



Beer Judge Certification Program

5115 Excelsior Blvd, #326
St. Louis Park, MN 55416

www.bjcp.org

StudentBounty.com

BJCP Special Ingredient Descriptions

March 24, 2014

Contributing Authors

Gordon Strong
Susan Ruud
Kristen England
Ken Schramm
Curt Stock
Petar Bakulić
Michael Zapolski, Sr. (Hightest)

Revised 2014 by Steve Piatz

Copyright © 2009-2014 by the authors and the BJCP

TABLE OF CONTENTS

1.	Introduction.....	1
2.	Honey.....	2
2.1.	Honey Attributes.....	2
2.1.1.	Color.....	2
2.1.2.	Flavor and Aroma.....	3
2.2.	Honey Varieties.....	4
2.2.1.	Apple Blossom.....	4
2.2.2.	Alfalfa.....	5
2.2.3.	Basswood.....	5
2.2.4.	Blackberry Blossom.....	5
2.2.5.	Blueberry Blossom.....	6
2.2.6.	Buckwheat.....	6
2.2.7.	Clover.....	6
2.2.8.	Cotton Blossom.....	7
2.2.9.	Fireweed.....	7
2.2.10.	Guajillo.....	7
2.2.11.	Heather.....	8
2.2.12.	Mesquite.....	8
2.2.13.	Mint Blossom.....	9
2.2.14.	Orange Blossom.....	9
2.2.15.	Palmetto.....	9
2.2.16.	Raspberry Blossom.....	10
2.2.17.	Sage Blossom (White Sage).....	10
2.2.18.	Sourwood.....	11
2.2.19.	Star Thistle.....	11
2.2.20.	Tupelo.....	11
2.2.21.	Wildflower.....	12
3.	Fruit.....	13
3.1.	Fruit in Mead.....	13
3.1.1.	Apple.....	13
3.1.2.	Apricot.....	14
3.1.3.	Banana.....	14
3.1.4.	Black Currant.....	14
3.1.5.	Black Raspberry.....	14
3.1.6.	Blackberry.....	15
3.1.7.	Blueberry.....	15
3.1.8.	Boysenberry.....	15
3.1.9.	Cherry.....	15
3.1.10.	Cranberry.....	16
3.1.11.	Elderberry.....	16
3.1.12.	Huckleberry.....	16
3.1.13.	Key Lime.....	16

3.1.14.	Lemon	17
3.1.15.	Lime	17
3.1.16.	Mango	17
3.1.17.	Marionberry	18
3.1.18.	Mulberry	18
3.1.19.	Orange	18
3.1.20.	Passion Fruit	18
3.1.21.	Peach	18
3.1.22.	Pear	19
3.1.23.	Pineapple	19
3.1.24.	Plum	19
3.1.25.	Pomegranate	19
3.1.26.	Prickly Pear	20
3.1.27.	Raspberry	20
3.1.28.	Red Currant	20
3.1.29.	Strawberry	20
3.2.	Grape Varieties in Pyments	21
3.2.1.	Cabernet Sauvignon	21
3.2.2.	Chardonnay	22
3.2.3.	Chenin Blanc	22
3.2.4.	Concord	22
3.2.5.	Gewurztraminer	23
3.2.6.	Merlot	23
3.2.7.	Muscat	23
3.2.8.	Pinot Noir	23
3.2.9.	Riesling	24
3.2.10.	Sangiovese	24
3.2.11.	Shiraz (Syrah)	24
3.2.12.	Tempranillo	25
3.2.13.	Vidal	25
3.2.14.	Zinfandel	25
4.	Spices	26
4.1.1.	Agave Nectar	26
4.1.2.	Allspice	26
4.1.3.	Black Pepper	26
4.1.4.	Black Tea	27
4.1.5.	Cardamom	27
4.1.6.	Chai Tea	27
4.1.7.	Chamomile	28
4.1.8.	Chipotle	28
4.1.9.	Chocolate	28
4.1.10.	Cinnamon	28
4.1.11.	Clove	29
4.1.12.	Coffee	29
4.1.13.	Coriander	29
4.1.14.	Ginger	29

4.1.15.	Hazelnut (filbert)	30
4.1.16.	Heather Tips	30
4.1.17.	Lavender	30
4.1.18.	Lemongrass.....	31
4.1.19.	Maple Syrup	31
4.1.20.	Mint	31
4.1.21.	Nutmeg	31
4.1.22.	Orange Peel	31
4.1.23.	Poblano	32
4.1.24.	Rose Petals.....	32
4.1.25.	Rosemary	32
4.1.26.	Saffron	32
4.1.27.	Spruce Tips	33
4.1.28.	Star Anise	33
4.1.29.	Vanilla	33

1. Introduction

The descriptions of honey, fruit, grapes and spices here were originally in the BJCP Mead Exam Study Guide. They were moved to this standalone document so they could be more easily used for multiple purposes and be referenced by other BJCP documents.

2. Honey

Honey varieties referenced on the mead exam were based on an analysis of actual varieties declared in many large mead competitions over several years. The data was collated and the 21 most frequently-occurring varieties were selected for inclusion on the mead exam. This means that a mead judge studying this information is likely to understand most honey varieties that are seen in actual competitions.

The honey varieties are often quite regional, so not all varieties will be seen in all competitions. Some of the rare or obscure honey varieties might be quite common in some regions. However, in large competitions that draw entries from all over the country, a wider distribution of honey varieties will be encountered.

The honey varieties are described with the following data:

- **Floral source** – type of plant blossom from which the honey is derived
- **Location** – region where commonly found
- **Color – honey** – the color of the honey in raw form
- **Color – mead** – the color of a mead made with the honey (assuming no added ingredients)
- **Aroma** – the characteristic aromatic qualities of the honey
- **Flavor** – major flavors in the honey
- **Substitutes** – other honey varieties that may be used
- **Confused with** – other honey varieties that might be mistaken for the specific variety
- **Best for** – recommended mead styles where the honey could best be featured.
- **Goes well with** – types of adjuncts or ingredients that complement the honey character.
- **Notes** – general comments about the honey.

2.1. Honey Attributes

There are a range of descriptors that are commonly used to describe honey. Note that the color, aroma and flavor of honey may be different than that found in the resulting mead. Fermentation and aging alters the perception of some of these attributes, as well as adding additional components.

2.1.1. Color

The U.S. Department of Agriculture classifies honey into seven categories: water white, extra white, white, extra light amber, light amber, amber and dark amber.



These are determined by a color grader using the Pfund scale, a visual system peculiar to the honey industry. A table of equivalences between Pfund readings and color names was created to allow common names to be used, although the names do not always make sense (e.g., buckwheat is hardly “dark amber” in color).

Color is not an indicator of honey quality, although the naming system is widely used by honey producers. The color of honey is characteristic of its floral source due to minerals and other minor components. Exposure to heat and storage time may affect a honey’s color (typically darkening and losing intensity of color with age/heat). A honey that is darker than expected may not have been stored properly. Honey that has granulated (developed crystals) will also appear lighter in color than clear honeys.

Generally, lighter honeys have a milder flavor and darker honeys have a more robust flavor, but many exceptions exist (e.g., basswood is light in color but with a strong flavor while tulip poplar honey is dark colored and mild tasting). So, while color may give some indication of expected flavor and aroma, this is not a perfect model.

2.1.2. Flavor and Aroma

The flavor and aroma components of unfermented honey are good indicators of what character you can expect from a varietal mead. However, they aren’t exactly the same. Just as you don’t expect wine to smell like unfermented grapes, the character of fermented honey is different from raw honey. Since there hasn’t been much formal research into mead, we have to rely on the research done from the honey industry (the National Honey Board in particular) to describe the nature of the honey.

Following are some common terms used when describing honey:

- **Sweet.** Sweet, sugary, honey-like aroma and flavor. Self-descriptive, really.
- **Floral.** Flowery aroma like fresh blossoms, the smell of nectar. Suggestive of fresh blooming flowers.
- **Perfumy.** A more fragrant and intense floral-like aroma, typically more concentrated.

- **Citrusy.** A character reminiscent of citrus fruit, such as oranges, lemons, limes or grapefruit.
- **Herbal.** A character reminiscent of herbs, such as mint, eucalyptus, or other aromatic plant leaves (fresh or dried). Can also be extended to tea-like character.
- **Grassy.** Suggestive of fresh cut grass.
- **Green leaves, vegetal.** A character like bruised tomato leaves, blackberry leaves or other green plant matter (not of unripe fruit).
- **Woody.** Suggestive of woody stems, herbs, or evergreens.
- **Earthy.** Suggestive of freshly turned soil, mushrooms, truffles, sometimes also mold.
- **Molasses.** Suggestive of molasses, sorghum, treacle, or dark brown sugar.
- **Caramelized.** Associated with browned (caramelized) sugars of varying depths and intensities, not burnt sugar. Toffee.
- **Nutty/toasty.** Characteristic of almonds, hazelnuts, and toasted bread.
- **Dried fruit.** Esters associated with dried fruit such as raisins, dried cherries, or prunes.
- **Fruity.** Esters reminiscent of ripe or nearly ripe tropical fruit, bananas, apricots, pears, apples, peaches, melons, or just suggestive of generic fruit quality.
- **Green fruit.** The character of unripe fruit.
- **Spicy.** Suggestive of spices (dried seed, fruit, root, bark, or vegetative substance), such as cinnamon.
- **Medicinal.** A character associated with medicines or chemicals, such as menthol.
- **Pungent.** A strong, sharp character.
- **Waxy.** Reminiscent of beeswax.
- **Creamy.** Suggestive of cream.
- **Buttery.** Suggestive of butter.
- **Hot.** Sharp, biting, possibly solventy.
- **Unique varietal.** Some honey varieties (such as orange blossom and clover) cannot adequately be described in terms other than themselves.

2.2. Honey Varieties

The honey varieties listed in this section are in the exam question pool:

2.2.1. Apple Blossom

Floral Source: Apple tree blossoms.
Location: Northern and central US.

Color – honey: Light, golden brown.
Color – mead: Light amber.
Aroma: Floral, hints of apple rind.
Flavor: Floral, does not taste overtly ‘appley’.
Substitutes: None.
Confused with: None.
Best for: Traditional meads, cysers.
Goes well with: Apples, spices.
Notes: Very sweet honey.



2.2.2. Alfalfa

Floral Source: Alfalfa blossoms, purple flowers.
Location: Midwest, US and Canadian Great Plains and Western US.
Color – honey: White to extra light amber.
Color – mead: White to straw.
Aroma: Beeswax, hay.
Flavor: Beeswax, mild, light, delicate.
Confused with: Clover, wildflower.
Best for: Traditional meads.
Notes: Very delicate, light honey. One of the only honeys that truly has a ‘waxy’ character that is not from poor handling.



2.2.3. Basswood

Floral Source: Basswood (American linden, *Tilia americana*) tree blossoms.
Location: Southern Canada to Alabama and Texas.
Color – honey: Water white.
Color – mead: Straw.
Aroma: White wine, chardonnay, yeasty, mineral, unripe (green) fruit
Flavor: Green ripening fruit, lingering flavor, creamy, buttery, herbal, crisp and clean finish.
Confused with: Midwestern wildflower.
Best for: Melomels, metheglins, cysers.
Goes well with: Apples, vanilla.
Notes: Distinctive lingering flavor. Can be a little harsh and hot when fermented.



2.2.4. Blackberry Blossom

Floral Source: Blackberry bramble blossoms.
Location: Pacific Northwest US.
Color – honey: White to light amber.

Color – mead:	Light gold.
Aroma:	Floral, leafy.
Flavor:	Moderate, fairly distinctive.
Best for:	Traditional meads, melomels.
Goes well with:	Blackberries.
Notes:	Should not have overt blackberry fruit character



2.2.5. Blueberry Blossom

Floral Source:	Blueberry shrubs, tiny white flowers.
Location:	Northeastern US, Michigan and Canada.
Color – honey:	Light to medium amber.
Color – mead:	Deep gold, should NOT be blue or purplish.
Aroma:	Floral, leafy, green leaves, citrus.
Flavor:	Fruity, green leaves, lemon, buttery finish. Delicate aftertaste.
Substitutes:	None.
Best for:	Traditional meads, melomels.
Goes well with:	Blueberries.
Notes:	No overt blueberry character.



2.2.6. Buckwheat

Floral Source:	Buckwheat, a plant that looks and grows similar to wheat but is actually an herb.
Location:	Across upper midwest US and Eastern Canada.
Color – honey:	Dark amber, looks dark purple or black.
Color – mead:	Deep amber to light brown.
Aroma:	Unmistakable, molasses, treacle, sultanas. Fairly strong.
Flavor:	Malt syrup, treacle, caramel, molasses, lingering earthy aftertaste, full-bodied. Pungent. Buckwheat pancakes.
Substitutes:	Avocado.
Best for:	Dark braggots, metheglins, traditional meads.
Goes well with:	Dark spices - cinnamon, nutmeg, etc.
Notes:	One of the darkest honeys available. Most people either love the stuff or hate it. Takes to spices well because it is so strongly flavored. West Coast buckwheat is much lighter and milder than Midwest buckwheat.



2.2.7. Clover

Floral Source:	Blossoms of White Dutch, Sweet, Red or white clover blossoms.
Location:	Across US and Canada, very widely available, quite common.



Color – honey:	Clear to light amber, commonly straw. Varies by variety.
Color – mead:	Light amber.
Aroma:	Sweet, slight bouquet of flowers, hints of clover fields.
Flavor:	Touch of flowers, nondescript mild, “classic honey” flavor, sweet, pleasant.
Substitutes:	Wildflower honey.
Confused with:	Wildflower honey.
Best for:	Melomels, traditional meads, metheglins, pyments.
Goes well with:	Like a blank slate, goes well with anything. All purpose honey.
Notes:	One of the most nondescript honeys. Has a very mild character that will get overpowered by anything strong flavored. A major constituent of wildflower honey in the Midwest.



2.2.8. Cotton Blossom

Floral Source:	Blossoms and leaves of cotton plant.
Location:	Southern US, cotton-producing states.
Color – honey:	White to light amber.
Color – mead:	Golden.
Aroma:	Smooth cotton blossom aroma, woody.
Flavor:	Mild, cotton blossom, woody, distinctive.
Best for:	Traditional meads, metheglins.
Goes well with:	Saffron.
Notes:	Quite mild honey.



2.2.9. Fireweed

Floral Source:	Red-purple blossoms of the Fireweed herb, a perennial that grows immediately following a forest fire.
Location:	Northern Pacific states and Canada.
Color – honey:	Water white.
Color – mead:	Straw.
Aroma:	Extremely light, herbal, tea-like.
Flavor:	Tea-like, delicate, sweet, fruity, with smooth finish.
Best for:	Traditional meads, light melomels.
Goes well with:	Peaches, pears.
Notes:	Very mild, sweet and fruity.



2.2.10. Guajillo

Floral Source:	Blossoms of wild desert bush, a medium-sized shrub that can grow into a small tree (up to 15' tall). White flowers.
-----------------------	---



Location:	Southwest Texas and northern Mexico.
Color – honey:	Light to deep amber, but darkens with age.
Color – mead:	Straw.
Aroma:	Perfume-like, fragrant, herbal, touch of lavender or mint.
Flavor:	Very light, mild, rich, smooth and sweet, with a hint of lavender or mint, brown sugar, vanilla. Earthy aftertaste.
Substitutes:	None.
Confused with:	Cotton blossom.
Best for:	Traditional meads, metheglins.
Goes well with:	Herbs and light spices.
Notes:	Also known as Huajilla, Guajillo is a member of the Acacia plant family. Light and delicate honey with subtle complexity.



2.2.11. Heather

Floral Source:	Purple-Pink blossoms on the perennial Heather scrub, <i>Erica vulgaris</i> .
Location:	Europe (esp. Scotland) and Asia Minor.
Color – honey:	Amber, reddish-orange hues.
Color – mead:	Deep amber.
Aroma:	Licorice, fresh floral, perfumy, anise, caramel, candied squash.
Flavor:	Vanilla, licorice, toasty, hint of maple, toffee, rich, complex, multi-dimensional. Heavy-bodied.
Substitutes:	None.
Confused with:	None.
Best for:	Traditional meads.
Notes:	One of the hardest honeys to use. Very ‘funky’ honey that requires extensive aging to mellow and smooth out. Crystallizes rapidly.



2.2.12. Mesquite

Floral Source:	Mesquite tree.
Location:	Southwestern US.
Color – honey:	Water white to amber.
Color – mead:	Straw to golden.
Aroma:	Robust earth, raw mesquite wood, NOT smoky.
Flavor:	Same as aroma, dominating long finish. Hint of apple or peach. Full, complex, distinctive. Earthy aftertaste.
Substitutes:	Fireweed.
Confused with:	Any varietal mead with oak (raw wood character).
Best for:	Traditional meads, metheglins, melomels.
Goes well with:	Hot peppers, berries. Chipotle, raspberry.



Notes: Very unique honey that nearly possesses some of the wood character of which the tree is known. Taste the distinct mesquite wood character in the honey, like food cooked with mesquite but without the smoke. Also known as Desert Blossom.

2.2.13. Mint Blossom

Floral Source: Spearmint or other mints.
Location: Central US to New England.
Color – honey: White to amber.
Color – mead: Pale yellow to amber.
Aroma: Sweet, light mint.
Flavor: Sweet, light mint, soft flavor.
Substitutes: None.
Confused with: None.
Best for: Traditional meads, metheglins, melomels.
Goes well with: Mint.
Notes:



2.2.14. Orange Blossom

Floral Source: Orange tree blossoms.
Location: California, Florida, Texas and Arizona.
Color – honey: Water white to extra light amber.
Color – mead: Straw to amber.
Aroma: Robust floral aroma. Big, fresh blossom-like, lemony, cream soda aroma, Orangina. Very distinctive.
Flavor: Orange water, citrus blossom, flowery perfumy aftertaste.
Substitutes: None.
Confused with: None.
Best for: Anything. Particularly traditional meads.
Goes well with: White grapes, tannic fruits, vanilla.
Notes: This and wildflower are probably the most well rounded 'utility' honeys. Takes oak very well. Keeps its character even with a large amount of adjuncts added. The California variety is of better quality than the Florida. The Florida variety is much less fruity and citrusy and has more of a muddled flavor that is not as distinctly known as orange blossom.



2.2.15. Palmetto

Floral Source: Blossoms on palmetto tree, saw palmetto.

Location:	US Southeast: North Carolina to Florida.
Color – honey:	Light amber to amber.
Color – mead:	Straw to light gold.
Aroma:	Musky, light, lemony, melony, citrusy, leafy, herbal.
Flavor:	Tartness, mixed citrus (lemon, lime, orange), grapey, piment, woody, herbal.
Substitutes:	Gallberry.
Confused with:	Gallberry.
Best for:	Traditional meads, melomels.
Goes well with:	Citrus.
Notes:	Thinner body than most honeys.



2.2.16. Raspberry Blossom

Floral Source:	Raspberry bramble blossoms.
Location:	Pacific Northwest, Upper Midwest, Upper East Coast US.
Color – honey:	Light amber.
Color – mead:	Golden.
Aroma:	Floral, light citrus (orange, lemon).
Flavor:	Floral, fruity, tangerine. Delicate aftertaste.
Substitutes:	Blackberry.
Confused with:	Blackberry.
Best for:	Traditional meads, melomels.
Goes well with:	Peaches, pears, vanilla, chocolate.
Notes:	Mellow and smooth with unique ‘green’ raspberry finish.



2.2.17. Sage Blossom (White Sage)

Floral Source:	White sage blossoms.
Location:	California, Southwest US.
Color – honey:	Water white to extra white.
Color – mead:	Water white to straw.
Aroma:	Herbal, elegant floral, earthy, spicy.
Flavor:	Sweet and clover-like, floral, spicy, metallic, heavy body. Mild flavor, rich, light.
Substitutes:	Black Button Sage, Purple Sage, Clover.
Confused with:	Clover.
Best for:	Traditional meads, metheglins, piments.
Goes well with:	Citrus, green tea, spices.
Notes:	White sage blossom is the most common but Black Button and Purple can be found. A rich honey that is still light in color.



2.2.18. Sourwood

Floral Source:	Sourwood tree, sometimes known as Lily of the Valley tree, grows to 40-60', blooms late, and has beautiful white bell-shaped flowers.
Location:	Middle to Southern Appalachian mountains.
Color – honey:	Extra light to light amber.
Color – mead:	Straw.
Aroma:	Sweet, spicy, anise, very aromatic.
Flavor:	Sweet, spicy, anise, distinctive rich honey flavor, touch of sourness, pleasant lingering aftertaste.
Substitutes:	Tupelo.
Best for:	Traditional meads.



2.2.19. Star Thistle

Floral Source:	Purple-Pink blossoms on Star Thistle herb.
Location:	US West, Midwest and Florida.
Color – honey:	White to extra light amber, greenish.
Color – mead:	Straw, greenish tones.
Aroma:	Grassy, anise.
Flavor:	Grassy, anise.
Substitutes:	None.
Confused with:	None.
Best for:	Traditional meads.



2.2.20. Tupelo

Floral Source:	White Tupelo (also known as Ogeechee lime) trees, growing to a height of 50-75' and blooming from early April to early May.
Location:	South Georgia and Florida panhandle.
Color – honey:	Light amber.
Color – mead:	Golden.
Aroma:	Apple, sweet, vanilla, herbal.
Flavor:	Creamy, sherry, light cinnamon, full-bodied, mild, complex, smooth, distinctive.
Substitutes:	None.
Confused with:	None.
Best for:	Traditional meads, melomels, metheglins, pyments.
Goes well with:	Spices, tannic fruits.



Notes: Very complex floral, herbal and fruity honey. Because of the price of Tupelo honey, it's usually used alone in a traditional mead of which it takes to oak very well. The high ratio of fructose to glucose is such that this honey does not crystallize and because of such is one of the sweetest honeys available. Inasmuch, Tupelo meads will usually taste sweeter than a mead made with different honey.

2.2.21. Wildflower

Note: "Wildflower" is not a variety, yet it is the most commonly declared type of honey that a mead judge will see in a competition. Rather than quibble about semantic matters, the general honey characteristics are described. Wildflower can mean honey from unknown blossoming plants, or polyfloral honey from multiple sources. It often reflects the dominant wild plants in a region, perhaps Clover. It varies greatly by region and season.

Floral Source: ANY blossom(s).
Location: Any/all.
Color – honey: Light to dark, usually light.
Color – mead: Light to dark, usually light.
Aroma: Varies, often generic floral character, usually not distinctive.
Flavor: Varies, often generic floral character, usually not distinctive.
Substitutes: Varies, usually not distinctive.
Confused with: Major constituent nectar, clover.
Best for: Melomels, braggots, anything that will use strong adjunct flavorings.
Goes well with: Varies.
Notes:

3. Fruit

The fruit varieties listed in this section came from a survey of mead competition data. The most commonly declared fruit were categorized and described. For each fruit, we list a description or definition, the source or region where typically grown, the food or product most closely associated with the fruit (if not served raw/whole), and the color, aroma and flavor contributions from the fruit. Generally, we are describing the color, aroma and flavor of the unfermented fruit, but in some cases how the fruit affects mead when fermented is identified.

This is a database of the most common fruit that mead judges will encounter in a competition, and is what is covered on the mead exam. There are certainly many more varieties of fruit that may be used. Grapes are covered in their own section, and include associations with wine varieties that make use of the grapes. Grape varieties are commonly declared when making pynments. Note that we are not defining apple varieties in detail since meadmakers rarely specify varieties of apples in cysers entered in competition. Blended cider is typically used to create cysers rather than single-variety juice.

3.1. Fruit in Mead

Note that fermented fruit can have quite a different character than fresh fruit. Sweetness often is a strong part of the mental association between fruit flavors and the fruit themselves. If the sweetness is fermented out, the remaining flavors might not be readily identifiable as the source fruit. Identifying fruit in a dry mead can be particularly tricky.

Different fruit are more distinctive and intense than others, but all have their own flavor and aroma characteristics (even if only identifiable by their general class, like berries or stone fruit). Some fruit cannot be described without using self-referential terms; their aroma, flavor or color *is* the definition (e.g., the color *orange*). Fruit have varying sweetness, acidity, tannin and fruit flavor. Fruit typically contribute a distinctive color to the mead.

3.1.1. Apple

Description or definition:

Dependent on variety – can be sweet or tart. Crisp or soft. Round fruit. Varying sweetness, acidity, tannin, and fruity flavors. Commercial cider is typically a blend of apple varieties, with varying sweetness, acidity, tannin and fruit flavor. Apples contain malic acid.



Source or region:

Cool climates worldwide.

Food or product:

Apple Juice, Apple Pie, Apple Cider.

Color:

Red, green or golden skin. White to off-white flesh. Contributes a straw to golden color to mead.

Aroma:

Cidery, apple, sweet, tart.

Flavor:

Sweet, tart, apple.

3.1.2. Apricot

Description or definition:	Small fleshy stone fruit, yellow to deep orange colored, with a large almond-like pit.
Source or region:	Native to eastern Asia.
Food or product:	Pies, juices, fruit concentrate.
Color:	Golden orange. Produces a mead with a pink-orange tint.
Aroma:	Strong, peach-like aroma.
Flavor:	Apricot, sweet. Adds acidity. Mild flavored.



3.1.3. Banana

Description or definition:	Long, curved yellow tropical fruit that grows in bunches. The flesh, ivory-white to yellow or salmon-yellow, may be firm, astringent, even gummy with latex when unripe, turning tender and slippery, or soft and mellow or rather dry and mealy or starchy when ripe.
Source or region:	Tropics.
Food or product:	Fresh Fruit, Pies, Breads.
Color:	Pale, creamy.
Aroma:	Banana.
Flavor:	Creamy, banana.



3.1.4. Black Currant

Description or definition:	Small round black fruit.
Source or region:	Originated in Tibet.
Food or product:	Crème de cassis liqueur, jams, jellies, preserves, Kir Royale cocktail.
Color:	Deep purple to black.
Aroma:	Berry-like, pungent. Can be slightly catty.
Flavor:	Pleasant, aromatic, slightly sour taste, pungent, tannic. Adds considerable tannin and moderate acidity. Produces a vinous character in mead. Strongly flavored.



3.1.5. Black Raspberry

Description or definition:	Dark deep red fruit is an aggregate of drupelets.
Source or region:	Indigenous only to North America, most abundant in the east.
Food or product:	Preserves, jam, jelly, bakery products, frozen fruit, juices, extracts, ice cream, yogurt, canned.



Color:	Deep dark red.
Aroma:	Raspberry.
Flavor:	Raspberry, sweet, tart.

3.1.6. Blackberry

Description or definition:	Grown on brambles in an aggregate of drupelets.
Source or region:	Oregon, Native to Asia, Europe, North and South America.
Food or product:	Fresh, Jelly, Pie, Fruit Concentrate, Juice.
Color:	Deep purple.
Aroma:	Fruity, blackberry.
Flavor:	Fruity, blackberry. Adds acidity and tannin. Strongly flavored.



3.1.7. Blueberry

Description or definition:	Round berry, smooth purple-blue skin, firm.
Source or region:	Michigan, Wisconsin, Minnesota.
Food or product:	Fresh, Jelly, Pie, Juice, Fruit Extract, Fruit Concentrate.
Color:	Bluish purple, produces a purple-pink color in mead.
Aroma:	Fruity, berry-like, delicate.
Flavor:	Fruity, berry-like (not like blueberry pie). Adds acidity and tannin. Fruit character is subtle.



3.1.8. Boysenberry

Description or definition:	Cross between a raspberry, blackberry, and loganberry. Looks like a large raspberry, with a raspberry-like flavor.
Source or region:	Native to California.
Food or product:	Fresh, Pie, Jelly.
Color:	Deep maroon, red wine.
Aroma:	Fruity, raspberry-like.
Flavor:	Raspberry-like.



3.1.9. Cherry

Description or definition:	Stone fruit, typically red although some varieties are golden. European varieties typically are more dark, complex and intense. Sweet and tart varieties.
Source or region:	Michigan, Wisconsin, Eastern Europe.
Food or product:	Pie.
Color:	Red to deep reddish-purple. Produces a mead that has a deep



Aroma:	reddish to reddish-brown color.
Flavor:	Fruity, cherry. Cherry, sweet or tart. Some associate with artificial flavoring, such as in medicines. Cherry pits can also be used to add an almond-like character. Tart cherries add acidity.

3.1.10. Cranberry

Description or definition:	Small red berry growing on bushes in bogs.
Source or region:	New England, Wisconsin.
Food or product:	Cranberry relish, juice.
Color:	Bright red.
Aroma:	Berry-like.
Flavor:	Very tart. Strongly flavored.



3.1.11. Elderberry

Description or definition:	Very small, blue-black to black berries grow in clusters.
Source or region:	North American and Europe.
Food or product:	Wines, jellies, pies, sauces.
Color:	Purple-black.
Aroma:	Berry-like.
Flavor:	Tart, astringent, berry. Adds considerable tannin.



3.1.12. Huckleberry

Description or definition:	Like a small blueberry, intense in flavor.
Source or region:	US, Canada.
Food or product:	Pie, jam.
Color:	Dark Purple.
Aroma:	Huckleberry, intense.
Flavor:	Intense, strong flavor of huckleberry.



3.1.13. Key Lime

Description or definition:	Yellow-green citrus fruit. (Green when unripe, ripens to yellow).
Source or region:	Florida.
Food or product:	Key lime pie.
Color:	Yellow-green, pale green.
Aroma:	Citrus, tart.



Flavor: Citrus, tart, lime; not as tart/strong as a lime.

3.1.14. Lemon

Description or definition: Bright yellow citrus fruit.
Source or region: Florida, California.
Food or product: Lemonade.
Color: Pale yellow.
Aroma: Citrus, tart.
Flavor: Citrus, tart, lemon. Adds considerable acidity. Zest is often used to impart essential oils more than acidity.



3.1.15. Lime

Description or definition: Deep green citrus fruit (Persian lime).
Source or region: Florida, California.
Food or product: Lime juice.
Color: Pale green.
Aroma: Citrus, tart.
Flavor: Citrus, tart, lime. Adds considerable acidity. Zest is often used to impart essential oils more than acidity.



3.1.16. Mango

Description or definition: The flesh of the mango is peach-like and juicy. The flavor is pleasant and rich and high in sugar and acid.
Source or region: Tropics. Native to southern Asia, now grown in California.
Food or product: Fresh or as juice.
Color: Yellow Pink flesh. Adds an orange-golden tint to mead.
Aroma: Peach/melon-like.
Flavor: Peach/melon flavors, acidic.



3.1.17. Marionberry

Description or definition: Cross between a blackberry and a black raspberry.
Source or region: Oregon.
Food or product: Jams, jellies, preserves, fruit wine.
Color: Purple.
Aroma: Blackberry, fruity.
Flavor: Fruity, blackberry.



3.1.18. Mulberry

Description or definition:	Collective fruit, succulent, fat, and full of juice, similar in appearance to the individual drupe of a blackberry.
Source or region:	Native to Eastern and Central China.
Food or product:	Fresh, Jelly.
Color:	Reddish-purple.
Aroma:	Berry-like.
Flavor:	A good balance of sweetness and tartness sometimes reminiscent of grapefruit.



3.1.19. Orange

Description or definition:	Orange-colored round citrus fruit.
Source or region:	Florida, California.
Food or product:	Fresh, frozen concentrate, juice.
Color:	Orange.
Aroma:	Orange.
Flavor:	Orange, sweet. Adds acidity. Zest is often used to impart essential oils more than acidity.



3.1.20. Passion Fruit

Description or definition:	Purple-brown round tropical fruit with orange flesh.
Source or region:	Brazil.
Food or product:	Sherbet, Confectionary, Drinks.
Color:	Orange.
Aroma:	Perfumy, musky, tart.
Flavor:	Musky, sweet-tart, perfumy.



3.1.21. Peach

Description or definition:	Round stone fruit with orange or white flesh and fuzzy skin.
Source or region:	South East region of the United States, originated in China.
Food or product:	Fresh, pie, fruit concentrate.
Color:	Pale yellow flesh. Produces a mead with a pinkish-golden color.
Aroma:	Fruity, peachy.
Flavor:	Fruity, peachy. A subtle fruit in mead.



3.1.22. Pear

Description or definition:	Rounded shape that becomes narrower towards the stalk. Table (eating) pears and perry pears can be used, as in perry. Culinary pears are sweeter and perry pears have higher tannin and acidity levels.
Source or region:	Europe and Asia.
Food or product:	Fresh, canned, used in baking.
Color:	Brown to gold to green to red skin, off-white flesh.
Aroma:	Fruity, pear.
Flavor:	Fruity, pear. A subtle fruit in mead.



3.1.23. Pineapple

Description or definition:	Oval to cylindrical shaped. It is both juicy and fleshy with the stem serving as the fibrous core.
Source or region:	Tropics.
Food or product:	Fresh, canned or as juice.
Color:	The rind may be dark green, yellow, orange-yellow or reddish when the fruit is ripe. The flesh ranges from nearly white to yellow.
Aroma:	Sharp, tart, pineapple.
Flavor:	Sweet or tart, Pineapple, melon-like.



3.1.24. Plum

Description or definition:	Round stone fruit, purple-black, red, or yellow color, firm with thin skin and soft flesh of varying color, typically deep amber.
Source or region:	Asia and Southern Europe.
Food or product:	Fresh, Jams, Juices.
Color:	Purple-black, Red, or Yellow. Produces a mead that is moderate purple to orange or reddish-brown color.
Aroma:	Plum, soft.
Flavor:	Sweet, juicy.



3.1.25. Pomegranate

Description or definition:	Nearly round yellow with deep pink or red coloring and a tough leathery skin or rind.
Source or region:	Native to Iran and the Himalayas in northern India.
Food or product:	Fresh, juice, jellies, sorbet.
Color:	Red, pink or whitish pulp. Purple-red seeds are what is used. Adds a purplish tint to mead.



Aroma: Tart.
Flavor: Sweetly acidic, juicy. Adds acidity and tannin.

3.1.26. Prickly Pear

Description or definition: Cactus - Pad is flat and fruit is oval in shape. Both Pad and fruit have sharp spines.
Source or region: American Southwest deserts.
Food or product: Fruit is edible - sold in stores as “tuna.” Pad is also edible - eaten as a vegetable and sold in stores as “Nopalito”. Prickly Pear Nectar is made from the juice and pulp of the fruit.
Color: Pads - Blue Green; Fruit is red, purple, brown. Nectar is fuchsia.
Aroma:
Flavor: Can add a dry, dusty, or powdery taste, overlaid on a sweet background.



3.1.27. Raspberry

Description or definition: Indigenous to Asia minor and North America. Red fruit found in an aggregate of drupelets.
Source or region: Cool climates.
Food or product: Jam, tart/pastry fillings.
Color: Red. Produces a mead with a pinkish to deep red color.
Aroma: Raspberry, sweet, tart, intense.
Flavor: Raspberry, sweet, tart. Adds acidity and tannin to mead. Strongly flavored.



3.1.28. Red Currant

Description or definition: Small red berries.
Source or region: Native to Northern Europe.
Food or product: Jellies, pies, sauces.
Color: Red.
Aroma: Tart.
Flavor: Tart. High acidity.



3.1.29. Strawberry

Description or definition: Plump, sweet red fruits with tiny black seeds on exterior.
Source or region: Originally cultivated in Europe.
Food or product: Fresh, flavoring, Jams, Pies

Color: Red. Produces a light pinkish-orange tint in mead.
Aroma: Sweet, Strawberry esters
Flavor: Sweet, Strawberry. Fruit character is delicate and subtle. May add some tannin from seeds. Lower acidity than raspberries. Mildly flavored.



3.2. Grape Varieties in Pyments

Most modern wine grapes are varieties of the species *vitis vinifera*, which is native to the Mediterranean region and central Europe. It is a widely adapted species and is grown on every continent except Antarctica. Most modern grapes based on *v. vinifera* are actually grafts onto North American rootstock of another species (such as *v. labrusca*), which was first done in the late 19th century after European vineyards were devastated by *phylloxera*.

When a single variety constitutes at least 75-85% of a wine (varying by law in country where produced), the result is a varietal wine named after the predominant grape. Many wines from the United States and Australia are produced as varietal wines. Wines with a mixture of grapes are known as blended wines. Blended wines are not inferior to varietal wines; in fact, most well-known French wines are blends of different varieties of the same vintage. European wines (French, Italian, German, Spain, etc.) are named for the region rather than the grape varieties used, although only certain varieties may be used by law in certain blended wines.

The concept of *terroir* is very important in the production of fine wines. It encompasses all environmental factors that produce a certain product, including the types of grapes used, the elevation and shape of the vineyard, the soil conditions and chemistry, climate and seasonal conditions, and local yeast cultures. This is how very unique wines are made from essentially the same ingredients. Mass-produced wines typically favor consistency at a low price, so the *terroir* is minimized.

The aroma and flavor of specific grape varieties will vary from year to year based on seasonal growing conditions, especially heat and rainfall. A range of descriptors is given for each variety, but don't expect all the various components to be in every vintage. Various wine resources describe the character of grapes depending on whether they were grown in cool, moderate or hot climates. This is why wine vintages will vary greatly, and some are more prized than others.

Grape varieties are typically grown for either red wine or white wine usages, although some can be used for both applications. Red wine gets its color (and tannin) from contact with red grape skins. Red grapes can make white wine if the skins are separated from the juice at pressing. Wines that are designed to age are often oaked, red wines more frequently than white. When judging pyments, keep in mind the character contributed by the grape juice and separate it from the fermentation, conditioning and age character that can vary. Meadmakers will not always treat varietal grapes in the same way vintners will treat them, so stick to the varietal character of the grape more than the total impression of popular wines made from those grapes.

3.2.1. Cabernet Sauvignon

Description: Red wine grape. Grows everywhere, particularly in warm climates. Can age well, usually oak aged when used in



wines.

Growing Regions: Bordeaux (France), Napa (US), Australia, Chile.

Product: Red Bordeaux and imitators, varietal US wine.

Color: Red grape. Dark, ruby red to dark purple, almost inky juice.

Aroma: Black currant, dark berries, leather, tobacco, cherry.

Flavor: Full-bodied, dense, dark, tannic. Medium to full bodied. Black currant, cassis, leather, tobacco, cherry. Often takes on additional flavors from oak.



3.2.2. Chardonnay

Description: Most popular white wine grape in the US. Often oak fermented and/or aged.

Growing Regions: Burgundy (France), Champagne (France), California (US), Australia.

Product: White Burgundy, Champagne, varietal US wine.

Color: White grape, pale yellow-green to yellow-gold juice.

Aroma: Apples, pears, tropical and citrus fruit.

Flavor: Medium acidity. Dry to medium-dry. Full bodied. Apples, citrus, peach, melon, tropical fruit. Can take on buttery and creamy flavors from malo-lactic fermentation. Can take on oaky, toasty, vanilla flavors from oak.



3.2.3. Chenin Blanc

Description: White wine grape.

Growing Regions: Loire (France), California (US), South Africa.

Product: Vouvray, white jug white.

Color: White.

Aroma: Citrus.

Flavor: Very high acidity, often slightly sweet to balance acidity. Crisp, tart, citrus.



3.2.4. Concord

Description: Native US table grape, first cultivated in Massachusetts, *vitis labrusca*.

Growing Regions: US.

Product: Grape jelly, grape juice, candy flavors, kosher-style wines like Manischewitz.

Color: Dark-colored purple-red juice, deep blue/purple-skinned grape.

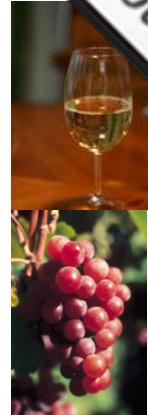
Aroma: Strong.

Flavor: "Foxy," musky, candied-strawberry.



3.2.5. Gewurztraminer

Description:	White wine grape.
Growing Regions:	Alsace (France), Germany.
Product:	Rhine wine, varietal French and US wine.
Color:	Dark pink colored grape, producing a straw-yellow to yellow-gold colored juice/wine.
Aroma:	Spicy, flowery, exotic fruit, candied apple, lychee, rose, honeysuckle. Ginger, clove, nutmeg, allspice.
Flavor:	Light to medium body, low acidity. Flowery, spicy, exotic fruit, lychee, peach, mango, quince, candied ginger, pineapple.



3.2.6. Merlot

Description:	Red wine grape, most popular US red, used for blending in France to add body and softness to Cabernet Sauvignon.
Growing Regions:	Bordeaux (France), Napa, Washington, Long Island (US).
Product:	Red Bordeaux, varietal US reds.
Color:	Black skin, dark ruby red to deep purple-red juice.
Aroma:	Plum, dark berry, jammy, currant, tobacco, chocolate, cedar, blackberry, black cherry, fruitcake.
Flavor:	Plum, berry, currant, chocolate. Medium to full body, fruity, medium tannins, soft, fleshy, more sugar but less tannin and malic acid than cabernet sauvignon. Can be oaky.



3.2.7. Muscat

Description:	Wine and table grape, many varieties, mostly white wine grape, although some red wine grapes are notable.
Growing Regions:	Asti (Italy), California (US), Alsace (France).
Product:	Asti, Dessert wines.
Color:	White to nearly black grapes; white is most commonly used in wine and mead. Straw-yellow to deep gold juice/wine.
Aroma:	Floral, orange blossom, honeysuckle, topical flowers, lily, hyacinth, Muscat grape, peach, mandarin orange, apricot, tangerine.
Flavor:	Very floral and fruity, orange, apricot, marmalade and Muscat grape. One of very few wines that tastes like the raw grapes.



3.2.8. Pinot Noir

Description:	Red wine grape. Difficult to grow, challenging wine to
---------------------	--



	make.
Growing Regions:	Burgundy, Champagne (France), Oregon, Central Coast of California (US).
Product:	Red Burgundy, varietal US wine.
Color:	Red. Dark pink to ruby red to violet juice/wine.
Aroma:	Cherries, strawberry, raspberry, cranberry, spice, earthy, woody.
Flavor:	Light to medium body, low tannins, medium-high acidity, silky. Strawberry, raspberry, cherry, red currants, spice, earthy, woody.



3.2.9. Riesling

Description:	Acidic white wine grape. Never oaked. Can age well, particularly German ones.
Growing Regions:	Germany (sweeter wines), Alsace (France, drier wine), New York (US), Washington (US).
Product:	Rhine wine, varietal US wine.
Color:	White grape. Juice is a pale yellow-green.
Aroma:	Fruity, green apple, floral, honeysuckle, rose, violet, minerals.
Flavor:	Light and refreshing. Fruity (apple, lemon, peach, apricot, pear, melon), floral (rose, violet), minerals. Light bodied.



3.2.10. Sangiovese

Description:	Red wine grape.
Growing Regions:	Chianti, Tuscany (Italy), California (US).
Product:	Chianti.
Color:	Purple-red grape. Deep purple-red juice/wine.
Aroma:	Cherry, strawberry, violets, nutty, black pepper, spicy, plum.
Flavor:	Tart cherry, berries, spice, violets, nutty, black pepper, tobacco. Medium-high acidity. Firm tannin. Light to full body.



3.2.11. Shiraz (Syrah)

Description:	Red wine grape, called Syrah in France and US, Shiraz in Australia.
Growing Regions:	Rhone (France), Australia, California (US).
Product:	Rhone reds, Shiraz.
Color:	Deep purple-black grapes. Deeply colored juice, from dark ruby red to inky purple.
Aroma:	Blackberry, black currant, berries, black pepper, clove, anise,



Flavor: cedar, incense, tar, smoked meat.
Black currant, blackberries, berries, black pepper, cedar. Full body, firm tannin. Smoked meat, tar.

3.2.12. Tempranillo

Description: Red wine grape. Main red grape of Spain. Made into moderate alcohol wines.
Growing Regions: Spain.
Product: Rioja.
Color: Red, deep color.
Aroma: Cherry, berry, cedar, spice.
Flavor: Full-bodied. Low acidity. Cherry, berry, cedar, spice.



3.2.13. Vidal

Description: White wine grape, vidal blanc. Thick skinned. Used to make sweet dessert wines, pressed from naturally-frozen grapes.
Growing Regions: Niagara (Canada), New York (US).
Product: Canadian Icewine.
Color: White.
Aroma: Fruity, grapefruit, pineapple, lychee. Floral, apricots, crème caramel.
Flavor: High acidity and fruitiness. Floral, resinous, pineapple, grapefruit, melon, hazelnuts, pears, orange blossoms. Flinty, minerally, viscous.



3.2.14. Zinfandel

Description: Red wine grape. Can age well, depending on style. Tends to make higher alcohol wines.
Growing Regions: California (US).
Product: Varietal US wine.
Color: Deep red color.
Aroma: Raspberry, blackberry, jammy, spicy.
Flavor: Robust. Blackberry, raspberry, spicy, jammy, fig, blueberry, sometimes chocolate. Broad range from light and fruity to big and rich. Medium to full body.



4. Spices

Metheglins are spiced meads, but the BJCP is somewhat liberal in defining *spice* for this purpose. Certainly the botanical definition of spice isn't used, since herbs, vegetables and other flavorings fit into this category. Don't get hung up about the technical definitions; the style categories are defined with specific examples to help entrants know where to enter their meads.

This list contains various mead flavorings that are popular among competition entrants. It also includes some additional fermentables (agave nectar and maple syrup) that would not be used in metheglins. Meads with additional fermentables should be entered as Open Category meads. Regardless, the spicing components listed in this section are related to the ingredient question on the exam dealing with spices in mead.

4.1.1. Agave Nectar

Description or definition:	Nectar from the agave plant; largely fructose, low-glycemic honey substitute. Blue agave (<i>Agave tequilana</i>) is generally best in Mead. A commercial sweetener in Mexico.
Source or region:	SW US, Mexico.
Food or product:	Agave Nectar, sweetener in many food products.
Color:	Ranges in color from light to dark, depending on degree of processing.
Aroma:	Sweet.
Flavor:	Sweet, mild, neutral taste (light color) to more caramel-flavored (darker color). Sweeter than honey but less viscous.



4.1.2. Allspice

Description or definition:	Dried unripe fruit of the <i>Pimenta dioica</i> plant; the green berry of a tropical evergreen, which is dried
Source or region:	West Indies.
Food or product:	Caribbean Jerk, mole sauce, pickling, curry sauces, pumpkin pie spice.
Color:	Dark reddish-brown.
Aroma:	Combination of cinnamon, clove, and nutmeg.
Flavor:	Tastes like a combination of cinnamon and cloves but hotter and peppery. Slight astringency. Some tongue-numbing qualities of clove.



4.1.3. Black Pepper

Description or definition:	Seasoning produced from the fermented, dried, unripe red berries of the plant <i>Piper nigrum</i> .
Source or region:	Originated in southern India and Sri Lanka.



Food or product:	Common table seasoning in western cuisines.
Color:	Black.
Aroma:	Peppery, pungent, aromatic.
Flavor:	Peppery, spicy, accents flavors, has some heat, slightly earthy.



4.1.4. Black Tea

Description or definition:	Fermented tea leaves.
Source or region:	Mainland China, India, Sri Lanka, Taiwan, Japan, Nepal, Australia, Kenya - named for the region of origin.
Food or product:	Black tea.
Color:	Black.
Aroma:	Herbal.
Flavor:	Tannic, bitter.



4.1.5. Cardamom

Description or definition:	Seed pod of <i>Elettaria cardamomum</i> (green cardamom).
Source or region:	India.
Food or product:	Common in Indian cooking and baking in Nordic countries.
Color:	Black seed from green pods.
Aroma:	Intensely aromatic fragrance, citrus, bright, sandalwood, cinnamon.
Flavor:	Strong, unique, bright, resinous taste. Astringent, not bitter, with a coolness similar to mint, though with a different aroma. Slightly numbing. Lingering aftertaste.



4.1.6. Chai Tea

Description or definition:	Black tea brewed with spices including cinnamon, cardamom, cloves, pepper and ginger, star anise, peppercorn, cloves.
Source or region:	India.
Food or product:	Expensive trendy lattes.
Color:	Tan.
Aroma:	Can consist of a variety of spices including cinnamon, cardamom, cloves, pepper, ginger, star anise, peppercorn, and cloves but no single spice should stand out alone.
Flavor:	Spicy, slightly astringent, including cinnamon, cardamom, cloves, pepper, ginger star anise, peppercorn, cloves but no single spice should stand out alone but should be a blend of spices.



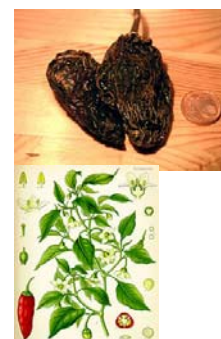
4.1.7. Chamomile

Description or definition:	Dried flowers of <i>Camaemelum nobile</i> .
Source or region:	Europe and Asia.
Food or product:	Tea.
Color:	White.
Aroma:	Apple-like, berries, honey, citrus, rose.
Flavor:	Soft, apple-like, honey, berries, citrus, rose.



4.1.8. Chipotle

Description or definition:	Smoked mature (red) jalapeño.
Source or region:	SW US, Northern Mexico.
Food or product:	Used to flavor soups, salsas, stews, sauces.
Color:	Dark red-brown to almost black.
Aroma:	Smoky.
Flavor:	Smoky, hot, jalapeño chile, nutty, spicy. Approximately 3,000 Scoville units.



4.1.9. Chocolate

Description or definition:	Made from the fermented, roasted and ground seeds of the tropical cacao tree.
Source or region:	Mexico, Central & South America.
Food or product:	Truffles, cocoa.
Color:	Dark brown.
Aroma:	Chocolate.
Flavor:	Chocolate.



4.1.10. Cinnamon

Description or definition:	Inner bark of a small evergreen tree, <i>Cinnamomum zeylanicum</i> , the essential oils found in the bark give the aroma and flavor, <i>Cassia</i> is often used as a less expensive substitute.
Source or region:	Southeast Asia, Sri Lanka, China.
Food or product:	Combined with other spices in many foods, atomic fireball candies. Cinnamon toast.
Color:	Light brown to darker orange-brown.
Aroma:	Cinnamon. Spicy-hot. Pungent, warm, appealing.
Flavor:	Hot, cinnamon, warming, spicy.



4.1.11. Clove

Description or definition:	Dried aromatic flower bud of the clove tree, essential oil of clove has anesthetic and antimicrobial qualities.
Source or region:	Indonesia, Madagascar.
Food or product:	Fragrances, baked products.
Color:	Very dark brown.
Aroma:	Strongly aromatic, earthy to musty, fragrant, somewhat sweet.
Flavor:	Strong, biting, tongue-numbing.



4.1.12. Coffee

Description or definition:	Roasted bean of the <i>Coffea arabica</i> plant.
Source or region:	Tropics. Originated in Ethiopia.
Food or product:	Coffee, espresso, Kahlua.
Color:	Brown.
Aroma:	Roasty, coffee.
Flavor:	Roasty, coffee. Harsh when boiled.



4.1.13. Coriander

Description or definition:	Seed of the coriander plant, <i>Coriandrum sativum</i> . The leaf is sometimes known as <i>cilantro</i> .
Source or region:	China, India, Mexico.
Food or product:	A main ingredient of curry.
Color:	Light tan.
Aroma:	Citrusy, lemony, sweet, appealing, strong.
Flavor:	Lemony, citrusy, spicy, estery. Some varieties have a vegetal, celeryseed flavor.



4.1.14. Ginger

Description or definition:	Smooth-skinned, plump, tan to medium brown rhizome of <i>Zingiber officinale</i> , with a larger central root and smaller buds. The skin and outer layers are fibrous, the inner core is pale yellowish, firm and very juicy and fragrant.
Source or region:	India, Jamaica, China.
Food or product:	Ginger ale, Asian foods. Candied ginger. Ground ginger. Pickled ginger.
Color:	Light yellow to pink flesh, light brown peel. Younger roots have a pinkish tinge.
Aroma:	Ginger.



Flavor: Ginger, hot, spicy, sharp, peppery. Full, slightly astringent. Flavor and heat will mellow with time in a mead. Very strongly flavored.

4.1.15. Hazelnut (filbert)

Description or definition: Nut or fruit of the hazel tree.
Source or region: Southern Europe, Oregon, Washington.
Food or product: Frangelico, Praline, Nutella.
Color: White.
Aroma: Nutty.
Flavor: Nutty, bitter, almond-like.



4.1.16. Heather Tips

Description or definition: Tiny purple blooms of the Scottish shrub *Calluna vulgaris*.
Source or region: Scotland.
Food or product: Scottish Heather Ale, fragrances, Drambuie.
Color: Light purple-pink.
Aroma: Floral, delicate.
Flavor: Floral, bitter, buttery, honey-like.



4.1.17. Lavender

Description or definition: Flower in the mint family, *Lavandula angustifolia*.
Source or region: Native to the Mediterranean region.
Food or product: Fragrances, bath soap.
Color: Pale purple.
Aroma: Floral, lavender, perfume, slightly sweet.
Flavor: Floral, sweet.



4.1.18. Lemongrass

Description or definition: Stalk of *Cymbopogon citratus*.
Source or region: Southeast Asia.
Food or product: Thai food.
Color: Pale green.
Aroma: Lemony, soft. Can be woody with cedar, ginger, sandalwood notes if higher quantities used.
Flavor: Refreshing, light, hint of ginger, citrus. Earthy, moderate



astringency. Tart.

4.1.19. Maple Syrup

Description or definition:	Boiled sap from sugar maple trees, <i>Acer saccharum</i> .
Source or region:	Northeast US, Canada.
Food or product:	Breakfast syrup, candies.
Color:	Pale to dark amber.
Aroma:	Sweet, caramel, vanilla, maple, nutty.
Flavor:	Sweet, caramel, vanilla, maple, nutty, sometimes a little smoky.



4.1.20. Mint

Description or definition:	Leaves of the perennial herb in the <i>Mentha</i> genus, many varieties exist – most common are spearmint and peppermint.
Source or region:	Native to Europe, Asia, Africa.
Food or product:	Mint jelly, iced tea flavoring.
Color:	Bright green.
Aroma:	Sharp, refreshing, minty. Other aromatics vary by variety, can be peppery, pineapple, apple, chocolate, lemon, etc.
Flavor:	Sharp, refreshing, minty.



4.1.21. Nutmeg

Description or definition:	Seed of <i>Myristica fragrans</i> , which also produces <i>Mace</i> (the fleshy webbed skin that envelops the seed).
Source or region:	Southeast Asia, Indonesia, Australia.
Food or product:	Eggnog topping, mulled wine.
Color:	Light tan.
Aroma:	Nutmeg, fleeting.
Flavor:	Nutmeg, soft, delicate, rich, complex, lacks astringency, slightly sweet.



4.1.22. Orange Peel

Description or definition:	Fruit peel of the orange. Fresh or dried.
Source or region:	Curaçao for bitter orange peel.
Food or product:	Bitter - Belgian Wit beers, Sweet - Grand Marnier.
Color:	Pale to bright orange.
Aroma:	Orange.



Flavor: Sweet or bitter, orange.

4.1.23. Poblano

Description or definition: Mild chile pepper, sometimes known as a *pasilla*. When dried is called an *Ancho*.
Source or region: Mexico.
Food or product: Chile Relleño.
Color: Dark purplish-green. Can get a dark reddish-black when mature.
Aroma: Fresh pepper aroma but with some spicy heat.
Flavor: Like green pepper, but with a mild to moderate heat. Approximately 1,000 Scoville units.



4.1.24. Rose Petals

Description or definition: Petals of the genus *Rosacea*. Literally thousands of varieties exist.
Source or region: North America, France.
Food or product: Rosewater, perfume.
Color: White, pink, dark red, many other colors.
Aroma: Soft, perfumy, flowery, rose. Varies by variety. Can be quite aromatic and perfumy.
Flavor: Perfumy, soft, rose. Varies by variety.



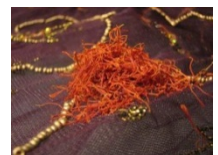
4.1.25. Rosemary

Description or definition: Leaves of the perennial shrub.
Source or region: Mediterranean region.
Food or product: Mediterranean Cuisine.
Color: Green.
Aroma: Sharp, strong, herbal, evergreen.
Flavor: Bitter, astringent, evergreen.



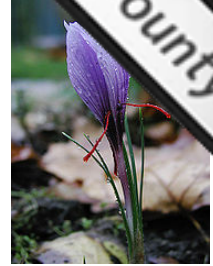
4.1.26. Saffron

Description or definition: Dried stigmas from *crocus sativus*.
Source or region: Native to Southwest Asia. Spanish saffron is regarded as the finest. Grown in Southern Europe and Asia. Iran produces the bulk of saffron currently.
Food or product: Risotto Milanese, paella.
Color: Deep yellow-gold, often with a light gold-orange hue.



Aroma: Exotic, pungent, not sweet, distinctive, dried hay, honey, musk, inviting.

Flavor: Unique, exotic, slightly bitter. Saffron must be heated (or “bloomed”) to release the flavor. Can be unpleasant if overdone, often tasting medicinal and metallic. Very strongly flavored.



4.1.27. Spruce Tips

Description or definition: Fresh growth on spruce trees.

Source or region: Found in the Northern temperate and boreal regions of the earth.

Food or product: Spruce beer.

Color: Green.

Aroma: Citrusy, piney, floral, fruity.

Flavor: Citrusy, piney, floral, fruity, resinous.



4.1.28. Star Anise

Description or definition: Star shaped fruit or seed of the *Illicium verum* tree.

Source or region: Native to China.

Food or product: Chinese cuisine, five-spice powder, garam masala, phở.

Color: Dark reddish-brown.

Aroma: Anise, black licorice, complex.

Flavor: Anise, black licorice, slightly sweet.



4.1.29. Vanilla

Description or definition: Seed pod of orchid *Vanilla planifolia*.

Source or region: Tropics, hot and humid climates.

Food or product: Ice cream, pudding, custard, dessert sauces.

Color: Light brown.

Aroma: Vanilla, sweet, full, penetrating.

Flavor: Vanilla, soft but strong, not bitter. Provides a fullness of flavor that can be used alone or to enhance other flavors.

