Herbal Cordials and Liqueurs:
Ancient herbal medicine

Herbal Mixology
Glen Nagel, ND
M.E.E.T The Herbs
My herbal philosophy

- **Medicine** making is a medicine.
- **Experience** is the best teacher, make it something to remember and experience
- **Everyday** practice your craft, your art.
- **Taste** is the teacher, the new active ingredient is Taste, smell, sight.
Herbal Mixology: The New Paradigm

- The problem with herbal medicine
- The problem with Mixed drinks
- Taste is the active ingredient
- Alcohol as medicine?
- Organoleptics: the way of senses
- Herbs as medicine
- The Bitters
- The Shrubs: Vinegar extracts
- Cordials and Herbal Elixirs
- Recipes
Herbal Mixology : Defined as

- The power of herbal phytochemicals driven into the blood stream by alcohol and wrapped in an organoleptically rich sensual experience: This is the magic and power to Herbal Mixology.
- The art and science of adding medicinal value and action to the world of tasty alcoholic drinks
- Bringing the value of medical tonics back to the roots of botanical medicine
- My path as an herbalist, naturopathic doctor
- Making medicine is medicine, DIY
What is a Cordial?

It's also called an elixir or of the core the distinction lies in the way that these various flavors of these drinks are obtained liqueur cordial is a spirit-based drink which flavor elements have been added you should buy in fusion and the vast majority are enhanced by sweeteners. These usually very from 20% alcohol to 50% alcohol. The word cordial come some from the heart and are are often associated with brandies and medicinal herbs.
History of Liqueurs, Cordials

• Cordials and the cores have their origins in practice of adding aromatic ingredients such as herbs, fruits, seed, spices, nuts, roots, flowers to the earliest distilled spirits in order to unmask an unappealing flavor or impurities. The end result was something that had medicinal value.

• The base spirit in many of liqueurs was neutral which meant that many of these could be concocted in domestic kitchens used for cooking, drinking, and medicine as various proprietary liquid or a scam on the market to them. Course of the early 19th century homemaking liqueurs declined.
History of Liqueurs, Cordials

• The science of distillation was still at its beginning in Europe there was a movement steeping certain medicinal herbs and alcohol extracted their beneficial qualities this was a very logical progression of the nonalcoholic distilling of essential oils which is practiced its ancient Egypt in classical Greece. Distilling as an offshoot of alchemical arts was attached with the doomed enterprise of attempting to turn metals into gold. Many of the religious orders of the time created traditional liqueurs with medicinal ingredients often with monastery gardens but a late Middle Ages most this the Italians had created of many liquerus and the French made Benedictine and chartreuse
History of Liqueurs, Cordials

• I liqueurs of the last century had an air of soothing palatability often used as dinner digesting's often with women who are not fond of the stronger alcoholic alternatives.

• many these liqueurs were indeed seen as more ladylike drinks enhanced by the induction of small tiny glasses.

• they started shedding their health claims and started producing them more for flavors and alcoholic effects
History of Liqueurs, Cordials

• The important cocktail air of the 1920s and 1930s coincided with their universal prohibition of alcohol United States but there was no such problem in London Berlin Paris.

• They were freed from the strait jacket of cultural politeness and liqueurs stoked a transformation of drinks such as punches and sours and fizzes this brought into the great cocktail in the couldn't happened without the homemade liqueurs and drinks.

• We are essentially rediscovering the medicinal aspect of the original creators of the elixirs and Cordials. Bringing back the beauty the mystery and the medicine. This is what I call herbal mixology
Common Liqueurs, Cordials Available

• There are many types of commercially available liquors that are generally flavored by many things including fruits, nut liqueurs, medicinal herb liqueurs, the cream liqueurs and a few other famous drinks.

• But the beauty of the liqueur is actually with the home herbalist and farmer creating unique fresh vibrant ideas with locally sourced ingredients made fresh that's what we were going to cover today.
Famously Know Liqueurs

• **AMARETTO**: Almond flavor liqueur, made with sweet Apricot pits
• **Anis or Anissette**: a sweet liqueur from anise seed
• **Benedictine**: A Bright golden herbalists pantheon of plants and spices potentially containing 75 ingredients
• **Chartreuse**: the greener the yellow variety rated Italy and Switzerland up to 130 herbs used to flavor grape brandy
• **Cream Liqueurs**: Bailey's Irish cream cream, Cream de cacao, Cream de menthe and Cream de Cacao or Kahlua.
• **Kummel**: or Caraway seed digestiff.
Famously Know Liqueurs

• The famous nut liqueurs: derived from hazelnuts walnuts almonds. Frangelico, Nocino are couple examples.
• Herbal Liqueurs are the famous Pernod, Absinthe which will talk about into detail
• Ouso: Which is a strong form of aniseed which will form of white precipitate
• Sambuca: Made in Italy it is quite popular is made from the flowers of elderberry goes really well almonds lemons and citrus
The Famous Damiana Liqueur from Mexico

Is thought off to be a famous invigorating Aphrodisiac. Is used for strengthening the nervous system and people are tired in tired and depressed comes in a seductive feminine bottle.

Made with Turnea diffusa a wild growing plant in Mexico which is aromatic.
Liqueurs Recipes

• Generally liqueurs are made with taking 40% alcohol like five to infusing herbal flavors straining the Herbs out adding approximately 20% sugar staring dissolving and filtering
The Green Fairy: *Artemisia absinthium*

Good or Evil?
Sluggish Digestion
Gas
Inactivity
ABSINTHE........ WORMWOOD....CHANGE YOUR WORLD
Insanity, Delusion, Visions
A Bittersweet Medicine
Bringing Balance, Tone, Loss
Choleretic, Anthelmintic, antiparasitic, stomachic, bitter. Stimulates appetite.
Sweet smell contrasts to bitter taste. Bittersweet medicines use to promote balance. Good for integration of physical and emotional levels. Useful for breaking the cycle of destructive behavior.
The Green Fairy

*Artemisia absinthium* (Wormwood)
Common Names

• Wormwood
• The Green Fairy, 
• la fee verte.
• The Green Muse.
• From Greek work “apsinthion” meaning undrinkable.
Related Species:

• There are over 180 species of wormwood.
• Mugwort (Artemisia vulgaris)
• Sagebrush (Artemisia tridentata)
• Moxa (Artemisia moxa)
• Tarragon (Artemisia drancunculus)
Historical Uses of Wormwood

• In the Bible, grew in the Garden of Eden.
• Ebers Papyrus 1550 B.C earliest written use.
• Pliny the Elder noted its use against worms.
• John Gerald 1597 Herbal, noted gastric tonic.
• 18th century use as popular drink Absinthe.
Chemistry of Wormwood

- Volatile Oils: monoterpenes alpha and beta thujone, chamazulene.
- Sesquiterpene lactones (Bitters) including, absinthin and others.
- Acetylenes: In the Root.
- Flavonoids: quercetin and others
- Phenolic Acids: coumaric and vanillic
- Lignans.
History of Absinthe: The Green Fairy

• Traditional bitter medicine
• Dr. Pierre Ordinaire credited with first recipe in 1792.
• Sold to Major Henri Dubied produced commercially in 1797 with son in law Henri Lousi Pernod.
• Pernod-Fils distillery made absinthe famous.
The Ritualistic Use of Absinthe

• One ounce poured in special tall glass
• Slotted spoon with sugar on top.
• Cold water poured over sugar.
• Resulting mixture a cloudy green-yellow color. “la louche”
• Sipped slowly for best enjoyment.
Absinthe drinker by Degas
Toxicology of Wormwood: The Thujone Connection

- Alpha and beta-thujone is a monoterpen found in wormwood, tansy, thuja, and saliva.
- Alpha thujone is more toxic component
- Structurally related to menthol.
- Toxic effects include hallucinations, tremors, convulsions, psychotic behavior and paralysis.
- The toxicity of thujone is related to dose.
- Alcohol may be more toxic than thujone.
- Thujone blocks GABA receptors in Brain.
Poisoning by Wormwood Oil

• Man drank 10 mls of pure wormwood oil thinking it was Absinthe.
• Caused acute renal failure.
• Patient eventually recovers.
• 1999 Journal Neurology , 2 adults, one child develop tonic -clonic seizures from topical application of oil.
Toxic effects of Absinthe

- LD 50 for thujone is 134 mg/kg
- Pendell suggests that a 175 lb man would have to drink 50 bottles to receive toxic dose.
- Typical Absinthe contained 2-4 ppm of Thujone. Current upper limit 10 ppm.
- 1999 BMJ article States Alcohol most toxic part of Absinthe.
Thujone and THC connection

• Historical use of Absinthe affecting consciousness.

• Thujones chemical structure is similar to THC (Tetrahydrocannabinol)

• Thujone may interact with same receptors as THC.*

• There is little research on Thujone and human health.#

*Sneden, A. T. in Introduction to Natural Products, Virginia Commonwealth University, Richmond, Va., 1995, p 81.

Thujone

THC
Traditional Clinical Uses

• Choleretic
• Anthelmintic, antiparasitic
• Stomachic, Bitter
• Stimulates appetite
A Bittersweet Medicine

• Sweet smell contrasts to bitter taste.
• Bittersweet medicines use to promote balance.
• Good for integration of physical and emotional levels.
• Useful for breaking the cycle of destructive behavior.
Wormwoods
Doctrine of Signatures

• Grows on marginal soils to which it brings life and beauty.
• Balances the bitter and sweet in life.
• Survivor plant, makes the best of bad environment.
• Green/Silver leaves, balancing youth and wisdom, growth and death.
Clinical Uses of Wormwood

Digestive Problems
Problems in integration
Bloating, Gas
Lack of Tone,

Balance problems
Emotional
Spiritual
Physical
Wormwood: Keys

- Long history of medicinal use and abuse.
- Used to shift human thoughts.
- Powerful nervine herb that affects consciousness.
- Used to bring emotion and spiritual balance.
- A bittersweet medicine.
Quince: Love Apple

- Quince, *Cydonia oblonga*, is the sole member of the genus *Cydonia* in the family *Rosaceae* (which also contains apples and pears).
History

• Pliny, who speaks at length of the medicinal virtues of the Quince, says that the fruit warded off the influence of the evil eye, and other legends connect it with ancient Greek mythology, as exemplified by statues on which the fruit is represented, as well as by representations in the wall-paintings and mosaics of Pompeii, where Quinces are almost always to be seen in the paws of a bear.

• By the Greeks and Romans, the Quince was held sacred to Venus, who is often depicted with a Quince in her right hand, the gift she received from Paris. The 'golden Apples' of Virgil are said to be Quinces, as they were the only 'golden' fruit known in his time, oranges having only been introduced into Italy at the time of the Crusades.
History

• The fruit, being dedicated to Venus, was regarded as the symbol of Love and Happiness, and Plutarch mentions the bridal custom of a Quince being shared by a married pair. Quinces sent as presents, or shared, were tokens of love. The custom was handed down, and throughout the Middle Ages Quinces were used at every wedding feast, as we may read in a curious book, *The Praise of Musicke*:

• 'I come to marriages, wherein as our ancestors did fondly and with a kind of doating, maintaine many rites and ceremonies, some whereof were either shadowes or abodements of a pleasant life to come, as the eating of a Quince Peare to be a preparative of sweet and delightful dayes between the married persons.'
Review

A review of phytochemistry and bioactivity of quince (Cydonia oblonga Mill.)

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Phytochemicals isolated from quince (Cydonia oblonga Mill.) were reviewed along with their bioactivities tested on animal models and in vitro tests. The review covers the findings from traditional medicines of different nations to the recent investigations and consisted of 52 references.

Key words: Phytochemicals, Cydonia maliformis, Cydonia vulgaris, Pyrus cydonia.
Table 1. Medicinal usages of different parts of quince.

<table>
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<tr>
<th>Effect/s Ailments treated</th>
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<th>Preparation</th>
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<td>Antibacterial, antimicrobial, expectorant, anti-cancer</td>
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<td>Antidiabetic</td>
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<tr>
<td>Antioxidant</td>
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<td>Hydro-ethanolic extract</td>
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<td>Cystitis</td>
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<td>Diarrhea and stomach ulcers</td>
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<td>Drug-induced myocardial necrosis</td>
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<td>Goyal et al., 2010</td>
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<td>Healing on skin lesions</td>
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<td>Haemorrhoids</td>
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<td>Inflammatory bowel disease</td>
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<td>Laxative</td>
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<td>Migraine, nausea, common cold and influenza</td>
<td>Seeds</td>
<td>Steaming the fruits in water</td>
<td>Oral</td>
<td>Hilgert et al., 2001</td>
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<tr>
<td>Pneumonia, hepatitis, antiseptic, phlebitis, skin cracking, haemorrhoids, diarrhoea, cancer, whooping cough, digestive and enteritis</td>
<td>NM</td>
<td>NM</td>
<td>Oral</td>
<td>Sopanwanshan (2010)</td>
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<tr>
<td>Stomach ulcer</td>
<td>Leaves</td>
<td>Oral</td>
<td>Oral</td>
<td>Sanci-Kundali et al., 2011</td>
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</table>

*NM: Not mentioned.
Quince Anti oxidants

![Bar Chart]

**Figure 2.** Hydroxycinnamic acid derivatives and flavan-3-ol contents of quince fruit (Hamauzu et al., 2005).
Vaccinium macrocarpon: Cranberry

- Family: Ericaceae
- Parts used: Fruit
- Habitat: Native to the bogs of N.E. USA and Southern Canada
- Taste: Sour
- Actions: Urinary antibacterial, antioxidant
**Vaccinium macrocarpon: Cranberry**

- Constituents:
- Anthocyanadins
- Proanthocyanadins
- Flavonols
- Organic acids: Citric, Malic, guinic
- Phenolic acids
- Glycoside of organic acid (Benzoic)
- Sugars. 1.1% fructose, 4.3 % glucose, pectins to 6.2%
Vaccinium macrocarpon: Cranberry

• Medicinal Uses
  Prevent UTI’s mild to moderate in young women and elderly.
  Acidify urine and decrease stone formation (speculative)
  Decrease symptoms in chronic pyelonephritis
  Decrease dental plaque
Vaccinium macrocarpon: Cranberry

• Mechanism of Action:
  • Consumption of cranberry juice or tablets lowers urine pH and acids in cranberry providing a bacteriostatic action.
  • Cranberry’s inhibition of bacterial adherence to the bladder is well known.
  • The proanthocyanidins in cranberry are suspected of preventing *E. coli* adhesion.
  • Cranberry proanthocyanidins contain an A-type linkage is believed to be key to this function. Other plant extracts also contain proanthocyanidins, but contain B-type linkages, such as green tea, grape juice and dark chocolate.
Vaccinium macrocarpon: Cranberry

- Cautions
  - May enhance warfarin action
  - High in oxalates, may cause or worsen kidney stones.
  - Generally Safe in Pregnancy
  - Caution as juice may have added sugar
Vaccinium macrocarpon: Cranberry

- **Dosing**
- Juice: 0.5 L/day (pure cranberry juice that is sugar free)
- Capsules 400 mg TID
- Tincture 2-5 ml, TID
- Standardized extract containing
  - 36 mg of cranberry proanthocyanidins (PACs)
Glyconda (Neutralizing Cordial)

- A combination of Rheum palmatum (Turkey Rhubarb), Potassium bicarbonate, Cinnamomum cassia (Cinnamon), Hydrastis canadensis (Goldenseal root), Mentha piperita (Peppermint oil), and vegetable glycerin, alcohol and water.
Glyconda (Neutralizing Cordial)

• “Neutralizing cordial is the very best corrective yet devised for disorders of stomach and bowels” (Harvey Wickes Felter M.D. 1907)

• Traditional Clinical Uses: Stomach upset, dyspepsia, nausea, gas, bloating, diarrhea. Adjunctive to disguise the taste of bitter medicines.

• Dosing Directions: Adults: 1 to 3 teaspoons as needed, Children: ½-1 teaspoon every 30 to 60 minutes as needed. As a Flavoring agent: Mix up to 25% of formula.
Neutralizing Cordial Recipe

- NEUTRALIZING CORDIAL (Modified)
- Rhubarb Tincture 80 ml
- Cinnamon Tincture 64 ml
- Hydrastis Tincture 40 ml
- Spirit of Peppermint 8 ml
- Potassium carbonate 16 grams
- Simple Syrup 250 ml
- Diluted alcohol (50%) 550 ml

Step 1. Dissolve 16 grams of potassium carbonate in 250 ml Simple Syrup
Step 2. Mix the tinctures, spirit and diluted alcohol.
Step 3. Mix both liquids, stirring or blending until KCO3 is dissolved.
Step 4. Add additional diluted alcohol to the total (if necessary) to bring the total volume to 1000 ml.