

Supplementary Information

Antioxidant Activities and Phenolic Compounds of Cornhusk, Corncob and Stigma Maydis

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Standard curves in this paper

1. Standard curve of total phenolic content

$$\text{Absorbance} = 0.0336 C_{\text{gallic acid}} (\mu\text{g}) - 0.01 \quad (r^2 = 0.999)$$

Linear range: 0-20 μg

2. Standard curve of total flavonoid content

$$\text{Absorbance} = 0.0012 C_{\text{rutin}} (\mu\text{g}) - 0.0171 \quad (r^2 = 0.998)$$

Linear range: 0-600 μg

3. Standard curve of total ketosteroid content

$$\text{Absorbance} = 0.0023 C_{\text{PA}} (\mu\text{g}) - 0.0486 \quad (r^2 = 0.997)$$

Linear range: 0-800 μg

4. Standard curve of DPPH radical-scavenging activity

$$\text{Inhibition (\%)} = 31.487 C_{\text{Trolox}} (\mu\text{mol L}^{-1}) - 1.3579$$

($r^2 = 0.996$)

Linear range: 0-3.00 $\mu\text{mol L}^{-1}$

5. Standard curve of ABTS radical-scavenging activity

$$\text{Inhibition (\%)} = 32.16 C_{\text{Trolox}} (\mu\text{mol L}^{-1}) - 3.0899$$

($r^2 = 0.995$)

Linear range: 0-3.00 $\mu\text{mol L}^{-1}$

6. Standard curve of reducing power assay

$$A_{\text{sample}} - A_{\text{blank}} = 0.1827 C_{\text{Trolox}} (\mu\text{mol L}^{-1}) + 0.0098$$

($r^2 = 0.992$)

Linear range: 0-2.91 $\mu\text{mol L}^{-1}$

7. Standard curve of ferric reducing-antioxidant power

$$A_{\text{sample}} - A_{\text{blank}} = 0.0092 + 0.0219 C_{\text{Fe(II)}} (\mu\text{mol L}^{-1})$$

($r^2 = 0.999$)

Linear range: 0-60.0 $\mu\text{mol L}^{-1}$

8. Standard curve of quantification of gallic acid

$$A = 2193.3 m (\mu\text{g}) - 39.424 \quad (r^2 = 0.9993)$$

Linear range: 0.0025-1.8750 μg

9. Standard curve of quantification of caffeic acid

$$A = 3315.8 m (\mu\text{g}) - 46.964 \quad (r^2 = 0.9995)$$

Linear range: 0.0025-2.5000 μg

10. Standard curve of quantification of femlic acid

$$A = 2886.5 m (\mu\text{g}) - 30.833 \quad (r^2 = 0.9995)$$

Linear range: 0.0025-2.5000 μg

11. Standard curve of quantification of resveratrol

$$A = 4004.7 m (\mu\text{g}) - 33.249 \quad (r^2 = 0.9995)$$

Linear range: 0.0025-2.5000 μg

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