

DEVELOPMENT AND ACCEPTABILITY OF FERMENTED PIPINONG GUBAT (*Melothria pendula*, linn) CREEPING CUCUMBER

HELEN MAGALONA HIJE

¹ Teacher III, Department of Education, Sorsogon City, Philippines

ABSTRACT

*This study focuses on the development and acceptability of fermented pipinong gubat (*Melothria pendula*, linn).*

*The researcher used developmental and descriptive-survey methods for this research to find out the level of acceptability of the fermented pipinong gubat (*Melothria pendula*, linn).*

The respondents of this study were the 30 residents of five barangays of the Municipality of Gubat which were grouped according to their age. A 9-point Hedonic Scale checklist was utilized in this study. Weighted mean was utilized to compute the acceptability level of the developed product in terms of taste, color, aroma, texture, and appearance.

Keyword : *Pipinong gubat, Acceptability, Treatments, Nutritional facts, and Indigenous food plant.*

1. TITLE-1: DEVELOPMENT AND ACCEPTABILITY OF FERMENTED PIPINONG GUBAT (*Melothria pendula*, linn) CREEPING CUCUMBER

For this study, insights and opinions are gathered from different age groups and utilized as a source of information that contributes to better interpretation, and presentation of the study.

Pipinong gubat or creeping cucumber with the scientific name (*melothria pendula*, linn) is a wild cucumber, an indigenous food plant that can be found all over the Philippines archipelago. Indigenous foods such as creeping cucumber are food originating or occurring naturally (in a country, region, at.) (Reverse Dictionary, 2021).

Preservation is one way of developing many neglected food plants and it can open a door for improving livelihood that can make a significant impact on poverty reduction and balancing diets. Over the past couple of decades; diet has transitioned into a dietary composition of convenience. Processed foods, fast food restaurants, and sugar-sweetened beverages have become mainstream commodities in both the developed and developing world. This change in food consumption has resulted in various health issues, it has become more essential to promote foods that not only provide adequate nutrition but also have properties for health promotion and disease.

Feeding growing populations with increasing demands for quality, healthy, savory, and attractive food is a vital challenge for humanity. Many indigenous food plants are neglected nowadays by many agriculture, food industries, and even local people for lack of nutritional and agronomic information a negative attitude towards indigenous foods (termed “foods for poor”, but part of essential linkages, we could also benefit from re-learning to use local

plants as sources of healthy food and other products, with attention and concern for environmental issues, (Harris and Fuller, 2014).

Several related studies and pieces of literature are utilized that contribute to strengthening the significance of the conduct of the study.

Joven (2018), The study used developmental, experimental-randomized complete block design and descriptive-survey methods of research. The process of making oregano juice and the proportion of ingredients were determined. The 5-point Hedonic Score Sheet was used for sensory acceptability and Likert's Scale of 7 point level of acceptability were the main instruments used in data gathering procedures. Based on the data gathered by the researcher, the following findings were revealed; The process used in developing oregano juice was the decoction method.

4. CONCLUSIONS

Based from the findings, the following CONCLUSIONS are drawn:

1. The process utilized in the production of the product is fermentation.
2. There were three treatments made to come up with the most accepted product, the three treatments vary in salt and sugar.
3. The level of likeness of the four treatments is like moderately, however treatment three had the highest weighted mean and considered to be the most accepted treatment.
4. The level of acceptability of the fermented pipinong gubat (*Melothria pendula*, linn) along the identified variables shows that Treatment 3 (FCC023) is acceptable as rated by the respondents.
5. The product contains calories, calories from fat, saturated fat, polyunsaturated fat, monounsaturated fat, sodium, potassium, carbohydrates, dietary fiber, sugars, and protein.

5. ACKNOWLEDGEMENT

This paper would not be possible without the exceptional support of these people whom the researcher would like to express gratitude. She sincerely appreciates and gratefully acknowledges their contributions.

Words of appreciation to Dr. Helen R. Lara, president of the Sorsogon State University for her support to the School of Graduate Studies. Likewise, the researcher is grateful to Dr. Gerry A. Carretero, dean of the School of Graduate Studies for his guidance, and his constant supervision to the graduate students.

The researcher is blessed to have Dr. Fely A. Habla, her adviser, for her shared knowledge and expertise in this study. Her endearing assistance, especially her patience throughout the completion of this paper is priceless.

Sincere appreciation to Dr. Noel G. Benavides, chairman of the panel of evaluators for his patience, dedication, and worthwhile efforts throughout the development of the paper.

Also, gratitude to Dr. Jhonner D. Ricafort and Prof. Shirley G. Dicen, members of the panel. Their significant contribution of insights and suggestions helped in the success of the developed research paper.

The researcher also appreciates the help of Dr. Susan S. Janer for sharing her knowledge and technical know-how. In addition, she wants to thank Mr. Asael Jared F. Gacosta, administrative officer of the School of Graduate Studies for his assistance to the graduate students.

She is also grateful to the Barangay officials and residents of Gubat who participated in the data gathering. Their honest and cooperative response helped much in this endeavor.

It is worth mentioning her heartfelt appreciation to Mr. Federico and Mrs. Luzviminda Hije, her parents. Their love, undying support, motivation, and financial assistance are incomparable.

She extends her acknowledgement to Ms. Renne Rose Ruiz, for the support, encouragement, inspiration, and love, Likewise, to Ms. Edna E. Hermida, Ms. Julia N. Pareja, Ms. Cynthia J. Jeresano, Ms. Zarina F. Perez, and Ms. Nory Jean D. Espeña, her friends who constantly support her throughout every phase in the graduate studies.

Special appreciation to the immediate relatives of Hije Family and Ruiz family, especially to her older sister Luz H. Derla. Their support, assistance, and inspiration are valuable part in this writing journey. In addition, she is thankful to Katrina Q. Endraca, Rodel Nico Ferreras, and Aprilyn A. Lasay for helping her gather data and supporting her to finish the study.

To those, who in one way or another, had assisted and encouraged the researcher to finish her study. Their names may not be included in this page, but she considers them as valuable part of this milestone. Above all else, heartfelt thanks beyond words to Almighty God for HIS endless blessings, for the researcher's wisdom and health. His grace of protection served as an opportunity to successfully complete this study. This contribution is offered to HIS glory.

H.M.H

6. REFERENCES

- [1]. Gatchalian, M.M and De Leon, Introduction to Food Technology. Meriam &Websters Bookstore, Inc. Manila, Philippines, 2010.
- [2]. Kim, Mina, Lee, Young-Jin, Kwak, Han Sub and Kang, Myung-woo. Identification of Sensory Attributes that drive Consumer liking of Commercial Orange Juice Products in Korea. Journal of Food Science: Volume 78, Issue 9 (September).1451-1458, 2013.
- [3]. Anne Gardener et al., The Inquisitive Cook: Discover the Unexpected Science of the Kitchen (Accidental Scientist an Exploratorium Book) Paperback – August 15, 1998
- [4]. Laura M. Bauer, Global fermented foods and drinks market –analysis of growth, trends,2015.
- [5]. T.G.G. Utpala, et al., CUCUMBER VEGETABLE AS A BRINE FERMENTED PICKLE, 2019.
- [6]. Patrick Durst et al.,FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS REGIONAL OFFICE FOR ASIA AND THE PACIFIC BANGKOK, 2014, PROMOTION OF UNDERUTILIZED INDIGENOUS FOOD RESOURCES FOR FOOD SECURITY AND NUTRITION IN ASIA AND THE PACIFIC, 2014.
- [7]. Nestor C. Altoveros and Teresita H.Borromeo, PHILIPPINES THE STATE OF THE PLANT GENETIC RESOURCES FOR FOOD AND AGRICULTURE OF THE PHILIPPINES (1997 - 2006), A COUNTRY REPORT Department of Agriculture Bureau of Plant Industry, 2007.
- [8]. Š. PODZIMEK1 et al.,The Evolution of Taste and Perinatal Programming of Taste Preferences., 2018.