

Australian farmers are moving to the new generation of NaanDanJain 'Super Diffuser' (SD) impact sprinklers.

Gervasi Farming Group - Vineyard case study, Victoria, Australia

Mr Gervasi has been growing table grapes in the Robinvale area of North West Victoria for some 40 years. Gervasi Farming Group supplies the Australian domestic market and via agents, Asia and the Middle East. Table grape varieties such as Thompson Seedless, Menindee Seedless and Red Globe of the highest quality are produced.



The Robinvale farm during the winter season



Joe Gervasi (Centre) and his sons Anthony & Andrew

The water supply

Case Study - Farm 1

1st stage - Water is pumped from the Murray River to the on-farm holding dam.

2nd Stage - The on-farm pump station then irrigates the 30 acre farm directly from the dam in four irrigation shifts.

Case Study - Farm 2

This 60 acre crop is irrigated directly from the Murray River.

Farm 1

This 30 acre table grape block has been converted from Nelson impact sprinklers (Brass) after 15 years of use, to NaanDanJain 6004SD LA (Super Diffuser - Low Angle) sprinklers in early 2015. After one full season in service the 6004SD LA has exceeded expectations

Farm 2

This 60 acre table grape block is about to be converted to the 6004SD-LA sprinkler following the success of the trial at farm 1.



The on-farm holding dam



Pump station (inside shed) and the pump suction line leading into the on-farm dam.

6004SD LA Sprinkler

- A low angle of four degrees facilitates a flat stream close to the ground and therefore avoids foliage.
- Unique hammer with SD (super-diffuser) plate for uniform distribution.
- Special arched water path for maximum diameter coverage.
- Resistance to UV radiation and accidental impact.
- Sprinkler drive mechanism prevents potential damage caused by snails.



Farm 1 – 30 acres of table grapes

6004SD LA Advantages:

- The protective cap prevents debris getting into the spring as this can stop the sprinkler from turning.
- The Nelson sprinklers that have been replaced cost around \$16 (AUD) 15 years ago however the plastic NaanDanJain replacement sprinklers cost significantly less than that in 2015!
- The NaanDanJain sprinkler has a better trajectory than the previous sprinklers and give better coverage.
- The 6004SD-LA sprinkler has proven to be thoroughly reliable and works well immediately upon start-up of the irrigation system.
- A range of different sized sprinkler nozzles are available which can be easily removed and re-fitted by hand.

Design details

- This 'three row system' features sprinkler laterals that are positioned down every third row, with sprinklers positioned in a triangular pattern to achieve the best uniformity.
- Vines are planted 2.4 meters apart down each row and the sprinklers are positioned at every fourth vine (Approximately 9.6 meters).
- Vine rows are 3.4 meters apart and sprinklers throw two rows so a radius of 6.8 meters approximately.
- Operating pressure approximately 2.8 bar (40PSI).



Dual dripline and under-vine sprinkler system.

