

ALOHA IS MY CHOICE OF MEDICINE

CANNABIS 201

Cannabinoids & Terpenes



We are Proud to Serve the Community

Aloha Green Apothecary

- First dispensary to open on Oahu
- Community volunteer work with local charities

Speaker - Aaron Whyne

- Patient Relationship Specialist
- Medical cannabis education, outreach
- Assistance with 329 card questions

What to expect from Aloha Green Apothecary

We are patient centered. We take patient privacy and security very seriously, so we ask everyone to enter through a secured entrance and to abide by Hawaii State Law in our dispensary.

We understand a patient's qualifying health care provider may or may not have discussed what medical cannabis products may fit their needs, what is available to them, or how much medicine is enough to help with their condition.

We listen and educate patients about our products because, we understand how economics, product availability and connecting to the medicine, plays an important role in choosing the right medicine.

Our Patient Consultants welcome all cannabis questions. They can tell you how our lab tested medicine is made, show you the lab results for each medicine, how much of that content is in a dropperful of a tincture or syringe, and what effects that medicine may provide. Patient's can also smell and look at our flowers.

We believe we are all still learning about the rapidly changing cannabis industry, so, there are no "dumb questions".



Ancient Japanese Cave Painting

- Dated to Neolithic period between 10,000 to 300 BC
- Found on Southern Island of Kyushu, Japan
- Displays use of Hemp for weaving rope, cloth, and basket making.
- Seeds used as a food source



INDICA STRAINS

Indica strains have a relaxing, sedative effect, often used to:



Reduce stress



Relieve pain



Limit anxiety



SATIVA STRAINS

Sativa strains have an uplifting effect and offer a cerebral high that includes:



Laughing uncontrollably



Engaging in in-depth conversations



Thinking creatively



HYBRID STRAINS

Hybrid strains offer a mix of effects, combining the traits they inherited from their parent strains. Hybrids are known to:



Offer a relaxing body effect



Create balance of mind and body



Deliver full body pain relief

Cannabis Industry Debate

Indica vs Sativa or Hybrid?

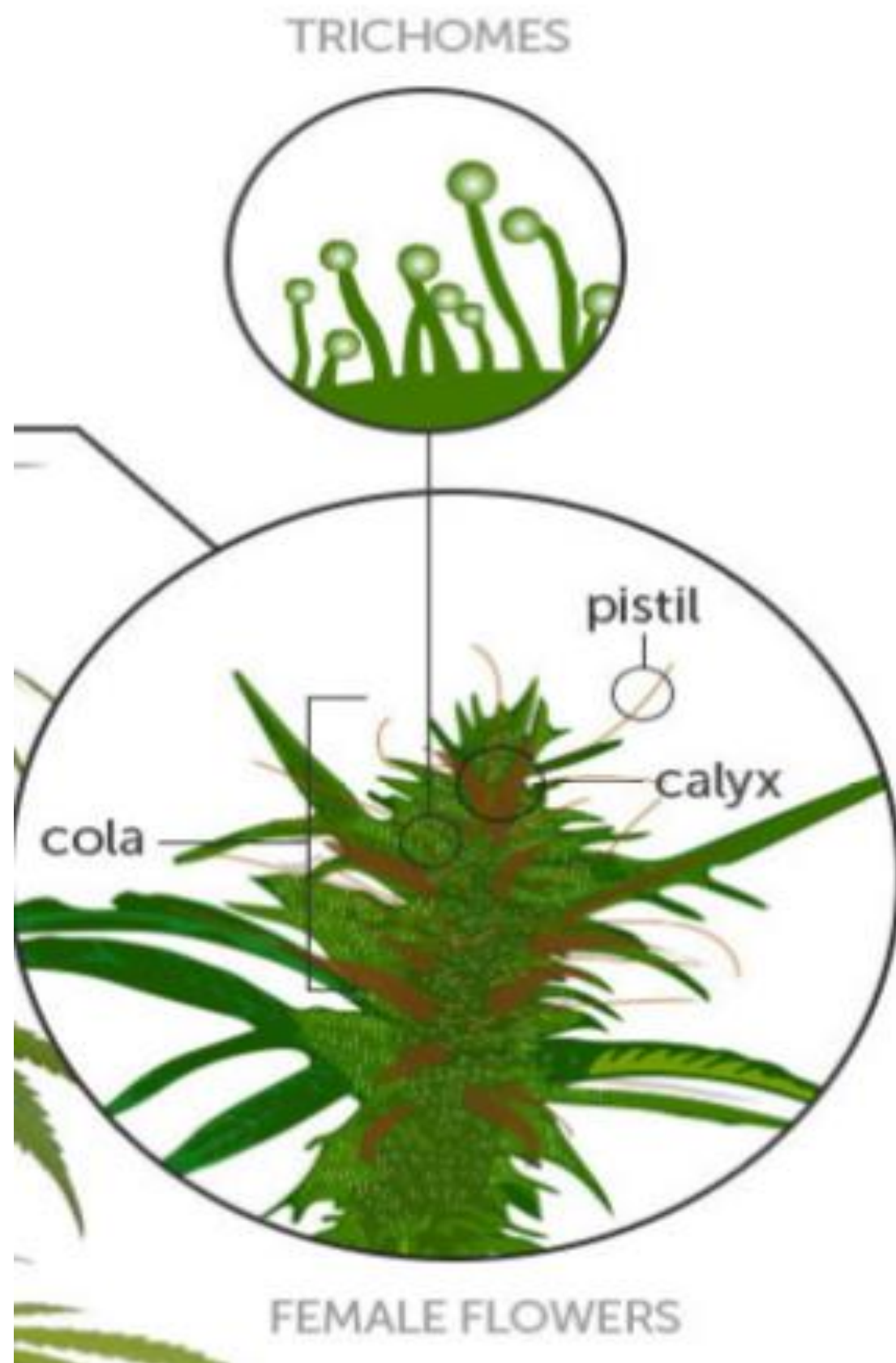
We understand that there is a lack of recorded data accumulated on the medicinal effects of individual land race strains with individual patients since humans started using cannabis as medicine.

There has been an amazing amount of hybridization over recent years with no consistent nomenclature or testing to maintain strain specific consistency.

As genetic diversity within strains is a natural occurrence, it is very difficult for anyone to say for certain or to predict, the exact medical effects of the cannabis strains of today, by name or classification alone.

I suggest, patients depend on cannabinoid & terpene lab testing, word of mouth, and trial by experience, to find the right strains & type of cannabis medicine to fit their need.

The Anatomy of the Female Cannabis Plant



The Endocannabinoid System

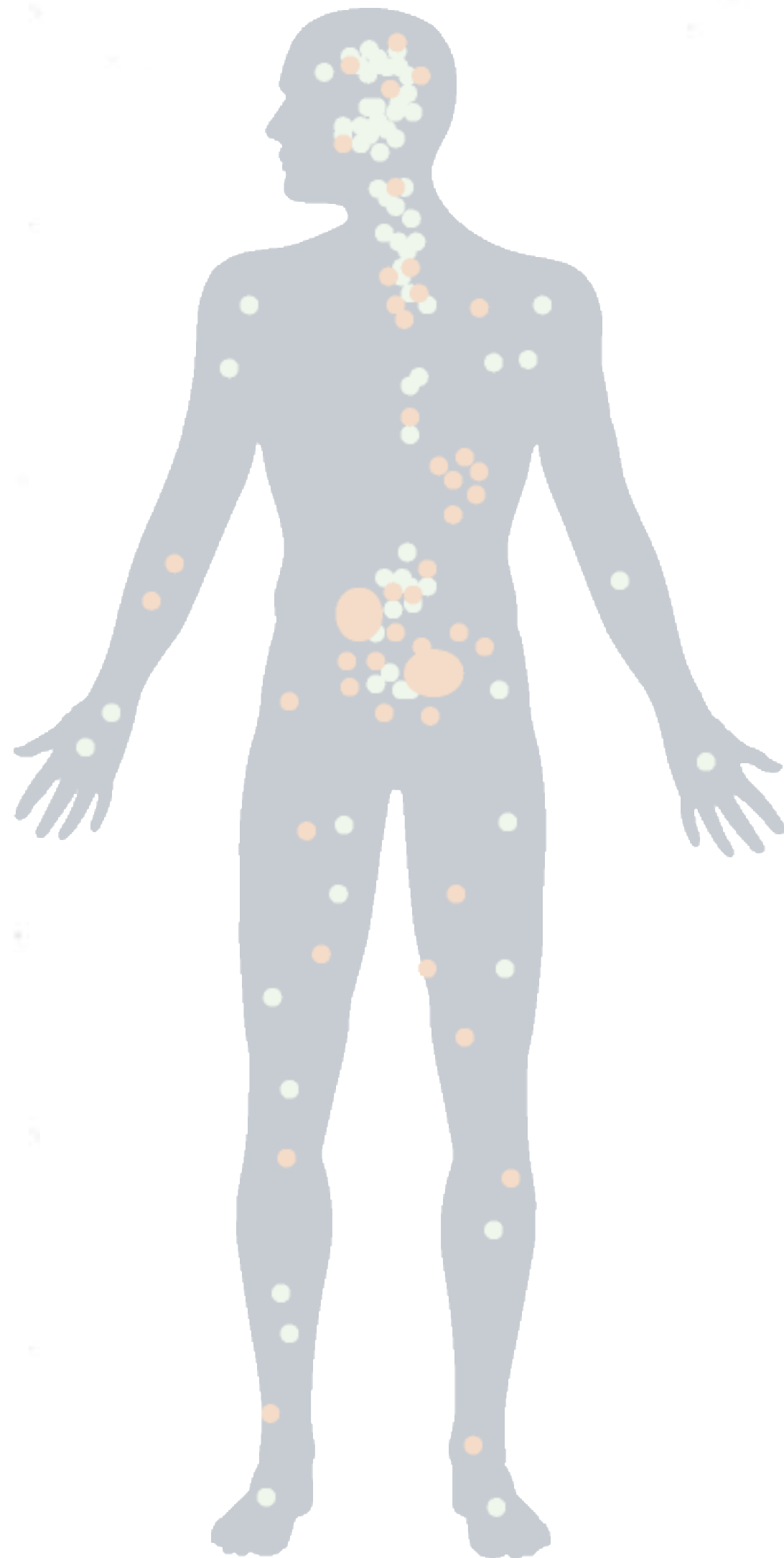
The Endocannabinoid system is a neuroreceptor system that is found in all mammals, birds, reptiles, and fish.

Spread throughout the body, the EC system uptakes cannabis medicine naturally.

The EC system regulates sleep, digestion, mood, motor control, immune function, pain, memory, temperature, and plays a critical role healing our bodies, keeping us in balance.

The balance our body maintains with each breath, with every beat of our heart, is called Homeostasis.

Cannabis medicine nourishes Homeostasis.



Cannabinoids

There are over 100 different cannabinoids in cannabis. Cannabinoids plug into our Endocannabinoid system, then provide most of the medicinal effects of cannabis.

Effects vary from plant to plant, strain to strain, cannabinoid & terpene content, curing, and processing.



Cannabinoids

1. Forming Stage

- Growing form starts out as CBGA, CBGVA.
- Compounds morph into THCA, THCVA, CBDA, CBDVA as plant matures.

2. Post Harvest

- Once mature, curing, then with combustion or convection applied, Decarboxylation occurs, the acid molecule is lost in small or large parts.
- Conversion to THC, THCV, CBD, CBDV, CBG, CBGV, where medicinal effect is increased.

CBGA
CBGVA

THCA
THCVA

CBDA
CBDVA

THC
THCV

CBD
CBDV

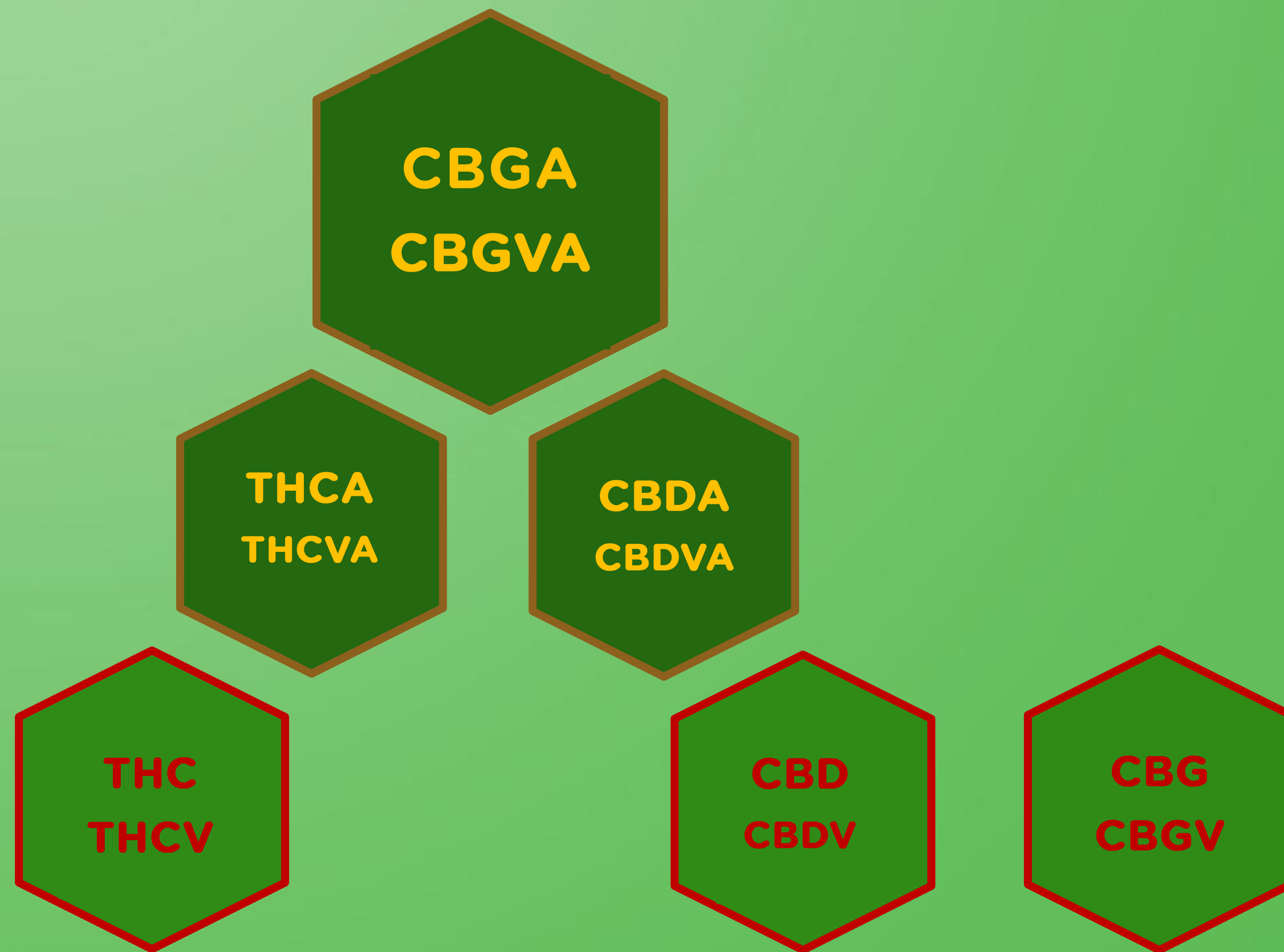
CBG
CBGV

CBNA

CBN

D-8
THC

- As harvested cannabis ages, but is not cured well, THCA, THCVA degrades into CBNA.
- With proper curing, THCA, THCVA are convert into THC and THCV.
- Eventually, THC, THCV, CBNA, & Delta 8 degrade into CBN.



Decarboxylation in Post-Harvest Cannabis

- Decarboxylation occurs when heat is applied during the curing process or afterwards with convection or combustion.
- Using the right temperature for the right amount of time, cannabis plants release CO₂ and an acid molecule, creating cannabinoids with more medicinal qualities.
- Consider the total amount for decarb & moisture content. The cannabis may need to decarb longer if it has more moisture.
- Boiling points/vapor points of the major cannabinoids, terpenes, and flavonoids range from 246.2 F to 435 F.
- Different sources say it is safe to decarb anywhere from 220 F to 240 F, for 30, 45, 60 minutes. Do not exceed 300 F.

- **THC**: Analgesic, Anti-cancer, Anti-bacterial, Anti-spasm, Anti-inflammatory, Appetite Stimulant, Neuroprotective.
- **THCV**: Anti-convulsive, Anti-inflammatory, Appetite Suppressant, Neuroprotective.
- **CBD**: Analgesic, Anti-anxiety, Anti-bacterial, Anti-cancer, Anti-convulsive, Anti-depressant, Anti-emetic, Anti-inflammatory, Anti-insomnia, Anti-ischemic, Anti-psychotic, Anti-spasm, Bone Stimulant, Immunosuppressive, Neuroprotective.
- **CBDV**: Anti-convulsive, Bone Stimulant.
- **CBG**: Analgesic, Anti-bacterial, Anti-cancer, Anti-depressant, Anti-fungal, Bone Stimulant.

CBGA
CBGVA

THCA
THCVA

CBDA
CBDVA

THC
THCV

CBD
CBDV

CBG
CBGV

CBNA

CBN

D-8
THC

- **CBGA**: Analgesic, Anti-inflammatory.
- **CBGVA**: Anti-inflammatory
- **THCA**: Anti-cancer, Anti-spasm, Anti-inflammatory.
- **THCVA**: Anti-inflammatory
- **CBDA**: Anti-cancer, Anti-inflammatory.
- **CBDVA**: Anti-inflammatory

- **CBNA**: Anti-inflammatory.
- **CBN**: Analgesic, Anti-bacterial, Anti-convulsive, Anti-inflammatory, Anti-insomnia.
- **Delta 8 THC**: Anti-anxiety, Anti-emetic.

Pennywise Flower (CBD/Hybrid 1:1)

TEST NAME

Extended Cannabinoids

Total THC

7.6 % 76 mg/g

Total CBD

7.5 % 75 mg/g

Cannabinoid	%	mg/g
CBD	0.094	0.94
CBDA	8.4	84
CBG	0.114	1.14
CBN	ND	ND
THC	0.22	2.2
Δ8-THC	ND	ND
THCA	8.4	84
THCV	ND	ND
Total Measured	17.2	172

ND - Not Detected

The Yeti (Indica/Hybrid) Liquid Aloha Cartridge

TEST NAME

Extended Cannabinoids

Total THC

49 % 490 mg/g

Total CBD

Not Detected

Cannabinoid	%	mg/g
CBD	ND	ND
CBDA	ND	ND
CBG	0.55	5.5
CBN	0.25	2.5
THC	25	250
Δ8-THC	ND	ND
THCA	28	280
THCV	ND	ND
Total Measured	54	538

ND - Not Detected

- Range of CBD for conditions: 1-6 mg for every 10 lbs. of body weight, consider individual level of pain.
- $\% \text{ CBDA} \times 0.877 = \underline{\hspace{1cm}}$. Then $\underline{\hspace{1cm}} + \text{CBD} = \text{total } \% \text{ CBD}$.
- Flower: $8.4 \times 0.877 = 7.3668$. $7.3668 + 0.094 = 7.4608$. Rounded to 7.5% total CBD.
- Range of THC used for conditions: 2.5, 10, 50 mg +.
- $\% \text{ THCA} \times 0.877 = \underline{\hspace{1cm}}$. Then $\underline{\hspace{1cm}} + \text{THC} = \text{total } \% \text{ THC}$.
- Flower: $8.4 \times 0.877 = 7.3668$. $7.3668 + 0.22 = 7.5868$. Rounded to 7.6% total THC.
- Cartridge: $28 \times 0.877 = 24.556$. $24.556 + 25 = 49.566$. Not rounded to 49% total THC.

Terpenes

Terpenes are fragrant oils that naturally occur in spices, fruits, herbs, flowers and cannabis. In high concentrations they can be toxic. Terpenes evolved to protect the plant from predators, draw in pollinators and animals to help spread its seeds. They contain medicinal benefits, that vary from plant to plant or cannabis strain to strain. Terpenes have synergistic interactions with cannabinoids and themselves.



Cannabis Terpenes & Therapeutic Uses

The synergistic interaction terpenes have with each other, cannabinoids and within our neuroreceptors, can affect the timing, intensity and movement of cannabinoid absorption through our bodies. This can increase an elevation experience from moderate to intense, energetic to sedative, or limit anxiety, paranoia, and appetite.

A-Pinene – *Pine*: Anti-bacterial, Anti-fungal, Anti-inflammatory, Bronchodilator, Memory Enhancer.

b-Caryophyllene – *Black Pepper, Clove*: Anti-bacterial, Anti-cancer, Anti-fungal, Anti-inflammatory, Anti-septic, Reduces anxiety, depression.

Caryophyllene Oxide – *Eucalyptus*: Anti-fungal, Anti-ischemic.

Citronellol – *Rose*: Anti-cancer, Anti-inflammatory, Anti-insomnia, Anti-spasm.

a-Humulene – *Hops*: Anorectic (suppresses appetite), Anti-cancer, Anti-bacterial, Anti-inflammatory.



Cannabis Terpenes & Therapeutic Uses

- Terpene content in flower between 1-2% is considered good.
- Content between 2.5-3% is considered very good, & 3-4% is excellent.
- Less than 1% of all High Times Cannabis Cup entries get above the 4% level.
- 10-15% or higher in concentrate is very good.
- **Limonene** - *Orange, lemon, Lime*: Anti-anxiety, Anti-bacterial, Anti-cancer, Anti-depressant, Anti-fungal, Promotes relaxation, Elevates mood.
- **Linalool** - *Lavender*: Anti-anxiety, Anti-bacterial, Anti-convulsive, Anti-depressant, Anti-insomnia, Sedative. Less-common than other terpenes.
- **b-Myrcene** - *Mango, Lemon Grass*: Analgesic, Anti-cancer, Anti-inflammatory, Anti-insomnia, Anti-spasm. Interacts with opioid receptors. Believed to contribute to “couch-lock”.
- **Phytol** - *Green Tea*. Anti-insomnia.
- **Terpinolene** - *Lilac, Apple*: Anti-bacterial, Anti-fungal, Anti-insomnia, Anti-septic, Sedative.



Pennywise Flower (CBD/Hybrid 1:1)

TEST NAME

Standard Terpenes

Terpene	%	mg/g
Caryophyllene Oxide	ND	ND
β-Caryophyllene	0.189	1.89
Citronellol	ND	ND
α-Humulene	0.123	1.23
Limonene	ND	ND
Linalool	ND	ND
β-Myrcene	0.47	4.7
Phytol	ND	ND
α-Pinene	0.102	1.02
Terpinolene	0.27	2.7
Total Measured	1.15	11.5

ND - Not Detected

The Yeti (Indica/Hybrid) Liquid Aloha Cartridge

TEST NAME

Standard Terpenes

Terpene	%	mg/g
Caryophyllene Oxide	0.39	3.9
β-Caryophyllene	3.8	38
Citronellol	ND	ND
α-Humulene	1.06	10.6
Limonene	2.2	22
Linalool	1.57	15.7
β-Myrcene	1.93	19.3
Phytol	ND	ND
α-Pinene	ND	ND
Terpinolene	1.20	12.0
Total Measured	12.1	122

ND - Not Detected

Compare & Contrast Terpenes

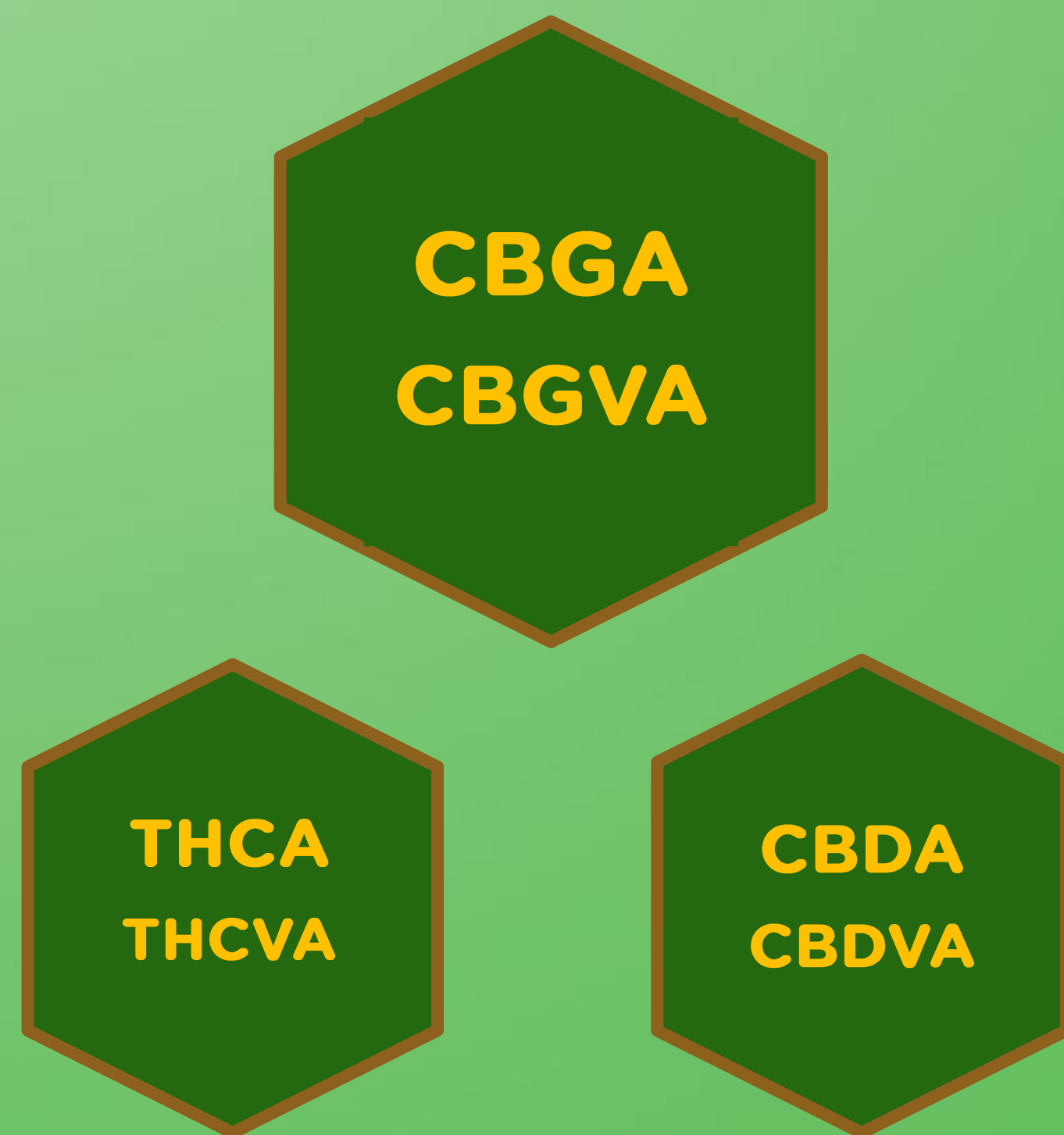
- Notice: Date of lab test, type of test, & product match.
- Terpene content in flower between 1-2% is considered good.
- Content between 2.5-3% is considered very good, & 3-4% is excellent.
- Less than 1% of all Hight Times Cannabis Cup entries get above the 4% level.
- 10-15% or higher in concentrate is very good.

Entourage Effect

The Entourage Effect is THC, CBD, other cannabinoids and terpenes working together in synergistic union to enhance the balance and therapeutic quality of cannabis medicine.

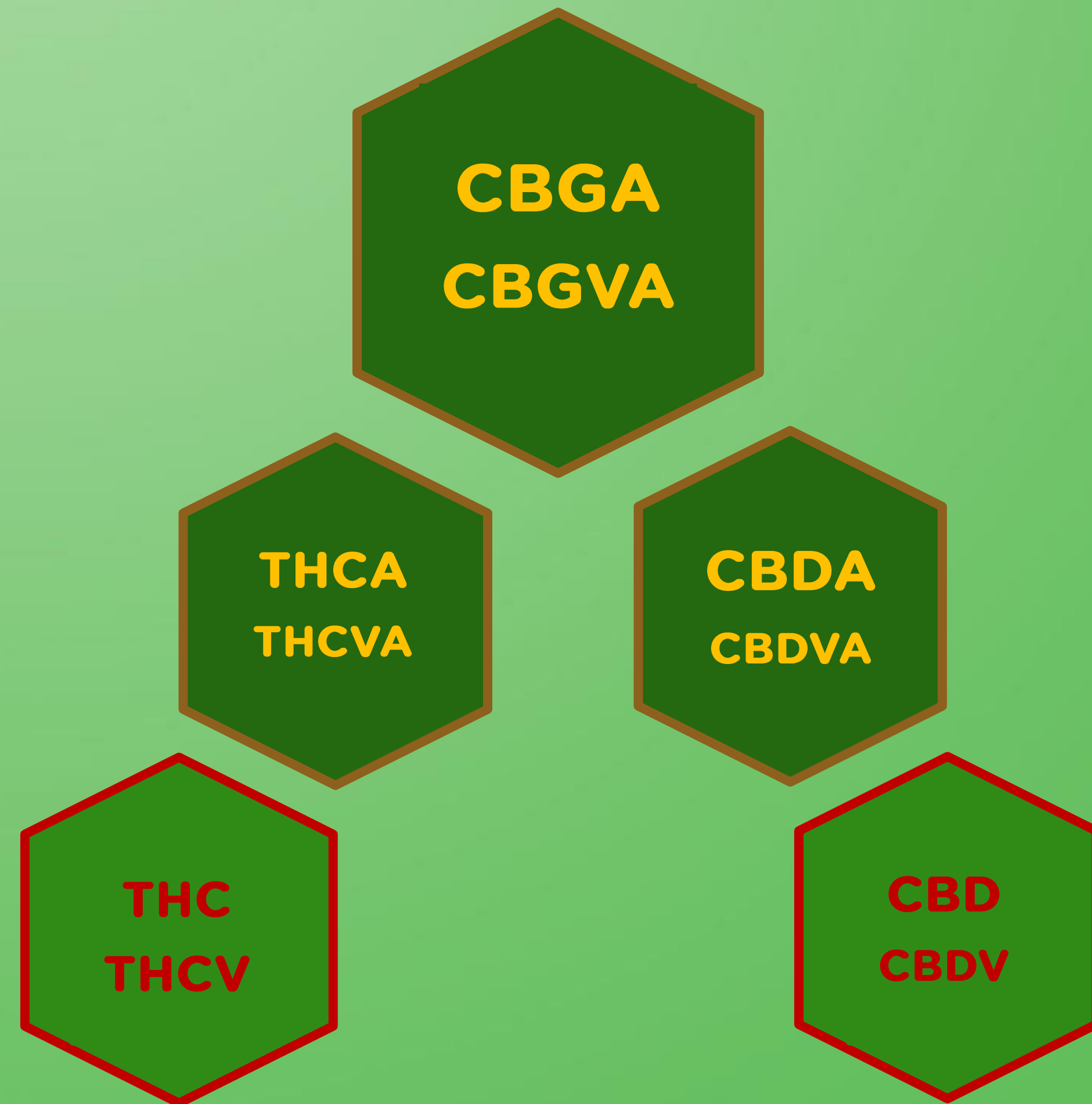
The best medicines have a “Full Spectrum”, they include cannabinoids, terpenes, fatty acids, flavonoids, carotenoids, are considered “whole plant”, aromatic and flavorful.





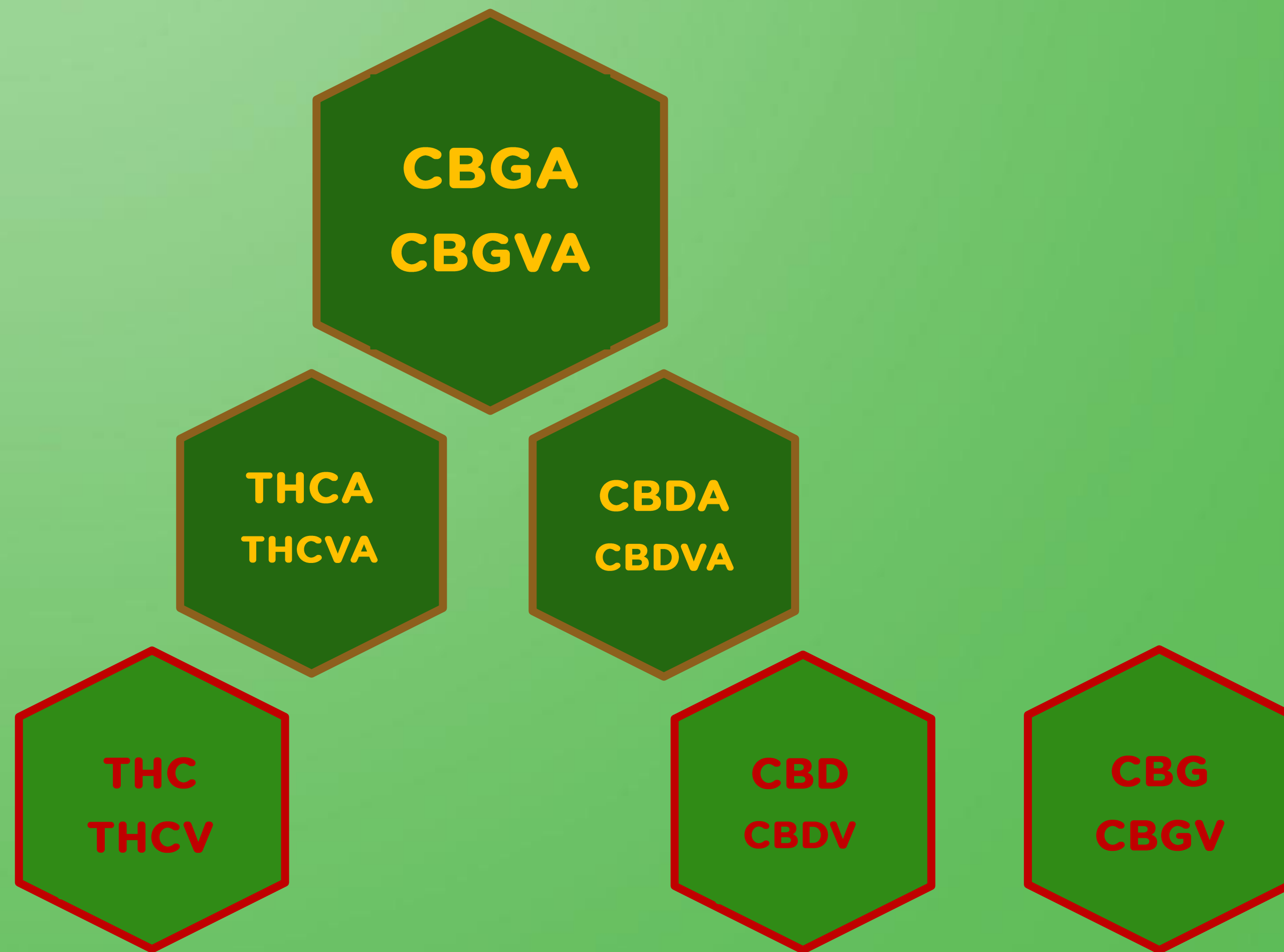
Therapeutic Effects & Synergistic Terpenes in Pre-Harvest Cannabis

- CBGA- Analgesic: **Myrcene**. Anti-inflammatory: **a-Pinene**, **b-Caryophyllene**, **Citronellol**, **Humulene**, **Myrcene**.
- CBGVA- Anti-inflammatory: **a-Pinene**, **b-Caryophyllene**, **Citronellol**, **Humulene**, **Myrcene**.
- THCA- Anti-cancer: **b-Caryophyllene**, **Citronellol**, **Humulene**, **Limonene**, **Myrcene**. Anti-inflammatory: **a-Pinene**, **b-Caryophyllene**, **Citronellol**, **Humulene**, **Myrcene**. Anti-spasm: **Citronellol**, **Myrcene**.
- THCVA- Anti-inflammatory: **a-Pinene**, **b-Caryophyllene**, **Citronellol**, **Humulene**, **Myrcene**.
- CBDA- Anti-cancer: **b-Caryophyllene**, **Citronellol**, **Humulene**, **Limonene**, **Myrcene**. Anti-inflammatory: **a-Pinene**, **b-Caryophyllene**, **Citronellol**, **Humulene**, **Myrcene**.
- CBDVA- Anti-inflammatory: **a-Pinene**, **b-Caryophyllene**, **Citronellol**, **Humulene**, **Myrcene**.



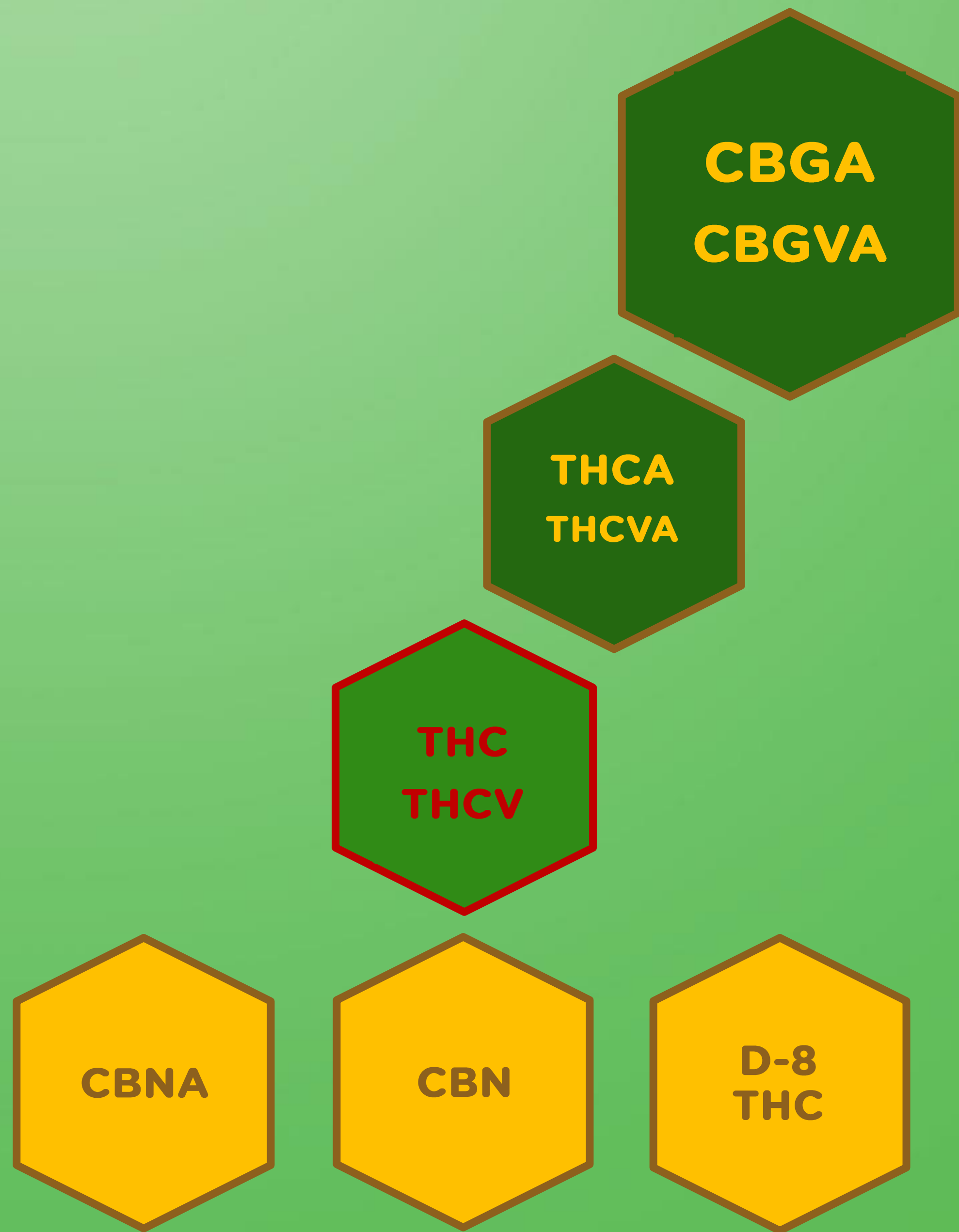
Therapeutic Effects & Synergistic Terpenes in Post-Harvest Cannabis

- **THC**- Analgesic: **Myrcene**. Anti-bacterial: **a-Pinene**, **b-Caryophyllene**, **Citronellol**, **Humulene**, **Limonene**, **Myrcene**. Anti-cancer: **b-Caryophyllene**, **Citronellol**, **Humulene**, **Limonene**, **Myrcene**. Anti-inflammatory: **a-Pinene**, **b-Caryophyllene**, **Citronellol**, **Humulene**, **Myrcene**. Anti-spasm: **Citronellol**, **Myrcene**. Appetite Stimulant. Bronchodilator: **a-Pinene**. Neuroprotective.
- **THCV**- Anti-convulsive: **Linalool**. Anti-inflammatory: **a-Pinene**, **b-Caryophyllene**, **Citronellol**, **Humulene**, **Myrcene**. Appetite Suppressant: **Humulene**. Neuroprotective.
- **CBD**- Analgesic: **Myrcene**. Anti-anxiety: **Linalool**, **Limonene**. Anti-bacterial: **a-Pinene**, **b-Caryophyllene**, **Citronellol**, **Humulene**, **Limonene**, **Myrcene**. Anti-cancer: **b-Caryophyllene**, **Citronellol**, **Humulene**, **Limonene**, **Myrcene**. Anti-convulsive: **Linalool**. Anti-depressant: **Limonene**, **Linalool**. Anti-emetic. Anti-inflammatory: **a-Pinene**, **b-Caryophyllene**, **Citronellol**, **Humulene**, **Myrcene**. Anti-insomnia: **Citronellol**, **Linalool**, **Myrcene**, **Phytol**, **Terpinolene**. Anti-ischemic: **Caryophyllene Oxide**. Anti-psychotic. Anti-spasm: **Citronellol**, **Myrcene**. Bone stimulant. Immunosuppressive. Neuroprotective.
- **CBDV**- Anti-Convulsive: **Linalool**. Bone Stimulant.



Therapeutic Effects & Synergistic Terpenes in Post-Harvest Cannabis

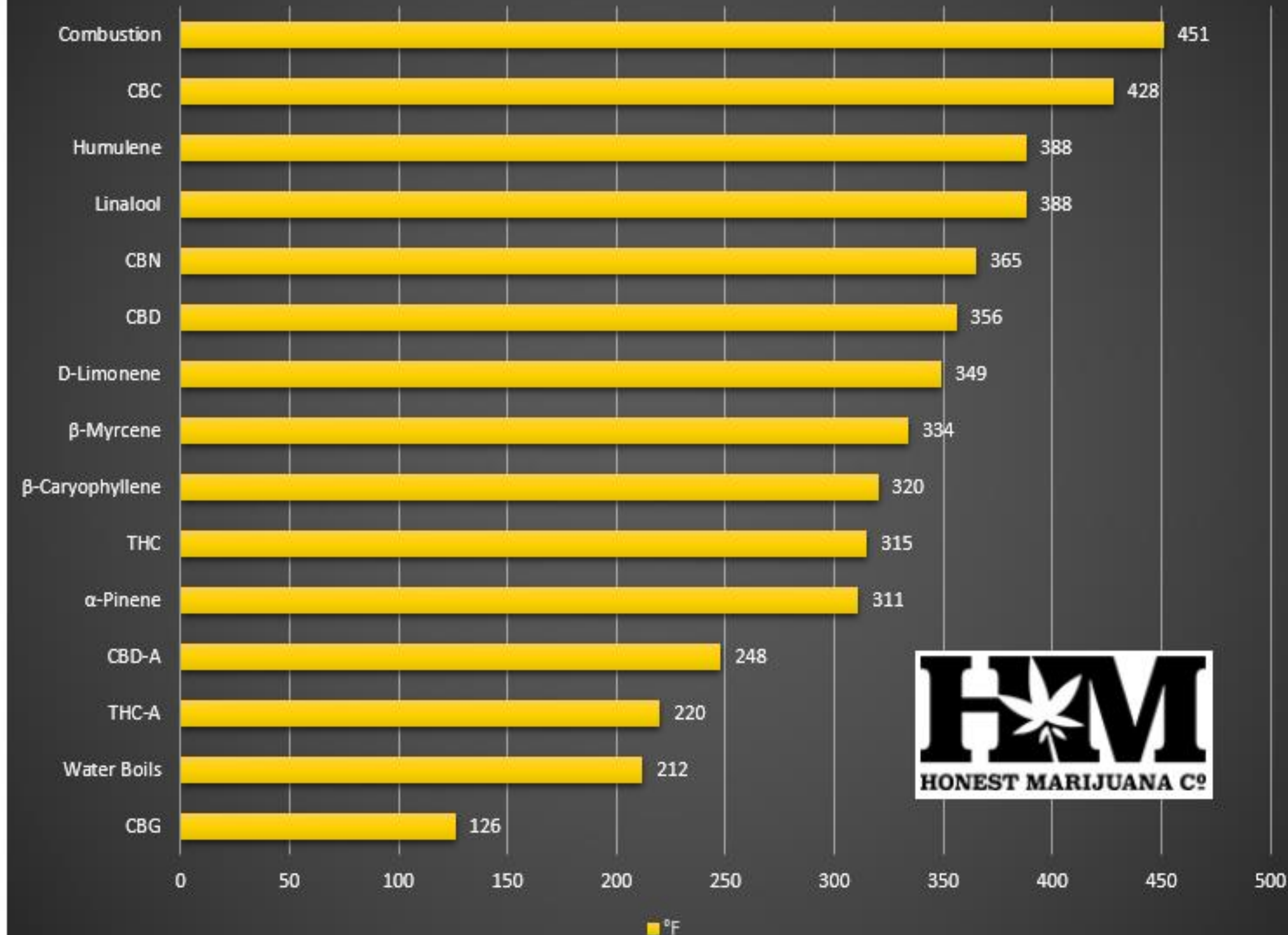
- CBG- Analgesic: **Myrcene**. Anti-bacterial: **a-Pinene**, **b-Caryophyllene**, **Humulene**, **Limonene**, **Linalool**, **Terpinolene**. Anti-cancer: **b-Caryophyllene**, **Citronellol**, **Humulene**, **Limonene**, **Myrcene**. Anti-depressant: **Limonene**, **Linalool**. Anti-fungal: **a-Pinene**, **b-Caryophyllene**, **Caryophyllene Oxide**, **Limonene**, **Terpinolene**. Bone Stimulant.
- CBGV- Unknown.



Therapeutic Effects & Synergistic Terpenes in Post-Harvest Cannabis

- CBNA- *Anti-inflammatory*: a-Pinene, b-Caryophyllene, Citronellol, Humulene, Myrcene.
- CBN- *Analgesic*: Myrcene. *Anti-bacterial*: a-Pinene, b-Caryophyllene, Humulene, Limonene, Linalool, Terpinolene. *Anti-convulsive*: Linalool. *Anti-inflammatory*: a-Pinene, b-Caryophyllene, Citronellol, Humulene, Myrcene. *Anti-insomnia*: Citronellol, Linalool, Myrcene, Phytol, Terpinolene.
- Delta-8THC- *Anti-anxiety*: Linalool, Limonene. *Anti-emetic*.

Honest Marijuana Vaping Temperature Chart



- Decarboxylation: Under 240 F
- The ideal vaporizing temperatures for dry herb, cannabis oil and other concentrates, is a subject for debate and mainly, a matter of personal preference.
- In *Beyond Buds-Marijuana Extracts-Hash, Vaping, Dabbing, Edibles & Medicines*, Ed Rosenthal suggests a commonly used range of 330-380 F (165.5-193.3 C).
- Clinical Assistant Professor at the University of British Columbia in Vancouver, Dr. Ian Mitchell believes the perfect vaping temperature range is 347-392 F (175-200 C).
- Temperatures above 400 F (204 C) create harmful compounds such as benzene, dioxins, and tars.

Consumption and Products

Inhalation

Onset: Immediate

Duration: 1-4 hours

Smoking or Vaporizing flower, Vaporizing oil cartridges, CO2 extracted, full spectrum cannabinoid, terpene rich cannabis oil



TEST NAME

Extended Cannabinoids

Total THC

20. % 200 mg/g

Total CBD

0.120 % 1.20 mg/g

Cannabinoid	%	mg/g
CBD	0.076	0.76
CBDA	0.049	0.49
CBG	0.161	1.61
CBN	ND	ND
THC	0.23	2.3
Δ8-THC	ND	ND
THCA	23	230
THCV	ND	ND
Total Measured	24	235

ND - Not Detected

TEST NAME

Standard Terpenes

Terpene	%	mg/g
Caryophyllene Oxide	ND	ND
β-Caryophyllene	ND	ND
Citronellol	ND	ND
α-Humulene	0.70	7.0
Limonene	ND	ND
Linalool	0.083	0.83
β-Myrcene	0.42	4.2
Phytol	ND	ND
α-Pinene	ND	ND
Terpinolene	ND	ND
Total Measured	1.20	12.0

ND - Not Detected

Rude Boi Flower (Indica/Hybrid)

- (THCA) $23 \times 0.877 = 20.171$.
 $20.171 + 0.23$ (THC) = 20.401.
Not rounded, 20% total THC.
- (CBDA) $0.049 \times 0.877 = 0.042$ + 0.076 (CBD) = 0.118.
Rounded to 0.120% total CBD.
- Terpene test is higher in humulene, myrcene, & has linalool.
- More of a sedative, anti-inflammatory, analgesic effect in most people.
- More of a night time medicine.

TEST NAME

Extended Cannabinoids

Total THC	Total CBD
58 % 580 mg/g	Not Detected

Cannabinoid	%	mg/g
CBD	ND	ND
CBDA	ND	ND
CBG	1.89	18.9
CBN	0.188	1.88
THC	48	480
Δ8-THC	ND	ND
THCA	11.5	115
THCV	ND	ND
Total Measured	62	616

ND - Not Detected

TEST NAME

Standard Terpenes

Terpene	%	mg/g
Caryophyllene Oxide	0.49	4.9
β-Caryophyllene	8.9	89
Citronellol	ND	ND
α-Humulene	4.6	46
Limonene	2.7	27
Linalool	1.63	16.3
β-Myrcene	2.5	25
Phytol	ND	ND
α-Pinene	ND	ND
Terpinolene	ND	ND
Total Measured	20.8	208

ND - Not Detected

Liquid Aloha SPAMC Concentrate Cartridge Forum Cookies X Memory Loss (Sativa/Hybrid)

- (THCA) 11.5 X 0.877= 10.0. 10.0 + 48 (THC) = 58% THC.
- High CBG level. Analgesic.
- High terpenes are multi-spectrum, provide a wide range of medicinal effects.
- More of analgesic, anti-inflammatory, up lifting, anti-anxiety effect at first, then later, sedative in most people.

TEST NAME

Extended Cannabinoids

Total THC	Total CBD
63 % 630 mg/g	11.7 % 117 mg/g

Cannabinoid	%	mg/g
CBD	11.7	117
CBDA	ND	ND
CBG	2.2	22
CBN	0.39	3.9
THC	63	630
Δ8-THC	ND	ND
THCA	ND	ND
THCV	ND	ND
Total Measured	77	773

ND - Not Detected

TEST NAME

Standard Terpenes

Terpene	%	mg/g
Caryophyllene Oxide	ND	ND
β-Caryophyllene	0.94	9.4
Citronellol	ND	ND
α-Humulene	0.69	6.9
Limonene	ND	ND
Linalool	1.17	11.7
β-Myrcene	2.9	29
Phytol	ND	ND
α-Pinene	ND	ND
Terpinolene	ND	ND
Total Measured	5.7	57

ND - Not Detected

Pure Aloha SPAMC Distillate Cartridge

- High in THC, with a small balance of CBD, CBG, CBN.
- Small amount of terpenes, under 10-15% for a concentrate.
- More of a potent, fast acting analgesic for break through pain, anti-inflammatory, at first, then later sedative, in most people.
- This medicine can get a patient very high, quickly, raise their THC tolerance.
- CBD used as a modulator.

TEST NAME

Extended Cannabinoids

Total THC

8.2 % 82 mg/g

Total CBD

Not Detected

Cannabinoid	%	mg/g
CBD	ND	ND
CBDA	ND	ND
CBG	0.86	8.6
CBN	0.97	9.7
THC	8.2	82
Δ8-THC	70.	700
THCA	ND	ND
THCV	ND	ND
Total Measured	80	800

ND - Not Detected

Pure Aloha SPAMC Cartridge D-8 No Terpenes

- Delta 8 THC (+ D-9=78.2%) is specialized medicine, one of the most beneficial cannabinoids, high THC, lower elevation experience.
- National Cancer Institute : D-8 has anti-emetic, anxiolytic, appetite-stimulating, analgesic, and neuroprotective properties.
- Relief from pain, nausea, anxiety and protects an aging brain.
- Med study: given to children undergoing chemo, stopped vomiting, improved nausea.

Consumption and Products

Inhalation of Shatter, Rosin

Onset: Immediate

Duration: 1-4 hours

Honey straw, concentration pen, dab rig



TEST NAME

Extended Cannabinoids

Total THC		Total CBD	
78 %	780 mg/g	0.157 %	1.57 mg/g

Cannabinoid	%	mg/g
CBD	ND	ND
CBDA	0.179	1.79
CBG	0.72	7.2
CBN	0.76	7.6
THC	21	210
Δ8-THC	ND	ND
THCA	64	640
THCV	ND	ND
Total Measured	87	867

ND - Not Detected

TEST NAME

Standard Terpenes

Terpene	%	mg/g
Caryophyllene Oxide	0.61	6.1
β-Caryophyllene	ND	ND
Citronellol	ND	ND
α-Humulene	0.92	9.2
Limonene	ND	ND
Linalool	0.58	5.8
β-Myrcene	1.50	15.0
Phytol	ND	ND
α-Pinene	ND	ND
Terpinolene	1.40	14.0
Total Measured	5.01	50.1

ND - Not Detected

Flo X White Rosin (Hybrid)

- Full Spectrum cannabis resin concentrate: pressed through a micro-screen at low heat.
- High THC 85%, CBDA, CBG, CBN.
- Multi-Spectrum terpenoids: Caryophyllene Oxide, Humulene, Linalool, Myrcene, Terpinolene.
- Lower than 10-15% terpene concentrate level.
- More of a fast acting analgesic, anti-inflammatory, mood enhancer (experienced user), then later, sedative in most people.

Consumption and Products

Ingestion

Down the hatch

Onset: 1-2 hours

Duration: 6-12 hours



TEST NAME

Extended Cannabinoids

Total THC

64 % 640 mg/g

Total CBD

24 % 240 mg/g

Cannabinoid	%	mg/g
CBD	24	240
CBDA	ND	ND
CBG	1.93	19.3
CBN	0.48	4.8
THC	64	640
Δ8-THC	0.56	5.6
THCA	ND	ND
THCV	0.50	5.0
Total Measured	91	915

ND - Not Detected

Apothecary Elixir (Purified)

- Extremely powerful, potent medicine. Concentrated, multi-spectrum in a 1 gram syringe.
- CBD 24% (240 mg), THC 65% (650 mg).
- Includes CBG, CBN, Delta-8, THCV.
- Serving: the size of a grain of rice, 0.1 or 1/10th of syringe: 24 mg CBD, 65 mg THC.
- Slower acting analgesic, anti-inflammatory, anti-anxiety, anti-proliferative, anti-nausea, sedative. Lasts 6 to 12 hours.
- Cancer patients love the Elixir.

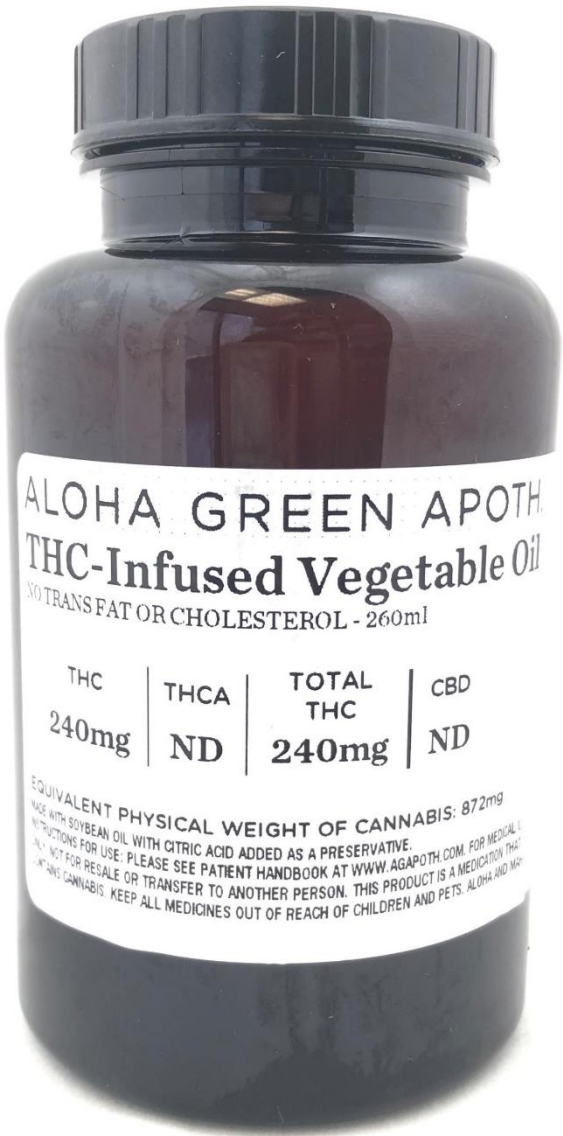
Consumption and Products

Under the tongue or down the hatch

Onset: 30 minutes

Duration: 1-6 hours

Tincture: cannabis oil mixed with MCT oil carrier



TEST NAME

METHC
HI-SO

Extended Cannabinoids

Total THC

Total CBD

18.3 mg/mL 19.7 mg/g

16.5 mg/mL 17.7 mg/g

Cannabinoid	mg/mL	%	mg/g
CBD	16.5	1.77	17.7
CBDA	ND	ND	ND
CBG	0.54	0.058	0.58
CBN	0.25	0.026	0.26
THC	18.3	1.97	19.7
Δ8-THC	0.67	0.072	0.72
THCA	ND	ND	ND
THCV	0.22	0.024	0.24
Total Measured	36.5	3.92	39.2

ND - Not Detected

1:1 House Tranquility 500mg

- To know the strength of your tincture:
- What size of bottle does it come in? 30ml / 1 ounce size.
- $16.5 \text{ CBD} \times 30 = 495 \text{ mg CBD}$
- $18.3 + 0.67 + 0.22 = 19.19 \times 30 = 575 \text{ mg THC}$
- 30ml/1 ounce size contains 495 mg CBD, 575 mg THC.
- To find how much is in a dropperful or 1 ml, divide total mgs by 30.
- 16.5 mg CBD, 19.19 mg THC.

Websites

Hawaii Medical Cannabis Registry Program:

Patient Hotline: 733-2177. Email: medicalcannabis@doh.Hawaii.gov

Download a copy of your electronic 329 card here's how: Go to

<https://medmj.ehawaii.gov/medmj/welcome> ,

At WELCOME page, log in to your account (email, password). Click Application Status, when it comes up. Look at line with your active Registration Number in green and follow the line to the far right. Click black Download Registration Card icon at far right. Your electronic card should appear.

Cannabis drug interactions? Talk to your 329 card, health care provider. Also, check out this Canadian website at <https://www.drugbank.ca/> or <https://reference.medscape.com/drug-interactionchecker>

Edibles calculations for THC and CBD: <https://jeffthe420chefcalculator.com/>

Vape Chart : <https://honestmarijuana.com/>



Ancient Cannabis

- “Burial Shroud” of 2 pounds of plant material found in a 2,700-year-old grave along the old silk road in China
- Burial site of a 45-year-old, blue-eyed Gushi shaman
- Even in modern times, caring survivors continue to bury their loved ones with cannabis

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Delta-8 information:

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MAHALO!

Q&A

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