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Cultivation of cucumber under greenhouse

D.S. Thorave
Central Sugarcane Research Station, Padegaon,Phaltan, SATARA (M.S.) INDIA
(Email : dsthorave@gmail.com)

Cucumber planting :

Bed preparation :

Fumigation: It is marketed as Formalin, an aqueous solution, which contains 37-40 per cent formaldehyde, which has a poor penetration and diffusion ability. The formalin used for sterilization should be mixed with water in 1:10 proportion. For drenching formalin is used at the rate of 7.5 lit for 100 sq mt *i.e.* 37.5 lit of Formalin will be required for 500-sq.mt polyhouse. After drenching, planting is done after two weeks, this method is not effective against nematodes and it should not to be used in a standing crop.

After fumigation, the beds of following dimensions are prepared.

- Top width - 90 cm.
- Path width - 50 cm
- Height - 40 cm

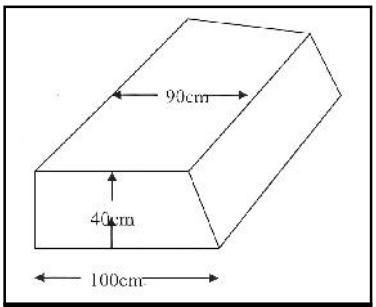


Fig. 1 : Raised bed with dimension

Planting distance:

– 60 cm between two plants.

– 50 em between two rows) Raised bed with dimension**.**

Planting material:

Seeds can be sown directly in the bed. Two seed are sown per hole and after germination healthy seedling are maintained and weaker seedling is uprooted. Disease free seedling of five to six week old is used for transplanting.

Variety : Multistar (dark green colour fruit), 22414 (white colour fruit). Both varieties are very popular for cultivation under greenhouse.

Culture practices in cucumber : Different cultural practices are followed in cucumber for period of 5 month of duration. The details of different cultural practices are given below :

Training : The basic principle of a training system is to uniformly maximize the leaf interception of sunlight throughout the green house. The selection of a system will largely depend on the greenhouse facility, the production system, and grower preference.

A vertical cordon system trains plants vertically to an overhead wire. Once the plants reach the wire, they are topped and then pruned using an umbrella system.

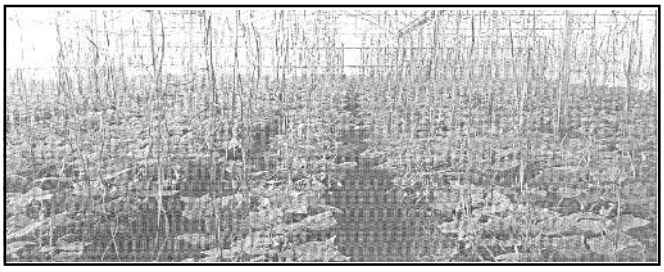
A second popular training system is the V -cordon. Single rows are evenly spaced approximately 1.5m apart and plants are distanced approximately 30 cm apart within each row, and the 2 over head wires are spaced approximately 75cm apart from each other. Plants can be trained on plastic twine supported from horizontal support wires running along the length of the bed (3mt above top of the bed). The base of the string can be anchored loosely to the base of the plant with non-slip noose.

Pruning: The most common pruning system for either vertical cordon or V-cordon trained plants is known as the umbrella system. The growing point of the main stem is removed when one or two leaves have developed above the wire. Two lateral branches near the top of the plant are allowed to grow and are trained over the overhead wire, in downward direction. The growing point of each lateral is removed when they are approaching to the ground.

Fruit thinning : Fruit pruning is based on plant vigor and fruit load. Extensive leaf growth is prevented to allow proper coloring of the fruits. The development of the fruit is depends on the constant production of leafaxils. If too many fruits are set at once, fruit thinning is necessary to avoid malformed and non-marketable small fruit. Such fruit, as they appear, should be removed.

Harvesting : Harvesting may begin 50 days to 65 days after planting. Harvesting is done three to four times per week. In a well-managed crop, harvesting period extends up to 12 weeks.

Yield : 8-10 kg per plant



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