

OUP International Conference and Exhibition on <u>Ces</u> Food Processing & Technology

November 22-24, 2012 Hyderabad International Convention Centre, India

Preparation of wine from ginger with potential antioxidant and medicinal properties

Divvya Rajadhyaksha, P. Kalekar and J. S. Londhe Department of Biotechnology, Sinhgad College of Science, India

While is an alcoholic beverage, made from fermented fruit juice. Wines are mainly classified into red wines and white wines. It was revealed that red wine has many medicinal properties including antioxidant which is because of polyphenols and flavonoids extracted in it during fermentation process. In present study, ginger (*Zingiber officinale*) was used in the preparation of this wine. Ginger is rich in vitamins and minerals. It contains health benefitting essential oils like gingerol and zingerones. Gingerols help improve intestinal motility & act as painkiller, nerve smoothing as well as anti-bacterial properties. It is used to relieve cold & flu symptoms, it lowers inflammation and helps reduce congestion. Ginger contains compounds known as sesquiterpenes, which combat the viruses that cause cold and helps cure cough and fever. Wine is produced using the yeast strain *Saccharomyces cereviseae*. Juice from ginger is extracted and autoclaved, sugar is added to this juice and it is autoclaved again. The juice stored in amber colored bottles and yeast were inoculated to these bottles, sealed and stored for primary fermentation for 7-10 days. The juice is then centrifuged to remove the yeast cells and racked for secondary fermentation. Parameters like acidity, pH, alcohol and sugar content of the wine were checked every after 24 hr. Medicinal properties like antioxidant, antinflamatory and antibacterial activity were checked. In conclusion, ginger wine with medicinal potential were made to treat cough cold like upper respiratory diseases.

sumanss@rediffmail.com

Physicochemical and microbiological changes of high pressure treated Indian white prawns (*Fenneropenaeus indicus*) during chill storage

Ginson Joseph, Kamalakanth C.K, Bindu J, Asha K.K, Sanjoy Das and Srinivasa Gopal T. K Central Institute of Fisheries Technology, India

Headless and shell on Indian white prawns (*Fenneropenaeus indicus*) were vacuum packed in ethylene-vinyl alcohol pouches and subjected to high pressure treatment of 250 MPa for 6 min at 25°C with a ramp rate of 400 MPa/min. Pressure treated samples were stored in ice (2±1 °C) along with untreated samples which served as control. The shelf life was evaluated to find out the changes in physicochemical and microbiological parameters. Physicochemical parameters like pH, tri-methyl amine (TMA), total volatile base nitrogen (TVB-N), colour, hardness, sensory and total viable count (TVC) were analysed at regular intervals of the storage period. Whiteness (L* value) increased, whereas yellowness (b* value) and redness (a* value) was found to decrease after high pressure treatment. Higher hardness was observed in treated sample than in control and a slightly increasing trend was observed during storage period in both sets. Significant reduction of TMA and TVB-N values were observed after high pressure treatment, and values increased with the storage period. Total viable count reduced in pressure treated samples and increased during chill storage. Based on sensory analysis and the different parameters studied, pressure treated samples had a shelf life of 32 days when compared to 12 days for the control.

Biography

Ginson Joseph has completed his Master of Science in Industrial Fisheries from Cochin University of Science and Technology. Presently he is working as Senior Research Fellow and pursuing Ph.D. in High Pressure Processing Technology in the Fish Processing Division, Central Institute of Fisheries Technology, Cochin, India.

jinsonjosephif@gmail.com