

German Wheat and Rye Beer Smoke-Flavored/Wood-Aged Beer

Dukes of Ale
BJCP Study Course
May 31, 2009
Todd Coffey

German Wheat and Rye Beer

- [15A. Weizen/Weissbier](#)

A traditional wheat-based ale originating in Southern Germany that is a specialty for summer consumption, but generally produced year-round.

- [15B. Dunkelweizen](#)

Old-fashioned Bavarian wheat beer was often dark. In the 1950s and 1960s, wheat beers did not have a youthful image, since most older people drank them for their health-giving qualities. Today, the lighter hefeweizen is more common.

- [15C. Weizenbock](#)

Aventinus, the world's oldest top-fermented wheat doppelbock, was created in 1907 at the Weisse Brauhaus in Munich using the 'Méthode Champenoise' with fresh yeast sediment on the bottom. It was Schneider's creative response to bottom-fermenting doppelbocks that developed a strong following during these times.

- [15D. Roggenbier \(German Rye Beer\)](#)

A specialty beer originally brewed in Regensburg, Bavaria as a more distinctive variant of a dunkelweizen using malted rye instead of malted wheat.

Cat 15: History

- Bavaria in Germany
- Degenberger Clan late 15th Century
Baron Hans Sigmund of Degenberger (feud, no children)
- 1602 Duke Maximilian I: Weissbier declared an exclusive right of the house of Dukes
- Huge public demand in 17th and 18th centuries
- By end of 18th century, Weissbier was unpopular and unprofitable
- By 1808, the Weissbier breweries were all empty
- 1855-1856: Georg Schneider became new tenant for Weisses Brauhaus in Munich
- 1872: Schneider obtained rights to brew Weissbier (end of 250 year reign of Royal brewing)
- 1874-1881: Malt use trippled and Weissbier made a comeback from near extinction!

Cat 15: Style Comparison

The following four pages are from the BJCP exam center page and were created by [Karen Rudloff](mailto:kmaroo@aol.com) <kmaroo@aol.com>.

<http://www.bjcp.org/docs/StylePresentation.pdf>

Cat 15 by the Numbers

Sub-cat	OG	FG	ABV	IBU	SRM
Weizen	1.044 – 1.052	1.010 – 1.014	4.3 – 5.6%	8 – 15	2 – 8
Dunkelweizen	1.044 – 1.056	1.010 – 1.014	4.3 – 5.6%	10 – 18	14 – 23
Weizenbock	1.064 – 1.090	1.015 – 1.022	6.5 – 8.0%	15 – 30	12 – 25
Roggenbier	1.046 – 1.056	1.010 – 1.014	4.5 – 6.0%	10 – 20	14 – 19

Cat 15: Exam Question

Style combos on exam:

1. American Wheat or Rye Beer
Straight (unblended) Lambic
Weizen/Weissbier
2. American Wheat or Rye Beer
Weizen/Weissbier
Roggenbier (German Rye Beer)
3. Straight (unblended) Lambic
Weizen/Weissbier
Witbier

6 points: Describe the aroma, appearance, flavor, and mouthfeel of each sub-style as in the BJCP Style Guidelines.

2 points: Identify at least one aspect of the ingredients (malts, hops, water chemistry) or background information (history, fermentation techniques and conditions, or serving methods) that distinguishes each sub-style.

1 point: For each of the sub-styles, name at least one classic commercial example as listed in the BJCP Style Guidelines.

1 point: Describe the similarities and differences between the three sub-styles.

Cat 15: Exam question

- Identify three distinctly different beer styles that contain wheat as 25% or more of the grist.
- *Beer styles that are variations of each other based on color, strength or other subtle differences do not count as distinctly different for the purposes of this question.*
- For each style provide a statement describing the style, as well as the differences and similarities between the styles by addressing the following topics:

6 points: Describe the aroma, appearance, flavor, and mouthfeel of each sub-style as in the BJCP Style Guidelines.

2 points: Identify at least one aspect of the ingredients (malts, hops, water chemistry) or background information (history, fermentation techniques and conditions, or serving methods) that distinguishes each sub-style.

1 point: For each of the sub-styles, name at least one classic commercial example as listed in the BJCP Style Guidelines.

1 point: Describe the similarities and differences between the three sub-styles.

Weizen (15A), DunkelWeizen (15B), Weizenbock (15C),
American Wheat or Rye (6D), Witbier (16A), Berliner Weisse (17A),
Straight Lambic (17D)

15A: Weizen/WeissBier

Commercial examples:

- **Weihenstephaner Hefeweissbier**
- Schneider Weisse Weizenhell
- Paulaner Hefe-Weizen
- Hacker-Pschorr Weisse
- Plank Bavarian Hefeweizen
- Ayinger Bräu Weisse
- Ettaler Weissbier Hell
- **Franziskaner Hefe-Weisse**
- Andechser Weissbier Hefetrüb
- Kapuziner Weissbier
- Erdinger Weissbier
- Penn Weizen
- Barrelhouse Hocking Hills HefeWeizen
- Eisenbahn Weizenbier

15B: DunkelWeizen

Commercial examples:

- Weihenstephaner Hefeweissbier Dunkel
- **Ayinger Ur-Weisse**
- Franziskaner Dunkel Hefe-Weisse
- Schneider Weisse (Original)
- Ettaler Weissbier Dunkel
- Hacker-Pschorr Weisse Dark
- Tucher Dunkles Hefe Weizen
- Edelweiss Dunkel Weissbier
- Erdinger Weissbier Dunkel
- Kapuziner Weissbier Schwarz

15C: Weizenbock

Commercial examples:

- Schneider Aventinus
- Schneider Aventinus Eisbock
- Plank Bavarian Dunkler Weizenbock
- Plank Bavarian Heller Weizenbock
- AleSmith Weizenbock
- Erdinger Pikantus
- Mahr's Der Weisse Bock
- Victory Moonglow Weizenbock
- High Point Ramstein Winter Wheat
- Capital Weizen Doppelbock
- Eisenbahn Vigorosa

15D: Roggenbier (German Rye Beer)

Commercial examples:

- Paulaner Roggen (formerly Thurn und Taxis, no longer imported into the US)
- Bürgerbräu Wolznacher Roggenbier

Resources:

- <http://www.germanbeerinstitute.com/Roggenbier.html>
- <http://www.maltosefalcons.com/tech/styleseries/roggenbier.php>

Cat 15 Recipe

T14. Provide a complete ALL-GRAIN recipe for a <STYLE>, listing ingredients and their quantities, procedure, and carbonation. Give volume, as well as original and final gravities. Explain how the recipe fits the style's characteristics for aroma, flavor, appearance, mouthfeel, and other significant aspects of the style.

Styles may include:

Belgian Tripel, Oktoberfest, Classic American Pilsner, Doppelbock, American IPA, Bohemian Pilsner, Robust Porter, **Weizen**, German Pilsner, Dry Stout, English Pale Ale

Cat 15A: Weizen Recipe

"Brewing Classic Styles" by Zainasheff & Palmer

Harold-Is-Weizen

OG: 1.050 FG: 1.012 IBU: 13 SRM: 5 ABV: 5.0%

5.6 lbs Continental Pilsener malt

5.6 lbs Wheat malt

Mash at 152F, boil for 90 minutes

13 IBU (0.8oz 4%AA) Hallertau for 60 minutes

Wyeast 3068 Weihenstephan Weizen Yeast

Ferment at 62F

Extract Recipe: Replace all malt with 8.6 lbs Wheat LME

Cat 15B: Dunkelweizen Recipe

"Brewing Classic Styles" by Zainasheff & Palmer

Trigo Oscuro

OG: 1.056 FG: 1.014 IBU: 16 SRM: 16 ABV: 5.6%

2.0 lbs Continental Pilsener malt

6.9 lbs Wheat malt

3.0 lbs Munich malt

6.0 oz Special "B" (120L)

6.0 oz Crystal 40L

2.0 oz Carafa Special II (430L)

Mash at 152F, boil for 90 minutes

16 IBU (1.0oz 4%AA) Hallertau for 60 minutes

Wyeast 3068 Weihenstephan Weizen Yeast

Ferment at 62F

Extract Recipe: Replace Pilsener & Wheat malt with 6.8 lbs Wheat LME, replace Munich malt with 2.2 lbs Munich LME.

Cat 15C: Weizenbock Recipe

"Brewing Classic Styles" by Zainasheff & Palmer

Trick or Treat Bock

OG: 1.081 FG: 1.021 IBU: 23 SRM: 16 ABV: 8.0%

5.0 lbs Continental Pilsener malt

10.0 lbs Dark Wheat malt

2.0 lbs Munich malt

0.5 lbs Special "B" (120L)

0.5 lbs Crystal 40L

0.25 lbs Pale Chocolate (200L)

Mash at 152F, boil for 90 minutes

23 IBU (1.6oz 4%AA) Hallertau for 60 minutes

Wyeast 3068 Weihenstephan Weizen Yeast

Ferment at 62F

Extract Recipe: Replace Pilsener & Dark Wheat malt with 11.0 lbs Wheat LME, replace Munich malt with 1.5 lbs Munich LME.

Cat 15D: Roggenbier Recipe

"Brewing Classic Styles" by Zainasheff & Palmer

J.C's Roggenbier

OG: 1.054 FG: 1.014 IBU: 17 SRM: 15 ABV: 5.3%

3.5 lbs Munich malt

6.25 lbs Rye malt

3.0 lbs Pilsener malt

1.0 lbs CaraMunih (60L)

2.0 oz Carafa Special II (430L)

Mash at 154F, boil for 90 minutes

16 IBU (1.0oz 4%AA) Tettnang for 60 minutes

1 IBU (0.3oz 3.5%AA) Czech Saaz for 15 minutes

Wyeast 3068 Weihenstephan Weizen Yeast

Ferment at 62F

Extract Recipe: Replace Munich malt with 2.6 lbs Munich LME.

Smoke-Flavored/Wood-Aged Beer

- [22A. Classic Rauchbier](#)

A historical specialty of the city of Bamberg, in the Franconian region of Bavaria in Germany. Beechwood-smoked malt is used to make a Märzen-style amber lager. The smoke character of the malt varies by maltster; some breweries produce their own smoked malt (rauchmalz).

- [22B. Other Smoked Beer](#)

The process of using smoked malts more recently has been adapted by craft brewers to other styles, notably porter and strong Scotch ales. German brewers have traditionally used smoked malts in bock, doppelbock, weizen, dunkel, schwarzbier, helles, Pilsner, and other specialty styles.

- [22C. Wood-Aged Beer](#)

A traditional production method that is rarely used by major breweries, and usually only with specialty products. Becoming more popular with modern American craft breweries looking for new, distinctive products. Oak cask and barrels are traditional, although other woods can be used.

Cat 22: History

- Ancient History!
- Beginnings of malting & kilning required heating the malted grains, and fires were the only option, hence smoke
- Smoke was generally considered a flaw
- Much effort devoted to kilning without too much smoke
- Dawn of Industrial Age: Brewers & Maltsters became separate crafts
- Coke used for kilning
- By 1820 almost all smoke was gone from beer
- Hydrometer invention pushed smokey brown malts to extinction in favor of pale malt's higher extract

22A: Classic Rauchbier

Commercial examples:

- Schlenkerla Rauchbier Märzen
- Kaiserdom Rauchbier
- Eisenbahn Rauchbier
- Victory Scarlet Fire Rauchbier
- Spezial Rauchbier Märzen
- Saranac Rauchbier

Cat 22A: Rauchbier Recipe

"Brewing Classic Styles" by Zainasheff & Palmer

Rauch Me Gently

OG: 1.056 FG: 1.014 IBU: 27 SRM: 16 ABV: 5.6%

5.6 lbs Continental Pilsener malt

4.5 lbs German beechwood-smoked rauch malt

1.75 lbs Munich malt

0.75 lbs CaraMunich (60L)

0.25 lbs Melanoidin (28L)

2.0 oz Black Malt (600L)

Mash at 154F, boil for 90 minutes

24 IBU (1.5oz 4%AA) Hallertau for 60 minutes

8 IBU (0.5oz 4%AA) Hallertau for 10 minutes

Wyeast 2124 Bohemian Lager Yeast

Ferment at 50F

22B Other Smoked Beer

Commercial examples:

- Alaskan Smoked Porter
- O'Fallons Smoked Porter
- Spezial Lagerbier
- Weissbier and Bockbier
- **Stone Smoked Porter**
- Schlenkerla Weizen Rauchbier and Ur-Bock Rauchbier
- Rogue Smoke
- Oskar Blues Old Chub
- Left Hand Smoke Jumper
- Dark Horse Fore Smoked Stout
- Magic Hat Jinx

22C: Wood-Aged Beer

Commercial examples:

- The Lost Abbey Angel's Share Ale
- J.W. Lees Harvest Ale in Port, Sherry, Lagavulin Whisky or Calvados Casks
- Bush Prestige
- Petrus Aged Pale
- Firestone Walker Double Barrel Ale
- Dominion Oak Barrel Stout
- New Holland Dragons Milk
- **Great Divide Oak Aged Yeti Imperial Stout**
- **Goose Island Bourbon County Stout**
- Le Coq Imperial Extra Double Stout
- Harviestoun Old Engine Oil Special Reserve
- Many microbreweries have specialty beers served only on premises often directly from the cask

Wood-aged beer

References:

- <http://hbd.org/mbas/saltydog/woodaged.jpg>
- <http://greatbrewers.com/style/wood-aged-beer>
- <http://www.byo.com/stories/techniques/article/indices/19-brewing-tips/1353-reusing-yeast-and-sherry-notes-mr-wizard>