

Santol vinegar essay sample

[Economics](#), [Globalization](#)



Introduction

Santol or cotton fruit (*Sandoricum koetjape*) is a tropical fruit grown in Southeast Asia (fruitinfo. com, Retrieved July, 2014). The Santol fruit tissue is mostly sub-acid or sour in nature. When the fruit is unripe, this tissue is even more sour. The Filipinos like Santol even if it tastes sour and they generally eat it with some salt. Filipinos also use Santol to make marmalade. Philippine is known for its tropical country because of cool climate that every living creature especially the tree grows easily. Our country is well known as a fruit producer like Lanzones, Mangoes, Rambutan, Santol, and Guavas that are exported and it bring the country popular to other ancient country.

Furthermore, even in this time of globalization, the Philippines has been experiencing economic crisis. As the government is still resolving ways to alleviate poverty, this is the best time for Filipino citizens to utilize resources in local areas and to be wiser in spending money.

That is why the Government encourage format to plant and produce abundant supplies that contribute a big income to our country and lead them to be known entrepreneur in exporting does tropical fruit. Santol is easily grown and is readily available in Laguna. It is found almost anywhere: in backyards, forests, and also in school gardens. The general acceptability and palatability of Santol fruit to Filipinos and its availability in local communities are the bases of utilizing Santol in this research. These product contribute to the benefits of the community to bring progress to it. Since fruit bearing trees are found every where we don't have to waste enough money just to produce a new product. Realizing the situation at hand, the researcher thought of exploring locally available resources to be made into a primary

commodity found in the market like vinegar. Thus, the researcher came out with their own version of Santol Vinegar.

Background of the study

The Santol tree is a fruit bearing tree. It is known to grow almost everywhere in tropical places. It grows by pollination and by seed. Its fruit is delicious and nutritious. And it can be a source of income for many Filipino.

The external pulp of the Santol fruit can be awfully inedible and harsh when the fruit is in an unripe but miraculously transforms itself into a sweet tasting fruit. The average of Santol fruits are bigger than a softball shape and the flesh and seeds were incredibly sweet/tart. The youthful fruits are candied. The ripen fruits have a vinous taste. Commercial vinegar is produced either by fast or slow fermentation processes. In general, slow methods are used with traditional vinegars, and fermentation proceeds slowly over the course of months or a year.

The longer fermentation period allows for the accumulation of a nontoxic slime composed of acetic acid bacteria. Fast methods add mother of vinegar (i. e., bacterial culture) to the source liquid before adding air using a venturi pump system or a turbine to promote oxygenation to obtain the fastest fermentation. In fast production processes, vinegar may be produced in a period ranging from 20 hours to three days. With those fast processes, commercial vinegar contains residual alcohol (about 6 to 7%).

The researcher wants to explore using the flesh of the Santol fruit (the skin and the seed removed) as potential household vinegar.

Theoretical Framework

Santol is a famous fruit in the Philippines. Its scientific name *Sandoricum koetjape*. It is native to Southeast Asia where it is called gratawn in Thai, kompem reach in Khmer, tong in Lao and donka in Sinhalese. The santol fruit has a thin outer peel and a thicker inner rind. The pulp is soft and contains a milky juice. It may be sweet or sour depending on the ripeness. The seeds are brown and inedible. Filipinos peel the fruit with a sharp knife and eat the flesh raw with some salt or even brown sugar. It may also be candied.

(Retrieved July 9, 2014, TagalogLang. com) Santol fruit have white juicy pulp around 3 to 5 brown seeds. The seeds are up to 2 cm long (Retrieved July 9, 2014, Wiki Answer). The pulp is mostly sour. The Filipinos like it even in that (sour) condition.

The fruit is usually consumed raw. Glass packed Santol marmalade is exported from the Philippines to oriental food dealers in Europe and the United States. Santol contains vitamins and minerals that strengthen immune system and promotes proper cell metabolism. It also contains amounts of carbohydrates, iron, fiber, and phosphorus. Chewing santol produces saliva that lowers the levels of bacteria in the mouth, thus reducing tooth decay (BARDigest, 2012). Although vinegar contains few essential nutrients, consuming it may provide you with some health benefits. Vinegar aids in healthy weight management when eaten in place of higher-calorie alternatives (Coleman, 2012). Studies published in 2010 in “Annals of Nutrition and Metabolism” and the “Journal of Nutritional Science and Vitamin ology” report that ingesting vinegar with complex carbohydrates

reduces post-meal blood glucose levels, and balsamic vinegar reduces triglyceride and total cholesterol levels.

Vinegar helps enhance the flavor of foods, but it is very low in calories. Using vinegar as salad dressings or sauces significantly helps reduce overall calorie intake. Most of the calories in vinegar are from carbohydrates — mainly sugars. Vinegar contains no fiber or dietary cholesterol. ([http://www. food. com/library/vinegar-680? oc= linkback](http://www.food.com/library/vinegar-680?oc=linkback)) The above cited information explains the nutritional value and health benefits of Santol and the usefulness of household vinegar support the present research study to produce a new variety of vinegar made from Santol. Conceptual Framework

The Conceptual Framework of this study is presented in Figure 1.

Independent Variable Dependent Variable

Frame 1 Frame 2

Figure 1 Research Paradigm

Frame 1 consists of the independent variable which includes the methods in preparing Santol vinegar, first with acetic acid and second with Yeast. Frame 2 consists of the dependent variables which includes the acceptability of the Santol vinegar in terms of aroma, color and taste.

Statement of the Problem

This study aims to experiment on how Santol can be utilized into vinegar.

This study sought to answer the following question. 1. What are the methods used in making Santol vinegar?

2. What is the level of acceptability of Santol vinegar with acetic acid in terms of sensory qualities such as:

- a. Aroma
- b. Color
- c. Taste

3. What is the level of acceptability of Santol vinegar with yeast in terms of sensory qualities such as:

- a. Aroma
- b. Color
- c. Taste

4. What is the mean acceptability of Santol vinegar with acetic acid as evaluated by housewives, instructors and students?

5. What is the mean acceptability of Santol vinegar with yeast as evaluated by housewives, instructors and students?

6. Is there a significant difference between the ratings given by the three (3) groups of respondents on the acceptability of the two Santol vinegar as to its aroma, color and taste?

Hypothesis
There is no significant difference on the level of acceptability between the Santol vinegar with acetic acid and Santol vinegar with yeast as rated by the three (3) groups of respondents in terms of sensory qualities.

Significance of the Study

The result of this research development will be beneficial to the following individuals:

This study will encourage Housewives to make homemade Santol vinegar. This could lessen household expenses and could be an income generating

business for the family.

Entrepreneurs will have a chance to venture on a profitable business enterprise with reasonably low cost investment.

Future researchers may look into other aspects of this study for further research and development like varying the flavors of Santol vinegar and the like.

Scope and Limitations of the Study

This study will focus on the production and preparation of vinegar from Santol. The study will determine the acceptability Santol vinegar in terms of aroma, color, and taste. This study will be conducted at Laguna State Polytechnic University (LSPU) Main Campus during the Academic Year 2014-2015.

The resulting Santol vinegar will be evaluated by five (5) instructors of the Industrial Technology Department of Laguna State Polytechnic University (LSPU), five (5) Food Technology students of LSPU and five (5) housewives of Baranggay, Banca-Banca Nagcarlan, Laguna.

Definition of Terms

Acetic Acid is an organic compound with the chemical formula CH_3COOH (also written as $\text{CH}_3\text{CO}_2\text{H}$ or $\text{C}_2\text{H}_4\text{O}_2$). It is a colourless liquid that when undiluted is also called glacial acetic acid. Aroma refers to the agreed odor or fragrance of Santol vinegar. Color refers to the acceptable clear color of the Santol vinegar. Fermentation is the aerobic breakdown of carbon into alcohol and lactic acid. Santol is a tropical fruit grown in Southeast Asia.

Taste refers to the tasting of the flavor quality of Santol Vinegar by taking some into the mouth. Vinegar is a liquid consisting mainly of acetic acid and water. The acetic acid is produced by the fermentation of ethanol by acetic acid bacteria. Sensory qualities refer to the characteristics of Santol vinegar like aroma, color and taste which will be rated by the evaluator/taster. Yeast is a fungus that allows fermentation on Santol vinegar.