

### (3) Crop weather interaction

#### d. Sunflower, Mustard and weather



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# Sunflower

## Examples

- Sunflower adopted to different climates ranging from arid under irrigation to temperate climate under rain fed condition, but is susceptible to frost.
- The optimum temperature required for seed germination is 20-22°C
- Sunflower successfully tolerates temperature range from 8-34°C, indicating its adaptation to the regions with warm days and cold nights.
- Optimum growth is achieved under mean daily temperature of 18 and 25°C.
- The water requirement of crop is 500-700 mm water

# Mustard

## Examples

- Brown, or Indian mustard (*Brassica juncea*), cultivated mostly under winter season with a temperature range of 10 to 25°C;
- During germination, higher temperature of 27°C is required, though cold condition favour the crop
- Efficient photosynthetic response is achieved at 15 to 20°C
- Mustard requires a low water requirement (240–400 mm)
- Excessive cold and frost will be harmful to crops