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Study of the Antioxidant Responses of Pomegranate due to Oxidative Stress Triggered By ROS

Vinayak Mahi
Department of Chemical Engineering, Federal University of Technology, Owerri, Imo State, Nigeria

Debopam Saha*
Department of Floral and Plant Sciences, Federal University of Technology, Owerri, Imo State, Nigeria
[*Corresponding author]

Abstract
Pomegranate plant has wide usage because of its biologically active compounds with different biological activities, being present in different parts of plants. In this review, the point of focus is on antioxidant responses of this plant under conditions of oxidative stress due to reactive oxygen species. In pomegranate, ROS cause oxidative stress due to different biotic and abiotic stresses, some of them causing elevation of antioxidant level and some stresses cause decline in antioxidant level. But plant has ROS scavenging mechanism that is antioxidant defense system which can be enzymatic and non-enzymatic preventing damage caused by reactive oxygen species. By evaluating level of antioxidants in different parts of plant, we can decide about its therapeutic and commercial usage; this evaluation also acknowledges about its agricultural plantation at specific areas under specific stress conditions. Owing to more antioxidant activities in peel part, it can be used in prevention of food spoilage by enhancing the shelf life.

Keywords
Biologically Active Constituents, Defense mechanism, Oxidative Stress, Pomegranate, ROS

The full length manuscript can be sought from the corresponding author or upon requesting the editorial office with due intensions for usage and implementation.