ABSTRACT

The unsaponifiable matters were separated from crude palm oil, crude palm kernel oil, and crude palm fibre oil. The sterol fractions were isolated by preparative thin layer chromatography and were then analysed by gas chromatography and combined gas chromatography-mass spectrometry. Qualitative separations of sterols are illustrated. Tables are presented showing the sterol composition determined in the oils, values obtained for individual contents are in broad agreement with other published results. There were no major differences between crude palm oil, crude palm kernel oil and crude palm fibre oil with respect to their sterols composition. β-sitosterol was found as the most predominant component in the sterol fraction from all oils. Sitostanol and ergosterol, of which their existence was not reported in any previous studies on palm oil, were found in the crude palm fibre oil samples, but were not detected in the crude palm oil and crude palm kernel oil samples.