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## **Bio-efficacy of Abutilontheophrasti**

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## Abstract:

The detailed study on plants is an ultimate weapon in the hands of a biologist and in 21<sup>st</sup> century Nano invasion has opened many new windows in the development of the plant science. Comparative studies in Nano science and modern techniques available now give us a great reliability not only on the medicinal values but also on various metabolites in many fields. The basic plant studies help us to extend the borders to a vast extent. In the present study the antibacterial, Pesticidal, Larvicidal and antioxidant studies were conducted in methanol, ethyl acetate and chloroform extracts. The antibacterial property against pathogenic bacteria like gram positive (*Bacillussubtilis, Salmonellaaureus Salmonellaepidermidis*) and gram negative (*Escherichiacoli, Pseudomonas aeruginosa* and *Klebsiellapneumonia*) is observed. The pesticidal activity at different concentrations is tested on *shrippicae*. Larvicidal activity for different concentrations is tested on shrippicells. Further the presence of phytochemicals such as flavonoids, tannins, saponins, cardiac glycosides, steroids was confirmed. Silver particles are reduced by the plant leaves extract. SEM analysis of the particles is reported. The long term pest resistance of the plant extract is discussed. The results of the present study are clearly discussed in the full paper.

