

RESEARCH PAPER

# Effect of andrographolide on feeding behaviour of *Papilio demoleus* L., (Lepidoptera: papilionidae) larvae

SRINIVASA RAO VATTIKONDA

Department of Zoology, Entomology Division, Nizam College (A), Osmania University, HYDERABAD (TELENGANA)

INDIA

Email : [vattikonda18@gmail.com](mailto:vattikonda18@gmail.com)

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Botanical insecticides are currently of interest because of their successful application in plant protection as biocontrol agents. Andrographolide which was isolated from *Andrographis paniculata* evaluated for its antifeedant activity against the fourth-instar larvae of *Papilio demoleus*. Preliminary screening after 24 hrs and 48 hrs of exposure at a concentration of 200 ppm exhibited 83.60 per cent and 80.05 per cent antifeedant activity significantly. The protected leaf area at 200ppm was  $32.08 \pm 0.84$  sq.cm and  $28.55 \pm 0.72$  sq.cm after 24 hrs. and 48 hrs, respectively. The antifeedant activity of andrographolide was also examined at 150, 100 and 50ppm concentrations which significantly reduced the feeding ability of larvae. The results imply that extract of *A. paniculata*, can potentially be used as an alternative pest control agent against the *Papilio demoleus* larvae.

**Key words** : Antifeedant activity, Photochemical, Andrographolide, *Papilio demoleus* larvae, Pest control

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