

BJCP Judges Reception 2008  
**Cider and Perry Workshop**  
Presented by Gary Awdey

## Spiked Samples

Neutral base cider is preferred though most ciders will do.

### **Ethyl Acetate**

Source for spiking: Sigma Aldrich W241407

<50 ppm solution: indistinctly fruity, may be a positive attribute

50-150 ppm: slightly sour, solventy

>150 ppm solution: harsh, sour, reminiscent of nail polish remover at higher concentration

Sample presented is 100ppm.

- A component of vinegar (along with acetic acid)
- Classified as volatile acidity
- Sources:
  - Temporary byproduct of normal fermentation (in moderate levels)
  - A product of acetic acid and ethanol (warning sign of acetification)
  - Directly from *Zymomonas* (bacteria), especially in French cider

### **Diacetyl**

Source for spiking: Sigma Aldrich W237000

Sensed as: buttery, artificial butter flavor, butterscotch flavor, rancid butter

0.2-0.4 ppm may round out flavor in some ciders but there is no consensus on desirability

Greater than that (especially above 1 ppm) it becomes a clear detractor

Sample used is 4 ppm (in the “movie popcorn” range)

- Yeast product at higher temperature
- Product of lactic acid bacteria

### **Acetaldehyde**

Source for spiking: Sigma Aldrich W200301

Sensed as: Grassy taste, raw apple skins, bruised apples, green apples

At higher levels it may be a sign of cider sickness (Framboisé)

- Reminiscent of banana peel or rotten lemon
- Produced from pyruvate intermediate caused by *Zymomonas* infection
  - *Zymomonas* is resistant to SO<sub>2</sub> treatment
  - Stopped by pH less than 3.7 *and* lack of glucose/fructose
  - *Zymomonas* likes warm temperature 25-30 degrees C (77-86 degrees Fahrenheit)

### **Mousiness**

No commercial sources for spiking. An easy way to prepare a mousy stock is to identify a cider that is developing mousiness and store it in a wine bag (available at most homebrew or winemaking supply shops) for several months.

- At near-threshold levels it reminds some people of Cheerios
- At higher levels it reminds people of the bottom of a rodent cage or wet animal fur
- A serious fault in cider when detected
- Ability to detect mousiness varies greatly from person to person
- Potentially a source of significant disagreement between judges
- Attributed to at least three different compounds in cider resulting from lactobacilli

- Source: malate salts, stable at low pH (high acid)
- Volatile at higher pH (reduced acid)
- Volatilizes to various degrees in saliva in the mouth
  - Generally tasted but not smelled
  - Results from fermentation conditions that also favor *Brettanomyces*
- Factors in development of mousiness
  - Oxygenation (poor handling or storage conditions)
  - Low SO<sub>2</sub>
    - Not enough added or
    - No free SO<sub>2</sub> remaining due to being bound by products of excessive amounts of rotten fruit
- Baking soda mouth rinse
  - Temporarily increases sensitivity to mousiness for most people
  - Useful in verifying presence of mousiness during judging (and settling disagreement)
  - No special recipe—just a spoon of baking soda stirred into a glass of water.

## Style Examples Poured

### Common Cider

West County Cider (Colrain, Massachusetts)

Pippin Cider (Apples we buy in the supermarket are uncommon varieties that have been carefully selected for balance of sugar and acidity, crisp texture, color, size, and ability to remain attractive even after prolonged storage; They are clonally propagated; In contrast pippins are seedling apple trees and seldom bear fruit similar to that of their seed parents; Though an acquired taste for eating, they enjoy a reputation for making good fermented cider; This will give you a different view of the service Jonathan Chapman--aka Johnny Appleseed--provided to settlers in the American wilderness.)

5.4% abv

<http://www.westcountycider.com/>

Domaine Du Minot (Quebec)

Méthod Traditionnelle

Cidre Léger Mousseux (Sparkling Light Cider) (An illustration of how bubbles and a French name alone do not make French cider, though it is a fine cider within the context of its own tradition. A clean, delicate cider that lacks the astringency of French cider)

5%

(Available in Ontario at select locations of the LCBO)

### English Cider

Aspall (England)

Organic Draft Cider (This import is available at various locations around the US. It has a fullness and fruitiness that makes it stand out among English ciders, with a freshness that typically suggests backsweetening with fresh juice.)

6.8%

Oliver's (England)

Herefordshire Dry Cider (Tom Oliver is a perennial winner at some of the more prestigious English cider and perry competitions. This cider, barrel aged in oak for eight months, is a nice illustration of still, dry English cider.)

7.5%

<http://www.theolivers.org.uk/page4.html>

Gary Awdey (New York)

Macerated, keeved, still Yarlington Mill (noncommercial, unreleased; I don't normally use my own ciders as style examples but this took Best in Class, Sweet Draught Cider, in blind tasting at the 2008 Putley Cider & Perry Trials in Herefordshire, England and represents the extreme sweet end of the range where there is substantial overlap with characteristics of French cider.

2.5%

Maceration and keeing (defecation) are traditional processes used in French cider production. Maceration means allowing the milled apples to sit for while before pressing. This gives the enzymes present in the fruit additional time to demethylate the pectin into galacturonic acid. Keeing is the enzymatic clarification of the sweet juice prior to fermentation. Calcium salt (calcium chloride or calcium carbonate) is added. The Ca++ attracts and crosslinks the negatively charged galacturonic acid chains into a gelatinous precipitate. Small bubbles of incipient fermentation lift this gel and compact it into a crust known as the brown cap (*chapeau brun*). This process has the benefits of removing many impurities from the must, as well as starving the yeast of critical nutrients (asparagine, thiamin) to permit higher levels of residual sugar. When done with tannic varieties of fruit this also may produce interesting phenolics.

Questions? [Gawdey@att.net](mailto:Gawdey@att.net)

## French Cider

Etienne DuPont (France)

Organic Cidre Bouché Brut de Normandie 2006

4.5%

West County Cider (Colrain, Massachusetts)

Reine de Pomme (Reine de Pomme is a French variety of cider apple. An exciting new development, this is a relatively clean North American equivalent of French Cider. There is a moderate amount of diacetyl in the 2007 vintage, in the subjectively desirable range, but otherwise there are no distractions from the fruit in this cider.)

5.7%

<http://www.westcountycider.com/>

## Common Perry

Blossomwood Cidery (Cedaredge, Colorado)

Laughing Pig Perry (Notoriously difficult to make and delicately flavored, well made perry tastes about as much like fresh, ripe pear as fine wine tastes like fresh, ripe grapes; New perry drinkers and cider judges struggle with this concept, and some perry makers resort to addition of extracts or flavorings or to backsweetening sugar-fortified pear wine with fresh juice in order not to disappoint preconceived notions of what the flavor should be; Cidermaker Shawn Carney takes an uncompromising approach in producing a fine perry that is more akin to a white wine).

5.8%

<http://www.blossomwoodcidery.com>

## Traditional Perry

Oliver's (England)

Herefordshire Dry Perry

7.3%

(Limited 2007 import, still limited availability at Merchant's Fine Wine in Dearborn, MI)  
<http://www.theolivers.org.uk/page4.html>

Oliver's (England)

Blakeney Red Single Varietal Perry (might be omitted from later workshop, depending on time available) (Blakeney Red is a variety widely planted in the late 19th century as a dual-purpose pear, particularly in west and southwest Gloucestershire; It produces a medium acid, medium tannin perry that must be milled at the correct stage of maturity in order to achieve its fullest flavor. It was one out of hundreds of traditional perry pears to make it onto the short list of 54 highlighted varieties following trials at the Long Ashton Research Station in the first half of the 20th century).

5.8%

(Limited 2007 import, still limited availability at Merchant's Fine Wine in Dearborn, MI)

Eric Bordelet (France)

Poiré Granit (Many find this to be of particular interest because the pears are from mature traditional French perry pear trees, some of which are over 200 years old. The perry is delicate, fruity, and the carbonation contrasts it to the English perries).

4%

(Much additional information if you put "Eric Bordelet" into your favorite search engine)

(Available online from K&L Wines)

## Cider Apple Tree Sources

If you're thinking of planting some of your own or know someone who might be interested here's a good place to start your search.

### **Cummins Nursery**

(Fingerlakes Region of NY)

<http://www.cumminsnursery.com/cidervar.htm>

Steve Cummins: Phone (607) 227-6147

### **Big Horse Creek Farms**

(Appalachian Region)

<http://www.bighorsecreekfarm.com>

Big Horse Creek Farm

PO Box 70

Lansing, NC 28643

Email: [Oldapple@bighorsecreekfarm.com](mailto:Oldapple@bighorsecreekfarm.com)

### **Trees of Antiquity**

Mail:

20 Wellsona Road

Paso Robles, CA 93446

Phone: (805) 467-9909

<http://www.treesofantiquity.com/>

### **Vintage Virginia Apples**

Phone: (434) 297-2326

[Fruit@vintagevirginiaapples.com](mailto:Fruit@vintagevirginiaapples.com)

Vintage Virginia Apples

PO Box 210

North Garden, VA 22959