Controlled-Environment Greenhouse



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From the Editor

The sweet and fragrant rock melon is a very popular fruit. As the wet summer season in Hong Kong is unsuitable for its growth, rock melon is rarely cultivated in open area. The Horticulture Section has made use of a controlled-environmental greenhouse to grow this fruit and the results are very satisfactory.



Selection of Varieties

There are a wide range of cultivated varieties for rock melon. Quality ones which are disease-resistant and suitable for greenhouse cultivation should be chosen.



Growth Conditions

Rock melon likes warm, dry weather with adequate sunlight. The optimum temperature ranges from 25°C to 30°C. It has different requirements for water in different growing periods. It needs a relatively more water during its initial growing to early flowering periods, but limited water supply from the flowering to fruiting periods. When fruits develop, more water is needed again. When the fruits mature, less water should be given.

Cultivation Management

Transplanting or Direct Sowing: Use plug trays to grow seedlings. When seedlings come to 2 or 3 true leaves, they can be transplanted to the planting medium (sandy loam with compost and organic base fertilizer) in the greenhouse. Apart from transplanting, direct sowing can also be adopted. The area for each seedling is about 55cm x 35cm.







Application of Fertilizer : Use the drip irrigation system to provide a suitable amount of water. During the growing period, apply liquid fertilizer (peanut cake or fish meal solution) once a week. Following the transplanting and during the flowering and fruiting periods, apply organic fertilizer as top dressing once each.

Selection of Fruiting Stems : When the seedlings grow to about 10 cm, support the stems by the hanging method. Keep the fruits, about one or two on each stem, on the secondary or tertiary stems, depending on the varieties used. Pinch the buds of the main or lateral stems, and remove excessive leaves and lateral shoots to facilitate ventilation and the growth of fruits.



Harvest: It takes about 35 to 45 days (depending on the varieties used) from the flowering stage to the maturity of fruits.

Note: Suitable watering, training and pinching, and selection of fruiting stems are the most important procedures. Cultivation requirements are not the same for different varieties.



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