



Research Article

Pesticidal Properties on the Leaf Extracts of *Strychnos-Nux-Vomica* Plant

Mity Thambi¹, Tom Cherian^{*2}

¹Department of Chemistry, Catholicate College, Pathanamthitta, Kerala, India.

²Department of Chemistry, Christ College, Irinjalakuda, Kerala, India.

Abstract

Strychnos-nux-vomica which belongs to the family *loganiacea* is a medium-sized tree. Other names of *Strychnos-nux-vomica* are Kanjiram, Kuchla, Kupilu. In India, the quality/toxicity of traditional medical crude and processed *Strychnos* seeds can be controlled by examining the toxic alkaloids using established HPLC methods and/or HPLC-UV methods. *Strychnos nux-vomica* is also used in homeopathy. *Strychnos* has not been proven effective for the treatment of any illness. Since the seeds contain strychnine poison, conventional doctors do not recommend it as a medicine. In the present study reveals that, plant extracts of *Strychnos-nux-vomica* leaves in ethyl acetate solvent is highly toxic against adults of *Sitophilus oryzae*. Higher doses and exposure time are required to achieve 100% mortality for the adults of *Sitophilus oryzae*. The ethyl acetate extract of *Strychnos-nux-vomica* could be used as a potential grain protectant against *Sitophilus oryzae*. The use of botanical materials as insecticides will benefit our agricultural sector. They are not only of low cost, but have no environmental impact in term of insecticidal hazard. Therefore, the findings of the current experiments strongly support the use and exploration of botanicals in pest management practices.

Key words: *Strychnos-nux-vomica*, *Sitophilus oryzae*, Disc method

***Corresponding Author:** Tom Cherian, Department of Chemistry, Christ College, Irinjalakuda, Kerala, India.