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**TITLE : A STUDY OF IMMUNOLOGICAL EFFECTS
OF A MEDICINAL PLANT EXTRACT
CAESALPINIA VOLKENSII ON MAMMALIAN
IMMUNE SYSTEM**

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ABSTRACT

It was a study designed to investigate the immunological response and medicinal value of biological active compounds extracted by water and ethanol in which various tests were carried out. The plant used was *Caesalpinia volkensii*. The objective was to study the effect of crude extracts from the *Caesalpinia volkensii* plant on the immune system of laboratory mice. The extracts were tested for their ability to alter red blood cell count, white blood cells count and white blood cell differential count. Blood was first bled from the mice and the parameters tested for and recorded. The mice were then given the plants extracts orally and after 8 days they were bled tested for and comparisons made. Some mice showed significant changes in the number of red blood cells while some did not amongst both ethanol and water. All treated mice showed a significant increase in the white blood cells counts, for the differential count, all the mice showed elevation in their lymphocyte count and a significant decrease in their neutrophils number.

The results in this study showed that the water and ethanol extracts of *Caesalpinia volkensii* leaves are immunostimulators in vivo.