious.

Note : In growing greenhouse cherry tomato, irrigation should be done in a controlled and careful way to avoid sudden changes in wetness. Less water is needed during the flowering period but more in the fruiting. The pH value of the medium should be maintained at 5.6 ~ 6.7 and the electrical conductivity (EC) at 2.5 ~ 3.5 .

Coming Next

Growing Sweet Pepper

For more information and visits to greenhouses, please contact :
Crop Development Section, AFCD (Tel :2668 0295)
AFCD Home Page
http://www.info.gov.hk/afcd