SALT FERMENTED INDIAN MACKEREL

The Indian mackerels were fermented using a combination of dry salting and wet salting in microaerophilic condition. Representative bacterial isolates from each stage of fortnightly samplings were picked up identified, verified for their salt tolerance and fermentation potential. The fermentation potential was mainly studied from their capabilities to show lipolytic and proteolytic activities. Out of the eighty representative isolates, one major bacterial player and three minor players were identified. A set of six vats, two each were used for fermentation of mackerel without any enrichment, with the consortium of all the selected isolates, and with only the major player. The biochemical, microbial and sensory analyses were done at fortnightly interval. The formation of characteristics flavour, colour and texture were considered as end point. The single species inoculated vats matured in 75 days, the consortia inoculated vat matured in 105 days while the control vats matured after 120 days.

Salient features of the technology

- Supply of Bacterial isolates with biotechnological potential to augment fermentation process.
- The importance of fermented foods is increasing as health food due to presence of probiotic microorganism and bioactive peptides.
- Indian mackerel is the only species has been suitable so far for salt fermentation as like salt fermented Lona ilish.
- CIFE Laboratory made salt fermented Indian mackerel has been evaluated from experts of fermented fish producers and wholesalers from Tripura state and received a good feedback in terms of quality of the product.
- Excellent acceptance in sensory evaluation
- Prolong shelf life and does not require refrigeration
- No preservative added

Fig. 1 Indian mackerel (*Rastrelliger kanagurta*)

Fig 2. Containers used for fermentation of Indian mackerel

	
Fig 3. Fresh mackerel cut in diagonally sticks same as lona ilish	**Fig 4.** Fermented Mackerel on 75thday (incubate with 90LHM1)