Contaminants Removal Performance In RBDPO by Using Different Type of Bleaching Clay

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Crude Palm Oil (CPO) undergo refining process that involved degumming, bleaching and deodorisation to produce Refined Bleached Deodorised Palm Oil (RBDPO). The quality of RBDPO must be maintained since it will contribute to product application's stability and quality. Contaminants such as Phosphorus, Iron and Chloride content influenced the RBDPO's quality and stability. This study was focussed at the comparison of pH (<6, 6-7, >8) of bleaching clay used in the refining process on the reduction of phosphorus, iron and chloride in RBDPO. The degumming and deodorisation condition are maintained for all trials and experiments. The results showed that percentage of removal of contaminants the highest with bleaching clay's pH below 6 (Phosphorus 88.1%, Iron 98.5%, Chloride 64.6%). The reduction of Phosphorus, Iron, and chloride in this study showed that pH of bleaching clay used in refinery affects the contaminants removal efficiency.