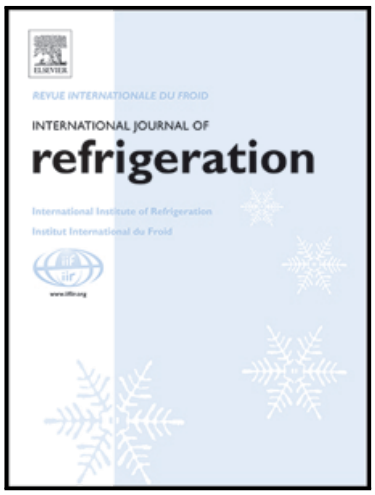

Numerical modelling of forced-air cooling of palletized apple: Integral evaluation of cooling efficiency

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Highlights

- Local and average airflow through palletized apples were analyzed.
- Cooling efficiency of forced-air cooling systems was analyzed with an integrated approach.
- The mass loss of fruit is primarily influenced by cooling time rather than air-inflow rate.
- An exponential relationship between cooling rate and energy consumption was found.