

## ASBC Approved Methods Barley – 7A

### A. Protein (N × 6.25) by Kjeldahl (**International Method**)

Calculate protein in barley by the formulas,

$$\begin{aligned} & \% \text{ protein (N} \times 6.25), \text{ as-is basis} \\ & = \frac{(\text{mL } 0.1N \text{ H}_2\text{SO}_4 - \text{mL } 0.1N \text{ NaOH}) \times 0.0014 \times 6.25 \times 100}{\text{wt of sample}} \end{aligned}$$

### Calculate protein in barley

- = Wt of sample
- = Moisture, %
- = mL 0.1N H<sub>2</sub>SO<sub>4</sub> used
- = mL 0.1N NaOH used

### Results

- Protein (N × 6.25), %, as is
- Protein (N × 6.25), %, dry basis

$$\begin{aligned} & \text{Protein (N} \times 6.25), \%, \text{ as is} \\ & = \frac{(50.0 - 33.1) \times 0.0014 \times 6.25 \times 100}{1.40} = 10.563 = 10.56 \end{aligned}$$

$$\text{Protein (N} \times 6.25), \%, \text{ dry basis} = \frac{10.563 \times 100}{100 - 12.4} = 12.06$$