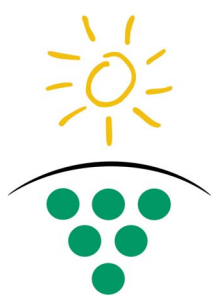


Promoting the Adoption of Precision Viticulture



COOPERATIVE
RESEARCH CENTRE
for
VITICULTURE

The Cooperative Research Centre for Viticulture is a joint venture between Australia's viticulture industry and leading research and education organisations.

It promotes cooperative scientific research to accelerate quality management from vine to palate.

Australian grape growers and winemakers are key stakeholders in the CRCV, contributing levies matched by the Commonwealth Government and invested by the Grape and Wine Research and Development Corporation in the Centre.

The CRCV is a joint venture of these core participants:

Tony Proffitt^{1,6}, Rob Bramley^{2,6}, David Lamb^{3,6}, Erika Winter^{4,6},
Gregory Dunn^{5,6} and Sheri Robinson⁶

¹AHA Viticulture, Dunsborough; ²CSIRO Sustainable Ecosystems, Adelaide;
³University of New England, Armidale; ⁴GrapeLinks, Melbourne; ⁵University of Melbourne, Dookie; ⁶CRCV, Adelaide, AUSTRALIA

There are now commercial examples in winegrape growing regions of Australia which demonstrate that Precision Viticulture (PV) can have economic benefits to grapegrowers and winemakers. However, the rate of adoption is variable.

CRCV Viticare surveyed 56 wine industry personnel and collected responses to the statement: "The potential benefits of PV are justified by the costs" Although 40% agreed, 53% were not able to make a judgment (Fig. 1).

CRCV saw a need to engage researchers and trainers to provide the industry with a comprehensive written source of information on PV detailing:

- concepts and implementation process (Fig. 2),
- tools, and when and how to use them (Fig. 3),
- protocols associated with data analysis, presentation and interpretation (Fig. 4),
- checklists when seeking service providers,
- costs in relation to potential benefits,
- commercial examples of PV being used in vineyards with economic outcomes (Fig. 5).

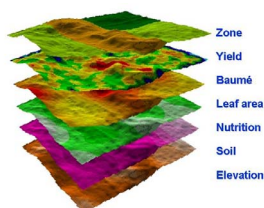
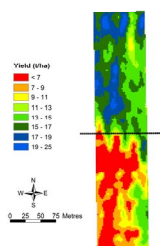


Fig. 4: One example of how to present zonal data.



This vineyard was divided into two zones (one north and one south of the line) and the fruit was harvested and processed separately. This selective harvesting strategy considerably increased the gross retail value of production in this 3.3 ha block.

Fig. 5: Yield map, courtesy of Vasse Felix and CSIRO.

"Precision Viticulture - a user's handbook" will be published in July 2006 and provide information, checklists and examples for the successful implementation and use of Precision Viticulture.

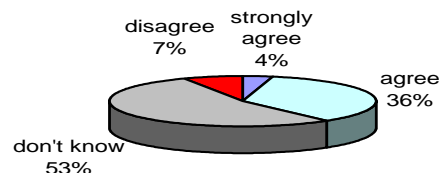


Fig. 1: Survey "Benefits of PV are justified by costs?"

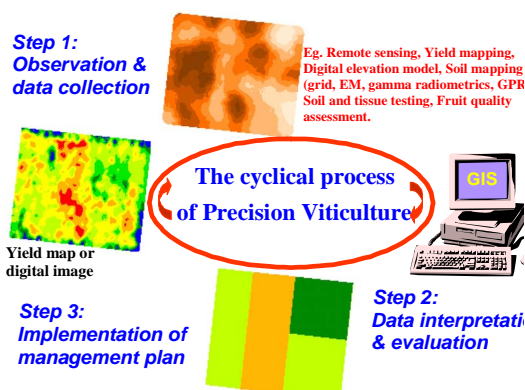


Fig. 2: The cyclical process of Precision Viticulture.

Guidance for adopting a Precision Viticulture approach to vineyard management

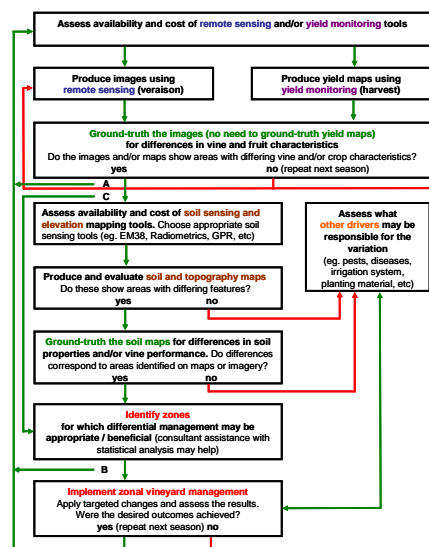


Fig. 3: Flow diagram showing one of several possible scenarios to the adoption of PV. The collection of more data could be done at points A, B and C.

