

## Tasting Honey and Sensory Analysis: The Missing Link



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Like wine, cheese, olive oil, coffee, and chocolate, honey has emerged as an artisanal obsession



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The bee was the symbol of the King of Lower Egypt



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*Clay seal*  
*Base pottery amphora*  
*Docket's seal*  
*Title: Seal*

Howard Carter No.: 614j  
Handlist description: Pottery vessel  
Card/Transcription  
No. 614, J.  
Clay seal  
Drab pottery amphora  
handles bound with rush  
18.0 cms  
Docket in black upon shoulder.  
Contents: apparently some kind of liquid  
like (?) honey

*Titulus Pictus*

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a = He of the sedge and the bee

b = sealer of the King of Lower Egypt

c = bee

d = honey

e = beekeeper

f = beekeeper

g Chief beekeeper of Amun

### Sealer of the Honey

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One honeybee makes only 1/12<sup>th</sup> teaspoon of honey in her entire lifetime.



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How do Bees make Honey?  
From the Nectar of Flowers



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My First Harvest Honey



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The bees in the colony must visit TWO MILLION flowers and fly over 55,000 miles; to make ONE pound of honey, it requires the lifetime work of approximately 768 bees.

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Warning: Beekeeping can be very addictive  
This can happen to you!



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Why are there so many types of honey....how do we describe them?

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### TERROIR: Geology, Geography, Climate

Vintages: good harvest and weak harvest

Limited harvest: plants that do not bloom or secrete nectar every year

- Honeybee behavior
- Climate/Microclimates/Temps
- Seasons: Sun, Rainfall, Wind
- Soil: minerals, pH
- Typography/slope

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### National Honey Show UK ~ 2003

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### National Honey Show UK ~ 2003 ~ Judging

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### Sensory Analysis

Using your senses to evaluate honey like an expert

- A method to evaluate honey by color, aroma, taste, flavor and texture.
- To create a vocabulary to talk about honey.
- Compliments pollen and chemical work done in the lab.
- Confirms defects.
- Tool for marketing

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### What is the Method of Sensory Analysis

- 1 Visual
- 2 Color
- 3 Aroma
- 4 Flavor
- 5 Texture

Tasting Honey Side by Side  
Memorizing each characteristic

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### Aroma of Honey

Humans sense of smell is approximately 1,000x more sensitive than our sense of taste, and humans can detect 40,000 different odors.

Scent memories influences our mood and are linked to an event, a person, place, thing or even a moment in time.

Cultural influences

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### SMELLS are Linked to Memories

Scent memories influences our mood (i.e. aromatherapy) and can transport us back to emotional memories including an event, a person, place, thing or even a moment in time that will carry our individual emotional reaction.

Aunt Ruthie

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## Understanding Taste vs. Flavor And describing Honey

- 5 taste sensations
- sweet (energy)
  - sour (unripe/rotting/palatability)
  - salty (minerals/electrolytes)
  - bitter (poison/danger)
- \*umami (protein/amino acids)



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There are thousands of flavors.

Humans actually taste with our noses

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## Describing Other Tactile Sensations Trigeminal Sensations



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## Colors of Honey

0 m	WATER WHITE	8 m
8 m	EXTRA WHITE	17 m
17 m	WHITE	34 m
34 m	EXTRA LIGHT AMBER	50 m
50 m	LIGHT AMBER	85 m
85 m	AMBER	114 m
114 m	DARK AMBER	140 m

- Gold, amber, purple, green, red, black
- Honey becomes darker as it ages
- Honeys become lighter when crystallized

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## Honey Tasting Notes

Honey	Color	Aroma	Flavor	Texture

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## Yellow Sweet Clover (*Melilotus officinalis*)

- Visual:**  
Extra white to straw color
- Odor:**  
Weak, vegetal, dry hay, floral.
- Flavor:**  
Sweet, sometimes slightly acid.  
vegetal-dry grass/hay, spice  
cinnamon, buttery texture  
when liquid. Cool on tongue (not  
temperature)
- Crystallization rate:**  
Moderate to rapid with very  
fine crystals, puree potato texture
- Blooms:** June to July  
Region: Nebraska, N&S Dakota




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### Defects in Honey

Honey is an extremely fragile substance

A) Marbling or white spots on the walls of the jar or on the surface (Air pockets, glucose crystals white )  
 B) Incomplete crystallization (Little glucose/heat)  
 C) Advanced phase separation (water content high/Old)  
 D) Foam Effervescence (Fermentation)



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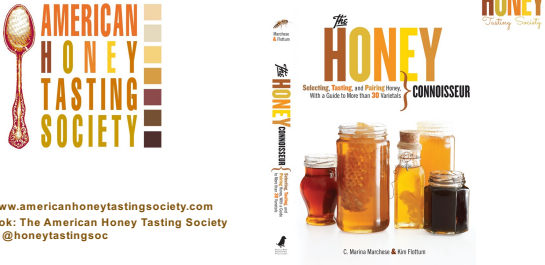
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### Beekeeper Management



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