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## ***Felicia muricata* Leaf Extract May not Completely Safe for Oral Remedies**

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Plants have multipurpose usage e.g. food, shelter, medicine preparation, textiles and many more (Fabeku, 2006). It has been evident that plants provided primary base of preventive and curative therapies and different therapeutic usage (Yesilada, 2005). Many biochemicals have been obtained from the plant sources for drugs and medicines like anti-malaria, anti-inflammatory (Cowan, 1999) and anti-diabetic drugs (Karim *et al.*, 2011). Some herbal plants exhibit toxicity, for example *Vernonia molissima*, *Datura stramonium* and *Solanum aculeastrum* were highly nephrotoxic and hepatotoxic to livestock and humans (Tokarnia *et al.*, 1986; Koduru *et al.*, 2006). One drawback of natural plants is that they do not provide safety and having threats like mutagenicity, carcinogenicity, embryotoxicity, nephrotoxicity and hepatotoxicity and will still present if these plants were not properly examined in medication point of view (Ertekin *et al.*, 2005). *Felicia muricata* Thunb. appear under the umbrella of Asteraceae family. This family has enormous significance in the formulation of herbal medicines (Heinrich *et al.*, 1998). Villagers of South Africa used *F. muricata* against headache, pains, inflammation and for cancer treatment (Hutchings, 1989). According to McGaw *et al.* (1997) aqueous extracts of plant showed preventive activity against cyclooxygenase, which is an important enzyme in the prostaglandin biosynthesis pathway.

Ashafa *et al.* (2009) evaluated the aqueous extract of *Felicia muricata* leaves at 50, 100 and 200 mg kg<sup>-1</sup> body weight in Wistar rats for 14 days. This study shows that the extract of *F. muricata* leaves caused significant increase in white blood cell (WBC) while it decreased the Large Unstained Cells (LUC). The Red Blood Cell (RBC), Packed Cell Volume (PCV), Mean Corpuscular Volume (MCV), Mean Corpuscular Haemoglobin Concentration (MCHC), neutrophils, eosinophils and Gamma-Glutamyl Transferase (GGT) compared favourably with the control. They also found that there was no significant difference in Haemoglobin (Hb) and Alanine aminotransferase (ALT) at both 50 and 100 mg kg<sup>-1</sup>, but at 200 mg kg<sup>-1</sup>, there was slight reduction in both parameters. The extract caused progressive significant increase in platelets concentration. The lymphocytes level was significantly higher at 50 and 100 mg kg<sup>-1</sup>. The extract at all doses did not significantly alter the levels of Na, K, Cl, inorganic phosphorus, urea, creatinine, total bilirubin, globulin, total protein, total cholesterol, High Density Lipoprotein-Cholesterol (HDCL-C) and low density lipoprotein-cholesterol (LDL-C). The study also shows that the liver- and kidney-body weight ratios were not altered by all the doses except an increase in kidney-body weight ratio by the 200 mg kg<sup>-1</sup> body weight of the extract. The concentration of triacylglycerol was increased by the 50 and 100 mg kg<sup>-1</sup> body weight, while that of alkaline phosphatase did not follow any regular pattern. There was reduction in the concentration of aspartate aminotransferase (ALT) from 50 to 200 mg kg<sup>-1</sup> body weight. The alterations on some hematological and liver function parameters were an indication that the extract possessed selective toxicity.

The extract did not cause inflammation while alterations in hematological and liver function parameters have been observed. So, *F. muricata* leaf extract indicated slight toxicity and may not completely safe for oral remedies (Yakubu *et al.*, 2005).

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