

# DPI Primefact

## Options for resting vineyards

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**Applying ethephon or double pruning are cost-effective options for ‘resting’ a vineyard. The information provided here is a summary of the article in the *NSW DPI Grapevine management guide 2023–24* (<https://www.dpi.nsw.gov.au/agriculture/horticulture/grapes>).**

### Introduction

Currently the Australian wine industry is experiencing an oversupply of red wine grapes because of oversupply and disruptions in shipping logistics and market access issues. As a result, growers have limited options for maintaining a vineyard until the market improves and fruit is contracted. Resting or ‘mothballing’ a vineyard provides an opportunity to maintain a vineyard block by reducing all inputs including tractor passes, labour, irrigation and pesticide applications, without the cost of harvesting the grapes.

In the 2022–23 growing season, trials on Chardonnay (Riverina, NSW, run by NSW DPI) and Shiraz (Riverland, SA, run by SARDI) investigated options for resting vineyards. Treatments included applying ethephon at EL25 and double pruning between EL stages 19 and 26 (Figure 1) as practical and economical options for growers. Both treatments were effective at reducing the crop. This trial is ongoing to investigate the effects of these treatments after a second season and on irrigation requirements. Full results are in the NSW DPI Grapevine management guide 2023–24.

### Treatment effects



Figure 1. Left, a Chardonnay vine after the first pruning in November 2022. Right, subsequent canopy growth at harvest in March 2023. Photo: Paul Petrie, SARDI.

At harvest, yield was reduced by up to 94% (Figure 2) in both treatments compared with the control (no treatments applied). While this is encouraging, environmental conditions resulted in uneven phenology across the block, which might have influenced results.



Figure 2. The effects of bunches treated with ethephon. Left, a Shiraz vine after being sprayed with ethephon. Middle, a shattered bunch after being treated with ethephon. Bottom, an ethephon-treated bunch at harvest.

## Points to consider when resting a vineyard

- Ethephon might be a viable economical option to remove bunches, but there is limited knowledge on the long-term effects of its use in grapevines.
- Double pruning is a viable option for those not wishing to use ethephon, but it might increase the time it takes for vines to return to full production.
- Coverage is important; apply to canopy-to-canopy saturation (do not concentrate spray).
- Target the bunch zone if appropriate (hand-pruned vines).
- Timing is very critical; target fruit set (between EL stages 25 and 27).
- Performance is best at warm temperatures (higher than 17 °C)
- Irrigation requirements will be reduced if the crop is removed.
- Include the recommended non-ionic surfactant.
- Ensure the sprayer is cleaned thoroughly after applying the ethephon.
- A minimal spray program to maintain vine health might still be required to control diseases such as powdery mildew and downy mildew to minimise possible spore load for future seasons and surrounding blocks.

## Permit

The permit (PER92913) for using ethephon in grapevines is on the [APVMA website](https://permits.apvma.gov.au/PER92913.PDF) (<https://permits.apvma.gov.au/PER92913.PDF>). This permit, which expires on 31.10.2026, has been updated to the new rate. Always follow all instructions on the permit for removing bunches.

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