

Intro to Hard Cider

Hacksburg Community Workshop

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Equipment

- ▶ Fermenter
- ▶ Airlock
- ▶ Hydrometer
- ▶ Siphon
- ▶ Bottles
- ▶ Caps/Bottle Cap

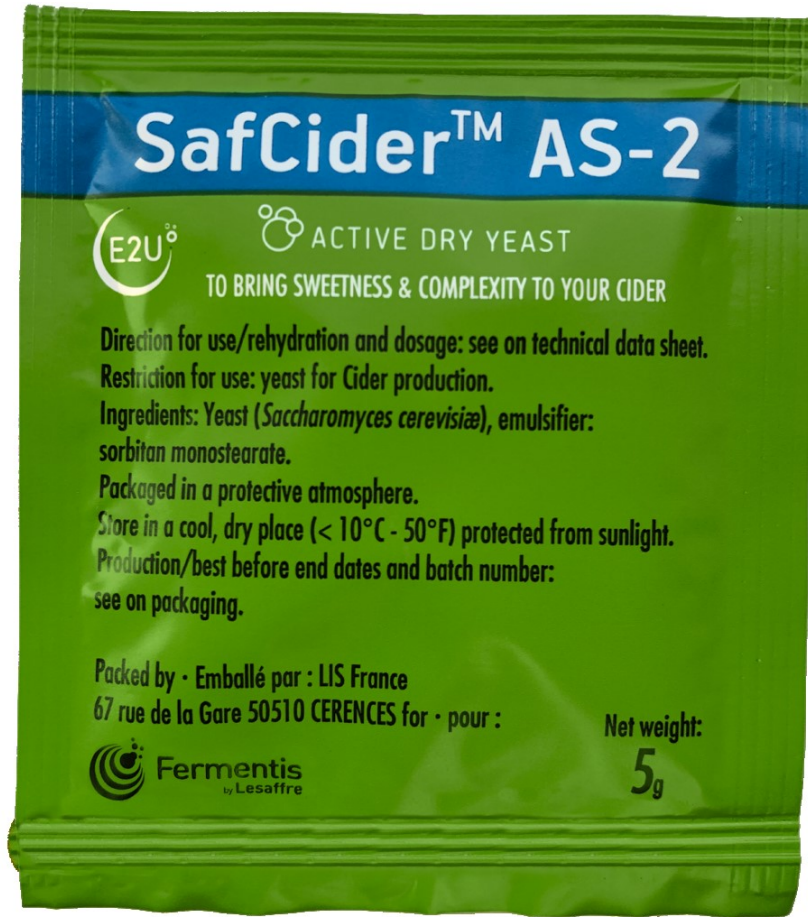


Apple Juice

- ▶ Look for preservative free varieties
 - ▶ Preservatives such as potassium sulfate and sodium benzoate will kill your yeast
- ▶ Pick the least filtered product you can find (cloudy or lots of sediment at the bottom)
 - ▶ Greater depth of flavor
- ▶ Try to find a product made with multiple varieties of apples
- ▶ Frozen concentrate is cheap and often is preservative free



Yeast



- ▶ Just as important as juice
- ▶ Strains for different alcohol levels, sweetness, acidity, etc
- ▶ Available dry and liquids
- ▶ Can use cider specific yeasts but champagne and beer yeasts can also work

Cidermaking Process

1. Clean and sanitize equipment
2. Add juice and yeast
3. Primary Fermentation
4. Secondary Fermentation
5. Stabilizing and Fining
6. Bottling



Clean and sanitize equipment

- ▶ Necessary foundation for making safe, high-quality cider
- ▶ Everything that touches your wine supply needs to be sanitized
- ▶ 2-step process:
 - ▶ first remove materials
 - ▶ second kill germs and bacteria
- ▶ Contaminants can prevent fermentation or cause “off” tastes
- ▶ Bacteria can result in vinegar instead of wine

Add ingredients



Add juice and record specific gravity using hydrometer



Add any flavorings at this time



Ensure that the temperature of the juice is 72° -75° F



Add yeast. Follow all instructions on yeast packet

Hydrometer



- ▶ Measures the specific gravity (density relative to water)
- ▶ Used to measure density of cider
 - ▶ Increased by fermentable sugars and other
 - ▶ During fermentation, yeast eats the sugars, producing alcohol and lowering the density
- ▶ Gives the sugar content of the juice, tracks the progress of fermentation, and measures approximately how much alcohol is the finished cider



Primary Ferment

- ▶ Where most of the sugar gets converted into alcohol
- ▶ Cover the primary fermenter and attach airlock
- ▶ Place in a location with a temperature of 72° -75° F.
- ▶ Fermentation should start within 24-48 hours.
- ▶ Allow to ferment for 5-7 days



Secondary Fermentation

- ▶ Optional step, allows additional yeast to settle out and cider to “clear”
- ▶ Place primary fermenter up at least 3 feet
- ▶ Siphon cider into a clean, sanitized container (racking)
- ▶ Leave the thickest sediment behind
- ▶ Attach airlock
- ▶ Ferment at 72°-75°F for 10 days

Stabilizing and Fining

- ▶ Potassium sorbate is a stabilizing agent
 - ▶ Prevents yeast from multiplying further
- ▶ Metabisulphite is a preservative
 - ▶ Releases sulfur dioxide which kill molds, yeasts, and bacteria
 - ▶ Also prevents oxidizing of wine
- ▶ Isingls is a fining agent
 - ▶ remove organic compounds to improve clarity
 - ▶ Forms a stable sediment that can be discarded
- ▶ Leave at 72° -75° F for 14 days to clear



Bottling

- ▶ Siphon cider into clean, sanitized bottles
- ▶ Use a bottle capper to seal the lids securely
- ▶ Store bottles in a dark, cool, temperature-stable place



Carbonation

- ▶ At this point cider will be “flat” with little to no carbonation
- ▶ Dissolve sugar or honey to boiling water then cool in fridge (priming solution)
 - ▶ General rule of thumb is to add one ounce of priming sugar per gallon of cider
 - ▶ Do not add more honey or priming sugar than your recipe calls for. Excess sugar can cause the bottles to explode.
- ▶ Mix priming solution with cider
 - ▶ Avoid excessive stirring which can expose the cider to excessive oxygen
- ▶ Fill and seal bottles
 - ▶ Make sure the bottle is sealed securely because it can pop off if it is not attached properly
- ▶ Bottle conditioning takes 8 to 16 days
 - ▶ More time will improve both flavors and carbonation
 - ▶ Cider will most likely be at its best around 6 months to a year

Wine

- ▶ Similar process of cleaning, fermenting, racking, and stabilizing
- ▶ For juice look for preservative free varieties
 - ▶ Winemaking juice and concentrates
 - ▶ Store bought juices can be used to make wine
 - ▶ Most red American grape varieties have a “foxy” scent and taste
- ▶ Making your own juice from grapes is more expensive and labor intensive



Resources

- ▶ Blacksburg
 - ▶ Eats Natural Food
- ▶ Roanoke
 - ▶ Southern Hills Homebrew Supply
 - ▶ Blue Ridge Hydroponics & Home Brewing Company
- ▶ Shady Spring, WV
 - ▶ Wills Beekeeping & Homebrewing Supplies
- ▶ Online
 - ▶ Northern Brewer
 - ▶ Midwest Supplies
 - ▶ Bremaster's Warehouse
 - ▶ Rebel Brewer