



# Benguet State University RESEARCH JOURNAL

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### Evaluation of Potato Genotypes Grown from Rooted Stem Cuttings Under Mid-Mountain Zone

..... 1 - 7

*D. K. Simongo, F. D. Gatawa, and G. A. Payangdo*



### Insects Associated with Yacon (*Smallanthus sonchifolius* Poepp & Endl) Plants in La Trinidad, Benguet

..... 8 - 15

*Bonie S. Ligat, Sr. and Gemma P. Sabas*



### Pilot Commercialization of Dehydrated Strawberry Products

..... 16 - 22

*Jane K. Avila and Lory C. Balaoing*



### The Ideal Vegetable Attributes Based on Consumer Preferences: A Conjoint Analysis Approach

..... 23 - 31

*M. K. T. Dagupen, M. A. B. Lubrica, D. D. Tagarino, X. Gellynck, J. Viaene, B. B. Gumihid*



### Knowledge and Practices of Sagpat Women on Indigenous Healing and Reproductive Health

..... 32 - 52

*R. S. Batani, M. D. Gapasin, B. Sa-ao, H. Bolislis, G. Taag, R. Sa-ao, T. Sagandoy, L. Samonte and A. S. Cuyan*



### Relationship Between Class Size and Students' Academic Performance

..... 53 - 58

*Maria Azucena B. Lubrica, Marcos A. Buliyat, Rosaline D. Dongbo, and Joel V. Lubrica*



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*Bonie S. Ligat, Sr. and Gemma P. Sabas*

## **PILOT COMMERCIALIZATION OF DEHYDRATED STRAWBERRY PRODUCTS**

*Jane K. Avila and Lory C. Balaoing*

## **THE IDEAL VEGETABLE ATTRIBUTES BASED ON CONSUMER PREFERENCES: A CONJOINT ANALYSIS APPROACH**

*M.K.T. Dagupen, M. A. B. Lubrica, D. D. Tagarino, X. Gellynck,  
J. Viaene, B. B. Gumihid*

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*R. S. Batani, M. D. Gapasin, B. Sa-ao, H. Bolislis, G. Taag,  
R. Sa-ao, T. Sagandoy, L. Samonte and A. S. Cuyan*

## **RELATIONSHIP BETWEEN CLASS SIZE AND STUDENTS' ACADEMIC PERFORMANCE**

*Maria Azucena B. Lubrica, Marcos A. Buliyat,  
Rosaline D. Dongbo, and Joel V. Lubrica<sup>2</sup>*

# EVALUATION OF POTATO GENOTYPES GROWN FROM ROOTED STEM CUTTINGS UNDER MID-MOUNTAIN ZONE



D. K. Simongo<sup>1</sup>, F. D. Gatawa<sup>2</sup>, and G. A. Payangdo<sup>3</sup>

## ABSTRACT

Rooted stem cuttings of six Potato genotypes; 5.19.2.2, 380241.17, 573275, 676070, 2.21.6.2, and MILUSA, and check varieties Granola and Igorota were evaluated for yield in mid-mountain zones.

It was observed that there were significant differences on plant survival, height, and weight of marketable tubers. Genotype 676070 had the highest plant survival of 100%, and Granola had the lowest survival of only 76%. Genotype 5.19.2.2 were the tallest plants at 75 DAP (28.45 cm). Genotype 380241.17 produced the highest marketable tuber weight (4.76kg/5m<sup>2</sup>) with highest computed yield of 22.36t/ha, and the highest profit. Genotypes 5.19.2.2, and 2.21.6.2 produced comparable yield of 8.83t/ha and 8.2t/ha respectively. Granola produced the lowest yield and negative profit.

Genotype 380241.17, 5.19.2.2, and 2.21.6.2 grown from rooted cuttings are favorable in mid-mountain zone.

**KEYWORDS:** potato genotypes, rooted stem cutting, potato genotype evaluation, mid-mountain zone

<sup>1</sup>Researcher, Northern Philippines Root Crops Research and Training Center, BSU

<sup>2</sup>Student of Bachelor of Science in Agronomy

<sup>3</sup>Adviser, College of Agriculture, Benguet State University, La Trinidad, Benguet



# INSECTS ASSOCIATED WITH YACON (*Smallanthus sonchifolius* Poepp & Endl) PLANTS IN LA TRINIDAD, BENGUET



Bonie S. Ligat, Sr.<sup>1</sup> and Gemma P. Sabas<sup>2</sup>

## ABSTRACT

This study was conducted to identify the different insects and other arthropods that were found on yacon (*Smallanthus sonchifolius* Poepp & Endl) plants; to classify these arthropods; and, to determine the degree of injury inflicted by the insects on the yield of the yacon plants.

There were twenty nine (29) species of insects, 2 species of spiders and 1 specie of mites that were found on yacon plants.

The species of arthropods were classified as potential insect pests, predators, parasitoids, and visitors.

The species of chewing insects had a sound (1) to slight (3) injury while the species of sucking insects had a sound or no injury on yacon plants. Both injuries were observed on the leaves of the yacon plants.

**KEYWORDS:** Yacon, insect pests, arthropod, predator and parasitoid.

<sup>1</sup>*Faculty member Department of Entomology,  
College of Agriculture, La Trinidad, Benguet*

<sup>2</sup>*Research Assistant*



# PILOT COMMERCIALIZATION OF DEHYDRATED STRAWBERRY PRODUCTS



Jane K. Avila<sup>1</sup> and Lory C. Balaoing<sup>2</sup>

## ABSTRACT

Dehydrated strawberry products namely: Infused-dried strawberries, strawberry pinwheel, and strawberry champoy were pilot tested. Procedures were standardized and a cost and return analysis was done. Results show that the optimum temperature for drying is 70°C for 36 hours. In descending order, the recovery rates for the three products are the following: strawberry champoy (38%), infused-dried strawberries (33.75%), and strawberry pinwheel (29%). The Moisture contents after drying were: infused-dried strawberries (3.37%); strawberry pinwheel (3.70%); and strawberry champoy (4.87%).

Dehydrated strawberry products contain appreciable amounts of energy, calcium, phosphorus and minimal amounts of iron, proteins, and dietary fiber. Infused-dried strawberry and strawberry pinwheel were rated as “liked very much” while strawberry champoy was “liked moderately”. All these dehydrated strawberry products show high market potential among tourists and local market.

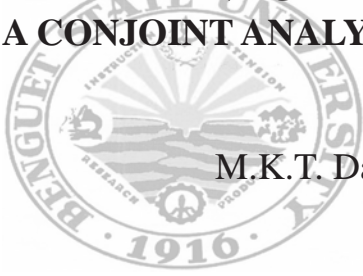
**KEYWORDS:** Strawberry, Dehydrated products, Commercialization, La Trinidad, Benguet

<sup>1</sup>*Manager, Food Processing Center and faculty, College of Home Economics and Technology, Benguet State University, La Trinidad, Benguet*

<sup>2</sup>*Dean, College of Home Economics and Technology, Benguet State University, La Trinidad, Benguet*



# THE IDEAL VEGETABLE ATTRIBUTES BASED ON CONSUMER PREFERENCES: A CONJOINT ANALYSIS APPROACH



M.K.T. Dagupen<sup>1</sup>, M. A. B. Lubrica<sup>2</sup>, D. D. Tagarino<sup>3</sup>, X. Gellynck,  
J. Viaene<sup>4</sup>, B. B. Gumihid<sup>5</sup>

## ABSTRACT

Consumers' purchase decisions are influenced by the attributes that they attach to the product. This study was conducted in the major vegetable markets of the Philippines from April 2005 to April 2007 to understand the relevant attributes and the respective attribute levels that consumers identified with carrots and cabbage. It also aimed to identify market segments according to relevant vegetable attributes assigned.

The important product attributes of carrot for consumers, according to order of importance are: price, origin, freshness, size, and color. Similarly, cabbage consumers gave the highest importance value to price followed by production method, origin, shape, and freshness.

The market segments were: Cluster 1 – “Origin-sensitive” and Cluster 2 – “Price-conscious”. Origin-sensitive consumers prefer carrots coming from Baguio-Benguet while price-conscious consumers prefer a low price of PhP15/kg.

The market segments for cabbage consumers are the: health-conscious and the price and origin conscious. The former gave the highest utility score to the attribute level organic under production method indicating that they connect food much more with their well-being. On the other hand, the latter gave high importance to cabbage with the lowest price of PhP 10/kg and cabbage originating from Benguet.

**KEYWORDS:** Conjoint analysis, consumer preference, vegetable attributes

<sup>1</sup>Director, Institute of Social Research and Development, Benguet State University

<sup>2</sup>Department Chairman, Math-Physics-and-Statistics, College of Arts and Sciences, Benguet State University

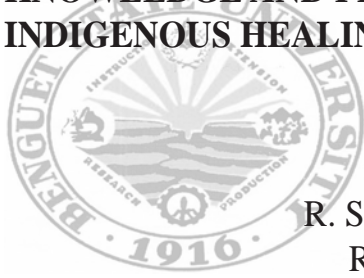
<sup>3</sup>Vice President for Finance, Benguet State University

<sup>4</sup>University of Ghent, Faculty of Agricultural and Applied Biological Sciences, Department of Agricultural Economics, Division Agro-Marketing, Coupure Links 653, B-9000 Gent, Belgium

<sup>5</sup>Research Assistant



# KNOWLEDGE AND PRACTICES OF SAGPAT WOMEN ON INDIGENOUS HEALING AND REPRODUCTIVE HEALTH



R. S. Batani, M. D. Gapasin, B. Sa-ao, H. Bolislis, G. Taag,  
R. Sa-ao, T. Sagandoy, L. Samonte and A. S. Cuyan <sup>1</sup>

## ABSTRACT

The study looked into the knowledge and practices on indigenous healing throughout the life cycle of women respondents in barangay Sagpat, municipality of Kibungan, Benguet, Philippines. Using key informant interviews and group interviews, 23 purposively selected women were asked on their worldviews on indigenous healing, their knowledge and use of medicinal plants as well as their practices related to diagnosing, curing, and preventing illnesses. The perceived effects of indigenous Knowledge on their health and well-being were ascertained too.

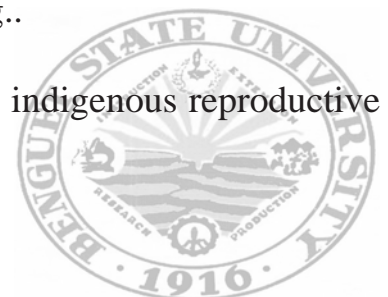
Results showed that women of Sagpat have a wealth of knowledge when it comes to indigenous healing systems – both homegrown and traditional. The engagement of the services of traditional healers and the use and propagation of medicinal herbs are being observed among women respondents. and knowledge of these are also openly being shared through their informal networks. The belief on traditional healers as litigators for offended spirits to affect a cure is strong. This is rooted on their views on the causes of ill health and the prevention and cure of such. Indigenous knowledge on healing is believed to have come from “Kabunian” as a ‘gift’ and one way of transmitting such ‘gift’ is through dreams.

Interesting data also pointed out that throughout the reproductive cycle of women; it is replete with taboos on food and diet as well as beliefs and practices related to conception up to the post natal stage. Specifically during birthing stage, men’s role figure as birthing attendants. Documented too, were several birthing positions women take and believed to be much more convenient for the woman than the conventional hospital birthing positions.

The study pointed out that the indigenous and homegrown healing systems are still the most workable and viable health alternative, in a resource poor setting..

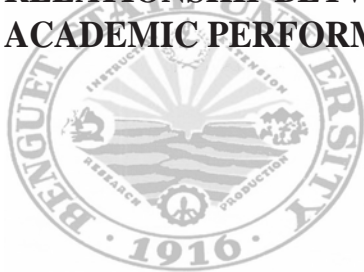
**KEYWORDS:** Indigenous knowledge; indigenous healing practices, indigenous reproductive health practices

*<sup>1</sup>Faculty members, Social Sciences department,  
College of Arts and Sciences, Benguet State University,  
La Trinidad, Benguet*





# RELATIONSHIP BETWEEN CLASS SIZE AND STUDENTS' ACADEMIC PERFORMANCE<sup>1</sup>



Maria Azucena B. Lubrica, Marcos A. Buliyat,  
Rosaline D. Dongbo, and Joel V. Lubrica<sup>2</sup>

## ABSTRACT

This study delved into the relationship between class size and students' academic performance at Benguet State University, particularly in the Mathematics-Physics-Statistics Department. Specifically, it aimed to: 1) determine if there is a significant difference in academic performance between students of smaller and bigger class sizes, and 2) determine if there is a significant relationship between class size and students' academic performance. The performance was based on the average of the final grades per class in the general education courses, particularly Information Technology (for the subject Basic Computer Education), Mathematics (College Algebra), Statistics (Principles and Methods of Statistics), and Physics (General Physics 1).

For each teacher in the Department, the final grades in the classes with the biggest and the smallest class sizes were used in determining significant differences in the academic performances of students in bigger and smaller class sizes.

Results indicated that in Basic Computer Education (Information Technology), one out of four teachers had a significantly lower students' average grade for the smaller class. In Mathematics, two out of four teachers had a similar trend. In Statistics, one of two teachers had significantly lower students' average grade for the smaller class. For Physics, two out of four teachers had the same result.

In contrast, one Mathematics teacher had significantly higher students' average grades in her smaller class. This is also true for one Physics teacher.

However, for each of the four subject areas, and using all the classes of each teacher, correlation analyses showed that in general, there was no significant relationship between class size and students' academic performance.

**KEYWORDS:** Class size and academic performance, class size, academic performance

<sup>1</sup>Paper presented during the Math Society of the Philippines Annual Convention,  
Cagayan de Oro on May 21, 2009

<sup>2</sup>Faculty members, Math-Physics-Statistics department, College of Arts and Sciences,  
Benguet State University, La Trinidad, Benguet

