

YEAST CHARACTERISTICS

Yeast is a fungus that feeds on sugar and nutrients. It is present in the bloom of fruits, nectar of flowers, on grains and seeds, in soil and in the air.

Characteristics for Winemaking/fermentation:

- High alcohol tolerance
- Preserve/enhance bouquet
- Not impart off-flavours
- Settle rapidly to firm deposit after fermentation
- Slow decomposition (autolysis) to avoid musty off-flavours
- Ferment between 50- 80 deg F
- Some resistance to sulphur dioxide
- Long lifecycle
- Rapid respiration rate

Wild yeasts and bakers yeast have low alcohol tolerance, are difficult to clear and autolyse rapidly.

Fermentation Process

Use starter to activate yeast to get fermentation going quickly. Use must, juice or water with sugar, acid and nutrient in warm place (75-80 deg). Sterilise vessel and plug with cotton wool. At the very least, good idea to rehydrate dried yeast.

Initially you want air present to get fermentation going. However alcohol is formed better in the absence of oxygen, which is why air lock needs to be used once the fermentation has got going.

Yeasts are sensitive to heat, acid and light. Too much of any of these will reduce activity or kill yeast. However, some heat and acid are needed. The fermentation process generates some heat itself.

Need nutrient, especially for flower, vegetable or fruit juice wines. Vitamin B1 gives added boost for stuck ferments or high alcohol wines.

Sulphite stuns yeast cells, but will not immediately stop a vigorous ferment. Potassium sorbate kills them, but needs to be used with sulphite to avoid geranium!

Rose Wine Characteristics

- ❑ Good acidity
- ❑ No excessive bitterness/tannins
- ❑ Often med dry, but check schedule
- ❑ Alcohol 10-12%
- ❑ Bouquet – light, fruity and fresh
- ❑ Pink, slight orange/onion skin tints

Commercial examples - dry Tavel through to medium or medium sweet Anjou.

Constructing Recipes

Often best when young. If using an older wine, try topping up with acid.

Fruit Juices are good for making Rose wines. Cranberry or blueberry are particularly good. Use with white grape juice to give vinosity.

Light red fruits give good colour and bouquet such as:

- Raspberries
- Strawberries
- Redcurrants

Don't ferment too long on the pulp – 2-3 days at most.

Elderberries in small quantities are OK – best if just boiled for a few minutes.

Avoid fruit which tends to brown, such as blackberries or apples.

RECIPES

Table Medium Dry Rose - Cranberry/Blueberry/Elderberry

Ingredients: 1 ltr cranberry & blueberry juice
 1 ltr white grape juice
 1/2 ltr apple juice
 10 oz elderberries (boiled 5 mins and use liquid)
 nutrient, pectic enzyme, yeast
 1lb 12 oz sugar

Mix ingredients, with only 1lb sugar initially. Add further 8 oz sugar when initial fermentation has died down. Ferment to dryness, add Campden tablet and leave for a few days before racking. Add a further Campden tablet, some wine stabiliser and the last 4 oz sugar to sweeten to medium dry.

Cranberry Rose Recipe

1 ltr white grape juice
1 ltr red grape juice
2 ltrs cranberry juice (in combination with other fruit e.g. cranberry/raspberry, cranberry blackcurrant etc)
Nutrient, pectic enzyme, 1/2 tsp tartaric acid, yeast
12 oz sugar

Mix all ingredients in demijohn except 1 ltr cranberry juice and 6 oz sugar. After about 5-6 days, add the remaining cranberry juice and sugar. Ferment to dryness, add Campden tablet. After a few days, rack off and add sorbate and Campden. Sweeten to medium dry (s.g. 1.000-1.002) with sugar or grape juice.

Elderberry, Blackcurrant, Raspberry

1 litre white grape juice
1 litre apple juice
8 oz elderberries
2 oz blackcurrants
2 oz raspberries
1lb 6 oz sugar
Yeast, nutrient, pectolase

Get a starter going using the juices and half the sugar. After 2-3 days, place fruit in a bucket, cover with boiling water – mash and allow to cool. Add the starter and ferment on the pulp for 2-3 days to give the wine some colour. Strain off the fruit, add the remaining sugar and ferment to dryness.

Rosé Wine - Dry

8oz fresh or canned Raspberries
1 It Apple Juice
1 ½ Its White Grape Juice
½ It Red Grape Juice
1lb 4oz White Sugar
½ tsp Tartaric Acid
Pectolytic Enzyme and Nutrient
Good quality Wine Yeast

Blend Juices with 12oz of sugar and ferment for 4-5 days. Add Raspberries and ferment on the pulp for 2-3 days. Strain, add the remaining sugar and ferment to dryness.