INSTABRIGHT e-GAZETTE
ISSN: 2704-3010
Volume VI, Issue IV
March 2025
Available online at https://www.instabrightgazette.com

IPOMOEA BATATAS (SWEET POTATO) LEAVES AS A NATURAL FOOD PIGMENT

KRISTINE CHEENA C. BONETE
RYZA ANGELA T. CODIZAL
CASSIE P. FAILANGA
LYKA D. ILAGAN
SAMMANTHA LHEARISH F. RUBION
Balayan Senior High School

ABSTRACT

This research investigates the application of Ipomoea batatas (sweet potato) leaves as a natural food coloring in some dairy products such as milk, condensed milk, and whipped cream. The pigments, which are primarily chlorophylls and carotenoids, imparted a dark green hue to the dairy blends, with the intensity of the color increasing proportionally with the concentration of the leaf extract. In skim milk, the hue became deepened considerably with increase in the volume of extract, indicating the stability and solubility of the extract in fluid dairy products. This indicates that sweet potato leaf extract may be an efficient, herbal substitute for artificial food coloring agents. Nonetheless, increased concentrations of the extract (7.5 ml and 10 ml) in whipped cream made pigment particles deposit at the bottom, affecting the stability of the color in more aerated and viscous foods. Notwithstanding this limitation, the research highlights the viability of sweet potato leaf extract as a natural food colorant, a sustainable and healthy alternative for use in the food industry.

Editorial Team
Editor-in-Chief: Alvin B. Punongbayan
Associate Editor: Andro M. Bautista
Managing Editor: Raymart O. Basco
Web Editor: Nikko C. Panotes
Manuscript Editors / Reviewers:
Chin Wen Cong, Christopher DC. Francisco, Camille P. Alicaway, Pinky Jane A. Perez, Mary Jane B. Custodio, Irene H. Andino, Mark-Jhon R. Prestoza, Ma. Rhoda E. Panganiban, Rjay C. Calaguas, Mario A. Cudiamat, Jesson L. Hero, Albert Bulawat, Cris T. Zita, Allan M. Manaloto, Jerico N. Mendoza