

## CURING BULB CROPS

**Introduction:** For bulb crops like onions and garlic, CURING means drying the neck and a few layers of peelings in order to protect the crop from water loss and decay during handling, storage and marketing.

Why do we cure bulb crops?

Reason #1: Storage life of cured crops is much longer.

Reason #2: Cured crops will have a lower rate of water loss during ambient storage.

Reason #3: Cured crops will have less decay than uncured crops.



Cured onions with tight neck and dry outer peels

Curing roots, tubers and bulb crops will increase storage life and protect quality during storage and marketing.

### Design Options & Materials Needed



Field curing in windrows (photo credit Oregon State University)



Field curing in burlap or jute sacks (Photo credit FAO)

Cover the crops during field curing with the dried tops of the plants.

Check in 3 or 4 days to determine the rate of curing.

The best curing conditions are warm and dry, with good ventilation.



# Postharvest Innovations Plan Series



Curing under shade in an outdoor shed on a raised platform

**Costs and benefits:** Bulb crops will lose about 5% of their weight during curing, but then will have a much lower rate of weight loss during ambient temperature storage or in cold storage.



Percent weight loss of cured and uncured onions in storage

Crop (1000 kg)	No curing	Curing before packing, storage and marketing	Potential increase in profits
Onions stored for one month at ambient temperature before sales	35% losses Poor quality  650 kg to sell @ \$2 per kg \$1300 market value	5% losses during curing 12% losses in storage  830 kg to sell @ \$3 per kg \$2490 market value	\$1190 additional market value due to curing

### For further information

Small-scale postharvest handling practices: A manual for horticultural crops (Chapter 2; 5<sup>th</sup> edition 2015)

[http://ucanr.edu/sites/Postharvest\\_Technology\\_Center\\_/files/231952.pdf](http://ucanr.edu/sites/Postharvest_Technology_Center_/files/231952.pdf)

Curing brochure, Sonora Pacific

<http://sonorapacific.com/presentations/training-brochures/file/63-post-harvest-curing?start=40>

## Postharvest Innovations Plan Series

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Number 19

Low cost, small-scale practices for reducing postharvest food losses

December 2017

Postharvest Handling Systems: Underground vegetables (roots, tubers and bulbs)

<http://vric.ucdavis.edu/postharvest/undergnd.htm>

Postharvest Technology Center (UC Davis) <http://postharvest.ucdavis.edu>

The Postharvest Education Foundation <http://www.postharvest.org>

Postharvest Innovations LLC <http://www.postharvestinnovations.com>

Citation: PI LLC (2017). PI Plan Series 19: Curing bulb crops. Postharvest Innovations LLC. 3 pp.