

CHOW-CHOW

(Sechium edule)

Chow-chow is a single seeded viviparous cucurbit. It is important in dietary system of tribal communities of the north eastern region. It is found in every kitchen garden of Meghalaya. It is a perennial rooted vine that bears edible fruits. In addition to fruit, stem, tender leaves and tuberous roots are also eaten. The root, stem and seed contain high calorific value and carbohydrate content. It is mainly propagated by means of seed (whole fruit with seed)/ sprouted fruits.



Cultivars

Meghalaya Local, Broad Green, Pointed Green and Oval Green are the recommended varieties for this region.

Climate and Soil

Chow-chow thrives well in moderate climate with high humidity as prevalent in north eastern region. It does not stand in extreme dry wind during summer and frost in winter. Chow-chow requires loose, well-drained soil rich in organic matter for its growth. Chow-chow is slightly tolerant to soil acidity.

Field Preparation

In January and February, pits of size 0.5 x 0.5 x 0.5m are dug. FYM is mixed with soil and pits are filled with one third by FYM and sprouted fruit is planted directly on center of pits. Pits system of growing is adapted for this crop so that the dug soil can support the vine for long period.

Seed Rate

1500 fruits/ha.

Time of Sowing.

Rainy season

Spacing

2m X 3m

Manure and Fertilizer

The dose of fertilizer depends upon soil, climate and system of cultivation. Well rotten FYM @15-20 t/ha is applied at the time of land preparation. NPK @ 120:80:80 kg/ha added with full dose of P and K before sowing and half dose of N at the time of vining and remaining half dose of N before flowering.

Training and Pruning

Training: Pandals or trellis are erected for the vines to trail over at a height of 2 meters in homestead garden, the vines are also allowed to climb on small trees. Most trellis in northeast India is constructed by bamboo about head height to facilitate walking beneath the vines for harvesting and other operation. Bower can also be prepared at the height of 5 feet placing bamboo poles followed by criss cross wire netting. Training on bower must be started just after 30cm of vine length from the ground level. Once the crop anchor, branches spread easily because of tendrils.

Pruning: There are two fruiting season in a year and vines are pruned at end of each season leaving only a small portion of about 1.5m of stem.

Irrigation

In NEH region like Meghalaya no irrigation is required as it is grown under rainfed condition, but a constant supply of water is essential for good growth.

Plant protection

Same as Cucumber

Harvesting and Yield

Peak season for harvest is between October-December and May-June. Chow-chow should not be allowed to become over mature, but picked prior to seed development.

An average yield of 200-250 q/ha has been recorded in Meghalaya.