

Isinglass

Air bladder, also called sound or swim bladder consists of several membranous layers rich in collagen. Located in the abdominal cavity below the vertebral column, air bladder helps the fish in regulating its specific gravity. Cleaned and dried air bladder is called as Fish Maw, which is an excellent raw material for production of Gelatin.

Hake, Sturgeons and carps are good sources for air bladder.

Processing

The air bladder after washing with water and scraping of the outer layer is split open longitudinally and washed well further, sundried to 15 % moisture level by hanging or placing in trays. Dried product is Fish Maw.

Dried air bladder is immersed and soaked in water until it becomes soft. It is then rolled after cutting into small pieces between water cooled iron rollers to convert them into thin strips. They can be further compressed by ribbon rollers into ribbons about 0.4mm thick which are air dried and rolled into coils. This is Isinglass.

Uses

- Clarifying agent for beer, cider, wine, vinegar etc.
- Can be used as adhesive waste
- Isinglass dissolved in acetic acid forms a strong cement base
- Can be used as a sizing agent in textiles
- It is an ingredient in Indian ink.

DRIED FISH MAWS



INTRODUCTION:

These are also known as the Air-Bladder or Swim-Bladder in Fish. The primary function of this Air-Bladder is to act as a float to maintain its position in the water. In some fishes, the air bladder is an accessory to the gills, and in others it acts as a true lung, enabling them to breathe. In some, the air bladder has some connection with the organ of hearing and in yet others, it has considerable vocal & sound producing properties. In the western world, it is also known as ISINGLASS, which is used in clarifying beverages, as an adhesive base in confectionary products, currencies, in Indian ink and for glass, pottery & leather.



USAGE & PREPARATION:

However, it's more common usage is as an edible luxury & TCM medicinal products and thus commands premium prices if the quality is prepared correctly. Normally the Air-Bladders are compressible sacs of several membraneous layers rich in collagen situated in the abdominal cavity. As soon as the fish is landed, the small portion of the fish belly is cut and the air bladder is pulled out. Blood stains, traces of oil and other extraneous materials like outer black membranes are removed by washing in cold water. Care should be taken to ensure that the Air-Bladder does not get contaminated with sand & soil.

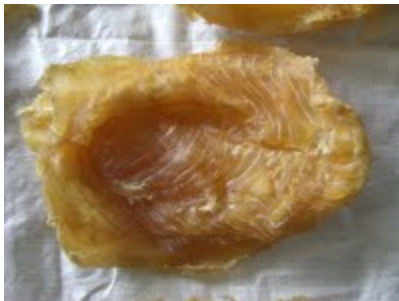


They should not be pressed hard so that the internal gas (a mixture of Oxygen & Nitrogen, with some traces of Carbon Dioxide) does not come out. If gas comes out, not only the bladder gets flattened but also it will give a bad look. Finally the Air-Bladders are dried in the sun by hanging them. When temperatures are high, it should be dried in shade under a fan or air-blower. The final product should be free from fungal, insect & mite infestation and have the characteristic odour.



TYPES:

There are close to 15 types of popular Fish Bladders, and for each specie there is a different style to prepare & process their Air-Bladders. The earlier described method is more common for the Eel & Tubular types, whilst with others there are some variations. Though, we are always experimenting with new species of Air-Bladders, at this moment, the common types we deal in are listed below and some of their photos are illustrated on this page.



1. EEL:: E1-E6
2. TUBULAR:: T1-T6

- 3. GMALE: GM1-GM6
- 4. GFEMALE: GF1-GF6
- 5. CAKE: C1-C6
- 6. LEAF: L1-L6
- 7. BILI: B1-B6
- 8. V-PERCH:: VP1-VP8