
EXPERIMENT 21 COLLECTION AND DRYING OF SHARK SKIN

Structure

21.1 Introduction

Objective

21.2 Experiment

21.2.1 Principle

21.2.2 Requirements

21.2.3 Procedure

21.2.4 Observations

21.2.5 Results

21.3 Precautions

21.1 INTRODUCTION

The skin of shark is an important raw material for making leather. After separation from fish, the skin is generally dried and sent to the factory where it's converted to leather. We shall learn the preliminary step of collection of the skin from fish (skinning), and drying it for preservation. Shark skin leather is a by-product from shark.

Objective

After performing this experiment, you will be able to:

- collect skin from shark and prepare it for drying.

21.2 EXPERIMENT

21.2.1 Principle

The skin is a tough covering of the fish. It's exceptionally strong and thick in the case of certain fishes such as shark. This makes it a suitable raw material for making leather. When skin is removed some fleshy matter adheres to the skin. This must be removed by trimming. Upon salting and drying, the skin becomes hard and stiff and in this form it can be preserved.

21.2.2 Requirements

- Shark (small or medium size)
- Common salt
- Sharp knife, scissors
- Vessel with drain at bottom
- Drier

21.2.3 Procedure

- 1) Start with only fresh fish. Wash, take weight.
- 2) Cut off fins.

- 3) Slit open the ventral side from head to tail using a sharp knife or scissors. Remove the entrails. Cut through the flesh just over the back bone, up to the dorsal side, but never damaging the skin.
- 4) Keep the fish flat on a table, skin side up.
- 5) Make an incision between skin and flesh at the tail end. Holding rest of the fish tightly pressed against the table, pull off the skin. In case, this is difficult (especially if the fish is large in size), after making incision, continue cutting the flesh layer closest to the skin as the latter is being pulled away.
- 6) Trim the skin free of any adhering flesh. Cut off any hanging pieces. A skin so prepared is shown in Fig.21.1.



Fig.21.1: Shark skin

- 7) Wash the skin thoroughly in water.
- 8) Drain and weigh.
- 9) Weigh out sufficient quantity of salt at the rate of approximately 15% of skin weight.
- 10) Rub salt over skin, particularly over the cut side.
- 11) Pack in layers in a perforated vessel. Keep a weight on top.
- 12) Keep for a day. Allow the liquid formed to escape out through the drain in the vessel.
- 13) Remove any salt crystals sticking on to the skin.
- 14) Dry under sun or in a drier at a temperature of about 50°C, till it's hard dried. The skin becomes stiff and hard upon drying.
- 15) Weigh, pack in polyethylene bags and store at room temperature.

21.2.4 Observations

Name of fish used :
 Weight of fish (x) =
 Weight of wet skin (y) =
 Weight of dried skin (z) =
 Yield of skin from fish = $y/x \times 100 = \dots\dots\dots\%$
 Yield of dry skin from wet skin = $z/y \times 100 = \dots\dots\dots\%$

21.2.5 Results

Skin constitutes % weight of whole fish.

The yield of dried skin from wet skin is %.

21.3 PRECAUTIONS

- Extreme care must be taken while skinning in preventing any physical damage to skin.
- Use only fresh fish for collecting skin.