

Berry Ripening and Maturity

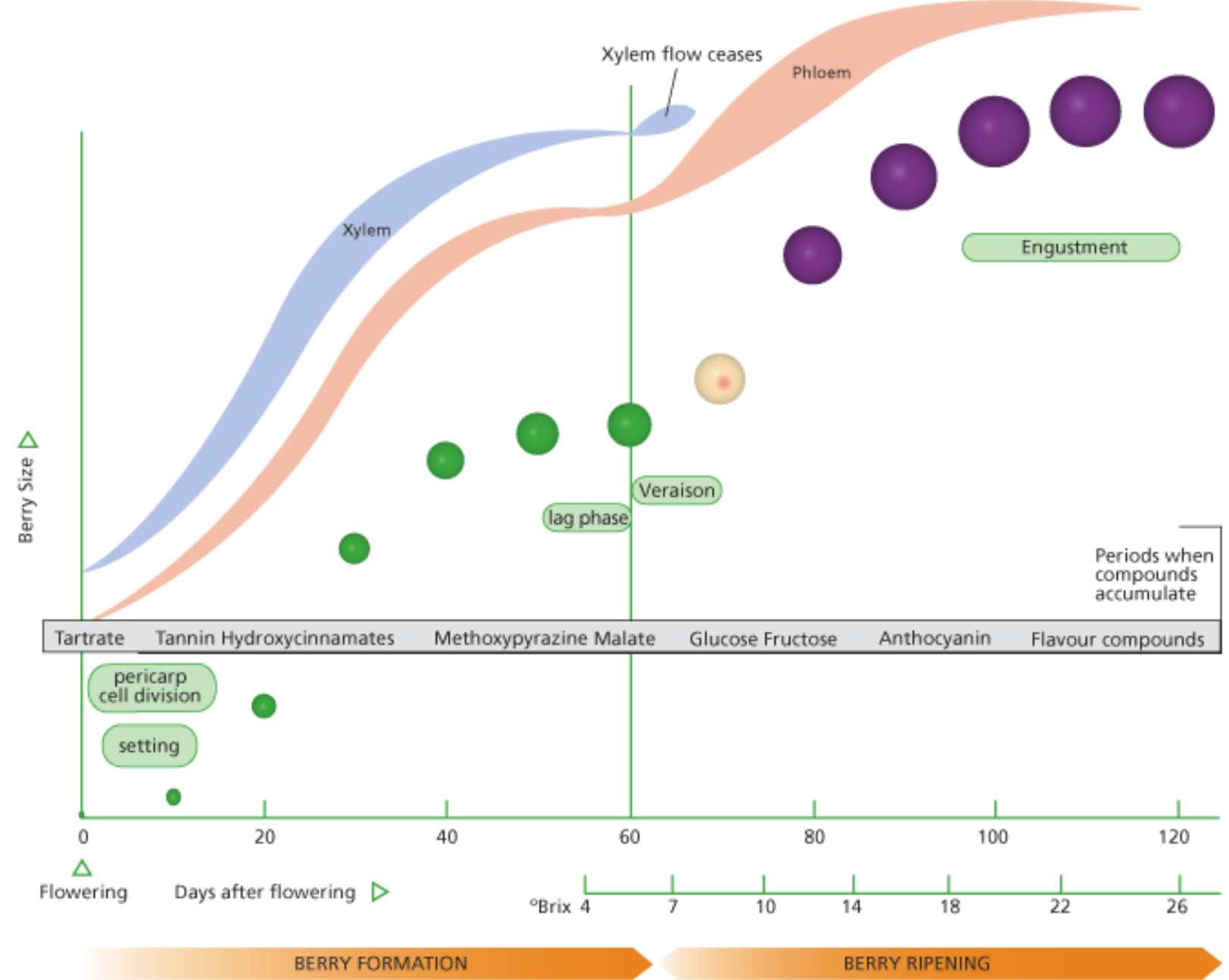


Figure 2: Diagram showing relative size and color of berries at 10-day intervals after flowering, passing through major developmental events (rounded boxes). Also shown are the periods when compounds accumulate, the levels of juice °Brix, and an indication of the rate of inflow of xylem and phloem vascular saps into the berry. Illustration by Jordan Koutroumanidis, Winetitles.

Veraison

- Net around veraison to avoid bird damage and disease
- Watch for bunch rots, spray as needed



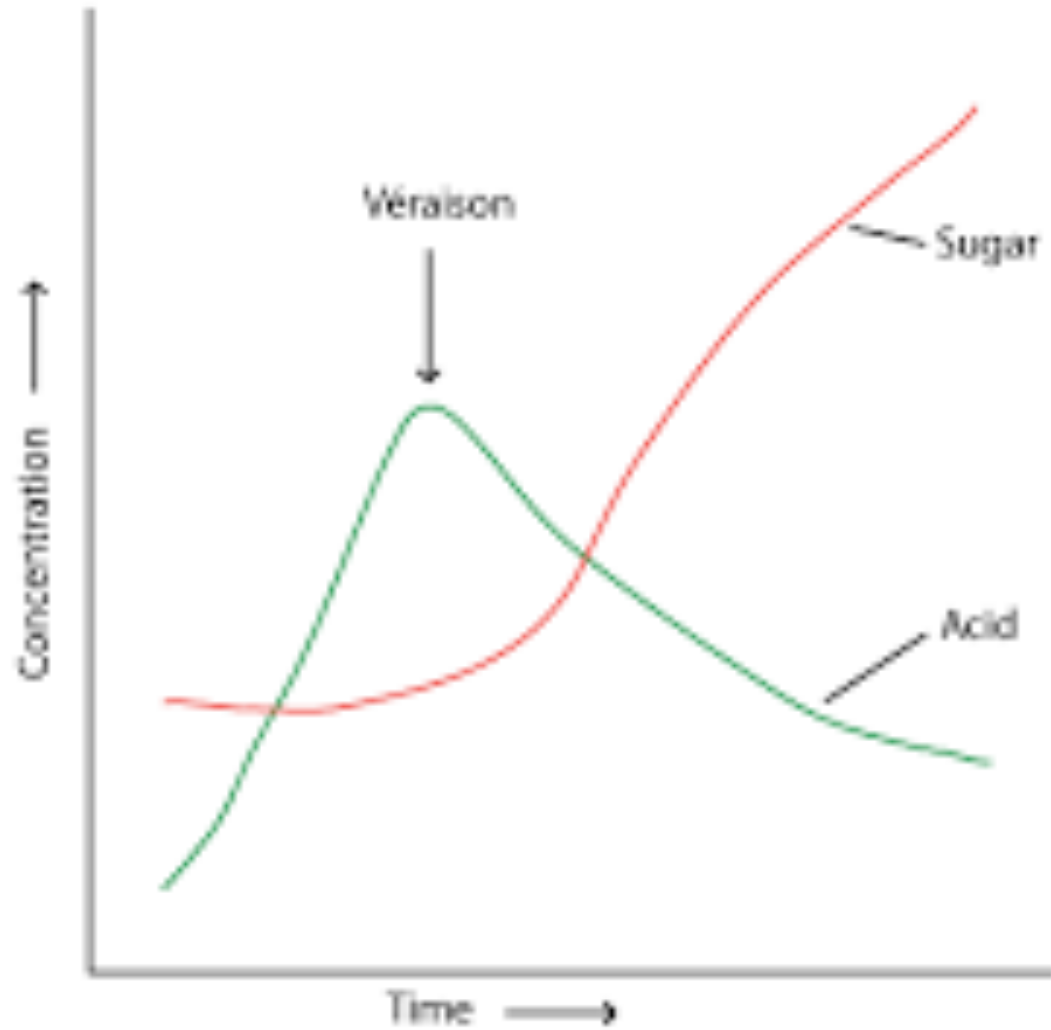
Yield Estimates

Vineyard Yield Estimation

WASHINGTON STATE UNIVERSITY EXTENSION • EM086E



Sugar and Acid Development

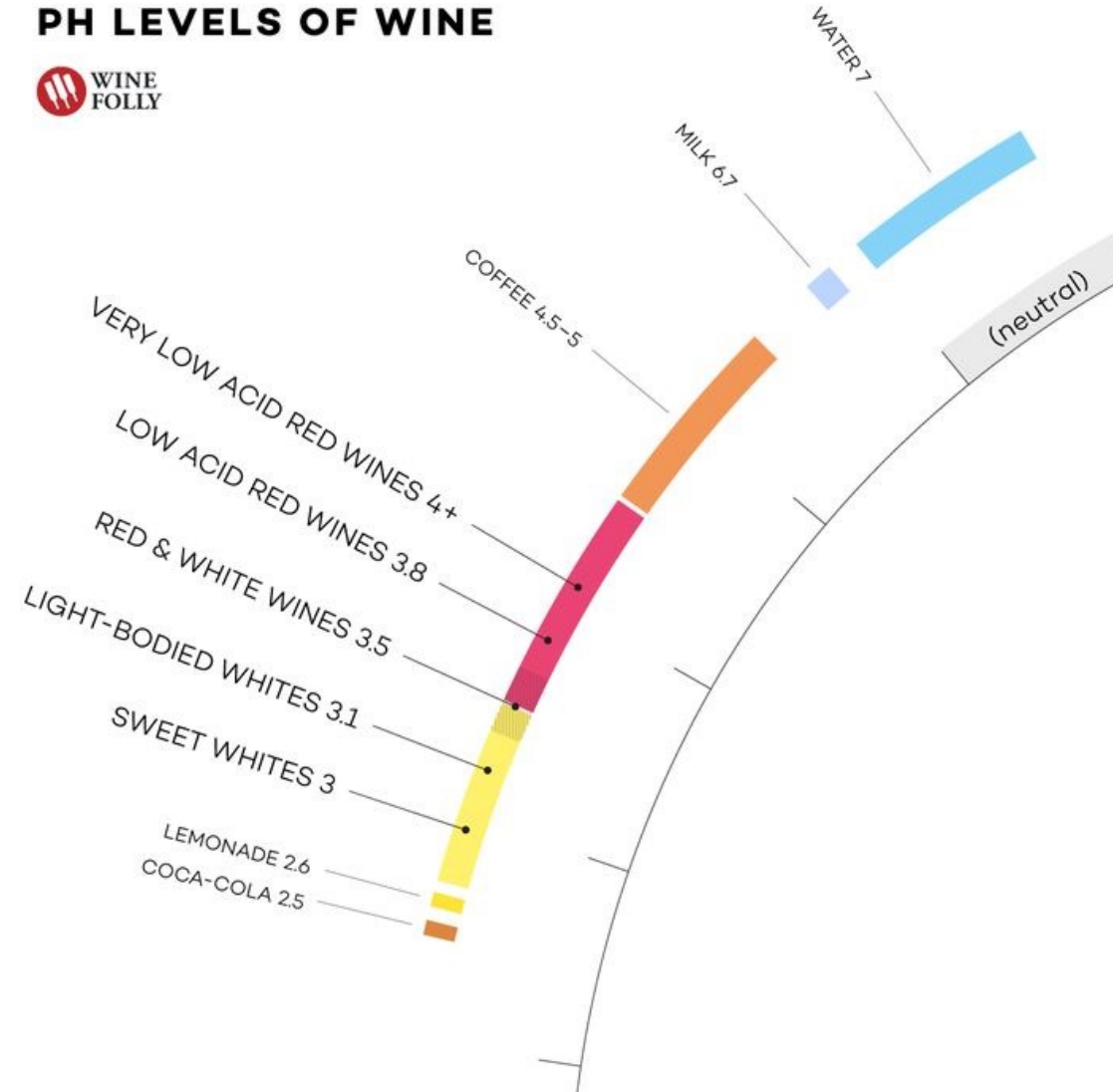


Changes in sugar and acid levels as a grape berry grows

Maturity Sampling and Analysis



PH LEVELS OF WINE





Equipment Check

- Macro bins
- Trailers / tires
- Sampling Bags



Harvest Checklist!
Equipment,
Maintenance, and
Everything in Between



Where to start?

- Facilities
- Equipment maintenance
- Fermentation materials
- Sanitation
- Staff

Facilities (what could shut you down?)



- Electrical
- HVAC
- Glycol Chiller/Heater
- Water

Electrical

- Have an electrician come out and inspect your power. Your circuits that your equipment is powered from.
- Connection plugs and power cords
- Phase Converters
- Generators (hurricane season)
- Better to have a professional look at it before you shock yourself (raise of hands)
- They will be able to check everything for you. Yes, your press is 208V but is that actually going to your machine?



HVAC/Glycol chilling and heating

- What do you have dictating the temperature of your winery and your fermentation/storage tanks?
 - Glycol chillers, Glycol Heaters
 - Fans (glycol)
 - Insulation to hold stable temperature (garage door weather strips)
- Best defense against critical failure is to have a professional come out and service all of this equipment (G&D, PRO).



Equipment Maintenance

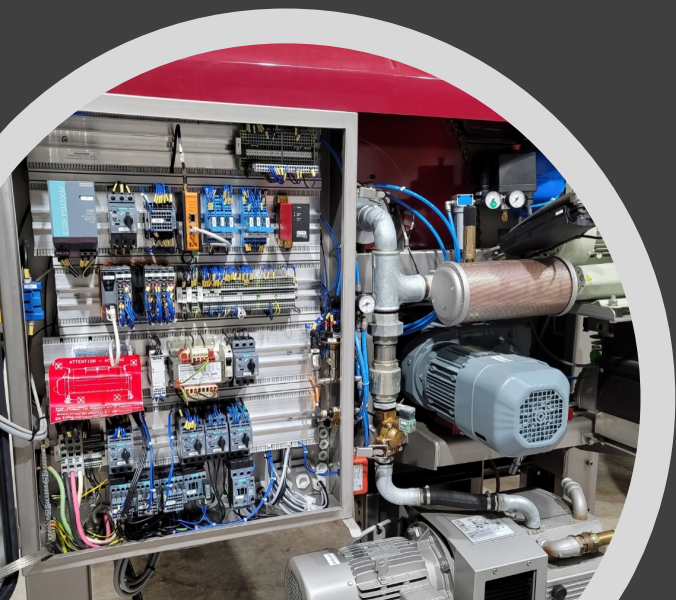


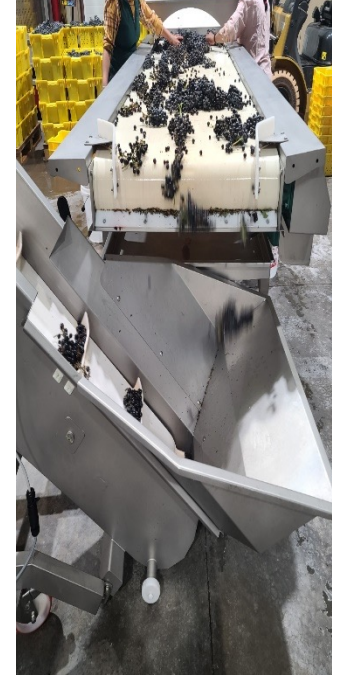
	STP	SPD	PRES	
MENT	1	3	0.22	6
AM	2	3	0.44	6
PROG	0	3	0.88	5
D	0	4	1.32	4
SURE	0.00 bar	5	1.77	4
LATION	0 min	6	2.65	3
LATION	0 s	7	3.53	3
	8	2	4.41	3
	9	0	0.00	0

SEPARATION OF JUICES

Press

- Best protection is to have your manufacturer send a trained technician out to conduct routine maintenance on your press
- If you must do self-maintenance, check hot spots that are likely to fail. Door seals, compressors, bladders, hydraulic leaks for vertical press,
- Plug it up and run it. Look at pressure gauges and listen for hissing or grinding in moving parts





Other equipment

- Sorting tables
- Elevators
- Destemmers
- Pumps
- Forklift



Fermentation materials

- After you have decided on how many tons of fruit are coming in for the new harvest, pick out everything necessary to complete each fermentation that fits your style of wine
 - Yeast
 - MLF bacteria
 - Enzymes
 - Fermentation nutrients

Cellar materials

- Inventory supplies from tri-clamps to KMS
 - Barrels based on new wine coming in
 - Barrel racks
 - Check hoses for damage
 - Make sure you have plenty of gas (argon, nitrogen)
 - Have your floor scale certified and calibrated



Sanitation

- Get everything clean before you bring fruit in
 - Tanks
 - Floors and drains
 - Processing equipment
 - Valves and fittings
- Stock up on cleaning solutions
 - Caustic/alkaline
 - Neutralizer (citric acid)
 - KMS
- Check service for Pressure washer and Ozone generator



Lab

- Have plenty of bags and markers for fruit samples coming in
- Stock up on reagent and buffer solutions
- Check your lab equipment's accuracy by getting them calibrated if need be
- Restock any graduated cylinders and beakers
- Have plenty of pipettes and sample tubes
- Keep a regular inventory to makes things easy



Fin.