Commercial Experiences with the Scott Henry Trellis System in the Hunter Valley

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Six years ago, as a licensed hotelier of 33 years standing, a frustrated farmer and a lover of wine, I decided to become a vigneron. Through good advice, I have been successful.

I do not intend here to give advice, simply to report my experiences. I started by attending short courses in viticulture where I soon discovered that there are more ways than one of growing grapes. As I had selected a site with good, deep, sandy loam soil and abundant water, it became evident to me that I would have a vigour problem. Having read some of his papers, I felt that Dr Richard Smart views made a lot of sense. The result was that I planted 16 hectares of Chardonnay, Sauvignon Blanc, Cabernet Sauvignon and Cabernet Franc to the Scott Henry Trellis system with Dr Smart as my consultant.

The results have been outstanding. The first three vintages (nine wines) have amassed in excess of 60 medals, including 3 international gold medals and a trophy and 16 gold medals in Australian shows.

I have approximately 35 tonnes of the harvest made into wine by my consultant winemaker Simon Gilbert. This serves two purposes. If I can show prospective purchasers of my grapes that they can make wines of gold medal quality, then I am assured of a sale at premium prices.

Secondly, the portion retained is value-added. I had no trouble in marketing the wines at premium prices, through highly profitable cellar-door sales, very acceptable distributor sales and, recently, high profit export sales to the United Kingdom and the East Coast of the USA.

I started the operation in 1989 and after the 1994 vintage had paid back all the establishment costs.

So, it is obvious that I consider canopy management to be essential. The Scott Henry system suited my site. I feel there is a system to suit every site. The main objection to canopy management that I often hear is expense: surely my story negates that criticism.

Installation
My complete operation, including land preparation, dam installation, complete automated irrigation system including pump house, trellis system with 8 wires, and vine rootings planted and strung to fruiting wires, cost $22,500 per hectare ($9,000/acre).

I am sure some growers may have been quoted more than that for conventional trellising.

Cost of managing the system

Shoot positioning
I find that the time required for shoot positioning is more than stated by Richard Smart in his excellent book Sunlight into Wine. Two passes are necessary. The first, two weeks prior to flowering (just before the tendrils grip), is when the shoots from the low vine are brushed through in front of the movable foliage wire which is then laid on top to retain them. Also at this time the high vine shoots are tucked into the first pair of foliage wires, and the vine trunks are de-suckered. This pass takes about 30 hrs/ha. The second pass is done straight after flowering. Any downward shoots not under the wire are tucked under the wire and clipped down. At the same time the high vine shoots are tucked into the second pair of foliage wires. This takes 10 hrs/ha.

Richard Smart's figures are about half this, but I feel that it is most important to do the job properly to obtain maximum fruit exposure.

We have 2 to 3 summer trimmings of tops and sides with a Gallagher trimmer which takes 1 hr/ha. We use the leaf plucker on Sauvignon Blanc and the Cabernets, which takes 0.5 hr/ha.

Pruning
We mechanically pre-prune with a Pellenc machine which saves 25% in pruning time, but at $225.00 per hectare, time is the only saving.

There are 3 metres of cordon per vine with 25 to 26 spurs. One person prunes 27 vines per hour (in Chardonnay) bringing the time to 74 hrs/ha. It takes 80 hrs/ha in Cabernet Sauvignon (25 vines/hr) and 95 hrs/ha in Sauvignon Blanc due to excessive water shoots.

Consequently, I estimate that the extra costs I incur by utilising the Scott Henry system to be $750.00 per hectare, but I consider this increase to be minor when you consider the extra yield which results. Moreover, now that grape purchasers are moving towards paying for quality, the bonuses are bountiful. A measure of quality is quite elusive and is usually assessed simply as degrees Baumé. The Scott Henry system enables the grapes to be left on the vine much longer, so that a higher Baumé level is generally achievable.

My work is all done by contract labour and machinery at an annual cost of $5,000 per hectare.

Scott Henry - key points
1. With a shoot density of about half a normal canopy there is very good fruit exposure, hence good fungicidal spray coverage.
2. The system is easy to mechanise, (leaf removal, pre-pruning, harvesting).
3. The fruit can be left on the vine longer to ripen, with higher Baumé, flavour and colour resulting because of the absence of bunch rot.
4. Higher yield. Typical yields in the Lower Hunter Valley from vineyards on poorer soils with limited water supply are less than half of mine. But even where the conditions are similar to mine, conventional vineyards have a vigour problem resulting in a high susceptibility to bunch rot.

Incidental background information

Pre-planting
The soil was prepared by the addition of 2.5 tonne/ha of lime and 12.5 m³/ha of fowl manure.

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