

**File No.47-1086/09(WRO)**

**EXECUTIVE SUMMARY**

The InVitro phagocytic activity of the crude extracts showed immunosuppressive activity with increase in concentration. At lower concentrations immunostimulatory activity was observed. Preliminary chemical tests have detected the presence of nitrogenous compounds, alkaloids, phenols steroids and terpenes. The activity can be attributed to any of these compounds. The IvVivo activity did not show marked variation in the different fractions. Hemolytic activity was pronounced for the different extracts. The methonolic crude extract showed a specific hemolytic activity of 10.26 while its non polar and semipolar showed 457.14 and 266.67 respectively. The polar and aqueous fractions failed to elicit hemolysis in human red blood cells. Analgesic activity was significantly higher in the DEAE fractions, which can be related to the proteins in the fractions. The Cell toxicity tests using Trypan blue indicated a concentration dependent decrease in the cell viability. The hexane fractions of both methanol and chloroform methanol extracts as well as the acetone fractions of chloroform methanol extracts were found to be toxic to cells. But the DEAE fractions were found to be more toxic. Similar results were obtained for SRB Assay though there was no consistent pattern of mortality that is concentration dependent. Antimicrobial activity was studied using 9 sps. of microorganisms. The minimum inhibitory concentration ranged from 0.4mg/ml for *Salmonella paratyphi B* to 1.1 mg/ml in *Candida albicans* for the chloroform methanol fractions. The methanol fractions were less toxic. The MIC ranged from 0.5 mg/ml in *Vibrio cholera* to 1.0 mg/ml in *Staphylococcus aureus* and *Candida albicans*. Both the crude extracts were found to have MIC at higher concentrations indicating that they are not as effective as the fractions.

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