A REVIEW ON ANTIOXIDANT ACTIVITY OF PHENOLIC COMPOUND IN ORYZA SATIVA (PADDY)

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ABSTRACT

Rice is generally categorised by colour into red, green, black, and white (common) varieties. It is one the main foods in the diet of the most populations that may have important role in the concentration of antioxidant ingested daily. Commonly, rice is consumed as polished white rice with the husk, bran, and germ fractions removed. Rice bran contains high amounts of fiber and bioactive molecules, such as vitamin B complex, tocopherols, tocotrienols, oryzanols and other phenolic compounds. Numerous studies have shown that the essential phytochemicals in fruits, vegetables and cereal grains, including rice, are significantly associated with reduced risk of developing chronic diseases such as cardiovascular disease, and type two diabetes. Several *vitro* and *in vivo* studies evaluating the grains with different pericarp colour (light brown, red and black) had showed potential beneficial effects on health related to the polyphenol content of the grain but it is not documented yet that is beneficial for the future researchers. Therefore this paper review the phenolic compounds identified in rice and their antioxidant activity.

Keyword : Antioxidant, phenolic compound, rice, Oryza sativa