

## Fruit Beers

### 1) BJCP Style Guide

#### a) 29A:

- i) A Harmonious marriage of fruit and beer, but still recognizable as a beer. The fruit character should be evident but in balance with the beer, not so forward as to suggest an artificial product.
- ii) Overall balance is the key to presenting a well-made fruit beer. The fruit should compliment the original style and not overwhelm it.

### 2) Fruit

#### a) There are no rules!

#### b) Think about a fruit, what components make up that fruit?

- i) Sugar
  - (1) How sweet is the fruit?
- ii) Flavor
  - (1) Sometimes hard to separate a fruit's flavor from the sweetness
- iii) Acidity
  - (1) Tart, sharp, prickly sensation
- iv) Water
  - (1) Can water down the beer
- v) Tannins
  - (1) E.g. Grape skins

#### c) Citrus

- i) Orange, Lemon, Lime, Grapefruit, tangerine, kumquat, yuzu
- ii) Usually higher acidity
- iii) Varying sweetness
- iv) Higher water content
- v) Fresh, peel, juiced, zested
- vi) Zest is a great way to get flavor without water and acidity
- vii) Similar flavors to American Hops
- viii) Pairs well with:
  - (1) IPA & Pale ales
  - (2) Wit
  - (3) Saisons

#### d) Stone Fruit

- i) Dark stone fruit: Cherries, plums
  - (1) Sweeter, lower acidity
  - (2) Similar flavors to dark crystal malts
  - (3) Good with dark beers (quads, baltic porters, russian imperial stouts)
  - (4) Good with sours which brightens the flavors
- ii) Light stone fruit: peaches, apricots, nectarines
  - (1) Brighter, some acidity, some sweetness.
  - (2) Similar to some hops and yeast strains
  - (3) Good with lighter beers saisons, sours, wit,

#### e) Berries

- i) Strawberries, raspberries, blackberries, blueberries, cranberries
- ii) Higher water content
- iii) Higher sugar content (? TBD)

- iv) Some fruit more subtle than others (strawberries)
- v) Some are very strong (raspberries)
- vi) Consider using dried fruits for concentrated flavors
- vii) Good in sours, blonds, ipas
- viii) Raspberries can hold up to darker beers: stouts, porters.
- f) Tropical Fruits
  - i) Pineapple, Lychee, dragon fruit, passion fruit, mango, coconut
    - (1) Yes, coconut is technically a drupe which is in the fruit family
  - ii) Similar flavors to hops, so good with IPAs

### 3) Using fruit

#### a) Form

- i) Fresh
- ii) Frozen
- iii) Juiced
  - (1) Concentrated
- iv) Canned
  - (1) In water
  - (2) In heavy syrup
  - (3) Aseptic
    - (a) Oregon Fruit Products
    - (b) Vintners Harvest
- v) Dried
- vi) Zest
- vii) Extract
- viii) Whole
- ix) Diced / chunks
- x) Pureed

#### b) Things to consider:

- i) The more broken down the fruit is, the faster it will contribute flavor and the less you'll need
- ii) The more broken down the fruit is, the more accessible the sugar is to yeast.
- iii) Skins, seeds contribute flavor and tannins
  - (1) This can be good or bad
- iv) Fresh fruit has wild yeast, and bacteria
  - (1) Great source for wild fermentation experiments
- v) However, if you want a clean beer
  - (1) Add on hot side
  - (2) Pasteurize fruit: TBD
  - (3) Use canned
  - (4) Don't worry about it

#### c) How

- i) Mash
  - (1) Cooked flavor
  - (2) Great for fruit that is mushy, stringy, or has lots of seeds (i.e. pumpkin)
- ii) Beginning of boil
  - (1) More of a cooked flavor
- iii) End of boil

- (1) Sterilize
  - (2) Fresh flavor
  - (3) Preserve some aroma
- iv) Fermentation
  - (1) Good for sterile fruits
  - (2) Lots of yeast, so sugar is fermented
  - (3) Possibility of incomplete fruit breakdown: consider non-whole fruit (purees, zest, etc)
  - (4) Fresh flavor
  - (5) Some aroma loss due to outgassing
- v) Secondary
  - (1) Less yeast, so risk of incomplete or very slow fermentation
  - (2) Possibility of incomplete fruit breakdown: consider non-whole fruit (purees, zest, etc)
  - (3) Improved aroma due to less outgassing
- vi) Bottling
  - (1) Great for extracts
  - (2) Easy way to dose and get exactly the flavor you want.
  - (3) Be sure to not add fruit with sugar!
- d) Clarity
  - i) Fruit has pectin which is what makes jellies solid and beer cloudy
  - ii) Fruit has tannins, which causes chill haze
  - iii) This is where you want to pull out all the stops
    - (1) Chill for a few weeks to get things to settle out
    - (2) Irish moss can help reduce protein levels
    - (3) Polycar can help remove tannins
  - iv) Or just accept it, you'll probably get dinged if you submit it for a competition though.
- e) How much?
  - i) Depends on fruit, form, and the beer
  - ii) AHA:
    - (1) Apricots:  $\frac{1}{4}$  to 2 lb/gal
    - (2) Blackberries:  $\frac{1}{2}$  to 4 lb/gal
    - (3) Blueberries:  $\frac{1}{2}$  to 3 lb/gal
    - (4) Sour Cherries:  $\frac{1}{4}$  to 2lb/gal
    - (5) Sweet Cherries:  $\frac{1}{3}$  to 4 lb/gal
    - (6) Citrus:  $\frac{1}{2}$  to 1 lb/gal
    - (7) Currants:  $\frac{1}{3}$  to 1  $\frac{1}{2}$  lb/gal
    - (8) Peaches:  $\frac{1}{2}$  to 5 lb/gal
    - (9) Plums:  $\frac{1}{2}$  to 2 lb/gal
    - (10) Raspberries:  $\frac{1}{4}$  to 2 lb/gal
    - (11) Strawberries:  $\frac{1}{2}$  to 3 lb/gal
- f) Blending is your friend
  - i) Fruit is a bit unpredictable
  - ii) To really dial it in, you need to blend clean beer with fruited beer.
  - iii) The first time I make a beer, I'll split the batch and reserve some for blending. The second time, I'll have a better idea of ratios.
  - iv) Usually I just pull off a gallon just to play with a fruit.

