

## **CHILLI** (*Capsicum annuum*)

Chilli is one of the most valuable crops grown in north eastern region. Fruits are long or small with high pungency. In Meghalaya, it is used as a principal ingredient of various curries and chutneys. It is also used for vegetables, spices, condiments, sauces and pickles. Chillies are good sources of vitamin A and vitamin C.



### **Cultivars**

HM-2880, HM-2881, Hybrid lava, Hoe, Pant C-I, Pant C-2 and local cultivars are recommended varieties for this region.

### **Climate and Soil**

Chilli is a plant of tropical and sub-tropical region. It grows well in warm and humid climate and a temperature of 20-30 QC. As a rainfed crop, it is grown in areas receiving an annual rainfall of 75-100cm.

A well-drained, well-aerated, fairly light fertile loam with a fair moisture holding capacity is ideal. Chilli crop prefers a soil reaction ranging from pH of 6.0-7.0.

### **Field Preparation**

The land is prepared by giving 5-6 ploughing, compost or FYM @ 150-200 q/ha should be spread and mixed well in the soil at least 15-20 days before sowing. At the last ploughing BHC @ 8-10 kg/acre should be applied to the soil to protect the crop from white ants and other soil pests.

### **Raising of Seedling**

The seeds are sown in well prepared raised nursery bed. Nursery beds are made near partially shaded areas. The nursery bed should be well pulverized and mixed with FYM. The seeds are sown thinly in lines spaced 5cm apart, sand and well decomposed compost are sprinkled over the seeds. Mulching with paddy straw conserves moisture. The mulch is removed as soon as the seeds start germinating. Heavy watering should be avoided in nursery bed.

### **Transplanting**

The seedlings become ready for transplanting in the main field within 6-7 weeks of seed sowing in the nursery bed.

### **Seed Rate:**

1.5 kg/ha.

### **Time of Sowing**

As a commercial crop, chilli is mainly grown in summer and winter and the seeds are sown in the nursery beds accordingly viz. summer crop: January- February and winter crop: July- August.

### **Spacing**

45cm X45cm.

### **Manure and Fertilizer**

FYM @ 25t/ha is incorporated before transplanting. NPK @ 100:60:60 kg/ha is applied under rainfed condition, where full dose of P and K and half of N should be applied two weeks after planting and the remaining N is top dressed one month after first application .

### **Weed control**

Mulching helps conserve moisture and nutrients and prevents weed growth. Earthing up should be done 30 days after transplanting. Manual weeding is a common practice for controlling weeds in chilli. Spraying of Tok E-25 @ 2 l/ha followed by one hand weeding helps check weed growth to a considerable extent.

### **Irrigation**

Irrigate the crops immediately after transplanting and subsequent irrigation at weekly interval.

### **Plant Protection**

**Thrips** (*Scirtothrips dorsalis*) - This small insect suck the sap from the foliage and lacerate the leaf tissue, which results in curling of leaves and flower fall down prematurely. Spraying Dimethoate or Monocrotophos @1ml/l of water at 15 days interval is recommended to control this pest.

**Aphids** (*Aphis gossypi*) - Aphids suck the sap from plants; they generally attack the plants in winter. Imparting blackish colour to the calyx and pods spoils the quality of the produce. Spraying the crop with Dimethoate @ 1ml/l of water and spraying with castor oil or paraffin controls the pests.

**Damping off** (*Pythium aphanidermatum*) - Damping off generally occurs in nursery bed. The disease infected seedling at ground level and plant fall over ground. The seedbed should be treated with formalin before sowing of seeds and seed should be treated with Ceresan or Agrosan GN @ 2-3g/kg of seeds before sowing.

**Anthracnose or fruit rot** (*Colletotrichum capsici* )-Dark sunken spot are formed on fruit and pink or dark coloured dots appear in the centre of the sunken spots. Due to this Spot, fruit rot and fall. Spraying the crop with Mencozeb @ 2.5gm/l of water and seed treatment with Ceresan @ 2-3g/kg of seeds before sowing helps in controlling this disease.

**Leaf curl** (viral) - The disease spreads through insect vector such as thrips and aphids. The disease affected leaves become small in size accompanied by downward curling. The leaves may fall off in case of severe attack. Spraying Rogor @ 1 ml/l of water control the insect vector and uprooting of infected plants is recommended to manage the disease.

**Harvesting and Yield**

Flowering takes place two months after transplanting and it takes another month for green fruit. For vegetable purpose, chillies are harvested while they are still green. For drying chillies are harvested at full ripe stage.

Green chilli yield: 75-100q/ha.

Dry chilli yield: 20-25q/ha.