

**THE BENEFITS OF BALANCED NUTRITION
ON
REDUCING BUNCH STEM NECROSIS INCIDENCE IN WINEGRAPES**

Bunch Stem necrosis is a disorder which has a severe impact in certain viticultural regions in New Zealand. It has long been the belief of some consultants that proper Balanced Nutrition plays an important role in alleviating the disorder. Roots Shoots & Fruits Ltd. in conjunction with a leading corporate studied the impact of balanced nutrition on a block of affected grapes in the Hawkes Bay Region.

**CORPORATE TRIAL
2004-2005
Cabernet**

A block of Cabernet, renowned for the severity of bunch stem necrosis observed in this block was chosen. Soil structure, plant age, root stock, orientation, vine spacings were all consistent over the whole area. The block was then divided into treated and control areas, all of which had 6 replicates of each. Nutrient levels were assessed prior to flowering via leaf analysis and from that information a balanced nutrient program was designed and implemented for the treated blocks. The control block consisted of the growers' normal fertiliser regime. All vineyard management practices were the same across treated and control areas. Prior to harvest (6th April 2005) the trial and control blocks were assessed for total infection, incidence and severity data for Bunch Stem Necrosis.

RESULTS

Control	Total Infection %	Incidence %	Severity %
1	27.8	54.7	50.8
2	20.7	51.2	40.5
3	11.5	30.8	37.5
4	21.8	53.2	40.9
5	12.3	38.2	32.1
6	19.4	50.05	38.5
Ave	18.92%	46.36%	40.05%

Treated	Total Infection %	Incidence %	Severity %
1	16.3	39.4	41.3
2	8.5	25.1	34.0
3	11.8	32.0	36.9
4	12.8	30.3	42.1
5	12.4	35.8	34.6
6	9.3	24.7	37.5
Ave	11.85%	31.22%	37.73%

CONCLUSION:

From the data obtained, it is clear that using a balanced nutrient program incorporating high quality products from the JH Biotech range at critical stages throughout the season was able to attain excellent results without any Phytotoxic reactions:-

The Incidence of BSN was reduced by 32.66%.

Severity was reduced by 5.79%

Overall total infection reduced by 37.37 %.

******There was a significant difference in the results and overall, the quality of the crop was positively improved.**

Targeted applications of particular elements or elements used at higher rates, from the JH Biotech range may be able to alleviate the incidence of Bunch Stem Necrosis further. Work will continue in the 2005 – 2006 season.