

THE PHYSICO- CHEMICAL CHARACTERISTICS OF THE SELECTED *CURCUMA* SPECIES

^{1*}Liza J. Caballero, ^{2**}Cesar P. Estrope, and ^{3***}Teresita Loida K. Ubag ¹Negros Oriental State University Bayawan – Sta. Catalina Campus, Philippines ²Negros Oriental State University Bayawan – Main Campus, Philippines

³Negros Oriental State University Bayawan – Sta. Catalina Campus, Philippines

*Corresponding Author: lizacaballero@norsu.edu.ph

***cesar.estrope@norsu.edu.ph

***teresitaloidaubag@norsu.edu.ph

ABSTRACT: *This study examines the physio-chemical characteristics of selected Curcuma species, focusing on their physical properties, and phytochemical properties. Various Curcuma species were analyzed to determine differences in color, odor, pH levels, and total bioactive compounds, among other parameters. The findings highlight significant variations in antioxidant activity, curcuminoid concentration, and mineral composition, which are crucial in assessing their potential applications in medicine, food, and cosmetics. The results provide essential insights into the nutritional and functional properties of these species, supporting their value in health-related industries and s*

Keywords: *Curcuma* species, physico-chemical properties, phytochemical analysis, rhizome analysis.