

A Review Bioactive Compounds of *Ipomoea triloba* L.

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Abstract: The Convolvulaceae family, commonly known as the morning glory family, is widely distributed across tropical, subtropical, and temperate regions. This family primarily consists of twining herbs or shrubs, occasionally exhibiting milky sap, and comprises approximately 60 genera and nearly 1,600 species worldwide. The present study aims to review *Ipomoea triloba* L., an ethnomedicinally significant plant within this family. This review focuses on documenting the phytochemical studies conducted on *Ipomoea triloba* L.

Keywords: *Ipomoea triloba*, Convolvulaceae and Ethnomedicinal

I. INTRODUCTION

Ipomoea triloba is a species of *Ipomoea* morning glory known by several common names, including littlebell and Aiea morning glory. It is native to the tropical Americas, but it is widespread in warm areas of the world, where it is an introduced species and often a noxious weed. This is a fast-growing, vining, annual herb producing long, thin stems with ivy-like, petioled, heart-shaped leaves 2.5–6 centimeters (0.98–2.36 in) long. The leaves sometimes, but not always, have three lobes. The vines produce tubular bell-shaped flowers, each about two centimeters long

II. MATERIAL AND METHOD

The phytochemical activities of compounds isolated and identified from *Ipomoea triloba* were searched through Sci Finder that is one search tools.



III. RESULTS AND DISCUSSION

Several species of the genus *Ipomoea*, as well as, of the Convolvulaceae family have the property of phytotoxicity, which means suppressing the growth of other plants including invasive weeds. In Mexico, farmers make use of *I. tricolor* Cav. for this purpose (Bah & Pereda-Miranda, 1997)

Phytochemicals studies

The genus is rich in bioactive compounds, including alkaloids, flavonoids, phenolics, and terpenoids. Studies by Kumar et al. (2015) identified significant antioxidant activities in *Ipomoea* leaf extracts. Additionally, *I. triloba* has been reported to contain caffeic acid derivatives with potential anti-inflammatory properties (Li et al., 2018).



According to Essiئت and Obioboho (2014) analysis of this research works; *I. triloba*, *I. batatas* and *I. involucrata* have been distinguished on the basis of phytochemical screening, quantitative evaluation and nutritional analysis. UkaChiedozi Joel (*et al* 2020) investigated that contains present alkaloids ($19.90 \pm 0.00c$), tannin ($14.00 \pm 0.00e$), flavonoid ($0.93 \pm 0.02e$) and saponin (23.01 ± 0.01) in *Ipomea triloba*. Arun O. S (2022) reported that Preliminary phytochemical screening present Tannin, Flavonoides and saponin in *Ipomea triloba*. Essiئت U.A (2014). Noticed that hydrogen cyanide (0.038 mg/100g), total oxalate (114.40 mg/100g), oxalate soluble (70.40 mg/100g), phytate (0.02 mg/100g) and tannin (1.72 mg/100g) present in *Ipomea triloba* L.

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