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FATTY ACIDS COMPOSITION AND QUALITY ASSURANCE OF SEMAL (*BOMBAX*) AND MONSA (*CHORISIA*) SEED OILS AND USE IN DEEP-FAT FRYING

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Abstract. This study evaluates the proximate composition of semal (*Bombax*) and monsa (*Chorisia*) seeds, the physico-chemical properties, and fatty acids composition of the seeds oil compared with cotton seed oil. Protein and fat content of semal and monsa seeds were (21.30% and 23.50%) and (28.50 % and 25.15 %), respectively. The major fatty acids components were linoleic (C18:2), Oleic (C18:1) and palmitic (C16:0) in semal and monsa seed oils compared with cotton seed oil. Semal, monsa and cotton seed oils were continuously fried at 180˚C ± 5˚C for 20 hr, 4 hr heating cycle per day for five consecutive days. Aliquots of potato chips were fried in the aforementioned oil samples. Quality assurance testes were performed on non-fried and fried of the oil samples. In generals, the results suggest that semal and monsa seed oil alone and in mixtures with other oil have to ban its use in frying process.

Keywords: Bombax seed oil, linoleic acid, chorisia seed oil, frying process.