

CROP LIGHT AND TEMPERATURE REQUIREMENTS FOR EDIBLE PLANTS

CROP	LIGHT	TEMPERATURE	COMMENTS
Bananas	Bright	Warm to hot	Depending upon the variety, can grow 7 to 25 feet (2 to 7.6 m). Will cause a lot of shading. Grow fast when hot, very slowly when cold.
Beans	Bright to very bright	Warm to hot	Will tolerate some shade. Pole beans, when trellised, cause shading. Seeds need 65°F (18° C) soil temperature to germinate well. Fava or broad beans prefer the cool temperatures and also need trellising. Don't grow favas in summer—they hate the heat.
Beets	Bright to very bright	Cool to warm	May go to seed if temperature nears 32°F (0°C) and then rises again.
Broccoli	Shady to bright	Cold to warm	Will flower fast and produce small heads if temperature is consistently warm to hot.
Brussels sprouts	Shady to bright	Cold	Poor quality if temperature is consistently warm to hot. Get tall toward maturity and may cause shading.
Cabbage	Bright to very bright	Cold to warm	May go to seed if temperature is below freezing for a long period.
Carrots	Shady to bright	Cool to warm	Will not tolerate crowding.
Cauliflower	Shady to bright	Cold to warm	Will flower fast and produce small heads if temperatures are consistently warm to hot.
Celery	Shady to bright	Cool to warm	Likes many months of consistent cool temperatures. Will often go to seed before it matures in warm summer temperatures.
Cherimoya	Bright	Cool to warm	Grows 15 to 20 feet (4.6 to 6 m) tall and will cause shading. Will not tolerate temperatures below freezing.
Chicory	Shady to bright	Cold to warm	Not good in hot areas.
Chinese cabbage	Shady to bright	Cold to warm	Flowers rapidly in warm to hot conditions.
Citrus	Bright	Cool to warm	May get tall (depending on variety) and cause shading. Will not tolerate temperatures below freezing.
Coffee	Shady to bright	Cool to warm	Grows up to 10 feet (3 m). May cause shading after a few years of growth. Will not tolerate frost.
Collards	Shady to bright	Cold to hot	Can grow tall and cause shading. Well adapted to solar greenhouses, except in summer.

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CROP	LIGHT	TEMPERATURE	COMMENTS
Cucumber	Bright to very bright	Warm to hot	Needs nights above 50°F (10°C).
Eggplant	Bright to very bright	Warm to hot	Needs nights above 50°F (10°C).
Endive	Bright	Cold to cool	Poor quality with warm conditions.
Fig	Bright	Cold to warm	Grows 15 to 30 feet (4.6 to 9.2 m) tall. Will cause shading. Will tolerate light frost and some shade. May lose leaves in winter, allowing more winter sun underneath.
Garlic	Shady to very bright	Cool to warm	Will tolerate diverse greenhouse conditions.
Herbs	Shady to bright	Cold to warm	Most will tolerate diverse conditions. Basil prefers warm temperatures. Herbs native to temperate climates may require winter dormancy or chilling.
Kale	Shady to bright	Cold to warm	Poor quality with warm to hot temperatures.
Kohlrabi	Bright	Cool to warm	Enlarged stem (edible portion) cracks with hot temperatures.
Leeks	Bright	Cool to warm	Will go to seed if temperature goes below freezing and then returns to warm.
Lettuce	Shady to bright	Cool to warm	Will go to seed with consistent warm to hot temperatures.
Mustard greens	Shady to bright	Cool to warm	Will go to seed with consistent warm to hot temperatures.
Okra	Bright to very bright	Warm to hot	Will not grow in cool, shady spots. May get tall and cause shading. Needs warm temperature.
Onions	Bright	Cool to warm	Will not bulb in winter but good for greens year-round.
Parsley	Bright to shade	Cool to warm	Will often go to seed the following winter.
Parsnips	Bright	Cool	Plants that overwinter may go to seed.
Peas	Shady to bright	Cool to warm	Warm to hot temperatures will reduce yield.
Peppers	Bright to very bright	Warm to hot	Prefer warm temperatures when young. Will overwinter if temperatures remain above 40°F (5°C) but grow best above 50°F (10°C).
Radish	Shady to bright	Cool to warm	Consistent warm temperatures cause top growth and flowering. Poor flavor in warm to hot temperatures.
Rutabaga	Shady to bright	Cool	Poor quality with warm to hot temperatures.
Spinach	Shady to bright	Cool to warm	Consistent warm to hot temperatures cause rapid flowering and short production period.

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CROP LIGHT AND TEMPERATURE REQUIREMENTS FOR EDIBLE PLANTS (CONTINUED)

CROP	LIGHT	TEMPERATURE	COMMENTS
Squash	Bright to very bright	Warm to hot	Requires nights about 50°F (10°C). Winter squash varieties need trellising and cause shading. Summer squash generally stays bushy.
Sweet potato	Shady to bright	Warm to hot	Needs hot temperatures for a long period. May vine extensively, causing shading.
Swiss chard	Shady to bright	Cool to warm	May flower in spring if winter temperatures go below freezing.
Tomatoes	Bright to very bright	Hot	Will tolerate short periods of hot temperatures. Vining tomatoes cause shading. Little or no production below 50°F (10°C).
Turnips	Shady to bright	Cool	Warm to hot temperatures cause cracking and produce poor eating quality.
Watermelon	Bright to very bright	Warm to hot	Requires nights above 50°F (10°C). Needs trellising, which causes adjacent shading.

CROP LIGHT AND TEMPERATURE REQUIREMENTS FOR SELECTED CUT FLOWERS

CROP	LIGHT	TEMPERATURE	COMMENTS
Astroemeria	Bright	Cool to warm	Needs trellising. Flowers at temperatures above 50°F (10°C).
Carnation	Bright	Cool to warm	Needs trellising.
Chrysanthemum	Bright	Cool to warm	May get tall and cause shading. Needs specific night length to flower. Flowers need temperatures above 50°F (10°C).
Rose	Bright	Warm to hot	Will not grow well if temperatures go below 40°F (5°C). Can get tall and cause shading. Will not tolerate shade well.
Snapdragon	Bright	Cool to warm	Tall varieties need trellising and may cause shading.
Stock	Bright	Cool to warm	A good winter-spring plant. Start between July 10 or after February 15 or plants may not flower. Some varieties are tall and will cause shade.
Sweet pea	Bright	Cool to warm	Usually needs trellising and may cause shading. Poor growth in hot temperatures.