



### *Case Study*

# Red, red wine: Vineland develops sophisticated Appassimento technology to meet winemaker's needs and consumer preferences

## **Background**

Canadians love their wine - especially the reds. The volume of wine sold in Canada increased by 40 per cent between 2004 and 2013 with more than half of that imported reds.

## **Challenge**

Canada's cool climate and short growing season mean it is difficult to consistently grow the high-quality grapes needed for premium red wines.

Some winemakers began to experiment with the Italian Appassimento method of drying grapes, which concentrates the fruit's sugars and produces a bold, high alcohol red wine. They experimented with on-the-vine drying, laying grapes out to dry in greenhouses or barns and using former tobacco kilns. But the inability to control humidity, temperature and pests meant significant crop losses.



## Getting answers

In 2011, Ontario's Rennie Estate Winery and Kew Vineyards approached Vineland to develop a technology that would give them better control over the drying method.

Vineland researchers developed a novel technology for a forced-air grape drying process over which winemakers have much better control. It is flexible and can be adjusted according to different harvest conditions and winery requirements.

The technology was tested in 2012 against all other drying methods by Brock University's Cool Climate Oenology and Viticulture Institute, and came out on top.

In 2013, Vineland filed patent applications (U.S. and Canada) on the air flow technology which have now been accepted and in 2014 issued a call for proposals to identify a commercialization partner. MTX Postharvest was the successful applicant who licensed the technology and produced the first prototype self-contained, Appassimento chamber which was installed at Kew Vineyards.



## Impact

As a result of the new Appassimento technology, Kew Vineyards increased production of its Soldier's Grant blend from 300 cases in 2011 to 1,000 cases in 2014. Kew's full Appassimento wine, Heritage, is the winery's top seller.

Blending with Appassimento wines can increase the flavour profile and value of table wines. Depending on the grape, blending can add 40 to 70 per cent to the price of a bottle. John Young, owner of Kew Vineyards, reports that blending with Appassimento creates a higher quality wine that can be sold for \$4 more per bottle than the standard variety.

Kew Vineyards invested in the first prototype unit and MTX has now sold a second to Rennie Estate Winery which was installed before the 2016 grape harvest. The \$70,000 unit cost may seem substantial but the higher quality wines created mean a payback of less than three years.

Wines crafted using this technology have won national awards, and in 2014, the Ontario Wine Awards introduced a new category for Appassimento wines. Rennie Estate Winery's 'G' wine took home the gold.



- **Vineland's patented technology controls the drying process to eliminate losses that occur with other drying methods**
- **Blending with Appassimento wines can improve the flavour profile and add 40-70 per cent to the price of a bottle**
- **10 Ontario wineries have contracted Vineland to participate in commercial-scale trials of the drying technology**
- **Within one year of market launch, two stand-alone drying units were sold and are currently in use for commercial wine production**



*“At the end of the day it really comes down to the consumer. If you can produce a high-quality product at a reasonable price, then the consumer will be very supportive. I think we were able to do exactly that with our Soldier’s Grant wine, which was produced with the help of the Vineland Research and Innovation Centre’s Appassimento technology.”*

- John W. Young, Kew Vineyards

*“We are currently working with the postharvest research team at Vineland to adapt the Appassimento drying technology to our winemaking needs because we see that there is a great future in this.”*

- Andrzej Lipinski, Big Head Wines

