

# Quince

## Recommendations for Maintaining Postharvest Quality

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Adel A. Kader

Department of Pomology, University of California, Davis, CA 95616

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## Maturity Indices

Change of skin color from green to yellow is the primary maturity index. Quinces should be picked when full-yellow and firm.

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## Quality Indices

- Size, color, freedom from defects and decay.
  - Quinces must be handled carefully as they bruise easily.
  - Quinces are not eaten fresh because of their astringency (due to high tannin content).
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## Optimum Temperature

0°C (32°F)

Highest freezing point = - 2°C (28.4°F)

Storage potential = 2-3 months

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## Optimum Relative Humidity

90-95%

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## Rates of Respiration

Climacteric respiratory pattern.

Temperature	0°C (32°F)	10°C (50°F)	20°C (68°F)
ml CO <sub>2</sub> /kg·hr	2.3 - 5.2	10.2 - 14.1	21.2 - 39.0

To calculate heat production multiply ml CO<sub>2</sub>/kg·hr by 440 to get Btu/ton/day or by 122 to get kcal/metric ton/day.

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## Rates of Ethylene Production

<b>Temperature</b>	0°C (32°F)	10°C (50°F)	20°C (68°F)
<b>µl C<sub>2</sub>H<sub>2</sub>kg·hr</b>	2.3 - 6.1	6.9 - 7.4	11.0 - 31.9

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## Responses to Ethylene

Ethylene (100ppm) treatment for 2 days at 18-21°C (65-70°F) and 90-95% relative humidity can be used after removal from cold storage to stimulate more uniform and faster ripening of quinces before processing.

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## Responses to Controlled Atmospheres (CA)

No published information.

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## Physiological Disorders

No published information.

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## Pathological Disorders

Blue mold, caused by *Penicillium expansum*, is the most common postharvest disease of quinces. Control strategies include careful handling to minimize wounding, prompt cooling to 0°C (32°F), and maintenance of optimum temperature and relative humidity during storage.