

1. Example of Costing Silage production – assumes 3 Tonne Dry Matter harvested per hectare and quality is good (at 9.5MJME/kgDM)

Cost		Annual Pasture/Crop	Perennial Pasture	Your Costs \$/ha
Sowing costs				
A. Cost of spraying & cultivating (\$/ha)		\$488	0	
B. Cost of seed and sowing (\$/ha)		\$200	0	
C. Cost of fertiliser applied see Nutrient removal below		\$255	\$55	
D. Total Sowing costs = (A+B+C)		\$943/ha	\$55/ha	
Allowance for grazing (for annual crop/pasture only)	Multiply			
No grazing	X 1			
1 grazing	X 0.7			
2 grazing	X 0.4	√		
Equals E		\$377/ha	\$55/ha	
PLUS		\$41	\$41	
F. Cost of weed and pest control (\$)				
G. Cost of mowing and raking (\$)		\$144	\$144	
H. Cost of baling, wrapping etc (\$)		\$330	\$330	
I. Total per hectare (\$) I = E + F+G+H		\$892/ha	\$570/ha	
J. Cost/ha with 20% wastage J = I x 1.2	I x 1.2	J = \$1071/ha	J = \$684/ha	
K. Cost/tonne If 3 Tonne Dry Matter harvested/ha	Divide by Tonne/ha J /3	K = \$357/T	K = \$228/T	

2. Hay Example

Cost Areas		Annual Pasture/Crop	Perennial Pasture	Your Costs \$/ha
Sowing costs				
A. Cost of spraying & cultivating (\$/ha)		\$488	0	
B. Cost of seed and sowing (\$/ha)		\$200	0	
C. Cost of fertiliser applied see Nutrient removal below		\$255	\$55	
D. Total Sowing = (A+B+C)		\$943/ha	\$55	
Allowance for grazing (for annual crop/pasture only)	Multiply			
No grazing	X 1			
1 grazing	X 0.7	√		
2 grazing	X 0.4			
Equals E		\$660/ha	\$55/ha	
PLUS				
F. Cost of weed and pest control (\$)		\$41	\$41	
G. Cost of mowing and raking (\$)		\$81	\$81	
H. Cost of baling, carting and storing (\$)		\$350	\$350	
I. Total per hectare (\$) I = E + F + G + H		\$997ha	\$527/ha	
J. Cost/ha with 20% wastage (if sold put) J = I x 1.2	I x 1.2	\$1196/ha	\$632/ha	
K. Cost/tonne If 5 Tonne Dry Matter harvested/ha	Divide by Tonne/ha J /5	K = \$228/T	K = \$126/T	

3. Comparing cutting silage or hay to the cost of Grain as a stock feed

	Silage - crop	Silage – perennial	Hay - crop	Hay - perennial	Grain
Cost/T Dry Matter basis	\$357/T	\$228/T	\$228/T	\$126/T	\$200/T
Energy content MJME/kgDM	9.5MJ	9.5MJ	8MJ	8MJ	11
Cost of energy (c/MJ) (\$/T/1000)/MJME	\$0.04 (4c/MJ)	\$0.024 (2.4c/MJ)	\$0.029 (2.9c/MJ)	\$0.016 (1.6c/MJ)	\$0.018 (1.8c/MJ)

3. Amount of nutrient removed from hay or silage

If hay or silage is cut and sold off the farm, then the true cost of cutting and selling hay or silage should include the cost of the nutrients removed. A guide to nutrient removal from hay is tabled below.

Amount of nutrient removed (kg)			
Product	Phosphorus	Potassium	Sulphur
Hay (1 tonne dry matter)	3	15	3

For example, if 5 tonnes/ha of dry matter are cut from a paddock, then nutrients required to maintain levels will be:

Phosphorus – 15 kgP/ha (5 tonnes x 5kg P)

Potassium – 75kgK/ha (5 tonnes x 15kg K)

Sulphur – 15 kgS/ha (5 tonnes x 5kg S)

This could be provided by using 300 kg/ha of super potash 1 and 1 which has 4.4% P; 25% K and 5.5% S. This cost should be included in estimating the total cost of hay or silage