
EXPERIMENT 7 COLLECTION AND DRYING OF AIR BLADDER

Structure

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7.1 INTRODUCTION

Fish air bladder serves as a raw material for making a few valuable products. The quality of the bladder influences quality of the products. Therefore, the bladders must be collected from fresh fish, possibly immediately after catching. They must also be preserved properly prior to conversion to products.

Objectives

After performing this experiment, you will be able to:

- identify air bladder in fish and understand its shape and structure; and
- separate bladders from fish and preserve it by drying.

7.2 EXPERIMENT

7.2.1 Principle

Air bladders are collected afresh so that only good quality material is used. The collagen contained in the bladder must not be adversely affected. All unwanted components in the bladder such as membranes and blood stains are removed. By drying, the moisture content is reduced to such an extent that the material can be preserved at room temperature.

7.2.2 Requirements

- Fish such as eel or catfish.
- Knife, scissors, vessels, etc.
- Balance
- Drier
- Plastic bags

7.2.3 Procedure

- 1) Wash and weigh the given fish.

- 2) Slit open the belly wall using knife or scissors. Locate the air bladder lying near the top of the belly cavity.
- 3) Cut the membranes attaching the bladder to the belly wall and separate out the bladder.
- 4) Wash it thoroughly in clean water. Remove any blood stain by mild scrubbing. Take weight.
- 5) Slit one side lengthwise, open the bladder and flatten it.
- 6) Peel off the membrane lining the bladder. Trim the bladder i.e. cut off any hanging pieces.
- 7) Wash again free of blood stain, membrane, etc.
- 8) Spread in trays. Dry by sun drying under shade or in drier at a temperature below 50°C.
- 9) Stop drying once the material becomes hard and stiff. (Moisture content must be reduced below 10%).
- 10) Weigh and pack in plastic bags.
- 11) Compare wet bladder with dry bladder.

7.2.4 Observations

Name of fish :
 Weight of fish (x) =
 Weight of wet bladder (y) =
 Weight of dry bladder (z) =
 Yield of wet bladder from fish = $(y/x \times 100)$ =%
 Loss of weight of bladder upon drying = $(y - z)/y \times 100$ =%

Characteristics noticed:

	Wet	Dry
Shape :		
Colour :		
Soft or hard :		

7.2.5 Results

Air bladder constitutes % of the weight of fish.

The loss of weight of bladder upon drying is %

7.3 PRECAUTIONS

- Only fresh fish must be used for collection of bladder.
- Dry only in shade if sun drying is adopted. If you're using a drier avoid overheating.