


IAFMM

international association of fish meal manufacturers

 Hoval House, Orchard Parade, Mutton Lane, Potters Bar, Hertfordshire, EN6 3AR
Tel: (Potters Bar) 0707 42343

No. 11 August 1979

**RECOMMENDED METHOD OF ANALYSIS
FOR DETERMINATION
OF SAND IN FISH MEAL**

RECOMMENDED METHOD OF ANALYSIS FOR DETERMINATION OF SAND IN FISH MEAL

1. General

Determination of hydrochloric acid insoluble ash.

2. Principle

The sand content is that part of the ash which is insoluble in hot hydrochloric acid.

3. Apparatus

Gooch crucibles

Electric muffle furnace and crucibles as used for the ash method (see Techn. Bull. No. 10).

Drying oven set at $103 \pm 2^\circ\text{C}$

Desiccator with silica gel blue

Hot plate or gas burner

4. Reagents

Hydrochloric acid, 3 N

5. Method

Approximately 5g of fish meal weighed to the nearest 1 mg is ashed (see Techn. Bull. No. 10). Transfer the ash to a 300 ml beaker or Erlenmeyer flask with the aid of 75 ml 3N HCl, boil for $\frac{1}{4}$ hour on a low flame or hot plate and filter the warm solution through a dry, weighed (to the nearest 1 mg) Gooch crucible provided with two sheets of ash-free filter paper. Wash the residue with hot water until free from acid. Dry for 1 hour in an oven at $103 \pm 2^\circ\text{C}$., and then heat in a furnace at 550°C . for 30 min. Allow to cool in a desiccator and weigh to the nearest 1 mg.

6. Calculation

$$\frac{\text{Gain in weight of crucible (g)}}{\text{Wt. of sample (g)}} \times 100 = \text{Sand content (\%)}$$

7. Repeatability

The difference between the results of two determinations carried out simultaneously or in rapid succession by the same analyst should not exceed 0.2%.