

minerals, vitamins etc. However, the high moisture content, pH and the presence of autolytic enzymes makes it highly perishable in nature. In this context, various convenient seafood products evolved from fresh fishes like dried, salted, smoked, cured, canned and ready-to-eat (RTE) products which usually give more shelf life without much nutrient loss. Among these, drying and salt curing is one of the oldest techniques which are being practiced in many parts of the world. But in this process, there may be chance of contaminants of microbial origins such as *Salmonella* which derived from natural aquatic environment or during processing. Since *Salmonella* species can withstand many stressful conditions its occurrence in dried and salted products with low water activity is always a problem. Hence understanding the behavior of *Salmonella* in salted and dried products is very important from a food safety standpoint. Around 100 dry fishes were collected from local markets in and around Cochin area and screened for *Salmonella*. The incidence rate of *Salmonella* in dry fishes is 4.61%. Dried shrimp, anchovy and sardine were positive for *Salmonella*. Antibioqram profiling was performed against twenty antibiotics and all isolates were multi-drug resistant towards various classes of antibiotics tested.

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Formation of biogenic amines and quality of shrimp (*Fenneropenaeus indicus*) treated with combinations of chitosan, NaCl and citric acid under refrigerated storage

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Shelf life of postharvest shrimp varies depending on processing and storage conditions. As seafood is highly susceptible to contamination by microorganisms producing biogenic amines, monitoring of biogenic amine levels under various treatment conditions is essentially important. The effect of 1% chitosan in combination with 1.5% NaCl (treatment 1, T1) and 1.5% citric acid (treatment 2, T2) on the biochemical and microbial quality characteristics and formation of biogenic amines (putrescine, cadaverine, histamine, agmatine, tyramine, spermine and spermidine) of Indian white prawn (*Fenneropenaeus indicus*) under refrigerated storage (4±2°C) was carried out. The biogenic amines which showed specific change during storage were putrescine and cadaverine. The putrescine and cadaverine content of chitosan – NaCl treated sample was significantly lower than that of control (p<0.05) on the day of rejection (9th day). The chitosan-NaCl treated sample got rejected on 9th day of storage with a putrescine and cadaverine content of 4.96 and 1.2 ppb respectively. While the chitosan-citric acid treated sample got rejected on 7th day of storage with a putrescine and cadaverine content of 19.35 and 0.34 ppb respectively. A lower increase of pH and TVBN was observed in both the treatments compared to control sample which got rejected sensory wise on 5th day of storage. Loss of freshness and melanosis of treated samples was lower than that of control. The mesophilic count of T1 and T2 reached 7 log cfu/g on 9th and 7th day respectively.