TOXICITY STUDIES AND EMULSION PREPARATION FROM OIL FROM SEED KERNELS OF FOUR CULTIVARS OF *MAGNIFERA INDICA*

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ABSTRACT

Mango (*Mangifera indica* L.) is one of the most common fruits in Nigeria. The seed kernels usually remain as waste after consumption of the mango fruit. This work was carried out to determine the potential applications of the waste seed kernels. Seed oils of four different cultivars were extracted. Brine Shrimps lethality test was used to study the toxicity of the seed oils. Emulsion capacity of the oils, were determined. Emulsions were produced with the oils, and compared with another vegetable oil (Melon oil), and stabilities of the emulsions over a period of time were monitored. *Mangifera indica* L. seed kernel oil screened for toxicity had 50% lethal concentration (LC_{50}) values ranging from 5122.11ppm to 7663 ppm. Percent emulsion capacity obtained was from 54% to 62.8%, and the emulsion produced from oils were very stable. The study showed that the oils were not toxic, have good percentage emulsion capacity, and form stable emulsion, hence they are all safe for commercial and domestic utilization.

Keywords: *Mangifera indica*, Seed oil, Brine shrimps, Emulsion, Toxicity.