

# Organoleptic Characteristics of Flavor Materials

Gerard Mosciano

Gerard Mosciano is joined by Judith Michalski, chief flavorist, Edlong Flavors; Carl Holmgren, consulting flavor chemist; William Jaggard, chief flavorist, Bell Flavors; and Douglas Young, principal flavorist, Symrise, in the organoleptic evaluations presented here.

Address correspondence to Gerard Mosciano, c/o *Perfumer & Flavorist* magazine, 362 S. Schmale Road, Carol Stream, IL 60188.

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The most recent Chemical Sources Association (CSA) annual roundtable was held at the Sheraton Newark Airport Hotel in Newark, NJ. The presentation brought together a number of suppliers. More than 160 people attended, representing creative flavorists and technical personnel from every major flavor house in the United States, as well as sales personnel from the presenting ingredient companies.

CSA is a leader in showcasing suppliers' new ingredients to its member companies. The initial roundtable sessions were the brainchild of Carole Pollock, a past CSA president, and they now are conducted by a roundtable committee consisting of Ed Brown (E&S Sales), Barbara Tangel (IFF) and Christine Daley (Bedoukian).

The latest roundtable — the third annual — was the most successful to date, thus confirming the validity of their initial concept: to bring together ingredient suppliers and ingredient users for the benefit of all involved. The main objective of the roundtables is to provide a unique opportunity for creative, technical and purchasing people to participate in interactive sensory-evaluation sessions. These sessions feature ingredient and finished-product evaluations for a broad range of natural products, natural flavor ingredients and isolates, essential oils, and synthetic flavor ingredients from a varied cross section of

established and newer ingredient suppliers.

I am including evaluations of some of the ingredients I obtained from the most recent roundtable and will present more in upcoming articles.

#### **Evaluations**

#### Cocoa Nib Extract (02-032-01)

Source: Moore Ingredients

Natural

Odor: @ 100 percent. Burned, slightly sulfurous, roasted cocoa powder, full and rich, fudgelike, slightly nutty with a molasses nuance.

Taste: @ 0.05 percent. Dry, powdery, cocoa, strong iso-valeraldehyde character with waxy cocoa liqueur notes. Possible applications: Cocoa, chocolate, mocha, nut

nuances.
➤ Moore Ingredients; tel: 513-881-7144; www.moorelab.com

#### Cognac Oil Replacer #1447

Source: Advanced Biotech

Natural

Odor: @ 1.0 percent. Sweet, fruity estry, winy, fatty, waxy, alcoholic rum, whiskey and fusel-like with fermented pineapple nuances.

Taste: @ 10 PPM. Sweet, estry fruity and slightly winy, waxy and slightly soapy with alcoholic whiskeylike depth notes, fruity pineapple nuances.



*Possible applications:* Grape, wine, alcoholic beverages such as rum and whiskey, fusel nuances, cheese and fruity ripe notes for pineapple.

➤ Advanced Biotech; tel: 973-357-0577; www.adv-bio.net

### Farnesol 95 percent (Isomer Mixture)

Source: SAFC

FEMA# 2478, CAS# 4602-84-0,

Nature identical

Natural occurrence: Apricot, orange peel and oil, grapefruit juice, cloves, ginger, thyme, beer, whiskey, basil, papaya, anise seed, balsam Peru.



Odor: @ 1.0 percent. Floral rose, sweet, fruity linalool with a fusel alcoholic, green lavender and haylike nuances.

Taste: @ 10 PPM. Sweet floral, fruity apricot and peachlike, green with woody tea and grape nuances. Possible applications: Mango, pear, tropical fruits, tea, apricot and peach.

➤ SAFC; tel: 800-244-1173; www.sigmaaldrich.com

#### 2-Furanmethanethiol Formate

Source: Treatt USA FEMA# 3158, CAS# 59020-90-5, Artificial

Odor: @ 0.5 percent. Coffee, roasted, meaty savory, toasted bready and bread crustlike with chocolate and alliaceous nuances.



Taste: @ 5 PPM. Roast beef, roasted coffee beany with slightly green vegetative and chocolate nuances.

Possible applications: Coffee, savory meat applications, nut flavors, bread and chocolate.

➤ Treatt USA; tel: 863-668-9500; www.rctreatt.com

#### 4-Hexene-3-one

Source: Treatt USA

FEMA# 3352, CAS# 2479-21-4, Nature identical *Natural occurrence*: Cooked chicken.

Odor: @ 1.0 percent. Pungent, horseradish and mustard with an ethyl vinyl ketone ethereal note, notes reminiscent of vinegar and rum.

Taste: @ 10 PPM. Pungent mustard, pepper, horseradish, rum, roasted onion and slightly tropical nuances.

Possible applications: Horseradish, mustard, pepper, rum, butterscotch, vanilla, coffee top notes, vegetable nuances, chicken, onion and fermented nuances.

➤ Treatt USA; tel: 863-668-9500; www.rctreatt.com

## Lactone of cis-Jasmone (synonym: 4-Hydroxy-4-methyl-7-cis-decenoic Acid $\gamma$ -Lactone)

Source: Bedoukian Research Inc. FEMA# 3937, CAS# 70851-61-5, Artificial Odor: @ 1.0 percent. Mild creamy, fatty coconut with condensed milky creaminess and fatty nutty nuances, lactonic, fruity peach and apricot nuances.

Taste: @ 1-10 PPM. Creamy coconut meat with fatty milky, buttery and cheesy lactonic nuances with waxy nutty and fruity notes.

Possible applications: Macadamia nut, pecan, cashew, coconut meat, peach, apricot, tropical nuances, baked goods, butter, cheese and other dairy applications, chocolate, strawberry, fat replacers, ripe banana notes and condensed milk.

➤ Bedoukian Research Inc.; tel: 203-830-4000; www.bedoukian.com

#### 3-Mercaptohexyl Butyrate

Source: Treatt USA

FEMA# 3852, CAS# 136954-20-6, Nature identical

Natural occurrence: Yellow passion fruit. Odor: @ 1.0 percent. Sulfurous, slightly roasted meaty savory, alliaceous roasted onion and vegetative with tropical fruity body nuances.

Taste: @ 2.5 PPM. Sulfurous, savory meaty, onionlike with a rich tropical fruit body. Possible applications: Sulfurous nuances for passion fruit and other tropical fruits, as well as body notes for berry flavors, minor notes for roasted onion and savory

➤Treatt USA; tel: 863-668-9500; www.rctreatt.com

#### **Methyl Dihydro Cinnamate**

Source: Degussa-Alfrebro Flavor and Fragrance

FEMA# 2741, CAS# 103-25-3,

Nature identical

applications.

Natural occurrence: Tabasco peppers.
Odor: @ 1.0 percent. Sweet, rich spicy
Ceylon cinnamon with resinous, powdery and balsamic nuances.

Taste: @ 5 PPM. Sweet, spicy Ceylon cinnamon with resinous, powdery fruity nuances.

Possible applications: Honey, confections such as red hots, berry nuances.

➤ Degussa-Alfrebro Flavor and Fragrance; tel: 33-49-309-3111; www.alfrebro.com

