



Pepper

About Peppers

Pepper is a warm season vegetable that can be grown for fresh table use or for processing (e.g. dried). Pepper can be direct seeded but is usually grown from transplants. Varieties vary widely in size, shape, color and flavor. Peppers may be classified as sweet, hot, chili, long, or others.



Climate and Soil

Temperature	Frost tolerance	Water needs	Tolerance to waterlogging	Drought tolerance
Warm, day 25-30°C, night 9-12°C. Seed germination between 6°C and 20°C. Chilling injury below 7°C.	Sensitive to frost at any growth stage.	Deep rooted, moderate total needs but regular watering needed.	Low at any time. Root fungal diseases increase at high soil water.	Poor to fair. Stress can result in poor fruit set and quality.
Humidity tolerance	Wind tolerance	Soil needs	Nutrient requirements	
Low – leaf foliar diseases in wet environments.	Fair to poor.	Sandy – earlier planting; Medium–highest yields; Heavy – risk of poor drainage	Moderate- high N, high P, low-mod K	

Production, Harvest and Postharvest Practices

Planting Material	Direct seed in warm soil; transplant (may be with plastic mulch) when cooler or with hybrid seed
Varieties	Open-pollinated and hybrid varieties.
Spacing	Varies. Transplants or final thinned direct seeded stands on single or double row on 75-165 cm spaced beds with 20-40 cm in-row spacing. Approx. 0.5-2.0 kg seed/ha
Site selection and Field Preparation	Level soil to permit irrigation. Till in fall for early spring planting. Raised beds to increase soil surface area, aeration, drainage. Fine seed bed.
Time to harvest	80-110 days after transplanting for 10-15% ripe fruit. Determinate varieties with simultaneous ripening for processing 120-150 days.
Length of harvest	2-4 times at 10-15 day intervals.
Expected yields	10 – 20 t/ha
Harvest	Hand harvest. Mature green and ripe fruit may be harvested at same time. Cool before shipping.
Storage	Fresh fruit may be stored for short periods (2-3 weeks) at intermediate temperatures. 7-13°C for ripe fruit. Do not store with ethylene-producing fruit.
Pests and diseases	Weeds, insects, nematode, viral/fungal/bacterial diseases

Prepared by Ron Voss and Mark Bell, June 18, 2007

Primary references: T. Hartz, LeStrange, M. 1996. Bell Pepper Production in California. UC Vegetable Research and Information Center. www.vric.ucdavis.edu.

UC IPM Pest Management Guidelines. www.ipm.ucdavis.edu

For more information visit: International Programs ip.ucdavis.edu