

Documents

Zamri, S.S.^a, Mahadi, M.^a, Abdullah, F.^b, Syafiuddin, A.^c, Hadibarata, T.^d

Evaluation of protein content and antioxidant activity of edible bird's nest by various methods
(2020) *Biointerface Research in Applied Chemistry*, 10 (2), pp. 5277-5283.

DOI: 10.33263/BRIAC102.277283

^a Faculty of Pharmacy, Cyberjaya University College of Medical Sciences, Cyberjaya, Selangor 63000, Malaysia

^b Department of Chemistry, Faculty of Science, Universiti Teknologi Malaysia, UTM, Johor Bahru, Johor 81310, Malaysia

^c Department of Water and Environmental Engineering, Faculty of Engineering, Universiti Teknologi Malaysia, UTM, Johor Bahru, Johor 81310, Malaysia

^d Department of Environmental Engineering, Faculty of Engineering and Science, Curtin University, Miri, Sarawak 98009, Malaysia

Abstract

The aim of this study was to evaluate the protein content and antioxidant activity of instant and raw Edible bird's nest (EBN). This study was conducted using two types of EBNs, which are instant and raw samples. All EBN samples were extracted via three types of extraction method, namely, salt, alkaline, and hot extractions. Lowry's method was used to analyze protein content and the antioxidant activities were analyzed via free radical scavenging assay 1,1-diphenyl-2-picrylhydrazyl (DPPH), total phenolic content (TPC) assay and ferric reducing antioxidant power (FRAP). This study showed that the highest protein was 2165.90 µg/mL obtained from raw EBN extracted via alkaline solution. In addition, it was also found that the protein concentration of raw EBN was higher compared to instant EBN for all types of extraction procedures. Results from antioxidant assay showed that there was no significant difference between DPPH and FRAP of both EBN. Moreover, TPC results showed that there was no phenolic compounds detected via all extraction procedures. © 2020 by the authors.

Author Keywords

Antioxidant activity; Edible bird; Protein

Correspondence Address

Abdullah F.; Department of Chemistry, Faculty of Science, Universiti Teknologi Malaysia, UTM Malaysia; email: faizuan@utm.my

Publisher: AMG Transcend Association

ISSN: 20695837

Language of Original Document: English

Abbreviated Source Title: Biointerface Res. Appl. Chem.

2-s2.0-85082564945

Document Type: Article

Publication Stage: Final

Source: Scopus

