A TADPOLE BIOASSAY OF THE PALMYRAH (*BORASSUS FLABELLIFER* L) NEUROTOXIN

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The lethal effect of partially purified preparations of the neurotoxin of the palmyrah palm on tadpoles of the tree frog (*Rhacophorus leucomystax maculatus* Schneider) was used as the basis of a bioassay of this toxin. The partially purified preparations had an LD 50 of 54.1 $\pm$ 17.9 μg/ml on 12-15 mm tadpoles during a 4 day test period. The neurotoxin was stable at 100°C for 10 min. The time course of tadpole mortality with 1–4 LD 50 of the toxin showed a delayed response,deaths having occurred on the second,third or fourth days. No histological abnormalities were detected in the liver, brain or spinal cord of the intoxicated larvae.

The tadpole LD 50 was approximately 180 fold lower than that reported on brine shrimp larvae.(1)

Reference

1. Greig, J. B., Kay, S. J. E. and Bennetts, R. J. *Food Cosmet. Toxicol* **18**. 483 (1980).