

Advanced Technology Viticulture broadens its mapping capabilities

Since Advanced Technology Viticulture introduced its grape yield monitor to the Australian and international markets, it has been adopted with more success than competing Precision Viticulture tools, according to company director Dr Bernd Kleinlagel. Now, ATV has extended its range of vineyard mapping tools.

During the 2009 vintage, ATV's easy-to-use vineyard mapping tools assisted the vineyard manager of a leading Australian grape and wine producer to carry out "selective harvesting", as termed by Kleinlagel.

"The terms selective harvesting, differential harvesting or split harvesting all mean much the same thing," Kleinlagel explains. "It implies that a suitable vineyard can be divided into different picking zones according to previously defined yield or other quality criteria."

These vineyard zones are displayed while ATV's software is operating on a display console and indicated by visual and audible devices to support the harvest team in sorting grapes into different bins for separate must processing, ultimately achieving economic benefits.

Adjusting certain harvester functions can also be accomplished. Additionally, ATV integrated tracking features to record important tags, boundaries or even yield data. This feature of the software is offered independently of the selective harvest plug-in, but is upgraded by spray and mulch-spreading mapping applications.

New to the viticulture market, ATV offers a rugged Ultra Mobile Personal Computer (UMPC) as a new benchmark for Precision Viticulture equipment. It features a daylight-visible 8.4inch touch screen with inbuilt GPS, camera, Wi-Fi, Bluetooth and USB as standard and operates with all operating systems such as Windows XP, Vista, 7, CE and Linux. This makes it a versatile tool for multiple applications.

All software and hardware developments follow ATV's main objective to simplify Precision Viticulture tools, as Kleinlagel mentions: "PV tools need to be greatly simplified, as unlike in Precision Agriculture, where highly trained farmers know how to use their 'toys', the viticultural sector quite often employs seasonal workers during the busy harvest season who do not necessarily have a similar qualification".

According to Kleinlagel, it is crucial for ATV to listen to its clients as this helps create simple, reliable tools, through high-technology within the UMPC. For example, ATV's grape yield monitor, which is well-known for its simple use, is a result of feedback from a long-standing client who suggested jokingly, "We want only two buttons, on and off". Furthermore, ATV now offers yield mapping with 'auto-start', requiring no buttons to be pressed and 'live-mapping' where all data can be transferred worldwide directly to any internet server. Kleinlagel believes this feature is especially interesting for spray mapping as it allows the vineyard manager to react in a timely manner to any errors



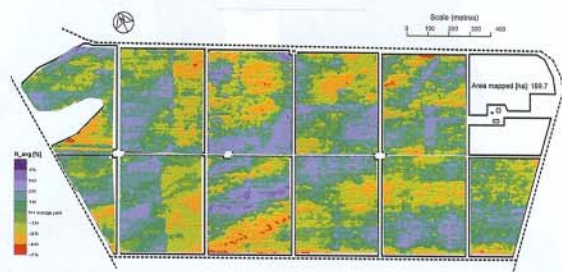
An example of the yield mapping software displayed on the Ultra Mobile Personal Computer, available from Advanced Technology Viticulture.

arising in the spray application such as missing rows, a common problem that has emerged during past spray mapping projects.

"It is important that the operator is comfortable in using our equipment. A key part of ATV's service is to offer support to the vineyard manager, technician and operator; from installation and training right through to creating correct yield maps," Kleinlagel said.

With the success of yield monitoring in viticulture as its background, ATV extended its service to other horticultural areas, including potatoes, and has successfully trialed an almond yield monitor for the first time this season.

For further information about Advanced Technology Viticulture's Ultra Mobile Personal Computers and Precision Viticulture applications, contact Bernd Kleinlagel, telephone +618 7127 0042 or email bernd@atv.net.au



A Riverland client of Advanced Technology Viticulture was able to identify problems with its irrigation system by using the vineyard mapping program. Some of the valves had 25% flow variation, leading to a 25% fertiliser application variation.