WHITE WINE PROCEDURES

1 **Crush the grapes** to break the skins. It is not necessary to de-stem them, but it does not hurt if you happen to have a stemmer/crusher. Keep the grapes as cool as possible.

2 **Test for total acidity.** If the acidity is less than .65%, add enough tartaric acid to bring it up to that level.

3 **Test for sugar with your hydrometer.** Correct any deficiencies by adding enough sugar to bring the reading up to 20° brix for most varieties (22° for Sauvignon Blanc and Chardonnay.) If higher than 26° brix, add water to lower it between 22° and 26°.

4 **When these tests and corrections have been completed, the must may be sulfited.** Estimating that you will get roughly a gallon of juice from every 16 lbs. of grapes (varies with the variety), add enough sulfite to give you a sulfur dioxide (SO_2) level between 50 and 120 parts per million (ppm.) Note: The amount needed will depend on the condition of the grapes, with moldy grapes getting the most concentrated dose. Very clean grapes may get by with little or no sulfite.

5 **Stir in** pectic enzyme (pectinase) **at the rate of one ounce to every 200 lbs. of grapes, or use** Lallzyme® Cuvée-Blanc. Place the crushed grapes in a covered container to macerate from 2 to 12 hours. If left to stand longer than 2 hours at this stage, the crushed grapes should be refrigerated.

6 **The grapes are then pressed to separate the juice from the skins.** Funnel the juice into topped up containers, cover, and let stand for approximately 24 hours.

7 **Siphon the clear juice away from the layer of settlings (called "gross lees") into a glass, stainless steel, or oak fermentor which is filled no more than 3/4 full.** (If using FT Blanc Soft Enological Tannin, mix it with the juice during the transfer to the fermentor(s). This is also the time to add Opti-MUM White® Specific Inactivated Yeast if desired.) Yeast should be added, 1g per gallon and a fermentation lock attached to the fermentor. Add nutrients according to the instructions on page 10.

8 **When visible signs of fermentation end, the wine must be racked off the lees,** and placed in topped up storage containers (glass, stainless, or oak). Add sulfite, 30 - 40 ppm. and let stand for a month.

9 **Rack off the lees.** If the wine isn't clearing, fine with Sparkolloid or a Bentonite slurry. Clarity occurs by three months. Sulfite and store full containers in a cool place.

10 **In a couple of months, rack and sulfite the wine again, placing it back in topped up containers.** For oak flavor add oak sticks or cubes. If additional high-quality French oak character would benefit your wine, use Tannin Riche enological finishing tannin.

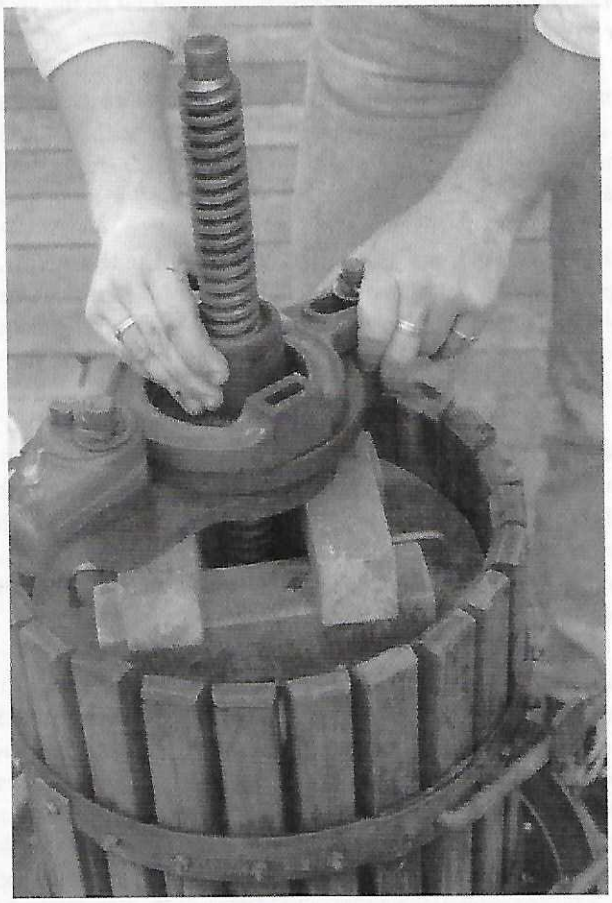
11 **In late Spring, before the onset of very hot weather, carefully rack the wine from the lees.** Test the wine for free sulfite content with a sulfur dioxide test kit to determine how much SO_2 is needed to bring the level to 30-35 parts per million.

12 **Siphon into bottles, cork them, and set them aside for whatever bottle aging is needed.** If you wish to sweeten the wine, do so with simple syrup (two parts sugar to one part water, boiled), and add 1/2 tsp. Sorbistat per gallon to inhibit any remaining yeast. White wines may be enjoyed 6 weeks after bottling.

Time Line for White Wine Fermentation.....

...1 to 2 weeks	...1 month	...2-4 months	In the spring
Active yeast fermentation of juice in primary fermentors about 3/4 full	Rack finished wine to clean fermentors, topped full. Settle out lees. Add sulfite.	Rack off lees and fine or filter. Add sulfite and cold stabilize. Oak additions.	Rack to bottling container, add sulfite, fill and cork bottles.

Fruit Wine Procedures, see next page



Placing the wood blocks and press head into the press before pressing the grapes.

FRUIT WINE PROCEDURES

Use the following procedures for 5 gallons of Berry or Stone Fruit Wines:

Smash sound, ripe berries (or pit stone fruit), tie loosely in a straining bag and place in open top fermentor.

Heat 6 quarts **water with Corn sugar** and bring to a boil. Remove from heat, cool and pour into the fermentor over the fruit.

Add the remaining **water**, **Yeast Nutrient, Pectinase and Tartaric Acid.** Add 5 crushed **Campden Tablets.**

Cover with loose plastic sheet or lid and allow to cool and dissipate the sulfite, waiting for 12 hours or overnight.

Stir in the **Yeast.** Once fermentation begins, **stir or push** the pulp down into the liquid twice a day.

After 5-7 days, strain and press the pulp. Funnel the fermenting wine into closed fermentors, such as glass or plastic carboys, and attach a fermentation lock. *Note: if this fermentation is very active, you may need to divide the wine between two carboys so it won't foam out and spill.*

When bubbles are no longer actively rising through the wine, siphon the wine back together into one full carboy. **Optional: Fine with Sparkolloid see pg.15 for mixing Sparkolloid,** add 3 Campden Tablets and store for four weeks with an airlock.

Rack (siphon) away from the sediment, top full with a neutral wine and leave under airlock for 3 weeks up to 4 months.

For **bottling, rack into an open container**, and add 3 crushed **Campden Tablets.** Sweeten with **sugar syrup** to taste and add 1/2 teaspoon **Sorbistat** per gallon to stabilize. Siphon into bottles, cork, and set aside to age for at least 3 weeks.

Berry, Plum, or Cherry Wine Recipe

20 lbs. Blackberries or
15 lbs Raspberries or
15 lbs. Pitted Plums or
22 lbs Cherries or
15 lbs Sour Cherries
(omit acid addition for sour cherries)
12 lbs. Corn Sugar
4 gallons Water
2 1/2 tsp. Yeast Nutrient
2 1/2 tsp. Pectinase
8 tsp. Tartaric Acid
5 g Epernay II Wine Yeast

Original Brix: 20
Total Acid: .6-.65%

Equipment needed For 5 gallons of Fruit Wine or Cider

1. 6.5 Gallon Food grade Bucket and Lid.
2. Nylon Bag to fit bucket.
3. One 5 gallon glass carboy (water bottle) with a fermentation lock and a #6 1/2 or #7 drilled rubber stopper. Or PET plastic carboy with a #10 drilled rubber stopper and fermentation lock.
4. Racking tube and flexible tubing.
5. Bottle filler
5. Corks or crown caps.
6. Two cases wine or beer bottles.
7. 25 pack of Campden Tablets
8. Corker or Capper

Optional:
1. Hydrometer (Saccharometer) and Test Jar
2. Acid Testing Kit

CIDER PROCEDURES

Crush the apples. Use only sound, fully ripe fruit. *(We rent an electric grinder and press.)*

Stir in **Pectinase** to accelerate break down of the fruit pectins. Use 1/2 oz. per 100-150 lbs. of fruit, with a contact time of 2-4 hrs, to achieve better runoff at press.

Press to separate the juice from the skins and other solids. Funnel the collected juice into closed containers, filled no more than 75% full. Add 5 crushed **Campden Tablets.** Settle the juice and wait for the sulfite to dissipate - 6 hours.

For each 5 gallons of juice, add 1-2 teaspons of **Yeast Food (Fermaid K)**. Stir and add 5-10g of **Yeast.** Attach a fermentation lock, and allow fermentation to proceed.

When visible signs of fermentation end, the cider must be racked off the lees and placed in topped up glass or stainless steel storage containers. Let it stand for a month.

During the racking at the end of fermentation, add sulfite using 3 crushed **Campden Tablets**.

After a month, rack and sulfite again then rack it back into topped up containers. Store for two or three more months.

Carefully rack away from the lees. If your cider is going into extended bottle storage, sulfite by adding 3 crushed **Campden Tablets**. Beverages such as this may often be enjoyed within two months of bottling. If you plan to drink some that soon, don't add additional sulfite to that portion at bottling time.

Siphon into bottles, cork or cap them, and set them aside for whatever bottle aging is needed. If you would rather sweeten the cider at bottling time, the following instructions will apply.

Cider Ingredients

100-150 lbs. Apples
or 5 gallons of juice
1 oz. Pectinase
2 teaspoons Yeast Food
10 g M-2 Yeast
25 pack Campden Tablets

Brix: 10-13
Total Acid: .6-.65%

Sweetening

To sweeten 5 gallons of cider, boil 1 cup of cane sugar with 1/2 cup of water for 5 minutes. Only stir in 1/2 of this and taste before you decide to add the rest. You may like it at this level of sweetness. If not, by all means add more.

You will also add 1/2 tsp. **Sorbistat** per gallon to to stabilize the cider and prevent re-fermentation in the bottles. Force carbonation in a keg is also an option. See our beer catalog for instructions on kegging.