

# Bioactive Compounds and TLC Analysis of Two Medicinal Plants from Murud Janjira

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**Abstract:** *The present study analyzes the leaves of Ipomoea pes-caprae (Roth) and Ipomoea triloba (L.) for their phytochemical composition using Thin-Layer Chromatography (TLC). Qualitative phytochemical screening was conducted to establish a scientific basis for their ethnomedicinal potential. The analysis confirmed the presence of various bioactive constituents, including alkaloids, flavonoids, saponins, and tannins. TLC profiling of ethanol, petroleum ether, and methanol extracts was performed to detect key phytochemicals such as alkaloids, tannins, and flavonoids. The findings validate the presence of these phytoconstituents in both plant species, supporting their potential medicinal significance. These results suggest that a polyherbal formulation incorporating these two medicinal plants could serve as a valuable source of bioactive compounds for therapeutic applications.*

**Keywords:** Ethanol extract, Petroleum ether extract, Methanol extract, TLC, Phytochemical analysis

