Nitrogen

**Total Nitrogen**

Nitrogen (N) is reported as elemental N as a percentage of DM. Crude protein is calculated as N multiplied by 6.25. The method used is a modification of the standard Kjeldahl procedure; therefore the value represents total N, including organic (e.g., protein and non-protein) and inorganic (e.g., nitrate) nitrogen. Digestions are conducted at FESL and analyses of digestate are done with the Technicon Autoanalyzer at the Ruminant Nutrition Lab., Animal Science. When publishing results of analyses conducted at the FESL, the following text statement and references may be used.

**Suggested text statement:** “For nitrogen analysis, samples were digested using a modification of the aluminum block digestion procedure of Gallaher et al. (1975). Sample weight was 0.25 g, catalyst used was 1.5 g of 9:1 K2SO4:CuSO4, and digestion was conducted for at least 4h at 375°C using 6 ml of H2SO4 and 2 ml H2O2. Nitrogen in the digestate was determined by semiautomated colorimetry (Hambleton, 1977).”

**References**

Gallaher, R. N., C. O. Weldon and J. G. Futral. 1975. An aluminum block digester for plant and soil analysis. Soil Sci. Soc. Amer. Proc. 39:803-806.

Hambleton, L. G. 1977. Semiautomated method for simultaneous determination of phosphorus, calcium and crude protein in animal feeds. J.A.O.A.C. 60:845-852.