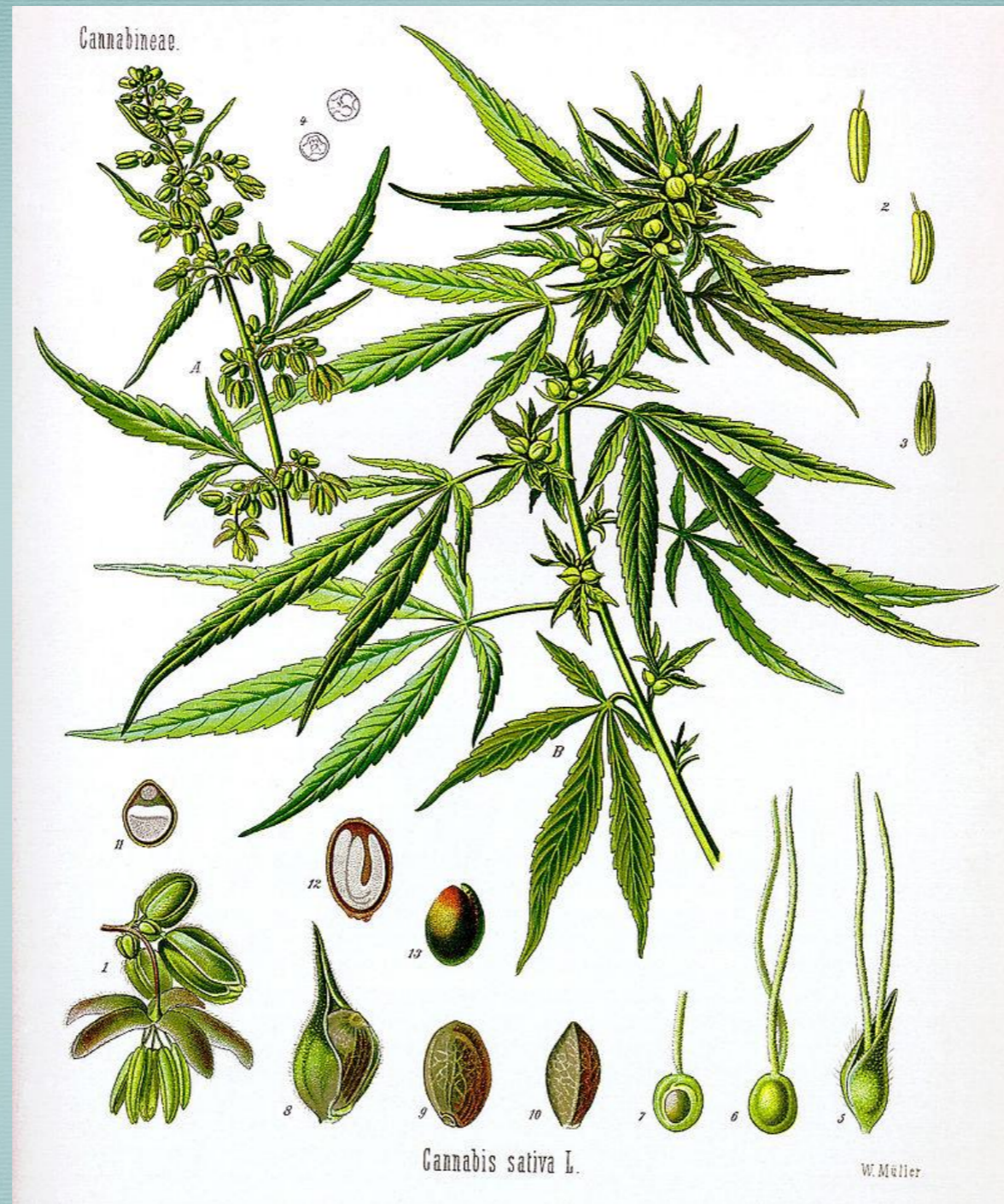


Medical Marijuana & Cancer

Letitia Cain, ND, FABNO, MFA

History

- * Long history of uses: hemp fiber, medicinal uses, recreational
- * Originated in mountain areas of Himalayas
- * First recorded use of *Cannabis*: 440BCE from a Greek historian but referred to in Hindu Vedas and found in ancient settlements as far back as 2200 BCE
- * 1839 introduced to Western medicine for analgesic and sedative effects



Cannabis

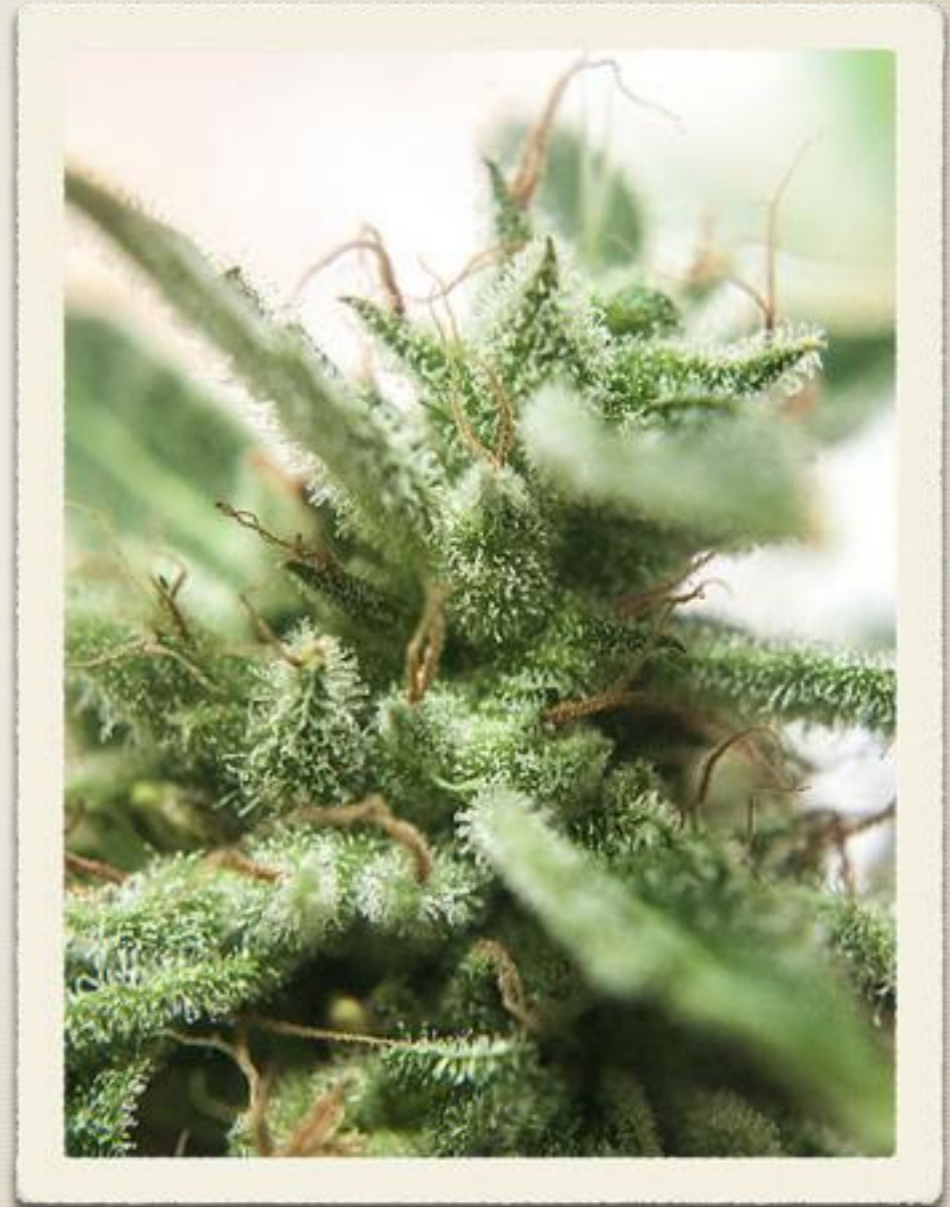
Types (Strains) of *Cannabis*

- * *Cannabis sativa*
- * *Cannabis ruderalis*
- * *Cannabis indica*



Parts Used

- * Dried and cured flower buds
- * Kief—a fine, powdery substance from trichomes of plant



Components

- * Contains terpene-phenolic compounds
 - * 483 identifiable chemical constituents
 - * Over 200 terpenes (flavor & aroma) identified
 - * 85 different cannabinoids
 - * Cannabidiol (CBD) and delta-9-tetrahydrocannabinol (THC) are the 2 produced in greatest abundance

Clinical Uses

- * Appetite stimulation
- * Weight gain
- * Nausea/Vomiting
- * Anti-anxiety
- * Sleep disturbances
- * Chronic pain
- * Muscle spasms
- * Nerve pain

Using *Cannabis*

- * Herb prepared for smoking or vaporizing
 - * Rapidly absorbed (2-10 minutes, lasting for 30 minutes-1 hour)
- * Herb in food products or cooking with cannabis
 - * Slowly absorbed (1-6 hours, lasting for 20-30 hours)

Cannabis Herbal Forms

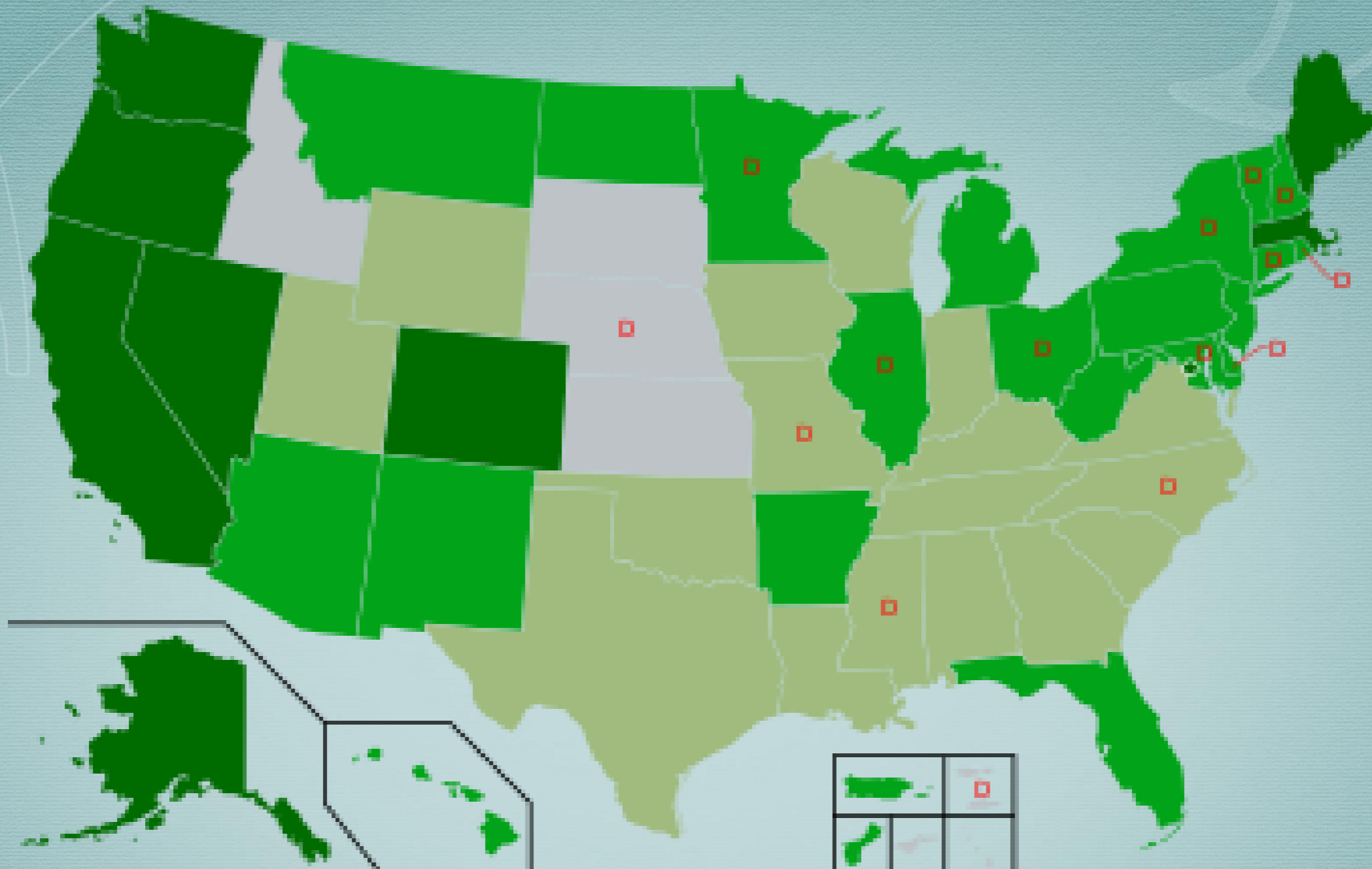
- * Bud cured and dried
- * Resin (hashish)—processed version of kief, involves pressure and heat
- * Rosin—from flower buds, extracted with heat and pressure
- * Solvent-Based Concentrates—Alcohol solvent extraction (RSO, Phoenix Tears), butane hash oil (BHO), or CO2
- * Topical preparations
- * Suppositories
- * Tinctures

Prescription Forms

- * Dronabinol (Marinol)—synthetic delta-9-THC in sesame oil in pill
- * Nabilone (Cesamet)—delta-9-THC in pill
- * Nabiximols (Sativex)—1:1 ratio of THC:CBD in pill, Canada only

Potential Side Effects

- * Anxiety
- * Dizziness
- * Tachycardia (rapid heart rate)
- * Low blood pressure
- * Decreased gastrointestinal mobility
- * Mild irritability and insomnia from withdrawal that lasts a few days
- * Metabolized through the liver CYP 450 system: caution with other drugs!



Current Legal Status

Legality of cannabis in the United States Legal Legal for medical use Legal for medical use, [limited THC content](#) Prohibited for any use Decriminalized Notes: • Includes laws which have not yet gone into effect. • Cannabis [remains a Schedule I drug](#) under federal law. • Some [Indian reservations](#) have legalization policies separate from the states they are located in.

WA Regulations

- * Medical Marijuana Authorization Form filled out by a provider allowed to authorize marijuana for medical purposes
- * Medical Purpose: allows you to grow own plants, exempt from sales tax & purchase unlimited amount
- * Recreational Use: allows up to 1 oz bud/16oz edibles/72 oz liquid/7 grams concentrate at a time of purchase
- * <http://www.doh.wa.gov/Portals/1/Documents/Pubs/608017.pdf> for list of Medically Endorsed stores with a consultant

Recipes

- * *Cook's Science* article, "Beyond Brownies: The Science of Cooking with Cannabis" by Andy Wright
- * Elise McDonough, edibles editor for *High Times* and author of *The Official High Times Cannabis Cookbook*
- * *Grow Your Own: Understanding, Cultivating and Enjoying Cannabis* by David Stein and Liz Crain

Resources

- * National Cancer Institute
- * The Splendid Table
- * Washington State Department of Health
- * *Grow Your Own: Understanding, Cultivating and Enjoying Cannabis* by David Stein and Liz Crain

* Questions?

* Thank you!