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Harvest Tec On-Baler RFV Calculator System

New RFV Calculator Demonstrated at USU Forage Technology Day

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LOGAN, UTAH. A forage field day was held August 24th to demonstrate the new on-baler Relative Feed Value (RFV) Calculator System recently developed by Harvest Tec, Inc. of Hudson, Wisconsin. Utah State University co-hosted the event at their Caine Dairy facility. Local and regional hay producers, along with dairy operators observed the system that was installed on a large square baler as 30 bales were made. Bales were identified and marked based on their RFV levels (low, medium, high) and sorted accordingly for feeding. Twenty additional sample bales were on display that had been made from a previous cutting. The calculated RFV values of these bales were shown to attendees along with bale coring test analysis results from 2 separate labs.

Prior to this harvest year, the USU staff, headed by Dr. Allen Young, completed a study of 546 bales showing the RFV Calculator system readings in comparison to the lab analysis of bale coring samples. Dr. Young told the Forage Day attendees that USU's evaluation revealed a production increase of six pounds of milk per day per cow was achieved by sorting and properly feeding the alfalfa hay.

Harvest Tec advanced systems are also benefiting those businesses involved in the export market. Joe Jessop of ACX International Ag Management attended the event and stated "I am very impressed with the new Harvest Tec products, particularly the bale identification and tracking systems, as tracking and inventory are always a big concern in the export market. Having an indication of the RFV measurement of every bale is an industry-leading advancement."

The Harvest Tec system works on the principal that higher leaf content of a bale creates greater density and bale weight, and therefore higher feed quality. Prior to baling, a sample of the hay is tested at a lab. The lab's number is entered into the system as the starting value, and the system uses data from the baler's scale and Harvest Tec's accurate moisture sensing system to determine the RFV of every bale. That score can then be recorded on an RFID tag attached to the bale string, or the bale can be marked

with food grade striping, with one stripe for 140-160 RFV, two stripes for 160-180 RFV or 3 stripes for over 180 RFV. With this identification in place, alfalfa hay can be bought and sold more fairly, and properly fed to dairy cattle to achieve higher production results.

The following chart shows the test results of the sample bales shown at the Forage Field Day. These scores show inconsistency and wide differences between results of the two labs, and large spreads in their numbers. One significant difference is that lab analysis shows results just from a single portion of a bale, while the Harvest Tec system measures the entire bale.

UTAH STATE TECHNOLOGY FIELD DAY RESULTS 8/24/2016 (20 sample bales)

| Bale ID # | Dairyland Lab, Arcadia, WI RFV | Utah State Lab RFV | Harvest Tec On baler calculated RFV |
|-------------------------|---|-------------------------------|--|
| 2195200779 | 152.35 | 192.66 | 168 |
| 2195200792 | 158.61 | 169.06 | 162 |
| 2195200794 | 171.18 | 187.65 | 159 |
| 2195200808 | 175.94 | 200.56 | 171 |
| 2195200821 | 164.63 | 144.46 | 173 |
| 2195200866 | 198.19 | 174.58 | 189 |
| 2195200868 | 164.27 | 136.46 | 186 |
| 2195200869 | 143.92 | 160.79 | 178 |
| 2195200870 | 153.45 | 155.76 | 173 |
| 2195200881 | 172.36 | 120.03 | 175 |
| 2195200889 | 163.96 | 169.26 | 171 |
| 2195200896 | 183.18 | 211.06 | 190 |
| 2195200898 | 158.27 | 202.67 | 182 |
| 2195200899 | 158.7 | 164.22 | 185 |
| 2195200907 | 166.75 | 185.63 | 172 |
| 2195200921 | 173.5 | 189.3 | 178 |
| 2195200928 | 163.25 | 178.02 | 186 |
| 2195200931 | 159.39 | 139.56 | 181 |
| 2195200936 | 158.06 | 193.85 | 173 |
| 2195200937 | 154.23 | 166.59 | 192 |
| average RFV | 164.70 | 172.10 | 177.2 |
| spread in values | 55 points | 72 points | 31 points |

Alfalfa producers and dairymen at the USU Forage Field Day learned how to benefit from this new technology that is destined to revolutionize the way RFV is measured, eliminate the need for random bale coring and provide a way to know the RFV of every bale. For more information, contact Harvest Tec at (800) 635-7468 or visit the website at www.harvesttec.com