de Trafford WINES

MINDFUL WINE GROWING

As an Architect and creative person I dislike the idea of adhering to a set of rules and the administrative burden that goes with organic and biodynamic wine. I have great respect for producers that follow biodynamic principles and I've studied it quite a bit and attended short courses by Nicholas Jolly and Monty Waldin, but I do have some reservations. One can choose a life without aspirins or antibiotics, but many of us would not be alive today if it were not for the assistance of modern science. Why should I deny my vineyard that advantage?

You could describe our approach as near organic, sustainable, eco-friendly or something along those lines. We simply try to work as closely with nature as possible. Modern science actually assists in allowing us to produce our wines as naturally as possible, while being guided by traditional virtues and knowledge. I feel that you cannot make fine wine without having respect for nature – it's a pre-requisite in the production process. So what do we do exactly?

NURTURING THE SOIL

We apply very little and in most years, no chemical fertilizer. Our soils are mostly decomposed granite with an ideal mix of clay and stones to allow good drainage, while at the same time retaining moisture essential in our typical Mediterranean climate. In our initial soil preparation we applied calcitic and dolomitic lime (both natural substances) as well as phosphate (organic and chemical form) to a depth of 1m. Chicken manure was broadcast on top to assist the cover crop and boost microbial life. Every 5 years or so we do soil analysis and add maintenance lime and phosphate if necessary. Every season we add our own compost that we produce from grape skins, garden refuse etc. as well as manure. We mostly use chicken manure, which is high in nitrogen relative to potassium, as most of our soils in the Western Cape are high in potassium.

WEED CONTROL

Unfortunately there is no real eco-friendly way of controlling weeds in the vineyard, unless you're in an area of excessive rainfall and can use the weeds to soak up the excessive moisture. It is vital to suppress the weeds in a Mediterranean climate like we have with a long summer drought.

Essentially there are three options.

1. That of physical removal, mostly by tractor (using a lot of fossil fuels), by hand (very expensive) or by horse (also very expensive). These are the methods that are favoured by organic and bio-dynamic producers.

2. The other is the use of weed killers, which are cost effective, uses very little fossil fuels, but reduces various forms of soil life as well as the targeted weeds or cover crop.

3. Straw mulch. Expensive, time consuming and a fire hazard.

We use all three options. Using straw mulch is our preferred option but it is a fire risk and the baboons keep removing the mulch to look for insects under the vines so we have to keep replacing the mulch, which adds to the expenses. Essentially, we farm in a nature reserve. Mostly beneficial but some disadvantages.

OUR VINES

We have used only virus free high quality, low yielding mix of clones for each variety, grafted onto mostly low vigour rootstocks. Recently we've started to use a more drought resistant, slightly more vigorous rootstock (R110), so we become less dependent on supplementary irrigation and offset some of the effects of climate change.

CANOPY MANAGEMENT

Our vines are cordon trained on a 7 wire VSP (vertical shoot positioned) trellis system – 1 cordon wire and 3 sets of moveable foliage wires. The well-spaced spurs on the cordon are pruned back to 2 eyes on each spur. This is a fairly standard system that works well in our region. The aim is to have a 1,2m long shoot with 22 leaves ripening two bunches of grapes, all in a well aerated canopy of bright, dappled light.

There's not a lot of difference between organic, bio-dynamic or conventional practices when it comes to canopy management. However, it is more critical than anything else for quality production. I believe the trouble we go to with having narrow rows (1.8 m wide) on a steep slope allows us to have balanced growth. It allows the whole canopy and particularly the bunch zone to have ample dappled light, which is critical for flavor development and achieving phenolic ripeness, as well as making disease and pest control that much easier.

We pay a lot of attention to our first suckering (removing unwanted shoots), which ensures that only the shoots we want to develop with bunches on are allowed to grow at the expense of the others. This makes subsequent suckering operations a lot easier and therefore the overall canopy management and spray requirements for the season easier too.

DISEASE CONTROL

Downy Mildew:

It only requires 10mm rain and a temp. above 10C over a period of 24 hours to initiate the onset of downy mildew. It takes a further week for secondary infection to take place and if left unchecked can destroy the season's growth and crop. As we're up against the mountain with higher average spring rainfall and many cloudy days we have to be especially vigilant – not unlike Bordeaux. In an organic or biodynamic system, copper is the only really effective solution to the threat of downy mildew. Although copper is a natural element it is very harmful to the environment if allowed to build up over the years, so we only do two copper sprays around mid-season. We usually prefer to start off the growing season with a systemic spray, like Folpan, while the shoots are short and we only need small volumes sprayed with a back pack. In early spring there is usually regular rainfall and the systemic products work within the vine and don't wash off - so we get away with less spraying. During the rest of the season, including the last spray, we use soft contact fungicides.

Powdery Mildew:

Regardless of the weather and in almost every grape growing region powdery mildew needs to be controlled. However, it's not as tricky as downy mildew. Regular Sulphur sprays are effective, inexpensive and acceptable in bio-dynamic and organic systems. The withholding period is at least 4 weeks though, and it is harmful to beneficial insects. We use a systemic product like Legend (together with the Folpan mentioned above) for our first few sprays, while the shoots are very short, so we spray very little by back pack and we don't have to worry about rain washing it off. During most of the season we spray Sulphur every two or three weeks. Our last spray we use a soft synthetic spray like Topaz which has a shorter two week withholding period, although we always allow 4 weeks.

Wood rotting diseases like Eutypa or Dead Arm:

Unfortunately these are becoming more problematic in the cooler, wetter areas like ours. We only prune in good weather and spray Trichoderma (a beneficial fungus) on the pruning wounds to reduce ingress of wood rotting pathogens. The early season sprays of Folpan also provide some protection, but it is a global problem which is starting to draw a little more attention as there doesn't seem to be any really effective remedies. Many old vineyards have more gaps than vines, contributing to their low yields.

PEST CONTROL

WE DO NOT USE ANY PESTICIDES. We don't have much of a problem with pests, probably due to our soft spray program and the fact that we have a small 5 hectare vineyard surrounded by a pristine natural environment. Our neigbours, from whom we buy grapes, also have relatively small blocks surrounded by natural

vegetation and broadly follow a similar protocol. In order to keep our vineyard in a healthy state we release a number of different beneficial insects in a few tranches throughout the growing season. In particular insects that feed on the mealybug, which spreads leaf roll virus.

IRRIGATION

Initially we planted and tended our vines without any irrigation and then along came three very hot years – 1998, 1999 and 2000 – and we installed a cheap overhead system to help the vines through these hot and dry summers. It proved very time consuming and benefitted the weeds as well as the vines and we converted to a conventional drip system a few years later. Drip systems are much more efficient than overhead. A few vintages – like 2014 – we don't need to water at all and some – like 2016 and 2017 – we can't water enough as we only have a very limited supply in mid-summer, which we restrict ourselves to. Along with most viticulturists, I believe the considered use of irrigation can enhance quality, just as much as it can of course dilute quality. In fact the amount of water we do add is so little it shouldn't really be called irrigation at all. However, even a small amount of water at veraison (when the grapes change colour) can make a real positive quality difference.

FERMENTATION & MATURATION

WE HAVE NEVER ADDED A COMMERCIAL YEAST TO OUR WINES since we started in 1992. It may be that one day we have to for some reason, but so far we've managed without and I believe it adds to the style and character of De Trafford wines. We add a small amount (usually in the region of 25ppm) of sulphur at the start of fermentation, which helps with reducing bacterial spoilage and oxidation, as well as selecting the more benificial yeasts for the fermentation. Sulphur levels are kept to a minimum and by the time the wine is bottled, usually between 50 to 100ppm, a little more than permitted with organic wine (up to 50ppm, depending on which organic association). In general nothing else is added, except bentonite (a natural clay substance) to some of the white wine barrels as needed for protein stability. WE DON'T HAVE A PUMP in the cellar, but move the wine gently using gravity or compressed air.

BOTTLING AND PACKAGING

We do all our bottling on site by gravity, as well as all labeling and packaging, by hand with modest low tech equipment.

It is difficult to put a label on what we do, but as a small family winery striving to make the best possible wine on the slopes of the beautiful Cape mountains with the lightest footprint, we hope that some knowledge of our procedures, from an environmental point of view, adds to the enjoyment of our wines!