

Climate

The onion is cool season crop, tolerant to frost in the young stage but less sensitive to heat. It is well adapted to a temperature range of 13-25°C. A temperature range of 15-21°C before bulbing is required for its good vegetative growth whereas a temperature of 20-25°C is considered ideal for bulb development. Very low temperatures in the beginning favours physiological disorder called bolting. Sudden rise in temperature favours early maturity of the crop in rabi and results in small size of bulbs. At least 10 hours light with favorable temperature is essential for growth, development and bulbing. Onion thrives well in places, which receive an average rainfall of 750-1000 mm during monsoon.

Soil

Onions can be grown on all types of soil such as sandy loam, silt loam and heavy clay soils. However, deep friable, highly fertile sandy loam to clay soil rich in humus is considered as ideal. Sandy soil needs frequent irrigation and favours early maturity. Whereas heavy soils restrict the development of bulbs and the crop matures late as compared to light soils. A pH range between 5.8-6.5 is considered as optimum. Good drainage is essential as water-logging results in total failure of the crop.