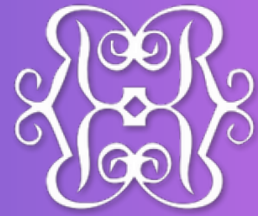




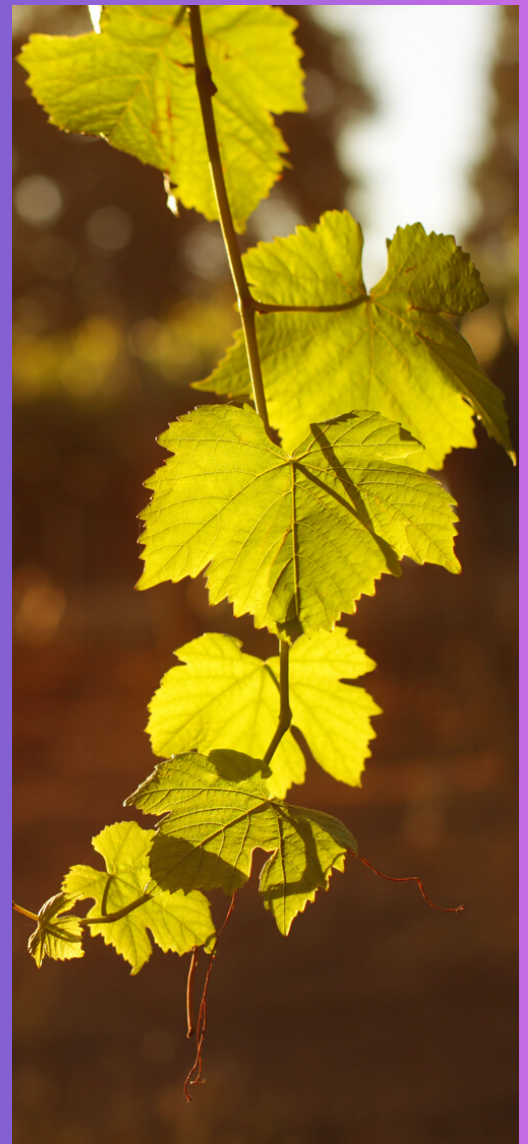
SUMMARY REPORT

REPORT ON A GROALOE TRIAL TO CONTROL LEAFHOPPERS AT THE ROLLINGDALE VINEYARD (2019)



ROLLINGDALE
WINERY

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Rollingdale Vineyard Research

SUMMARY REPORT



During the summer of 2019, we conducted a trial using GroAloe at the Rollingdale vineyard to control for the incidence of leafhoppers. When we began in mid-May, we observed a large number of leafhoppers (an average of approx. 18 individuals per leaf) (Figure 1). By the beginning of July, the GroAloe treatment significantly reduced their abundance.

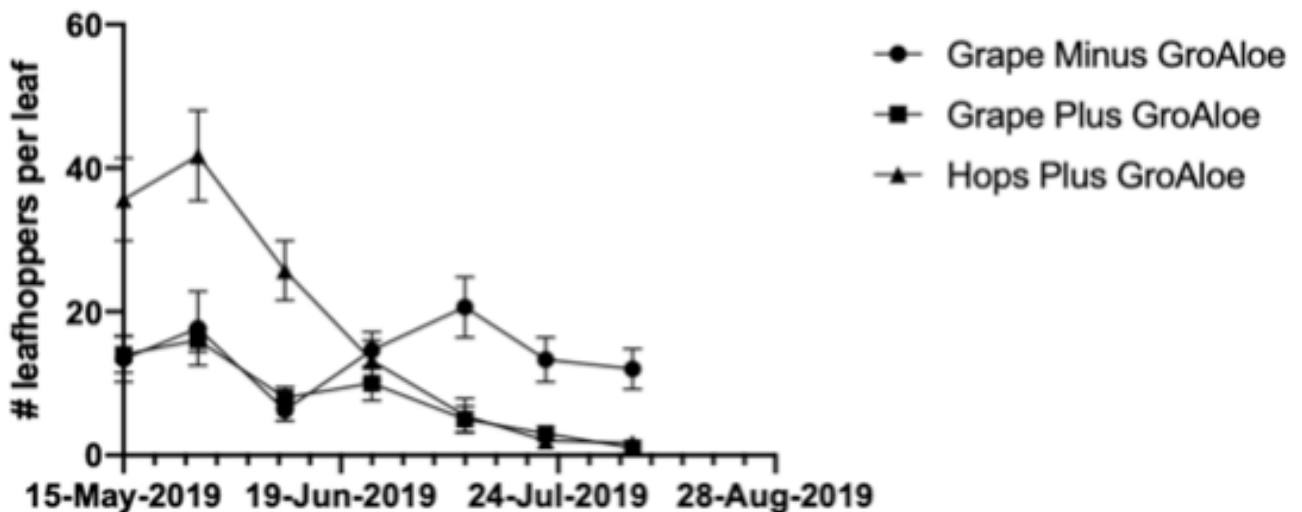
GroAloe Trial to Control Leafhoppers

By the beginning of August, leafhoppers were reduced even further to almost zero in the GroAloe treatment, whereas they remained high (average of approx. 18 individuals per leaf) in the control.

We also treated a row of hop plants at the same time, and we found a similar result. Hops were highly infested with leafhoppers in Mid-May (approx. 35 individuals per leaf), and by early August they were almost completely eliminated following the GroAloe treatment (Figure 1)



Leafhoppers



SUMMARY REPORT

ROLLINGDALE, BC. WINERY TRIAL & TESTIMONIAL

Brendan Smith, Vineyard Manager & Winemaker

Rollingdale is a small farm gate winery located in Lakeview Heights in West Kelowna, British Columbia. As an organic winery, we are restricted as to what products we can use on our grapes.

Our focus is on producing fine wines using only premium grapes made from the most conscientiously cultivated vines we can find. To achieve this, we are open to new ideas and ways of doing things.

When GroAloe was introduced to us as a 100% organic soil amendment product that could materially enhance yield, while skeptical, we were willing to give it a trial.

The trial was overseen by the University of British Columbia, Okanagan Campus, and commenced in March 2019 to harvest in October of that year. We followed the protocols given to us by our GroAloe consultant and used no other sprays, including Kumulus.

"The results were nothing short of astonishing."

YEAR OVER YEAR COMPARISONS

	2019				2018		
Grape Type	Yield/Ton	pH	Brix		Yield/Ton	pH	Brix
Pinot Gris	6.02	3.52	23.8		4.17	3.62	24.2
Pinot Blanc	5.38	3.44	22.0		3.11	3.32	22.0
Chardonnay	2.80	3.34	23.2		2.70	3.22	22.5
Marechal Foch	3.35	3.62	20.0		2.80	3.78	19.0
Merlot	3.32	3.32	21.0		1.39	3.44	23.0
TOTALS	20.87				14.17		
INCREASE	47.3%						

SUMMARY REPORT

“We had lower leafhopper numbers throughout the entire vineyard by about 90%; healthier fruit clusters with a great fruit set; no sign of uneven growth of berries and clusters; overall healthier grapes; skin structure of the merlot was very evident; the merlot also had great tannin development with long chain tannins arriving; long, full clusters with enhanced overall berry size; and both an increase in the quality of the grapes and in yield.



The yield was a 47% increase year over year. In comparison, most other wineries in the Okanagan Valley saw a similar harvest or worse to the prior year. Rollingdale has a contract vineyard that is completely separate and was not treated with GroAloe, and this crop was devastated by white powdery mildew.

Needless to say, we have already put our order in for GroAloe for next year with the first application starting in March.

“We would recommend GroAloe to any winery whether organic or not.”

Brendan Smith, Vineyard Manager & Winemaker

