



# Chillies

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## Background

### *Origin and distribution*

These hot vegetables are native to the tropics of Central and South America and are among the oldest cultivated crops on this continent.

### **Soil and climatic requirements**

Chillies grow well in areas where the average temperature is 24 °C for at least 4 to 5 months of the year. Chillies can be grown in a wide range of soils. The optimum soil for production is sandy loam, deeper than 400 mm with a pH between 5,5 and 7,0.

### **Uses**

Chillies are used as ingredients to add flavour and colour to most dishes. They are high in vitamin A and C, calcium and iron and can be used as a medicine to treat asthma, coughs and sore throats.

### **Cultural practices**

#### *Soil preparation*

Soil can be prepared in many ways, such as a fine bed to allow good germination and infiltration of water. The height of the beds should be 20 cm in the dry season and 35 cm in the wet season.

Mulch should be used to minimise leaching of fertiliser, conserve moisture and reduce weeds.

### *Planting*

The seeds should be planted during spring in pots or trays of sterilised seed compost, and maintained at a temperature of about 20 °C (70 °F).

Sow the seeds in nursery trays or outdoor seedbeds when there is no longer a risk of frost. These seedlings can be transplanted when they have 4 to 5 true leaves.

Space the plants 40 to 50 cm apart with 70 to 80 cm between the rows and add mulch at a thickness of at least 10 cm.

### *Fertilisation*

In order to realise acceptable yields in peppers, fertilisers must be used and before applying fertilisers, soil tests must be conducted to determine the type and the quantity of fertiliser in the soil to ensure optimum plant growth. It should be fertilised with a combination of organic and/or chemical fertilisers.

### *Irrigation*

Chillies require about 600 mm of water during the growing season in the form of rain or irrigation. During flowering and fruit set water should be sufficient and waterlogging should be avoided as the crop is sensitive. Too much water may inhibit flowering and fruit formation and too little may lead to flower drop.

Furrow and drip irrigation are mostly recommended. If overhead irrigation has to be used, it should

not be scheduled for late in the evening because wet leaves and fruit promote diseases. Plants should be dry before nightfall.

### *Weed control*

Weeds should be controlled to limit competition for nutrients, water and light. Mulches can also be used to suppress weeds and if not effective, recommended herbicides should be used.

### *Pest and disease control*

Frequent pests include American bollworm, cutworms, aphids, beetles, thrips, nematodes and red spider mites. Frequent diseases include virus and bacterial wilt and powdery mildew. Registered chemicals, good cultural practices, such as proper crop rotation, as well as field sanitation are the three mechanisms that should be integrated to control all the pests and diseases affecting the crop. Proper sanitation should include the removal of all the diseased plant material.

### **Acknowledgements**

BERKE, T. *et al.* 2001. Chilli pepper production, *South African Garden*, (October 2002).

FARMER'S WEEKLY (June 2001). *A sizzling success – growing chillies*