



An infested Yarra Valley vineyard being replanted with phylloxera resistant rootstock

# 125 years for Vinehealth Australia

On Saturday 21st December 2024, Vinehealth Australia celebrates its 125th birthday. **Cindie Smart** raises a glass to the organisation that's been working hard to protect grapevines in South Australia since 1899.

**P**hylloxera has been called many things: grapevine cancer, the world's worst agricultural pest, the grapevine scourge. Phylloxera's ability to kill own-rooted grapevines and wreak havoc on wine regions is well known. There remains no cure for phylloxera-infested vines.

Some people say the absence of phylloxera in South Australia is down to luck. But few argue about the role Vinehealth Australia has played in helping to keep phylloxera and other pests out of the state.

And on 21st December 2024, the Phylloxera and Grape Industry Board of South Australia – trading as Vinehealth Australia – will mark 125 years of operation.

Vinehealth Australia was created in response to the growing international phylloxera threat. Phylloxera was unintentionally introduced into France on American vine cuttings and reported in 1865. Its presence was quickly felt. As a measure of the devastation phylloxera caused in France alone, it's been reported that 2 million acres (810,000 hectares) of vines were destroyed by phylloxera



Vinehealth Australia CEO Sam Scarratt  
Image: John Kruger

between 1868 and 1888 (*Sydney Morning Herald*, 1890).

Many believe at least two-thirds of all European vineyards were destroyed, and some think the number is closer to 90 percent. European wine production plummeted around 75% overall between 1875 and 1889, and the devastation of

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Sam Scarratt

phylloxera was felt deeply by growers and winemakers.

In the face of the growing international phylloxera threat, the South Australian wine industry persuaded the State Government to establish the *Vine Protection Act 1874*, prohibiting

the importation of vine material into the state.

When phylloxera was confirmed in vineyards in Geelong in 1877, prevention efforts intensified in South Australia. *The Phylloxera Act 1899* established the Phylloxera Board – now known and trading as Vinehealth Australia.

That first Phylloxera Board included some famous wine industry names: Thomas Hardy, George Fullerton Cleland, Henry Maydwell Martin, William Patrick Auld, Herman Büring, Benno Seppelt, Maurice William Holtze and Arthur James Perkins.

*The Phylloxera Act 1899* was a progressive piece of legislation that set rules for the registration of all South Australian vineyards, the importation of grape products into the state and phylloxera outbreaks. The Act also set levies for grapegrowers, winemakers and distillers to fund activities.

“Funded by the grapegrowers of South Australia, a major role of the board has been to broaden the awareness of the devastation which could be caused by the uneducated or careless if phylloxera were introduced, as has happened in many of the leading grapegrowing countries around the world. A constant program of research and education taken across state boundaries has been significant in keeping phylloxera out of the vineyards of South Australia,” wrote Bill Brand, former Chairperson of Vinehealth Australia, in the book *‘The Phylloxera Fight’*.

Over the decades, the organisation has evolved, including a name change to Vinehealth Australia eight years ago and expanding its role to encompass broader biosecurity responsibilities.

**The threats**

Phylloxera prevention remains at the core of Vinehealth Australia’s activities. Phylloxera is now established in several regions of Victoria and New South Wales, including Maroondah (Yarra Valley) and North East (Rutherglen) and can be spread from region to region by machinery, grapevines, soil and people.

For regulatory and management purposes, wine regions are classified into Phylloxera Management Zones according to evidence of phylloxera presence, absence or unknown (untested) status:

- Phylloxera Exclusion Zones (PEZ) – a whole state or part thereof, recognised to be free of phylloxera.
- Phylloxera Risk Zones (PRZ) – an area of unknown phylloxera status (but never detected).
- Phylloxera Infested Zones (PIZ) – an area known to have phylloxera.

Movement of items including machinery, equipment, grapes, grape products, propagation material, diagnostic samples and soil that could potentially transfer phylloxera from one place to another are tightly controlled between these areas.

In addition to phylloxera prevention, Vinehealth Australia is committed to keeping out all exotic pests, diseases and weeds that could damage the South Australian wine industry.

At the top of the list is *Xylella fastidiosa*, known as Pierce’s Disease in vines, Australia’s number one unwanted plant

pest, due to multiple hosts and vectors, rapid impact and global spread.

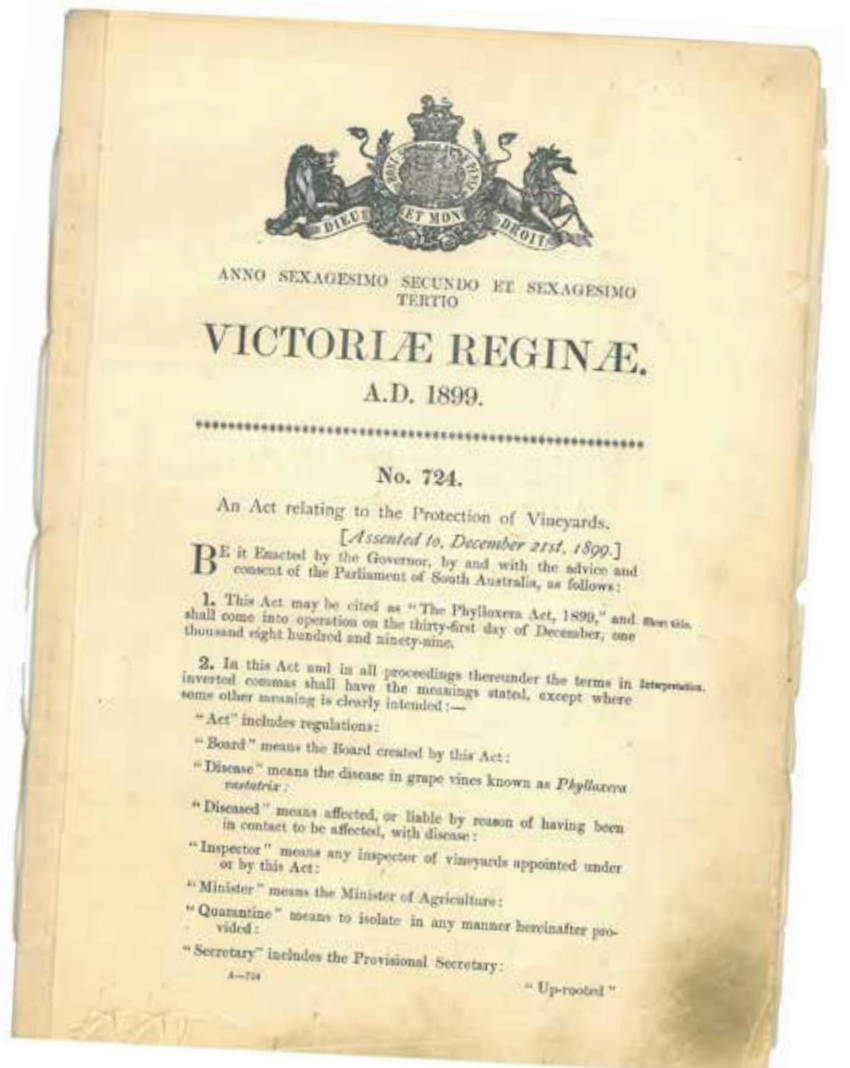
The absence of phylloxera and other key pests and diseases including *Xylella* in South Australian vineyards is a testament to Vinehealth’s work.

**What Vinehealth protects**

South Australia’s rich tapestry of old and young vines, thanks to the absence of phylloxera, forms the foundation for some of Australia’s most iconic wines. A guide to the world’s old vines can be found in Jancis Robinson’s *Old Vine Registry*, which shows South Australia’s oldest vineyard is the Ashbroek Old Block, planted in 1865.

According to the Vinehealth Register, of the total 75,000 ha of vines planted in South Australia, there are:

- 67,535 ha of vines aged 0-34 years.
- 6,446 ha of vines aged 35-69 years. ▶



1899 Phylloxera Act



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Rootstock production



Phylloxera adults, nymphs and eggs. Photo courtesy of Agriculture Victoria (Rutherglen)

- 621 ha of vines aged 70-99 years.
- 231 ha of vines aged 100 years to 124 years.
- 117 ha of vines aged 125 years or more.

The Register also includes nearly 17 ha older than 159 years. Considering SA was created as a Province of Australia in 1834 and settled in 1836, having vines still alive today that were first planted in 1842 is a testament to the state's phylloxera free status.

The risk to South Australia's old and young vines is higher than ever with increased international and interstate people movements, tough industry conditions leading to corners being cut, and other pest and disease pressures intensifying.

### Phylloxera control

The small team of four at Vinehealth empowers growers, winemakers, contractors and industry stakeholders with resources and expertise to safeguard

vineyards and wineries from phylloxera and other pests, including biosecurity signage, farm-gate hygiene tools and disinfestation protocols – all backed by the latest science.

The strong working relationship Vinehealth Australia has with the South Australian Government, and particularly the Department of Primary Industries and Regions (PIRSA), enables strategic biosecurity work for industry, including tight quarantine standards that control the importation of vines and machinery across the border.

A key phylloxera preparedness activity is increasing vineyard plantings on phylloxera-tolerant/resistant rootstocks. In South Australia, 75 percent of vines are on own roots, which are susceptible to phylloxera destruction.

While rootstock plantings are gradually increasing, the cost of replanting on rootstock can be prohibitive – rootstock material can cost triple that of own-rooted material.

But this initial cost is well worth the long-term gains, according to Hill-Smith Family Estates former chief winemaker, now head of sustainability, Louisa Rose. Almost all the Hill-Smith Family Estates-owned vines in the Barossa, Riverland and Tasmania are on rootstock, apart from their old own-rooted vines, some that date back more than 125 years.

“Anything that we've planted in the past 50 years is on rootstock. There's no reason not to, and lots of reasons to,” Louisa said. “If you have a good match of rootstock and vinifera variety, the grapes will be as good as own roots and often better, with more reliable and consistent crops and more resilient in the face of our changing climate.”

Franco D'Anna, owner and winemaker of Hoddles Creek in the Upper Yarra and member of the Yarra Valley Wine Growers' Association, questions why more vineyard owners around Australia aren't using rootstocks when replanting, to ensure vineyards will survive when phylloxera does arrive.

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"We never thought we would get phylloxera here in the Yarra. And that was our biggest problem because the region was so reliant on own roots. We didn't plant with rootstocks when we could have, and that was a mistake," Franco said.

"You look at France and Italy – some of the best wine regions in the world are all planted on rootstocks. If you do it gradually, it's manageable financially and you save money later on. The cost for us to rip out and replant in one big hit, and the loss of production, would be enormous."

### The future

To keep South Australian vineyards healthy and productive, prevention activities are key. For Vinehealth, that means:

- Ensuring the regulatory management of phylloxera is based on risk, science and industry insights.
- Improving the production of high-health planting material by the grapevine propagation sector.
- Enhancing farm-gate hygiene adoption through practical solutions.

"We are also heavily focused on preparedness. As part of that, we're working on South Australia's Phylloxera Response Plan and we're also improving the Vinehealth Vineyard Register to ensure it's a better management tool for vineyard owners and provides more robust biosecurity management for the South Australian grape and wine industry," said Sam Scarratt, Vinehealth Australia CEO.

Sam said it was good to see the Sustainable Winegrowing Australia program assisting with the adoption of farm-gate hygiene activities. "But we know biosecurity practices still have a long way to go," she said.

"There are simple things growers can do to protect their vines, including fencing, signage, machinery cleanliness and footwear disinfection. And Vinehealth can help with biosecurity tools and resources.

"As we approach the 125th anniversary of Vinehealth, let's recognise our deep history and the significant contributions we have made to the grape and wine industry. And recommit to working together to keep South Australia phylloxera free. There's a lot at stake and we all play a part."

*Vinehealth Australia acknowledges the ongoing support of interstate Phylloxera Infested Zones to practice good hygiene activities to prevent the spread and the work of Agriculture Victoria to undertake world-leading phylloxera research, supported by Wine Australia.*

### References

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