

## Barrel Aged

- In Lambic breweries, barrels rarely are placed against each other. This prevents \_\_\_\_\_.
  - Barrel breakage
  - Barrel to barrel confusion
  - Leakage
  - Microflora migration
  - All the above
- True**/ False, In Germany you can still find beers dispensed from wooden casks.
- Name three cities in Germany where the dispense is still popular and highly traditional.
  - Not judging relevant
- What annual maintenance is done to wood barrels and why will it meet it's eventual demise?
  - Cleaning/ labor intensive
  - Cleaning/ Cost
  - Repitching/ Labor instensive
  - Repitching/ Cost
- Which of these are *NOT* an effect that hemicelluloses have on barrel aged beer?
  - Wood sugar (body)
  - Carmelization products (food for brettanomyces)
  - Color
  - Alcohol content
- Which of these are *NOT* an effect that lignin has on barrel aged beer?
  - Color; increase in blended complexity
  - Production of vanilla
  - Promotion of oxidation products.
  - All are effects
- What is a nutrient source for brettanomyces in seasoned and toasted oat barrels?
  - Tannins
  - Cellobiose
  - Polypeptides
  - Organic phosphates
- Which of these flavor groups are oak-derived?
  - Hemicellulose
  - Lignin

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- c. Tannins
  - d. Lipids
  - e. All are oak flavor groups
9. When using a wine barrel, what is the most important question to ask?
- a. What type of oak?
  - b. What level of toast?
  - c. What was the prior use?
  - d. When was the barrel last used?
  - e. All the above
10. True/ False When re-using a charred barrel, the difficulty in sanitizing the barrel is of *great* importance in the consideration in its use.
11. True/ False. Oak chips are a *poor* substitute for new oak barrels.
12. True/ False The majority of microbial contact for lambic wort is provided through contact through the resident bacterial in barrels and *NOT* through open air inoculation.
13. What is the best way to get good spirit character during the aging process from your barrel without fortifying?
- a. Allow barrel to warm up and NOT cool down
  - b. Allow barrel to cool down and NOT warm up
  - c. Allow barrel to warm and cool down several times.
  - d. None of the above
14. If a barrel aged beer comes off 'hot' or really boozy you can probably assume which?
- a. Beer was fortified with spirit
  - b. Large amount of spirit was soaked into the beer
  - c. Barrel housed lower quality spirits
  - d. All the above
15. True/ False As far as the flavor emphasis of barrel aged beer goes, the major concern is to ensure that the character of the wood comes through in the finished beer more so that the spirit the barrel once held.