BaleMax™ Improves Hay Quality in Long-Term Hay Trial

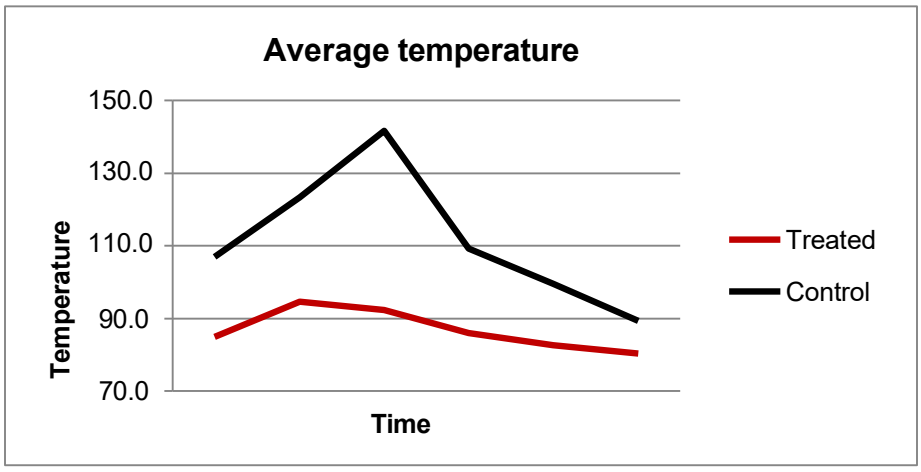
Study was conducted from July 2015 through October 2016 in Southwest Minnesota.

BACKGROUND

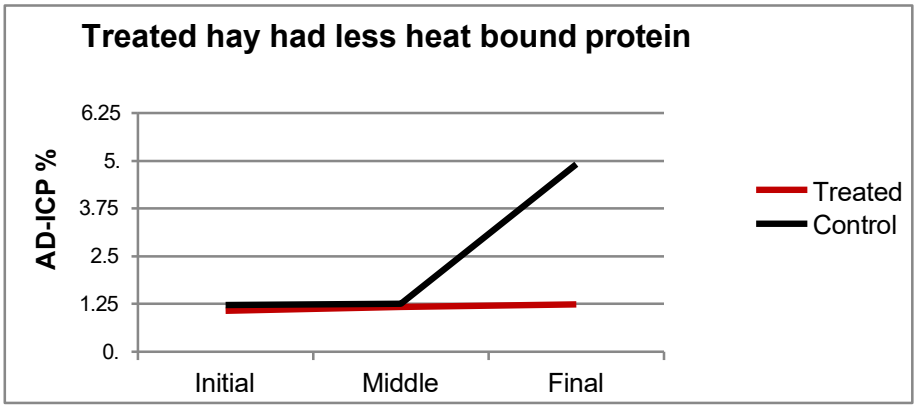
In this study alfalfa/orchard grass hay was baled into large round bales in July 2015 in Southwest Minnesota. Half of the bales were control and the other half were treated with BaleMax™. The hay started out around 18% moisture and a relative feed value (RFV) of 125. Moisture and temperature were monitored over the initial 21 day curing period with lab analysis collected periodically throughout the duration of the study.

STUDY HIGHLIGHTS

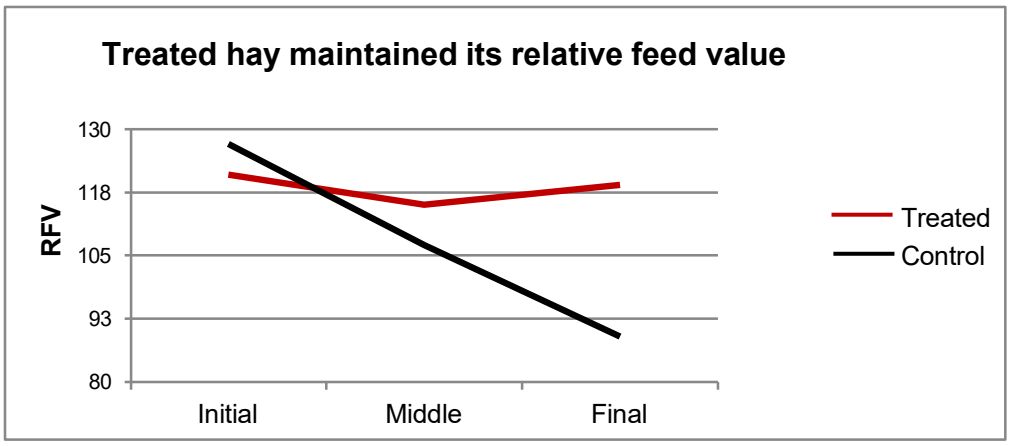
- BaleMax™ treated hay didn't heat through the curing process
- BaleMax™ hay stayed much cooler, resulting in 3.67% less heat damaged (bound) protein
- BaleMax™bales had 8.96% lower acid detergent fiber (ADF) and 8.62% lower neutral detergent fiber (aNDF)
- BaleMax™ treated hay maintained its RFV staying 30 points higher at the end of the study



The control bales got hotter than those bales treated with BaleMax™, which affected the heat damaged protein (AD-ICP) shown below.



We saw that the ADF and aNDF were more favorable in the BaleMax™ samples as both were lower roughly 9% lower than the control. As ADF increases, digestible energy decreases. As NDF increases, dry matter intake goes down. These factors led to the RFV of the treated hay to be 30 points higher. The treated hay maintained its quality while the control declined through the storage period.



Lab analysis from the final sample can be seen below:

	CP	AD-ICP	Adj. CP	ADF	aNDF	RFV
Treated	19.26%	1.24%	19.26%	34.56%	48.48%	119.16
Control	18.50%	4.91%	13.60%	57.10%	57.10%	89.53