

NIRS Forage and Feed Testing Consortium
“Dedicated to increasing the accuracy and knowledge of NIRS testing.”

NIRS Consortium Membership NEWS

June, 2000

Revisiting the NIRS Consortium Annual Meeting

The Consortium Annual Meeting and NIRS Conference was successful in the excellent presentations given by Sam Coleman, Paolo Berzaghi, Dave Mertens, Don Sapienza, and Pat Hoffman. We were also happy to have the input of nutritionists and other professionals such as Marcia Endres, John Anderson, Jim Linn, Hans Jung, Bill Seglar, Randy Shaver, Paul Porter, Glen Broderick, Jim Halgerson, Paul Peterson, and John Grabber. At this time, Don Sapienza has compiled details and notes from the white paper discussions at the meeting into a preliminary white paper draft. This draft will be circulated to the participating nutritionists at the Annual Meeting as well as several other animal nutritionists from around the country for their opinions and input. The result will be a summary of the state-of-the-art of NIRS instrumentation and usage, including strengths as well as areas of future research and innovation. This paper will be written for a wide audience in order to address issues of NIRS performance that have surfaced in the past.

Instrument Standardization and Monitoring Program

The NIRS Consortium is moving ahead with an instrument standardization and monitoring program. At this time, Paolo has visited 5 out of the 6 alfalfa breeders in Consortium membership in order to standardize their instruments to the new Consortium Master Instrument located in Madison, WI. Paolo will review the method of standardization used and determine if it is appropriate for the remaining Consortium labs. The method used includes the 30-sample characterization set for multiple products and a specific standardization for forages using a 14-cell forage set. Alfalfa breeders will then receive a new check cell set composed of one newly purchased ISI soybean check cell and a new forage check cell packed and sealed by Paolo.

After reviewing how well the standardization and check cell set-up goes for the alfalfa breeders, Paolo will proceed with instrument standardization and set up of new check cells for the remaining membership. Alfalfa breeder set up is expected to be completed in June, with visits from Paolo to the remaining membership beginning in July.

Members are asked to begin submitting weekly instrument diagnostics by fax or email to Paolo, starting the week of June 19th. The Consortium will establish a

preliminary database for each lab's results. Members are asked to submit results from running (1) the diagnostic test and (2) the check cell results, on the Monday of each week. Paolo will review the results and report to each lab. This method of instrument monitoring will continue until mid to late summer when a website will be completed in which Consortium members will submit this same information under secure conditions and automatically receive pass/fail information and suggested actions to take.

Attached are two documents entitled *Instrument Monitoring (Example 1)* and *Instrument Monitoring (Example 2)* that are examples of a layout that will appear on the reporting website when it is complete.

Please review the attached document entitled *Instrument Standardization and Monitoring* for specific rationale and proposal for standardization and for monitoring using 2 new check cells.

After reviewing the document *Instrument Standardization and Monitoring*, please respond with your lab's commitment to participate in this program in the time frame outlined above (Paolo's visits beginning in July to commercial labs). This program will require the purchase of a new ISI soybean check cell by each lab. Please respond by email to Patty within one week of receiving this news brief and the attached documents.

RUP Equation Work

Recently the Consortium has reached an agreement with the UW Soil and Forage Analysis Lab and with Pat Hoffman to update RUP equations. Originally, the RUP work by Pat Hoffman was done for research purposes and required a large number of sample incubations and chemistry analyses. Using the original methods, updating the RUP equations was considered too costly and lengthy a process. A simplified plan has been developed,

however, that will achieve the RUP update as well as streamline the in situ procedure.

Along these lines, the Consortium and UW Soil and Forage Lab, with Pat Hoffman consulting, will also develop an RUP calibration for fresh cut samples for alfalfa breeders. The timeline for beginning this in situ procedure will be during July of 2000.

Release of the hay RUP equation is also expected to take place shortly, as Paolo makes final arrangements.

For further information on any of these topics, please contact Patty or Paolo.

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