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Nontargeted metabolomics approach to determine metabolites profile and antioxidant study of Tropical Almond (*Terminalia catappa* L.) fruit peels using GC-QTOF-MS and LC-QTOF-MS

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Highlights

- This article attempts to determine the appropriate extraction method of food waste almond peels for proper utilization and waste management
- Results of the present investigation revels almond peels as a good source for the recovery of the antioxidants
- Most potent extract was characterized for the identification of the bioactive compounds by GC-QTOF-MS and LC-QTOF-MS
- Correlation between phytochemical content and antioxidant activity was determined
- *Terminalia catappa* peels proved to be a novel source in the preparation of dietary supplements or nutraceutical, food ingredients, pharmaceutical and cosmetic products.

ABSTRACT

The objective of the present study was to identify the metabolome pattern and study the biological efficacy of Almond (*Terminalia catappa* L.) peels. In the present study, metabolite profiling was carried out using GC-QTOF-MS and LC-QTOF-MS techniques, from the potent extract showed highest antioxidant efficacy. Antioxidant efficacy of the various