

## Processing of Artificial Fragrant Rice The Method and Aroma Retention

*Filli Pratama*

### Abstract

*Processing of artificial fragrant rice in which one or more aroma compounds were introduced into raw milled rice were studied. The end product, which is potentially marketable, showed no visible difference in appearance from the untreated rice, and the cooked product showed perceivable aroma to the consumers. The aromatisation process used liquid carbon dioxide as a vehicle to deliver the aroma. Five aroma compounds of eugenol, iso-eugenol, methyl eugenol, cinnamyl alcohol, and cinnamaldehyde were used as model compounds. The results showed that liquid carbon dioxide at a pressure of 8 MPa and an equilibration time of 5 minutes were found to be the optimum conditions for imparting the aroma compounds into the rice. The retention of the model aroma compounds in rice were in the range of 33% to 50%. The aroma carrier was found to be able to carry the model compounds into the core of rice. This was significant, as it potentially provided a longer period for the aroma compounds to remain in the rice.*

**Key words:** artificial fragrant rice, liquid carbon dioxide, aroma.