

by physical, chemical and sensory evaluations. Moisture content, NPN and Sarcoplasmic protein showed a decreasing trend, whereas total protein content increased in all the treatments during frozen storage. pH values showed an increasing trend during the storage study in all the treatments. TMA-N, TVB-N, Peroxide value and Thiobarbituric acid value showed increasing trends in all the treatments during the storage study, however all the values were well within the acceptable limits. There was a significant decrease in the hardness, cohesiveness springiness and chewiness in all the treatments during the storage. The final lower value of hardness was recorded in T3 indicating that serving of skeletal muscle in pre-rigor stage resulted in the better textural properties. Values of a^* and b^* showed a decreasing trends during storage indicating greenish and bluish colouration. Colour parameters showed significant differences ($p < 0.05$) as storage progressed. Sensory score showed a decreasing trend with the storage reaching to the final value of 6.38. However the shrimps were still acceptable six months of storage supported by the sensory score. Lack of significant differences among different treatments indicate that initial differences in quality due to severing of skeletal muscle in different stages of rigor, get neutralised during the length of storage.

AV OR 26

Drying characteristics of shrimp (*Metapenaeus dobsoni*) in electrical dryer

D.S. ANIESRANI DELFIYA*, P.V. ALFIYA, S. MURALI, MANOJ P. SAMUEL
ICAR-Central Institute of Fisheries Technology, Kochi, Kerala, India; *delfy.lenin@gmail.com

Dried shrimp is one of the most important high value fishery products and it is commonly dried in open sun for 3 to 5 days. Drying of shrimps in a closed chamber is the best approach to avoid contamination by dust, dirt, birds, animals and spoilage due to rain, wind, moisture which are associated with open sun drying. In this study, an electrical cabinet dryer is used to investigate the drying characteristics of shrimp (*Metapenaeus dobsoni*). Shrimps were dried from the initial moisture content of 79–80% (wb) to the final moisture content of 38–40% (wb). Experiments were carried out at the drying air temperature of 55°C and the air velocity of 0.8 m/s. Moisture content of shrimp was decreased with drying time and drying process occurred at falling rate drying period. Drying rate was decreased continuously with drying time. Moisture ratio vs drying time graph has been plotted and various drying models were fitted for describing the drying kinetics of shrimps in electrical dryer. Drying models were compared by calculating R^2 , root mean square error and p values to obtain a best fit model which gives better agreement to the drying data.

AV OR 27

Study of drying characteristics of Indian mackerel (*Rastrelliger kanagurta*) in CIFT solar-electrical hybrid dryer

S. MURALI *, MANOJ P. SAMUEL, K. SATHISH KUMAR, V.A. MINIMOL

ICAR-Central Institute of Fisheries Technology, Kochi, Kerala, India; *muralibte21@gmail.com

Fresh Indian mackerel (*Rastrelliger kanagurta*) was thoroughly washed, eviscerated, cut into butterfly style and salted overnight with dry salt (salt : fish, 1:3). The salted mackerel was dried in a solar-