

**EVALUATION AND PROCESSING OF YACON (SMALLANTHUS  
SONCHIFOLIUS) TUBERS AS ALTERNATIVE SWEETENER  
AND GRANULATION CONTENTS**

**ROZELLE SEDON**

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## **ABSTRACT**

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**Adviser: MARK JUDE F. TRONDILLO, PhD**

The study was conducted to develop a Yacon tuber food-grade granule sugar and determine brix level and mineral content to produce an alternative sweetener. The study employed a completely randomized design with three treatments and three replications associated with determining the level of sugar in Yacon tubers. Treatment 1 with a physical color of Pale White and is considered as fresh Yacon tubers has a mean of 10.00 with a sugar concentration of 100 grams per liter while treatment 2 with a physical color of Yellow has been stored for 3 days has a mean of 14.00 and has a sugar concentration of 140 grams per liter. Treatment 3 with a physical color of Mild Orange has a mean ratio of 14.67 with a sugar concentration of 146.7 grams per liter. The study reveals that the physical color Yellow (Treatment 2) and Mild Orange (Treatment 3) has a significant difference in the level of sugar concentration of Yacon tubers as an alternative

sweetener. The findings indicate that the level of brix content has a significant effect on the physical color of Yacon tubers according to the number of days of storage. Furthermore, treatment 3 has the highest sugar concentration among all treatments.

**Keywords:** Yacon, alternative sweetener, brix content, *Smallanthus sonchifolius*, physical color