Mead 101

Bee Friendly Austin Apiary

History of Mead

- Thought to be the oldest alcoholic beverage known to man, the history of mead dates back 20,000 years or more to Africa and flooded hives in tree hollows. The formal production of mead began about 8,000 years ago whereas wine dates back around 6,000 years.
- The availability of agricultural products such as grapes, cane sugar and grains that offered cheaper fermentable sugars brought about the decline of mead making.
- Mead making is enjoying a resurgence. As beekeepers, we have an opportunity to produce and enjoy another product of the hive.

What is Mead?

In the simplest terms, mead is fermented honey and water. Traditional mead is just that but variations have existed through the ages.

- Traditional Mead: About 3 lbs honey per gallon of water, fermented
- Hydromel: A weal or "watered" mead.
- Sack Mead: A stronger (typically sweeter) mead.
- Metheglin: Spiced mead.
- Melomel: A mead made with fruit.
- Cyser: A melomel made with apple juice or cider
- Sparkling Mead: A tricky endeavor.

Basic Ingredients for Brewing Mead

Honey is the first ingredient to consider when making mead.

- The flavor of the final product is dependent on the honey.
- Delicate varieties work well for traditional and fruit meads
- Stronger honeys go well with strong and spiced meads.

Yeast is the next ingredient to consider.

- Yeasts have different characteristics including the % alcohol they produce.
- Yeast needs nitrogen, phosphorus and potassium for growth.

Water is the third basic ingredient

- Use bottled spring water (not distilled) if tap water is questionable.

Basic equipment

- 2 Carboys (fermentation vessels)
- Fermentation lock
- Autosiphon or 7 feet clear plastic 5/16th inch hose
- Sanitizer (No Rinse)
- Large funnel
- Corks and corker –or- caps and capper
- Hydrometer (optional but recommended)
- Wine thief (optional but recommended)

Understanding the Hygrometer

The original gravity (OG) defines the amount of honey in the mixture (must) available to be converted to alcohol.

The final gravity (FG) defines the amount of residual sweetness.

Alcohol By Volume (ABV) = (OG - FG) * 131.25

A must with an OG of 1.1 and FG of 1.0 would have an ABV = 13.125%

- Dry 0.990 – 1.010 FG
- Semi-Sweet 1.010 – 1.025 FG
- Sweet 1.025 – 1.050 FG

Yeast Types

- Wild Yeast (take your chances)
- Bread Yeast (primitive but easy to acquire)
  - Fleishmans 12-14% ABV
- Dry yeast (Popular and used in the majority of recipes)
  - Lalvin EC-1118 or K1V-1116 18%
  - Lavlin D-47 or 71B-1112 14%
- Liquid yeast (Wyeast "Smack packs")
  - Sweet Mead 4184 11% ABV
  - Dry Mead 4632 18% ABV
  - Ale Yeast 1388 12-13% ABV

Understanding Yeast

Yeast have a growth cycle (lag, growth, stationary)

- Happy yeast makes good tasting alcohol
- Stressed yeast create harsh fusels ("rocket fuel") and off tastes – these need to be aged out.
- The lack of nutrients stresses yeast

Processing Guidelines

- Clean and sanitize
- Make the **must** (=honey water mixture)
- Add the yeast or starter
- Ferment until all visual signs of air bubbles disappear.
- Rack (leave sediment behind) two or more times
- Age until clear
- Optional: Back sweeten, stabilize and allow to clear
- Sanitize bottles
- Bottle and seal with cap or cork

JAOM - Joe's Ancient Orange Mead

- JOAM
- 1 gallon batch

  * 3 1/2 lbs honey (will finish sweet)
  * 1 Large orange (later cut in eights or smaller rind and all)
  * 1 small handful of raisins (25 if you count but more or less ok)
  * 1 stick of cinnamon
  * 1 whole clove (I prefer to skip this)
  * 1 teaspoon of bread yeast (I prefer Lalvin 71B-1122)

* Balance water to one gallon

BOMM – Bray's One Month Mead

- The BOMM - 1 gallon
  Get a one gallon jug of spring water - I use Ozarka - make sure it is not distilled!
  Remove 1/2 cup water to compensate for Wyeast 1388 smack pack volume.*
  Draw line on jug at current water level.
  Remove 3.2 cups of water from 1 gallon jug. (757 ml)
  Add honey back to the line. About 2.4 lbs.*SG will be 1.092-1.1.
  Add 1/6 tsp potassium carbonate (Not calcium carbonate!)
  Add 1/4 tsp Diammonium Phospate (DAP) and 1/2 tsp of Fermaid K.*
  -the DAP and Fermaid K will also be added again at 2/3 and 1/3 sugar break.
  (I simplify and add the 2nd once the airlock begins bubbling and the 3rd 24 hrs later).
  Cap and shake until all honey is dissolved - it will take a bit of effort!
  Add activated Wyeast 1388 yeast.*Activated for about 2 hours to overnight.
  Be sure to squeeze every drop out!
  Shake once a day to aerate for the first week. No water in airlock for 7 days.
  Don't forget to monitor the gravity with a hydrometer so that you know when to add the nutrients!

  This mead is good at 24 days (Great with a bit of aging)! Enjoy!

Books on mead making

- Steve Piatz – The Complete Guide to Making Mead
- Ken Schramm – The Compleat Mead Maker

Texas Meaderies

- Rohan Meadery
- Dancing Bee Winery (and mead)
- Meridian Hive Meadery