

Table 2. Economic analyses of ripener results obtained in crops harvested between 2020 – 2024 in the two participatory demonstration trial fields

Year	RV yield increase ¹ (t/ha)	RV price ² (R/t)	RV Income ³ (R/ha)	Ripening cost ⁴ (R/ha)	Benefit to cost ratio ⁵	Gross margin ⁶ (R/ha)
2020	0.96	4525	4344	579	7.5	3765
2021	3.25	5196	16 887	587	28.8	16 300
2022	2.34	5685	13 303	603	22.1	12 700
2023	1.88	6810	12 803	638	20.1	12 165
2024	0.77	7475	5756	700	8.2	5056

¹RV yield increase in ripened treatment over control treatment from Table 1, ²Declared RV price for the applicable harvest month, ³The product of RV yield increase and RV price, ⁴Total ripening cost including aerial application and the fluazifop-p-butyl chemical, ⁵RV income divided by ripening cost, ⁶RV income minus ripening cost.

Conclusion

A value analysis of the long-term participatory research trials reported in this paper revealed advancements in our knowledge on chemical ripening at an individual field level, and the development of a flexible and calculated ripening approach by the grower. The implementation of this approach led to a superior cane quality performance, at the farm level. The trials also contributed to the increased adoption of chemical ripening on a regional level.

Acknowledgements

Special thanks to Brad O'Neill, for the dedicated management of the demonstration trials on his farm over the past ten years, as well as to the Cane Testing Services (CTS) staff at the Maidstone Mill, for the testing of cane consignments from these trials.

References

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