

TAMILNADU AGRICULTURAL UNIVERSITY

COIMBATORE

SUCCESS STORIES

PANDHAL CULTIVATION

Name of the farmer : Mr.Alliraj
Village : Sadaiyagoundanur,
Udumalpet block,
Thiruppur district.
Mobile Number : 9442009878
Area under pandhal cultivation : 7 acres

PANDHAL SYSTEM



Duration : 160-165 days

Crops grown: Bitter gourd is grown as main crop, ribbed gourd, brinjal and onion are also grown. Bitter gourd is planted as a shade net for the cultivation of tomato after the harvest of bittergourd to maintain optimum temperature

Ploughing : 4-5 times ploughing and beds are made with the spacing of 10 ft.

Basal application : FYM; poultry compost and DAP as basal. Poultry waste of 15 tonnes and Rs. 13000/ton is applied in the in the first ploughing. 465 kg of SSP is applied in the last ploughing.

Sowing: Dibbling method



Seed rate : 5,500 seeds/ha

Variety : East-West of Palyee variety

Spacing : 10×2 ft or 9×1.5 ft

Irrigation : Bore well irrigation thorough drippers.



Fertilizer recommendation: After the germination of seeds, 8-30 day AI-19 is applied. Upto 10 days after sowing urea is applied at 60-70 kg/ha. After 10 days urea is applied in excess of 1 kg to the previously applied. 12:50:00 of MAP (monophosphoric acid) is applied during 30-60 days. Flowers set in 60-75 days according to the season. Urea of 75 kg in flower setting and 270 kg in fruit setting.



Management practices: In the 90th day fruits start to set. Bitter gourd is mainly affected by fungal and viral disease, so contact fungicide is applied in the beginning stage itself. Fruit fly is controlled in biological method. A tablet of Rs.150 which has cherry fragrance is mixed in bucket and hanged at a approximate distance inside the pandhal. 4-5 buckets are used in a hectare and it is efficient for one month. The bucket is hanged after flower setting and before fruit setting.

Other practices: During 10th day the small branches are tied to thread for the tendrils to stand and spread in the pandhal



Sprayer: Stihl mist blowers are used for spraying and the cost is about Rs.36,000. In this 10 lit water is sprayed for 5 hrs and 1 ac needs 40 litres of water. The tank capacity is about 20 litres and the speed of spraying is adjusted with the nob. Dusting also done with this sprayer.



Harvesting: Harvesting is done 2 times a week and total of 20-25 harvesting is done. Harvested fruit size is about 12 inches length and weight is above 500g. The yield is about 15-20 tonnes/ha.

Marketing: The fruits are marketed in the Udumalpet weekly market or sale to the dealers.

Advantages: Pandhal system is a long term investment. Cost of construction of pandhal system is about nearly 8.5 lakhs for 1 ha. The cost of cultivation of bitter gourd is about nearly 2.5 lakhs. The profit varies from season to season. Within 2 years the cost invested for the pandhal construction is taken and cultivating for further years is profit only. Reconstruction of pandhal is done once in 2 years in this we have to tighten the wire. The pandhal system is constructed by temporary and permanent method. In temporary bamboo sticks are used inside the pandhal while in permanent fully stones are used. Coconut leaves are used as a wind barrier.



Compost preparation: 4 horses are grown for carting and the dung also used as manure. Horse dung and mulberry wastes are decomposed in layer by layer in 6 ft breadth, 40 ft length and 9 ft depth. In this pit the horse dung and mulberry waste are filled in layer by layer and the moisture is maintained by sprinkler. After 6 months the waste are turned into fine compost and applied to the field.



