

# The Oil of *Adenanthera pavonina* L. Seeds and its Emulsions

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The oil of *Adenanthera pavonina* L. seeds was analysed by chromatographic and instrumental means. The oil was found to be rich in neutral lipids (86.2%), and low in polar lipids (13.8%). The neutral lipids consisted mainly of triacylglycerols (64.2%). Unsaturated fatty acids were found as high as 71%, while the percentage of saturated fatty acids was only 29%. GC and GC/MS analyses revealed linoleic, oleic and lignoceric acid to be predominant among all fatty acids in the *A. pavonina* oil, whereas stigmasterol was the major steroid identified within this study. Subsequently, the oil was used for preparation of submicron oil-in-water (o/w) lipid emulsions. Lipid emulsions were formulated by using soybean lecithin (SL) to investigate their particle size, Zeta potential and stability at the different oil and SL ratios. The results obtained indicate possible applications of the tested oil in pharmaceutical and medical fields as drug and cosmetic active ingredient carriers.

**Key words:** Indian Red Wood, Leguminosae, Nanoemulsions