

# Sensory Attributes of Honey

Developed for the National Honey Board by rtech laboratories from Land O' Lakes, St. Paul, Minnesota **Method** 

Thirteen trained panelists evaluated samples with three replications during two testing sessions. Panelists received ten grams of each sample in a one-ounce covered plastic soufflés cup. Samples were held and served at room temperature under white lights. Panelists cleansed their palates with low sodium saltine crackers and carbon-filtered water between tastings.

Appearance, aroma, flavor, nose/mouthfeel, and aftertaste/afterfeel were assessed. Panelists were not informed of the objective of the test or that they would be testing different floral varieties of honey. The descriptive terms used by the panel only represent a perception that is common to them and should not be interpreted as general positive or negative attributes.

**Table 1. Summary of Main Descriptive Characteristics** 

Floral Variety	Characteristics
Avocado Honey	Molasses/Brown Sugar Flavor and Metallic/Iron Flavor
Blackberry Honey	Low Flowery Perfume Aroma, Transparent Appearance, Thick Viscous Appearance, High Sweet Flavor, High Clover Nectar Flavor.
Blueberry Honey	Low viscosity, Flowery Perfume Aroma, Green (unripened fruit) Aroma and Lemon Aroma and Fruity Flavor
Buckwheat Honey	Dark Color, Sharp and Medicinal Aroma, Barny, Medicinal, Green (unripened fruit) and Bitter Flavor, Pungent Aromatic (nose-burn), Molasses/Brown Sugar Aftertaste and Lingering Flavor
Clover Honey	Sweet Aroma, Clover Nectar Aroma, Spicy Cinnamon Aroma, Low Sharp Aroma, Light Appearance, High Transparent Appearance, Low Thick Viscous Appearance, High Sweet Flavor, Clover Nectar Flavor, Waxy Flavor
Eucalyptus Honey	Sweet Aroma, Clover Nectar Aroma, Sweet Flavor, Clover Nectar Flavor, Lingering Flavor, Sweet Aftertaste
Gallberry Honey	High Flowery Perfume Aroma, Dark Appearance, Thick Viscous Appearance, High Spicy Cinnamon Flavor, High Flowery Perfume Flavor, Low Fruity Flavor, Tea Flavor, Hot Bite Mouthfeel, Flowery Perfume Aftertaste
Orange Blossom Honey	Sweet, Flowery Perfume, Clover Nectar, and Beeswax Aroma, Sweet, Flowery Perfume, Clover Nectar, and Beeswax Flavor, Sweet and Flowery Perfume Aftertaste
Safflower Honey	Clover Nectar Aroma, Spicy Cinnamon Aroma, Moderately Dark Appearance, Moderate on all Flavor and Aftertaste Characteristics (no extreme highs or lows), Pungent Aromatic Nose Feel and Hot Bite Mouthfeel and Aftertaste.
Sage Honey	Thick/Viscous with Clover Nectar Flavor
Saw Palmetto Honey	Sweet Aroma, Clover Nectar Aroma, Dark Appearance, Spicy Cinnamon Flavor, Anise Flavor, Molasses Prune Flavor and Aftertaste.

Sourwood Honey	Anise (black licorice) Aroma and Flavor, Astringent (mouth-drying) relatively low on Sweet Flavor
Soybean Honey	High Sharp Aroma, Flowery Perfume Aroma, Molasses Prune Aroma, Dark Appearance, Low Thick Viscous Appearance, Low Clover Nectar Flavor, High Fruity Flavor, Green Flavor, Molasses Prune Flavor, Pungent Aromatic Nose Feel, Fruity Aftertaste, Lingering Flavor.
Star Thistle Honey	High Anise Aroma with low other aroma (sweet, spicy cinnamon, molasses prune, sharp), Light, Transparent, and Thick Viscous Appearance, High Anise Flavor, Low Sweet Flavor, Low Spicy Cinnamon Flavor, Low Waxy Flavor, Low Metallic Flavor and Aftertaste, Low Pungent Aromatic Nose Feel.
Sunflower Honey	Citrus Aroma with low other aroma Characteristics (sweet, clover, spicy cinnamon, flowery perfume, anise, sharp). High in Tiny Air Bubbles Appearance, Low Transparent, Low Thick Viscous Appearance, and Low on most flavor attributes except Green Flavor and Fruity Flavor. Low in Aftertaste attributes except Fruity.
Tupelo Honey	Sweet, Flowery Perfume, and Spicy Cinnamon Aroma, Flowery Perfume and Spicy Cinnamon Flavor (like red hots), Flowery Perfume and Fruity Aftertaste

Table 2. High and Low Intensity Attributes Relative to Other Honey

### **A**ROMA

	Sweet	Clover Nectar	Green	Spicy Cinnamon	Waxy	Flowery Perfume	Anise	Molasses Prune	Sharp	Lemon	Chemical/ Medicinal
Avocado											
Blackberry											
Blueberry			Н							Н	
Buckwheat		L		L	L	L		Н	Н	L	Н
Clover			L	Н							
Eucalyptus											
Gallberry											
Orange Blossom	Н	Н			Н	Н					
Safflower											
Sage	L		L				L	L	L		L
Saw Palmetto											
Sourwood							Н				
Soybean									Н		
Star Thistle							Н				
Sunflower		L									
Tupelo	Н			Н		Н					

# **FLAVOR**

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	Sw eet	Clover Nectar	Gre en	Spicy Cinnamo n	Waxy	Flowery Perfume	Anise	Molasses Prune	Medicin al	Fruity	Barn y	Metallic	Bitter
Avocado								Н				Н	
Blackberry													
Blueberry										Н			
Buckwheat			Н			L			Н	L	Н		Н
Clover			L					L	L			L	L
Eucalyptus													
Gallberry													
Orange Blossom	Н	Н			Н	Н							
Safflower													

Sage		Н				L	L		L	L
Saw Palmetto										
Palmetto										
Sourwood	L	L		L		Н				
Soybean										
Star Thistle										
Sunflower			L			L				
Tupelo			Н		Н					

### NOSE/MOUTHFEEL

	NOSE/MOUTHFEEL	_
	Pungent Aromatic	Hot Bite
Avocado		
Blackberry		
Blueberry		
Buckwheat	Н	
Clover	L	
Eucalyptus		
Gallberry		
Orange		
Blossom		
Safflower		
Sage		L
Saw Palmetto		
Sourwood		
Soybean		
Star Thistle		
Sunflower		
Tupelo		

# AFTERTASTE/AFTERFEEL

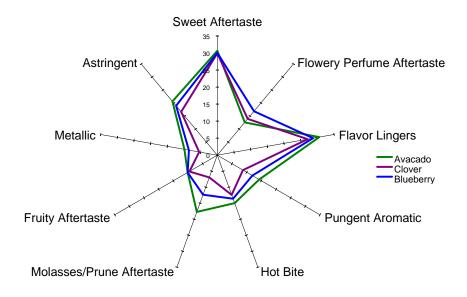
	Sweet	Flowery Perfume	Molasses Prune	Fruity	Metallic	Astringent	Flavor Lingers
Avocado		L					
Blackberry							
Blueberry			Н				Н
Buckwheat							
Clover							
Eucalyptus							
Gallberry							
Orange Blossom	Н	Н					
Safflower							
Sage			L		L	L	L
Saw Palmetto							
Sourwood						Н	
Soybean							
Star Thistle							
Sunflower							
Tupelo		Н		Н			

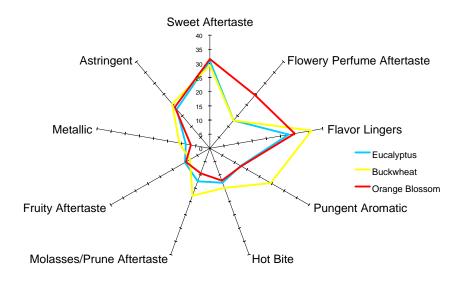
### NOSE/MOUTHFEEL ATTRIBUTES

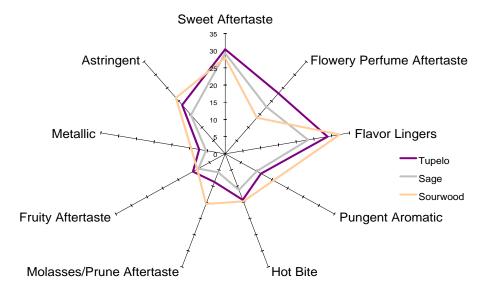
Pungent	Intensity of pungent aromatic feel, stays in the nose and seems to
Aromatic	burn the nose
Hot Bite	Degree to which sample has a bite that stings the tongue like a hot
	spice feeling

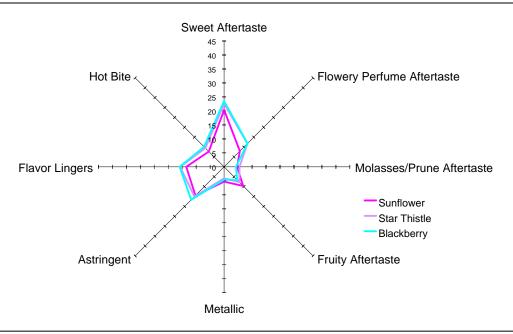
### AFTERTASTE/AFTERFEEL ATTRIBUTES

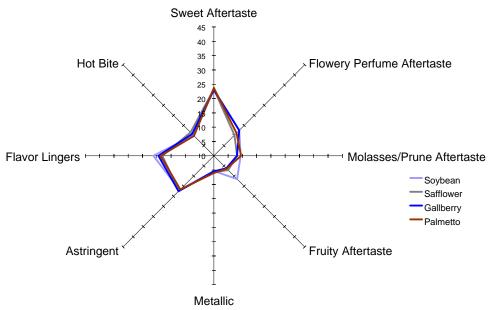
Sweet	Intensity of lingering sweet honey flavor remaining
Flowery Perfume	Intensity of a lingering perfume like or artificial perfume flavor remaining
Molasses Prune	Intensity of lingering flavor like molasses, brown sugar, a caramelized flavor, prunes, or raisins
Fruity	Intensity of lingering fruity flavor like apricot, not quite ripe mango, or peach
Metallic	Intensity of metallic flavor such as a lingering iron flavor remaining
Astringent	Degree to which mouthfeel is let dry on tongue and mount, astringent
Flavor Lingers	Degree to which flavor lingers in mouth for a long time from goes away quickly to lingers a long time





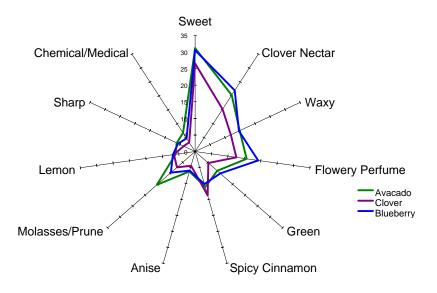


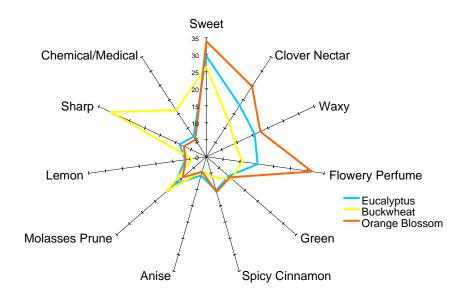


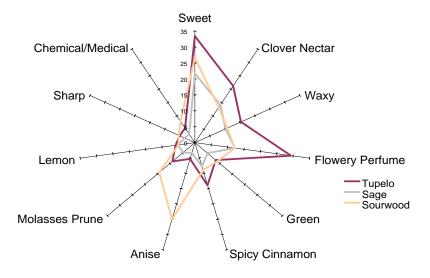


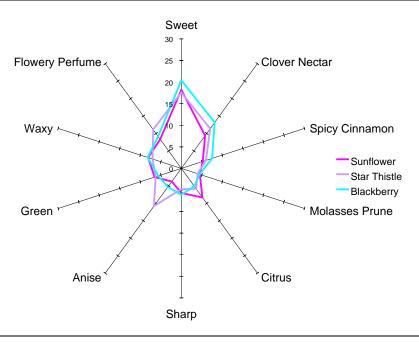
# AROMA ATTRIBUTES

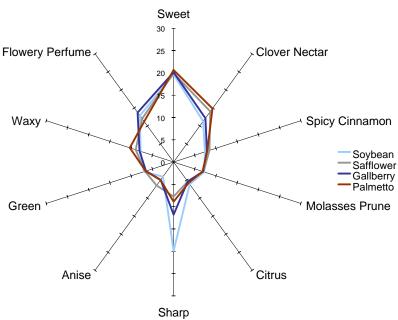
Sweet	Intensity of sweet aroma, sweet as typically comes from honey
Clover Nectar	Intensity of aroma like clover nectar, a sweet flowery nectar but quite
	delicate
Green	Intensity of green aroma, this can include any green plant and green un-
	ripened fruit
Spicy Cinnamon	Intensity of spicy cinnamon like aroma, smells like red hots
Waxy	Intensity of waxy aroma like beeswax
Flowery Perfume	Intensity of flowery or perfumy aroma including white lilies or citrus
	blossom
Anise	Intensity of anise aroma like anise candy or black licorice
Molasses Prune	Intensity of aroma like molasses, sorghum molasses, prunes, raisins,
	horehound candy or brown sugar
Sharp	Intensity of a strong, sharp, barny aroma
Lemon	Intensity of lemon-like aroma
Chemical/Medicinal	Intensity of chemical or medicinal aroma may be like varnish











# **FLAVOR ATTRIBUTES**

Sweet	Intensity of sweet flavor, a sweet typical of honey
Clover Nectar	Intensity of flavor like clover nectar
Green	Intensity of green flavor, this can include any green growing thing and green un-ripened fruit
Spicy Cinnamon	Intensity of spicy cinnamon like flavor, tastes like red hots
Waxy	Intensity of waxy flavor like beeswax
Flowery Perfume	Intensity of flowery or perfumy flavor including white lilies or citrus blossom
Anise	Intensity of anise flavor like black licorice or anise candy
Molasses Prune	Intensity of flavor like molasses, brown sugar, a caramelized flavor,
	horehound candy, prunes, or raisins
Medicinal	Intensity of medicine like or medicinal flavor, may be like varnish, outer part
	of the mango
Fruity	Intensity of fruity flavor like apricot, peach, lemon, orange
Barny	Intensity of barn-like flavor characteristic of some dark honey
Metallic	Intensity of metallic flavor or iron flavor
Bitter	Intensity of bitter flavor
Tea	Intensity of tea flavor

