



May 2023

For:

Innovation Team

By:

Cesare Bonventre

James E. Freeman



## iCan North America: Redefining Aromatherapy with Cutting-Edge Profiles

- I. Our Mission: At iCan, we merge the established standards of the aromatherapy industry with the emerging field of botanical essential oils and their other organic compounds and terpenes. We accomplish this by sourcing the purest, 100% natural ingredients available.
- II. The Art and Science of Aromatics: We leverage the contemporary understanding of biochemical properties associated with aromatic molecules. By combining high-grade aromatic compounds and blending principles, we engineer aroma and flavor profiles that deliver desired taste, smell, and synergistic effects when used in conjunction with other functional foods, herbs, fungi, and plant extracts i.e. Kava, adaptogenic and medicinal mushrooms, herbs, etc.
- III. Customer Satisfaction through Rigorous Testing: Our commitment to solid customer satisfaction and unparalleled enjoyability is ensured through objective focus groups and thorough competition comparisons with finished products. Each new product release is meticulously crafted guaranteeing exceptional quality.
- **IV. Unleashing Innovation**: At iCan, we embrace the ever-changing landscape of our industry, including the introduction of new flavors with complex aromatic profiles. By actively engaging in research and staying true to the integrity of the plant, we continuously innovate and create amazing products.
- V. Industry Leaders: we strive to be industry leaders, providing wholesalers and individual customers worldwide with consistency, quality, and accessibility. With our finger on the pulse of the industry, we are always prepared for the next big challenge



## Unlocking the Power of Essential Oils: The Entourage Effect in Action

- **I. Aromatic Profiles**: Essential oils play a vital role in defining the unique aromas of plants. These compounds are responsible for the captivating scents that engage our senses.
- **II. Essential Oils:** are made up of various other compounds including lactones, ketones, aldehydes, sesquiterpenes and monoterpenes (known as terpenes collectively), sulfur compounds, esters, phytols, alcohols, flavonoids, etc.
- **III. Non-Intoxicating Psychoactivity**: While some compounds of essential oils are considered psychoactive molecules due to their interaction with brain chemistry, they do not induce intoxication.
- **IV. Broad Reaching Effects**: Essential Oils also interact directly with other systems in the body, such as neurotransmitters and hormones, expanding their impact beyond the ECS.
- V. Amplifying Assimilation: Certain essential oils enhance the absorption and assimilation of other functional foods and compounds, maximizing their effectiveness.
- **VI. Modulating Neurotransmitters**: Some compounds within essential oils influence the flow of neurotransmitters like dopamine and serotonin, contributing to the overall effects experienced by the user.
- **VII. The Entourage Effect**: The remarkable synergy and the powerful interaction between the various plant compounds determines the unique effects of products on individuals, highlighting the importance of a well-balanced.



## The Significance of all of the Compounds Found in Essential Oils

Essential oils (EOs) are volatile and concentrated liquids extracted from different parts of plants. Bioactive compounds found in EOs, especially terpenes and terpenoids possess a wide range of biological activities including anticancer, antimicrobial, anti-inflammatory, antioxidant, and antiallergic. Available literature confirms that EOs exhibit antimicrobial and food preservative properties that are considered as a real potential application in food industry. The individual compounds in EO's play a crucial role in the interaction with our nervous system. They determine the therapeutic and medicinal effects of various combinations of essential oils.

### I. Essential Oils and Receptor Binding:

- Essential Oils act as the glue that binds the beneficial compounds of other functional foods to our neuroreceptors.
- This binding interaction influences the overall effects experienced by individuals.

### II. Solubility and Versatility:

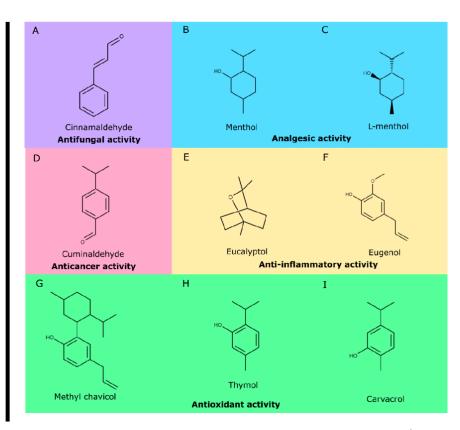
- Essential Oils are oil and alcohol soluble, making them versatile additives.
- They can be incorporated into a variety of products, including beverages, edibles, tinctures, tablets, extracts, diffusers, candles, and body care products.

### III. Enhanced Taste and Fragrance:

- When properly used and blended, essential oils can enhance the taste and fragrance of products.
- This allows for a more enjoyable therapeutic & aromatic experience for users.

### IV. Proposed Effects and Holistic Benefits:

- Essential Oils not only provide sensory enhancements but also offer holistic benefits.
- Similar to the effects of the plants they are derived from, terpenes can potentially offer proposed effects and holistic benefits to consumers.



7/13/2023 4



## Some Common Compounds in Essential Oils:

### CARYOPHYLLENE

- Fully activates the nervous system and is a CB2 receptor agonist (turns it on)
- Anti-Bacterial
- Anti-inflammatory
- Anti-fungal

#### HUMULENE

- Appetite suppressant
- Anti-bacterial
- Anti-inflammatory
- Anti-tumor effects

### PINENE

- Most abundant terpene on earth
- Improves memory and focus
- Boosts energy
- Bronchodilator (makes breathing easier)

- \*https://pubmed.ncbi.nlm.nih.gov/27573936/
- \*https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4322067/
- \*https://www.ineurosci.org/content/22/11/4720.full
- \*https://www.healthaffairs.org/doi/full/10.1377/hlthaff.2018.05266

#### MYRCENE

- Most abundant terpene found in hops and oranges
- Acts indirectly with both the ECS and the opioid system
- Anti-inflammatory
- Sedative
- Muscle relaxant & Pain relief

#### LIMONENE

- Second most abundant terpene on earth
- Improves mood
- Anti-anxiety
- Anti-depressant
- Pain relief
- Anti-tumor

### LINALOOL

- Anti-anxiety
- Sedative
- Pain relief
- Antibacterial

#### PINENE

Sources: Pine, Cedarwood, Rosemary, Sage Effects: Enhanced Cognition, Uplifting, Energizing Benefits: Anti-inflammatory, Bronchodilator, Memory Retention



Note: Pinene is the most abundant terpene found in nature

#### LIMONENE

Sources: Lime, Lemon, Grapefruit, Orange Effects: Uplifting, Euphoric, Energizing, Awakening Benefits: Antibacterial, Antifungal, Anticarcinogen Note: Limonene is the second most abundant terpene found in nature

#### MYRCENE

Sources: Hops, mint, cloves, lemongrass Effects: Sedative, Calming, Relaxing Benefits: Muscle Relaxant, Analgesic, Anti-inflammatory, Sleep Aid Note: Myrcene is one of the most abundant terpenes found throughout all cannabis species

#### **TERPINOLENE**

Sources: Tea Tree, Lilac, Apple, Cumin, Pine Effects: Sedative, Calming, Relaxing Benefits: Sleep Aid. Promotes Apoptosis Note: Terpinolene is the dominant terpene in cannabis with a diesel or gasoline aroma

#### LINALOOL

Sources: Lavender, Mint, Laurels, Lilies Effects: Sedative, Calming, Relaxing Benefits: Anxiolytic, Analgesic, Anticonvulsant

Note: Linalool modulates brain chemistry to produce sedative effects

#### BETA-CARYOPHYLLENE

Source: Black Peppercorns, Clove, Cinnamon, Oregano Effects: Enhanced Cognition, Relaxing

Benefits: Anti-Inflammatory, Digestive Aid, Analgesic, Anti-microbial Note: Beta-Caryophyllene is only terpege to activate CB receptors

of the Endocannabinoid System.

5



## Who are using Essential Oils and Terpenes:

## **Industry**

- Craft Beer and Spirits
- Flavored Foods and Beverages
- Herbal Teas
- Nutraceutical Products
- Essential Oils

## **Beer and Spirits**

- Lagunitas Brewing Co.
- Pabst Blue Ribbon
- Samuel Adams
- Stillwater Artisanal
- Kikoko
- Humboldt Distillery
- Heretic Spirits
- Willett Distillery
- Terpene Distillate Vodka

## Non-Alcoholic

- La Croix
- High Tide
- Som Sleep
- Recess Sparkling Water
- Hoplark Hop Tea
- Mood33
- Hiyo sparkling tonic













7/13/2023 6



## Are Essential Oils & Terpenes the future for Food & Beverages? We think yes, and here are a few reasons why:

- \* Enhanced Taste Experience: By incorporating 100% natural botanical terpenes for flavor, beverages can offer a more authentic and enjoyable taste. These terpenes, derived from plants, provide a wide range of aromatic profiles that can elevate the beverage's overall flavor profile, resulting in a more satisfying drinking experience.
- Customized Effects: The inclusion of separate terpene blends catering to specific effects (Rest, Energy, Focus, Calm, Recover, Arousal, and Creative) allows consumers to choose beverages that align with their desired mood or intention. This customization provides an opportunity to enhance various aspects of well-being and functionality, offering a more personalized beverage experience.
- Natural and Plant-Based: 100% natural botanical terpenes are derived from plants, making them a preferable choice for consumers seeking natural and plant-based products. The use of natural terpenes aligns with the growing demand for clean, unadulterated ingredients, and provides an alternative to synthetic or artificial additives.
- \* <u>Holistic Wellness</u>: Certain essential oils have been associated with potential wellness benefits. For instance, the terpenes most abundantly found in Lavender Oil, such as myrcene and linalool have been linked to relaxation and calming effects, while others like Lemon and Citrus EO's contain limonene and pinene which may contribute to increased focus and energy. By incorporating these terpenes into beverages, consumers can potentially experience a holistic approach to wellness.
- \* <u>Transparency and Trust</u>: Clearly labeling the use of 100% natural botanical terpenes and effect-derived terpene blends helps build trust with consumers. It allows them to make informed choices based on their preferences and requirements, promoting transparency and confidence in the product they are consuming.
- Diverse Options: The availability of various effect-derived essential oil and terpene blends provides consumers with a range of options to suit their specific needs. Whether seeking relaxation, energy, focus, or creativity, individuals can select beverages tailored to their desired effect, expanding the possibilities for a customized and enjoyable drinking experience.
- Sugar-Free Option: Many consumers are increasingly conscious of their sugar intake and seek healthier beverage alternatives with reduced or zero sugar content.

  Beverages using 100% natural botanical terpenes can offer a sugar-free option without compromising on flavor. By replacing or minimizing the need for added sugars, these beverages cater to individuals who prioritize a low-sugar or sugar-free lifestyle, promoting healthier choices and supporting overall well-being.

By incorporating 100% natural botanical essential oils & terpenes for flavor and separate blends of terpenes catering to specific effects, consumers can enjoy beverages that not only taste great but also offer potential holistic benefits, customization, and transparency in their ingredients.

7/13/2023 7 of <#s>



# How can we help: "Effects Blends"

(Entourage Effect)

















## **ENERGY**Water Soluble Terpene

What better way to energize the body than a shock to the senses? Energy combines an intense pinene-driven sensation, coupled with minty notes, and finished off with citrus to get you on your feet and ready to go.

## **A-PINENE**

- Most abundant terpene on earth
- Improves memory and focus
- Boosts energy
- Bronchodilator (makes breathing easier)



Recommended Flavors to use: Pineapple, Peppermint, Mojito



## **REST**Water Soluble Terpene

With a primary focus on Myrcene and Linalool, known for their relaxing effects, Rest has a very pleasant and smooth profile that is ideal for creating an overall experience of serenity.

## **MYRCENE**

- Most abundant terpene found in citrus and hops oils
- Acts indirectly with both the ECS and the opioid system
- Anti-inflammatory
- Sedative
- Muscle relaxant & Pain relief



Recommended Flavors to use: Banana, Pistachio, White Chocolate



## **CALM**Water Soluble Terpene

When it comes to putting the mind at ease, a mellow, well-rounded blend is necessary in order to help unwind. Calm brings together Limonene, Linalool, Myrcene, Humulene, and other aromatics in order to restore balance and wellness.

### LIMONENE

- Second most abundant terpene on earth
- Improves mood
- Anti-anxiety
- Anti-depressant
- Pain relief
- Anti-tumor



Recommended Flavors to use: Grape, Lychee, Guava, Blackberry



## FOCUS Water Soluble Terpene

Focus combines the sharpness of alpha and beta-Pinene with the smooth citrus notes of Limonene and Valencene in order to create a blend that will elevate and drive your attention to whatever is necessary.

## **VALENCENE**

- Terpene found in Valencia oranges
- Anti-inflammatory
- Bronchodilator
- Anti-allergic



Recommended Flavors to use: Guava, Cucumber, Mango



## RECOVER Water Soluble Terpene

The key to restoration and healing lies with terpenes known for their anti-inflammatory and refreshing properties. Linalool leads off Recovery, and is followed by Limonene, Myrcene, and Caryophyllene in order to create a blend that will leave you feeling renewed.

## **CARYOPHYLLENE**

- Fully activates the nervous system and is a CB2 receptor agonist (turns it on)
- Anti-Bacterial
- Anti-inflammatory
- Anti-depressant
- Anti-fungal



Recommended Flavors to use: Blueberry, Apricot, Watermelon



## **CREATIVE**Water Soluble Terpene

Limonene, Linalool, Terpinolene, and Geraniol are found in many essential oils known for their effectiveness in enhancing intuition. Creative takes these terpenes and combines them with an array of other aromatics in order to round out a blend that will bring out the imaginative mind.



- Analgesic
- Anti-convulsant
- Anti-epileptic
- Anti-psychotic
- Sedative
- Anxiolytic



Recommended Flavors to use: Grapefruit, Blood Orange, Lemon Lime



## AROUSAL Water Soluble Terpene

Anisaldehyde, Linalool, and Sage Oil are found in many essential oils known for their effectiveness in improving mood, relieve stress, and alleviate pain. Arousal takes these terpenes and combines them with an array of other aromatics in order to round out a blend that will increase sexual desire.

## Sage Oil

- Anti-Stress
- Anti-Anxiety
- Improved Memory and Alertness
- Anti-Bacterial
- Anti-Inflammatory



Recommended Flavors to use: Strawberry, Watermelon



## Recommended Dosage:

## **5 Beverages Per 1 ML WST**

1 Liter= 5,000 Beverages

1 Gallon= 18,925 Beverages

2.5 Gallon= 47,312 Beverages

5 Gallon= 94,625 Beverages

## 4 Beverages Per 1 ML WST

1 Liter= 4,000 Beverages

1 Gallon= 15,140 Beverages

2.5 Gallon= 37,850 Beverages

5 Gallon= 75,700 Beverages

Our standard offering includes over 120 varieties of 100% natural botanical flavored terpenes, which can be further tailored into watersoluble terpenes upon request. We also have the expertise to develop customized flavors according to the desired preferences. Today, we invite you to sample three delightful options: Cookies & Cream, Purple Punch, and Lemonchello.