

International Journal of Advanced Research in Science, Communication and Technology (IJARSCT)

Volume 2, Issue 1, September 2022

# **Insecticidal and Antifeedant Property of Lantana** camara Leaf Extract against Vegetable Crop Pest (Earias vittella and Leucinodes orbonalis)

Swapnali Patil, Dipali Ingavale, Harshad Kamble Department of Agrochemicals and Pest Management Department of Microbiology Shivaji University Kolhapur, Maharashtra, India

Abstract: In recent year Biopesticides have been proved to be a potential source of plant protecting agents. Lantana camara belonging to family verbeceae commonly known as Ghaneri. Lantana camara is considered as the useful traditional plant in India. The various properties of plant part are useful as insecticides antifeedant . In this study the bioefficacy of Lantana camara against Earias vittella and Leucinodes orbonalis was investigated under laboratory condition .The biological effect of distilled water and chloroform of leaves of Lantana camara at different concentration on the larvae of Earias vittella and Leucinodes orbonalis. Antifeedent activity of chloroform and water leaf extract of Lantana camara were estimated in the present study. All extract moderate antifeedent activity .Higest antifeedent (80%) Activity was observed in chloroform leaf extract of Lantana camara. The result suggest that chloroformic leaf extract of Lantana camara has potential to be used as Biopesticides for the control of the Earias vittella and Leucinodes orbonalis.

Keywords: Lantana camara, Earias vittella, Leucinodes orbonalis, Mortality, Antifeedant

## REFERENCES

- [1]. Ismaqn MB(1997) Leads & prospects for the development of new botanical insecticide, rev pestic Toxical.3:1-20
- [2]. Damalus .C.A understanding benefits and risks of pesticide use sci.Res,Eassays 2009,4945-949
- [3]. Carvalno .f.p. pesticide environment & feed safety food energy secure 2017.6,48-60.
- [4]. Effect of powdered leaves L.camara . cleodendrum interme and citrus limon on rich rice moth, kiran moray, sujata pillai prabhudas patel
- [5]. Asian journal of chemistry ;vol 23.7(2011). Toxic effects of L.camara crude extracts on spodopetra litura
- [6]. Repellent Antifeedant and toxic activity of L.camara leaf extract, against Reticuterms flaviceps.(Isoptera).ZHONGLIN YUAN and XING PLNG HU
- [7]. J.Nat prod. Resour., 2015, 5(5):26-35, Insecticidal effets of larvaes flower and fruits of L.camara Linn. On Musca domestica L.
- [8]. Advance in biological research 2(3-4):36-43,2008, Evalution of larvicidal effect of L.camara Against mosquito species., M.satishkumar and S.M.Maneemegalai.
- [9]. Antotoxic activity of methanol extracts of different parts of L.camara ., Badakshdan Mahdi, Subramanion Yoga Latha
- [10]. Bindu VR, gangas & susha dayanandan, mortality of some medicinal plants on the pulse beetle (coleoptern, brucidae), journal biofertilizer & biopesticide. Volume6,
- [11]. Balaraju K. vendan SE, Ignacimuthu S, park K. Antifeedant and larvicidal activity of Swertia chirata Buch-Ham ex Wall against Helicoverpa armigera Hubner and Spodopetra litura Fab.Social Science 2011;31:1902-1905
- [12]. Kannaiyan S.Insect pest management strategies:current trends and future prospects strategies:in integrated pest management, (Eds. S.Ignacimuthu and Alok Sen) Phonix publishing House, New Delhi;2002 ;1-13

[13]. Ignacimuthu S, Jayaraj S. Eco-friendly approaches for sustainable insect pest management. Current Science Copyright to IJARSCT DOI: 10.48175/IJARSCT-7100 251

## IJARSCT



## International Journal of Advanced Research in Science, Communication and Technology (IJARSCT)

#### Volume 2, Issue 1, September 2022

2003;84:1292-1293

- [14]. Elumalai K, Krishnappa K, Anandan A, Govindarajan M.Mathivanan T. Antifeedant activity of medicinal plant essential oils against *Spodopetra litura* (Lepidoptera:Noctuidae). International Journal of Recent Scientific Research 2010;2:62-68
- [15]. Mehmet K, Hakki MA. Insecticiddal effects of essential oils from various plant against larvae of pine processionary moth (Thaumetoea potyocampa Schiff)(Lepidoptern:Thaumerropoeidae). Pest management Science 2003;60:173-177
- [16]. Jacobson M. Botanical Insecticides past, present and future .In:Philogene BJR, Morand P, (Eds), Insecticidal of plant Origin. Am Chem Soc Symp Ser,No.387, Washington, DC
- [17]. Sadek MM.Antifeedant & toxic activity of *Adhatoda vasica* leaf extracts against *Spodopetra litura* (Lepidoptern: Noctuidae).Journal of Applied Entomology 2003;127:396-404
- [18]. Botanical pesticides for pest management. By.D.A Dodia, I.S Patel, D.M. Patel