

Waxy breakdown of Garlic

Cause

Waxy breakdown is a physiological condition, not one due to infection by microorganisms.

Occurrence

No one knows what causes this. The appearance of garlic cloves with this problem was thought to be similar to translucent scale of onions, which prompted some to suggest the same cause: high temperatures during growth and/or after harvest. However, this has not been confirmed. Some researchers have said waxy breakdown may be associated with poor ventilation and low oxygen levels during storage.

Symptoms



The symptoms are not apparent until the skins surrounding the cloves are removed. Affected cloves are often on the outside of the head, and initially show slightly sunken yellow areas. The entire clove eventually turns amber colored, but remains firm, if slightly shrunken.

Control

- Good ventilation during storage may help prevent this problem, but that isn't certain.

Clove on the left has discoloration due to waxy breakdown. Clove on the right is normal.
Photograph by Melodie Putnam

References

- Cornell University Plant Disease Diagnostic Clinic.. Diseases of Garlic Factsheet.
<http://plantclinic.cornell.edu/FactSheets/Diseases%20of%20garlic/GarlicDisorders.htm>
- Schwartz, H.F. & Krishna Mohan, 2006. Compendium of onion and garlic diseases and pests, 2nd Ed.
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- UC Davis Postharvest Technology Research and Information Center.
<http://postharvest.ucdavis.edu/Produce/Producefacts/Veg/garlic.shtml>