

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 1½ 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 of brine %	Time of dipping (minutes)	Heat processing at 0.9 kg./cm ² steam hrs. mts.	Nature of	
			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

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 ₂ 0.5%	soft	slightly impaired	skin loosens	not characteristic	soft	clear with suspension of skin lustre
„	sl. hard	„	skin off	„	„	„
Acetic acid 0.5%	soft	good	skin loosens	„	„	„
„ 1%	hard	„	lustre gone	„	„	„
Citric acid + CaCl ₂ 0.5%	„	„	skin loosens	„	„	„
Acetic acid + CaCl ₂ 0.5%	„	„	skin loosens non-lustrous	„	„	„
Citric acid 0.5%	slightly soft	„	in tact	characteristic	„	clear
„ 1%	firm and soft	„	„	„	„	„
Alum 1%	„	slight bitter taste	„	„	„	„

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.

Central Institute of Fisheries Technology,
Cochin-682003

K. K. Balachandran
P. Madhavan