

Before We Were So

*Rudely
interrupted*



Today we will look at a few “new things”

Winery supply companies are constantly pushing the envelope for unique ingredients

Yeasts, tannins, barrels, enzymes, closures, etc

They want to provide more tools in the winemakers toolkit to help improve winemaking for wineries, be they high end boutique wineries, or huge operations with wines at every possible price point and style

Today we will look at a few “new things”

We can't look at everything, but we can look at a few exciting options that have now trickled down so that passionate winemakers can continue to shape the wines they make

Today's Big Three:

Tannins in winemaking

Thermaflash technology

Oak and barrel alternatives



Tannins in winemaking

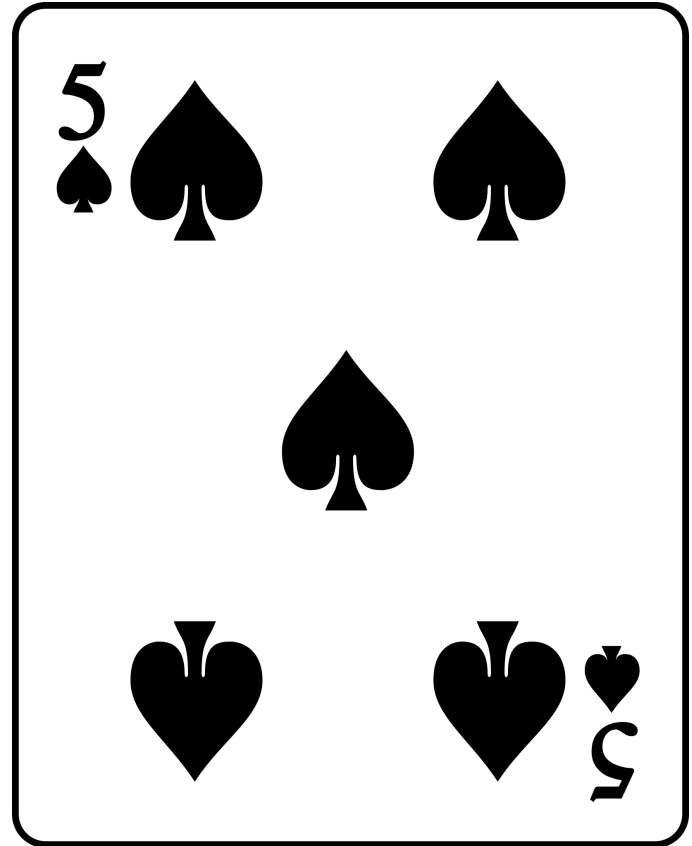
SKINS

SEEDS

STEMS

ADDITIVES

BARRELS/OAK ALTERNATIVES



Tannins in winemaking

Tannin concentration varies by grape variety

Hybrid grapes less than 100 mg/l Pinot noir: 100 mg/l Cab Sauv:1600 mg/l

Available tannins are higher in grapes grown at low tons per acre

Thermaflash reduces seed tannins, while increasing skin tannins

Hot pressed juice/wine concentrate: no seed tannins, low skin tannin extraction, lower overall tannins as grapes are typically overcropped

Stems- thankfully fallen out of favor, as using stems incorporated many “green” flavors along with some tannins

Tannins in winemaking

Tannins are important not just for taste, but for helping bind color in the wine.

Tannins are important because they are a good anti-oxidant (you can maintain freshness in white wines by adding some tannins to the juice, for example, or barrel fermenting)

Tannins bind with proteins, and fall out of the wine during fermentation

Tannins from seeds have high amounts of harsher “grip” tannins

Tannins reduce over the course of winemaking

Orange wines- white wines fermented on skins have a much higher tannin to anthocyanin ratio, so the tannins taste smoother

Tannins in winemaking

Extended maceration increases extraction

Submerged cap extracts more than if cap is just punched down

Higher fermenting temp extracts more tannins

Tannins help colors bind, and provide astringency/dryness

Adding tannins to wine:

“Adding tannin to crushed grapes: both a sacrificial tannin to draw out protein while leaving the grape tannins behind, and also as an antioxidant

Barrel refresh tannins: aids in color stabilisation, provides body and structure to the wine

Skin tannins: tannins extracted from grape skins: overcropped grapes? Cool growing season? Hot pressed juice? Wine kit?

Could you imagine something that did this...

Compared to traditional techniques, the Flash Detente process significantly increases the quantity of extracted dyes, the polyphenols and the polysaccharides. The wines produced have more colour and are fruitier and rounder, with no reduction in the tannin structure.

Without also extracting unripe flavors and harsh tannins from seeds....

And delivering clean grape juice to work with!

Thermaflash...

Optimizes color, phenolic and tannin extraction from skins

Eliminates seed tannins and harsh seed flavors-

Very smooth wines, even young, as time is not needed to soften up harsher tannins

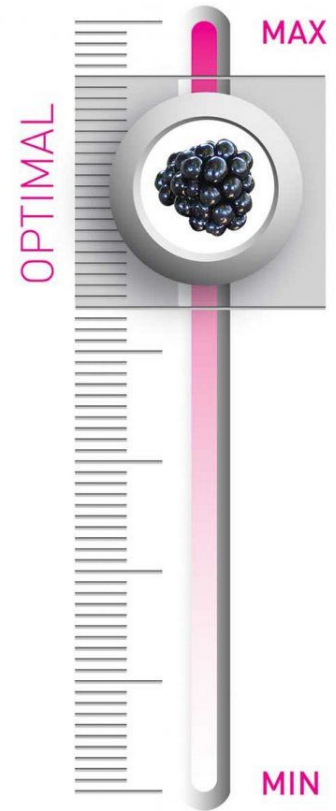
The flip side: if you expect a “grip” from the seed tannins and flavors, you do not get it

Surprise results polutants on grapes (eg from cars driving by a highway vineyard) are blown off

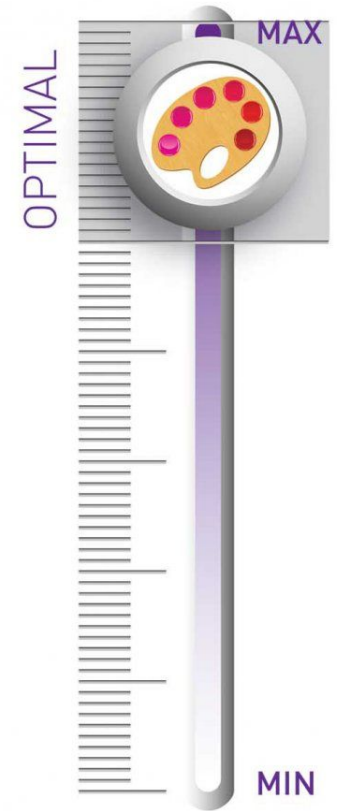
Surprise result: Various “unripe/under-ripe flavors are also eliminated



STRUCTURE



FRUITY



COLOUR



Conventional winemaking on the skins:

Leaves in the skins between 25 and 35% of the phenolic, color, and organic acid compounds

Extracts flavors from the seeds, which can be unripe, even if the grapes themselves measure ripe in terms of color, aroma and flavor to taste, usual seed tannins

Thermaflash allows wineries to

Get the most flavor out of grapes (but does not replace the grower, who must decide yields per acre, trellis options, pruning, when to harvest etc

Get smoother wines to market sooner

**THERMAFLASH DOES NOT MAKE BAD GRAPES GOOD. BUT IT HELPS GET THE
BEST OUT OF THE GRAPES GROWN WHILE ALLOWING FOR A MORE
STREAMLINED PROCESS**

Thermaflash—originally very expensive, but.

Gaining in popularity as wineries “rent out” it’s use to other wineries

Crushpads can handle relatively small amounts of grapes- no longer just huge amounts of tons

Wineries can have lower winemaking costs, plus benefit from wines not needing to be warehoused

Thermaflash reds now available to home winemakers as well

Barrels and oak alternatives

Gone are the days when a barrel or oak chip choice was determined by

American vs French

Toast level

Oak and barrel alternatives



Barrels do many things

Provide tannins to wine , acting as an antioxidant, while stabilising color

Provide micro-oxygenation, and concentration of flavor

Temper the fruitiness of a wine due to the micro-oxygenation

Add notes of flavor and character to the wine

**OTHER THAN MICRO-OXYGENATION, BARRELS CONTRIBUTE LESS AND LESS TO A WINE
AS TANNINS AND FLAVOR COMPOUNDS LEECH OUT**

Volume
Roundness



Freshness
Fruitiness

Toasted
intensity

Structure