

**PHYTOCHEMICALS OF *CHRISTIA VESPERTILIONIS* LEAF EXTRACT:  
ANTIOXIDANT, ANTIDIABETIC AND TOXICITY CAPABILITIES**

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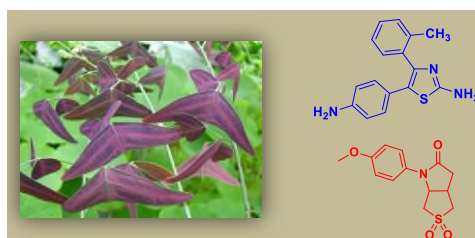
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Phytochemicals of *Christia vespertilionis* plant is known for medicinal properties and used to treat various health problems (**Fig. 1**). The present study revealed medicinal properties of the leaf extract of *Christia vespertilionis* plant as its total phenolic content derived is screened for their antioxidant, antidiabetic and toxicity properties by Folin-Ciocalteu method, DPPH assay with butylated hydroxytoluene standard,  $\alpha$ -amylase inhibition assay with metformin standard, brine shrimp lethality bioassay respectively.



**Fig. 1:** Phytochemicals in leaf extract of *Christia vespertilionis*, a Malaysian medicinal plant

The total phenolic content of leaves extract is identified as  $128.852 \pm 3.90$  mg gallic acid equivalent per gram of dried sample. The antioxidant potentiality is identified with 34.72-2.01 percentage of free radical scavenging against 200-6.25 mg/mL concentrations with  $IC_{50}$  39.987 mg/mL. The antidiabetic potentiality is identified with 23.33, 20.14 and 15.34 percentage against 500, 250 and 125 mg/mL concentrations with  $IC_{50}$  35.2 mg/mL. The percentage of mortality identified as 21.59-10.87% for 200 and 12.5 mg/mL concentrations. The results revealed that *Christia vespertilionis* leaf extract is enriched with potential therapeutic properties of phenolic content that is associated with low toxicity levels.

**Keywords:** *Christia vespertilionis*, total phenolic content, antidiabetic activity, antioxidant activity, toxicity.