USE OF ANKOM FILTER BAG TECHNIQUE FOR NDF AND ADF ANALYSES
Updated September 2013

I. Personal Protective Equipment:
   A. Lab coat
   B. Safety glasses/ goggles
   C. Latex gloves and thermal gloves over latex
   D. Face shield for releasing pressure from Ankom machine

II. Procedure:
   A. Label and weigh ankom filter bag.
   B. Fill bag with 0.5000-0.5040 g of sample.
   C. Heat seal bag to close within 1/8 inch of end (heat sealing does not alter bag weight). Make sure to seal bags twice keeping the seals close together.
   D. Place three bags per level in bag suspender. Spread sample evenly in bag.
   E. Place bag suspender and weight in Ankom machine.
   F. Fill machine with ~1700mL of NDF/ADF solution (solution should cover the top level of bag suspender). Close lid tightly.

   **Note:** It takes 15 min for temperature to come up after bags are placed into solution.
   G. Turn on agitator. Agitate for 75 minutes for NDF/ADF.
   H. Before opening lid, **release NDF/ADF solution** from Ankom machine. Close value and rinse.
   I. Rinse bags by pouring boiling distilled water into reservoir. Leave lid open. Agitate for 5 min. Repeat 3 times.
   J. Remove bags from suspender, manually remove excess water from bags, and place in 60° C oven for 24 h or 100° C oven over night (minimum 6 hrs). Weigh bags back using a desiccator.

   **NOTE:** If you are not analyzing for protein following procedure add 0.5 g sodium sulfite per bag. When analyzing by-products or corn add 0.5 mL α-amylase per bag.

III. Calculations:

   \[ \% \text{ Fiber} = 100 \times \frac{(\text{Dry Bag Wt} + \text{Residue Wt}) - (\text{Dry Bag Wt})}{(\text{Sample Wt}) (\text{Lab corrected DM})} \]