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Evaluation of Antiherbivoral, and Antibiofilm Activities in Trichomes of *Coleus amboinicus* and *Solanum lycopersicum*.

This study undertakes evaluation of the antiherbivoral, and Antibiofilm activities exhibited by trichomes in *Coleus amboinicus* and *Solanum lycopersicum*. This employs a combination of in vitro and in vivo assays to investigate the chemical composition of trichome secretions from *Coleus amboinicus* (Indian borage) and *Solanum lycopersicum* (tomato). The research focuses on evaluating the effectiveness of these secretions in inhibiting deterring herbivores, and preventing biofilm formation. The aqueous extract and methanolic extract was used for preliminary analysis of metabolites. HPLC of the samples analysed a number of secondary metabolites such as terpenoids, phenolics, alkaloids, cyanogenic glycosides and gossypol. Antiherbivoral effects are assessed using herbivorous insects like *Drosophila melanogaster* in controlled environments. Additionally, the antibiofilm properties are examined against common bacterial strains like *Bacillus* species and *Staphylococcus* species known for biofilm formation. The result demonstrated positive Antiherbivoral and Antibiofilm activity.

Primary authors: S, ASHMITHA; Dr H, Malathi.H (Jain University); Ms J, Sanjitha

Presenter: S, ASHMITHA

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