



Organoleptic Characteristics of Flavor Materials

Judith Michalski, Flavor Consultant; judithmichalskillc@gmail.com

Organoleptic Evaluation Panel

- Judith Michalski
- Gerard Mosciano, consulting flavor chemist
- Carl Holmgren, consulting flavor chemist
- William Jaggard, Bell Flavors & Fragrances
- Tom Gibson, creative director, Silesia Flavors
- Robert Pan, Bell Flavors & Fragrances

Natural occurrence information is from Leffingwell & Associates and The Good Scents Co. Suppliers of most materials found in this report can be located in *Allured's Flavor & Fragrance Materials*, published in print and online by Allured Business Media. Learn more at www.perfumerflavorist.com/ffm.

Suppliers: Suggest materials for evaluation to Judith Michalski; judithmichalskillc@gmail.com.

Recently, this tasting panel sat down with some not-so-typical solid extracts from Frutarom (www.frutarom.com). I hope that you find our comments interesting and inspiring.

Arnica Flowers TR 63–39% ETOH 3328523711.11

CAS# 68990-11-4

Odor: @ 100%. Alcoholic, sweet, woody and balsamic.

Taste: @ 0.50%. Astringent, dried flowerlike, alcoholic and woody.

Taste: @ 0.75%. Astringent, woody and alcoholic.

Possible applications: This material can only be used in alcoholic beverages as per CFR 21, 172.510. It is reminiscent of products such as rum and sweet vermouth. It will also shine in beverage applications such as peach and apricot flavors for cordials.

Barley SE MB 3300408131.51

CAS# 85251-64-5

Odor: @ 50%. Sweet, malty, molasseslike, fermented and cereal-like.

Taste: @ 0.5%. Grainy, brown, sweet and malty.

Taste: @ 1.0%. Sweet, bready, malty and molasses-like.

Possible applications: This interesting material possesses notes that make it a good addition for sweet brown flavors like chocolate, malt, caramel, brown sugar and cereal, as well as more savory types such as bread, soy sauce, rice and beer.

Black Haw Bark SE FR 3327302301.35

FEMA# 2538, CAS# 84929-54-4

Odor: @ 50%. Sweaty, earthy, woody and slightly cooling.

Taste: @ 0.3%. Bitter, dark cocoalike and slightly woody.

Taste: @ 0.5%. Bitter, dark cocoalike with an astringent aftertaste.

Possible applications: The flavor of this material was totally unexpected after its rather unpleasant aroma. All chocolate and coffee type flavors will benefit from this material.

Horehound Herb SE FR 3327321001.33

FEMA# 2581, CAS# 84696-20-8

Odor: @ 100%. Sweet, brown, warm, caramellic, molasses-like with an underlying dried fruit note.

Taste: @ 0.25%. Herbal, dried fruitlike, slightly tart and slightly medicinal.

Taste: @ 0.75%. Sweet, dried fruitlike, herbal, tobacco-like with sun-dried tomato nuances.

Possible applications: This is a very useful material not only for dried fruit type flavors like raisin, date, fig, prune, apricot and sun-dried tomato, but also for sweet browns and spices including caramel, honey, brown sugar, cinnamon, allspice and their ilk.

Update: δ -Tridecalactone

In the March edition of this column, δ -tridecalactone, FEMA# 4685, was stated as not occurring in nature. Recent information has been received indicating that it is present naturally in butter, milk, yogurt and starfruit.

—Judith Michalski

Juniper Berries SE FR 3328349801.35

FEMA# 2603, CAS# 84603-69-0

Odor: @ 50%. Woody, brown and slightly terpenelike.

Taste: @ 0.3%. Woody, herbal, bitter and piney.

Taste: @ 0.5%. Herbal, very bitter, woody and earthy.

Possible applications: The bitterness of this product is akin to that of gentian and quassia. It is best suited to those flavors that have an inherent bitterness (i.e. cranberry and grapefruit). *Digestif*-type cordials such as Campari and Centerba would also be a good home for this product.

Lemon Peel SE 3327324001.33

FEMA# 2623, CAS# 84929-31-7

Odor: @ 50%. Citrus, herbal with an underlying musty, oxidized note.

Taste: @ 0.25%. Bitter, herbal, citrus, tealike and terpenelike.

Taste: @ 0.50%. Lemon tealike and bitter.

Possible applications: This product is not a fresh lemon per se, but more of the familiar canned or bottled tea type. It would also go well in a citrus type mélange tea with spice or grapefruit added.

Oak Chips SE FR 3372329001.35

FEMA# 2794, CAS# 68917-11-3

Odor: @ 50%. Woody, casky, oaky.

Taste: @ 0.35%. Woody, astringent and vanillalike.

Taste: @ 0.50%. Woody, aromatic and bitter.

Possible applications: This material is the classic example for describing woodiness. Its qualities are highly useful in mimicking cask notes in whiskey, chardonnay and rum flavors. It can also be used in brown flavors, such as vanilla, dark chocolate and coffee.

Orange Peel Sweet SE FR 3327333801.33

FEMA# 2824, CAS# 8008-57-9

Odor: @ 50%. Sweet, orange marmaladelike, dried fruitlike and woody.

Taste: @ 0.3%. Bitter, orange terpenelike with peely undertones.

Taste: @ 0.5%. Tart, bitter, woody with orange terpenelike notes.

Possible applications: This is a very interesting orange product, completely different from the oil and juice. The bitter, terpene notes will give an unexpected twist in citrus cordial flavors, as well as those of the sweet dough, sweet spice and brown types.

Orris Root TR 3328560501.34

FEMA# 2830, CAS# 90045-89-9

Odor: @ 100%. Floral, berrylike and woody.

Taste: @ 0.50%. Berrylike, sweet and woody.

Taste: @ 0.75%. Perfumey, iononelike and woody.

Possible applications: Like its other manifestations, this extract of orris root is appropriate for use in berry flavors such as raspberry, blackberry and blueberry. It will also find good use in cherry, apricot, strawberry and grape flavors.

Tamarind SE FR 3327350201.33

21 CFR 182.20, CAS# 84961-62-6

Odor: @ 50%. Sweet, brown, dried fruitlike with a slightly fishy undertone.

Taste: @ 0.50% Acidic, brown and fruity with cooked notes.

Taste: @ 0.75% Acidic, dried fruitlike with cooked notes.

Possible applications: Tamarind SE is a natural for dried fruit flavors, especially prune, fig, raisin, apricot and the like. It has a nice acid kick, and its cooked, brown character can also be utilized to add jam notes to other fruit flavors.

To purchase a copy of this article or others, visit www.PerfumerFlavorist.com/magazine. 