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**A Study of Phytochemical Constituents and Antioxidant and
Antifungal Activities of Selected Medicinal Plants**

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ABSTRACT

Medicinal plants are valuable natural resources that contain a wide variety of bioactive compounds with important therapeutic properties. Phytochemicals such as alkaloids, flavonoids, phenolic compounds, tannins, saponins, terpenoids, glycosides, and steroids are commonly present in different parts of medicinal plants and may contribute to their biological activities. The present study focuses on the phytochemical constituents and antioxidant and antifungal activities of selected medicinal plants. Preliminary phytochemical screening can be performed on plant extracts to identify the major groups of bioactive compounds present in them. The antioxidant potential of the extracts can be evaluated using suitable in vitro assays, such as DPPH or other free-radical-scavenging methods. Antioxidant activity is important because free radicals and oxidative stress can contribute to cellular damage and various health disorders. Similarly, the antifungal activity of the selected plant extracts can be examined against appropriate fungal strains using standard microbiological techniques such as agar well or disc diffusion methods. The inhibition of fungal growth can be assessed by measuring the zone of inhibition and comparing the activity of different extracts. The study may help establish relationships between phytochemical constituents and biological activities. The findings could provide useful scientific information regarding the potential of selected medicinal plants as natural sources of antioxidant and antifungal compounds and may support further research into their pharmaceutical applications.