

**BIOACTIVITY-GUIDED SCREENING OF SELECTED PLANTS FROM
UPV MIAG-AO CAMPUS**

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ABSTRACT

Twelve selected ethnomedically-used plants were screened for alkaloids, saponins, and flavonoids. Nine out of twelve plants contained at most two of the phytochemicals tested and three showed the absence of these phytochemicals.

Methanolic extracts of three selected plants (*Stachytarpheta jamaicensis*, *Hyptis suaveolens*, *Semecarpus philippinensis*) were examined for antibacterial activity against *Staphylococcus aureus*, *Bacillus subtilis*, *Escherichia coli*, and *Pseudomonas aeruginosa*. All extracts were found to be active at least against two of the microorganisms tested. The extract of *Stachytarpheta jamaicensis* was found to be active against three out of four microorganisms and found to be the most bioactive.

Stachytarpheta jamaicensis was subjected to bioactivity-guided fractionation using solvents of increasing polarity - hexane, ethylacetate, and n-butanol. The hexane extract was considered as the most bioactive fraction. Its chromatogram contained seven spots in which four turned blue violet after spraying with vanillin-H₂SO₄. The color change exhibited suggests the possible presence of saponins.