

sulphites

MATCH points

The use – and labelling – of sulphites continues to ignite debate among winemakers. Tom Bruce-Gardyne sheds some light on the issue



IT IS just over 25 years ago that the first wine in America carried the dreaded phrase – “contains sulfites” – on the back label. Whether spelt with an “f” or a “ph”, it was the end of innocence for anyone who believed wine was a purely natural product. For there, along with the fermented Chardonnay or Merlot, was a sinister-sounding chemical no doubt injected into the wine by a satanic figure in a white coat. The warning forgot to mention how many sulfites the bottle might contain; it was enough to know they were there. All that was missing was a malevolent skull and crossbones and the word “Toxic!”

People had lobbied to have ingredients listed on wine bottles as early as 1972 according to Thomas Pinney’s *A History of Wine in America*. The arguments were batted back and forth for over a decade until a legal challenge by the industry succeeded in striking it off the agenda. But the lobbyists, led by the Centre for Science in the Public Interest, were not about to give up, and in Senator Strom Thurmond, a teetotal Republican from South Carolina, they found their man. “Only now,” wrote Pinney, “the object was not to inform but to frighten.”

The 1987 law on sulphite labelling was designed to protect the 1% of the US population, principally asthmatics, at risk from an allergic reaction. Curiously labels were not required for dried fruit which

often contain far higher levels of SO₂ than wine. By the time the EU followed suit in 2005 the late senator’s desired shock factor had probably worn off, yet the confusion remains. Whether a wine contains an imperceptible quantity above the legal threshold of 10 parts per million (ppm) or 20 times that amount – the limit for dry white wines in the EU – consumers are none the wiser. “You might not add any sulphur and yet you could still have 20 or 30mg,” says Doug Wregg of Les Caves de Pyrène, referring to naturally occurring levels in wine. “Or you might add a ton of sulphur and have lots of free sulphur floating around, and all the consumer would know is that both wines ‘contain sulphites’. It’s absurd, but then labelling laws are absurd anyway.”

NATURAL HIGH

Wregg, a flag-bearer for natural wines and organiser of this year’s Real Wine Fair in London, believes the consensus among natural winemakers is not to ban the addition of SO₂, but merely to use it only when necessary. He contrasts this with “industrial wines made to a recipe rather than in an empirical way of whether it needs sulphur. I think so much wine making is done without thought, to be safe and sit there on a supermarket shelf and it does no credit to the producer or the consumer.”

Feature findings

- ▶ The “contains sulphites” warning has been on wine bottles since 1987 in the US. The EU followed in 2005.
- ▶ The motives behind the law have been questioned, and the fact it covers such a wide band: from 10ppms of sulphites up to 400ppm in the case of sweet wines.
- ▶ While much of the debate on sulphites has swirled around “natural wines”, a bigger issue concerns its possible overuse in the mainstream.
- ▶ Evidence suggests the quality of a wine can suffer from excess SO₂ before you can actually smell the sulphites.
- ▶ Among mass-market white wines Pinot Grigio and Sauvignon Blanc may be worse affected than Chardonnay.
- ▶ Some say heavy-handed use of SO₂ is the fault of contract bottlers; other blame the big brand owners and retailers for playing too safe.
- ▶ Controversially, excessive levels of SO₂ have been called a bigger issue than cork taint.

The market for natural wines in the States is minute as it is for organic wines whose producers forswear the use of added SO₂. “US winemakers like their wines clean and stable; 99.9% of what we do see is from Europe,” says American wine writer Christy Canterbury MW. “It’s because the wines are often so foul,” adds Bob Betz MW, winemaker at the Betz Family Winery. “It’s a style made by some iconoclasts, and it reads well in print, but I have yet to have a no-sulphur wine of merit.” Yet while the arguments rage over natural wines – whether its proponents are idiot savants or unhinged hippies – it is merely a sideshow to the real issue on sulphur and whether it is being over-used in the mainstream.

Geoff Taylor of Corkwise, a wine analysis company whose clients include major UK supermarkets and their suppliers, says: “It’s no myth that when ▶



sulphites



you walk round a winery and sample wine from a barrel or tank, it tastes at its best. Everything you do from that point on is going to change the wine. In a commercial world you have to do things like filtration and set SO₂ levels, but with the technology now available – the use of inert gases, screw caps, well-designed bottling lines... we should be able to fine-tune those levels.” Within the EU, the limits are currently set at 160ppm for dry reds, 210ppm for dry whites and 400ppm for sweet wines. This is for a total made up of the bound SO₂ – for those sulphites which have combined with other elements in the wine – and the so-called free SO₂ which is what effectively preserves it against oxidation.

“Free is the part you can smell. What a lot of people don’t realise is that prior to the stage of smelling sulphur dioxide, there is a muting of the fruit,” says Taylor. “If you give people the same wine with different levels of SO₂ they are really surprised at the difference in quality.” Having attended one of his seminars where we tasted the same New Zealand Sauvignon dosed with low, medium and high levels of sulphur, I can only agree. The last example, just within the legal limit, was almost totally devoid of fruit. Even the wine with just a medium dose tasted dull.

“Sulphur bleaches colour and mutes fruit,” says Bob Betz. “We don’t taste barrels we have sulphured within two weeks. But after time in the bottle, any wine that is high in phenolic extraction will need such long ageing that when palatable, the free sulphur is probably all bound up.” Because he drinks mainly reds, Betz doesn’t encounter over-sulphured wines that often: “Except when I taste Mosel Riesling!” In her experience, Canterbury puts the incidence at one in five, while for author and wine educator Joel Butler MW it is one in 20, “mainly freshly bottled whites like German Riesling or young Sauvignon Blanc”.

Butler says, “Certainly US winemakers are using as little SO₂ as they think they can get away with, in line with today’s trend for lower additive levels of any

Within the EU, the limits are currently set at 160ppm for dry reds, 210ppm for dry whites and 400ppm for sweet wines

kind, and less manipulation. On the other hand, sane winemakers realise that for the most part, in today’s global market, you simply must use SO₂ levels in safe but sufficient amounts to have a viable product.” The key word here is “safe” and whether there is a tendency to be over-cautious. “We all have different thresholds to SO₂,” says the New Zealand-born consultant Sam Harrop MW. “The real question you have to ask is, how much sulphur is too much?”

SIDE EFFECTS

Like Bob Betz and Geoff Taylor, Harrop believes it can damage a wine before you can actually smell the telltale whiff of spent matches. Of the three major commercial white varieties, he feels the excessive use of SO₂ affects Sauvignon Blanc and Pinot Grigio more than Chardonnay because “they probably have higher levels of residual sugar” and “rely

on primary aromatics from reductive winemaking”. With its greater use of oak and “more oxidative handling” it is less of an issue for Chardonnay. “Part of the problem is that most winemakers around the world like to play it too safe when supplying wines for export, and they like to follow something of a formula.”

With one big volume white wine, Harrop says he achieved a huge improvement in quality simply by reducing the total SO₂ from 140 to 115ppm. “In my opinion many winemakers don’t question the role of sulphur and its impact on aromatic intensity enough throughout the winemaking process”, Harrop explains, adding that he has worked in regions where it is normal for the mobile bottling line to set the levels of free sulphur in

order to prevent any possible come-back. “I can’t understand producers who spend so much time in the vineyard and the winery making sure of quality, only to let go of the reins at bottling to either a production department or a bottling contractor who has much less knowledge or interest in how the wine presents itself to the consumer”, he remarks.

If we are talking of a consumer in a UK supermarket, the wines often carry an extended shelf life, even though “most major brands would be on the shelf and drunk within a matter of weeks”, says Taylor. Indeed they would be delisted if they didn’t fly off the shelf, and once in the trolley their average life expectancy shrinks to a few hours. He says the shelf life is based on a balance of factors including SO₂, alcohol levels, grape variety and pH, yet some wines play it safer still. “If you see a ‘buy – consume within six months’, and the data suggests it would last three years, I’m thinking they haven’t got it quite right.”

BIG ISSUES

Taylor maintains the issue is not just with free sulphur. “If you read books on the subject, they’ll say you can’t taste bound SO₂, but what I say is that you can taste its effects. While free sulphur is very much on the nose, the bound version is

more evident on the palate. If it is too high, you get this bitterness and metallic taste." Within the trade he feels there are many misconceptions. "I read a lot where wines are described as 'over-extracted' or 'too phenolic' - and when we test them all we can see are different SO₂ levels." How related these issues are is a matter of debate, and some feel he may be confusing cause and effect.

Offered a choice between a corked wine and one whose "fruit" had been suppressed by sulphur, most people would pick the latter

But if that is contentious it is nothing compared to Taylor's claim that excessive use of sulphur is now a bigger issue than that perennial obsession - TCA. "No way!" cries Canterbury "Cork taint is still a much, much bigger problem." Joel Butler agrees. "Sure, using too much [SO₂] is abusive and stupid... but if you are dealing with crap grapes in large part, you are forced to use prophylactic actions to make a saleable product. However, erring on the side of caution to produce a stable product is a different and lesser problem than cork taint. No doubt consumers would be better off with wines that had less SO₂," he argues. "But if the trade-off is oxidized, hazy, 'dead' and dull wine in the bottle, I will stick with the perhaps neutral-flavoured, but at least 'fresh' wine protected by sufficient SO₂."

Offered a choice between a corked wine and one whose "fruit" had been suppressed by sulphur, most people would pick the latter. Ideally you would never have to choose, or make the sort of trade-off mentioned above. Either way one thing is beyond dispute: as far as government health warnings go, "contains sulphites" remains a masterpiece of misinformation. db

For those who innovate, for the classics, for those looking for quality, for those who bet on the added value...
for each capsule, Ramondin



Tin
World leaders in the manufacture of tin capsules



Deep drawn aluminium with tear
Developed in 2010, patented by Ramondin



Polylam
Product Quality, Service Guarantee