

# Extraction and Evaluation of *Celosia Argentea*

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**Abstract:** *This study focuses on the extraction and evaluation of bioactive compounds from *Celosia argentea*, a plant known for its nutritional and medicinal properties. The research aims to isolate key phytochemicals, assess their pharmacological potential, and evaluate their applications in health and industry. Using solvents of varying polarity, extracts were obtained from *Celosia argentea* leaves and stems. Phytochemical screening revealed the presence of flavonoids, alkaloids, saponins, tannins, and phenolic compounds. Quantitative analysis showed high antioxidant activity, confirming the plant's potential as a natural source of therapeutic agents.*

*Further investigations were conducted to assess anti-inflammatory activities of the extracts. Preliminary results indicate promising anti-bacterial and anti-diabetic properties, supporting traditional uses of the plant in treating infections. Additionally, a nutritional profile analysis highlighted its value as a dietary supplement. The study concludes that *Celosia argentea* holds significant potential in pharmaceutical and nutraceutical industries, warranting further research for product development and therapeutic applications.*

**Keywords:** Anti-inflammatory, Extract, *Celosia argentea*, Side effects