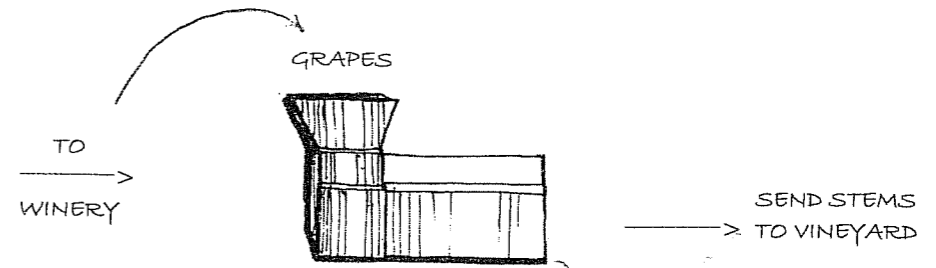
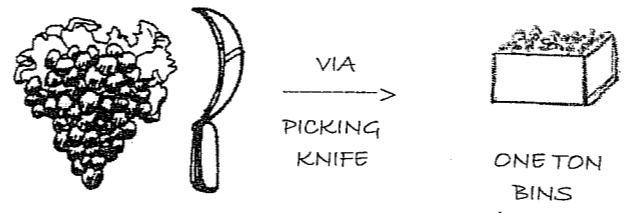


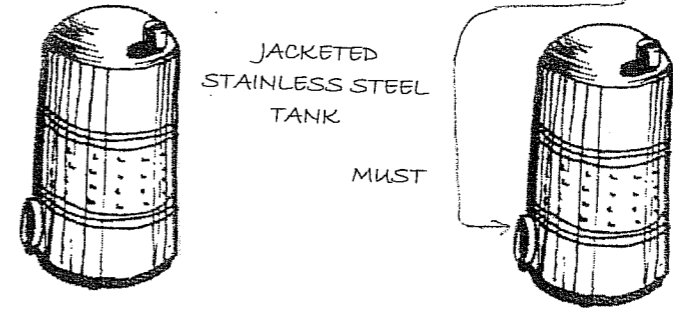
# Cabernet Sauvignon and Cabernet Franc Production

1 CHECK THE STATUS OF VERASION IN THE VINEYARDS IN LATE-JULY. BY AUGUST, BEGIN CHECKING THE SUGAR, ACID AND VINE HEALTH.

2 THE HARVEST IS USUALLY IN OCTOBER. THE IDEAL ANALYSIS: 23° Brix, 0.85 TA and 3.35 pH



3 PUMP THE CRUSHED, DESTEMMED, SULFITED GRAPE (THE "MUST") TO JACKETED (FOR A REFRIGERANT) STAINLESS STEEL TANKS.



ADD 50 ppm SO<sub>2</sub>  
SO<sub>2</sub> or sulfur dioxide is added to prevent oxidation by destroying the 'oxidases' (enzymatic catalysts of oxidation in the grapes) to prevent color deterioration, loss of freshness and premature browning, to inhibit activity of native yeast and bacteria and, to a small degree, extracts color and polyphenols from the skins.

4 HOLD THE MUST IN THE TANK FOR THREE DAYS. THIS IS CALLED "COLD MACERATION" OR "COLD SOAK". TEMPERATURE IS HELD AT 65° F.

5 ADD A 5% SOLUTION OF VIABLE WINE YEAST TO START ALCOHOLIC FERMENTATION. THE YEAST OF CHOICE IS THE LEVULINE BRG STRAIN OF *Saccharomyces cerevisiae var. ellipsoideus*.

TO HELP PREVENT FERMENTATION FROM STARTING, THE MUST MAY BE SPARGED WITH CO<sub>2</sub> TO PREVENT YEAST GROWTH.

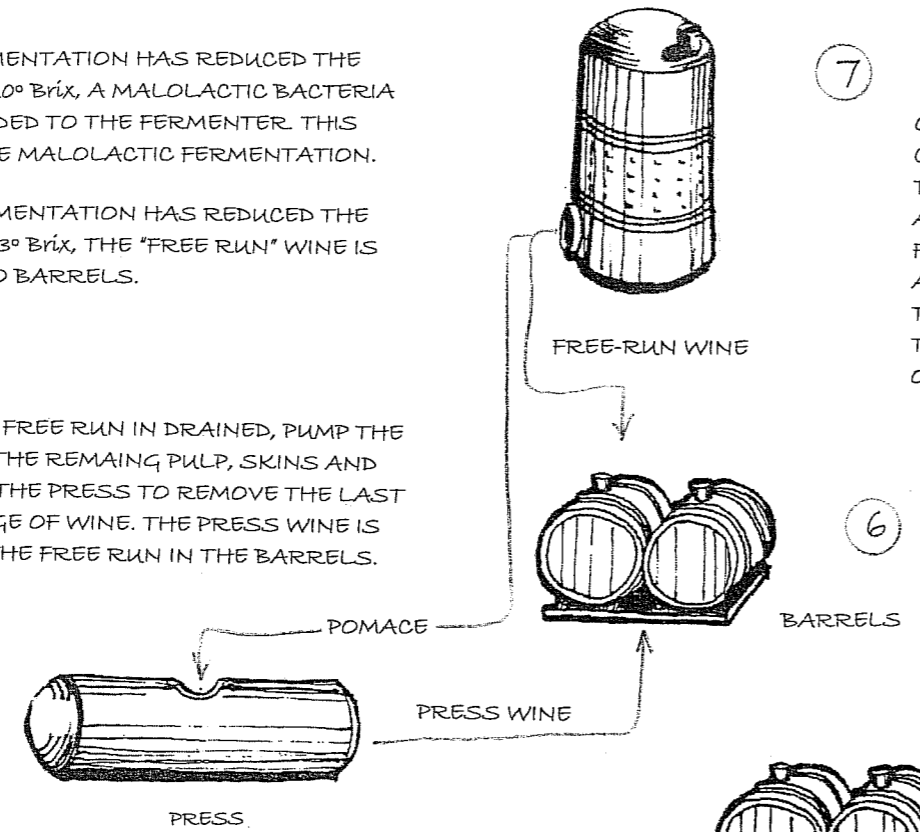
12 THE WINE IS NOT RACKED OFF THE YEAST LEES. KEEPING THE WINE ON THE YEAST LEES IS CALLED SUR LIE. THE WINE IS STIRRED EVERY TWO WEEKS.

SUR LIE AGING GIVES THE WINE A MORE COMPLEX 'VINOUS' BOUQUET, INCREASES THE BODY AND MAKES THE WINE FEEL "SILKY" ON THE PALATE AND SLOWS THE OXIDATIVE AGING OF THE WINE.

8 WHEN FERMENTATION HAS REDUCED THE SURAR TO 10° Brix, A MALOLACTIC BACTERIA WILL BE ADDED TO THE FERMENTER. THIS WILL INDUCE MALOLACTIC FERMENTATION.

9 WHEN FERMENTATION HAS REDUCED THE SURAR TO 3° Brix, THE "FREE RUN" WINE IS DRAINED TO BARRELS.

10 AFTER THE FREE RUN IN DRAINED, PUMP THE "POMACE", THE REMAINQ PULP, SKINS AND SEEDS, TO THE PRESS TO REMOVE THE LAST PERCENTAGE OF WINE. THE PRESS WINE IS ADDED TO THE FREE RUN IN THE BARRELS.



7 ONCE THE FERMENTATION BEGINS, CO<sub>2</sub> IS A BYPRODUCT. THE CO<sub>2</sub> CAUSES THE SKINS, PULP AND SEEDS TO RISE AND FORM A "CAP". TO KEEP THE CAP FROM DRYING AND TO EXTRACT THE AROMAS, COLORS AND TANNINS FROM THE CAP, THE TANK WILL BE MIXED THREE TIMES A DAY BY "PUMPING OVER" OR "PUNCHING DOWN".

6 FERMENTATION WILL BEGIN IN ABOUT 12 HOURS. THE TEMPERATURE WILL BE CONTROLLED AT 75° TO 85° F.

11 MONITOR THE BARRELS DAILY TO CHECK FOR COMPLETION OF ALCOLHOLIC FERMENTATION. ONCE "DRY" (ALL SUGAR FERMENTED), THE BARRELS ARE TOPPED AND THE SO<sub>2</sub> IS ADJUSTED TO 20 ppm. SAMPLES ARE TAKEN FOR THE LAB.

16 THE WINE WILL BE RACKED AT YEARS END. THE BARRELS ARE CLEANED, THE WINES ANALYZED AND TASTED, SO<sub>2</sub> IS ADDED AND THE WINE RETURNED TO BARRELS.

15 AFTER 9 MONTHS OF SUR LIE, THE WINE WILL BE RACKED OFF THE YEAST LEES IN JUNE. THE BARRELS ARE CLEANED, THE WINES ANALYZED AND TASTED, SO<sub>2</sub> IS ADDED AND RETURNED TO BARRELS.

14 THE WINE IS CHECKED FOR COMPLETION OF MALOLACTIC FERMENTATION. THIS USUALLY OCCURS BY SPRING. MALOLACTIC FERMENTATION CONVERTS THE NATURALLY OCCURRING MALIC ACID TO THE SOFTER LACTIC ACID AND ADDS COMPLEXITY TO THE WINE.

13 THE BARRELS ARE FILLED, OR "TOPPED" ONCE A MONTH.

17 AFTER 18 TO 24 MONTHS OF BARREL AGING, THE WINE WILL BE REMOVED FROM BARRELS, TASTED, CHECKED IF FINING IS NEEDED TO REMOVE HARSHNESS (USUALLY WITH EGG WHITES). THE WINE WILL BE GIVEN A LIGHT FILTRATION PRIOR TO BOTTLING.

