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# Hops: Harvesting and Processing

Rob Serrine  
MSU Extension  
Leelanau County, MI

MSU IPM Academy  
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**MICHIGAN STATE**  
**UNIVERSITY**

**Extension**



# Hop Production Stages

- Stages of Growth
  - Dormancy
  - Spring regrowth
  - Vegetative growth
  - Reproductive growth
  - Preparation for dormancy
- Each stage requires its own unique management regime



## Preparation for Dormancy (September)

### In the Field

- Harvest!!!!
- Vines cut (bottom then top)
- Laid down into trailer
- Taken to picking machine
- Cones dried for 8-12 hours (10% moisture) under 140 F
- Dried cones cooled 12-24 hours
- Cold storage



Source: Jason Perrault, Perrault Farms





















- Pelletizing



<http://www.makepellets.ca/Hophead%202-1.jpg>

# Packaging

N Flush

Vacuum seal

O2 and light proof packaging material



# Cold Storage

- For AB-This freezer keeps the hops stored within at a constant 18-26 degrees Fahrenheit at a 70% relative humidity.



<http://www.fwwarehousing.com/divisions/5/cold-storage.html>



# The effects of storage temperature on the chemical composition of hop pellets

A. Canbaş\*, H. Erten, F. Özşahin

Department of Food Engineering, Faculty of Agriculture, University of Çukurova, 61130, Adana, Turkey

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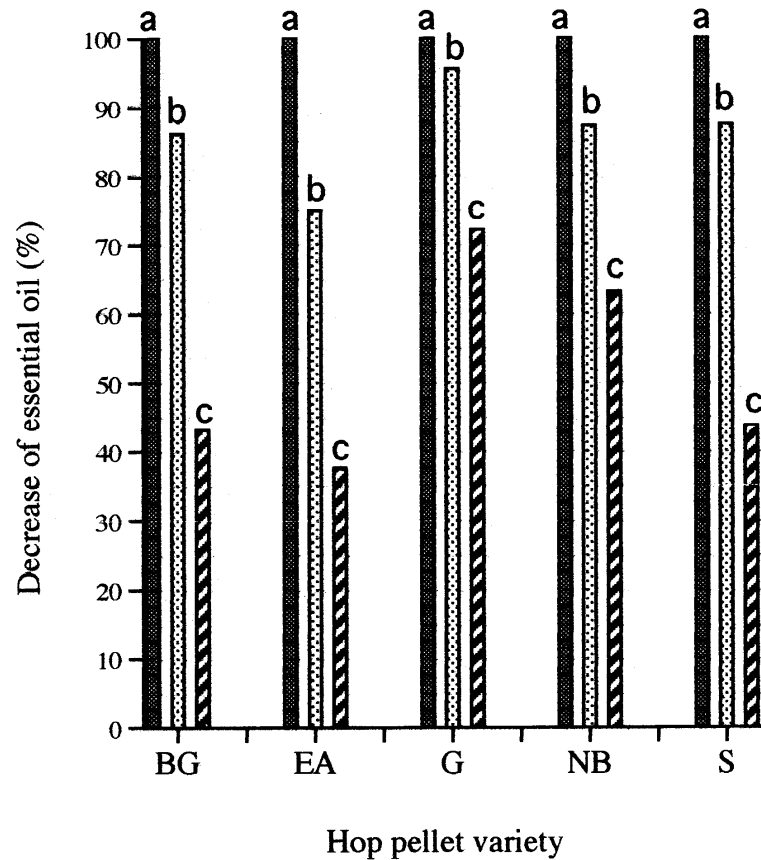


Fig. 5. The effect of 6 months storage on essential oil of hop pellets. BG, Brewers Gold; EA, Efes Aroma; G, Galena; NB, Northern Brewer; S, Saaz; a, Initial; b, 3°C storage; c, Room temperature storage.

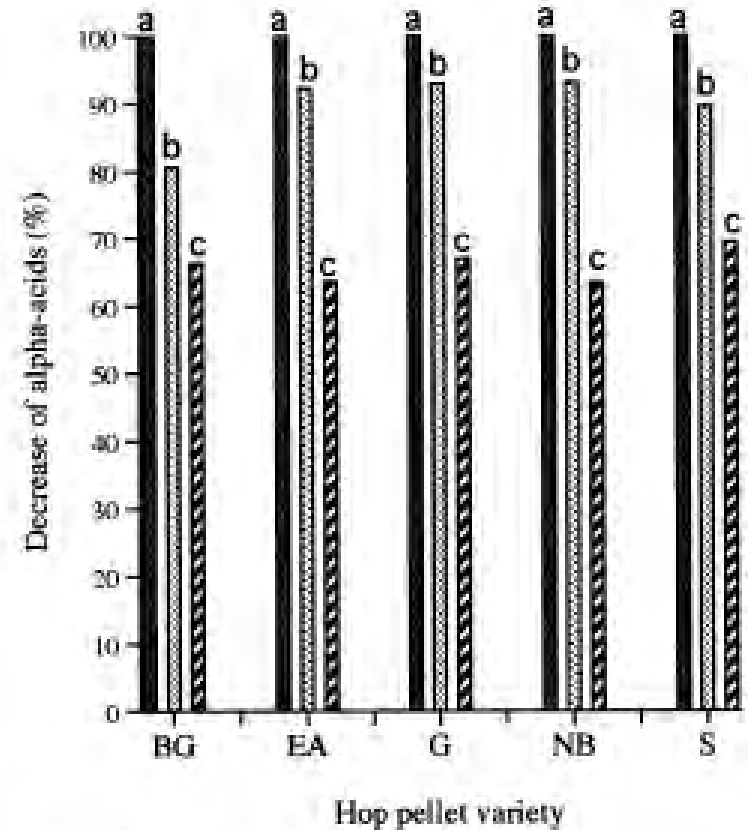


Fig. 1. The effect of 6 months storage on alpha-acids of hop pellets. BG, Brewers Gold; EA, Efes Aroma; G, Galena; NB, Northern Brewer; S, Saaz; a, Initial; b, 3°C storage; c, Room temperature storage.



# WOLF Hopfenpflückmaschine WHE 513



