

# Proximate Analysis Facility

## (3-56, 3-59 and 3-60 Ag/For building)

The Proximate Analysis Facility is a component of the core lab facilities in the Faculty of Agricultural, Life & Environmental Sciences supporting both research and teaching activities within the faculty. The primary role of the Proximate Analysis Facility is to provide equipment necessary to determine the gross composition of food, feed and their ingredients following principles outlined in the Weende Analysis.

The equipment includes the following:

- 1) **Elemental Analyzers (Leco TruSpec C/N and Thermo Scientific Flash 200)** - for nitrogen and crude protein determination. The Flash 2000, because of its superior sensitivity, is also ideal for soil carbon and nitrogen determination.
- 2) **Goldfish Fat Extraction Apparatus** - for the determination of crude Fat
- 3) **Ovens and furnaces** - for dry matter and inorganic matter determination, respectively.
- 4) **Ankom Fiber Analyzer** - that uses nylon bag technology for the determination of the crude fiber content of food/feed or of forages using the detergent analysis (ADF/NDF) outlined by Van Soest.
- 5) **IKA Calorimeter** - for energy determination.
- 6) **Freeze dryers** - include a multiport system for the drying of small samples as well as a 35-liter capacity freeze dryer for larger samples or larger numbers of samples. \
- 7) **Routine Sample Preparation equipment** - Balances, centrifuges, freeze dryers, drying ovens, etc.

This facility provides consultation on these procedures and equipment, access to equipment, training, and equipment maintenance. While the above noted equipment and procedures are a focus of this facility, we are also available for consultation on a wide variety of analytical procedures.

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