



# Jefford On Monday: Not tannin, but texture

[Andrew Jefford](#) October 3, 2016

**Andrew Jefford takes a contextualised look at whole-bunch fermentation...**

image: <http://keyassets.timeincuk.net/inspirewp/live/wp-content/uploads/sites/34/2016/10/Jefford-Barruol-Ste-Cosme-vineyards-2-630x417.jpg>



Château de Saint Cosme vineyards in Gigondas. Credit: Andrew Jefford

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One winemaking topic I'm sure we'll hear more of in the years ahead is the use of stems in red-wine fermentation.

With every new vintage in **Burgundy**, more producers adopt it, at least in part; in many other regions, too, it is becoming a favoured tool of the avant-garde as well as a staple of arch-traditionalists. I ran a workshop on the subject recently in Hong Kong (in conjunction with wine educator J.C. Viens, held at Berry Bros' Hong Kong tasting rooms), which gave me a chance to review the topic; we then tasted a set of wines made with stems against similar examples from destemmed fruit. Here is a brief summary and some tentative conclusions.

## What's a stem made of?

Water, mostly (the exact level depends on the extent of lignification when picked): 50 to 80 per cent. Its principal dry-matter contents are cellulose and hemicellulose (around 50 per cent of the non-water content), followed by lignin, tannins and protein. Stem tannins include catechin,

epicatechin, epicatechin gallate and epigallocatechin, some or all of which are commonly found in both tea and chocolate and which, by the way, are considered to have multiple health benefits.

## Why would a winemaker decide to use stems in his or her red-wine fermentations?

Here are some of the possible reasons.

### **Historical authenticity**

This won't matter to most, but may to some: almost all red wines would once have been whole-bunch fermented. Prior to the nineteenth-century invention of the crusher-destemmer, removing every berry from every bunch would have been dissuasively time-consuming. It can be done with coarse sieves, but even that would have been a rare sophistication.

### **Physical benefits**

Using stems helps create an aerated, free-draining marc, and helps lower fermentation temperatures. It does, though, make the marc harder to press down by hand, and it can't be done at a large scale, or quickly. It also means a greater quantity of press wine, since more juice remains in the berries.

### **Lower alcohol levels**

For three reasons: stems contain water but no sugar; there tends to be a lower conversion of sugar to alcohol in a whole-bunch ferment; and the use of smaller, open-fermenters means some evaporative loss of alcohol. Set against that, though, remember that the fruit for whole-bunch ferments tends to be picked late, in order to ensure maximum stem ripeness, and that may lift alcohol levels.

### **Paler colours**

Stems absorb colour.

### **Lower acidity**

Stems contain potassium, which combines with tartaric acid in the wine and precipitates, reducing the overall acidity level.

### **Tannin?**

I've put a question mark here. It's logical to assume that tannin-rich stems will increase the overall tannin level of a wine, and Rhône consulting oenologist Fabien Ozanne confirmed to me that a whole-bunch ferment will add about 15 per cent to the total polyphenol index of a wine compared to a destemmed wine, given an identical approach to extraction in the two wines. Everything, though, depends on how a fermentation is arranged. Some whole-bunch practitioners, like Dani Landi in Spain's Méntrida, do little other than moisten the cap gently, extracting very little tannin. Even where the fruit and stems are worked, most of the tannin will come from skins, not stems, and is thus principally variety- and site-dependent. The question is a complex one, as our tasting bore out.

image: <https://keyassets.timeincuk.net/inspirewp/live/wp-content/uploads/sites/34/2016/10/jefford-slopes-of-Cornas-3.jpg>



Vineyards on the slopes of Cornas. Credit: Andrew Jefford.

## **Freshness**

Whenever you talk to a whole-bunch practitioner, they nearly always mention ‘freshness’ (and never mention ‘tannin’) as a reason for retaining some or all of the stems. One reason for the growing popularity of whole-bunch fermentations, as my colleague Jane Anson pointed out in her excellent recent piece on the use of whole bunch in Bordeaux, is that this freshness might act as a corrective to the sometimes excessive richness which results from the highest quality contemporary red winemaking. Where does this freshness come from? It’s an intriguing question. Is it connected to the tannin spectrum of stems, or due to their other constituents?

## **Profundity**

More subjectively, many producers feel that whole bunch brings something ‘extra’ to a wine, and I agree with this. That extra, though, is not a flamboyant or showy quality; rather it is a kind of darkness or sobriety of flavour – hence the notion of added profundity. Some would allege that stems intensify the sense of terroir in a wine, in that the sensorial imprint of the stem must (like fruit) reflect, to a greater or lesser extent, the vine’s site. This is possible but unproven.

## **‘Only “ultra-sorting” can avoid sacrificing precision of flavour...’**

image: <https://keyassets.timeincuk.net/inspirewp/live/wp-content/uploads/sites/34/2016/10/Jefford-Louis-Barruol-saint-cosme.jpg>



Louis Barruol of Château de Saint Cosme. Credit: Andrew Jefford.

What’s certain is that the decision to use whole bunch imposes an enormous quality challenge on the producer. Henri Mayer’s celebrated opposition to whole bunch and championing of destemming came at a time when many Burgundian producers carried out whole-bunch fermentations badly using inadequately ripened, unsorted fruit, and the wines smelled and tasted composty, green and impure as a consequence. Those taking on whole-bunch fermentations today are far less cavalier. Louis Barruol of Ch. de Saint Cosme, for example, says that two-thirds of his time at harvest is spent at the sorting table, making sure the bunches are “ultra-sorted”. That is the way to avoid sacrificing precision of flavour while still enjoying the benefits of whole bunch.

In Hong Kong, we tasted six pairs of wines, and in most (though not every) case the whole-bunch exemplar was preferred to its destemmed alternative. If there was a surprise lesson here, it was that with each of these six wines the stems seemed to have brought not tannin, but texture: the palpable counterpart to that profundity or darkness of flavour I mentioned earlier.

## The bunch, the whole bunch and nothing but the bunch.

*The following wines were fermented using 100% whole-bunch fruit save for the Dujac, which was made with 80-90% whole-bunch fruit.*

### **Léon Beyer, Pinot Noir, Comtes d'Eguisheim, Alsace 2009**

You might not guess this was 100% whole bunch: fermentation is rapid, in small vessels, using a submerged cap, which the wine being lifted out for pressing after five days. The result is raspberry and cassis scents and flavours pure enough to satisfy any Jayerist – but a velvety texture, too, to carry the wine with graceful poise. **91 points / 100**

### **Timo Mayer, Pinot Noir, Doktor Mayer, Yarra Valley 2015**

Impressively sweet-fruited scents, with fine, searching, pungent flavours of great class and depth: redcurrant rather than raspberry here. Once again, a wine which comes across as having great seriousness of purpose but without any notable or exaggerated grip: outstanding Pinot. **93**

### **Dujac, Vosne-Romanée Premier Cru Les Beaumonts, Côtes de Nuits 2010**

Complex aromas: earth and incense, with the fruit notes providing a filling warmth rather than anything more specifically allusive. Another wine which perfectly illustrates the 'texture not tannin' motif: it's resonant and deep but almost soft. Some tasters wished for more fruit precision, but I feel that it is precisely the wine's chiaroscuro which would make it an enjoyable bottle to spend time with. **93**

### **Clape, Cornas 2004**

The most mature wine in our tasting, but much admired: dark, dense, resonant and smouldering. This wine and its Rhône sibling below were in fact the 'grippiest' of our collection, though after twelve years this was a wine of striking harmony, and the whole-bunch freshness-in-ripeness had stood it in very good stead. **92**

### **Ch de Ste-Cosme, Gigondas 2013**

This is an outstanding wine from a difficult vintage: spicy, warm and rich in scent, with deep, almost booming fruit, floral touches, and plenty of richly textured lushness, too. A compelling effort, bearing in mind it has four single-site brethren: would this wine really have been as exciting and engaging without the whole bunch (and the sorting which this technique implies here)? **93**

### **Daniel Gomez Jimenez-Landi, Las Uvas de la Ira, Méntrida (Sierra de Gredos) 2014**

There was some aromatic reduction here, but once we had peered behind that, this was a perfect illustration of how Pinot-like high-altitude Grenache can be. Fine cherry-raspberry scents and stealthy, graceful, lingering and saline-savoury flavours in which you had to hunt for tannins in the wine's nooks and crannies if you wanted to spot them. Made with 100 per cent whole bunch, but without any working of the marc at all. **91**

Read more at <http://www.decanter.com/wine-news/opinion/jefford-on-monday/jefford-whole-bunch-fermentation-332676/#g1MxmWVCCg2yEQsf.99>