

Comparative Study on Sensory Profiles of Liquor from Different Dried Cocoa Beans

Authors : Khairul Bariah Sulaiman, Tajul Aris Yang

Abstract : Malaysian dried cocoa beans have been reported to have low quality flavour and are often sold at discounted prices. Various efforts have been made to improve the Malaysian beans quality. Among these efforts is introduction of the shallow box fermentation technique and pulp preconditioned through pods storage. However, after nearly four decades of the effort was done, Malaysian cocoa farmers still received lower prices for their beans. So, this study was carried out in order to assess the flavour quality of dried cocoa beans produced by shallow box fermentation techniques, combination of shallow box fermentation with pods storage and compared to dried cocoa beans obtained from Ghana. A total of eight samples of dried cocoa was used in this study, which one of the samples was Ghanaian beans (coded with no.8), while the rest were Malaysian cocoa beans with different post-harvest processing (coded with no. 1, 2, 3, 4, 5, 6 and 7). Cocoa liquor was prepared from all samples in the prescribed techniques and sensory evaluation was carried out using Quantitative Descriptive Analysis (QDA) Method with 0-10 scale by Malaysian Cocoa Board trained panelist. Sensory evaluation showed that cocoa attributes for all cocoa liquors ranging from 3.5 to 5.3, whereas bitterness was ranging from 3.4 to 4.6 and astringent attribute ranging from 3.9 to 5.5, respectively. Meanwhile, all cocoa liquors were having acid or sourness attribute ranging from 1.6 to 3.6, respectively. In general cocoa liquor prepared from sample coded no 4 has almost similar flavour profile and no significantly different at $p < 0.05$ with Ghana, in term of most flavour attributes as compared to the other six samples.

Keywords : cocoa beans, flavour, fermentation, shallow box, pods storage

Conference Title : ICAFE 2015 : International Conference on Agricultural and Food Engineering

Conference Location : Penang, Malaysia

Conference Dates : December 03-04, 2015