

Article

Potentially Bioactive Metabolites from Pineapple Waste Extracts and Their Antioxidant and α -Glucosidase Inhibitory Activities by ^1H NMR

Awani Azizan ¹, Lee Ai Xin ² Nur Ashikin Abdul Hamid ³, M. Maulidiani ⁴, Siti Zulaikha Abdul Ghaffar ⁵, Nur Khaleeda Zulaikha Zolkeflee ² and Faridah Abas ^{2,*}

1. Laboratory of Natural Products, Institute of Bioscience, Universiti Putra Malaysia, 43400 Serdang, Selangor, Malaysia; faridah_abas@upm.edu.my; awani_azizan@yahoo.com; khaleeda_zulaikha@yahoo.com; shikinhamid89@yahoo.com
 2. Department of Food Science, Faculty of Food Science and Technology, Universiti Putra Malaysia, 43400 Serdang, Selangor, Malaysia; ctzue.agb@gmail.com; ax1895@gmail.com
 3. School of Fundamental Science, Universiti Malaysia Terengganu, 21030 Kuala Nerus, Terengganu, Malaysia; maulidiani@upm.edu.my
- * Correspondence: faridah_abas@upm.edu.my; Tel.: (+603-97698343)

Received: date; Accepted: date; Published: date

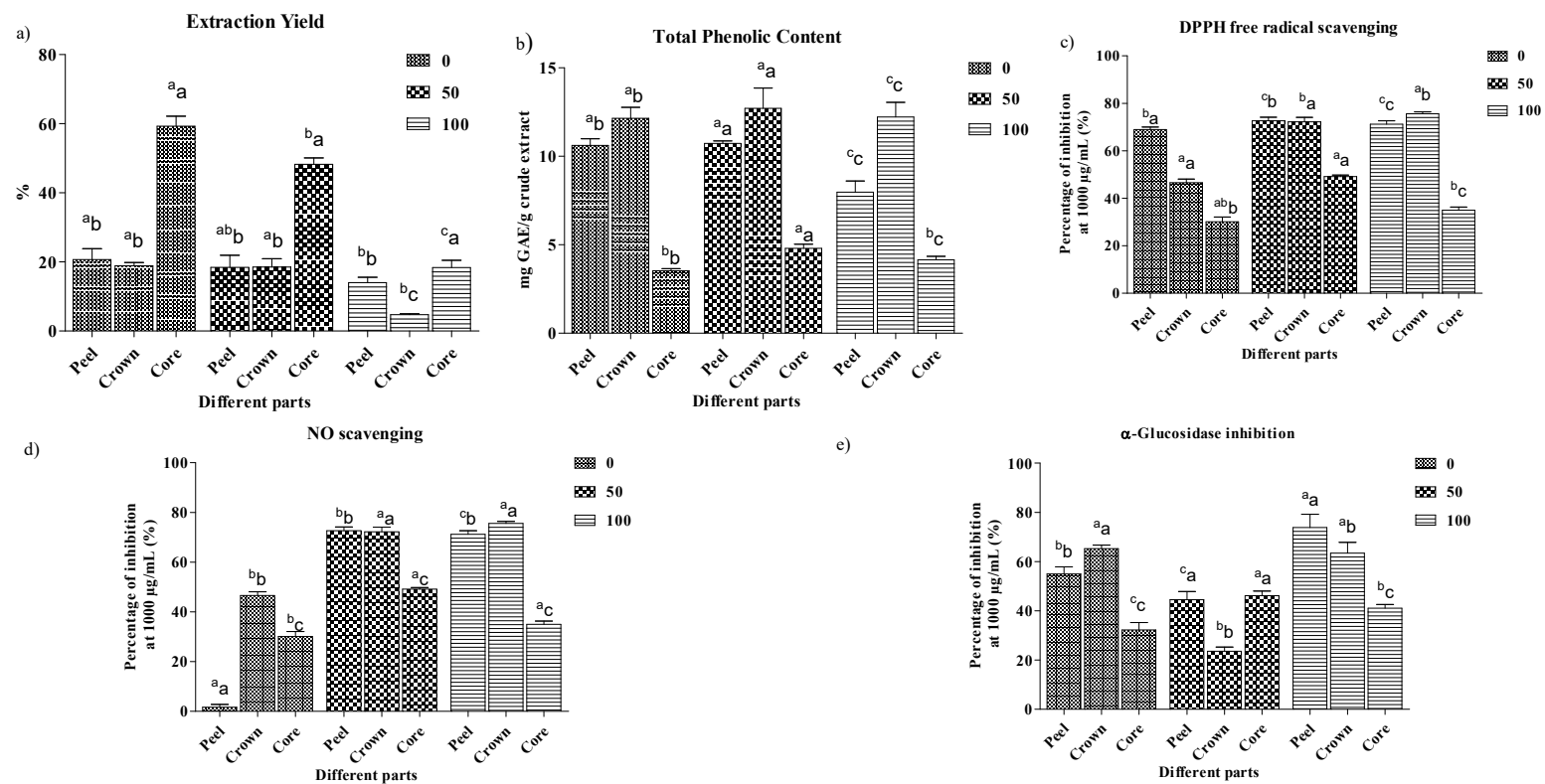


Figure S1. (a) Extraction yield; (b) Total phenolic content; (c) DPPH free radical scavenging; (d) NO free radical scavenging; (e) α -Glucosidase inhibitory activities of MD2 pineapple peel, crown and core extracted with 0, 50 and 100% ethanol. Values are means \pm standard deviation based on four biological replicates. The superscript is to compare the same part of plant with different ethanol ratio extraction; and the subscript is to compare the different parts of the plant with same ethanol ratio extraction. Mean with different superscript and subscript letters are significantly different ($p < 0.05$).

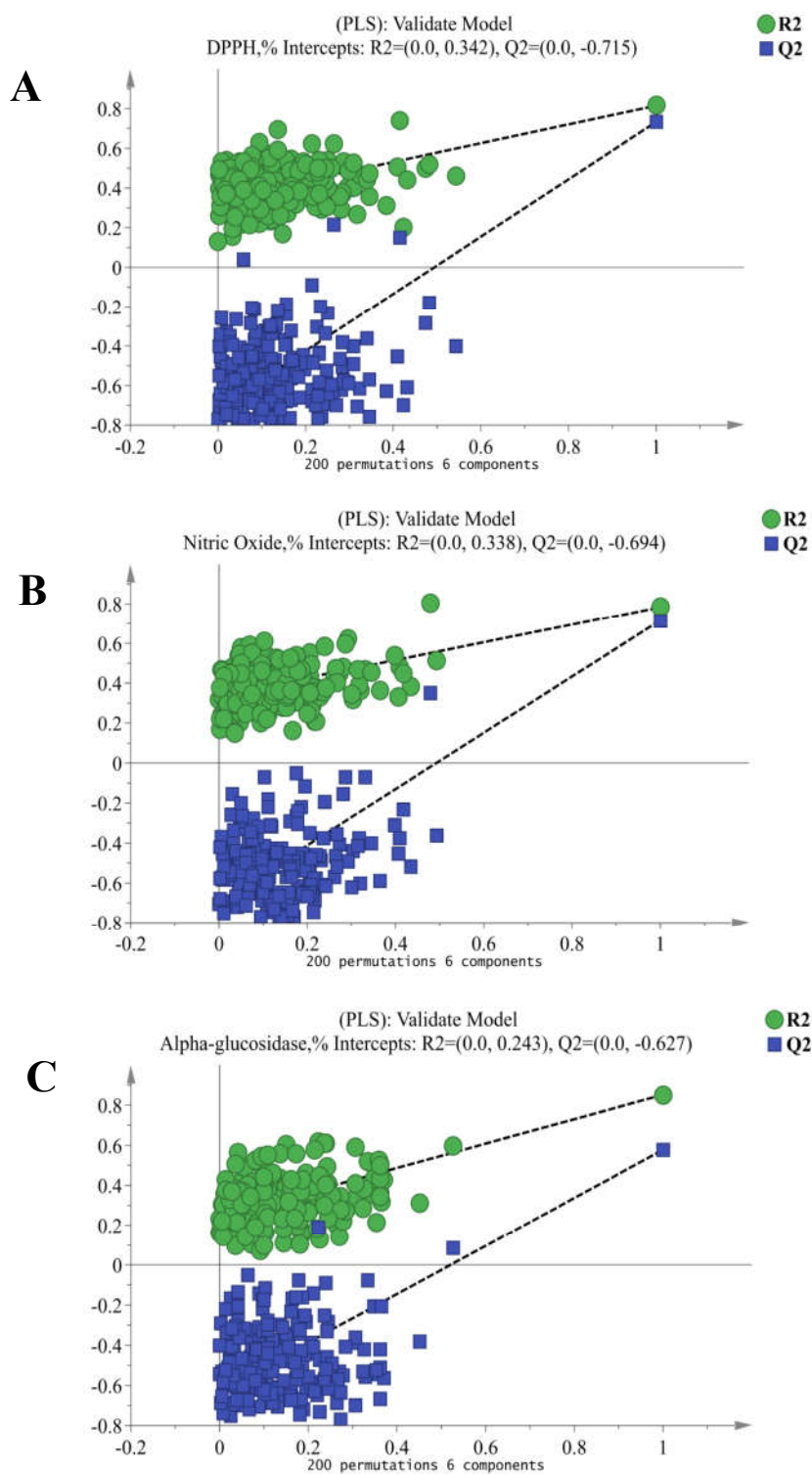


Figure S2. Validation of PLS model using permutation test (100 permutations) of DPPH, NO and α -Glucosidase inhibitory activities.

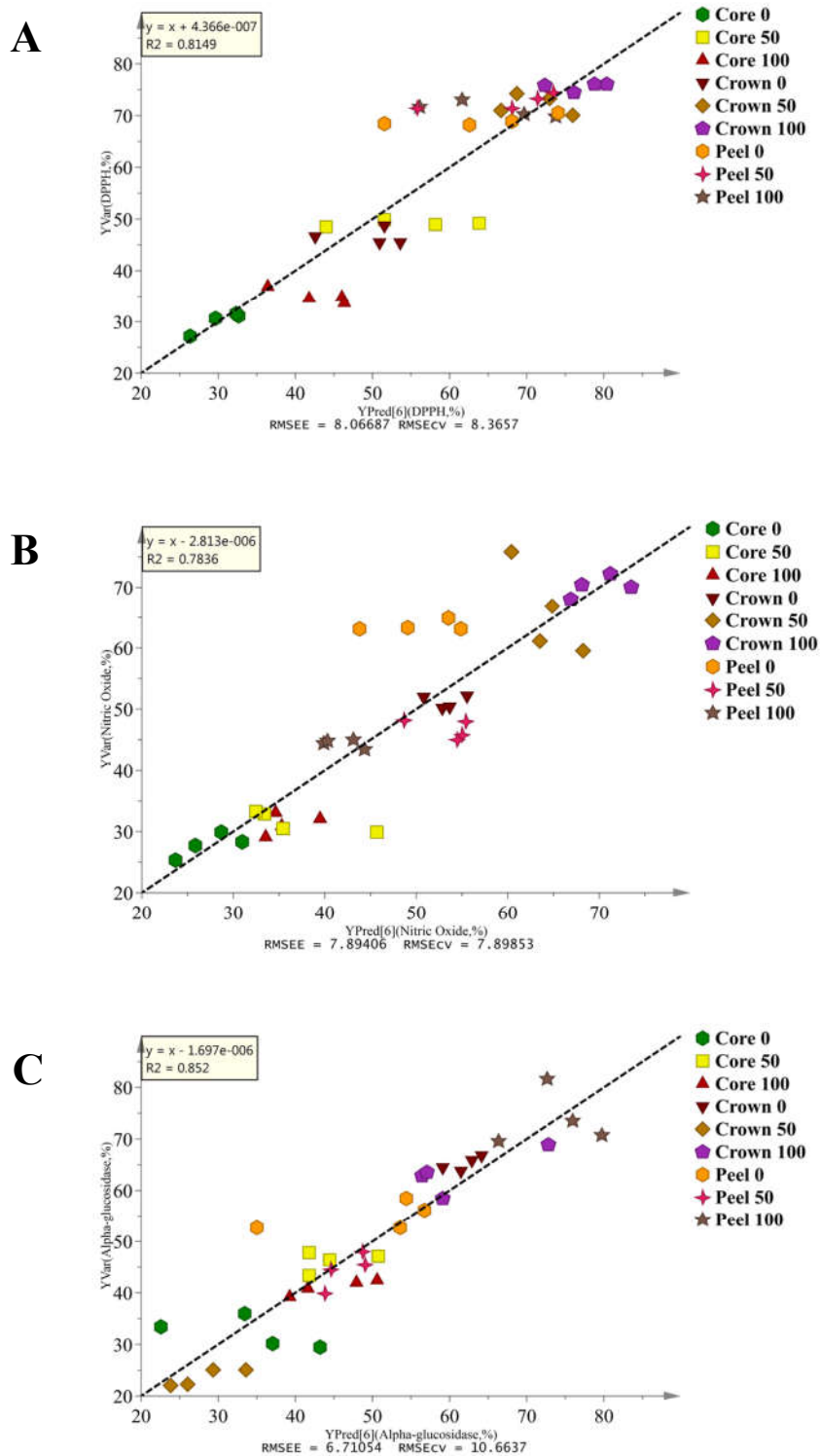


Figure S3. PLS derived relationship between observed vs predicted of DPPH, NO, α -Glucosidase inhibitory activities.