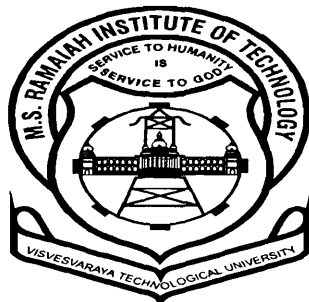


MICROWAVE ASSISTED EXTRACTION OF POLYPHENOLS FROM TEA AND THEIR ANTI-OXIDANT ACTIVITY



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ABSTRACT

As tea being the most common beverage of all the others, our study is based on the benefits of tea to human kind. Hence this study is based on comparative study of the green tea samples from three geographical locations i.e. Alipore Dooars, Darjeeling and Ooty and finding out which amongst these have the maximum concentration of tea polyphenol and thus also determining the antioxidant activity of these polyphenols.

In this study we make use of Microwave Assisted Extraction method for the polyphenol extraction and we use Ferric chloride method for finding out the Antioxidant activity.

We also conclude the effects of temperature, time and liq/sol ratio on the polyphenol concentration. Making the final result as the tea sample collected from Ooty to have a maximum concentration of polyphenol amongst them thus also providing the antioxidant activity to be dose dependent. Therefore making the Ooty tea sample the most effective.