

# **STUDY ON ANTIOXIDANT POLYPHENOL EXTRACTION FROM HUSK AND LEAVES OF MAIZE BY USING THE METHOD OF ENRICHMENT DIFFUSION**

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## **Summary**

This paper focuses on the extraction conditions and the effect of extraction conditions on the polyphenol content and antioxidant activity of the stem and leaves of maize by using diffusion method of enrichment. The input factors were studied such as the temperature, time and the ratio of solvent to materials of extraction, and target functions were polyphenol content, total antioxidant activity, reducing power and free radical scavenging activity DPPH. The results showed that enrichment diffusion method allowed to obtain antioxidant polyphenols with lower solvent content and less extracting time than non-enrichment method, for example extracting time of 8 hours, the ratio of solvent to material 30/1 (v/w), extracting temperature 90<sup>0</sup>C. Polyphenol content corresponded 48.96 - 50.88 mg acid gallic/g DW.

**Keywords:** *Antioxidant, diffusion, extract, maize, polyphenol, enrichment.*