#### NOTE: III

#### CANNING OF LACTARIUS

Though not a sizable fishery on national level (catch: 13894m. tons in 1973) landings of lactarius (Lactarius lactarius) is considerable in the states of Kerala and Tamil Nadu. Apart from a note (Anon, 1965) no published work is available on its preservation by canning. Fish processed by this method on storage loses its flavour and the lustrous skin is peeled off. The present note describes a method in which these factors also are taken care of. Fresh lactarius after evisceration gutting and cleaning was cold blanched in brine (15% and saturated) alone and in saturated brine containing different concentrations of citric acid, calcium chloride, alum as well as some of their combinations and then canned as per the process mentioned earlier.

Effects of concentration of brine, time of dipping and period of heat processing on the finished products are presented in Table I.

Lactarius cold blanched for 20 minutes in saturated brine yields sufficiently soft meat when heat processed for 1 hour; however the bone is rendered soft only on heat processing for  $1\frac{1}{2}$  hours which in turn renders the meat excessively soft and causes to lose the discrete shape on further handling.

Table II provides a comparison of the effects of different treatments tried to maintain proper texture of the meat while rendering the bone soft. Although all treatments, in general, are effective in

TABLE I

Effects of processing parameters on the quality of canned lactarius

| Concentration | Time of           | Heat processing at |               | Nature of     |      |  |
|---------------|-------------------|--------------------|---------------|---------------|------|--|
| of brine %    | dipping (minutes) | 0.9 kg./ci<br>hrs. | m² steam mts. | meat          | bone |  |
| 15%           | 15                | 1                  | 00            | very soft     | hard |  |
| ,,            | 20                | 1                  | 00            | soft          | ,,   |  |
| ,,            | 25                | 1                  | 00            | ,,            | ,,   |  |
| ,             | 30                | 1                  | 00            | . ,,          | ,,   |  |
| ,,            | 30                | 1                  | 30            | very soft     | soft |  |
| Saturated     | 5                 | 1                  | 00            | soft          | hard |  |
| ,,            | 10                | 1                  | 00            | ,,            | ,,   |  |
| "             | 15                | 1                  | 00            | soft and firm | ,,   |  |
| . ,,          | 15                | 1                  | 30            | soft          | soft |  |

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TABLE II

Effects of different additives on the quality of canned lactarius

| Treatment                               | Texture       | Flavour              | Color of skin                | Color of meat           | Nature of bone | Nature of oil                            |
|---|---------------|----------------------|------------------------------|-------------------------|----------------|--|
| Cacl <sub>2</sub> 0.5%                  | soft          | slightly<br>impaired | skin loosens                 | not chara-<br>cteristic | soft<br>su:    | clear with<br>spension of<br>skin lustre |
| • | sł. hard      | ,,                   | skin off                     | <b>&gt;</b> >           | <b>?</b> ?     | ,,                                       |
| Acetic acid 0.5%                        | soft          | good                 | skin loosens                 | ታን                      | >>             | ,,                                       |
| ,, 1%                                   | hard          | ,,,                  | lustre gone                  | <b>)</b> >              | <b>&gt;</b> >  | ,,                                       |
| Citric acid + Cacl 2 0.5%               | **            | > 9                  | skin loosens                 | <del>2</del> 9          | <b>79</b>      | >>                                       |
| Acetic acid + Cacl <sub>2</sub> 0.5%    | <b>&gt;</b> > | <b>&gt;</b> >        | skin loosens<br>non-lustrous | <b>3</b> 5°             | <b>&gt;</b> >  | "  |
| Citric acid 0.5%                        | slightly soft | . ,,                 | in tact                      | characteristic          | 99             | clear                                    |
| ,, 1%                                   | firm and sof  | t ,,                 | <b>?</b> •                   | >9                      | ۰,۶            | ,,                                       |
| Alum 1%                                 | ,, bit        | slight<br>tter taste | . 72                         | . 22                    | >>             | 77                                       |

achieving the goal some result in imparting certain undesirable effects on the quality of the finished product viz. colour change of the meat, lose of lustre of the skin etc. Potash alum though is known to impart firm texture to the meat, imparts a slight bitter taste. Cold blanching in saturated brine containing 1% citric acid

yields a satisfactory product. It retains good flavour, texture as also colour of the meat and the lustre of the skin, while the bone is sufficiently soft.

#### REFERENCE

Anon, 1965. Fish Technology Newsletter; 6, 3:1.

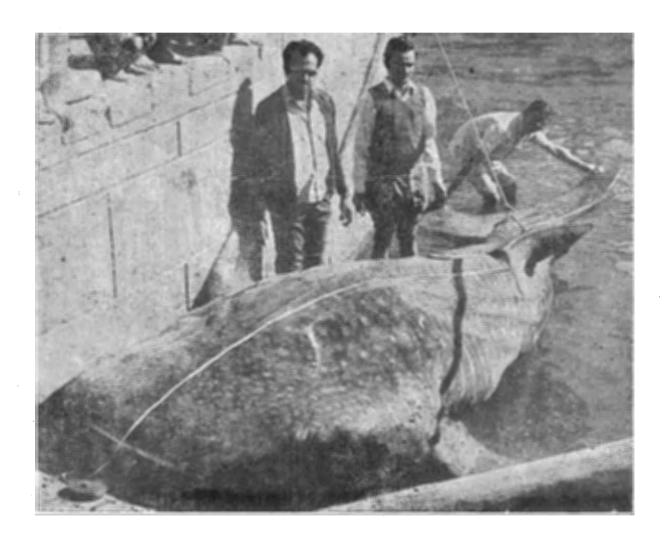
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#### NOTE: IV

# CATCH OF A WHALE SHARK, RHINCODON TYPUS (SMITH), OFF NORTH WEST COAST OF INDIA (VERAVAL)

A 11 m. trawler of the Central Institute of Fisheries Technology, during its regular fishing operations off Gujarat coast, caught a giant shark measuring 6.65m. in total length and 1.5 tonnes in weight on 17th January 1976 in their tra-

wl net. The specimen has been identified as *Rhincodon typus* (Smith) commonly known as whale shark or basking shark (fig.). There is no record of whale shark caught by a trawl net along the Indian Coast.



### Catch of a whale shark, Rhincodon typus (Smith), off north west coast of India (Veraval)

## Morphometric features of the specimen landed are indicated below:

| Colour of the skin                                | : | Ash grey with white spots |
|---|---|---------------------------|
| Sex   | : | Female                    |
| Total length                                      | : | 665 cm.                   |
| Standard length                                   | : | 519 cm.                   |
| Girth (maximum)                                   | : | 345 cm.                   |
| Distance between the snout to the Ist dorsal fin  | : | 285 cm.                   |
| Distance between the snout to the 2nd dorsal fin  | : | 420 cm.                   |
| Distance between snout and pectoral fin           | : | 155 cm.                   |
| Distance between snout to last gill slit          | : | 165 cm.                   |
| Width of the mouth                                | : | 93 cm.                    |
| Length of the caudal fin (caudal pit to the       |   |                           |
| tip of the dorsal lobe)                           | : | 161 cm.                   |
| Height of the caudal fin                          | : | 205 cm.                   |
| Interspace between 1st dorsal and 2nd dorsal fins | : | 137 cm.                   |
| Interspace between pectoral and pelvic fins       | : | 185 cm.                   |
| Interspace between pelvic and anal fins           | : | 103 cm.                   |
| Interspace between anal and caudal fins           | : | 72 cm.                    |
| Length of pectoral fin                            | : | 115 cm.                   |
| Width of pectoral fin                             | : | 90 cm.                    |
| Length of 1st dorsal fin                          | : | 72 cm.                    |
| Height of 1st dorsal fin                          | : | 52 cm.                    |
| Length of 2nd dorsal fin                          | : | 32 cm.                    |
| Height of 2nd dorsal fin                          | : | 29 cm.                    |
| The liver of the specimen weighed                 | : | 150 kg.                   |

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