

4 Physiology

	Respiration rate*	Ethylene production**	Ethylene sensitivity***
Asian leafy – buk choy	Moderate	Moderate	Moderate
Asian leafy – choy sum	Moderate	Moderate	Moderate
Asian leafy – gai lan	Moderate	Moderate	Moderate
Asian leafy – pak choy	Moderate	Moderate	Moderate
Asian leafy – wombok	Moderate	Moderate	High
Baby spinach	High	Low	High
Beans	High	Low	Moderate
Broccoli	High	Low	High
Brussels sprout	High	Moderate	High
Cabbage	Low	Low	High
Capsicum – green	Low	Low	Low
Capsicum – red	Low	Low	Low
Carrot	Moderate	Low	High
Cauliflower	Moderate	Low	High
Celery	Low	Low	Low
Cucumber – green field	Low	Moderate	High
Cucumber – Lebanese	Moderate	Moderate	High
Eggplant	Moderate	Moderate	Moderate
Green onions	Moderate	Low	Low
Kale	High	Low	High
Leek	Moderate	Low	Low
Lettuce – hearting	Moderate	Low	High
Lettuce – loose leaf	Moderate	Low	Moderate
Parsnip	Moderate	Low	Moderate
Pea, edible pod	Very high	Low	Moderate
Pumpkin	Low	Moderate	Moderate
Rocket	Very high	Low	High
Silverbeet	Moderate	Low	High
Squash (pattypan)	Moderate	Moderate	Low
Sweet corn	Very high	Low	Low
Sweetpotato	Low	Low	Low
Zucchini	Moderate	Moderate	Moderate

* Respiration rate at 5°C. Low = <5ml.kg⁻¹.h⁻¹; Moderate = 5–15ml.kg⁻¹.h⁻¹; High = 15–30ml.kg⁻¹.h⁻¹; Very high = >30ml.kg⁻¹.h⁻¹

** Ethylene production at 20°C. Low = <0.1µl.kg⁻¹.h⁻¹; Moderate = 0.1–1.0µl.kg⁻¹.h⁻¹; High = >1.0µl.kg⁻¹.h⁻¹

*** Ethylene sensitivity. Low = not considered ethylene sensitive. Moderate = some damage may occur with prolonged exposure. High = damaged significantly by short exposure / low levels of ethylene.

Note that respiration rate is highly variable and is strongly affected by variety and growing conditions.

Data sourced from the UC Davis postharvest technology database, USDA ARS Handbook 66, and the scientific literature.