

Research area: VITICULTURE: CLIMATE MITIGATION

Regional cluster: GREATER NSW/ACT

What are the best strategies for maintaining grapevine canopy function when heat events are prolonged in the preharvest period?

Background

Climate change has seen higher temperatures and increased heatwave events become the new 'normal'. Grapes become more susceptible to extreme heat during ripening as they soften (8–13° Baumé) and can become sunburnt or shrivelled, causing a reduction in both grape quality and yield. Extreme heat also causes the vine to 'shut down', stalling grape ripening in the preharvest period.

Why is it important?

There are a number of strategies used by growers to mitigate heatwave effects and maintain canopy efficiency and the progression of ripening. The question will address whether water, foliar nutrition, sunscreen or a combination of these is the best solution. Furthermore, vineyard blocks where sunscreens have been applied are ripening quicker and not stalling under sustained heat events.

What would success look like?

Success for the sector will be in the provision of answers on whether water, foliar nutrition, sunscreen or a combination of these can address grapevine canopy efficiency and the progress of ripening under protracted elevated temperatures. The role of sunscreens as ripening aids (as opposed to just sunburn protection) will be elucidated, which will assist the sector to weigh up the cost of sunscreen use.

For further information and to develop an application please contact:

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