



Anwendungsbericht / User application report

Produkt / Product:
Penergetic-p

Fachberater / Consultant:
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Anwender / User:
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Datum / Date:
2016

	2011	2015
Breed: Vorarlberg Brown Cows	100 LU	118 LU
Cows:	64	65
Avg. kg	9.120	9.800 (+ 7,4%)
Avg. fat	4,38	4,35
Avg. protein	3,56	3,68
Avg. cell count	148	80
Avg. Age	5,1	5,1
Avg. concentrated feed/cow/day	6,5	6,0 (-8,2%)
Field:		
Meadow – permanent pasture ha	40	41
Number of cuttings	4 + 1 grazing	4 + 1 grazing
Avg. hay/ton/ha	10,5	12,00
Avg. yield in € (converted into hay; kg/ 18 cent x 40) ¹	75.600,00	86.400,00
Additional yield in %		+ 15%
Additional yield in € total		+ 10.800,00
Additional yield in €/ha		+ 263,00
Maize - ha	10,5	9,5
Avg. NEL		6,8 - 7
Avg. yield/ton/ha	45	53
Avg. yield € /ha in Vorarlberg ² 45/53 x 60,00 € / ton	2.700,00	3.180,00
Avg. yield € (calculated on 9,5 ha)	25.650,00	30.210,00
Additional yield in %		+ 17 %
Additional yield in € total		+ 4.560,00
Additional yield in €/ha		+ 480,00
Mineral fertilizer applied (tons)	16	5
Avg. costs of mineral fertilizer (ton)	190,00	190,00
Avg. mineral fertilizer applied in €	3.040,00	950,00
Avg. reduction in tons		11
Savings in %		- 68,7%
Savings in € total		- 2.090,00
Savings in €/ha/meadow		- 50,00



Calculation:

¹ Meadow: Avg. kg hay/22cent. minus 4 cent ventilation = 18 cent.
 2011: 10,5 tons avg. yield/ha
 10.500 x 0,18 = 1.890,00 € x 40 ha = 75.600,00 €
 2015: 12,0 tons avg. yield/ha
 12.000 x 0,18 = 2.160,00 € x 40 ha = 86.400,00 €
² Maize: ton / 60.00 €
 8 tons additional yield/ha: 8 x 60,00 – 480,00 € x 9,5 ha = 4.560,00€

Total expenditure: Penergetic-g, t ,k ,p

2011	2.126,00		
2012	6.215,00		
2013	5592,00		
2014	4.381,00	992,00	
2015	3.351,00		
2016	3.218,00		
Total	24.883,00	25.875,00	
Avg.	net		4.312,00

Additional yields / savings:

2015		Additional yield	Savings
2015	Pasture	10.800,00	
2015	Maize	4.560,00	
2015	Fertilizer		-2.090,00
2015		15.360,00	
2015	total	net	17.450,00

Avg. annual expenditure: Penergetic total 4.312,00 **Avg. per ha: 86,20 €**
 Avg. annual savings and additional yield: 17.450,00 **Avg. Per ha: 349,00 €**

Avg. annual total difference + 13.137,00 € net **Avg. per ha: + 262,70 € net**

Other observations:

Meadow: Buttercup is substantially diminished, greater biodiversity, especially in the fall more clover, better taste, very dense sod grass, meadow panicle increases, very good quality, additional yields, **grass swaths collapse less when mowing** - (possibly stronger cell walls or less water stored in cells), greater yield.

Slurry: Before using Penergetic the edges of the floating layer in the tank had to be dredged in order to fully bring the slurry in motion (took a whole day).

Now, the slurry is homogeneous and may even be spread in very hot weather (up to 30 degrees Celsius). Since the feed additive has been used, the slurry is homogeneous and application of the slurry additive is now mostly superfluous.

Milk performance: Since the use of the milking robot, the cell counts have declined significantly. Also the basic feed was increased (available ad libitum) and the amount of concentrated feed could be decreased. It is noteworthy that at a higher milk production (+ 7%), the ingredients have remained roughly the same, which suggests a higher quality of the basic feed. Possibly also the Penergetic feed additive contributes to a better feed conversion.

Edwin Wohlgenannt:

„Better yields and optimized quality at lower costs – **GREAT STUFF!**“