

CROP	Ethylene Production	Ethylene sensitive	chilling or mishandling injuries	Respiration Rate	ICED
Apples	very high	high	browning, rot, soft	low	
Asparagus	low	low	dull, limp	extremely high	YES
Basil	low	low	browning, limp	high	NO
Beans, snap	low	moderate	surface pitting, brown streaks, dark tips	very high	NO
Beans, lima	low	moderate	yellow to brownish lesions on tips and stalks	high	NO
Beets, bunched	very low	low	limp tops, rots	high	YES
Beets, root	very low	low	black root, brown spots on rot tips	moderate	Can
Blackberries	low	low	mold	high	NO
Blueberries	low	low	mold	moderate	NO
Broccoli	very low	high	strong odor, yellowish, black rot spots	very high	YES
Brussel sprouts	very low	high	tipburn, black leaf speck, yellowing	very high	YES
Cabbage	very low	high	black spots, tipburn, soft	moderate	NO
Cantaloupe	high	moderate	soft spots, fusarium rot	moderate	NO
Carrots, topped	very low	high	rubbery, insect damage, brown lesions	moderate	YES
Cauliflower	very low	high	yellow or brown curds, riciness	high	YES
Celery	very low	moderate	yellowing, limp, rots	moderate	YES
Corn, sweet	very low	low	tough kernels, loss of sugar	extremely high	YES
Cucumbers	low	high	pitted, watersoaked, yellowing	moderate	NO
Eggplant	low	moderate	browning, shriveling, decay, pitting		NO
Endive	very low	moderate	wilting, yellowing, soft, rots	very high	YES
Garlic	very low	low	rots, soft neck, brown spots	low	NO
Leafy greens	very low	moderate	wilting, yellowing, soft, rots	very high	YES
Herbs	very low	moderate	wilting, yellowing, soft, rots		NO
Leeks	very low	moderate	rot around roots, limp	high	YES
Head lettuce	very low	high	wilting, bolting, tipburn, discoloration	moderate	YES
Mushrooms	low	moderate	browning, water spots	very high	NO
Onions, bulb	very low	low	soft neck, sprouting, root growth, rots	low	NO
Onions, green	very low	moderate	limp, yellowing, rots	very high	YES
Parsley	very low	high	limp, yellowing, bad odor	extremely high	YES
Pears	high	high	mushy, soft, rots	moderate	NO
Peas, in pods	very low	moderate	tough, yellowing, limp, yellow	extremely high	CAN
Peppers, bell	low	low	pitting, wilting, rot, soft	moderate	NO
Peppers, hot	low	low	pitting, wilting, rot, soft	moderate	NO
Potatoes, early	very low	moderate	soft rot, scab, surface discoloration	moderate	NO
Potatoes, late	very low	moderate	sprouting, soft rot, scab, discoloration	very low	NO
Pumpkins	low	low	rot, broken handles	moderate	NO
Radishes with tops	very low	moderate	color bleed, pithy, rots	high	YES
Raspberries	low	low	mold	high	NO
Rutabagas	very low	low	pitting, rots, water spots	low	NO
Spinach	very low	high	wilting, yellowing, rots	extremely high	YES
Squash, summer	low	moderate	pitting, limp, rots	moderate	NO
Squash, winter	low	low	rots, color loss	moderate	NO
Strawberries	low	low	mold, water spots, limp	high	NO
Sweet potatoes	very low	low	decay, pitting, discoloration	low	NO
Tomatoes	moderate	high	decay, pitting, anthracnose, cracking	moderate	NO
Turnips	very low	low	pitting, water spots, rots	low	YES
Watermelon	low	high	rots, anthracnose	low	NO

F = forced-air cooling, H = hydrocooling, I = package icing, R = room cooling, V = vacuum cooling, N = no precooling needed  
Sources: USDA Agricultural Marketing Service, Kansas State University Extension, and Jim Waltrip at Petoseed  
2012 Production Guide for Storage of Organic Fruits and Vegetables NYS IPM Publication No. 10 Cornell University