

INSECTICIDAL AND FUNGICIDAL EFFECT OF PLANT EXTRACT-A LABORATORY BASED STUDY

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ABSTRACT

The alternatives of Bio hazardous chemical insecticide were evaluated in the laboratory with methanol, ethyl acetate and petroleum ether extract of *Lantana camara* Linn. against Sand fly (*Phlebotomus argentipes*), methanol extract against Diamond Back Moth (*Plutella xylostella*), Red Spider Mites (*Tetranychus urticae*) and Fungi (*Pyricularia oryzae*, *Colletotrichum capsici*, *Fusarium oxysporum* -MTCC, Chandigarh) were evaluated. All were found effective against *P. argentipes* (max. 87.5% methanol extract), *P. xylostella*, *T. urticae* (max.100% methanol extract) and antifeedancy of *P. xylostella* (max. 83% methanol extract). The growth inhibition of *P. oryzae*, *F. oxysporum*, *C. capsici* with methanol extract was found 28.2, 22.4 and 19.2% on 9th day. The study will lead to explore the findings in broader areas like fungicidal, larvicidal and adulticidal effect to insect having medical as well as economic importance with eco-friendly plant products.

KEYWORDS: *Lantana camara*, Insecticide, Sand Fly, Diamond Back Moth, Red Spider Mite