

Hydrosmart Water Conditioning for Vineyard Productivity

Hydrosmart has entered an unprecedented phase of scientific research and development starting from 2009 and extending into 2015. Dr. Bob Moore, Research and Development Manager at Hydrosmart Agronomic, says that agronomic and physical test results have been coming in fast, showing that all of the great testimonials provided by farmers over more than a decade have been based on verifiable science. In the following, Moore shows evidence of application of Hydrosmart to the vineyard industry in a time of drought. The company continues to receive excellent reports back from satisfied clients, whose businesses depend on use of low water quality resources.

Essentially, the way Hydrosmart works is that it dissolves the minerals in borewater. It teases the minerals apart after the water has been underground for a long time and minerals have accumulated to high levels and have found each other, explains Moore. Equilibrated minerals in the groundwater interact with each other and are poised to precipitate and cause trouble once reaching the surface. As well as causing pipe blockages, dripper and spray blockages, these minerals also cause crusts to form around plant roots, depriving them of water. Moore continues, "By breaking up the minerals in water, we dissolve scale and soil crusts, and free plant roots to take up the water that they desperately need."

Clients of the company expect a high level of commitment to backup support, ongoing advice, and hydrological knowledge. Hydrosmart staff provides this service by phone and email. Local customers also drop in occasionally to discuss their successes. Here, Hydrosmart shares agronomist Brett Irvine's extract from "Agronomic comment on Hydrosmart for Growing Grapes 2014".

"There are just two table grape vineyards located in the vicinity of the western Queensland town of Cunnamulla and they are side by side and irrigate from the same point from the Warrego River. They are predominantly growing the Menindee seedless variety with the same rootstock, trellis design and drip irrigation system. During regular farm visits to the region in February 2013, I noticed a rapid deterioration in the vine health on both vineyards. Tests on the Warrego River water quality showed EC of 2600 but the most dramatic issue appeared to be the high sodium carbonates and bi-carbonates similarly emanating from river and bore water sources. Upon seeing this I advised both vineyard owners to consider installing a Hydrosmart unit to treat their water used for foliar spray applications and irrigation.

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J Biggs' farm, Cunnamulla

One of the owners was in a position to do so rapidly and installed it in such a way to enable treatment of both the bore and river water being added to a new farm storage dam. On farm, results were startling over the season on J Biggs' (manager, **Matilda Made Fruit Company** at Cunnamulla since 1997), vineyard using the Hydrosmart when compared with the other vineyard: carbonate deposits on valves, hydraulic tubing and the drippers reduced significantly, and vines maintained a full growing canopy. Poorer canopy growth on the untreated farm lead to the application of nearly 2.5 times the irrigation water. The untreated farm suffered heavily from bunch stem necrosis and lost considerable (30+%) fruit. Hydrosmart offers a cost effective means of limiting the damage caused to farms by drought induced low water quality. It assists greatly in maintaining the crop and infrastructure in a commercially viable state." ■

Source:

Hydrosmart

Web: www.hydrosmart.com.au

دخلت شركة Hydrosmart مرحلة غير مسبوقة من البحث العلمي والتطوير في عام ٢٠٠٩ ومن المتوقع أن تمتد هذه المرحلة حتى عام ٢٠١٥. يقول الدكتور بوب مور، مدير البحوث والتنمية لدى Hydrosmart Agronomic، أن نتائج الإختبار الزراعي والمادي تتهافت بسرعة، وتبين أن كل الشهادات التي قدمها المزارعون على مدى أكثر من عقد من الزمن تستند إلى علم تم التحقق منه. يعمل Hydrosmart على تزويد المعادن في مياه الآبار، ويبيدها عن بعضها البعض بعد أن يكون قد مضى وقت طويل على وجودها في المياه الجوفية، حيث تكون المعادن قد وجدت بعضها وتراكمت بمستويات عالية. ومن ثم، تتفاعل المعادن المتوازنة في المياه الجوفية مع بعضها البعض، وتستعد لترسيب مما يسبب المتاعب حين تصل إلى سطح المياه. من خلال تفتيت المعادن في المياه، يقول مور أننا نقوم بحل نطاق وقشور التربة، ونحرر جذور النباتات لتأخذ المياه التي تكون بأمرس الحاجة إليها. في هذا المقال، يظهر مور دليل تطبيق Hydrosmart في صناعة كروم العنب في أوقات الجفاف.