

## **Evaluation of the Bioactivity of some Traditional Medicinal Plants using the Brine Shrimp Lethality Test**

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### **Abstract**

The purpose of this experiment was to evaluate the bioactivity of extracts of *Chrysanthemum cinerariaefolium* Vis., *Albizia anthelmintica* A. Broqn, *Maerua edulis* (Gilg) De Wolf, *Maerua subcordata* (Gilg & Bened) De Wolf and *Myrsine africana* L. which are used traditionally as anthelmintic by using brine shrimp lethality test. Serial dilutions of 1000~g/ml, 100~g/ml and 10~g/ml of the extracts were put in five test tubes. Ten (10) brine shrimp larvae were immersed into each of the test tubes and the number surviving after 24 hours counted and the percentage mortality and LC<sub>50</sub> for each extract was determined. *C. cinerariaefolium* extract ( pyrethrins) was active ( LC<sub>50</sub>< 1000~g/ml) at LC<sub>50</sub> of 1.3 ~g/ml while the" methanol extract of *A. anthelmintica* bark was active with LC<sub>50</sub> of 18~g/ml. The methanol extracts of *Maerua edulis*, *Maerua subcordata* and *Myrsine africana* were not active (LC<sub>50</sub>< 1000~g/ml). The result indicated that *C. cinerariaefolium* and *A. anthelmintica* extracts have bioactivity and is the basis for their use as anthelmintic by pastoral communities. Brine shrimp lethality test was found to be a simple and rapid test and is thus recommended for similar studies.