

# Fining, Filtering and 'Fuging:

A sensory evaluation of two common (and one not-so-common) methods for clarification in mead.

Brian Wing, Owner & Mead Maker  
Green Bench Brewing / Green Bench Mead & Cider - St Pete, FL

# Goals of this session

- Experiment - Hypothesis is still being tested.
- Filtration (any type) is a trade-off for both home and pro
  - Increase meadery efficiency
  - More open tanks per year
  - Shelf stable product
- Less obvious benefits
  - Increased yield
  - Increased extraction
  - More?

# Your job today

- Look, Taste, Smell
- Take notes, rate them, etc
- Interested in differences **BETWEEN** the samples
  - Aroma
  - Mouthfeel
  - Tannin / Acidity / Balance
  - Perceived sweetness
  - Perceived maturity



CLARKS

G.S. Green

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BREWING CO.

WEBB'S CITY  
CELLAR  
1525A 23RD AVE SE  
SEASIDE, FL









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# Batch Details - Rubus

- May 2<sup>nd</sup>
  - 360# Palmetto Honey
  - 300# Raspberry
  - Water to 140 gallons
  - 5 ml Fermcap S
  - 7 ml Pectic Enzyme (Scottzyme Pec5L)
  - 200 g Opti-Red
  - 50 g FT Rouge Berry
  - 30 seconds pure O<sub>2</sub>
  - 280 g SafAle US-05 yeast (350 g Go-ferm)
  - 23.8 Brix (1.100 SG)
  - Staggered nutrient addition
- June 3<sup>rd</sup>
  - 20 g SO<sub>2</sub> / 44g Sorbate
- June 7<sup>th</sup>
  - 100# Raspberry
  - 120# Honey (OB & Palmetto)

# Clarification Methods

- Finings
  - Fermobent Pore-Tec & Sparkolloid
    - Fermobent added day 1
- Lenticular Filter
  - GW Kent 16” 2-Module
  - PALL Supradisc II X100 filter
    - 1-4 micron nominal
- Centrifuge
  - GEA HB-05



GW Kent 16" 2-Module  
Lenticular Filter



# GEA HB-05 Mechanical Separator

# Findings Agents & Time

## Pros

- Low cost of entry
- Minimal intervention
  - Lower labor cost
  - Reduced chance for infection?
- Gentlest method

## Cons

- Time & Tank Space
- Bench trials needed
- Consistency challenges
- Reduced chance for infection?
- Shelf stability?

# Lenticular Filtration

## Pros

- Moderate cost of entry
  - \$5,000 filter
  - \$500 / module
- Sealed / Sterile
- CO<sub>2</sub> purge
- Long filter life
  - 100's of HL potential

## Cons

- Storage maintenance
- Heavy equipment
- Sanitation requirements
  - Steam or (lots of) water
- Backflush & rinsing water requirements



# Centrifuge

## Pros

- Infinite volume capacity
- Consumables
  - Water / CO<sub>2</sub> / Compressed air / Power
- Sealed / Sterile
- CO<sub>2</sub> purge
- Turbidity selection at will
- Greater yield (5-10%)
- Extraction & Maturity?
- No “filter shock” observed

## Cons

- Price
  - \$125,000 all-in
- Service requirements
  - 2,000 hr mark
- Relatively large footprint
- Pressurized tanks ideal





# Results

- Sample #1 – Centrifuge
- Sample #2 – Finings
- Sample #3 – Lenticular Filter

\*\*Added post-presentation\*\*

Informal vote held with the audience and the results of “most desirable overall” below:

- Centrifuge – 28 votes
- Filter – 19 votes
- Finings – 16 votes

Detailed analysis of tasting sheet feedback still underway

# Final Thoughts

- Interested in differences BETWEEN the samples
  - Aroma
  - Mouthfeel
  - Tannin / Acidity / Balance
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