



How to Choose the Best Yeast

Brew Your Own by
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As brewers we take great consideration in selecting the ingredients we use for our recipes, because it is the recipe that defines the beer we make. Developing the recipe and deciding which ingredients would work best in a beer is the most creative and rewarding aspect of brewing, and the result is the brewer's signature.

Each brewery's product has a unique character partly from the brewer's signature and recipes, and partly from the house strain of yeast. Choosing a strain of yeast for a particular

beer style is an integral component of recipe formulation, whether you're making the choice for a production brewery or a homebrewery.

The National Collection of Yeast Cultures in the United Kingdom catalogs more than 500 strains of *Saccharomyces cerevisiae*, and this list is not all-inclusive. Choices abound, and the brewer's selection of strain has as great an influence on beer flavor and aroma as any other ingredient.

There are several features to consider in choosing a strain. These include flocculation, fla-

(Continued on page 3)

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Next Meeting: June 15th

Location: Chris Steinkraus's House

6840 N Chestnut Ave

Fresno, CA 93710

Schedule:

10:00 Brewing Demo— Saison

12:00 Club Business

12:30 Style Lecture— American Wheat

1:00 Discussion-Yeast Starters

1:30 Open taps/Father's Day Raffle

Please bring a side dish to share at the potluck and some homebrew or some nice commercial brew to share with the other beer lovers.

May Meeting

Another great meeting at Bencomo's in May! We tried some Anchor Steam for our style of the month, Cal Common. We met Kristi from Das Bierhaus located on Olive in the Tower District. And Tom Pope gave us some great info on Brewing Historical British Beers. Some great beer was shared and lots of good info to help us brew better beer!



(Continued from page 1)

vor and aroma characteristics, production of fermentation byproducts, attenuation, rate of fermentation, style appropriateness and, above all, the brewer's experience with the strain.

Flocculation

Flocculation, a yeast's ability to clump and settle at the end of fermentation, can help determine the clarity of the beer. Flocculation ability is generally classified as low, medium, or high. Many English and American ale strains have medium to high flocculation characteristics. Most lager strains are low to medium flocculators, and hefeweizen yeast and many Belgian strains are low flocculators. If you are brewing a hefeweizen, the obvious choice is a low-flocculating weizen yeast, because some of the yeast should remain in the beer.

Flavor and Aroma

The next factor to consider is the flavor profile. Are you brewing a wit, a German weizen, or an American wheat? Each yeast is unique. You wouldn't expect the clove and banana character in an American wheat, and it would be just as inappropriate not to have that character in a German wheat. Most American ale yeast strains work well in American hefeweizen, but a low flocculator would be the best choice, and there is an American hefeweizen yeast available on the market. The defining character of the style is its turbid appearance and mild fruity esters. The defining character of a German weizen is the clove and banana aroma, and this is what differentiates it from American hefeweizen. The Belgian wit yeast is similar to the German yeast but leaves a crisper, tart character.

These yeast strains are unique in that they are not desirable in a wide range of beer styles — an American hefeweizen yeast usually is



used only for American-style hefeweizens. Many other strains are versatile, and perhaps the most common and versatile are the American ale strains. There are numerous American varieties, a few of which are available for purchase by homebrewers. It has become quite common for homebrewers to collect a pitch from the local brewery, and many breweries

have proprietary strains.

American ale yeast strains generally are medium to high flocculators and leave a clean, slightly fruity finish. Ester profiles vary from strain to strain. The finish tends to be somewhat malty but not quite as malty as most English ale strains. If your pitch comes from a local brewery, ask the brewer about his yeast strains' characteristics and the origin of the yeast. Of course, the best way to determine whether you wish to brew with a yeast strain is to try beers brewed with it.

Other varieties, such as English ale yeast strains, leave a sweeter, maltier profile than the American, but the strains are somewhat interchangeable. An English-style ale can be brewed with an American yeast and vice versa. A stout, for instance, can be brewed with an Irish stout yeast or almost any of the American or English choices. Keep in mind, however, that while each of these may be appropriate for the style, each will produce a different beer. One will be sweeter than the next and accentuate malt more or less, and levels of byproducts such as esters (fruity) and diacetyl (buttery) will differ.

Fermentation Byproducts

Fermentation byproducts are another aspect of flavors and aromas. Byproducts include diacetyl, esters, fusel alcohols (spicy, wine-like), and other products. The advantage of using an English ale yeast when brewing an English style is the maltier profile it produces, but some English strains have the tendency to produce detectable levels of diacetyl. While diacetyl is not necessarily a desirable character, very low but detectable levels are acceptable in many English ales. Some American ale strains are also very prone to diacetyl production. If you wish to brew a beer without this flavor profile, it would be best to select a different yeast.



(Continued on page 6)



2013 “Worthog of the Year” Official Rules

Dear Worthogs:

“Worthog of the Year” (also known as WotY) is an honor bestowed upon an individual who brews the best beers through a single year. To honor this member, a trophy is given to the highest scoring Worthogs to highlight their outstanding brewing skills. Please read below for official rules.

Official Rules

1. Only actively paid members may participate in the competition.
2. The competition consists of brewing 4 different styles of beer between the dates October 31st and the September general meeting.
3. Each contestant must register their beers at <http://sjworthogs.org/woty>
4. Competition entries will **only** be accepted at the general meeting listed below **no later than 12:30 pm**. Beers will be inventoried by the current acting Executive Vice President or any person on the board who will not be participating in the judging.
5. All entries must be submitted in two - 12 oz. or higher bottles with the competitors name clearly printed on them. You may also use the bottle ID generated for you when registering your beer at <http://sjworthogs.org/woty>. Any bottle that does not specify a first and last name will be disqualified.
6. Each candidate may only enter in one beer per style.
7. All entries will be judged by two or more judges based on BJCP guidelines using the official BJCP score sheet (http://www.bjcp.org/docs/SCP_BeerScoreSheet.pdf). Entries that are out of style will be disqualified.
8. Depending on the number of judges, scores will be averaged between the score sheets to determine the value for that particular entry. For example; judge one gives 40 points and judge two gives 42 points. Your official score value for that competition will be 41. The participant with the highest cumulative amount of points at the end of all four competitions will be awarded WotY.
9. The styles for 2013 and their dues days are as follows:
 - a. **Dry Stout (Category 13A)** will be due at the **January** general meeting.
 - b. **Specialty Beers (Category 23)** will be due the **March** general meeting.
 - c. **American Pale Ales (Category 10A)** will be due at the **June** general meeting.
 - d. **Saison (Category 16C)** will be due at the **September** general meeting.
10. The Worthog of the Year winner will be awarded the trophy at the annual Hogtoberfest event.

May the best Worthog win!

Sincerely,

Board of Directors

Worthog of the Year Update

The points as of the 2nd round of beers (Category 23 Specialty Beer) for the top 3:

1. Chris Steinkraus 74.03 points
2. Scott Bailey 71.96 points
3. Matt Humann 68.70 points

We're halfway through the competition and anyone could win it. Be sure to register to enter the next style, Category 10a—American Pale Ale. Entries must be entered through our new competition website, you can register and enter your beer at <http://www.sjworthogs.org/woty/>. Entries must be entered through the website to be judged in the competition. Please bring your entries no later than 12:30 to our June general meeting.



2013 WotY

Category 10A - American Pale Ale

You must register your entry at <http://sjworthogs.org/woty/>

3rd round entries must be presented at the June 2013 club meeting or to any board member prior if you are unable to attend the June 2013 meeting.

See page 4 for rules and more info.

Bencomo's Homebrew Supplies

Bencomo's Homebrew Shop was started in 1991 in Mike's Liquors on north Palm Ave. Julian Bencomo has been brewing since 1988, is a nationally recognized beer judge, and has won numerous awards for his

beers. The shop is located on the northeast corner of Olive and Arthur between Palm and Fruit at . Hours of operation are M-F 10-4; Sat. 9-5 we also take appointments after hours and on Sundays. Bencomo's is a full service shop with great selection of grains, hops, yeasts, extracts and equipment. Homebrewing advice is always just a phone call away. Phone 559-486-3227

Address: 234 W Olive Fresno

News around Town

Have you Heard about Beer Friday?

Every Friday on New Rock 104.1 FM from 4 to 5 pm is Beer Friday. Tune in to hear all about beer related stuff with hosts Ron and the Hammer. Tune in on July 12th to hear our own Sean Wood talk about homebrewing and the Worthogs!

Have you Liked Drink 559 on Facebook yet?

DRINK 559 is a page dedicated to promoting and spotlighting news and accomplishments of breweries, wineries, and distilleries that reside in the 559 area code.

Speaking of local...A new podcast is available that promotes the local beer scene. It's called The Perfect Pour. In fact our fellow Worthog, Tom Caprelian of House of Pendragon Brewing is a guest in episode #12. Go ahead and download it on iTunes or their website at <http://theperfectpour.podbean.com/>.



Turn in your White Labs Vials at the next Meeting...when we get 5000 Chris White will brew with us!



(Continued from page 3)

Degree of Attenuation

Degree of attenuation directly affects the flavor of the final product and is one of the most important factors to consider. Attenuation is the process of sugars in the wort transforming into alcohol and carbon dioxide through fermentation. Knowing a strain's degree of attenuation helps the brewer predict the final gravity of a given beer. One yeast might complete fermentation at 1.010, while another stops at 1.014 given the same wort.

Compare degrees of attenuation among strains. The less attenuative a yeast strain is the higher the final gravity will be and, thus, the more unfermented sugars will remain in the beer. The amount of this residual sweetness in a beer dramatically affects the final flavor.

A brewer needs to know before the brew begins whether the yeast is a poor attenuator or a high attenuator. To produce beers of similar terminal gravities, a brew fermented with a yeast with a low degree of attenuation will have to be mashed cooler than one fermented with a high degree of attenuation.

Attenuation may be listed as low, medium, or high, or it may be represented as a percentage range. For instance a California ale yeast is listed with an attenuation of 73 percent to 80 percent, which is fairly high. An English ale yeast from the same lab is listed as having an attenuation of 63 percent to 70 percent, which is quite a bit lower. Expect a much sweeter, maltier product from the English yeast than the Californian. To brew a beer with the same malty character that the English yeast would produce, the mash temperature would have to be adjusted upward by a few degrees to compensate for the higher fermentation characteristics of the California yeast.

Rate of Fermentation

Rate of fermentation generally does not concern the homebrewer to a great degree but is related to the degree of attenuation. Slower fermenters are generally lower attenuators and produce maltier beers. Fermentation rates of various strains are hard to come by in any

literature available to homebrewers.

It would be nice to know if your beer is going to be ready for that bachelor party next month, but you used a Vienna lager yeast and your batch is chugging along very slowly at a rate of one or two points of gravity a day. Had you known that it was a slow fermenter and low attenuator, you might have chosen another yeast. Now you have two worries. Will the beer be ready on time? And should you have dropped the mash temperature three or four degrees to compensate for a low attenuator so the finished beer won't turn out overly sweet?

Style and Experience

Two remaining factors to consider are the appropriateness for style of a particular strain and the experience of the brewer with that strain. All of the factors described above lead the brewer to determine whether a strain is appropriate or not. If you wish to brew that German hefeweizen, then you must choose a strain with the characteristics expected of the style. The best way to assure that whatever style you brew is as close to the authentic style as possible is to use the yeast suggested for that style, such as a Czech yeast for a Czech pils and an English yeast for an ESB. If you prefer not to use the authentic yeast or if it is unavailable, look for yeast strains with similar characteristics and adjust your brewing processes to compensate for any expected differences.

While reading the literature about a strain is helpful, nothing is more important than the brewer's experience with that yeast. The brewer needs to know the yeast well to be able to predict with confidence what the terminal gravity will be and how the final beer will taste and smell. There is nothing wrong with experimentation for the fun of it and for the learning experience. But when you want to brew a certain style of beer, arm yourself with the information to achieve your goal. Nothing is more rewarding than achieving what you expected because you knew what you were doing.

