

**Flavonoids, Alkaloids and Tannins of Three Varieties of Horse
Radish (*Moringa oleifera*
Lam.) Extracts: Potential Components of
Toothpastes**

**Jhoseph B. Carranza, Precious Gem L. Molina, John Joseph R.
Ortañez, Lorcelie B. Taclan, Vicky C. Mergal and Orlex
Yllano**

Adventist University of the Philippines, Cavite,
Philippines; lbtacalan@yahoo.com

Abstract: *Moringa oleifera* Lam is a very common plant in tropical countries such as the Philippines. Recently, the Philippine Congress approved it as the national vegetable because of its various health benefits. Through phytochemical analysis the study generally identified the secondary compounds of its three varieties namely; Native, Yard Long, and Chinese. The study aimed to establish the secondary compounds of the three varieties that would be potential components of toothpaste. Gathering samples of the three varieties was done at the university campus. Each variety was dried using the Multi commodity heat pump dryer to preserve their nutritional contents before crude extraction that was done at the Department of Science and Technology- Industrial Technology Development Institute (DOST-ITDI) using 95% ethanol. Each extract was subjected to phytochemical analysis using standard laboratory procedures. Results revealed that the extracts contain flavonoids, alkaloids and tannins that are known to have antimicrobial and anti-inflammatory properties. Thus, these *Moringa* varieties have potential natural components in the manufacture of toothpastes.

Keywords: *Moringa oleifera*, flavanoids, alkaloids, tannins