Adjuncts

Adjuncts offer a creative avenue for brewers seeking to craft unique beer experiences and flavors that cannot be achieved with traditional ingredients. By incorporating unexpected flavors and textures, adjuncts can evoke memories and spark conversation. However, their use demands careful consideration and skillful execution. While often misunderstood as a recent trend, adjuncts have a rich history across alcoholic beverages.

Popular Adjuncts

1. Vanilla
    a. Impossible to find a substitute for the layer of creaminess and flavor in beer
    b. Extracts usually add a less authentic character
    c. Bigger beer requires more vanilla
        i. ~5-8 ounces of vanilla beans per 5 gallons in pastry stouts.
    d. Varietals matter. Some can exhibit tobacco/earthiness tones that may not be suitable for the style of beer
    e. Processing
        i. Split and cut the beans.
        ii. Soak in a grain spirit (just enough to cover the bean)
        iii. Pour whole tincture into beer
        iv. 1+ week of contact time. Increased contact time does not seem to contribute off flavors.
2. Chocolate
    a. Cholaca – Cacao liquid made for brewing. Makes chocolate pudding in the bottom of your fermenter. Grainy texture.
    b. Cocoa powder – Grainy texture. Even more chocolate pudding in the bottom of your fermenter.
    c. Baker's chocolate – More fat and oil than cacao beans
    d. Cacao beans
        i. Varieties matter. Some can be fruity, soft, earthy, or spicy. Ghana cacao beans have been my preference.
        ii. Roasting brings out chocolatey flavors and gives a deeper, richer taste
            1. 300 degrees for 10-15 minutes
        iii. Can increase perceived bitterness
            1. Decrease IBUs or increase gravity/residual sugars
        iv. Bigger beer requires more cacao beans. Start with ~2 pounds for a 5 gallon batch of a pastry stout.
        v. Leave on beer for 12 hours to 48 hours. Leaving on beer to long can lead to increased astringency and bitterness
    e. Can achieve good chocolate flavor with malt vs nibs. Try combinations of chocolate malt, pale chocolate malt, chocolate rye, and carafa II
3. Cinnamon
    a. There are different varietals. Depends on what you want to achieve. Saigon/Vietnamese and Indonesian cinnamon is my personal favorite. Has less heat and spice and more sweetness

    b. Sticks vs ground
        i. In pastry stout – 2-3 sticks or 0.25 to 0.5 ounce of ground
    c. Can add perceived “heat” to the beer
    d. Leave on beer for too long can extract astringency or bring weird heat/flavors. I never leave for more than 24 hours. Some brewers leave for ~7 days without adverse effects
4. Maple Syrup
    a. Extremely fermentable. May lead to increased attenuation. May need to mash higher or add lactose or maltodextrin for body.
    b. Ensure you buy a syrup without preservatives
    c. Start with around 20 ounces in a 5 gallon batch
    d. Consider use of an extract in conjunction with maple syrup if you want the maple syrup taste to be pronounced.
5. Coconut
    a. Typically use whole flaked in beer
    b. Sweetened coconut adds residual sugar. Typically buy unsweetened for my beer.
    c. Oils cause a loss of head retention
    d. Toasted coconut vs untoasted coconut
        i. Toast at home have oven at 350-400 degrees. Toast 4 minutes, flip, toast another 4 minutes
        ii. Untoasted coconut can give a more sunscreen type flavor.
        iii. Toasted gives a more complex flavor with caramel
        iv. Try using a mix… 1/3 untoasted to 2/3 toasted
    e. How much?
        i. Bigger the beer, the more coconut you need
        ii. Higher the ABV the more fat that is stripped from coconut
        iii. 1 pound per gallon in a pastry stout
    f. 7 days for full extraction. Hard to over extract. Put in muslin with stainless steel ball to keep in beer.
    g. Coconut milk and cream of coconut can add unique texture and flavor
6. Coffee
    a. Variety matters. Fruit forward could be weird. Heavy roast can make astringent and make perceived roast too high in stout.
    b. Can increase pH and may require a pH adjustment.
    c. Increases perceived bitterness. Consider decreasing hops, using less roasted malts, and/or increasing body.
    d. Processing:
        i. I use whole beans and add when beer has been cold crashed. Adding to warm beer increases the risk for extracting green pepper or astringent flavors.
        ii. My strong preference is toward light to medium roasted coffee with traditional flavor profiles
        iii. 2-6 ounces of whole coffee beans
        iv. Maximum extraction is achieved in 16 hours. Max time to steep is 48 hours as oversteeping can increase green pepper, acidity, bitterness, and vegetal off flavors.

7. Fruits
    a. Whole fruit vs puree vs concentrated purees vs dried fruit
        i. Whole fruit – I typically used when processing the fruit myself and going into a sour beer
        ii. Puree and concentrated purees – Puree retains the whole fruit that has been pulped and mashed. Concentrated puree comes from fruit juice that has had the water removed during processing. They are thinner in consistency than purees, have higher sugar, but have 200-250% stronger flavor than purees.
            1. Typically use in clean beers as most that are bought are aseptic.
        iii. Freeze dried fruit retains more of the fruit's flavors than dehydrated fruit. 1 ounce of dried fruit can be equal to 12 to 24 ounces of fresh fruit.
    b. Consider the acidity of the fruit, how much the fruit will affect attenuation, and the ABV of the base beer as adding fruit can affect ABV.
    c. Amount needed to add depends upon whole fruit vs puree vs concentrates
8. Other
    a. Nuts
        i. High fat content that can decrease head retention and affect mouth feel
        ii. PB2/peanut flower – lower fat content.
            1. Hard to separate from beer
            2. Creates a slug of peanut butter in the bottom of your fermenter
        iii. Contact time of 1-2 weeks. Doesn't pull astringency or off flavors
        iv. 0.5 pounds per gallon
        v. Victory, biscuit, and munich malt combinations can help accentuate peanut flavors
        vi. Good time to use an extract
    b. Candy
        i. Hard to work with due to preservatives, difficulty separating from beer, oils
        ii. Add after fermentation has completed due to preservatives
        iii. Make sure to account for increased sweetness
    c. Herbs
        i. Make a tincture and add to beer
        ii. 10 minutes on vodka usually gives you a good idea of flavor and aroma
        iii. Try adding tincture to a cheap beer to see how it presents
    d. Graham crackers
        i. Hard to impart in beer
        ii. Don't put it in your fermenter. Add to mash tun
        iii. Victory malt and honey malt can help with graham cracker flavor
9. Extracts
    a. Can give a "fake" taste
    b. Perfect for accentuating flavors and aromas in conjunction with "the real thing"
    c. Takes a lot of trail and error. You can add more, but you cannot take it out!

Resources:

1. Beanilla – www.beanilla.com – Popular site for buying vanilla

2. Nuts.com – www.nuts.com – Variety of adjuncts including nuts, crushed cookies, crushed candies, dried fruits. Widely utilized by craft breweries
3. Amoretti – www.amoretti.com – Water soluble extracts, concentrated purees. TTB approved and widely utilized by craft breweries
4. Olive Nation – www.olivenation.com – TTB approved extracts. Widely utilized by craft breweries
5. Perfect Purees – www.perfectpuree.com – Frozen purees and concentrated purees.
6. Aseptic fruit Purees – www.asepticfruitpuree – Variety of aseptic purees. Does not require refrigeration. Wide variety of flavors. Comes in a bag that can be easily punctured.
7. Fierce Fruit – www.fiercefruit.com – Variety of aseptic purees. Does not require refrigeration. Wide variety of flavors. Comes in a bag that can be easily punctured.
8. Oregon fruit purees – Variety of aseptic purees. No direct purchasing for homebrew scale size but sold through a variety of homebrew suppliers. Comes in aluminum cans or pouches. Does not require refrigeration.
9. Mostra – www.mostracoffee.com – One of my favorite coffee roasters
10. Onyx – www.onyxcoffeelab.com – One of my favorite coffee roasters
11. Counter Culture – www.counterculturecoffee.com – One of my favorite coffee roasters
12. Modern Times – www.moderntimesmerch.com – One of my favorite coffee roasters