

Harvest Weed Seed Control Financials

Glenvar Bale Direct

Capital Cost: \$140,000

Area harvested with one harvester (ha)					
Costs	\$/ha	1000	2000	3000	4000
Bale handling (on farm)	5	5000	10000	15000	20000
Repairs and maintenance	2.5	2500	5000	7500	10000
Fuel (extra 0.5 L/ha)	4.4	4400	8800	13200	17600
Finance (\$140K, 6%, 8 yr)		22545	22545	22545	22545
Total		34445	46345	58245	70145
Cost per ha		34.45	23.17	19.42	17.54
Residue removal (nutrient value \$/ha)		14.93	14.93	14.93	14.93

*If financed over five years (as most farm machinery is), the annual finance cost would be \$33,235 to completely pay off machine in five years.

**Growers with very high levels of soil Potassium may not wish to include the cost of nutrients in the calculation. The nutrient cost is roughly half K and half N.

Assumptions

- Wheat 2 t/ha
- Fuel price on farm \$1.1 / L
- Nitrogen fertiliser \$1.15 / unit N
- Potassium fertiliser \$1.30 / unit K
- Interest rate 6%
- Machinery is paid in full over eight years and finance cost is amortised

Nutrients in residue

Assuming 10 kg Potassium (K) per tonne of residue (normal range 5 to 15) and 6 kg Nitrogen (N) per tonne of residue (normal range 4 to 8).

Nutrient calculation:

2 t/ha wheat crop produces 3 t/ha residue (40% Harvest Index).

Baling removes 50% of residue (range 40% to 55%) when harvesting wheat.

Therefore, 1500 kg/ha of residue is removed in bales. We assume a nutrient efficiency of 50% (i.e. if residue was retained, 50% of the nutrients would be used directly by following crops).

