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Brine shrimp lethality bioassay of *Abrus precatorius* (Linn.) leaves and root extract

Henry Yusufu Wakawa
University of Malaysia, Malaysia

The present study was conducted to test for *in vivo* Brine Shrimp Lethality Assay (BSLA) of Abrus precarious leaves and root extracts after successive maceration in four solvents (n-hexane, dichloromethane (DCM), ethyl acetate and methanol) and correlate cytotoxicity results with known pharmacological activities of the plant. Cytotoxicity was evaluated in terms of LC_{50} (lethality concentration) of the plant extracts, 10 nauplii were added into three replicates of each concentration of the plant extracts, and after 24 hours, the surviving brine shrimp larvae were counted, and LC_{50} was assessed. Potent cytotoxicity was found for both the leaves and root extracts of *Abrus precatorius*. Results showed a concentration dependent increment in mortality rate of the brine shrimp nauplii and the n-hexane and dichloromethane fractions of the root and leaves extracts were more potent against the brine shrimp with LC_{50} values of 7.870 ppm and 19.135 ppm (µg/ml) respectively, whereas methanol fractions of both the extracts exhibited low potent activity with LC_{50} values 61.575 ppm and 226.053 ppm (µg/ml) in root and leaves respectively. The result indicated that bioactive components are present in this plant that could be accounted for its pharmacological effects.

ntawa1hen@yahoo.com