

Extraction and Characterization of Secondary Metabolites from Medicinal Plants †

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Abstract: Most of the current medicines at use are derived from phyto-compounds. Plant-based products are used since ancient times to cure various ailments. Due to modern civilization, the properties of numerous medicinal plants remain undiscovered or dormant. This study deals with *Cassia alata*, *Thespesia populnea*, and *Wrightia tinctoria*. The extracts *Cassia alata*, *Thespesia populnea*, and *Wrightia tinctoria* were checked for their bioactive properties. Secondary metabolites such as alkaloids and saponins were withdrawn from dried leaves using the solvent extraction method. The secondary metabolites were characterized by UV-Vis spectroscopy (UV-Vis) and Fourier Transform Infrared Spectroscopy (FT-IR). The metabolites were evaluated for an antioxidant property using DPPH. The metabolites were further checked for larvicidal activity.

Keywords: Phyto-compounds; secondary metabolites; solvent extraction; antioxidant activity.

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Conflicts of Interest

The authors declare no conflict of interest.