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VALUE ADDED METABOLITES FROM POMEGRANATE FRUIT WASTE

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ABSTRACT

Pomegranate, *Punica granatum L.* (Punicaceae) is considered to be one of the most ancient, mystical and distinctive fruits known to mankind. Almost all parts of the plant i.e. fruit, leaves, bark, seeds and flowers represent a rich reservoir of phytochemicals such as anthocyanins, flavonoids, tannins, vitamins, etc. Pomegranate fruit is comprised of 78% juice and 22% seeds. Commercially, pomegranate fruit is exploited for its juice which is a rich source of antioxidants, while the seeds are considered as a waste and often discarded. Research has shown that the pomegranate seeds contain approximately 12-20% of oil, especially, omega fatty acids, which exhibit beneficial health effects. Pomegranate seed oil possesses antioxidant properties that can help to prevent and heal varied types of cancers. Also it is shown to exhibit lipid lowering, anti diabetic and antioxidant properties. Thus, current embodiment attempts to review the varied extraction methods of pomegranate seed oil, characterization and analysis of its phytoconstituents and their applications.

Keywords: Pomegranate, seeds, pomegranate seed oil, omega fatty acids, extraction, anti cancer, etc.