



LITCHFIELD ANALYTICAL SERVICES

P.O. Box 457

535 Marshall Street

Litchfield, MI 49252

Phone: (517)-542-2915

Fax: (517)-542-2014

email: litchlab@qcnet.net

web page: www.litchlab.com

Feeds Forages Mycotoxins Soils Plant Tissues Manure Fertilizers Lime Water

Invitro Neutral Detergent Fiber Digestibility (IVNDFd)

IVNDFd is reported as a percentage of total NDF. Rate calculations, lag time, and calculated indigestible NDF are based on a beta ver1A K_d rate calculator (February 2004) created by Dr. Mike VanAmburgh from work published in the 2003 Cornell Nutriton Conference Proceedings. Adjusted NE_L is based on utilizing IVNDFd in calculating TDN and NE_L from the 2001 NRC.

Litchfield Analytical Services currently utilizes a UDY cyclone mill with a 1mm screen to grind forages to be evaluated for IVNDFd which will yield a higher digestibility than obtained from a Wiley knife mill. For purposes of K_d rate calculations, RFQ, and Milk 2000 (M2K) calculations, the IVNDFd is factored by 0.92 based on research at Miner Institute.

Rumen fluid used for IVNDFd evaluations is collected from several early to mid lactation cows consuming a high production TMR of alfalfa haylage, corn silage, and HMSC for each run. Sample are incubated in individual flasks in a traditional Tilley and Terry system utilizing a VanSoest buffer solution. Samples are run in duplicate and re-run if values do not agree. Blanks, quality control samples, and samples for monitoring lag time are included in each run. Results are generally not biased based on quality control samples, but quality control sample results outside of acceptable limits may result in a run being discarded.