

## Maximise Growth of Young Vines by Nick Hoskins

Spending several months a year looking at new vineyards has given me some insights into the common problems of vine establishment. While most growers do an excellent job, I still see properties that have fallen down on one or more of the basics – namely, weeds, water, and fertiliser. Here are a few dos and don'ts to keep in mind.

### Weeds

- DO NOT underestimate the influence that weeds have on slowing vine growth.
- DO plan weed control, keeping in mind the limited number of days that are suitable for spraying.

Weed control is critical in the first year. Vine roots are at the surface, competing for moisture in the same area as the roots of the weeds – and the weeds always win!

Weed spraying applications are weather dependant. Spring is an extremely windy time, and the days suitable for herbicide applications can be few and far between. Large areas may need to be sprayed in a few hours, so be prepared and stay on top of weed control. Once weeds become too tall, control becomes difficult.

### Water

- DO install a good irrigation system and monitor the soil wetness regularly (get out in the vineyard with a shovel to check on water delivery). Adequate water supply, and quality design and componentry are essential to deliver the right amount of water to each vine. Most irrigation systems are now electronically controlled, which allows accurate applications with less wastage.

If drip line is used, keep enough lateral movement of water through the soil to reach the vine if it is located between two emitters.

On sloping vineyards, check that water from emitters is not running down the outside of the drip line and missing the vine completely. I recently saw a grower who had placed jiffy clips slightly above vines planted on the slope to

ensure that any water running down the outside of the pipe would drip off in the right place. Try to take into account differing soil types, so they can be watered separately. Slopes need special consideration. Soils at the top of the slope are often lighter, with heavier soils at the bottom: vines suffering from dryness at the top of the slope and waterlogged vines at the bottom are a common sight. Subsurface drainage may also contribute to excess water at the bottom of the slope.

### Fertiliser

- DO apply a base fertiliser dressing and monitor nutrient levels during the growing season.

- DO look at the vines frequently and note any slowing of growth and/or unusual leaf symptoms.

In recent years, vineyards have been planted on lighter soils than previously used for viticulture. Many of these lighter soils are low in organic matter, with limited nutrient-holding capacity. Make sure you seek professional advice on an ongoing basis, carry out base dressings before planting begins, and budget for fertiliser applications. A number of properties are using fertigation with excellent results.



**I rarely see problems in vines that are growing strongly. Stress from any of the above factors can lead to long-term problems in the vineyard.**