

Aug 06, 2020

Toxicity assay for mosquito larvicidal activity

DOI

dx.doi.org/10.17504/protocols.io.bjdiki4e

avinash.kale¹

¹domnic colvin

UM-DAE Centre for Exce...



avinash.kale

OPEN  ACCESS



DOI: dx.doi.org/10.17504/protocols.io.bjdiki4e

Document Citation: avinash.kale 2020. Toxicity assay for mosquito larvicidal activity. **protocols.io**
<https://dx.doi.org/10.17504/protocols.io.bjdiki4e>

License: This is an open access document distributed under the terms of the **Creative Commons Attribution License**, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited

Created: August 06, 2020

Last Modified: August 06, 2020

Document Integer ID: 40074

Toxicity assay for mosquito larvicidal activity

The isolated colonies were tested for their toxicity on the overnight, starved, laboratory cultured mosquito larvae of *Culex quinquefasciatus* (third instar) at different dilutions ranging from 1:5; 1:10; 1:100 and 1:1000 with 10 larvae in each dilution. The total volume in the entire test beaker was kept constant at 30ml. Two sets of control, one with larvae feed and others without larvae feed were maintained. Control with larvae feed was kept to avoid standard error in mortality due to starvation. All the tests and controls were performed in duplicates and the readings are an average of three independent experiments. The percent mortality of the larvae at 48 hours was calculated(16). The average larval mortality data were subjected to probit analysis for calculating LC50 at 95% confidence limit (LCL) using the SPSS 16.0 version (Statistical software package) to find the regression equation values. Results with $p \leq 0.05$ were considered to be statistically significant(17).