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General Techniques Involved in Phytochemical Analysis

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Abstract: Plants are highly valued in the pharmaceutical industry due to their vast structural diversity and extensive pharmacological activities. The bioactive compounds found in plants, known as phytochemicals, are extracted from different plant parts, including leaves, flowers, seeds, bark, roots, and pulp. These phytochemicals serve as natural medicinal agents and as precursors for the synthesis of more complex semi-synthetic compounds. This paper discusses the collection and processing of plant materials, extraction techniques for active compounds, and qualitative and quantitative analysis of phytochemicals

Keywords: Phytochemicals, Decoction, Infusion, HPLC, HPTLC, OPLC, NMR, X-Ray Crystallography



