

Accepted Manuscript

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

Jia-Wei Han , Chun-Jiang Zhao , Jian-Ping Qian ,
Luis Ruiz-Garcia , Xiang Zhang

PII: S0140-7007(18)30059-8
DOI: [10.1016/j.ijrefrig.2018.02.012](https://doi.org/10.1016/j.ijrefrig.2018.02.012)
Reference: IJIR 3893



To appear in: *International Journal of Refrigeration*

Received date: 15 July 2017
Revised date: 26 February 2018
Accepted date: 26 February 2018

Please cite this article as: Jia-Wei Han , Chun-Jiang Zhao , Jian-Ping Qian , Luis Ruiz-Garcia , Xiang Zhang , Numerical modelling of forced-air cooling of palletized apple: Integral evaluation of cooling efficiency, *International Journal of Refrigeration* (2018), doi: [10.1016/j.ijrefrig.2018.02.012](https://doi.org/10.1016/j.ijrefrig.2018.02.012)

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

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.

ACCEPTED MANUSCRIPT

Download English Version:

<https://daneshyari.com/en/article/7175284>

Download Persian Version:

<https://daneshyari.com/article/7175284>

[Daneshyari.com](https://daneshyari.com)