

# Belgian Sour Beers: Style & Brewing

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<https://goo.gl/evfVZJ>



# Quick Introduction

Started brewing in late 80's in Montreal - early attempts were ghastly.

In Halifax in early 90's, joined Brewnosers, went all grain

Became a BJCP beer judge in 1993

Life got in the way - moving, children, other hobbies

Just got back into brewing last summer after 19 yr hiatus

But enough about me...

# Belgian Sour Beer Styles

Flanders Red

Oud Bruin

Lambic

# Origins

Both Red and Oud Bruin are offshoots of the same style, which probably originated as a provision porter - a darker beer aged for long periods.

Lambic is an ancient “farmer’s beer”. Geuze was invented from Lambic in 1870.



# Flanders Red vs Brown

## **Flanders Red**

Reddish to red-brown

Low hop bitterness

Malty, fruity

Tart to sour

## **Oud Bruin (“Old Brown”)**

Reddish brown to brown

Low hop bitterness

Malty, fruity

Tart to sour

# But Seriously...

BJCP Style guide for 17B Flanders Red:

**Commercial Examples:** Rodenbach Klassiek, Rodenbach Grand Cru, Bellegems Bruin, Duchesse de Bourgogne, New Belgium La Folie, **Petrus Oud Bruin**, Southampton Flanders Red Ale, Verhaege Vichtenaar, Monk's Cafe Flanders Red Ale, New Glarus Enigma, Panil Barriquée, Mestreechs Aajt

# So what *is* the difference?

## Flanders Red

Fruiter

Traditionally aged in wood

Fermented with *Saccharomyces*, *Pediococcus*,  
*Lactobacillus* and *Brettanomyces*.

## Oud Bruin (“Old Brown”)

Maltier

Typically aged in steel

Fermented with *Saccharomyces*, and  
*Lactobacillus*

# Examples



# Brewing Specifics

- Belgian brewers are notoriously secretive, and brewers of old ales doubly so...
- Many use traditional (ie antiquated) equipment for fear of changing a parameter or losing one of the wild strains.
- Some are cooled in coolships, exposed to the air for inoculation, others are cooled and pitched with primary cultures, then moved to wood (red ales) or controlled secondary (oud bruins)
- Generally moderate in alcohol (4.5-5.5%), and low in hops (15-25 IBU)
- Aged 1-3 years, finished products may be a blend of old and younger beers

# Brewing at Home

- Water - nothing special, 50-100 ppm calcium.
- Malt - combination of pils or pale and vienna, with specialties such as Caravienne or CaraMunich, aromatic malt, crystal, special B.
- Hops - Hallertau and Saaz are good choices - 1-1.5 oz bittering, ½ oz finishing.
- Yeast - multiple options of yeast strain blends (eg Wyeast 3763 Roeselare Blend, WLP665 Flemish Ale Blend)
- Time. Plus maybe some wood chips.

# Brewing at Home (cont'd)

- Mash - as you will.
- Boil - no more than 2 hours, despite legend and rumour
- Fermentation - either primary with an ale strain and secondary with the blend, or just go for it.
- Ferment  $\sim 20^{\circ}\text{C}$ , age a bit cooler.
- You may need to add fresh yeast for bottling, for higher carb versions use champagne bottles.

# Lambics

The yogurt of the beer world...

# Lambic styles

Vieux Lambic - aged, often very low carbonation

Geuze - blend of old and young, highly carbonated

Faro - low gravity, blended and sweetened

Framboise - with raspberries

Kriek - with sour cherries

Other fruits - peach, grape, bilberry, apple, black currants

# Profile

Lambics are tart to very sour, most are dry and crisp, with varying amounts of *Brett* funk.

Typically highly attenuated (except sweetened Faro, and sweetened pasteurized abominations - I mean examples)

Some, termed *hard lambics*, are quite intensely sour, with very complex funkiness.

Framboise and Kriek fruits add to tartness

There is a legend that lambics do not produce hangovers. I've never consumed that much lambic...

# Examples

Mort Subite (Geuze, Framboise, Kriek)

Cantillon

Boon

Drei Fonteinen



# Lambic - not your standard beer

- Grist is ~ 35% unmalted soft wheat
- Hops are aged in cloth sacks for 2-3 years
- After boiling wort is cooled overnight in coolships in the attic, open to the night air
- Pumped down into wood barrels for primary fermentation.

# Fermentation profile

- May have 80 or more microorganisms (one article said a minimum of 62 were *necessary*).
- First round of fermentation is by enteric bacteria and *Kloeckera*, a spoilage yeast.
- Second round is by *Saccharomyces cerevisiae*, *bayanus* and others.
- Third is *Pediococcus*
- Fourth is *Brett*
- Additional organisms, such as *Candida*, *Pichia*, *Hansenula*, and *Cryptococcus* contribute to pellicle, attenuation, and fruitiness.

# Lambic - still not your standard beer

- The real art of Lambic brewing is in the *blending*.
- Since each barrel has its own microflora, each has its own character
- The lambic brewer will blend different barrels to get the desired balance
- Geuze is a blend of old and young lambic, again selection in blending is important.

# Fruit

Fruit adds a layer of complexity

Raspberry, cherry and grape are traditional

Cherries are sour Schaarbeek (Morello) cherries. NOT sweet cherries.

# Brewing at Home

- Malt bill - 60% pale malt, 35% soft wheat, 5% crystal
- Mash - may be easier if wheat is gelatinized by combining with 10% malt, holding at 158F for 15 minutes, then boiling for ½ hour before adding to main mash.
- Rice hulls may be helpful because of the high wheat content.
- Step at 120F, 140F, 158F
- Pray sparge doesn't stick on the wheat
- Boil 90-120 minutes, using ¾-2oz old stale aged Hallertau hops
- Multiple lambic yeast blends available - which are close enough, even if they don't have 62 separate strains...

# Fermentation

Brett likes wood, so if you don't have barrels, throw in some wood chips or staves

Don't make a starter!

Give it lots of time - at least a year, two is better.

# Fruit

Remember, if using cherries, they must be SOUR cherries!

Use a LOT - typically ~ 8 lb for a 5 gallon batch

Enjoy the fruits of your labour!