



The Jetsonville Hillslope Erosion Trial Site, July 2021.

Mitigating Hillslope Erosion in Northern Tasmania

The Hillslope Erosion Sub-Project has established trial sites in areas of Northern Tasmania with intensive cropping enterprises and high susceptibility to hillslope erosion such as Deloraine and Scottsdale.

Objective

Trial sites were established to investigate the cost-benefit ratio of different hillslope erosion control methods and to build awareness of hillslope erosion. Using these results, NRM North aims to demonstrate the cost-effectiveness of protecting soil from erosion.



Key Findings

- Leaving soil bare through an intense rainfall period is an expensive option.
- Utilising any of the erosion control techniques was more beneficial than leaving the seedbed bare.
- Sowing a cover crop gave an 8:1 return on the investment.



Methodology

In June 2021, five 250m² trial plots were prepared at Moore's Vegetables in Jetsonville.



Treatments:

- Bare fallow (smooth bed);
- Tama ryegrass cover crop on smooth bed;
- Contour-ripped bare fallow;
- Contour-ripped with Tama ryegrass cover crop; and
- Contour-ripped with Tama ryegrass cover crop (early terminated).

Notched bamboo monitoring pegs (190) were inserted into each plot, with the soil level to the notch. The difference between the notch and soil level was measured manually on each peg in November 2021.

Conclusion

All plots experienced erosion, but the extent was reduced when soil protection methods, such as cover crops, were used.

Value of cover crop

Spending money on cover crops or tillage to reduce erosion risk through winter and early spring is usually a cost-effective investment in Tasmania's higher rainfall agricultural zones.



\$ 1,723

Sowing a basic ryegrass cover crop reduced the costs of erosion by \$1,723/ha (incl. the cost of a cover crop)

Trial Sites



Scan to view the full 2021 report and 2019 report from the Weetah Trial Site.

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Australian Government