Going against the grain with alternatives to wooden trellis posts

By Hans Mick

While timber maintains its dominance as the material used for trellis posts in most vineyards, there is a small but growing number of products made from other materials that are gaining a slice of the market share. Hans asked if steel or plastic-derived posts will ever overtake wood and what are the factors driving change?



The predominance of wood trellis posts in Australian vineyards is slowly giving way to non-wood alternatives.

or most vineyard operators, the maintenance, replacement or installation of trellis posts is an ongoing activity. While wooden posts are still the preferred choice for the

majority of growers, a diverse range of alternative options are now available to challenge timber's dominance.

While it's difficult to tell just how widely these steel or plastic-derived

alternatives have penetrated the marketplace, there's evidence that a growing number of viticulturists are adopting these systems, or are at least considering them as a viable preference.

"If I was establishing a new vineyard myself, I'd definitely look at steel for a number of reasons," revealed senior viticulture officer Ian Macrae from the Riverland's CCW Co-operative.

"It's very easy to just sling the wires up where you want to put them; it's a very quick and easy system."

But Macrae said the primary benefit of alternative products is their longevity when compared to traditional pine posts, even though there's often a higher initial cost outlay.

"I worked for years at Kingston Estate, so if you are a corporate [or larger] vineyard, you tend to look at things over the longer term. The cost of repairs and maintenance of post replacement is quite a substantial cost that you have to







The Waratah Gripfast (left) and Woodshield posts are two alternatives to pure timber posts now available on the market. Photos supplied.

budget for; so you have to take that into account," Macrae explained.

Sales manager Hayden Maher, from Waratah Fencing, said demand for his company's steel posts has been driven by long-term savings due to the product's durability.

"Some growers are looking for a different solution that's going to give them a lower maintenance cost down the track," Maher said. "Obviously the lifespan of the posts is far greater with steel compared to a pine post."

The Australian-based manufacturer has been supplying posts to viticulture,

and to agriculture more generally, for over 130 years and now locally produces steel posts for vineyards.

"Our Gripfast Trellis post has been used in vineyards for many years with great success."

Maher said increasing demand for steel options is also due in part to a decline in the quality of timber products as well as their rising cost.

"The Waratah star post has been used in wide and varied ways across different trellis installations; certainly a lot of growers are coming and wanting that. We're seeing growth across the board in steel posts right through the industry.

"For growers, using pine posts has worked well for many years, but now the cost of pine posts is increasing and it appears that the quality and the lifespan of posts is decreasing; they're certainly looking for other options," Maher said.

NO DISPOSAL ISSUES

Maher also attributes another key factor to the rising demand for non-wood products: the difficulties when it comes to the disposal of chemically-treated timber.

"That's a big driver in the industry," he said. "The fact is that timber is getting



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painful to dispose of once it's broken. A lot of vineyards have a very large pile of broken pine posts and they don't have a way to dispose of them because of the way that they're treated chemically."

For business development manager Ashley Davidson, from Victorian manufacturer Woodshield, increased demand for its alternative post product is due to a combination of cost factors and environmental concerns.

"The uptake we get is from people looking at alternatives to chemically-treated timber.

"If you go and speak to someone and they're working off a budget, regardless of their organic or biodynamic principles, it comes down to the bottom line. [The cost of our product] would be at least 30 percent more than a treated timber post. However, the lifespan of the product is four to five times longer and there is no cost associated with disposal."

Davidson said approved disposal sites for treated timber posts are limited and there can be substantial costs involved.

"You've got to truck it to that site and actually pay for its disposal; there was talk [in South Australia] about this costing around \$180 per tonne," he said.

Davidson said his business has been experiencing strong sales of its product which utilises a robust polymer outer casing around an inner un-treated wooden 'round' to produce a post with 40 to 50% more strength than

a standard timber post which has far greater flexibility.

"So with machine harvesting, you can shake the hell out of the trellis and not get breakages as with normal treated timber.

"The feedback [from growers] has been about the lack of maintenance; you don't have issues with cracked timber, loose staples, splinters and you don't get those breakages," he said.

...I'm confident in saying that 95% of new plantings would be going in on timber." Ian Macrae, CCW Cooperative, Riverland, South Australia

ENVIRONMENTAL AWARENESS

Davison said the rise in demand for the product started around 2011 after organic certification for vineyards was granted in both Australia and New Zealand.

He said there has been a slow but growing awareness across the industry, particularly among younger people, about the potential damage to the environment caused by chemically-treated posts.

"You don't name names, but there are beautiful vineyards right on the Murray and they've got these chemically-treated posts sitting on the ground leaching their chemicals. I saw another in McLaren Vale where the grass was dead from about two metres outside the pile of posts just from the leaching of the chemical.

"Organics is definitely increasing and that's just one facet of it [...] I'm not a greenie by any means but I think everything is changing."

But across the wider industry, where for the most part wooden trellis posts still dominate, Davidson said it's debatable as to how widespread such concerns are.

"It depends who you talk to. If you talk to the sustainable marketing people in the corporate producers, they'll say it's changing because we have to change, because the market wants a healthier product and [consumers] want to know it's not contaminated. But if you talk to the viticulturists on the bottom line, they'll say, 'how do I make my balance sheet?'"

He said he knows of several wineproducing clients who are now "in tune with organics".

"[They're] pushing that way because they're getting a premium price for their product overseas and they're happy about that.

"There are a fair few of them too that are just out there and saying, cost-effective wise it would be stupid to







Made out of PVC, the same material used to make guide posts on the sides of roads, the Reggie post is named after a former Marlborough vineyard worker who came up with the idea and is a strengthened polymer product that has foam inside, creating a "sandwich structure" that stretches when the post is crushed or bent to prevent breakage. Photos supplied.

spend money on timber now that it's not going to be lasting the same sort of time. That's why there are so many alternatives popping up now."

In the Riverland, Ian Macrae said the adoption of non-timber posts in his region has been "negligible".

"We've got a lot of patches – 3500 patches and 550 growers - and I get around and see what people are doing and I'm confident in saying that 95% of new plantings would be going in on timber," Macrae said.

He said the reluctance to embrace alternatives is due to a several factors.

"We are fairly conservative here. A lot of our growers are fairly old; looking 20 years into the future, a lot of them would say we're not going to be there, so they're not necessarily thinking too far into the future even if they're thinking of redevelopment.

"There are some growers who are redeveloping their patches; one just pulled out some old Riesling that's been giving him a lot of grief over the years and is going to replant it to Shiraz. With the posts, I know without discussing it that he'll put in what's already there: on that 10 acre patch they will be pine posts."

Macrae said that for many growers, attitudes toward non-wooden posts were shaped by products on the market decades ago which weren't successful.

"I would think that the reason for that lack of uptake goes back to some of the early posts that were available that didn't perform very well overall. "Some of the steel posts available at that time were not suitable for the large crop loads and very large canopies we tend to get in this area; they just bent.

"[They] didn't adhere to some of our sandier soils very well; they didn't stand up nice and straight."

However, Macrae is quick to add that those sorts of issues no longer affect the alternative products that are currently available on the market.

"They've had a lot of development put into them and a lot of the problems that existed with some of the earlier posts have been addressed. Some of the new ones I've seen are really strong and they're much larger so there's more adhesion in the lighter soils."



OVERCOMING PRECONCEPTIONS

For a number of manufacturers of non-timber trellis posts, overcoming negative preconceptions about the materials used to make their products has been required.

Ray Holcroft is the sales manager for Queensland business FSP Australia, which produces the so-called Reggie post – named after a former Marlborough vineyard worker who came up with the idea for the strengthened polymer product.

Holcroft said vineyard trials were undertaken and input sought from viticulturists and engineers to ensure the strength and 'workability' of their product which has now been on the market for several years.

"We kept trialling different things, making them bigger, stronger, with wood in the middle," he explained. "We ended up with a product that worked."

Holcroft said the Reggie posts also have foam inside which creates a

"sandwich structure" that stretches when the post is crushed or bent to prevent breakage.

He said demand has been increasing quickly, although there have been obstacles to having the product accepted by some growers.

"Firstly, they look at it and go, 'oh, it's plastic'. But then you've got to explain that's it's not actually plastic, it's PVC. It's the same material that they make the guide posts on the side of the road out of; you can hit those with your car at 60km an hour and they don't break. Our posts are probably five times thicker than those."

"These aren't the old posts [...] these are completely different.

"I know in McLaren Vale, for example, there are heaps of the old recycled plastic posts that can fall over once they reach a certain temperature.

"The PVC used for our posts is heated to 130 degrees to extrude it; it doesn't get to 130 degrees in a vineyard so there

really are no issues like that with our posts at all."

Holcroft said one vineyard in the Barossa had recently ordered 1200 of the posts off the back of 600 posts that had previously been purchased. He said growers elsewhere in South Australia and on Queensland's Granite Belt have also been adopting the posts, while there's been interest, too, from those in Marlborough in New Zealand where stringent regulations are in place to restrict the use of new treated wooden posts.

For Holcroft, change is inevitable when it comes to moving away from wooden trellis posts to the more sustainable and cost-effective alternatives, with the next generation leading the way.

"To get any new idea into a centuriesold industry is hard. The blokes who you have to look to now are the younger blokes, the sons of today's growers if you like."



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