

## Determination of Dry Matter of Silages Using a Microwave

### Procedure for microwave oven:

1. Weigh out 100 gram of forage or total mixed ration on a plate to determine initial wet weight.
2. Place an 8-oz glass of water (3/4 full) in the back right corner of the microwave. Try to keep the water level constant during microwave use.
3. For silages or feeds with 25 to 50% dry matter:
  - A. Heat for 5 minutes on high power
  - B. Stir feed, rotate plate and return to oven
  - C. Heat for 3 minutes on high power
  - D. Stir feed, rotate plate and return to oven
  - E. Continue to heat at one minute intervals
  - F. Continue to weigh, stir and rotate plate, and reheat sample until sample weight does not change more than 1 to 2 grams and/or feed starts to char.
4. Calculate Percent Moisture and Percent Dry Matter

$$\text{Percent Moisture} = \frac{\text{Wet Weight} - \text{Dry Weight}}{\text{Wet Weight}} \times 100$$