

Foam Ranger CEP BREW Class Outline – March 2007

Beer Category – 18 Belgian Strong Ales (the light ones)

- Review style guidelines for 18C, 18D
- Review notes on Belgian Strongs
 - History
 - Ingredients
 - Recipe

Tasting Examples

- Belgian Tripel
 - Chimay Cinq Cents (judge), Westmalle Tripel, Victory Golden Monkey
- Belgian Golden Strong Ale
 - Duvel, Lucifer, Delirium Tremens

Technical Discussion – Parameters that affect ester levels

- Yeast Strain
- Cell Count/Pitch Rate
- Fermentation Temperature
- Wort Oxygenation
- Original Gravity

Beer to Judge – Belgian Golden Strong with esters and solvent

Quiz

Further Reading

Handouts

1. BJCP Style Guidelines, Strong Ales, Category 18
2. Beer of the Month, Scott DeWalt, Brewsletter Urquell, Mar 2007
3. Notes on Belgians, Mike Heniff
4. BJCP Scoresheets
5. Notes on Esters, Mike Heniff
6. Quiz

Notes on Belgian Strong Golden and Tripels (BJCP Category 18)

Style Characteristics - Review BJCP Style Guidelines for 18C, D

History

Belgian Tripel

- Most likely first commercialized by the Drie Linden brewery as Witkap Pater (now “Witkap Tripel”) in 1932
- The monastery Westmalle, released their tripel in 1934 but had been developing their recipe since 1931 (and had a relationship with Drie Linden well before that)
- Likely the term tripel was originated as a descriptor of strength with single, dubbel, and tripel denoting 3, 6, and 9 Belgian degrees (roughly equivalent to strength in % abv)
- Chimay started brewing their tripel (Cinq Cents) in 1966 hoping to compete with Orval, another lighter Trappist beer in the region.

Belgian Strong Golden

- Brewery Moortgat started brewing strong ales just after the first World War in 1923. Reportedly, the brewer exclaimed that “that’s a devil of a beer” and hence received name Duvel, similar to the term for “devil” in Flemish, duivel.
- Jean DeClerk, famous brewing scientist helped Moortgat develop the recipe and used a Scottish yeast strain from McEwan’s.
- In 1970, Moortgat reformulated their strong dark “Duvel” to make it lighter to compete with the increasing popularity of pilsners.

Ingredients

Malts

- Pilsner malt is the base, any European type is appropriate
- Sugar, can be light candi sugar, invert sugar, cane sugar, corn sugar
- Vienna, Munich, and CaraPils can be added to a tripel for malt character but should be restrained and should still be within the color range

Hops

- Typical European varieties such as Hallertauer, Styrian Goldings, Czech Saaz
- Be cautious about being heavy handed on the late additions, most Belgian styles only have a slight hop profile

Spices

- Although typical in many Belgian styles, most tripels and strong golden have no spice additions, if they are used, its character is only slight

Water

- Just about any water will do but acid will be needed to acidify the mash and sparge if the bicarbonate (alkalinity) level is medium or high (above 120 ppm), soft water with little calcium (less than 80 ppm), very low sulfate (less than 50 ppm), and low alkalinity (less than 80 ppm) is optimal

Yeast

- Use of the proper Belgian strain is paramount, suggest starting with the following:
 - Tripel: Westmalle (WLP530/Wyeast 3787) or Chimay (WLP500/Wyeast 1214)

- Strong Golden: Duvel (WLP570/Wyeast 1388) or Chouffe (WLP550/Wyeast 3522)

Recipe

“Devilish” Belgian Strong Golden (batch #121)

Recipe by Michael Heniff

(5 gallons/19 L, all grain)

OG = 1.080, FG = 1.015

IBU = 40, SRM = 3-5, ABV = 8.6%

Ingredients:

14.7 lb (6.7 kg) Belgian Pilsner Malt (1.4 – 1.8 L)

0.35 lb (0.16 kg) CaraPils Malt (6 – 9 L)

1.3 lb (0.6 kg) granulated corn sugar

7.8 AAU German Perle hops (60 min)

(1.0 oz./28 g of 7.8% alpha acids)

2.3 AAU Czech Saaz hops (10 min)

(0.75 oz./21 g of 3.0% alpha acids)

1.5 AAU Czech Saaz hops (0 min)

(0.5 oz./14 g of 3.0% alpha acids)

Wyeast 1388 (Belgian Strong Ale) or White Labs WLP570 (Belgian Golden Ale) Yeast

Step by Step: Mash grains at 150 F (66 C) for 90 minutes. Boil wort for 75 minutes adding hops per scheduled times. Cool wort to room temperature and drain or rack the wort off of the trub. Aerate the cool wort and oxygenate. Ferment at 68 F (19 C) for 10 days in the primary and 2 weeks in the secondary.

Further Reading

- *Brew Like a Monk*, Classic Beer Style Series, Hieronymus
- “Yeast Strains for Belgian Strong Ales”, Brew Your Own, Jan 2007, M. Heniff
- *Great Beers of Belgium*, Michael Jackson
- *The Classic Beers of Belgium*, C. Deglas
- *Radical Brewing*, Randy Mosher

Notes on Belgian Strong Golden and Tripels (BJCP Category 18)

History

Belgian Tripel

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Belgian Strong Golden

- Began at the Moortgat brewery in 1970 where the brewers wanted to brew their strong dark ale lighter to compete with the increasing popularity of pilsners. Reportedly, the brewer exclaimed that “it was a devil of a beer” and hence received then name Duvel, similar to the term for “devil” in Flemish, duivel.
- Jean DeClerk, famous brewing scientist helped Moortgat develop the recipe and supposedly used a Scottish yeast from McEwan’s.

Ingredients

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Foam Ranger CEP BREW Class Quiz – March 2007

Name: _____

BJCP #: _____

1. Name two commercial examples of Belgian Tripels.
2. Name two commercial examples of Belgian Golden Strongs.
3. Name three aromas or flavors associated with esters.
4. What is the most common base malt associated with Tripels and Golden Strongs?
 - a. Pils
 - b. Pale
 - c. Munich
 - d. Crystal
5. Name three aspects with fermenting a Tripel or Golden Strong that can affect ester levels?
6. What was the key flaw in the flawed beer presented?
7. True or False: It is appropriate for a Belgian Golden Strong to have a solventy aroma.
8. Provide two typical flavor/aroma hops for Tripels and Golden Strongs.
9. Does higher fermentation temperature increase or decrease ester levels?
10. What are the primary differences between Tripels and Golden Strongs?