Laboratorio Analisi Zootecniche sas –Gonzaga MN:

Informazioni sui Parametri analizzati presso Dairyland (USA)

CP	**Crude Protein**
AD-ICP	**Acid Detergent Insoluble Crude Protein (ADICP) (Most feeds naturally contain 5 to 10% of nitrogen (CP) as ADIN, but ADIN greater than 15% of nitrogen is an indicator of heat damage. Formation of ADIN is also called non-enzymatic browning (because the hay or silage turns brown) or Maillard reaction. Proteina grezza (insolubile) legata all'ADF**
ND-ICP w/Na2SO3	**Neutral Detergent Insoluble Crude Protein, with Na2SO3 with amylase**
SP%CP	**Protein Solubility (Generally an indicator of protein rapidly digested in the rumen)**
Ammonia CP%CP	**Ammonia-CP% (In silage fermentation Ammonia N as % of CP - High levels (>12-15% of CP) indicate that extensive protein degradation has occurred)**
Ammonia CP%DM	**Ammonia-CP%**
ADF	**ADF (Residue remaining after boiling a forage sample in acid detergent solution. ADF contains cellulose, lignin and silica, but not hemicellulose)**
aNDF	**aNDF (Residue left after boiling sample in neutral detergent solution. If amylase and sodium sulfite are used during the extraction (this is recommended procedure), the fiber fraction should be called amylase-treated NDF (aNDF) to distinguish from original method.**
aNDFom	**aNDFom (NDF with with Na2SO3 + amylase and residue ashed with ash value subtracted).**
Lignin	**Lignin (ADL) (Undigestible plant component, giving the plant cell wall giving its strength and water impermeability. Technically, a chain of phenyl propane units).**
NDFD30	**NDF Digestibility 30 h (In vitro NDF digestibility of forages are evaluated by incubating forage in buffers and live rumen fluid, at body temperature, under anaerobic (no air) conditions. NDFD = dNDF/NDF*100).**
NDFD120	**NDF Digestibility 120 h**
NDFD240	**NDF Digestibility 240 h**
uNDFom30-120-240	**Undigested NDF 30 h (Undigested NDF residue after a specified time of digestion: 24, 30, 120, 240 h. At time 0h = 100% uNDF or NDF).**
Starch	**Starch**
IVSD7	**In Vitro Starch Digestibility (IVSD 7 h). IVSD7-o and Starch MIR_P1T1 kd rates are designed to provide values appropriate for ration balancing, including use within CNCPS version 6.5. These values can be measured by wet chemistry or NIR and are well correlated to other known indicators of starch digestibility including soluble protein and ammonia. When integrated into starch digestion models with a passage rate of 8%/hr, these values will predict rumen degradabilities within a range of 40-80% for corn grain, earlage, snaplage, and corn silage.**
EE(Fat)	**Fat (ethereal extract)**
ash	**Ash**
Lactic	**Lactic Acid**
Acetic	**Acetic Acid**
Propionic	**Propionic Acid**
pH	**pH**
Adj_CP	**Adjusted Crude Protein (Adjusted crude protein estimates the protein available for animal use and should be used for formulating rations when ADFCP is greater than 14% of the total crude protein).**
NFC	**NFC**
RFV	**Relative Feed Value (RFV) (An index for ranking cool season grass and legume forages based on intake of digestible energy. RFV is calculated from ADF and NDF as follows: RFV = [(120/NDF) * (0.889- (0. 779 * ADF))] / 1.29).**

LABORATORIO ANALISI ZOOTECNICHE sas di Mancinelli D.r Eugenio e D.r Marco V.le Marconi n° 9 46023 GONZAGA (MN) Tel. 0376.528295 0376.529091 Fax 0376.528362 P. IVA: 01649590203 e-mail info@lazoovet.it Sito web: http://www.lazoovet.it/

RFQ	**Relative Forage Quality (RFQ) (An index for ranking all forages based on intake of TDN calculated by estimating digestible portions of protein, fatty acids, fiber (NDF), and non fibrous carbohydrate. Formulas: RFQ = dIntake potential*dTDN/1.23 Where: dTDN = TDN (defined below) with NDFD. dIntake potential for legumes =(120/NDF) + (NDFD-45) *0.374*1350/100 dIntake potential for grasses = -2.318 + 0.442*CP -0.0100*CP2 - 0.0638*TDN+ 0.000922*TDN2 + 0.180*ADF – 0.00196*ADF2 - 0.00529*CP*ADF).**
RFQ table 1:	**Table 1. The categories and RFQ ranges used in the Southeastern Forage Quality categorization system. Forage Quality Category RFQ: Premium > 140; Good 110-139; Fair 90-109; Utility < 90.**
TDN_Milk2013	**TDN_Milk2013 for hay and haylage**
Milk/Ton_Milk2013	**Milk per TON Milk 2013 for hay and haylage**
TDN_Milk2006	**TDN_Milk2006 for cornsilage**
Milk/Ton_Milk2006	**Milk per TON Milk 2006 for cornsilage**
Starch_kd_MIR	**Starch Digestion Rate (kd, %HR, Mertens) Rumen starch digestibility is estimated from a 7 hour incubation of a starch containing feed material, ground to 4 mm. This starch digestibility is then modeled in an equation developed by Dr. Dave Mertens to generate an estimated rate of rumen starch digestibility. This value should fall in the range of 15% to 30% / hour.**
TDN_OARDC	**The OARDC energy calculations are similar to those developed by the NRC (2001). Both calculations use a summative approach by assigning digestibility and energy values to CP, NDF, Fat, and Ash. Both the OARDC and NRC (2001) utilize the relationship between lignin and NDF to determine NDF digestibility.**
TDN MILK2006 and MILK2013	**The MILK2006 and MILK2013 equations were developed by the University of Wisconsin for corn silage and alfalfa/grass, respectively. These use a summative approach similar to OARDC and NRC (2001) to calculate energy. In vitro NDFD is used in these calculations instead of lignin to estimate NDF digestion. Additionally, MILK2006 takes processing and moisture content into consideration for predicting starch digestibility in corn silage.**

LABORATORIO ANALISI ZOOTECNICHE sas di Mancinelli D.r Eugenio e D.r Marco V.le Marconi n° 9 46023 GONZAGA (MN) Tel. 0376.528295 0376.529091 Fax 0376.528362 P. IVA: 01649590203 e-mail info@lazoovet.it Sito web: http://www.lazoovet.it/