

## **ABSTRACT:**

Herbs are getting importance by the researchers and scientists to their medicinal properties. Now a days, world is shifting toward herbal medicines. *Cucumis melo var. agrestis* is one the herb that is nutrients enriched. This plant has health beneficial polyphenols and metabolites. In this research we extract the metabolites and nutrients using different organic solvents and quantify the extracts. Soxhlet's Apparatus was used for extraction methods. Different solvents such as Ethanol, n-Hexane, DCM, Acetonitrile and Ethyl acetate were used to extract from the fruit seed and fruit shell and the extracts were analyzed on GC-MS and Atomic Absorption Spectroscopy to quantify metabolites and heavy metals in it. The presence of metabolites is human beneficial while the heavy metals can be toxic to human health.

**KEYWORDS:** Metabolites; Polyphenols; Organic Solvents GC-MS; Atomic absorption spectroscopy.