

**Title** Ultraviolet-C irradiation effects on physiological changes and inhibition on polyphenol oxidase of longkong (*Aglaia dookkoo* Griff.) after harvesting

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#### **Abstract**

The effects of Ultraviolet (UV)-C irradiation at 0 (control) and  $5.4 \text{ kJ/m}^2$  on physiological change and the activity of polyphenol oxidase (PPO) which was partially purified by  $(\text{NH}_4)_2\text{SO}_4$  precipitation (20-60% saturation) and anionic exchange chromatography (DEAE-650M) of longkong (*Aglaia dookkoo* Griff.) at  $25^\circ\text{C}$  was determined. The changes in respiration and ethylene production were evaluated at 2 days interval. UV-C fruits had lower rates of respiration and ethylene production than control. PPO activity of the extract from longkong pericarp which was stored for 12 days of UVC at  $5.4 \text{ kJ/m}^2$ , was low than that of extracts from control.