

What is optimally processed corn silage worth to a dairy producer?

Savings in grain cost

A recent edition of Progressive Dairyman Canada reported that improving the kernel processing score from 50 (considered adequate) to 70 (optimal) and feeding as little as 9 pounds of corn silage dry matter a day can reduce grain costs by \$0.08 per head per day.

Small improvements pay

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Jim Ferguson, University of Pennsylvania, has established that fecal starch analysis is a good predictor of starch digestibility and milk loss or gain. According to Ferguson's formula, each percentage point of fecal starch is worth 0.72 pounds of milk. At the same time, Vita Plus Corporation research shows that even subtle changes in kernel processing can affect fecal starch. For example, improving kernel processing just 10 points from the lower range of adequate to the upper range of adequate will lower fecal starch by 2.68 percent. Applying Ferguson's formula, that equals 1.9 pounds of milk or \$0.48 worth of milk!

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What is optimally processed corn silage worth to the dairy producer?

What does this improvement cost?

Very little. The cost of optimal kernel processing is often reflected in the added cost of field chopping. It may be an added cost for specialized processing equipment, more fuel, or simply more time to do an adequate job. However, this cost is very low when calculated on a cost per head per day basis as all investments should be. For example, if the added cost is \$1 per ton to achieve optimum processing, that's \$0.025 per head per day for a cow fed 50 pounds of as-fed corn silage per day.

Bottom line

Based on university and industry research, the return on investment far exceeds the costs to ensure that your bunkers, bags and silos contain a year's supply of optimally processed corn silage.

Yours sincerely, J&A Forage Services, LLC



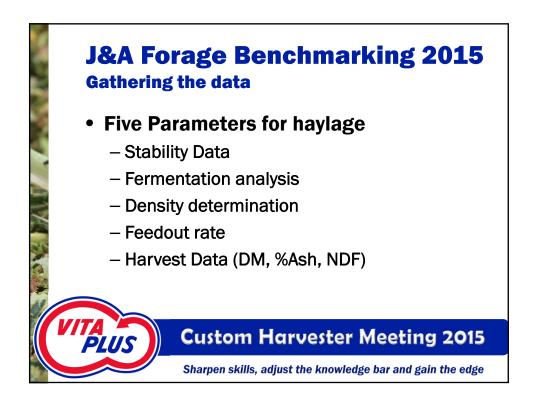
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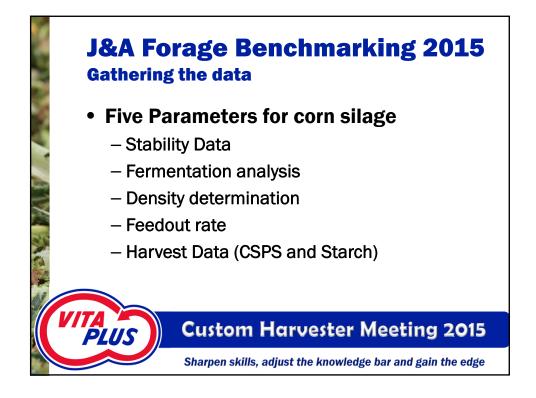
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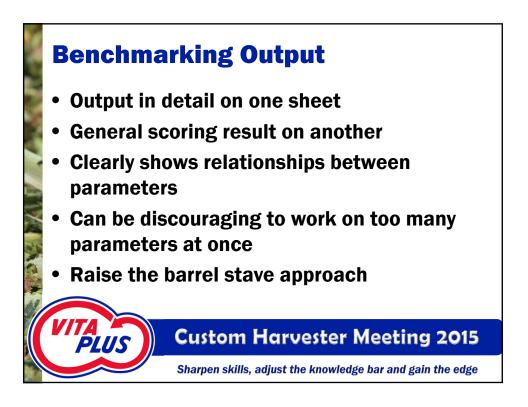
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	J&A Forage Services Density Survey - March 2014							
	Farm Code	Core ID	Description	As Fed Density		DM	Notes:	
	G	A1	Hlg Pile Left	49.00	16.17	33.0		
		A2	Hlg Pile Center	53.00	17.49	33.0		
		A3	Hlg Pile Right	47.00	15.51	33.0		
		B2	CS Rt Low	45.00	18.00	40.0	Not Rolled	
		B3	CS Left Low	57.00	19.38	34.0	Rolled	
		B4	CS Right High	45.00	18.00	40.0	Not Rolled- Good DM Density	
-		B5	CS Left High	47.50	16.50	34.0	Rolled-Very Good As Fed Density	
		B6	2012 Silage High	44.00	14.08	32.0		
		B7	2012 Silage Low	50.00	16.00	32.0		
	S	C1	CS Left Low	45.00	15.75	35.0		
		C2	CS Center Low	45.00	15.75	35.0		
		C3	CS Right Low	49.00	17.15	35.0	Highest Density on Right	
1		C4	CS Left High	37.00	12.95	35.0		
		C5	CS Center High	37.00	12.95	35.0		
		C6	CS Right High	39.00	13.65	35.0	Corresponds to Right Low	
	н	D1	CS Left	47.00	x	X		
2		D2	CS Center	30.00	x	X		
L.		D3	CS Right	40.00	x	X		
		D4	CS Center High	36.00	X	х		
	В	E1	CS Left	52.00	15.86	30.5	Small Bunker	
1 CA		E2	CS Center	47.00	14.34	30.5	Small Bunker	
A COLORING COLORING		E3	CS Right	43.50	13.27	30.5	Small Bunker	
	С	F1	CS Bag Center	37.00	13.13	35.5	Good Looking Bag	
		F2	CS Bag Upper Rt	33.00	11.71	35.5	Good Bag-Result Typical for Bag	
and the second s	Survey Ave			43.96	15.38	34.2		
	VP Survey Ave				14.88	33.55		
	USDA Survey				14.50			
	Rec Minimum			35-40	14-15			
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Forage Benchmarking Initial Effort-March 2014									
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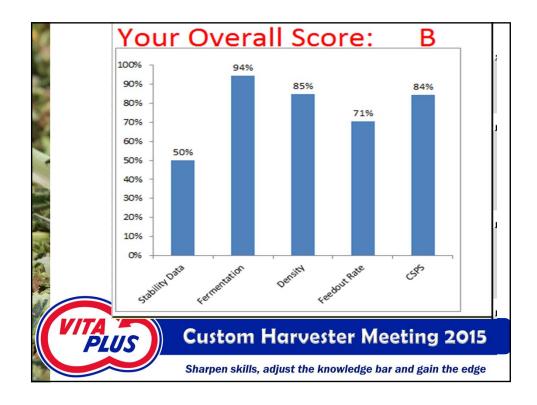
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Parameter	Where you are	<u>Goal</u>	Earned Point	Possible Poir	<u>Score</u>	Grade
Stabilite Data	I					
Temperature range on the silo face	0	Less than 15	4	4	50	D
Difference between 18" and ensiling temperature	-2	Less than 10	4	4		
Difference between 18" and 4" temperature	0	Less than 15	0	0		
Loose feed temperature compared to ambient and	0	Less than 15	0	4		
Faceruse	yes	yes	3	3		
Subjective surface spoilage rating	5	7 or better	-2	3		
Fermentation						
DM%	34.5	32-35	10	10	94	A
pH	3.8	less than 4	3	3	÷.	
Lactic. % DM	8.0	4-7	3	3		
Acetic, % DM	0.7	1-3	0.5	2		
Ratio of Lactic to acetic	11.7	3 or above	3	3		
Buturic, % DM	0.0	0	0	0		
Ethanol, % DM	0.0	0-3	1	1		
Total VFA, % DM	8.7	6 or more	3	3		
Ammonia, % CP	4.2	Less than 7	2	2		
Densit						
Core Density	14.3	more than 15				
Shoulder Density	13.6	more than 15				
Left side		more than 15				
Middle		more than 15				
Right side		more than 15				
Average Density, Ib/ft^3	13.9	more than 15	8	10	85	B+
Core density - shoulder density	0.66	less than 2	6	6		
Porosity calculation	0.45	Less than 0.4	3	4		
Feedout rate						
		more than 12				
		in the				
		summer;				
inches/day	5.00	more than 6	6	7	71	C+
1x per day versus 2x per day	1	2x	4	5		
Amount of loose feed present	some	none	2	5		
Kernel Scoring						
Corn Silage /Kernel Processing Score	67.54	more than 70	10	11	84	B+
Starch, %	27.8	more than 30		5		











"Let advertisers spend the same amount of money improving their product that they do on advertising....and pretty soon, they won't need to advertise."

Will Rogers

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