

## PRE-MARKET TREATMENT AND MARKETING OF SUGPO

by

Santiago P. Tan

### PREPARATION

Before harvesting your sugpo, preparation of materials like container and sufficient ice is necessary. The container must be airtight to minimize the rapid melting of the ice and conserve its coolness. It must be made of wood or plywood or G.I. (galvanized Iron) insulated with styrofoam.

Icing should be done immediately after weighing the shrimps. Avoid exposure of the shrimps to the heat of the sun. It causes deterioration and thus produce poor quality product. The shrimps should be placed in prepared chilled water before the final packing.

In packing the shrimps, ice should be cracked into small pieces to have a better contact with the layer of shrimps. A container of 15-20 kilos capacity will be convenient in handling and transporting to the site of the factory or market.

This preparation immediately following harvest is very important to maintain the freshness of the product.

## MANUFACTURING PROCESS

The moment the iced shrimps arrive in the factory or the processing plant the shrimps are re-weighed and washed with cold or chilled water. After weighing and recording the same, the head of the shrimp is removed completely. This process should be done if the product is intended for export. This is done to minimize cost of materials for packing, cost of transportation, and to keep the product longer in storage.

The next step after removing the head is another washing, using cold or chilled water. Cold or chilled water is used in washing the shrimps so that it will not be subjected to sudden change of temperature, as this will affect the quality of the products. After washing the headless shrimps are classified and sorted according to sizes or grouping. Two kilograms of headless shrimps of the same sizes or grouping is placed in each tray. The tin tray is constructed so hold at least two kilograms of headless shrimps and its dimension is made to fit to size of the inner-waxed boxes for systematic handling and packaging. The arrangement of the headless shrimps in the tray should be made so that the bottom and topmost layers of the shrimps appear and the tail ends are in the center of the tray while the shrimp meaty portion (section where the head is separated from the body) is placed facing outwards.

The arrangement is made, so that when the ice block is formed with the headless shrimps they can still be easily seen at the two side of the eyes block. The quality and freshness of shrimp frozen products, can then be easily determined visually, by just looking at both sides of the ice blocks where the shrimps are encased.

After placing and arranging the two kilograms of headless shrimps of uniform sizes and same grouping in each tray, the shrimps are pressed to level its content, using either the hands or the bottom of another tray. Only the bottom and top most layers are arranged systematically, leaving the middle portion, at random arrangement. When all the headless shrimps are already arranged and placed in the tray, according to size and groupings, the tray are subjected to quick freezing to  $-30$  to  $-40^{\circ}\text{C}$ . temperature for one hour. Quick freezing is made to kill or de-activate most of the bacteria in the shrimps. Lower bacterial count, also enhances the preservation and retains the freshness of the frozen product.

After one hour of quick freezing at  $-30$  to  $40^{\circ}\text{C}$ , the trays are removed and filled with cold or chilled water on the top, level of the shrimps, and quick-frozen again for another one hour at  $40^{\circ}\text{C}$ . A small ice block with headless shrimps

encased is formed inside the tray. By sudden immersion in the ordinary tap water, the ice block thus formed can be easily removed from the tray, and this is placed inside the plastic film before placing the same in the inner-waxed carton.

Marking as to size assortment should be made on the outer covering of the inner waxed-boxes. These boxes, with two kilogram shrimps content, are placed in a bigger or outer carton with 10 boxes capacity or 20 kilograms in total contain of shrimp weight. Markings are also made according to sizes assortment or groupings of the 10 boxes inside.

After sealing the cartoons using the plastic sealer, they are placed inside the cold storage having minus 15-20 degrees centigrade. This complete the processing up to packaging, and the finished frozen products are ready to be shipped by boat, having refrigeration unit, to destination.

#### WHOLE AND HEADLESS FROZEN SHRIMPS

For domestic marketing of frozen shrimps, the shrimps are frozen as a whole piece or with head-on. The difference is that for export market shrimps are marketed headless, while for local consumption and inasmuch as the Filipinos prefer to partake their shrimps in whole piece, these are sold with head-on. This food preference is always taken into consideration in the domestic marketing of frozen shrimps.

On the other hand, the Japan export market prefers that their frozen shrimps be headless due to the economy of handling and transportation. Here the purpose is more on economic expediency and less on food preference.

#### CLASSIFICATION OF FROZEN SHRIMP IN THE EXPORT MARKET

In the export market, the headless shrimps are grouped according to their sizes. As practiced, the frozen shrimps are classified as follows:

Black Tiger (Sugpo)	White Shrimps
U-10 pcs/lb	21-25 pcs./lb
10-15 pcs/lb	26-30 pcs./lb
16-20 pcs/lb	31-40 pcs/lb
21-25 pcs/lb	41-50 pcs./lb
26-30 pcs/lb	51-60 pcs./lb
31-40 pcs/lb	61-70 pcs./lb
41-50 pcs/lb	71-80 pcs/lb

For illustration -- in the classification under 10, it means that to make one kilogram of headless shrimps, the number of pieces of same size should not be more than 10 pieces. Approximately, one headless shrimp weighs more than 100 grams.

#### PERCENTAGE OF MEAT ON HEADLESS PRAWN WHEN PROCESSED

Head part -----	35%
Body meat portion -----	65%
Total	<u>100%</u>

If the prawn weighs 100 grams, the body part weighs only 65 grams and the head part, 35 grams.

#### WASTE DISPOSALS

What is to be disposed of is the estimated 35% head portion of the shrimps. This portion is collected, dried and sold as protein feed supplement, or make into Patis or into shrimp kropeck, depending on which offers a good economic return.