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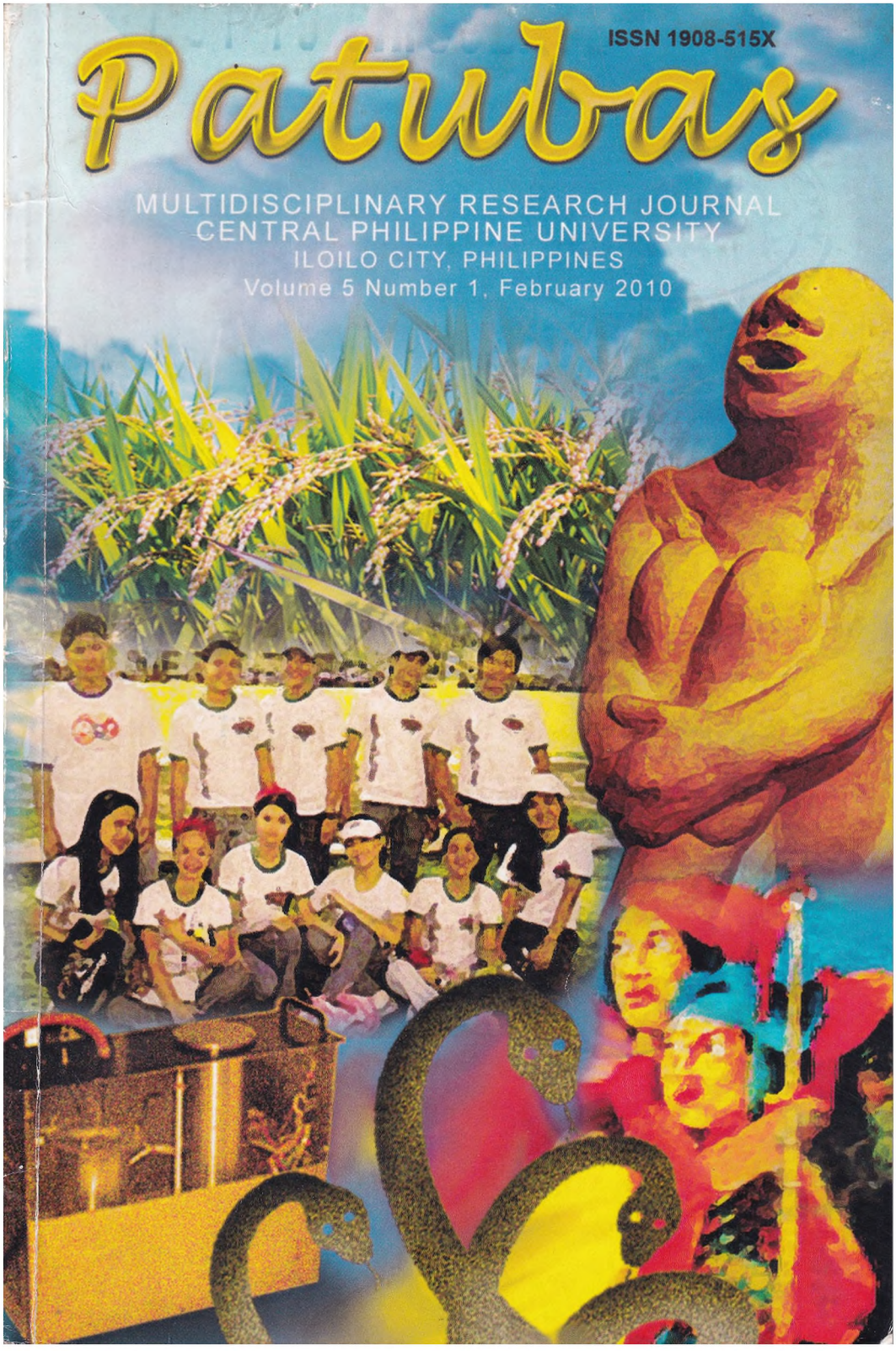

Patubas is an Ilonggo word for "product" or "fruit". It is a fitting description for this multidisciplinary research journal which is indeed, a product or fruit of our labors as researchers or the "seekers" of truth in its varied dimensions.

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PATUBAS

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Patubas is a refereed multidisciplinary research journal that aims to provide a source of information in the areas of agriculture, natural resources and the environment; social sciences, humanities and the arts; physical and biological sciences; business and management; engineering, information and communications technology; education; health, nursing and medical education; alternative medicine; theology and biblical studies; institutional system and process assessment; and community baseline or impact studies. The objective of the journal is to help education professionals and decision-makers disseminate information and learn from each other's work.

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2. Manuscript submitted shall be related to areas specified above. It shall be written either in English or Filipino.
3. Publishes descriptive, relational, and experimental research studies.
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   a. Title Page
   b. Abstract (150 words or not more than one page)
   c. Introduction
      c.1. Background, Rationale and Related Studies
      c.2. Objectives
      c.3. Theoretical/Conceptual Framework and Hypotheses (if applicable)
      c.4. Significance of the Study
      c.5. Scope and Limitation of the Study
   d. Methodology
   e. Results and Discussion
   f. Conclusions and recommendations
   g. Acknowledgment
   h. References
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PREFACE

What makes a university distinguished is its serious engagement in the field of research. The great universities in the world invest so many resources people, time, skill and money - into their research program because they see research as a tool where they could introduce an intervention to make the world safer, healthier, and better for everyone. Research pulls us out of our comfort zones and places us in a world where we are challenged to look for ways and means to answer the "why?" that confronts us. Research challenges our minds to discover the "what?" so we could provide concrete answers to some questions that have remained unanswered. It challenges our curiosity to delve into the "where?" and point us to finding something certain. This is exactly what research is at Central Philippine University helping to create and find answers to questions and making sure that these answers could make a difference to make life better for the many.

Research has taken this University to where it is now, an institution that has provided the answers to the many "whys?" "what?" and "where" asked by our society. The various researches, with social significance, conducted through the auspices of the University Research Center are attestations of the importance of research to our University. But how will the world know the progress that CPU has undertaken in this field of discipline if we do not inform them? They must know, and that is where the role of *"Ang Patubas"* comes in. The pages of this publication give everyone a glimpse into the productive minds of our faculty of instruction, our staff and students as they are introduced through their works.

"Patubas" is a Hiligaynon word that means *"product"* or "fruit". While it suggests abundance of crop or production in agriculture in the context of research it connotes the fruit or product of work of our people here at CPU. The various research abstracts that had seen print in the issues of *"Ang Patubas"* are evidence of what our University can offer to our society through researches that provide answers to questions that could be translated into something that will work for the benefit of everyone.

May *"Ang Patubas"* continue to be a publication that reflects CPU's continuing pursuit for excellence through research. May its pages continue to inspire those who read through them that they will be enlightened.

Teodoro C. Robles

TEODORO C. ROBLES, Ph.D.
University President

THE SOCIAL SYSTEMS IN EARLY BISAYAN MYTHOLOGY

Marie Melanie J. Misajon

ABSTRACT

This is a descriptive study on literature using content analysis. It is based on the theory on literary research set by Altick and Fenstermaker (1993) for textual study and literary history. It aimed to examine the operating social systems within the texts of Early Bisayan mythology. The basic objectives of the study were to identify the components of power, kinship, territorial, proprietary, and value systems. Manuscripts of epics, myths, and legends were collected, read, and analyzed. Characters were identified and categorized. The Power system dominates Early Bisayan mythology. The concept of a supreme god and creator was consistently observed varying only in the names given to them. The supreme power is assigned to the elements of wind and water followed by deities called diwata in Hiligaynon. The kinship system permeates mythology, among the elements, deities, and mortals. The territorial system includes dominion over a certain element, part of nature, political division, or human host habitation by spirits. The proprietary system was moderately observed among mortals through the ownership of slaves and personal properties. The value system is dominant with a clear reference to right and wrong, reward and punishment. The highest value goes to obedience and industry being the ones that deities reward. The subjugation system, was also observed in the characters of monsters or creatures that a hero is expected to defeat to be worthy of his stature. On the whole, six social systems are active in Early Bisayan mythology involving deities, mortals and supernatural characters.

INTRODUCTION

Mythology appears to be a common literary experience in an era when nations were once disconnected from each other. In the western world, the Greeks (Hamilton, 1998; Buxton, 2004), Romans (Grueber, 1990; Fairbanks, 1907), and Egyptians (Hart, 1990) have extensive mythology systems. Greek Mythology is a set of diverse traditional tales about the exploits of gods and heroes and their relations with ordinary mortals in its pre-Christian era. Egyptian mythology is likewise a manifestation of ancient Egyptian religion, which is the succession of tentative beliefs held by the people of Egypt for over three thousand years, prior to major exposure to Christianity and Islam. Egyptian mythology is locality based wherein people of a certain area share the same beliefs like the Amun-Mut-Chons triad of Thebes, where the chief god was Amun Chons.

Roman mythology is a collection of various beliefs, rituals, and other observances concerning the practices by the ancient Romans from the legendary period until the arrival of Christianity. The original religion of the early Romans was so modified by the addition of numerous and conflicting beliefs in later times, and by the assimilation of a vast amount of Greek mythology (Rose, 1991)

Three cultures in Asia with known mythology systems are the Japanese (Azhkenazi, 2003), Chinese (Birrell,1999; Collier, 2003), and Hindu (Dimmit & Bernardus, 1978) Japanese mythology is a very complex system of beliefs arising from its two dominant religions, Shinto and Buddhism as well as some minority agriculture-based religion. Since China developed without a unifying religion, its mythology arose from a mixture of Confucianism, Daoism, and Buddhism to produce an uncertain mixture of gods for all occasions.

Hindu mythology details the lives and times of legendary personalities, deities and divine incarnations on earth interspersed with often large sections of philosophical and ethical discourse. It is heavily religion-based.

Ancient Philippine mythology varies among the many indigenous tribes and languages of the Philippines. Some tribes during the pre-Spanish conquest era believed in a single Supreme Being who created the world and everything in it, while others chose to worship a multitude of tree and forest deities (diwatas). The names of the Supreme Being vary with the languages in the regions.

Eugenio (2001, 2002) has anthologized most of the Philippine myths, legends and epics. Jocano (1958), on the other hand, made an extensive study of the mythology of the Sulod People of Central Panay. He identified three domains and a pantheon of deities headed by a male diwata known as Tungkung Langit. The most powerful of such deities had control over the elements of nature.

This study, which focuses on early Bisayan mythology is a continuing effort to systematize the characteristic features that are to be found in traditional Hiligaynon literature, a part of which is found in the Misajon anthology (2006) entitled Inventory of Extant and Extinct Traditional Literature In Western Visayas Area I (Iloilo, Antique, and Guimaras).

The framework of this research comes from the book The Art of Literary Research. Authors Altick and Fenstermaker (1993) say that literary research may develop into five areas. This study followed two of these namely, textual study and literary history. Textual study is purely on the meaning, structure and techniques of the text. No outside-of-the-text factors are considered to bring light into the text. It is content analysis involving only the manuscript. Literary history touches on the collection of ideas, arts, habits or the milieu of the literature at the time of its creation.

The body of manuscripts from which the study of Early Bisayan mythology was observed includes two parts of the epic Hinilawod. Hinilawod is a collection of epics of the Sulod People in central Panay as chanted by Ulang Udig and Hugan-an and recorded and translated into English by Felipe Landa Jocano. Of the vast collection of Hinilawod, only the adventures of Labaw Donggon and Humadapnon were included in this study. Hinilawod provided 10,630 verse lines for the study. The rest are myths and legends from the various areas of the pre-Spanish Bisayan region to include Panay, Negros, Cebu, Samar, Bohol and Leyte. A few categories and their respective titles are as follows: Cosmogony , The Story of Creation (Visayan) ; Origin of Mankind, The First Man and Woman (Panay - Yligueynes) ; Origin of the Early Bisayans , Ancient Panay and its Inhabitants ; and Origin of Land forms, Legend of Hari sa Boqued (Visayan). The finished research report provides a listing of all these categories and titles.

Several manuscripts were taken from secondary sources, (Magos, 1978; Maxfield & Millington, 1906; Siscar, 1958; Buyser, 1916; & Narboneta, 1959) which are masters theses on Bisayan folktales and legends. Others, were translations (Robertson, undated) and studies of

translations (Ignacio, 1951) of the manuscripts of Jose Maria Pavon, a secular priest, who came to the Philippines in 1810 from Spain. Father Pavon was the cura insular for Himamaylan in 1849 and was believed to be a historian first and a priest next and thus had access to the works of Spanish historians Miguel de Loarca, Diego de Povedano, and Father Francisco Deza, a Jesuit stationed in Iloilog in the 17th century. Some were from the ethnographic works of Felipe Landa Jocano and the microfiche file of Henry Otley Beyer in the National Library.

The search for manuscripts from the above sources was limited to Bisayan mythology prior to the arrival of the Spaniards with priority on translations of Hiligaynon literature. Only legends, epics and narratives were chosen.

The conclusions of this study are with limitations as they are based on very specific literature. The further inclusion of a legend or epic may disprove this study's claims. English which is the language of all manuscripts also presented a limitation. Translation is a cause for error due to the changing of words and structure for the translator's desire to make the material more cogent. The works of the early Spanish chroniclers also had to go through multiple translations, from the original oral indigenous version to Spanish, from Spanish to Hiligaynon and finally to English. The use of educated or so called "university" or literary English for the folktale speaks of the corruption of the original.

On the whole, the findings on the social systems in mythology will contribute to new knowledge primarily in Philippine literature and secondarily, to the social sciences.

Objectives of the Study

This study was conducted to identify the social systems in Early Bisayan mythology.

Specifically, the study aimed

1. to identify the components of the following systems:
   a. power
   b. kinship
   c. proprietary
   d. territorial
   e. value
2. to document any other system that may be observed in the study.

METHODOLOGY

This research is primarily a descriptive study on literature and followed the process of content or information analysis. According Eisenberg and Berkowitz (1990) the "big skills" in solving information problems follow five steps: analysis, development of strategy, location of information, using the information and synthesizing the information.

The search for manuscripts for this study led to the internet and the libraries of Central Philippine University, University of San Agustin, Iloilo City, Iloilo Province, the National Library, National Archives. The available literature at the UP Visayas Center for Western Visayas Studies was also examined.

The manuscripts were read to determine whether or not they qualified as data source using period indicators (Misajon, 2006). The internal indicators like names of characters, and cultural references determined whether or not the manuscripts were classifiable as Early Bisayan. For example if the legend spoke about a datu, which is part of the Bornean culture, then it was included as part of the corpus.

Also, footnote citations from secondary sources clearly identified which manuscripts were taken from the translations of the collection of indigenous manuscripts of Pavon and de Povedano.

There were two rounds in the reading of the manuscripts for content comprehension. The third reading of the manuscript was to identify the characters of the manuscripts and their relationship with one another and observe the social systems set by the objectives.

RESULTS

The corpus of manuscripts is made up of one epic, 39 legends and one folktale. Hinilawod, the only epic studied yielded 10, 630 verse lines for study. From these the social systems as set in the objectives were observed.

The Power System was observed to dominate early Bisayan mythology. Perceived to have the highest power over the lives of all characters are the natural elements of air and water. They pre-existed all,

concept of power blends deity and elements, calling them as gods. From the collection of literature, the gender of gods were initially nebulous but eventually distinguished as male and female. Some legends describe them as elements of sea and land, air, some as land and sea and some as human in form and behavior. The pantheon of deities of Early Bisayan Mythology ascribes the highest power to Kaptan and Maguayen while the rest of the gods and goddesses exercise their elemental power over mortals. They are collectively referred to as "the gods of Madia-as".

The concept of diminishing elemental power cascades to the other characters of early Bisayan mythology. The concept of political power is introduced with the culture of datus and rulers. The attempt to tap on the elemental power dominates the lives of the babaylans or spirit media as they unite with spirits to do supernatural feats. Power is ascribed to certain animals to the point of deification like the bird Manaul, referred to as the King of the Air and Lord of the Birds who guided the destiny of space. Monsters and Giants are likewise perceived to be powerful necessitating sorcery to defeat them.

The Kinship System is the second system observed with three dominant veins:

1. Spousal Kinship which refers to the marriage between two parties or characters in mythology. The earliest reference to a spousal relationship is between the elements, the marriage of the sea breeze and the land breeze;
2. Parental Kinship which is the relationship between a parent and an offspring; and
3. Sibling Kinship which refers to relationships shared by two or more characters having the same parents.

The study of the parental kinship system revealed parenting categories and manners of reproductions. There are three parenting categories observed: among deities, among mortals and deities thus producing demigods, and across species, e.g., plants giving birth to mortals. The manners of procreation are through body parts, e.g., from the finger tips of the first man and woman, pigs and deer were born; through the genitals; and through supernatural means for example, Dumalapdap was born on a plate through a ritual.

The Territorial System pervades early Bisayan mythology in the lives and behavior of the characters. These territorial systems can be classified as: 1. Elemental Territory wherein deities are known for the elements that they control like the land or sea breezes or the part of nature that they dominate like the sky or plains or an expertise in human life, e.g., happy

homes; 2. Political Territory wherein a specific land area is assigned to a datu as a monarch with servants and slaves that belong to him. His identification is complete only with reference to his territory, e.g., Datu Maalam of Kalipayan; 3. Locational Territory wherein certain creatures, perceived as monsters, guard specified areas, e.g; Balanakon, a two-headed monster which guards a narrow ridge leading to Tarambuan-ka-banwa; and 4. Host Inhabitation Territory wherein spirit beings inhabit a host in the form of the babaylan to be able to do certain tasks.

Proprietary System or the ownership system was also observed especially among deities, mortals or across character categories. Among royalty, a daughter is dispensed with like property by giving her as a reward to someone who has successfully accomplished a difficult task. A very strong and irretractable Value System permeates early Bisayan mythology.

Starting with the original occupants of the world when it was just nothing but void, strong values determining what is right or wrong already existed. Obedience and industry are the traits that have supreme values. These are observable in the lives of deities and mortals. The opposite of these justify punishment and great personal tragedy like the supreme god Kaptan who punished his own children because of their rebellion against him.

Subjugation is another system observed to recur in mythology. It involves a hero in combat with a monster, wherein his conquest of the said creature elevates his status and worthiness as a hero. The observed manners of subjugation are 1. Exceptional human skills as in the killing of the monster Manalintad, and 2. Power of sorcery as in the use of magic daggers and strong charms. Subjugation merits a reward in mythology.

DISCUSSION

The existence of the six systems: power, kinship, territorial, proprietary, value, and subjugation point to the humanity of this body of literature. Man himself, as the story teller, the speaker of tales, or the recorder of legends, may have commented on the various facets of his milieu but has interpreted them from his perspective as a human being. Thus, the assignation of power to the elements and deities who ruled supreme are merely reflections of his own perception of his weaknesses at certain historical points of life. Family relationships are the main reference points of man outside of himself. Territorial and proprietary

systems point to an expanded concept of man to include space and objects related to him. A strong value system for a variety of aspects in life points to a clear feature that the Early Bisayans of the pre-Christian era had a strong concept of what is right or wrong, what is worthy of reward or punishment, and what merits emulation or destruction. It also supports the spiritual nature of man that is desirous of connecting with the spirit world to transcend the natural boundaries of his humanity. The subjugation system reveals a great dependence on sorcery in becoming a hero.

On the whole, this study reveals a very strong, even uncanny similarity to the power and territorial systems of Greek, Roman and Egyptian mythologies. This study aligns Early Bisayan mythology with the structure and characteristics of the mythologies identified by Hamilton (1998), Fairbanks (1907), and Hart (1990). This differs from the information provided by Eugenio (2001, 2002) with its content analysis of texts and Jocano (1958) by making generalizations beyond the mythology of the Sulod people alone to the greater Bisayan region.

CONCLUSIONS

This research on Early Bisayan mythology started with the investigation of the five social systems of power, kinship, territorial, proprietary and values. A sixth system, subjugation, was also observed to exist.

Of the six systems, power and kinship dominate both deities and mortal characters. The territorial system takes a variety of spatial occupation from elemental, localized area, to human host inhabitation. The subjugation system is task specific and observable in the many adventures of folk heroes. The value system permeates mythology establishing a clear standard for what is right or wrong, good or bad, and worthy of reward or punishment for the early Bisayans. Proprietary system is moderately observed in personal properties and among royalty.

The following can be concluded from the study:

1. There are six active social systems in the early Bisayan mythology namely: power, kinship, territorial, proprietary, values and subjugation.

2. The power system is the most dominant of the systems.
3. Sorcery plays a key role in the practice of these systems.
4. The Early Bisayans had a strong sense of right and wrong.

RECOMMENDATIONS

Based on the findings of this research, the following are recommended

1. Further research a similar study on the mythology of other Philippine languages;
2. Make a comparative study with Greek, Roman or Egyptian mythology; and,
3. Conduct further studies on the extent of sorcery on Early Bisayan culture.

ACKNOWLEDGMENT

My heartfelt gratitude goes to the following with whose help the completion of this task was made possible: Central Philippine University, my home institution, for the opportunity to pursue the life of the mind; Dr. Randy Anthony V. Pabulayan, Director, University Research Center, for his untiring support and direction; Dr. Anita Illenberger, Prof. Hope Patricio, and Engr. Artchil B. Fernandez, proposal evaluators, for their invaluable comments and suggestions; and Ms. Gloribel Ardiente, manuscript encoder, for her ability type to Hiligaynon names and texts with accuracy.

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PANANAW NG MGA KOLEHIYONG ESTUDYANTE SA FILIPINO BILANG BASIKONG ASIGNATURA SA CENTRAL PHILIPPINE UNIVERSITY

Liza V. Do-oma

ABSTRAK

Layunin ng pag-aaral na ito na tukuyin ang pananaw ng mga kolehiyong estudyante sa Filipino bilang basikong asignatura sa Central Philippine University. Ang metodong ginamit ng mananaliksik ay palarawan. Ito'y naglalayong alamin ang katotohanan ukol sa kondisyon o ng relasyong umiiral, ang kasanayang nangingibabaw, mga paniniwala o opinyon na nararamdaman ng mga estudyante. Ang mga tagatugon ay mga estudyante sa kolehiyo na may basikong asignatura sa Filipino 2a sa unang semester ng taong 2002-2003 na may kabuuang bilang na isang-daan limampu't lima (155). Batay sa resulta ng pananalisik, ipinapakita na ang mga estudyante ay sang-ayon sa Filipino bilang basikong asignatura. Ipinapakitang walang katotohanan ang mga hindi magagandang pananaw ng mga estudyante sa nasabing asignatura at isang haka-haka lamang ang mga naririnig tungkol sa kanilang negatibong pananaw at walang ganang mag-aral sa nabanggit na asignatura. Ipinapakita ring hindi nila ipinagsawalang bahala ang wikang Filipino. Isang kongklusyon ang inihaharap ng pananaliksik na walang kaugnayang pagkakaiba sa pananaw ng mga estudyante sa Filipino 2a bilang basikong asignatura sa pagitan ng kanilang edad, uri ng paaralang napagtapusan ng hayskul, samantalang may kaugnayan naman sa pagitan ng pananaw at pelikulang pinapanood.

INTRODUKSYON

Katwiran ng Pag-aaral

Isang maalindog na diwata na sa kanyang pagkahumaling ay nagsabog ng esmeralda sa tubig at sumulpot sa kinahagisan nito ang Pilipinas. Sa loob nito, bunga ng pananakop ng iba't ibang dayuhan ay hindi nagkaintindihan ang sangkatauhan kaya nabuo ang WIKANG FILIPINO na nagmula sa iba't ibang wikain ng Pilipinas para maging tagapagbuklod ng lahat.

Sinabi ni Gregorio kay Gonzales (1983), na isa sa pinakaepektibong tagapaglaganap ng pagtuturo at pagkatuto ay ang sistema ng paaralan. Mahihikayat nito ang guro upang magawa ang responsibilidad bilang epektibong guro. Maging ito'y makakatulong sa pagpaunlad at pagtuturo ng asignaturang Filipino kaya ipinahayag ni Contreras (1986) na paunlarin ang ating sariling wika at palaganapin dahil ang Pilipinas ay may iisang wikang kakaiba sa lahat. Wikang tagapagbuklod ng sambayanang Pilipino.

Ayon kay Lopez (1989), may dalawang salik na nakakaimpluwensya sa pag-aaral ng asignaturang Filipino. Ang mga ito'y: pananaw at pagpapahalagang moral mismo. Idinagdag pa dito ni Gregorio (1989) na ang mga mag-aaral ay siyang sentro ng pagtuturo.. Ang kanilang pananaw sa katauhan, pag-uugali, paraan, pamamaraan sa pagtuturo ng guro at mga kagamitang pampagtuturong ginagamit ay mahalaga sa kanilang pagkatuto. Ang kanilang pananaw mismo ay nagpapakilala ng pagkakaunawa at damdamin sa asignaturang Filipino.

Ayon naman kay Bennagen (1991), ang wikang Filipino ay daluyan ng pambansang kultura na mahalaga para sa ating pagkakaisa bilang isang sambayanang Pilipino. Ito'y kasangkapan sa pag-iisip at pakikipag-ugnayan sa lipunan. Tinatangkilik ito ng bawat Pilipino ayon kay Alcantara (1996) na dapat pahalagahan. Nagsisilbi rin itong salamin ng kultura, pagkatao ng sambayanan, at masistemang kabuuan na sinasalita ng mga tao upang gamiting tagapag-ugnay ayon naman kay Badayos (1999).

Binanggit ni Willing kay Badayos (1999), na isinaalang-alang ng sensitibong guro ang mga istilong gusto ng mga estudyante sa pagkaroon ng isang matagumpay at mabisang pagkakatuto. Ipinahayag ni Belvez (2000), na ang tunay na guro ay kailangang may angking kakayahan, kasanayang pampropesyunal, magandang saloobin, at magandang pananaw sa propesyon. Ang pagkakaroon ng sapat na mga sangguniang

dyornal, aklat at iba pang mga kagamitang pampagtuturo gayundin ang kadalubhasaan ng guro sa propesyon ay mahalagang salik na magagamit sa pagsulong ng wikang nabanggit.

Ayon kay Anam (2000), upang mapadali ang pagsasalin ng kaalamn ay gumamit ng mga kagamitan ang guro at tulungang maging mulat ang mga estudyante at maging lohikal sa pag-aaral. Idinagdag pa ni Landy (2000), na ipagpatuloy ng guro ang kanyang pananaliksik sa iba pang mga bagay kaugnay sa topiko dahilang hindi siya makapagturo kung wala siyang kaalaman. Magiging katulad siya ng sasakyan na nangangailangan ng langis bago umandar.

Pinapaniwalaan naman ni Moscaya (2004), na higit na kawili-wili at epektibo ang pagkatuto kapag may baryedad sa mga gawain. Kaya, kailangan ang guro ay maging malikhain, mapag-isip, mapaghanap ng mga teknik at pamamaraang gamitin upang ang proseso ng pagkatuto ay maging kasiya-siya.

Saklaw at Katakdaan ng Pag-aaral

Ang pag-aaral na ito ay sumasaklaw sa "Pananaw ng mga Kolehiyong Estudyante sa Filipino bilang Basikong Asignatura sa Central Philippine University." Sinasaklaw din ng pag-aaral na ito ang kaugnayan ng mga iba't ibang salik sa edad, kasarian, uri ng paaralang napagtapusan ng hayskul, at pelikulang pinapanood na nakakaimpluwensya sa pananaw ng mga estudyante sa asignaturang Filipino. Ang tagatugon ng pag-aaral ay mga estudyanteng mula sa dalawang daang animnapu't isa (261) na kumukuha ng asignaturang Filipino 2a sa Central Philippine University, taong panuruan 2002-2003 na ginamitan ng stratified random sampling.

METODOLOHIYA

Disenyo ng pananaliksik

Gnamit sa pag-aaral na ito ang pamaraang palarawan upang alamin ang pananaw ng mga estudyante sa Filipino bilang basikong asignatura . Tiniyak din kung may kaugnayan sa kondisyon na nakakaapekto sa saloobin o paniniwala ng mga tagatugon. Isang napapanahong kalakaran sa pagtuturo na bigyang halaga at pagsasaalang-alang ang mga estudyante o mag-aaral. Kaya sinabi ni Gregorio (1983), na ang mga mag-aaral ay sentro ng pagtuturo. Ang kanilang pananaw sa katauhan,

pag-uugali, paraan, pamamaraan sa pagtuturo ng guro at mga kagamitang pampagtuturo na ginagamit ay mahalaga sa kanilang pagkatuto.

Layunin ng Pag-aaral

Layunin ng pag-aaral na ito na tukuyin ang "Pananaw ng mga Kolehiyong Estudyante sa Filipino bilang Basikong Asignatura sa Central Philippine University, taong-panuruan 2002-2003."

Layunin ng pag-aaral na ito na masagot ang mga sumusunod:

1. Tukuyin ang ng pananaw ng mga estudyante sa Filipino bilang basikong asignatura.
2. Alamin kung may makabuluhang pagkakaiba ang pananaw ng mga estudyante sa Filipino nang sila'y pinangkat ayon sa edad, kasarian, paaralang napagtapusan ng hayskul, at pelikulang pinapanood.

Ipotesis ng Pag-aaral

Batay sa layunin , narito ang ipotesis na nabuo:

Walang makabuluhang pagkakaiba sa pananaw ng mga estudyante sa Filipino bilang basikong asignatura sa kolehiyo nang sila'y pinangkat ayon sa edad, uri ng paaralang napagtapusan ng hayskul, at pelikulang pinapanood ng mga estudyante sa kanilang pananaw sa asignaturang Filipino.

Teoryang Batayan ng Pag-aaral

Ang mga basikong asignatura ay magsisilbing pundasyon sa kaalaman ng mga estudyante sa antas tersyaryo. Ayon kay Spolky (1975), ang pananaw ng estudyante ay isang malaking salik na nakakaapekto sa kanyang akademikong kakayahan. Ang kanilang pananaw ay isang salik na nakakaimpluwensya sa iba't ibang tagumpay sa pag-aaral ng pangalawang wika.

May limang iba't ibang salik na nakakaimpluwensya sa pananaw ng mga estudyante sa asignaturang Filipino. Ito'y ang kasarian, edad, paaralang napagtapusan ng hayskul, at pelikulang pinapanood.

Sinabi ni ni Fassenger (1995), na ang mga lalaking mag-aaral ay mas aktibo at higit na may kumpiyansa sa loob ng silid-aralan kumpara sa mga babaeng estudyante. Ito'y pinabulaanan ni Crawford at Macleod (1990) sa kongklusyon ng kanyang pananaliksik na ang mga babaeng mag-aaral ay may kaunting tiwala sa kanilang kakayahang makapag-isip kumpara sa mga lalaking mag-aaral.

Idinagdag din ni Geroche (1991) nang napatunayan niyang walang makabuluhang pagkakaiba sa pananaw ng mga lalaki at babae sa wikang Filipino gayundin sa resulta ng pag-aaral ni Hall, atbp. (1999) na nagsasabing walang pagkakaiba sa pagitan ng mga mag-aaral sa iba't ibang antas.

Sinasabi ni Gregorio (1983), na ang mga mag-aaral ay sentro ng pagtuturo at ang kanilang pananaw sa asignatura ay mahalaga. Ito ang magiging batayan ng pag-aaral.

Pamamaraang Ginamit sa Paglikom ng mga Datos

Ninais ng mananalisik na alamin ang "Pananaw ng mga Kolehiyong Estudyante sa Filipino Bilang Basikong Asignatura sa Central Philippine University," taong panuruan 2002-2003.

Bago ibinigay ang talatanungan sa mga tagatugon, kinilala muna ng mananaliksik ang sampung (10) guro na nagtuturo ng asignaturang Filipino 2a.

Isang daan limampu't limang (155) mga estudyante ang naging tagatugon ng pag-aaral sa pamamagitan ng paggamit ng *stratified random sampling* mula sa dalawangdaan animnapu't isa (261).

Ang mga tagatugon ay inuri ayon sa kanilang edad, kasarian, paaralang napagtapusan ng hayskul at pelikulang pinapanood.

Matapos makuha ang bilang ng mga tagatugon, sila'y binigyan ng talatanungan ng mananaliksik upang sagutan na pamamagitan ng paglagay ng tsek sa mga pahayag na "sang-ayon", na nangangahulugang ang pahayag ay tinatanggap ng tagatugon; "di- sang-ayon", na ang pahayag ay di-tinatanggap; at "di-makapagpasya" na ang pahayag ay walang katiyakang tinatanggap ng tagatugon. Binigyan sila ng sapat na oras upang sagutin ng tiyak ang talatanungan.

Sampling Technique at Istadistikang Ginamit

Ang mananaliksik ay gumamit ng stratified random sampling sa pagkuha ng bilang ng mga tagatugon na kalahok sa pag-aaral. *Mean* at katumpakang-tuos naman ang istadistikang ginamit sa pag-alam ng pananaw ng mga estudyante at *chi-square* sa pagkuha ng kaugnayan ng pananaw ng mga estudyante sa pagitan ng edad, kasarian, uri ng paaralang napagtapusan ng hayskul, at pelikulang pinapanood.

RESULTA

Mga tagatugon ayon sa edad, kasarian, uri ng paaralang pinagtapusan ng hayskul.

Ipinapakita ng Manghad 1 na marami ang mga estudyanteng may edad na 17 pababa ang naka-enrol sa asignaturang Filipino na may 60.6% kumpara sa mga estudyanteng may edad na 18 pataas na may 39.4%.

Nakakuha ng 40% ang mga estudyanteng lalaki at 60% naman ang mga estudyanteng babae. May 54.8% naman ang mga estudyanteng nagtapos sa pampublikong paaralan at 45.2%. mula sa pribadong paaralan. Ipinapakita naman ng resulta ng kadalasan ng panonood ng pelikulang Pilipino na ang mga estudyante ay nanonood ng isang beses na may porsyentong 71.0% samantalang 29.0% sa mahigit isang beses.

Manghad 1. Distribusyon ng mga tagatugon ayon sa edad, kasarian, uri ng paaralang napagtapusan ng hayskul, at pelikulang pinapanood bawat araw.

Baryabol	f	%
Edad		
17 pababa	94	60.6
18 ataas	61	39.4
Kabuuan	155	100.0
Kasarian		
Lalaki	62	40.0
Babae	93	60.0
Kabuuan	155	100.0
Uringpaaralang pinagtapusan sa hayskul		
Pribad	70	45.2
Publiko	85	54.8
Kadalasan ng Panonood ng Pelikulang Pilipino		
Isang beses	110	71.0
Mahigit isang beses	45	29.0
Kabuuan	155	100.0

Mga tagatugon ayon sa kanilang pananaw sa Filipino bilang basikong asignatura.

Ang pananaw ng mga estudyante na "di makapagpasya" ay nakakuha ng 3.0%, samantalang 33.5% sa "di-sang-ayon", at 64.5 naman sa "sang-ayon" sa Filipino bilang basikong asignatura.

Manghad 2. Distribusyon ng mga tagatugon ayon sa kanilang pananaw sa Filipino bilang basikong asignatura.

Pananaw	f	%
Di makapagpasya	3	3.0
Di-sang-ayon	52	33.5
Sang-ayon	100	64.5
Kabuuan	155	100.0

Mga tagatugon ayon sa kanilang edad at pananaw sa Filipino bilang basikong asignatura.

Ipinapakita ng Manghad 3 na ang pananaw ng mga estudyante na 'di makapagpasya" sa edad 17 pababa ay nakakuha ng 3.2%, at 0.0% ang sa may edad na 18 pataas. Samantalang 29.8 % naman ang nakuha ng may edad na 17 pababa, 39.3% sa may edad na 18 pataas, at sa pananaw na "sang-ayon" ay 67.0% sa edad na 17 pababa at 60.7 % sa edad na 18 pataas. Sa kabuuan, ipinapakita ng manghad na walang kaugnayang pagkakaiba ang edad ng mga estudyante sa Filipino bilang basikong asignatura.

Manghad 3. Distribusyon ng mga tagatugon ayon sa kanilang edad at pananaw sa Filipino bilang basikong asignatura.

Pananaw sa Filipino bilang basikong asignatura	Edad ng tagatugon			
	17 pababa		18 pataas	
	f	%	f	%
Di makapagpasya	3	3.2	0	0.0
Di-sang-ayon	28	29.8	24	39.3
Sang-ayon	63	67.0	37	60.7
Kabuuan	94	100.0	61	100.0

Pearson's r=0.006 Sig.= 0.94

Mga tagatugon ayon sa kasarian at sa pananaw sa Filipino bilang basikong asignatura.

Ang mga lalaking estudyante ay nakakuha ng 3.2% sa pananaw na "di makapagpasya", 37.1% sa "di-sang-ayon", at 59.7% sa "sang-ayon," samantalang ang mga babae naman ay nakakuha ng 1.1% sa pananaw na "di makapagpasya," 31.2% sa "di sang-ayon," at 67.7% sa "sang-ayon" sa Filipino bilang basikong asignatura. Ipinapakita ng manghad na walang kaugnayang pagkakaiba sa pagitan ng kasarian at pananaw ng mga estudyante sa Filipino bilang basikong asignatura.

Manghad 4. Distribusyon ng mga tagatugon ayon sa kasarian at sa pananaw sa Filipino bilang basikong asignatura.

Pananaw sa Filipino bilang basikong asignatura	Kasarian ng tagatugon			
	Lalaki		Babae	
	f	%	f	%
Di makapagpasya	2	3.2	1	1.1
Di-sang-ayon	23	37.1	29	31.2
Sang-ayon	37	59.7	63	67.7
Kabuuan	62	100.0	93	100.0

Chi-square= 1.652 df=2 Sig.=0.438

Mga tagatugon ayon sa uri ng paaralang napagtapusan ng hayskul at ang kanilang pananaw sa Filipino bilang basikong asignatura.

Ipinapakita ng Manghad 5 na ang mga estudyanteng galing sa publikong paaralan ay nakakuha ng 2.9% sa kanilang pananaw na "di makapagpasya," 40.0% sa "di-sang-ayon," at 57.1% sa "sang-ayon," samantalang ang mga estudyanteng galing ng pribadong paaralan ay nakakuha naman ng 1.25 sa kanilang pananaw na "di makapagpasya," 28.25 sa "di-sang-ayon," at 70.6% sa pananaw na "sang-ayon." Inilalahad sa manghad na walang kaugnayang pagkakaiba sa pagitan ng uri ng paaralang pinagtapusan ng mga estudyante at sa kanilang pananaw sa Filipino bilang basikong asignatura.

Manghad 5. Distribusyon ng mga tagatugon ayon sa uri ng paaralang napagtapusan ng hayskul at ang kanilang pananaw sa Filipino bilang basikong asignatura.

Pananaw sa Filipino bilang basikong asignatura	Uri ng paaralang pinagtapusan			
	Publiko		Pribado	
	f	%	f	%
Di makapagpasya	2	2.9	1	1.2
Di-sang-ayon	28	40.0	24	28.2
Sang-ayon	40	57.1	60	70.6
Kabuuan	70	100.0	85	100.0

Chi-square= 3.22 df= 2 Sig.= 0.200

Mga tagatugon ayon sa frequency ng panonood ng pelikulang Ingles bawat araw at ang kanilang pananaw sa Filipino bilang basikong asignatura.

Ayon sa resulta ng manghad 6 ang mga estudyanteng nanonood ng pelikulang Ingles bawat araw ay nakakuha ng 2.1% sa kanilang pananaw na "di makapagpasya," 32.3% sa "di-sang-ayon," at 65.6% sa "sang-ayon," samantalang ang mga nanonood naman ng pelikulang Ingles ng mahigit isang beses bawat araw ay nakakuha ng 1.76% sa pananaw na "di makapagpasya," 35.6% sa "di-sang-ayon," at 62.7% sa "sang-ayon." Ipinapakita lamang na walang kaugnayang pagkakaiba sa pagitan ng frequency ng panonood ng pelikulang Ingles at sa pananaw ng mga estudyante sa Filipino bilang basikong asignatura.

Manghad 6. Distribusyon ng mga tagatugon ayon sa frequency ng panonood ng pelikulang Ingles bawat araw at ang kanilang pananaw sa Filipino bilang basikong asignatura.

Pananaw sa Filipino bilang basikong asignatura	Frequency ng panonood ng pelikulang Ingles sa bawat araw			
	Isang beses		Mahigit isa	
	f	%	f	%
Di makapagpasya	2	2.1	1	1.76
Di-sang-ayon	31	32.3	21	35.6
Sang-ayon	63	65.6	37	62.7
Kabuuan	96	100.0	59	100.0

Pearson's r= 0.012 Sig.= 0.878

Mga tagatugon ayon sa frequency ng panonood ng pelikulang Filipino bawat araw at sa kanilang pananaw sa Filipino bilang basikong asignatura

Ipinapakita ng resulta na ang mga estudyanteng nasa kolchiyo ay nakakuha ng 2.1% sa isang beses na panonood ng pelikula bawat araw sa kanilang pananaw na "di makapagpasya", 32.3% sa "di-sang-ayon", at 65..6% sa "sang-ayon." Samantalang 1.76% sa kanialgn pananaw na "di makapagpasya", 35.6 % sa "di-sang-ayon", at 62.7% sa sang-ayon sa kanilang panonood ng mahigit isang beses bawat araw ng pelikulang Filipino

Ipinapakita ng manghad 7 na may kaugnayang pagkakaiba sa pagitan ng panonood ng pelikulang Filipino at sa pananaw ng mga estudyante sa Filipino bilang basikong asignatura.

Manghad 7. Distribusyon ng mga tagatugon ayon sa frequency ng panonood ng pelikulang Filipino bawat araw at sa kanilang pananaw sa Filipino bilang basikong asignatura.

Pananaw sa Filipino bilang basikong asignatura	Frequency ng panonood ng pelikulang Filipno bawat araw			
	Isang beses		Mahigit isa	
	f	%	f	%
Di makapagpasya	2	1.8	1	2.2
Di-sang-ayon	42	38.2	10	22.2
Sang-ayon	66	60.0	34	75.6
Kabuuan	110	100.0	45	100.0

Pearson's r= 0.190 Sig.= 0.018

TALAKAYAN

Ayon kay Lachica (1993), ang anumang paraan ng pakikipagtalastasan at pagpapahayag ng kaisipan at damdamin sa pamamagitan ng mga salita upang maunawaan ng kapwa ay tinatawag na wika. Ito ang wikang Filipino, ang daan at katuparan ng lahat ng mga pangarap ng mga Pilipino. Nagkakaroon ng pagkakaisa ang lahat ng dahil sa wikang ito.

Sa pagtuturo ng wikang Filipino, ang isang guro ay nangangailangan

maging maagap sa paghahanap ng mga kagamitan at mga estratehiyang magagamit sa kanyang pagtuturo. Idinagdag ni Belvez (2000), na ang isang katangian ng isang epektibong guro ay ang paggamit ng iba't ibang dulog at estratehiya sa pagtuturo, mayaman sa kagamitang biswal, awdyo-biswal na angkop at lapat sa uri ng aralin, sa layuning nais matamo, at sa kaalaman, kasanayan at kakayahang ninanais malinang. Ang paggamit ng awdyo-biswal na kagamitan tulad ng panonood ng pelikulang Filipino ay isang makabuluhang pamamaraang magagamit ng isang gurong nagtuturo ng asignaturang Filipino. Ang pelikula ay isang kagamitang tanaw-dinig na may layuning pang edukasyunal ayon kay Abad, et al. (1996).

Tiwala ng bawat isa ang kailangan upang mapabilis ang pag-unlad ng pagtangkilik ng ating sariling wika. Ang Filipino ay isang katotohanang umuusbong sa puso ng bawat Pilipino. Ito ang wika ng ating lipunan.

Magkaroon din ng magandang pananaw ang mga susunod pang mga estudyanteng mag-aaral sa asignturang Filipino gaya ng ipinapakitang resulta ng pananaliksik na ito.

Kongklusyon

Batay sa resulta ng pananaliksik, ipinapakitang ang mga estudyante ay sang-ayon sa kanilang pananaw na ang asignaturang Filipino ay basikong asignatura sa Central Philippine University. Ipinapakitang walang katotohanan ang mga di magagandang pananaw sa asignatura. Isang katotohanan na patuloy pa rin nating minamahal at tinatangkilik ang wikang Filipino bilang tagapagsiwalat ng kaisipang Pilipino. Pinapatotohanan ng resulta ng pananaliksik na ang Filipino ay isang makabuluhang basikong asignatura sa Central Philippine University na nakatutulong sa pag-unlad ng bawat estudyante maging ng iba pang Pilipino. Ang panonood ng pelikulang Filipino ay isa sa mga pamamaraang magagamit bilang lundayan ng mga guro para mas lalo pang maging malinaw, mahalaga, at madali sa mga estudyante ang pag-intindi ng basikong asignaturang Filipino.

Rekomendasyon

Batay sa resulta at kongklusyon ng pag-aaral, ang mga sumusunod ay ang mga rekomendasyon:

1. Ipagpatuloy ang nasimulang mga programa sa pagpapaunlad ng asignaturang Filipino.

2. Magkaroon ng iba pang pag-aaral tungkol sa iba pang salik na nakakaapekto sa pananaw ng mga estudyante sa pag-aaral ng asignaturang Filipino.

3. Magkaroon ng bukas na isipan ang mga guro sa Filipino sa paggamit ng mga makabagong teknolohiya at pamamaraang magagamit sa pagtuturo.

4. Magkaroon ng suporta mula sa mga tagapamahala ng unibersidad sa mga guro sa paggamit ng mga makabagong teknolohiyang pang-instruksyon sa pagtuturo sa silid-aralan.

5. Dagdagan ang mga pagsasanay at mga pampasiglang gagamitin ng mga guro para lalong mahasa ang kasanayan sa pag-aaral ng mga estudyante sa asignaturang Filipino.

PASASALAMAT

Isang taos-pusong pasasalamat ang nais iparating ng may-akda sa mga sumusunod na tao, kaibigan, kapamilya at kapuso na buong pusong tumulong at sumuporta upang matapos ang pananaliksik na ito. Salamat kina:Dr. Randy A.V. Pabulayan, Direktor ng University Research Center sa kanyang walang sawang pag-unawa, pagtulong, at buong pusong kadalubhasaang pagbabahagi ng kanyang oras at kaalaman; kay Prof. Janet P. Jaco sa kanyang panghihikayat; sa aking mga kapamilya at kapuso na kapwa guro sa Kolehiyo ng Edukasyon sa pagbabahagi ng kaalaman; Gayon din sa aming mapagpakumbaba at matulunging OIC Dean ng Kolehiyo ng Edukasyon na walang iba, Dr. Joel A. Ciriaco sa kanyang mga makabuluhang payo upang maisagawa ang pag-aaral at higit sa lahat sa ating POONG MAYKAPAL. Maraming-maraming salamat.

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THE ILONGGO ARTISTIC TRADITION IN THE WORKS AND LIVES OF TEN SELECTED VISUAL ARTISTS

Lucell A. Larawan

ABSTRACT

This study aimed to define the Ilonggo artistic tradition from the works and lives of ten selected visual artists. Using document analysis and interview, a brief profile, and a critique of the works of selected artists were made based on the photographs of the artworks. Selection was made based on any two of the following: a major national award in art, gallery exhibits held, activity in the past two years, and group affiliation. The study showed that the Ilonggo artistic tradition is characterized by an easily recognized hallmark of the works that identifies the true "voices" of the artists manifesting themselves in signature styles not yet seen in the usual canons in art. The works-though varied in a range of mediums, subjects, moods and elements-remain hinged in the framework of Ilonggo culture. Not having enrolled in any fine arts course, most of the leading artists were apprenticed under the tutelage of "*Hubon Madiaas*" which served as the prime mover of visual arts activities in Panay. The artists are products of the admixture of natural endowment in art, presence of cultural activities to participate in, challenge of peers, and a courageous resolve to continue their art regardless of the lack of patronage by the public in general. The artists still belong to the country's mainstream art even if they are sometimes stereotyped.

INTRODUCTION

Background and Rationale

In the framework of government policy, the art and culture of the country should be given importance. In Article XIV, sections 14 and 15 of the Philippine Constitution, it is stated that "The State shall foster the preservation, enrichment, and dynamic evolution of a Filipino national culture based on the principle of unity in diversity in a climate of free artistic and intellectual expressions." In Hortilla's (1999) paper, he quoted that the Philippine constitution, cognizant of the Universal Declaration of Human Rights, has enshrined the recognition of our "Rights to Culture" as a basic human right. It is a fundamental right of the communities to freely participate in its cultural life-whether in process of evolution, conservation, preservation, and/or in the enhancement of cultural heritage and artistic traditions." Yet this right is of little value unless the creative and cultural forces that shape people's lives are respected and understood by the agents of change-the policy-makers, artists-educators and cultural workers, government agencies, the private sector, and the non-government organizations.

An overview of the evolution of the Philippine art relates to the focus on Ilonggo art since it is an offshoot of the national artistic development. The National Commission for Culture and the Arts records a brief history of the Philippine art, highlighting briefly on the luminaries of the field. The classical roots in Philippine painting had its roots from the first painter of note, Fabian de la Rosa (1869-1937). Later, it was de la Rosa's nephew, Fernando Amorsolo y Cueto (1892-1972) who became the first national artist. The works of these artists were literal landscapes.

Modernism in the Philippine painting started with the distorted and naked workmen by Victoriano Edades (1895-1985). Edades recruited two young dropouts from the UP College of Fine Arts, Carlos "Botong" Francisco and Galo Ocampo. The Triumvirate of Edades, Ocampo, and Francisco became the core of a group of artists informally known as the Thirteen Moderns. The other "Moderns" (according to Edades' list) were Diosdado Lorenzo, Vicente S. Manansala, Hernando R. Ocampo, Cesar T. Legaspi, Demetrio Diego, UST faculty members Bonifacio Cristobal (1911) and architect Jose Pardo (1916), Arsenio Capili (1914 1945) who died during the war, two student-assistants Ricarte Purugganan (1912 - 1998), and Anita Magsaysay-Ho (1914), the only woman in the group. Other names which gained significance were Fernando Zobel (1924-84), Nena Saguil (1914-1994), and Jose Joya (1931-1995).

In the sixties and seventies, several young artists were now on the rise such as Bencab, Antonio Austria, Manuel "Boy" Rodriguez Jr., Roberto Chabet, Norma Belleza, Jaime de Guzman, Danilo Dalena, Imelda Cajipe-Endaya, Justin Nuyda, and Angelito Antonio among others. This new generation ensured that Modernism, in particular, and Philippine painting, in general, will remain alive and well into the next decades (from http:www.ncca.gov.ph)

The article of Leo Benesa (2009) poses the question on what makes Philippine Art "Filipino". The question was a rephrasing of the old problem of national identity in the visual arts. A great deal of the confusion in the cultural identity stems from the fact that the Philippine art belongs to the western tradition in its use of paint and canvas and other materials, as well as in such influences as impressionism, expressionism, surrealism, cubism, pop, minimalism, and the like (Benesa, 2009).

In the essay, the confusion was clarified on the issue that although the influence of the western models are evident, Philippine paintings have not lost their national identity because of it. Just as the Spoliarium painting by Juan Luna remains "Filipino" even if done in Europe, the paintings on question remain Filipino in origin and tradition (from http:www.ncca.gov.ph)

In Iloilo, no formal study was done on the works and lives of local artists. Panay island is endowed with nationally-acclaimed talents in the visual arts. Despite this reality, the region is facing a dismal art scene due to the overall negative art appreciation and development culture manifested by the lack of researches that document and establish an Ilonggo artistic tradition. Only one study has been formally conducted by Defensor (1992) about the works of a local artist Vicente San Miguel. The rest are scant essays and reviews that cannot yet establish a significant pool of knowledge on the Ilonggo artistic tradition.

Even with the challenges in Iloilo's art scene, a new era of better consciousness and culture of excellence in art appreciation can begin.

Objectives

This study aimed to define the Ilonggo artistic tradition from the works and lives of ten selected visual artists.

Specifically, the study was undertaken to:

1. make a brief biographical sketch of each selected artist and some extravisual factors that are significant in their development;
2. critique the major paintings or sculptures of each of the ten selected Ilonggo visual artists; and,
3. synthesize the Ilonggo artistic tradition based on the overall criticism of selected artworks, characteristics of the artists, and the state of the arts in the province.

Significance of the Study

This study is in line with the mandate in Article XIV, sections 14 and 15 of the Philippine Constitution. This constitutional mandate goes in the same vein as the National Commission for Culture and the Arts (NCCA) mandate that to "conserve and promote the nation's historical and cultural heritage, it shall: 1) support, monitor, and systematize the retrieval and conservation of artifacts of Filipino culture...and all Filipino cultural treasures...; 2) encourage and support the study, recognition, and preservation of endangered human cultural resources...; and, 6) encourage and support scholarly research and documentation of Philippine cultural traditions, arts, and crafts, as well as significant cultural movements, achievements, and personalities especially in the literary, visual, and performing arts...". If there have been reviews and essays on the works of Ilonggo artists, they could not yet derive the Ilonggo artistic tradition for they were very limited and "elitist", based on highly opinionated interviews which may lack the merit of a scientific method of data gathering. This study will benefit the country in general and Iloilo in particular, in terms of "fostering the preservation, enrichment, and dynamic evolution of a Filipino national culture based on the principle of unity in diversity in a climate of free artistic and intellectual expressions." The study conserves and promotes the Ilonggo historical and cultural heritage.

For the NCCA, the results of this study can add to the pool of knowledge needed in decision-making and the attainment of its mandate. This will give the picture of the Ilonggo idiosyncracies which differ from the rest of the art colleagues from Manila and the other provinces.

The university can benefit by realizing its cultural objectives in the promotion and conservation of the community's arts. In the mission statement of the university, it is stated that the mission of Central

Philippine University is to carry out a program of spiritual, intellectual, moral, scientific, technological, and cultural training, and allied studies under influences which strengthen Christian faith, build up character and promote scholarship, research and community service. One of the purposes of a local university should be on developing and encouraging the development of the Ilonggo identity.

The local artists involved can benefit from this study by the reorganization of their accomplishments shown by the artworks and unique biographical information.

For aspiring artists, they can learn from the models of pursuing the field discussed in this study.

The readers and audiences of Ilonggo art can also use the results of the study in their efforts to understand the uniqueness of Ilonggos.

Scope and Limitations

The research is limited to only ten selected Ilonggo visual artists in order to focus the analysis of the artworks and the Ilonggo artistic tradition. Selection of the ten artists was based on the criteria specified.

METHODOLOGY

This research used the document analysis and descriptive approaches. It analyzed and made a critique on some major works done by each selected artist using the elements of art, influences, social and political context, and personal factors as bases.

The respondents of this study were ten Ilonggo artists, namely, Nelfa Querubin-Tompkins, Ed Defensor, Harry Mark Gonzales, Martin Genodepa, Alan Cabalfin, Fred Orig, Joe Amora, Boyet Zoluaga, Benjie Belgica, and Dado Tan. At least two of the following criteria were met as bases of selection: 1) The Ilonggo artist should have had a major award in any of the prestigious national fine arts contests which include the Metrobank Art and Design Excellence (MADE), AAP (Art Association of the Philippines), Petron, Philip Morris, PLDT, Shell, Diwa ng Sining, GSIS, and the Biennal Dumaguete Open Terra Cotta Festival contests;

2) He or she should have had a major one-man or two-man exhibitions at reputed galleries or museums here or abroad (this criteria may substitute criteria #1); 3) He or she should be active in the local art scene, meaning, he continues to have exhibits for the past two years and is still recognized in the local art community; and, 4) He or she should be a member of the oldest art group in the region, the "*Hubon Madiaas*".

"*Hubon Madiaas*" was organized in 1983 under the auspices of the University of the Philippines in the Visayas (UPV). Its prime movers were Dr. Dionisia A. Rola, then Chancellor of the University, Prof. Jose Joya, then Dean of the University of the Philippines College of Fine Arts and one of the prominent artists of the country, Prof. Dea V. Doromal, Chairperson of the UPV Committee on Culture and the Arts, and Ed Defensor, Professor and resident artist of UPV who went on to become its founding chairman.

As a group they have held a number of group shows not only in the Visayas but also in Metro Manila. They were also in the forefront of organizational and cultural activities, having been charter members of the Arts Council of Iloilo Foundation, Inc., organizers of *"Hublag! The Ilonggo Arts Festival"*, celebrated from 1988 to 1995, as well as co-organizers of the Visayas Islands Visual Artists Exhibition-Conference (VIVA-EXCON), a biennale activity still celebrated in the Visayas area until today.

Primary data of this study included the actual artworks of the artists. If some of their major works were no longer accessible, a photograph of paintings and sculptures of the selected artists was used to analyze the works. They were collected from the artists personally or through their websites. Aside from the photos, personal interview was used as one of the bases to analyze the artworks and describe the background profile of the artists.

The photographs of the artists' works were the main instrument of the study. Aside from photographs, an unstructured interview was used. The interview dealt with the influences of the artists in terms of style, favorite artists, and preference on subject of artworks. It also dealt with the background information of the artists.

The materials used were the digital camera and a tape recorder. Most of the artists' recent works are not yet widely seen or circulated that is why taking photographs of their works was very important for analyses.

The analysis of each artist's works touched on the dominant elements, principle, subject, emotion, medium, style, influence and general feature. However, the analyses varied based on the notable factors which likewise differed in each artist.

In the collection process, Step 1 was setting the criteria of selection of respondents which was discussed earlier. Based on a preliminary interview, those who can qualify in at least two criteria were listed. The names and addresses of these artists were availed from "*Hubon Madiaas*" headquarters. Step 2 was setting an appointment with each artist. A convenient place of appointment was preferred in the set meetings of each artist such as a restaurant or coffee shop at Robinson's Iloilo. Step 3 was conducting an interview on each artist. The interview was set with an average of thirty minutes. Step 4 was getting the photos of four major artworks done by each artist. This was done after the interview of each artist. In this step, the artists were consulted about which artworks were major representations of their outputs. Step 5 was the analysis of the artworks and the artists. Based on the photos, interviews, and the secondary data, the write-up on the results and discussion followed.

RESULTS

Following are the study findings of the features of the Ilonggo artistic tradition, highlighting ten Ilonggo artists, namely, Amora, Belgica, Cabalfin, Defensor, Genodepa, Gonzales, Orig, Querubin, Tan, and Zoluaga. The artists' works are described as to their dominant artistic element, subject matter, emotion, medium, style, influence by another artist, and their outstanding general feature (see Table 1).

Joe Amora: Limner of San Enrique

Profile. Hailing from the town of San Enrique, Joe Amora associated much of his life with the rural ambiance of his hometown such that many of his paintings show the activities of farming among his town mates.

Amora won several awards in painting and sculpture. In 1996, Amora won in the national *Diwa ng Sining* as finalist in both the mixed media painting and sculpture categories, National Electrification and Administration (second place), Wow Philippines (second place). In the

provincial level, he is either first or second placer in the annual Pinta Paraw at Villa, Iloilo. Amora also won in other contests such as the belen-making in SM City (grand champion), and the Semana sang Iloilo on-the-spot painting (grand prize).

Critique of works. As to color combination, the artist Amora is influenced by the vibrant abstracts of national artist Jose Joya. As to choice of subject, his works have a similar sentiment with Amorsolo who always depicts the farmers although not as literal in a sun-basked mode. The elements of lines and color combine the principles of rhythm, harmony and balance to show lowly farmers. Like his peers at "*Hubon Madiaas*", Amora prefers acrylic for its odorless and fast-drying qualities. The artist finds his signature work by the accents of bamboos that separate the different scenes of farming. To the eyes, these bamboos create movement, complementing the energetic work in the farm. Some of his works are "*Obrero sa Tubo*" (Figure 1), "P*alas-anon sa Matag Adlaw*" (Figure 2), "Weaving" (Figure 3), and "The Harvest" (Figure 4).

Having started with realism, Amora evolved into a modernist whose manner of presenting rural life gives the viewer a fresh insight of daily living. In his "*Obrero sa Tubo*" (Figure 1), the workers are individually focused, separated by lines. The atmosphere in the far side and the activities of farmers are separated. There is a message of individuality in diversity and commonality. These concepts are not contradictory as healthy and productive individuals should maintain their individual identity although the task is just similar and routine.

"*Palas-anon sa Matag Adlaw*" (Figure 2) is connoting the daily burden of living in the rural scene. As the classical allusion of the Biblical passage, "each one should carry his own load...Anyone who is lazy should not eat."

Figure 1. "Obrero sa Tubo", acrylic by Joe Amora

Figure 2. "Palas-anon sa Matag Adlaw", acrylic by Joe Amora

The relief on mahogany wood titled "Weaving" (Figure 3) depicts diligence. In reality, the lowly folks in the local milieu are struggling with work pay that can hardly support bare necessities. This work shows Amora's versatility to work on different media like his colleagues from "Hubon Madiaas". As he emphasized, he could easily come up with a sculpture because even with a given wood or stone, the task is less complicated and less demanding compared to painting where one should stretch the canvas and spend for the more expensive acrylic colors.

The "Harvest" (Figure 4) painting is a unique rendition of this very common scene in San Enrique. Even if the theme is the end part of the planting cycle, Amora still presented the carabao and farmer tilling the ground before planting the palay seeds, conveying to the viewer the importance of a process before reaping the reward of one's labor. "Those who sow in tears will reap with songs of joy" according to the Bible in Psalms.

Figure 3. "Weaving", wood relief
By Joe Amora

Figure 4. "Harvest", acrylic
By Joe Amora

Personally, what Amora depicts in his artworks are those meaningful in his family life as farmers. The cultural element comes into mind about sugarcane plantation which is one of the major agricultural activities in Panay island where Iloilo is located. Three activities involved are planting, weeding, and harvesting.

The fields are plowed at least twice before planting the sugarcane. As soon as everything is set, straight lines about two and a half to three feet apart are plowed across the field. It takes ten men to plant a one-hectare lot in five days. Cuttings known as *patdan* is planted using the *tagad* or *topil*, a dibble stick with a blunt-iron blade. When the cane starts to grow, the spaces between the hills are plowed to destroy the weeds which compete with the growth of the plant. This activity is known as *tudling*.

The spaces between the plants are hoed to allow moisture to penetrate the roots. The *tudling* is done at the interval of two months. When the canes are ready for harvest, samples are taken and brought to the sugar central for analysis. Once the inspector's approval has been secured, cutting of the canes starts. This takes place from November to March. The laborers use long steel knives to cut the cane. In some areas, the cane plantation is burnt first before cutting is done. Then men start their work on any spot most convenient for the truck to haul the canes to nearby sugar central (Jocano, 1980).

Benjie Belgica: Sculpting Muted Melodies

Profile. Born in 1950, Belgica is son to businessman father and Consul-General Larry Belgica. Since he was three years old, he already started to draw for his classmates.

Belgica took BS Management in Ateneo de Manila University. While he was in college, he took an elective subject where he opened his eyes to"serious art". As a student, he doubted whether he will become an artist for his preoccupation was helping his father in the newspaper business.

His growth as an artist started when he became a marketing director of his family's business. In 1977, he joined group shows in Antipolo, Manila. In 1979, his first solo show was held in Iloilo.

Later, Belgica held his exhibitions at Montreal, Canada, Japan, Germany, and the US-with a total of seven one-man shows.

Critique of works. Having preferred singing men, women or children in terra cotta, Belgica uses a smooth texture with rhythm and harmony in the presentation of each subject. The technique used is much influenced by Brancusi who abbreviates the presentation of a subject. His goal is to capture the emotion rather than tell a story. Despair is the dominant emotion while the sculptures call the attention to the artist's past experiences. In painting, Belgica's emotion is more on romance. In his rendition in acrylic, Fil De La Cruz is a dominant influence although the artist finds his identity with the presence of *patadyong* colors in all backgrounds of his paintings.

Seeing the usual and most popular subjects of Belgica's terra cotta works as shown by his "Elan Vital Singing Figures" (Figure 5, 6 & 7), one looks at the artist's expression of his sentiment on a career he longed for

but did not have --- to be a successful musician. Monumentalizing that sentiment is his way of being reminded of an unfulfilled dream by using a humble medium, clay.

Clay as a reminder of frailty and fragility, is an effective medium used by Belgica since the message is expressing his fragile dream. Contrasting that fragile reminder, however, is the blooming of a more promising career in the visual arts.

Belgica is not only known for his terra cotta singing figures. In his paintings, he usually depicts women rendered with plants in the background and a touch of the ethnic style as seen in the addition of "*patadyong*" representation in the whole composition. "*Patadyong*" is a native cloth made by the weavers of Iloilo which is used for women's clothing. Like the "Limitless Love" (Figure 8) which presents two lovers, Belgica's paintings are unique in the sense that they are minimalist and at the same time, ethnic.

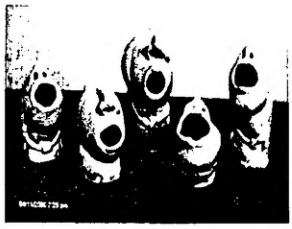

Figure 5. "Elan Vital Singing Figures 1", terra cotta by Benjie Belgica

Figure 6. "Elan Vital Singing Figures 2", terra cotta by Benjie Belgica

Figure 7. "Elan Vital Singing Figures 3", terra cotta by Benjie Belgica

Figure 8. "Limitless Love", acrylic by Benjie Belgica

Allan Cabalfin: Innovations in Studio Pottery

Profile. Cabalfin took architecture at UP Diliman. However, after graduation, his preoccupation has been more on the visual arts. His passion for the arts somehow overpowered his inclination for architecture.

When he studied at UPV, he initiated to form the Students Artists Society. His medium at that time was more on painting. When he went to Manila, he further grew with his artistic talent by more exposures and group shows participated by architecture students.

There were various personalities who contributed to the development of Cabalfin's art. From *Hubon Madiaa*s where he was a member, Eduard Defensor as an adviser, contributed in his art pursuit but as to the influencers of his style of expression, he admitted that there were many.

Critique of works. Looking at the works of Cabalfin, one is drawn with a dominant feeling of curiosity which the studio pottery evokes. The works in rhythmic and harmonious shapes and textures are either made of stone-ware or terra cotta. Although influenced by Japanese potters who mentored him for a month and the tutelage of Nelfa Querubin, the concepts remain his own. The exciting shapes of Cabalfin's works either suggest a vessel or a human figure. As a vessel, the purpose is more decorative than functional. The human figures which Cabalfin creates show a "oneness" of man and his environment or the unique qualities of the human body where the artist gives the viewer a fresh insight.

If allowed to speak for themselves, Cabalfin's works that range from the functional vessel to sculptural explorations tell about the journey of craft and art into a higher elevated form that is "spiritual". His terra cotta "*Torso*" (Figure 9) is a sculpture making the body of a woman as its subject. Some of the works of the artist show the human figure which indicates his fascination with the body's inherent beauty. The linear elements that can be seen in the torso make the presentation go beyond the usual expectation of the viewer.

The "Vessel 2" (Figure 10) are high-fired tea cups that achieved a unique texture and color. The technique applied which uses a wood-fired kiln is a unique process which heats at least 1000^0 Celsius to attain the stoneware quality of the cups. The quality attained by this wood-firing method is unique compared to the common electric kiln.

Figure 9. "Torso", terra cotta
By Allan Cabalfin

Figure 10. "Vessel 2", stoneware
By Allan Cabalfin

The "Vessel 1" (Figure 11) may seem to be a container but in essence, it is deliberately made to intrigue and arouse curiosity more than its functional intent. As a glazed stoneware, the piece also uses a high-temperature wood-fired method.

"Aurora" (Figure 12) rendered in terra cotta forms an intriguing figure of a woman coming out of a shell. The concept alludes to a story of "*Malakas and Maganda*" arising from a split bamboo. With this kind of presentation, the theme is on environmental appreciation, showing that mankind is closely linked to his eco-system. The idea encourages the viewer to value environmental sustainability for future generations.

Figure 11. "Vessel 1", glazed
stoneware cotta by Allan Cabalfin

Figure 12. "Aurora", terra cotta by
Allan Cabalfin

Edward Defensor: Rhythm of the Dance

Profile. Born in March 13, 61-year-old artist Edward Defensor, used to play with ant hill soil of Mina, Iloilo, his hometown and molded them into toys of his choiceuntil the childhood hobby ceased to be played and turned into desirable forms in a well-acclaimed artistic career.

Defensor has a fulfilling career as an associate professor in the Division of Humanities in UP in the Visayas, and visual and performing artist. Among his major achievements are of the Jose Joya Professorial Chair (1996); most outstanding UPV alumnus in the Arts and Letters last 2006; co-congress director during the 2nd National Visual Arts Congress by the NCCA, among others.

Critique of works. Ed Defensor creates a name for his works that speak for themselves an outstanding general feature: dancing figures that merge theater and the visual arts. The subjects' faces may not tell much emotion but with the flow of the body's movements, rhythm, harmony and balance intertwine with the artistic elements to evoke a dominant romantic emotion. These figures rendered in different mediums have broad sympathies with Brancusi who simplifies the subjects with minimal details. In painting, Defensor renders the dancing figures in a cubist style influenced by Pablo Picasso.

Much of Defensor's work can be traced to a dance performance medium used in his well-acclaimed theater productions where he is also engaged. Whether in sculptural or painting media, the figures have intensity of expression, graceful movements that can be gleaned from the positions of the hands, feet, heads, and the overall drama of the total composition. From different sources of inspiration and a wide range of themes, the figures are allowed to flow, as if Defensor dramatizes a story that happened in Panay, not anymore with actual music and ballet combinations which he directed with equally outstanding noteworthiness. If dance cannot be immortalized in a single moment, he attempts to capture the saga by using the visual media. Alice Guillermo, a noted art critic wrote about the artist:

"Certainly one of the most active artists working in Iloilo today is Ed Defensor, who commutes between several art media: the theater and the visual arts, particularly sculpture and painting. Seeing Ed, one gets the impression that here indeed is one person who is thoroughly immersed in art, not only in a personal way, but in a large public sharing of narratives, movements, and images. An artist thoroughly dedicated to his work, he goes about his art with unflagging enthusiasm, drawing from a wide array of materials and deriving inspiration from diverse sources, indigenous, colonial and contemporary."

"Iloilo becomes a center of art activity in the Visayas and nationwide

in the 'Hublag' festival to which painters, sculptors, and installation artists from all over the country have been invited. In one of these festivals, Defensor exhibited an unusual bamboo sculpture consisting of a series of bamboo tubes cut and carved with a built-in mechanism for movements to depict the legendary Visayan serpent, the 'Bakunawa'. Since then, Defensor has already accumulated a sizeable body of sculptural works, as well as drawings and paintings. He also stayed at the University of the Philippines for a time in order to earn his master's degree with a thesis on the artist San Miguel, a 19th-century *telon* painter who adorned numerous theater stages and studios with his scenographic paintings of gardens and architectural backgrounds."

"Exhibited in a sculpture garden, Defensor's three-dimensional works show the influence of Napoleon Abueva primarily in the modernist approach to form as well as in the adventurous experimentation with all kinds of media. He rarely works with only one material, but invariably combines several different materials to bring out textural interest, and relationships of contrast and complementarity. Often, too, he creates his own media, as in his unusual sculpture *Kneeling Dancer* (Figure 16), made of copper nails ranged closely in tight rows around the figure with its wooden core. This produces a highly textured effect and an oscillating tonal play in the tiny glistening rods of copper. Such observations are evident in his *Dancing for the Moon* (Figure 13). *Folk Dancer* (Figure 14), also makes use of copper nails to shape the stylized human figure, but in addition, it is set on a pedestal of wood with colorful abstractions in acrylic encased in glass on the sides of the stand. The figure and the smooth stand of black wood are complementary elements which makeup a single unit. The eye continually goes from figure to pedestal and takes up the interaction of color and texture. This device combining sculpture and paintings within glass windows is resumed in *Dance Lantern* which plays geometric form, the square lantern with the asymmetrical form of the sculpture. In *Fillet O' Nails* (Figure 15), the figure of the fish, in which the design of the copper nails brings out the iridescence of fish scales, floats in space above the round object of a piece of bamboo, suggesting the outrigger of a boat, thus suggesting a space as an expanse of water. In turn these two parallel suspended forms are attached to a slightly curving wooden stand with plant-like forms carved in relief, which in turn stands on a squarish base."

Martin Genodepa: Transforming a Stoic Stone

Profile. Raised up in a serene and close-to-nature environment in

Figure13. "Dancing for the Moon", acrylic by Ed Defensor

Figure 14. "Folk Dancer", nails and wood by Ed Defensor

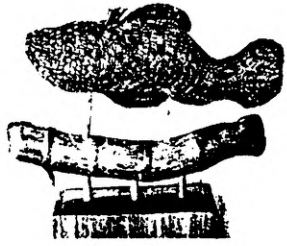

Figure 15. "Fillet o'Nails", nails and wood by Ed Defensor

Figure 16. "Kneeling Dancer", nails and wood by Ed Defensor

Guimbal, sculptor Martin Genodepa derived his spirituality and creative energy from an alchemy of nature and awakened consciousness further stimulated by artists affiliated with the academe. The youngest among three brothers from parents who were public school teachers (his father was a principal), Genodepa was born on July 30, 1963.

Genodepa first showed his works in Manila in Hiraya in 1996. The sculptor joined the "Diwa ng Sining" sculpture category and won as finalist. For Genodepa, winning in a contest is not the only basis to gauge one's success in the art career. It is by the body of work, the number of solo exhibits, their viewership, and being written about by respectable people. His works were already featured by Eric Torres in the "Travel Times". Alice Guillermo also wrote about the sculptor's works.

Genodepa was nominated twice in the CCP 13 Artists Award. For the

first time, he was nominated by Cajipe-Endaya, and on the second time, by Brenda Fajardo.

Critique of works. The sculptures of Martin Genodepa reject theatricality and detail in favor of radical simplification and abbreviation. His goal is to capture emotions of human beings rather than tell a storyand render them visible with minimal formal means. Mostly, his sculptures are coral stone, sand stone, or marble. Genodepa's minimalist approach focusing on human heads evoke a dominantly hilarious and romantic emotion. The shapes and textures create harmony and rhythm which contribute to the noteworthy quality of the artworks.

The viewer does not miss the stark ironyfragile human beings shaped from stoic, hard, and passionless stone. This is both to protest and battle alienation and lack of privacy which are the usual effects of modernization. The stone made soft by tender expressions depicts the struggle to maintain one's dignity and self-awareness in the midst of a more impersonal and busy society which is alluded to by the cold and formless stone. If humanity in the 21st century continues to stifle his innate emotions for the sake of efficiency, truly the stones will start crying.

Genodepa often depicts the head with the bust as a unitary irregular circle or oval shapes. As they evoke images of repose like Brancusi's works, Genodepa's heads are usually positioned to convey an ecstatic mood with faces rendered in a cubist approach. The women in coral stone are a subtle monument to the aesthetic act and to the observation that women are its inspiration.

Genodepa found a likeness of his coral stone in the country after his fifth solo exhibit. It was the unearthed prehistoric sculpture called *Likha* found at Kalatagan, Batangas. Likha as published by the national museum is rendered with cubical face representing a deity; however, the face of the *Likha* is stoic as it resembles an ancient god.

In the "Wrapped Series" (Figure 17), the woman's head in an inclined position is almost blanketed with her long hair. Part of the back and hips are made visible. The message it seems to communicate is the typical conservative woman who wants to preserve her dignity and respect.

The "Bust Series" (Figure 18) in 1996, also in coral stone, includes an

abstracted torso with the head inclined to face the back. The position and the expression of the face is ecstatic which emotes the woman's "paglalambing".

The "Bust Series" (Figure 19) made in 1997, shows a portion of the face in a circular composition. The work suggests timidity or shyness of a woman. She may have hidden herself from someone.

In another "Bust Series" (Figure 20) in 1997, the woman in repose with the head appearing in full, shows a day-dreaming mode. She could have been fantasizing about a lover.

The simple titles used in Genodepa's works are seemingly done deliberately to leave some mystery that should make demands on the spectator. Giving them too explicit a title takes away the mystery so that the spectator moves on to the next object, making no effort to ponder the meaning of what he or she has just seen.

Figure 17. "Wrapped Series", corral stone by Martin Genodepa

Figure 18. "Bust Series 1996", corral stone by Martin Genodepa

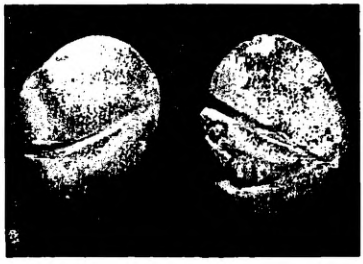

Figure 19. "Bust Series 1997", corral stone by Martin Genodepa

Figure 20. "Bust Series 1997", corral stone by Martin Genodepa

Evident in the sculptures of Genodepa is *kalulo* which refers to tenderness of heart. One of the Ilonggo relational imperatives, *kalulo* can also mean love, kindness, sympathy, unselfishness.

The sculptor's strong Christian principles separate him from the rest. His convictions came from a transition wherein at one point, he was socializing (with gays) but later on realized that he did not belong to their group. More likely, Genodepa's manner of faith-walk contributed much to his level of success and fame as an artist.

Harry Mark Gonzales: Avant-garde in Terra Cotta

Profile. Although raised poor, Harry Mark dominated the 2007 national Metrobank Art and Design for Excellence competition in sculpture, being the grand prize winner. He has been considered recently as one of the three leading authorities (the youngest) of his medium chosen from Iloilo during the recent Biennial Terra Cotta Festival held in Dumaguete City and one of the five selected provincial participants to the Visayan Islands Visual Arts Exhibit Conference (VIVA-EXCON) in Bacolod. Since 2002, Gonzales had been a member of "Hebron Artists", a CPU-based art group composed of the researcher and Rymer Gengoni (BS Advertising student).

Critique of works. Resistance to stasis is a running motif in the works of Harry Mark Gonzales. As a modernist who intimates a break from convention and a renewal of resources of the artistic agency, his terra cotta expressions are not taken from any established canon or particular leading lights of the Philippine or foreign sculpture. The dominant approach shows coiled designs which seem to be the signature identity of his recent works. Based on his creations, he is more a starter of his own school of thought than an avid protégée of the past.

In the early stages, Gonzales' compositions, according to him, did not have much quality to be included in his serious pieces. They were mostly small flowers in a vase rendered literally in oil which he gave to his classmates (more than forty of them received an artwork). He also made terra cotta ash trays and figures, although not as good and expressive compared to his recent outputs.

In his sculptures, the viewer is offered the enjoyment of its humble material, clay. Compared to direct carving where various instruments and tools play an "intermediary" role, modeling of clay necessitates the sculptor's hands directly encroaching into the substance of the material.

The works generally have power to emphasize the message which focuses on human struggle. The struggle is effectively portrayed in the elements of shape and texture. Gonzales' abstract and semi-abstract figures could root from Brancusi and Moore; however, they possess a lot of deviations from the common "schools" of thought in the past and could not be traced to a contemporary artist elsewhere. His innovations in terra cotta figures are unequalled in the region.

The grand prize winning entry, "A Protest to the Guimaras Oil Spill" (Figure 21), reminds about a memory of poisoned shores and fishes made inedible in areas affected by the national tragedy. The rare cracklings and blackish effect in some parts did not just show dramatic textures and color. The holes in the center are inspired by some of Henry Moore's sculptures. They eloquently emphasize the effects of pollution to the sea creatures. This was accomplished through unconventional open-firing technique using coconut shells with husks. For the sculptor Gonzales, every trace left by his hands become evidence of the struggle to breathe meaning into a mound of inert clay.

Certainly, to those affected by the environmental tragedy in Guimaras, the piece brings emotional resonances of those thousands who had to cope with a loss of livelihood and income, extreme poverty, and respiratory diseases. It is but honorable for an artist to mourn, commemorate, and protest the careless venture for profit that resulted in the mass suffering of his less fortunate neighbors, if that is the least that he can do.

Evoked in the "Reaching Out" (Figure 22) is the irony not lost on the viewer: the fragility of one's life summoning the divine is alluded to by the nature of its material. Harry Mark's troubled childhood experiences seemed to lead him to depend on a higher power that can make things turn out for good in this life and beyond. He always shares with close friends the pangs of pain he often felt before. Instead of giving way to the negative effects of his experiences, he mustered the strength to outgrow them and move on. These experiences could be likened to necessary ingredients of the humble material for his true sculptural expressions.

The hand of Christ that is very near the seeker implies His nearness for anyone's frail grasp and accurately interprets the Biblical saying, "Draw near to me and I will draw near to you". The seeker's facial expression is passionate and one can tell of his all-out search for a relationship with the divine, qualifying the prerequisite of finding the sought-after. "You will find me if you seek me with all your heart", as quoted in the Old Testament.

Figure 21. "A Protest to the Guimaras Oil Spill", terra cotta by Harry Mark Gonzales

Figure 22. "Reaching Out", terra cotta by Harry Mark Gonzales

Figure 23. "Flesh Struggles Against the Spirit"; terra cotta by Harry Mark Gonzales

Figure 24. "Innovation of the Young, Wisdom of the Old", terra cotta by Harry Mark Gonzales

The left hand carrying a Bible is suggestive of the balance involved in that search. It is conscious of the possibility that passion without a strong basis of faith is but fanaticism, while having a strong basis without passion is but a lifeless orthodoxy.

The color applied in the sculpture seemed to suggest a patinated bronze which shows a creative synthesis, a break-away from tradition.

The "Flesh Struggles Against the Spirit" (Figure 23) is a fitting portrayal of an inner struggle inside us. Based on Christian teachings, the nature of the flesh is ungrateful, lustful, envious, unholy, greedy and selfish. The Spirit, on the other hand, produces the fruit of love, peace, joy, meekness, patience, and faithfulness among others.

The "Innovation of the Young, Wisdom of the Old" (Figure 24) is an insightful paradigm for organizational success. The implication is that organizations must base their actions on entrepreneurial skills; however, they must also acknowledge that there are classic principles of management and accounting that govern the long-run stability.

Fred Orig: Human Figures in Neon Colors

Profile. Considered the best and most experienced figurative painter, Fred Orig is a name remembered in the Ilonggo art scene. Among other awards, Fred Orig is the grand champion of the painting contest sponsored by the National Electrification Administration. Locally, he always dominates the yearly "*Pinta Paraw*" by winning either as a first or second placer.

Orig proved that his skill in drawing and painting is his main livelihood. He started a commercial painting business while staying in Davao and continued this for three years. When he came to Iloilo, Orig was invited to join the "*Hubon Madiaas*" group in 1983.

His affiliation with "*Hubon Madiaas*" gave Orig an inspiration to leave his commercial art venture to pursue the "serious art" career. Five years after joining "*Hubon*", he went full time into painting and sculpture.

Known to be prolific in creating art works, Orig admits that for a long time, he only managed to have one solo show in Manila.

Critique of works. The artist dwells on themes that propagate social consciousness and environmental issues. His distinctive style is known to combine both concept and skill in the overall composition. Recently, his signature style mostly evolves into figures in neon colors alluding to the screen of the cellular phone as a way of presenting the modern Filipino life that has now become heavily dependent on the gadget. Fred established his reputation not only through his acumen in attracting art collectors but also through the numerous national and local art awards that he earned.

As it is theatrical presentation in Ed Defensor's works, Orig is known for the poetry of facial and body gestures of his subjects. Their expressions are dramatically loaded with interactive and conversant

emotions no matter how ordinary the activity is. The paintings are expressionist men and women in the urban setting conversing in bars, restaurants, or commercial centers. The dominantly neon renditions of the subjects outlined by luminous lines create harmony and rhythm. Not only is the skill of the painter displayed; the concepts are equally competitive.

In Orig's "*El Niño*" (Figure 25), the watercolor painting shows two banana plants. He painted them as he saw the plight of his environment during the disaster. The colors he used which are distorted from the real brown colors of the actual plants, figuratively shows his sentiment. The bright colors he used perhaps tell about Fred's intention to commemorate a tragedy like the oil spill in Guimaras, as some artists such as Gonzales, did.

"*Haw-as*" (Figure 26), according to the artist was painted when he saw the activities of fishermen in his hometown of Dumangas, Iloilo. Traditionally, the muscular fishermen regularly go to the shore after a catch and put the fishes in different baskets or containers according to kind. The catch is usually sold to the town marketplace or used as viands by the men and their families. In the manner of presenting the subjects, Orig uses a little distortion by positioning the "balsa" behind the figures, giving a closer focus on the subjects with their native facilities.

The "Lunch break" (Figure 27) oil on canvas is the usual approach used by Orig in his other paintings since a few years ago. In this approach; he uses a luminous blue to outline the figures. The purpose why luminous colors are combined in such manner is the artist wants to allude to the cell phone screen, the gadget which has become part of the Filipino's life nowadays. The overall composition does not only show a

Figure 25. "El Niño", acrylic
by Fred Orig

Figure 26. "Haw-as", acrylic
by Fred Orig

vibrant color combination. It likewise uses drama in arranging the postures of the women and the musicians taken from an actual scene at the Mary Mart mall in Iloilo City. The artist uses a little application of shading in the subjects. In this presentation, the artist has made an identity of his own which is not shared by other artists even in Manila.

"*Yakap sa Kalikasan*" (Figure 28), Orig's painted relief and oil, is a passion for environmental preservation. Women are symbolic of fertility and abundance. In this presentation, they are made to symbolize nature and its bounty.

Orig's works reflect environmental and social aspects. Seen in his works are reflections of socialization in the urban setting as well as *kakugi*, a moral virtue of Ilonggos.

Figure 27. "Lunch Break", acrylic by Fred Orig

Figure 28. "Yakap sa Kalikasan", acrylic by Fred Orig

Nelfa Querubin: Multi-awarded Ceramics Artist

Profile. Hers is a triumph like her high-fired ceramics that masterfully attained the blend of technique and material. Nelfa Querubin hails from an island seashore of Concepcion, Iloilo, where she spent her humble childhood with her twelve brothers and sisters.

Her good friend Leonardo Villaroman introduced her to pottery in the early 70's and became her first mentor. She also befriended the now popular artists like Brenda Fajardo and Pettyjohn. As Querubin produced

her works, she was able to hold a solo show in Manila where her works were discovered by the Design Center of the Philippines headed by painter-sculptor Arturo Luz.

It seems it all started when Querubin got married to an American, Mike Tompkins. In 2003, she was awarded the very elusive first prize in Ceramics in the Colorado Arts Festival.

Critique of works. Looking at Querubin's recent accomplishments as one of the best ceramic artists and printmakers in the country (based on the opinion of artists at the Dumaguete Biennial Terra cotta festival) and later in Colorado where she resided, one can behold a very accomplished life and her leap to victory like her works reminding about the role of meticulous process and heat in crating the masterpieces. Considered a luminary by contemporary artists, Querubin has evolved in her craft from vessels to stunning sculptural colorful patterns that earned awards and distinction abroad, including the Grand Prize in Ceramics at the Colorado Arts Festival in Colorado, the U.S.A., where she is currently based.

Of her works, clay is poetically alluding to a powerful transformation of frail human beginnings to a likeness of divinity. They are stressing that life is a testimony of how the Maker can recreate unimpressive inert clay into valuable and admirable pieces. That they do not just stimulate universal concepts with the use of textures, colors, forms, harmony, and rhythm but they also highlight the strength and durability of stoneware. Querubin's subjects are semi-functional vessels which evoke a dominant feeling of curiosity and intrigue. Japanese and American potters have a way of influencing the methodologies of her works although the artist stands out in the "sea" of studio potters for her passion and penchant for fresh ideas. In a gathering of known potters during the recent Terra cotta Festival in Dumaguete last 2007, Querubin is considered by fellow artists as the most respected Filipino in the clay medium because of her "quite advanced explorations not yet attained by other potters." With Querubin's creations, the call is for a deeper understanding of how a life is transformed, like clay, to attract inspiration and encouragement.

Dr. Thelma Kintanar, a famous art critic, said about Querubin's "Retrospective Exhibition in Celebration of the UP Centennial": "It is not just the acceptance of clay as an art medium which Querubin has helped to bring about her pioneering venture. More important, she has contributed to the indigenization of contemporary Philippine Art".

Of this same solo show, another famous critic stressed: "Her forms

carry the usual context of the potter's art: seemingly functional pieces aspiring to be functionless. Objects moving from utilitarian dimensions to a sort of a spiritual function called art."

A critic from Colorado, Mary Voeltz Chandler made another view of her works: "And for the most unusual work, count objects that look as if someone used clay to create fiber or a non-representational painting. Nelfa Querubin-Tompkins' *Abstract Landscape* and *Deep River* might suggest specific themes in their titles, but the result is the best reflection of a work of art: they attract, prompt questions, never give up their secrets right away, and demonstrate a universal truth about the power of clay, which in this case mixes vessel and sculpture to create a third entity."

Querubin's works have undergone stages of evolution. In her early career, she created more utilitarian bowls, cups, and teapots, among others. They are formed through a combination of the potter's wheel and manual molding. Her middle career is described as a penchant for decorative works displaying abstracted compositions that emote a colorful visual tradition of high-fired and glazed quality. Her later stage is a reflection of her inspiration from her American environmentthe color of sunset, the texture of the snow, lichen, coral, wood. Almost all of her later works are slab-built, hand-formed, resulting in unique shapes and uneven surfaces that portray the dramatic pieces.

Querubin's "Winter Sun" (Figure 29), showcases a bold use of colors and harmony in textures. It is inspired by an American environment where she has lived. The "Tranquility" (Figure 30), with a gradiated blue and exciting linear textures tells about how simplicity and mastery of medium blend to present a rare composition. "Two Fishes" (Figure 31), a large vase in a shape of a fish, is a whimsical piece reflective of her playfulness in using the medium. "Dressed for the King" (Figure 32) is a stunning abstraction with exploding colors and textures in the body. All these artworks are high fired and glazed, the types that Querubin has evolved in her later career as an artist. High-fired ceramic artworks are usually heated with as high as 1000^{0} Celsius. They are more difficult to achieve given that the percentage for breakage in that temperature is higher.

Pottery is made by forming a clay body into the desired objects and heating them with high temperatures in a kiln to induce reactions that lead to permanent changes, including the increase of their strength and hardening and setting of their shape. Pottery is durable and fragments, at least, survive long after artifacts made from less durable materials have

Figure 29. "Winter Sun", stoneware by Nelfa Querubin

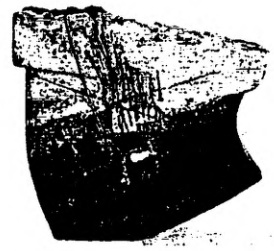

Figure 30. "Tranquility", stoneware by Nelfa Querubin

Figure 31. "Two Fishes", stoneware by Nelfa Querubin

Figure 32. "Dressed for the King", stoneware by Nelfa Querubin

decayed past recognition. The study of pottery may allow inferences to be drawn about a culture's daily life, religion, social relationships, and the way the culture understood the universe.

Dado Tan: Melodies in Print-making

Profile. A popular voice in the 90's as an interpreter of the song "*Iloilo Banwa Kong Pinalangga*", Fundador "Dado" Tan gave way for another rhythm in print-making and sculpture. He started as the lead singer of the Tunog Amakan band in his college days at UP in the Visayas under the directorship of Ed Defensor.

He paints and sculpts using different media. Later, he came up with a signature style that depicts his subjects inside a bottle.

Considering the practical side, Tan does not yet go full-time in art. He

is presently connected with Xeno Pharma as a medical representative. He finds his art as a stress reliever while working. He is contemplating about having a one-man show in Iloilo as of this writing.

Critique of works. Tan's works inside a bottle is a powerful symbolism of environment and ecology. Rendered in explosive colors and textural interplay, the proportion and harmony of the compositions evoke curiosity. The works are influenced by the environmentally focused renditions of Fil De La Cruz. With the use of bottle shape in every composition, the artist's voice stands out among many. Looking at Tan's works, one remembers that the boundaries of one's upbringing connoted by the bottle is the delimiting factor which determines how far and wide a person can go through the horizons of opportunities given the struggles. Yet in Tan's life as a self-taught artist, the limitations are in fact, opportunities.

Tan, unlike the other "*Hubon*" artists, paints and sculpts using the terra cotta medium. His signature style that depicts the subject/s inside the bottle came up in one of the workshop sessions with "Hubon" artists. Using the signature concept, he depicts *tinala, panagang sa ati, tinabal*, and *sinamakan*. In similar modes of presentation using the bottle as a parameter, Tan also presents women. During the "Dihon Sang Lunang" Exhibit with the members of the "Hubon", he showed mother and children artworks in terra cotta. They are peculiar in a sense that the mother is rendered in a bottle shape and the children are usually eight to twelve.

In the "Rebirth" (Figure 33), the idea is regeneration which sentimentally looks at the plight of the environment. The "*Panagang*" series (Figures 34, 35 & 36) prints and mixed media are revelations of the Ilonggo folks' belief in the spirit world which is an extra-scientific phenomenon that governs the affairs of men. The word connotes a talisman to ward off evil in a household. Iloilo had been stereotyped as one of the places where the "*aswang*" or flying beast in the night existed. That is why the talisman had been a common method for protection reportedly possessed by many old folks.

Tan's mentor encouraged him to continue with the particular presentation that no artist has yet done elsewhere which is presenting his subject inside a bottle. The concept is unique for it parallels the reality that one's world exists in the context of an environment which shapes one's world view. Dealing with how one lives a life, it shows that one's sentiment about his environment and the things that make him happy or sorrowful are determined by a particular mind set.

The native food *tinala* is apparently a pleasant reminder about the entirety of a well-lived life. The "delicacies" may comprise the basic motivations one possesses which according to McClleland are the need for power, achievement, and affiliation. Whatever these motivations are, they are deliberately encouraged and treasured and can be products of a specific subculture.

As seen in many of Tan's works, the spirit world which is part of the Ilonggos' beliefs is manifested.

Figure 33. "Rebirth", print by Dado Tan

Figure 34. "Panagang sa Kalautan", mixed media by Dado

Figure 35. "Panagang sa Katalagman", mixed media

Figure 36. "Panagang", print By Dado Tan

PG "Boyet" Zoluaga: Limning the Bane of 21st Century

Profile. Born on February 1, 1958, Boyet Zoluaga is a native of Guimbal, Iloilo. He started to show his artworks when he studied in UP Iloilo. His initial breakthrough came in 1976 when he won first place in the painting contest with his entry "*Kahayag*". From that time on, he was taken as illustrator of the student publication "Pagbutlak".

After graduation, he went to Saudi Arabia to work with the help of a

former teacher. There he spent two years until he realized that he was not meant to stay longer in that job. So Zoluaga returned home to continue his artistic pursuits.

In 1998, Zoluaga won as one of the five jurors' choice in Philip Morris and went to Vietnam to further compete in the Asian Art Awards but unfortunately, he did not win. However, he saw it an opportunity to interact with productive artists from other countries.

Critique of the works. The darker side of life expressed in bold lines and overall composition that emote fear, loneliness, hopelessness and concepts such as phobia, isolation, and death are symbolized in the works of PG Zoluaga. With emphasis on environmental destruction and alienation, these are intended to portray the artist's deep sentiments for his community that suffers the plight of a third world setting and the harsh realities of modernization where exploitation, corruption, and dehumanization of man abound. Using a social realist style, the influences of Munch and Chagall are evident in the works and effectively convey the intended messages.

Zoluaga's deepest sentiment expressing itself in the visual medium was popularized in the 90's through his original song composition "*Iloilo Banwang Pinalangga*" (Iloilo My Beloved Town). In the message of the song, the place is "*duog sang mga damgo*" (a haven of dreams) which captures one's affection. At the end of the song, Zoluaga made a plea for his town, "*San-o mo ako mabatian*?" (When can you hear me?) Such plea as seen in his social realist paintings and drawings reflects his protest to stop the "acts of men" which either destroy the environment or take people's dignity and rights.

In his color etching "Deliverance" (Figure 37), the theme is exorcism. The scene is a tribal dance with a "shaman", the main subject, who performs a ritual to cast out evil spirits. The background with textural elements is a representation of the natural habitat in the rural scene with colors rendered in an almost monotonous range of black, sepia, and green. In a natural environment where the ritual is performed, the presence of evil is dealt with through supernatural means. The work calls to mind the people's desire for a power beyond them which, in the Filipino culture, is summoned to counter horror or demonization. Horror or demonic activities are alluded here as the social ills that need to be "exorcised".

"Deliver Us From Extinction" (Figure 38) effectively communicates humanity's struggle for survival. Two people in the center personalize the

bamboos which are abundant in the community. In the background are faces of human beings floating in a lake of fire and burning bamboos that gradually turn into ashes. The entire mixed media painting is a prophetic message that warns about an impending doom both in the natural and spiritual levels. In the natural plane, these may be the disasters that follow deforestation. In the spiritual plane, it suggests of the "second death" which is possible for the deserving. More than suggesting destruction of natural environment due to "*kaingin*" (burning of trees), the painting eloquently emphasizes that people-considered to be most important in the entire creation-are actually the endangered species.

The "Pilgrimage" (Figure 39) pen and ink is a journey into the unknown. Naked human figures with halos on their heads walk in a highway towards a bright light ahead. The pilgrimage appears to have a positive culmination but seems to be restrictive as the feet of the travelers are imbedded in cement blocks. Zoluaga communicates the effort of people to live dignified lives in order to receive their reward physically and spiritually; but in the journey, they are constrained by a weight beyond their control. This speaks about the depravity of man which is a teaching of Christianity. On his own, man is helpless unless he calls on a "savior" to redeem him.

In Zoluaga's "Awareness" (Figure 40), the distorted man is holding a cellular phone while his open right eye looks through the gadget. The message of this social realist painting gives awareness of the distorted vision of the 21st century Filipino whose preoccupation is giving in to pleasures, wasting much of his time, while dismissing the more serious issues about his existence. The closed left eye tells about how he disregards the primary issues of life in favor of modernism.

Figure 37. "Deliverance", color etching acrylic by PG Zoluaga

Figure 38. "Deliver Us from Extinction", by PG Zoluaga

Figure 39. "Pilgrimage", pen and ink by PG Zoluaga

Figure 40. "Awareness", acrylic by PG Zoluaga

DISCUSSION

This pioneering study considers the fulfillment of the Constitutional mandate where, "The State shall foster the preservation, enrichment, and dynamic evolution of a Filipino national culture based on the principle of unity in diversity in a climate of free artistic and intellectual expressions." Rarely have institutions been diligent in documenting and preserving the local and national heritage as implicated by an absence of this research despite the presence of competitive Ilonggo visual artists who are well-respected in the cultural community. This study is therefore a milestone in Iloilo's cultural development.

Hortilla's (1999) mention of the "right to culture" based on the universal declaration of human rights by the United Nations makes Ilonggo visual arts a basic human right where participation should not be taken only as a privilege or a luxury in the mindset of the typecast stinginess among the local community. In this perspective, the agents of change-the policy-makers, artists, educators, cultural workers, government agencies, the private sector, and the non-government organizationshave more reason to give more respect and understanding on the creative forces of the society.

When Philippine art that reflects the western tradition as pointed out by Benesa (2009) in its use of paint and canvas and other materials, as well as in such influences as impressionism, expressionism, surrealism, cubism, pop, minimalism and the like, it has not lost its being Filipino. The argument is settled on the issue on what makes Philippine art Filipino because the artist and the culture presented are of the country's origin. The

same is true with Ilonggo artistic tradition reflecting foreign influences in the manner of presentation. The Ilonggo identity is retained by the one who made the artwork and the context of culture.

A reflective look at the works of the top Ilonggo artists reveal a diversity of artistic elements, principles applied, subjects, emotions, media, styles, influences, and general features. This diversity shows that even with similarities in upbringing and local environment, the works of the top artists derive their energies from different sources of inspiration, messages, and personalities. What is common among the works is the strength of resolve to present the true voice of the artist without any pretense, and this they did without a formal preparation in a Fine Arts degree.

The unbridled expression is proven by the visual presentations of the artists which, according to observers, give a new philosophy that is not yet seen in any existing art book. The philosophy has apparently evolved and has gone beyond just being a synthesis of local and national artistic influences.

The leading lights of the Ilonggo visual arts, whose works and profiles were analyzed, are avant gardes of their respective media and adventurers in a rough sea. The Ilonggo artists are offshoots of modern art whose works tell about self-consciousness, or consciousness of the self. This self makes sense of time and space, a knowledge that plays out in the context of a marked presence. The Ilonggo artists share this disposition.

The Ilonggo artistic tradition is not about the dominance of a particular style, medium, principle, subject matter, emotion, or influence of another artistbut rather a presentation of the Ilonggo communal life, beliefs, moral virtues, and personality.

The temperament of art in Iloilo is generally less turbulent compared to that in Negros province. This is correlated to the general social condition of the province which does not have much social tensions to commemorate like Negros wherein the suffering from hunger was sensationalized decades ago.

ble 1. Summary of the Features of the Ilonggo Artistic Tradition

Artists	Dominant artistic element	Dominant artistic principle	Dominant subject matter	Dominant emotion	Dominant medium	Dominant style	Dominant influence by another artist	Outstanding general feature
Amora	color, lines	rhythm, harmony, balance	farmers	expectancy, truggling to	Acrylic	modern genre painting	Jose Joya, Amorsolo	bamboo forms that depict a fresh presentation
Belgica	shape, texture	harmony	singing men, women and chil dren	despair, romance	terra cotta, acrylic	minimalist sculpture, ethnic painting	Brancusi, Fil De La Cruz	the singing figures have a singular message that pose a question
Cabalfin	shape, texture	rhythm, harmony	emi-functional vessels, men, women	curiosity	stone-ware, terra cotta	conceptual studio pottery	Japanese potters, Nelfa Querubin	defines an Ilonggo studio pottery
Defensor	shape, texture, color	rhythm, harmony, balance	dancing women and men	romance	nails and wood, terra cotta, acrylic	minimalist sculpture, expressionist paintings	Jose Joya, Brancusi, Picasso	the dancing figures in different mediums tell of a merge between theater and visual arts

Continuation of Table 1.

Artists	Dominant artistic element	Dominant artistic principle	Dominant subject matter	Dominant Emotion	Dominant medium	Dominant style	Dominant influence by another artist	Outstanding general feature
Genodepa	shape, texture	harmony, rhythm	men and women heads	romance, hilarity	coral stone	minimalist sculpture	Brancusi	expressive faces in coral stone are very fresh
Gonzales	shape, texture	emphasis on message	abstract, semi-distorted figures	Struggle	terra cotta	abstract and semi-abstract	Brancusi, Henri Moore	innovations in terra cotta and expressive presentations
Orig	color, shape, line	harmony, rhythm	men, women in the urban setting	interactive and conversant	Acrylic	expressionism	modern painters	both concept and skill are applied; figures are very expressive
Querubin	shape, texture, color	harmony, rhythm	semi-functional vessels	Curiosity	stone-ware	conceptual studio pottery	Japanese and American potters	experimentations in stone-ware are quite advanced among potters
Tan	color, texture, shape	proportion, harmony	native delicacies, woman and habitat in a bottle	Curiosity	Print	conceptual presentation of environmental and ethnic themes	Fil De La Cruz	presentation in a bottle is very fresh and competitive
Zoluaga	lines, shapes	emphasis on message	distorted men, destruction of nature	phobia, hopelessness, protest,	pen and ink, acrylic	social realism	Munch, Chagall	distortions and expressive lines effectively portray the message

CONCLUSIONS

Unique among the Ilonggos was their individual identity as reflected in the works and lives of the artists. That identity cannot be described as a simple, collective entity for even in the communal upbringing where the environment was similar, the personalities, medium, style, and subject preferences of the artists made art a complex presentation of various dominant moods, seasons, and the evolution of the society. Even with influences from foreign and Manila-based icons, each of the leading Ilonggo artists had developed an easily recognizable hallmark that identified their individuality and described their true "voice". An example of this is Joe Amora's use of linear elements of sugarcanes that dominate his works. Regarding the prevailing range of the colors, the artists mostly preferred warm and explosive hues also observable among great Filipino modernists such as national artists Jose Joya, Ben Cabrera, and Manansala, among others. The works, although in a variety of media, subjects, moods, and elements- remained hinged in the framework of "Ilonggo" and "Panayanon" culture observable in the customs, beliefs, symbols, values, and norms of the place such as the tradition of planting and harvesting sugarcane, the belief on the existence of the supernatural world, and the cardinal virtue of *kakugi* among Ilonggos.

The unbridled expression of the top Ilonggo artists was proven by the visual presentations of the artists which, according to observers, gave another philosophy not yet seen in any existing art book. The works may have had some influences from famous foreign or Manila-based artists, but the manner by which the works "re-presents" reality evidenced an undebatably fresh innovation which characterizes Ilonggo art. Even if they may be classified as modern, these paintings and sculptures are not stripped of a unique identity as they build an artist's name behind a particular style or medium recognizable even without one's looking at the signature of the works.

In a state of flux, Ilonggo art had been constantly changing and what was common among the ten leading artists was the role of a group that served as a prime mover of cultural activities, and the aggressiveness and undaunted determination of the artists to continue in their art regardless of how the community in general regarded their outputs. This scenario successfully substituted the absence of a formal course in the fine arts among the leading artists. The artists still belonged to the mainstream art in the country even if they may be "stereotyped" because they were not Manila-based. This was true in the sense that they were getting their energies from the leading artists in the country through interaction and

workshop while the competitiveness of their works was also evident in their ability to bring top awards in national contests.

RECOMMENDATIONS

Based on the conclusions, the following recommendations are presented:

1. Philanthropists, the government, and the university administrators in the province should be sponsors of grants for materials, allowances, and appropriate venues for the Ilonggo artists mentioned to make them concentrate on their art. This is fulfilling the role of preserving a unique and rich culture.
2. The artists themselves need to continue working on their pieces for one-man exhibits in Manila, the region, and other countries if they have the chance.
3. The University should be a prime mover of cultural activities not just limited to its students but also for leading artists. This can be realized by:
    a. publishing this manuscript into a book or journal to be sold to libraries in the region and to be donated to the National Commission on Culture and the Arts; and,
    b. commissioning or patronizing the works of some local artists with a sense of cultural obligation not just utility; and,
4. More related researches should be conducted on other top achievers in "*Ilonggo*" and "*Panayanon*".

ACKNOWLEDGMENT

The challenge in coming up with critical analyses of the works of the Ilonggo artists is a new realm that I just ventured into with an aim to improve awareness and appreciation in the visual arts. I wish to thank the following for their contributions: Dr. Expedito Señeres, for his encouragement during times of exhaustion from the task of writing. His involvement was a wind beneath my wings; Harry Mark Gonzales, for providing a way to contact the artists in this study; the University Research Center under the leadership of Dr. Randy A. V. Pabulayan, for giving this study a chance to spark public interest; the ten leading artists who willingly gave their time for interviews about their lives and works; and the Ultimate Artist, God Almighty, who gave me the skills and the joy in appreciating art.

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DESIGN, CONSTRUCTION AND TESTING OF A LOW COST MINI ELECTRIC STEAM GENERATOR

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ABSTRACT

This study aimed to design, construct and test a Low Cost Mini Electric Steam Generator for Physics Laboratory with the following components: the AC power supply, heater, boiler, water pump, water level controller, temperature indicator, and steam exhaust. The AC power is a 220 V/60Hz that is used to supply the heater for the boiler to produce steam. The water is automatically fed via a submersible water pump with a water level controller to maintain the correct level of water and avoid its shortage inside the boiler. The boiler was also connected to a temperature sensor. The maximum power line voltage is 227 V while the total resistance of the heater and the transformer is 51.5288 ohms, with a load current of 4.42 amperes and power equivalent to 1000 watts. After a series of tests, it was found out that the Low Cost Mini Electric Steam Generator is capable of producing steam at the rate of 225.2 gm/min. The maximum temperature generated is 1000C, which is the boiling point of water. It can be concluded that the low cost mini electric steam generator was satisfactorily made and can meet the needs of the Physics Laboratory for experiments in thermodynamics.

INTRODUCTION

Background of the Study

A steam engine is a mechanical device used to transfer the energy of steam into mechanical energy for a variety of applications, including propulsion and generating electricity. The basic principle of the steam engine involves transforming the heat energy of steam into mechanical energy by permitting the steam to expand and cool in a cylinder equipped with a movable piston. Steam that is used for power or heating purposes is usually generated in a boiler. The simplest form of boiler is a close vessel containing water, which is heated by a flame so that the water turns to saturated steam. The ordinary household-heating system usually has a boiler of this type, but steam-generating plants used for power purposes are more complex in design and are equipped with various auxiliary devices. The efficiency of a steam engine is generally low, and therefore, in most power generation applications, the steam engines have been replaced by steam turbines.

The steam generator consists of two major parts: the top half or the combustion chamber and the bottom half which contains the coil stack. Air is delivered from a blower through an air jacket to the top of the combustion chamber. The air jacket provides cooling for the inner skin of the combustion chamber and preheats the air as it flows to the combustion chamber. The fuel is dribbled onto a spinning cup that vaporizes the fuel into a very fine spray. Only 12 watts of electric power is required to vaporize the fuel with the spinning cup. This is less than what would have been required to vaporize the fuel with a pressure pump or compressed air. The coil stack is usually made of finned tubing. The finned tubing has 8 to 10 times the heat transfer surface of bare tubing. The coil stack with finned tubing is considerably smaller than a bare tube coil stack. The coil stack contains stainless tubing in which all joints are welded. As such the coil stack can withstand a considerable amount of abuse without damage. If the burner is turned on with a dry boiler, the over heat control will turn off the burner and no damage will occur to the coil stack (from http://www.firedragon.com/~kap/Barrett/SteamGenerator1.html).

On the other hand, the Electric Steam Generator Corporation SPEEDYLECTRIC electrode type steam generators are designed to work with artificially increased boiler water conductivity. This greatly reduce the cycling up effect as additional electrolytes are carried in with the makeup water.

Conventional fuel fired boilers and electric boilers of the immersed resistive heating element type must utilize heat transfer surfaces at a temperature substantially higher than the desired steam temperature. The efficiency of such units depends on the efficiency of the conversion of fuel into heat and the efficiency of heat transfer. These efficiencies are highly dependent on heat transfer surfaces. Minerals are left behind and deposited on the hot heat transfer surfaces (scale) as the water flashes into steam. These deposits can greatly reduce heat transfer efficiency. With an electrode type electric boiler, heat is generated directly in the water itself. No part of the boiler is at a temperature higher than the steam being produced.

Electric steam generators of the electrode type are constructed with a vertical pressure vessel thereby resulting in a relatively small footprint, occupying less valuable floor space. Because of their small footprint, SPEEDYLECTRIC steam generators can be located close to the load, reducing long, heat wasting runs of pipe. There is no requirement for fuel handling space or equipment. As an electric boiler has no stack, there is no related stack heat loss and there is no problem with air pollution due to incomplete combustion of fuel. The hazards associated with the combustion of fossil fuels are eliminated.

Conventional fuel fired boilers and electric boilers of the immersed resistive heating element type are subject to failure with potentially disastrous results if the water level falls below some minimal point. There is no unsafe water level in an Electric Steam Generator Corp. SPEEDYLECTRIC electrode type electric boiler because, if for any reason the water supply is interrupted causing the water level in the pressure vessel to fall below normal levels, the electrode tips will become completely exposed. No current will pass between the electrodes, no steam will be produced and no hazardous temperatures can occur. In an electrode type steam generator, 100% of the electrical energy is converted to heat.

Electricity has always been considered a safe, clean, and efficient form of energy. In the past however, it was also expensive, particularly when compared to natural gas and cheap oil. In recent years, with the rapidly rising cost of using natural gas and oil-fired boilers, electricity is increasingly becoming a practical alternative source of energy. For the future, electricity enjoys one very important advantage over other forms of energy-it can be generated from a number of power sources including hydro, nuclear, fossil fuels, tidal, solar, geothermal and wind. A great deal of time, effort and money are being devoted to developing new technologies and sources of electric power (ESG Corporation, 2009).

In the Physics laboratory of Central Philippine University, a steam generator was developed by PASCO Scientific, Inc. The steam generator includes many convenience and safety features, namely: extra wide base, rubber stopper for a tight seal and safety pressure release, dual steam ports, internal electric heater, low water warning light, and six variable power (0 400 watts) with an adjustable steam flow. This steam generator boils three-fourths liter of water in 10 minutes and provides continuous steam up to 10 g/min. A baster is also provided for removing hot water for experiments. The steam generator provides steam to change the temperature of the metal sample for the study of thermal expansion (from http://www.pasco.com.html).

The result of tests using this equipment shows a significant effect in thermodynamics particularly in conducting coefficient of linear expansion experiment. The room temperature reading before the rod was subjected to heat was 260C. The final temperature attained as the steam continuously flowed reached to 1000C giving a 740C change in temperature. The maximum scale reading it attained was 0.04 cm which contributes 0.04164 cm change in the length of the rod (L). The coefficient of linear expansion of the metal was 0.0000093784/0C which means that for every 10C rise in temperature, the temperature of the metal rises at the rate of 0.0000093784/0C.

In the second semester of school year 2005-2006, the Physics Stockroom of the Department of Mathematics and Physics, Central Philippine University (CPU) served twenty two (22) Physics 6 Laboratory Classes. Twenty sections came from the College of Nursing with a total of 870 students. One section was from the College of Education for their Bachelor of Science in Nutrition and Dietetics with nine students listed in the classroll. On the other hand, the College of Arts and Sciences has one section for their Bachelor of Science in Medical Technology with a total of 29 enrollees (UCSC Data, 2nd Sem. 2005-2006).

Physics 6 laboratory experiments include: Precision Measurement, Motion, Forces, Simple Machines, Electricity and Heat. Coefficient of Linear Expansion, Specific Heat and Latent Heat of Fusion of Ice are the experiments that fall under the category of Heat. In these three experiments, an electric steam generator is used to produce steam in order to determine the coefficient of linear expansion of a metal, the specific heat of a metal, the latent heat of fusion of ice and the temperature of the substance.

As per Physics Stockroom Inventory Records for school year 2005

2006, only three electric steam generators were in the list. Out of these three electric steam generators, only one was in good working condition. This equipment was purchased from a reputable supplier with high standard product qualities. It was imported from the USA thus, was expensive. With only one equipment available, it cannot cater to the needs of 908 students to conduct experiments in thermodynamics. Then, with a minimal budget allocated every year for the equipment alone, the Department cannot purchase all the equipment needed in the Physics laboratory. As a result, experiments cannot be performed individually but rather in groups. At present, a class has a maximum of nine groups with five students per group. With this number of students per group, not all of them can manipulate the equipment, hence a low cost electric steam generator was designed.

The Low Cost Electric Steam Generator was simple in design. It costs P15, 000.00 with the same features and functions as compared to the previous one. Furthermore, it has a special feature that the previous steam generators do not have, the temperature indicator.

Objectives of the Study

The main objective of the study was to design, construct and test the Low Cost Mini Electric Steam Generator for Physics Laboratory experiments.

Specifically it aimed:

1. to draw the basic Block Diagram of the system and to integrate each discrete component based on the block diagram;
2. to identify the basic components needed in setting up the system;
3. to construct an electric steam generator that will use local and available materials; and,
4. to conduct final testing and evaluation of the system in terms of the temperature, and the volume flow rate of the steam at specific temperature.

Scope and Limitation of the Study

This Low Cost Mini Electric Steam Generator was primarily designed for Physics Laboratory experiment specifically on the Thermodynamics laboratory experiment. The system capacity is

approximately 1.5 liters of water for steam distillation unit and 2 liters of water for reserve water tank. The temperature was set to boiling point of water; which is controlled by the temperature indicator built-in in the system. The feeding mechanism of water is automatic using a submergible water pump and controlled by the water level controller. This system was designed based on the requirements and needs in thermodynamics experiments in the Physics Laboratory.

This system was also designed based on its specifications and limitations. The supply voltage was set to 220 VAC/60Hz line source with AC voltage controller to control the current through the heater using quadrac. The temperature ranges from -100 C to 1100 C indicated automatically by a temperature indicator attached to the system.

This study was limited only to the design, construction and testing of the low cost mini electric steam generator. Revision or upgrading of the system was beyond the scope of this study and is included in the recommendation for further studies. Testing and evaluation were conducted by the Stockroom Coordinator, Stockroom Assistants of the Physics Laboratory, Faculty of the Department of Mathematics and Physics, College of Engineering, and the Designer.

Significance of the Study

The low cost mini steam generator is advantageous to the University specifically to the Department of Mathematics and Physics because this equipment is much cheaper compared to the one used in the Physics Laboratory. The finished device is also advantageous to the students because it can provide them hands-on experience in their thermodynamics experiments.

Time and Place of the Study

The study was conducted in School Year 2005-2006 up to School year 2007-2008 at the Physics Stockroom, En203, College of Engineering, Central Philippine University, Jaro, Iloilo City.

METHODOLOGY

Conceptualization of the Design Trainer

The design is based on the block diagram of a given system shown in Figure 1 below. The simplified block diagram of the steam generator system is composed of seven blocks labeled with a name that corresponds to its specific function and operation, namely: the AC power supply, heater, boiler, water pump, water level controller, temperature indicator, and steam exhaust. The AC power is a 220V/60Hz that is used to supply the heater to heat the boiler to produce a steam. The water is automatically fed via a submergible water pump and it was controlled by a water level controller to ensure the correct level of water and to avoid shortage of water inside the boiler. The boiler was connected with a temperature sensor and indicator to properly monitor its temperature.

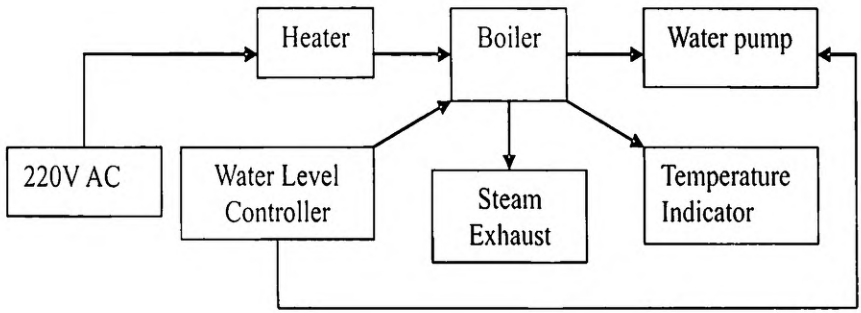

Figure 1. Block diagram

Construction of the Steam Generator

The construction of the steam generator was done at the Physics Stockroom, EN203 by the designer and the work students assigned in the laboratory.

Testing the Circuit Design and Pre-evaluation

The testing of the design was done at the EN203 Physics Stockroom, College of Engineering, Central Philippine University. The parameters

tested were the volume of the steam generated per unit time, and the minimum and maximum temperature.

Final Evaluation and Testing of the Finished Design

The final evaluation of the steam generator was again done at the EN203 Physics Stockroom. It was tested by the personnel from the Math and Physics Department during the week of continuous operations. During the evaluation and testing of the steam generator, the following instruments were used:

DMM (Digital Multimeter). METEX model M380 is a multimeter instrument used in measuring voltage, current, and resistance of a given circuit and component.

Power source. This is a line voltage that provides supply to the generator, connected to a 220VAC line.

Thermometer. This is used in the measurement of temperature to ensure accuracy of the control system.

Data Gathered

During the performance evaluation of the steam generator, the following data were gathered:

1. Power line voltage and load current
2. The minimum and maximum temperature
3. Steam flow generated per unit time

Parameters Analyzed

The parameters analyzed were the temperature, and the volume flow rate of the steam at specific temperature. Temperature was obtained using the built-in laboratory thermometer. On the other hand, the volume flow rate was obtained by confining the steam in a container for a certain period of time.

RESULTS

Operation

The power supply provides electricity of the proper voltage and current to the steam generator which operates at 220VAC/60Hz. The heater operated at 220V, 1000W with a current equivalent of 4.42A. The water level controller was supplied by 220VAC and was stepped down to 12V DC. The water level sensor detects the lower and upper level of water. It also controls the submersible pump. Once the water is below the water level, the submersible pump automatically turns ON and fills the boiler with water. Once the water reaches the upper level of the water sensor, the submersible water pump automatically turns off. The designed Low Cost Mini Electric Steam Generator is shown in Figure 2.

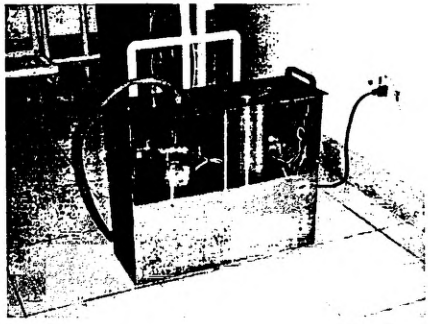

Figure 2. The designed low cost mini electric steam generator

Power Line Voltage and Load Current

Results of Testing and Evaluation show that the Low Cost Mini Electric Steam Generator operates at 227V AC power line voltage and with load current equivalent to 4.42A. The current was measured using a clamp meter and it shows that the current reading was 4.42A. This indicates that the heater is working properly. The power consumption of the heater was determined by multiplying the current reading with source voltage (P = IV). The computation reveals that power consumption is 1003.34W. The larger the power, the higher the energy consumption and the larger the steam it generated.

Minimum and Maximum Temperature

The pre-boiling temperature of 1.25 liters of water confined inside the stainless boiler was 280C. After 25 minutes of boiling, the temperature reached 1000C. At maximum temperature of 1000C, the steam flows to the steam outlet.

Steam Flow Generated per Unit Time

The average steam flow generated by the Low Cost Mini Electric Steam Generator after 3 trials was 225.2 g/min.This means that for every minute of operation, 225.2 g of steam flows out in the steam outlet. This steam flow is higher than the steam flow of the currently used steam generator which has an average rate of 28.4 g/min.

Table 1. Steam Flow Generated per Unit Time

Trials	Steam Generator Currently Used	Mini Electric Steam Generator
1	25.8g/min.	224.9g/min.
2	29.2g/min.	225.2g/min.
3	30.2g/min.	225.5g/min.
Average	**28.4g/min.**	**225.2g/min.**

DISCUSSION

The results of this study show a significant improvement as to the features and design compared to the equipment developed by PASCO Scientific, Inc. (from http://www.pasco.com.html). The result of the test using this equipment shows that in terms of the steam flow generated per unit time, the output of the newly designed equipment is almost nine times more than that of the currently used steam generator. In the coefficient of linear expansion experiment, the maximum scale reading was 0.6 cm which contributes 0.0625 cm change in the original length of the rod. The coefficient of linear expansion of the metal was 0.000014076/0C. In addition, the outcome of the design was also comparable to the design of the Barrett Steam Generator (from http://www.firedragon.com/~kap/Barrett/SteamGenerator1.html).

However, the Barrett Steam Generator can only be procured abroad while the newly designed equipment was made using locally available materials.

CONCLUSION

After three trials, the Low Cost Mini Electric Steam Generator is capable of producing steam at the rate of 225.2 g/min. That amount of steam generated is enough to meet the steam needed in the coefficient of linear expansion apparatus and other experiments related to the study of heat. The maximum temperature generated is 1000C, the boiling point of water. The controller can detect well the water level automatically with the water level sensor attached to the system preventing the overheating of the boiler. It can be concluded further that it was satisfactorily made and can meet the needs of the Physics Stockroom for experiments in thermodynamics.

RECOMMENDATION

Based on the results of tests, it is recommended that:

1. The water capacity of the boiler be reduced to make the boiling process fast. The circumference of the boiler must be as big as the hot plate in order to prevent heat loss.
2. It is also recommended that an insulator be placed outside the chamber of the reserve tank in order to prevent the submersible pump to deform because it gets hot once the hot plate is turned on.
3. A ¼ hp water pump with one way valve is also recommended for high pressure application such as in the Department of Mechanical Engineering of this University which uses high pressure of steam in their experiments related to Heat.
4. It is highly recommended to use aluminum chamber instead of stainless steel in order that the time needed to heat and boil will be shortened.

ACKNOWLEDGMENT

The authors wish to express their utmost gratitude to those who in one-way or another had contributed to the success of this study.

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ADAPTABILITY, MILLING RECOVERY AND EATING QUALITY OF FORTY MASIPAG RICE CULTIVARS GROWN UNDER CPU EXPERIMENTAL FARM CONDITIONS DURING WET SEASON PLANTING

Erlinda B. Famoso

ABSTRACT

The study was conducted from October 23, 2006 to January 15, 2007 at the CPU farm in Tuburan Sulbod, Zarraga, Iloilo to evaluate the 40 MASIPAG rice cultivars as to their adaptability, milling recovery and eating quality. The treatments consisted of forty MASIPAG rice selections and were laid out in randomized complete block design replicated three times. Results of the study revealed that cultivars M1111 and M7821 had the earliest maturity at 113 DAE while M1194 was the latest (134 DAE) to mature. M1222 was the tallest at 151 cm, while, SW01VR, M11111 and M2272 were the shortest. 10 AG and Prakmalis produced the most number of productive tillers (19), whereas, 5AG had the least (4). The least non-productive tillers (3) were obtained from M2782, M1201, M2112, M2413, Sampaguita, M1924, M2193 while M1152 R produced the most (10). Red Borong gave the highest plot yield of 1032 g/1m2 which is equivalent to 10910 kg/ha. This is 8954 to 9295 kg/ha higher than the yields of M5BD1, 5 AG, M1222, which were the lowest yielders. Simpocot and M1372 had the highest milling recovery, whereas, M130, M2084 and Elon Elon Red had the lowest. Most of the cultivars were classified as Grade 1 in terms of their chalky grains and only M2413 (with 10.2 % chalky grains) was classified as Grade 3. M11111 had the most immature grains (13.7%) and Prakmalis produced the longest grains. The majority of the cultivars produced short grains (5.2 to 6.8 mm) and grains with intermediate width. Among the 40 cultivars, only BR210, 10AG, Sampaguita and M130 retained their aroma after cooking. M37W, M2782, and M130 were tender when cooked and Elon Elon Red, M2193, and M2782 were rated as tasty.

INTRODUCTION

In the 1970 and 1980, enormous investments were made in fertilizer and pesticide intensive "green revolution" agriculture development approach. Starting in the 90's, the focus shifted to investment in biotechnology and genetic engineering.

Organic agriculture got less attention in the mainstream strategy in agriculture. Oftentimes, it was out-dismissed in the mainstream policy debate.

In the Philippines, the advocacy for sustainable agriculture was mainly espoused by development Non-Government Organizations (NGOs) and Private Organizations (POs) as an off-shoot of the farmers' experiences in the "green revolution era". In the mids 80s one of the most innovative works on rice farming was initiated by MASIPAG (Magsasaka at Seyentipiko Para sa Ikauunlad ng Agham Pang-agrikultura) group of development oriented scientist and workers together with farmer groups (from http://www.organicriceorg/orgrice industry.html).

The MASIPAG was first implemented as a program by a group called Multi-Sectoral Forum (MSF), a discussion group of national scientists from the University of the Philippines at Los Baños (UPLB) who opposed the wrong directions of the government under the late strongman, former President Ferdinand E. Marcos. Its advocates and practitioners had proliferated in most of Luzon's provinces and in the Visayas and Mindanao regions even as they confronted head-on the massive effort to embrace further the of HYV for commercial and mass production of rice.

The MASIPAG, now a nationwide coordinative body and network of scientists' and farmers' groups and non-government organizations, blamed the Green Revolution Program of Marcos for the disappearance of some 4,000 varieties of traditional rice all over the country. It further noted that the traditional practices that went with the propagation of traditional rice varieties also disappeared.

Now, after 20 years, the MASIPAG network have already retrieved some 600 varieties of lost traditional rice that are now circulated, shared and propagated nationwide totally without chemical or synthetic inputs. The traditional rice varieties that vary from black to light yellow to golden to bright brown, and from aromatic to sticky, are put into trial

propagation that requires assistance and cooperation from the other traditional rice variety advocates (from http://www.sunstar.com.ph/static/ilo/2005/12/05/bus/farmers.benefit.from.training.on.organic.rice.farming.technology.html). In a study conducted by Dusaran and Pabulayan (2002), most of the respondents fond the MASIPAG rice production technology as less expensive. The study further revealed that the most common MASIPAG rice selections the respondents preferred are Red Bolong and 5AG because of their high yield and good eating quality.

Organic rice is currently more expensive than conventional rice. As demand for organic rice increases, the cost of production should go down and there will be less need for marketing. Consumers who lead the way and patronize organic rice will reap the benefits from healthier and tastier meals right away (from http://www.organicriceorg/orgriceindustry.htm).

The study conducted by Famoso (2005) during wet season planting showed that among the 40 MASIPAG rice selections tested, M37 W gave significantly ($P<0.01$) higher yield of 5345 kg/ha. This was followed by M137 2 1 with 5237 kg/ha. The yields of these two selections were 15.9 to 33.5 % greater than the yields of other selections. Moreover, only these two selections exceeded the 5 t/ha national average yield of rice under Philippine conditions.

Arancon (1996, in PhilDHRRA, 2004) reported that some MASIPAG lines outyielded the check rice variety, PSB Rc 4. The corrected plot yield of MASIPAG cultivars ranged from seven to nine tons/ha for a two year experiment.

Despite the lack of moisture when the plants were in their maximum tillering to hard dough stages during the dry season planting, the yields of M137 2 1 and M37 W were 13.5 to 18.1 % higher than the wet season yields. Rice selections M137 2- 1 and M37 W in Group III were the highest yielders at 6187 and 6068 kg/ha, respectively (Famoso, 2006).

Lack of sunlight early in the growth and development of the rice plant normally does not limit grain yield except under excessively cloudy and cool conditions. However, panicle differentiation begins at a 42-day critical sunlight-requiring period. Low yields do occur in years of low sunlight caused by cloudy conditions and rain (Duy, Hirano, Sagawa & Kuroda, 2004).

Rice is a hygroscopic material and will change in moisture content in relation to temperature and the relative humidity of the surrounding air.

The moisture content of rough rice must be below 14 % before it can be safety stored. Rice is normally harvested at a moisture content of 20 % or more during the wet season. If the moisture content is not reduced to below 14 % shortly after threshing, grain quality deteriorates because of microbial activities and insect damage (Peng & Hardy, 2001).

One of the priority qualities of consumers for rice is its eating quality. The scented rice variety like Sampaguita is one of the potentials. However, very few efforts have been made to upscale the production (including research) where cultivation seems to be confined to limited pockets where farmers grow them for self-consumption or for special occasion (from http://www.organicriceorg/orgriceindustry.htm).

Milling recovery is the total milled rice obtained out of paddy. The maximum milling recovery is 69 to 70% depending on rice variety, but because of grain imperfections and the presence of unfilled grains, commercial millers are happy when they achieve 65% milling recovery. Village type rice mills have 55% or lower milling recovery (from http://www/org/ppfm/riceQuality/webhelp/OLY07.html).

Head rice recovery is the weight percentage of head rice (excluding brokens) obtained from a sample of paddy. Under controlled conditions head rice recovery can be as high as 84% of the total milled rice or 58% of the paddy weight. Commercial rice mills turn out 55% head rice on average, whereas head rice recovery of village type rice mills is in the order of 30% (from http://www/org/ppfm/ricequality/webhelp/OLY07.htm).

Grain quality determines the market price of rice. Rice varieties with low grain quality are not well accepted by farmers and consumers. Clear, vitreous, translucent kernels are demanded by all segments of the rice industry.

The nutritional value depends on the total quantity and quality of protein. Rice is an important source of protein and supplies more than 50% of the total protein consumed. However, the protein content of milled rice is relatively low. The milled rice proteins consist of at least 80 % or more of glutalin, 10 % globulin, and 5 % prolamin (Bangwaek, Vergara & Robles, 1994).

The protein content tends to be low when high solar radiations occur during grain development, and it is generally low in the dry season than in the wet season. The temperature, management and cultural practices during grain ripening is also reported to affect the protein content, as well

as growing of rice in the puddled and unpuddled soil, and the time of harvest and is generally low at early harvest as compared to late harvesting (Qiao-quan, Wang, Chen, Cai, Hong & Gu, 2000).

With different factors affecting the growth and eating quality of forty MASIPAG rice cultivars, this study was conducted.

Objectives of the Study

The general objective of the study was to evaluate the forty MASIPAG rice selections as to their adaptability, milling recovery and eating quality when grown under CPU experimental farm conditions during wet season planting. Specifically, the study aims to:

1. appraise the forty MASIPAG rice selections based on their agronomic characteristics and yield components,
2. evaluate the milling recovery and physical attributes of forty MASIPAG rice cultivars,
3. assess the sensory qualities of forty MASIPAG rice cultivars, and,
4. determine the various grain quality characteristics of the forty MASIPAG rice cultivars,

Time and Place of the Study

The study was conducted from October 23, 2006 to January 15, 2007 at CPU, Zarraga farm, at Tuburan Sulbod, Zarraga, Iloilo.

METHODOLOGY

Land Preparation and Layout

The total experimental area of 388.06 square meters was plowed twice using a spiral plow attached to the handtractor to thoroughly prepare the field. One week before transplanting, the field was plowed again and harrowed to level the field prior to transplanting. A day before transplanting, a carabao-drawn harrow was used to incorporate the two sacks of D and T compost (1.27 % N, 2.97 % P_2O_5, 0.83 % K_2O, 0.86 % Ca, 0.34 % Mg, 167.0 ppm Zn, 53.57 ppm Cu, 4.02 ppm Mn, 2.04 % Si and 24.38 % organic matter) as source of nutrients of seedlings. The total

area was divided into three blocks. Each block measuring 7.25 x 17.75 meters represented a replication. There were 40 plots per block, each measuring 1.5 x 1.5 meters. With a distance of 25 cm x 25 cm between hills, there was a total of 64 hills per plot. A one meter distance between blocks and 0.25 meter between plots were provided.

Experimental Treatments and design

The experiment was laid out in a randomized complete block design replicated three times. The 40 MASIPAG cultivars used as treatments were as follows:

1. Simpocot
2. Elon Elon Red
3. Binolongan
4. Azucena
5. M122 2
6. M12 21 B4
7. M241 3
8. M211 3
9. M227 2
10. M211 2
11. M202 5
12. BR-210
13. M120 1
14. M219 3
15. M208 4
16. M43 4 1
17. M137 2
18. Red Borong
19. 5AG
20. M11 20 3
21. M37-W
22. M115 2R
23. M78 2 1
24. M92 2 1
25. 10AG
26. M97 1 2
27. M126 1
28. M160 1
29. M192 4
30. M11-11 1
31. M5BD-1
32. GL3 1
33. Sampaguita
34. M278
35. M11 10 4
36. M119 4
37. Prakmalis
38. Dinorado
39. M130
40. SW 01VR

Collection of Seeds and Sowing of Seedling

Of the 40 MASIPAG rice cultivars, sixteen were collected from different farmer-members by MASIPAG personnel and handed to CPUCA. Twenty four other cultivars were collected from the 2006 dry season planting at Zarraga farm, Tuburan Sulbod, Zarraga, Iloilo. The seeds were soaked in clean tap water for 48 hours and were incubated at room temperature for another 48 hours. Water was changed every six

hours to avoid rotten odor during soaking. The pre-germinated seeds of each cultivar were sown in a prepared seedbed raised at 5 cm and measured 0.5 x 0.5 meter. Water was maintained at 2 cm depth for 18 days to facilitate pulling.

Pulling, Transplanting and Replanting

The 18 day-old seedlings were pulled and divided into three parts to ensure seedlings were distributed to each plot per replication. One seedling was planted per hill with a space of 25 x 25 cm between rows and between hills at a depth of 2 to 3 cm. Replanting was done one week after transplanting.

Irrigation

Three days after transplanting, irrigation water was admitted and maintained at the depth of 3 cm until the seedlings were well established. Water level was gradually increased to 5 cm depth during the late vegetative and reproductive stages. Two weeks before harvest, water was drained to hasten maturity of grains and also to facilitate harvesting.

Crop Protection

Leaf miners at seedling stage were controlled using madre de cacao leaves at the rate of 1.5 kg of chopped leaves per 3 liters of water. The chopped leaves were soaked overnight, strained, then the solution was sprayed late in the afternoon. Mollusks were hand picked from the experimental area to avoid losses of seedlings. Weeds were controlled by handweeding and one passing of rotary weeder.

Roguing

Removal of off-types or mixture of other cultivars was done from vegetative to maturity stages to see to it that all possible mixtures were removed before the crop was harvested. Off-types were cut close to the root system. Plants with different characteristics or exhibited any difference in agronomic characteristics than the majority of the plants in a plot were considered off-type.

Harvesting and Threshing

Harvesting was done when 80% of the total plants in the effective experimental area (1m x 1m) showed full maturity. Plants were considered mature when the leaves were yellowing and the panicles were drooping. Harvested panicles were placed in separate and properly labeled sacks and threshed immediately by foot trampling.

Drying

Threshed grains were sundried immediately on a sack spread on cemented ground for three to four times to less than 14% moisture since it was rainy season.

Seed Cleaning and Storage

Seeds were cleaned using a blower to remove light and diseased grains, plant parts and weed seeds. The seeds were placed in clean sacks properly labeled with its designated cultivar name and replication number and placed inside the storage room for sensory evaluation.

Milling of Rough rice

Seeds from the three replications with cultivar name were combined prior to milling. Traveling milling machine was tried at Jereos Street La Paz, Iloilo City. Only forty percent of the total rice seeds in each plastic bag was milled but not totally dehulled resulting in hard and non-sticky rice when cooked. The milled rice seeds in each plastic bag were winnowed and all the undehulled rice grains were collected and stored.

Data Collected

The following data were collected.

1. Days to maturity. Number of days to maturity was determined by counting the number of days from emergence up to the time when 80 % of the panicles were golden yellow.
2. Plant height. Ten sample plants randomly selected from each plot were measured from the ground level to the tip of the panicle using a

meter stick. Height was taken before harvest.

3. Number of productive and non-productive tillers. This was counted simultaneously with height measurement from ten randomly selected sample plants per plot. Tillers were considered productive when it developed at least 80 % filled grains while non-productive tillers were those that did not produce panicles.

4. Yield per plot. All plants from the five inner rows of each treatment were harvested for plot yield. After threshing, drying and cleaning, the grains from each plot were weighed using a Toledo platform balance keeping a separate data for each treatment. A digital moisture tester borrowed from Western Visayas Integrated and Agricultural Research Center (WESVIARC) was used for moisture content determination.

5. Corrected yield. Corrected yield in kilograms per hectare was computed using the formula:

$$\text{Corrected yield (kg/ha)} = \frac{\text{yield/plot (g)}}{1{,}000\ \text{g/kg}} \times \frac{10{,}000\ \text{m}^2/\text{ha}}{\text{plot area (m}^2\text{)}} \times \frac{100\ \text{AMC}}{100\ 14}$$

6. Milling potential. Milling potential of rough rice is the estimate of the quantityof total milled rice consisting of head rice and broken grains that can be produced from a unit of rough rice. To determine the milling yield, total yield available within three replications were combined and brought to the miller for milling. Head rice is the milled rice with length greater or equal to three quarters of the average length of the whole kernel. It is often expressed on a % paddy or rough rice basis (on 14% Moisture content basis).

The various components such as total milled rice and head rice were weighed to determine the milling yield and head rice recovery. Three 50-gram samples of milled rice were randomly collected from a plastic bag using three plastic cups and were used in calculating % head rice. Percent total milled rice and percent head rice were computed using the following formula:

$$\%\ \text{Total Milled Rice} = \frac{\text{weight of total milled rice (g)}}{\text{weight of rough rice (g)}} \times 100$$

$$\%\ \text{Head Rice} = \frac{\text{weight of head rice (g)}}{50\ \text{g}} \times 100$$

The milling potential was classified based on the following categories:

Milling potentials	Classification	Recommended value
% Total Milled Rice	Premium (Pr)	70.1 % and above
	Grade 1 (G1)	65.1 % - 70.0 %
	Grade 2 (G2)	60.1 % - 65.0 %
	Grade 3 (G3)	55.1% - 60.0 %
% Head Rice	Premium (Pr)	57.0 % and above
	Grade 1 (G1)	48.0 % - 56.9 %
	Grade 2 (G2)	39.0 % - 47.9 %
	Grade 3 (G3)	30.0 % - 38.9 %

7. Physical attributes. The physical attributes consisted of four parameters namely: % chalky grains, % immature grains, grain length and grain width. Chalky grains are whole or broken grains, one half or more of which is white like the color of chalk and is brittle. Immature grains are light green and chalky with soft texture. Grain length and grain width, on the other hand, are the length and width (in mm) of the rice grain.

a. Grain length and width. Grain length and width were determined by measuring the length and width of ten (10) whole milled grains from each replicate using a vernier caliper. Based on the average length and width, the grains were classified into the following categories:

Grain length(mm)	Category	Grain Width(mm)	Category
7.5 and above	Extra long(EL)	more than 3.0	Slender(S)
6.6- 7.4	Long (L)	2.0-3.0	Intermediate
5.5- 6.5	Medium (M)	less than 2.0	Bold (B)
5.4 and below	Short (S)		

b. Chalky and immature grains. Determination of percent chalky and immature grains was done by weighing three, 50-gram samples from the total milled rice. Each 50-gram sample represented a replication. Chalky and immature grains were separated from each replicate and weighed. Percent chalky and immature grains were calculated as follows:

$$\% \text{ Chalky Grains} = \frac{\text{weight of chalky grain (g)}}{50 \text{ g}} \times 100$$

$$\% \text{ Immature Grain} = \frac{\text{weight of immature grain (g)}}{50 \text{ g}} \times 100$$

Percent chalky and immature grains were classified based on the following categories:

Physical attributes	Classification	Recommended Value
% Chalky Grains	Premium (Pr)	< 2.0 %
	Grade 1 (G1)	2.0 % - 5.0 %
	Grade 2 (G2)	5.1 % - 10.0 %
	Grade 3 (G3)	10.1 % - 15.0 %
% Immature Grains	Premium (Pr)	< 2.0 %
	Grade 1 (G1)	2.0 % - 5.0 %
	Grade 2 (G2)	5.1 % - 10.0 %
	Grade 3 (G3)	10.1 % - 15.0 %

8. Determination of preference scores for sensory evaluation. This was evaluated by consumer panel. An information sheet was distributed and accomplished by each evaluator. Score cards were explained to the evaluators to minimize error in answering the said forms during the evaluation. A photocopy of detailed score card was attached to an information sheet for the evaluator to refer.

Cooked rice samples were prepared by washing the raw milled rice two times before cooking. A rice cooker was used in cooking the 40 MASIPAG rice cultivars following the ratio of 1:1 (1 cup rice and 1 cup water). Cooked rice samples were placed in a styrofoam plate with proper number of 40 MASIPAG rice cultivar. The name of each selection was placed at the bottom of the styrofoam plate. The samples were placed on top of the table according to the experimental design. Bottled water (350 ml) and a teaspoon were provided to each evaluator. For sensory evaluation, the score card shown in Appendix A was accomplished. The 40 MASIPAG cultivars were rated as to aroma, off-odor, color, gloss, cohesiveness, tenderness, texture, and taste based on the following categories:

Aroma	5 very aromatic
	4 aromatic
	3 moderately aromatic
	2 slightly perceptible aroma
	1 no aroma
Color	4 white
	3 creamish white
	2 grayish white
	1 white with reddish or other colored streaks
Cohesiveness	3 sticky
	2 distinct grains stick together

	1	separated
Texture	3	smooth
	2	slightly smooth
	1	rough
Taste	3	tasty
	2	slightly perceptible taste
	1	bland
Off odor	4	sack-like
	3	old-like
	2	moldy
	1	rancid
Gloss	3	glossy
	2	moderately glossy
	1	dull/no gloss
Tenderness	3	tender
	2	tough
	1	hard

Analysis of Data. All data collected except for the determination of preference score for sensory evaluation were statistically analyzed using the analysis of variance for a randomized complete block design. Significant differences among treatment means were determined using the Duncan's multiple range test at the 5% level of probability.

RESULTS

Number of Days from Emergence to Maturity

The data in Table 1 shows a wide variation on the number of days from emergence to maturity. Cultivars M11-11-1 and M78-2-1 matured significantly ($P< 0.05$) the earliest at 113 days. These were followed closely by M122-2, 10 AG and M278-2 which matured at 114 DAE; M115-2R, M192-4 which matured at 115DAE; and 5 AG and M11-10-4 which matured at 116 DAE. M137-2, GL3-1, M227-2, M291-3, M202-5, M11-20-3, M130 and M160-1 (117 DAE) matured one to two days earlier than M37-W, Azucena (118 DAE), M219-3, Dinorado, and M211-3 (119 DAE). These were 2 to 11 days earlier than the rest of the cultivars with maturity period ranging from 120 to 129 days. M119-4 was significantly ($P< 0.05$) the latest to mature at 132 days which is 19 days later than the maturity period of M11-11-1 and M78-2-1. Both Red

Borong and Sampaguita were harvested at 129 DAE which did not significantly differ from the maturity period of M11 11 1.

Table 1. Number of Days from Emergence to Maturity of 40 MASIPAG Rice Cultivars at Harvest.

Rice Cultivars	Mean	Rice Cultivars	Mean
Simpocot	125[f]	M37 – W	118[cd]
Elon Elon Red	127[g]	M115 – 2R	115[b]
Binolongan	126[fg]	M78 – 2 – 1	113[a]
Azucena	119[d]	M92 – 2 – 1	125[f]
M122 – 2	114[b]	10AG	114[b]
M12 – 21 – B4	128[g]	M97 – 1 – 2	127[g]
M241 – 3	117[c]	M126 – 1	122[de]
M211 – 3	119[d]	M160 – 1	117[c]
M227 – 2	117[c]	M192 – 4	115[b]
M211 – 2	123[e]	M11- 11 – 1	113[a]
M202 – 5	117[c]	M5BD – 1	126[fg]
BR - 210	125[f]	GL3 – 1	117[c]
M120 – 1	123[e]	Sampaguita	129[gh]
M219 – 3	119[d]	M278 – 2	114[b]
M208 – 4	126[fg]	M11 – 10 – 4	116[bc]
M43 – 4 – 1	124[ef]	M119 – 4	132[h]
M137 – 2	117[c]	Prakmalis	120[de]
Red Borong	129[gh]	Dinorado	119[d]
5AG	116[bc]	M130	117[c]
M11 – 20 – 3	117[c]	SW – 01VR	127[g]

[abcdefgh] Treatment means followed by the same letter superscript are not significantly different over each other at the 5% level of probability.

Plant Height

The Duncan's multiple range test on final height measurement of 40 MASIPAG cultivars revealed that M1222 was relatively the tallest at 151 cm, although this was almost the same as the heights of M2113, Azucena (149 cm), 10 AG (148 cm), and Red borong (147 cm). On the other hand, SWO1VR, M11111 and M2272 were significantly the shortest at 88 and 87 cm, respectively. Nine other cultivars namely; M1201, M11203, M2782, M9222, M5BD1, M11104, M1194 and M2193 had similar heights ranging from 94 to 99 cm. The rest of the cultivars had

average heights varying from 100 to 126 cm (Table 2). During height measurement, it was observed that some of the MASIPAG cultivars were as tall as the person taking the data. This was the characteristics of traditional varieties which were utilized as parentals of the tested cultivars.

Table 2. Average Plant Height of Forty MASIPAG Rice Cultivars at Harvest.

Rice Cultivars	Mean	Rice Cultivars	Mean
	--cm--		--cm--
Simpocot	124[d]	M37 – W	109[fg]
Elon Elon Red	138[b]	M115 – 2R	101[gh]
Binolongan	121[e]	M78 – 2 – 1	103[gh]
Azucena	149[a]	M92 – 2 – 1	94[h]
M122 – 2	151[a]	10AG	148[ab]
M12 – 21 – B4	133[cd]	M97 – 1-2	125[d]
M241 – 3	123[d]	M126 – 1	101[gh]
M211 – 3	149[a]	M160 – 1	121[e]
M227 – 2	87[i]	M192 – 4	94[h]
M211 – 2	126[d]	M11- 11 – 1	88[i]
M202 – 5	103[gh]	M5BD – 1	94[h]
BR - 210	116[ef]	GL3 – 1	123[d]
M120 – 1	99[h]	Sampaguita	107[fg]
M219 – 3	93[hi]	278 – 2	96[h]
M208 – 4	115[ef]	M11 – 10 – 4	94[h]
M43 – 4 – 1	113[af]	M119 – 4	94[h]
M137 – 2	124[ad]	Prakmalis	136[c]
Red Borong	147[ab]	Dinorado	121[e]
5AG	105[gh]	M130	122[e]
M11 – 20 – 3	96[h]	SW – 01VR	88[i]

[Abcdefghi]Treatment means followed by the same letter superscript are not significantly different over each other at the 5% level of probability.

Number of Productive and Non-productive Tillers

The 40 MASIPAG rice cultivars developed an average of 4 to 19

productive tillers while 10 AG and Prakmalis produced the most (19 and 16, respectively). Azucena ranked third with 14 productive tillers although, statistical analysis showed that they did not markedly differ with those of M130, M1194, M11104, M1152R and M2782 which produced 11 productive tillers. Dinorado which produced 10 productive tillers had comparable number of productive tillers to M2113, Sampaguita, M11203, M1201 and M2112 which produced eight. Eighteen cultivars had productive tillers ranging from 5 to 7 while 5 AG developed the least number of productive tillers with only four.

For the number of non-productive tillers, M1152R produced the most at 10 unproductive tillers which is comparable to that of Azucena (9 tillers) which ranked second. M126-1, M130, 5 AG, M2084, Simpocot and SW01VR produced between 6 to 7 non-productive tillers which are almost the same as those produced by seventeen cultivars except M2782, M1201, M2112, M2413, Sampaguita, M1924, and M2193 which produced the least of only 3 non-productive tillers. These results are all shown in Table 3.

Table 3. Number of Productive and Non-productive Tillers of MASIPAG Rice Cultivars at Harvest.

Rice Cultivars	Number of Tillers		Rice Cultivars	Number of Tillers	
	Productive	Unproductive		Productive	Unproductive
Simpocot	8^{d}	7^{b}	M37 – W	6^{f}	5^{bc}
Elon Elon Red	5^{g}	4^{e}	M115 – 2R	11^{c}	10^{a}
Binolongan	8^{d}	6^{b}	M78 – 2 – 1	5^{g}	6^{b}
Azucena	14^{bc}	9^{ab}	M92 – 2 – 1	6^{f}	4^{e}
M122 – 2	9^{d}	5^{bc}	10AG	19^{a}	6^{b}
M12–21–B4	7^{e}	4^{e}	M97 – 1 – 2	7^{e}	5^{bc}
M241 – 3	5^{g}	3^{d}	M126 – 1	9^{d}	7^{b}
M211 – 3	9^{d}	6^{b}	M160 – 1	8^{d}	5^{bc}
M227 – 2	9^{d}	5^{bc}	M192 – 4	7^{e}	3^{d}
M211 – 2	8^{d}	3^{d}	M11- 11 – 1	7^{e}	4^{e}
M202 – 5	6^{f}	4^{e}	M5BD – 1	6^{f}	5^{bc}
BR - 210	8^{d}	4^{e}	GL3 – 1	7^{e}	5^{bc}
M120 – 1	8^{d}	3^{d}	Sampaguita	9^{d}	3^{d}
M219 – 3	7^{e}	3^{d}	M278 – 2	11^{c}	3^{d}
M208 – 4	7^{e}	4^{b}	M11 – 10 – 4	11^{c}	6^{b}
M43 – 4 – 1	5^{g}	4^{e}	M119 – 4	11^{c}	4^{e}
M137 – 2	7^{e}	6^{b}	Prakmalis	16^{ab}	6^{b}
Red Borong	7^{e}	5^{bc}	Dinorado	10^{d}	6^{b}
5AG	4^{h}	7^{b}	M130	11^{c}	7^{b}
M11 – 20 – 3	8^{d}	4^{e}	SW – 01VR	6^{f}	6^{b}

^{abcdefghi} Treatment means followed by the same letter superscript are not significantly different over each other at the 5% level of probability.

Actual Plot Yield

The actual plot yield presented in Table 4 reveals that Red Borong produced a grain yield of 1032 g/1m^2 and outyielded the other 39 cultivars.

The yield of Red borong was 122 to 320 g/1m^2 higher than the yields of six cultivars namely; GL31 with 910 g/1m^2, M2112 with 888 g/1m^2, M11111 with 878 g/1m^2, SW01VR with 874 g/1m^2, 10 AG and M2025 with 827 g/1m^2. Moreover, Elon Elon Red (781 g/1m^2), M9712 (749 g/1m^2), M1601 (747 g/1m^2), M1372 (746 g/1m^2), M37W (745 g/1m^2), Azucena (713 g/1m^2) and M1201 (709 g/1m^2) produced significantly better yields than M5BD1 with only 389 g/1m^2 which obtained the lowest yield. Most of the cultivars yielded from 604 to 663 g/1m^2.

Eight cultivars had comparable performance from 509 to 558 g/plot which is 193 to 243 g/1m^2 higher than the yields of cultivars M1221B4, M2413, M9221, M2272, M11203, Binolongan, 5 AG and M1222 significantly produced the lowest yields.

Corrected Yield

When yield was converted to yield/ha, Red Borong gave significantly ($P < 0.05$) the highest corrected yield 10,910 kg/ha. GL31 ranked second at 8565 kg/ha but is comparable to M2112 at 8047 kg/ha. Cultivars M11-11-1 (7986 kg/ha), SW01VR (7873 kg/ha), M202-5 (7099 kg/ha), 10 AG (7068 kg/ha),and Elon Elon Red (6356 kg/ha) were 2924 to 4554 kg/ha lower than the corrected yield of Red Borong. Most of the cultivars gave a corrected yield ranging from 2000 to 5000 kg/ha. Eight cultivars namely, M5BD1with 1615 kg/ha, 5 AG with 1915 kg/ha, M1222 with 1956 kg/ha, M11-20-3 with 2212 kg/ha, M92-2-1 with 2233 kg/ha, M2272 with 2236 kg/ha, Binolongan with 2239 kg/ha and M130 with 2385 kg/ha gave significantly the lowest corrected yield (Table 5). The yield of Red Borong, the highest yielder, was from 8954 to 9295 kg/ha higher than the yields of M5BD1, 5 AG, M1222, which were the lowest yielders.

Table 4. Actual Plot Yield of Forty MASIPAG Rice Cultivars.

Rice Cultivars	Mean	Rice Cultivars	Mean
	g/m^2		g/m^2
Simpocot	628^{cd}	M37 – W	745^{bc}
Elon Elon Red	781^{bc}	M115 – 2R	536^{efg}
Binolongan	454^{gh}	M78 – 2 – 1	509^{fgh}
Azucena	713^{bc}	M92 – 2 – 1	465^{gh}
M122 – 2	422^{h}	10AG	827^{b}
M12 – 21 – B4	499^{fgh}	M97 – 1 – 2	749^{bc}
M241 – 3	494^{fgh}	M126 – 1	613^{d}
M211 – 3	542^{ef}	M160 – 1	747^{bc}
M227 – 2	464^{gh}	M192 – 4	604^{de}
M211 – 2	888^{b}	M11- 11 – 1	878^{b}
M202 – 5	827^{b}	M5BD – 1	389^{i}
BR - 210	550^{ef}	GL3 – 1	910^{ab}
M120 – 1	709^{bc}	Sampaguita	622^{d}
M219 – 3	663^{c}	M278 – 2	558^{ef}
M208 – 4	657^{cd}	M11 – 10 – 4	635^{cd}
M43 – 4 – 1	553^{ef}	M119 – 4	566^{efg}
M137 – 2	746^{bc}	Prakmalis	662^{cd}
Red Borong	1032^{a}	Dinorado	605^{de}
5AG	430^{h}	M130	483^{fgh}
M11 – 20 – 3	463^{gh}	SW – 01VR	874^{b}

^{abcdefghi} Treatment means followed by the same letter superscript are not significantly different over each other at the 5% level of probability.

Cultivars M1372 and M37W were the top yielders and the only cultivars out of the 40 tested that exceeded 5 tons/ha during the 2005 wet season planting and 6 tons/ha during 2006 dry season planting (Famoso, 2005 & 2006). In this study, however, these two cultivars ranked 9th and 10th with grain yields of only 5761 kg/ha and 5721 kg/ha. It can be noted that eight of the MASIPAG rice cultivars tested have yields higher than 6 tons/ha. Arancon (1996) reported that three of the MASIPAG lines outyielded the check rice variety, PSB Rc 4. The corrected yield (kg/ha) of MASIPAG cultivars ranged from 7 to 9 tons/ha for a two year experiment (from http://www.organicriceorg/ orgriceindustry.htm).

Table 5. Corrected Mean Yield of MASIPAG Rice Cultivars.

Rice Cultivars	Mean	Rice Cultivars	Mean
	kg/ha		kg/ha
Simpocot	4256[cd]	M37 – W	5721[bc]
Elon Elon Red	6356[bc]	M115 – 2R	2987[cfg]
Binolongan	2239[gh]	M78 – 2 – 1	2644[fgh]
Azucena	5236[bc]	M92 – 2 – 1	2233[gh]
M122 – 2	1956[h]	10AG	7068[b]
M12 – 21 – B4	2588[fgh]	M97 – 1 –2	5768[bc]
M241 – 3	2549[fgh]	M126 – 1	3854[d]
M211 – 3	3105[ef]	M160 – 1	5853[bc]
M227 – 2	2236[gh]	M192 – 4	3803[de]
M211 – 2	8047[b]	M11- 11 – 1	7986[b]
M202 – 5	7099[b]	M5BD – 1	1615[i]
BR - 210	3122[ef]	GL3 – 1	8565[ab]
M120 – 1	5183[bc]	Sampaguita	3982[d]
M219 – 3	4503[c]	M278 – 2	3268[ef]
M208 – 4	4495[cd]	M11 – 10 – 4	4264[cd]
M43 – 4 – 1	3172[ef]	M119 – 4	3301[efg]
M137 – 2	5761[bc]	Prakmalis	4511[cd]
Red Borong	10910[a]	Dinorado	3785[de]
5AG	1915[h]	M130	2385[fgh]
M11 – 20 – 3	2212[gh]	SW – 01VR	7873[b]

[abcdefghi] Treatment means followed by the same letter superscript are not significantly different over each other at the 5% level of probability.

Milling Potentials

The data in Table 6 show that the different cultivars had good milling and head rice recovery. Five cultivars had Grade 1 (with 65.1% to 70.0%) total milling recovery and eight cultivars fell generally under Grade 2 (60.1% to 65.0%); eleven cultivars had Grade 1 head rice recovery and fourteen cultivars under Grade 2. Most of the cultivars had Grade 3 (55.1% to 60.0%) total milled rice and head rice recoveries.

Simpocot and M1372 gave better percent milling recovery of 67.9; however, DMRT indicated that they did not markedly differ from M7821 (66%), M11203 (64.9%), M1601 (64.7%), M1221-B4 (64.3%), Dinorado (64.2%), SW01VR (63.6%), 5 AG (63.2%), M2112 (61.3%), 10 AG (60.9%), M2782 (60.8%) and M9712 (60.4%). Cultivar M9712 was closely followed by Sampaguita at 59.8 %. Thirteen cultivars had

50.7 to 58.8 % milling recovery while nine cultivars had 41.2 to 48.5%. Three cultivars, namely, M130 (39.4 %), M2084(35.7%) and Elon Elon Red (33.7%) gave the lowest milling recovery which were 28.5 to 34.2 % lower compared to those of Simpocot and M1372.

The head rice recovery of 40 Masipag rice cultivars ranges from 28.8% to 51.8%.

Table 6. Milling Potential of 40 MASIPAG Rice Cultivars.

Rice Cultivars	Milled Rice		Head Rice		Rice Cultivars	Milled Rice		Head Rice	
	Grade	%	Grade	%		Grade	%	Grade	%
Simpocot	1	67.9^{a}	1	48.9^{ns}	M37-W	3	56.8^{de}	3	31.8^{ns}
Elon Elon Red	3	33.7^{q}	1	48.5	M115-2R	3	58.1^{bc}	2	39.4
Binolongan	3	53.7^{g}	2	47.4	M78-2-1	1	66.0^{a}	3	28.8
Azucena	3	41.8^{n}	3	38.6	M92-2-1	3	56.3^{f}	3	34.6
M122-2	3	56.3^{f}	1	51.2	10AG	2	60.9^{a}	2	40.1
M12-21-B4	2	64.3^{a}	2	39.2	M97-1-2	2	60.4^{a}	2	41.8
M241-3	3	47.3^{jk}	3	38.4	M126-1	3	57.7c	1	51.8
M211-3	3	41.2^{no}	1	49.7	M160-1	2	64.7^{a}	2	45.6
M227-2	3	46.7^{kl}	2	46.4	M192-4	3	46.8^{jk}	3	36.9
M211-2	2	61.3^{a}	1	50.9	M11-11-1	3	41.3^{n}	2	47.6
M202-5	3	42.0^{m}	1	50.9	M5BD-1	3	54.3^{fg}	1	49.8
BR-210	3	58.8^{b}	3	37.7	GL3-1	3	57.4^{ef}	1	49.6
M120-1	3	52.2^{gh}	3	35.8	Sampaguita	3	59.8^{ab}	1	48.7
M219-3	3	49.1^{ij}	2	44.5	M278-2	2	60.8^{a}	3	33.9
M208-4	3	35.7^{p}	3	32.3	M11-10-4	3	51.0^{h}	3	34.7
M43-4-1	3	43.9^{lm}	1	50.3	M119-4	3	50.7^{hi}	2	43.9
M137-2	1	67.9^{a}	3	35.9	Prakmalis	3	56.5^{e}	2	41.6
Red Borong	3	48.5^{j}	3	37.8	Dinorado	2	64.2^{a}	3	33.8
5AG	1	63.2^{a}	2	40.0	M130	3	39.4^{op}	3	30.0
M11-20-3	1	64.9^{a}	2	39.6	SW-01VR	2	63.6^{a}	2	47.1

^{abcdefghijklmnopq} Treatment means followed by the same letter superscript are not significantly different over each other at the 5% level of probability.

^{ns} Not significant at the 5 % level of probability.

Physical Attributes

Except for M2413 which had 10.2% chalky grains and was categorized under grade 3, all cultivars were classified under either Grade 1 or Grade 2 (Table 7).

The higher the percentage of chalky grains, the poorer the quality of rice. None of the cultivars had premium classification under percent chalky grains. However, statistical analysis on percent chalky grains failed to show significant variations among the 40 cultivars.

In terms of percent immature grains, M11111 produced the most at 13.7% which was closely followed by M1221B4 with 12.4 % and M1152R with 12.3%. The amount of immature grains produced by M2025, M1601, Dinorado and Sampaguita were about the same (11.1 to 11.7%). The rest of the cultivars had percent immature grains ranging from 3.0 to 10.9. This shows that the cultivars were classified either as Grade 2 or Grade 3 and none was classified under premium.

Seventeen out of the forty Masipag cultivars had long grains (from 7.0 to 7.5 mm) Prakmalis had the longest grains at 7.5 mm, followed by M11203 (7.3 mm), M11104, M5BD1 (7.2 mm) and M2272, M1201, 5 AG, 10 AG, M1601, M1924 and M130 all of which had mean grain length of 7.0 mm. Twenty three other cultivars had medium grain length ranging from 5.2 mm to 6.8 mm (Table 7).

Table 7. Physical Attributes of 40 MASIPAG Rice Cultivars.

Rice Cultivars	Chalky Grains		Immature Grains		Grain Length		Grain Width	
	Grade	%	Grade	%	Class	mm	Class	mm
Simpocot	2	9.0^{ns}	3	10.5^{c}	M	5.8^{e}	I	2.3^{b}
Elon Elon Red	1	3.8	2	9.1^{fg}	M	6.0^{de}	I	2.0^{c}
Binolongan	2	9.9	1	4.0^{m}	M	6.3^{cd}	I	2.0^{c}
Azucena	1	5.0	2	8.1^{h}	M	5.8^{e}	I	2.0^{c}
M122-2	2	8.2	2	6.7^{h}	M	6.3^{cd}	I	2.2^{bc}
M12-21-B4	1	4.6	3	12.4^{ab}	M	6.3^{cd}	I	2.0^{c}
M241-3	3	10.2	2	6.6^{ik}	M	6.0^{de}	I	2.5^{a}
M211-3	2	7.3	1	4.9^{l}	M	6.0^{de}	I	2.3^{b}
M227-2	2	5.8	2	7.0^{j}	L	7.0^{a}	I	2.0^{c}
M211-2	2	6.0	2	9.6^{ef}	M	6.0^{de}	I	2.0^{c}
M202-5	1	8.0	3	11.5^{b}	M	6.2^{d}	I	2.5^{a}
BR-210	1	4.4	2	10.0^{de}	M	6.2^{d}	I	2.0^{c}
M120-1	2	5.4	2	8.8^{gh}	L	7.0^{a}	I	2.0^{c}
M219-3	1	4.8	1	4.0^{m}	L	6.8^{b}	I	2.0^{c}
M208-4	2	5.9	1	3.6^{mn}	L	6.7^{b}	I	2.5^{a}
M43-4-1	2	6.9	1	4.8^{l}	M	5.7^{ef}	I	2.5^{a}
M137-2	2	6.8	1	4.5^{lm}	L	6.7^{b}	I	2.0^{c}
Red Borong	2	6.4	3	10.4^{cd}	M	5.5^{f}	I	2.5^{a}
5AG	2	7.8	1	3.9^{m}	L	7.0^{a}	I	2.5^{a}
M11-20-3	2	5.6	1	4.7^{l}	L	7.3^{a}	I	2.0^{c}
M37-W	2	9.9	2	7.9^{ij}	M	6.2^{d}	I	2.3^{b}

Table 7 Continued

Rice Cultivars	Chalky Grains		Immature Grains		Grain Length		Grain Width	
	Grade	%	Grade	%	Class	mm	Class	mm
M115-2R	1	3.7	3	12.3^{ab}	M	5.7^{ef}	I	2.5^{a}
M78-2-1	2	6.3	1	3.9^{m}	M	5.7^{ef}	I	2.0^{f}
M92-2-1	2	8.4	1	3.8^{m}	M	6.2^{cd}	I	2.0^{f}
10AG	2	5.6	1	4.1^{m}	L	7.0^{a}	I	2.0^{f}
M97-1-2	1	4.5	3	10.9^{bc}	L	6.7^{b}	I	2.0^{f}
M126-1	2	7.7	1	3.8^{m}	L	6.7^{b}	I	2.0^{f}
M160-1	1	4.2	3	11.1^{b}	L	7.0^{a}	I	2.0^{f}
M192-4	1	4.2	1	4.2^{m}	L	7.0^{a}	I	2.0^{f}
M11-11-1	2	8.6	3	13.7^{a}	M	6.2^{cd}	I	2.3^{b}
M5BD-1	1	4.5	2	5.1^{k}	L	7.2^{a}	I	2.5^{a}
GL3-1	2	6.2	2	5.7^{kl}	M	6.0^{de}	I	2.0^{f}
Sampaguita	1	4.7	3	11.5^{b}	M	6.0^{de}	I	2.3^{b}
M278-2	2	5.9	1	3.0^{o}	M	6.3^{cd}	I	2.0^{f}
M11-10-4	2	9.5	2	9.8^{e}	L	5.9^{g}	I	2.0^{a}
Prakmalis	2	5.4	2	6.7^{j}	L	7.5^{a}	I	2.0^{f}
Dinorado	2	6.8	3	11.7^{b}	L	6.7^{b}	I	2.3^{b}
M130	2	4.7	1	3.8^{mn}	L	7.0^{g}	I	2.2^{bc}
SW-01VR	1	4.9	1	4.0^{m}	M	6.5^{c}	I	2.0^{f}

^{abcdefghijklmno}Treatment means followed by the same letter superscript are not significantly different over each other at the 5% level of probability.

M Medium (5.5 to 6.5 mm)
L Long (6.6 to 7.4 mm)
I Intermediate (2.0 to 3.0 mm)

All cultivars had intermediate (I) grain width which ranges from 2.0 to 2.5 mm. The widest (2.5 mm) were obtained from nine cultivars namely; M2413, M2025, M2084, M4341, Red Borong, 5 AG, M1152R, M5BD1 and M1194.

Sensory Description

The sensory descriptions of 40 Masipag rice cultivars are presented in Table 8. All cultivars were perceived to be aromatic when cooked because during milling and cooking, these already emitted aroma. However, when the cooked rice cooled, only BR210, 10 AG, Sampaguita and M130 maintained their aroma. Eleven cultivars were slightly

aromatic, twelve were moderately aromatic and thirteen had no aroma.

Almost of the cultivars have an old-like and no-off odor. Three cultivars, namely, Dinorado, M2272 and M2112 had sack-like odor while M2413 smelled like cockroach.

As to their color, twelve cultivars were grayish white, ten were creamiest white, five were reddish and maroon, and the rest were light brown, pinkish and brown. Mixture in color rating was observed because of the continuous milling of the 40 cultivars. The milling machine could not be totally cleaned before milling another cultivar.

Only M5BD1 had a slightly glossy appearance while the rest of the cultivars were either moderately glossy or had dull appearance. The dull appearance could be mainly due to the milling process where the grains were unproperly dehulled resulting in non-sticky, hard to tough rice. Only M37W, M2782, and M130 were tender when cooked. The panelists observed that upon conducting the sensory evaluation they experienced itchy throat which was mainly due to the pericarp. The presence of the pericarp is attributed to the inability of the milling machine to properly dehull the rough rice since only a very small amount of the rough rice was used for milling.

As to texture, only three cultivars M227-2, M115-2R and M130 were rated as smooth, sixteen cultivars were slightly smooth and the rest were rated as rough.

Three out of the 40 MASIPAG cultivars Elon Elon Red, M2193, and M2782 were rated as tasty. The rest were rated either as bland or slightly perceptible (Table 8).

Table 8. Sensory Description of Cooked MASIPAG Rice Cultivars.

Rice Cultivars	Aroma	Off-odor	Color	Gloss
Simpocot	MA	old-like	reddish	mod. glossy
Elon Elon Red	MA	none	light brown	dull
Binolongan	SA	none	grayish white	dull
Azucena	SA	old-like	maroon	dull
M122–2	NA	none	maroon	dull
M12–21–B4	SA	none	creamiest white	dull
M241–3	NA	cockroach-like	grayish white	dull
M211–3	MA	old-like	creamiest white	dull
M227–2	NA	sack-like	grayish white	dull

Table 8 Continued

Rice Cultivars	Aroma	Off-odor	Color	Gloss
M211–2	MA	sack-like	grayish white	dull
M202–5	NA	old-like	grayish white	dull
BR-210	A	old-like	reddish	dull
M120–1	NA	none	grayish white	dull
M219–3	MA	none	brown	mod. glossy
M208–4	MA	none	pinkish	dull
M43–4–1	NA	none	pinkish	mod. glossy
M137–2	SA	none	grayish white	mod. glossy
Red Borong	MA	old-like	reddish	dull
5AG	SA	none	maroon	dull
M11-20-3	SA	old-like	creamiest white	dull
M37-W	MA	none	grayish white	mod. glossy
M115-2R	SA	old-like	maroon	mod. glossy
M78-2-1	NA	none	creamiest white	dull
M92-2-1	MA	old-like	grayish white	mod. glossy
10AG	NA	none	creamiest white	dull
M126-1	NA	moldy	grayish white	dull
M160-1	NA	none	creamiest white	dull
M192-4	NA	none	creamiest white	mod. glossy
M11-11-1	SA	none	light maroon	slightly glossy
M5BD-1	NA	old-like	grayish white	mod. glossy
GL3-1	MA	none	reddish	dull
Sampaguita	A	moldy	brown	dull
M278-2	NA	none	creamiest white	mod. glossy
M11-10-4	MA	old-like	creamiest white	dull
M119-4	SA	old-like	redish	dull
Prakmalis	SA	old-like	brown	mod. glossy
Dinorado	MA	sack-like	grayish white	dull
M130	A	none	creamiest white	mod. glossy
SW-01VR	SA	none	light brown	dull

A - Aromatic
MA - Moderately Aromatic
SA - Slightly Aromatic
NA - No Aroma

Table 8. Sensory Description of Cooked MASIPAG Rice Cultivars.

Rice Cultivars	Cohesiveness	Tenderness	Texture	Taste
Sinpocot	separated	hard	rough	slightly perceptible
Elon Elon Red	distinct grains stick together	hard	rough	tasty
Binolongan	distinct grains stick together	hard	rough	bland
Azucena	separated	hard	rough	slightly perceptible
M122-2	separated	hard	rough	bland
M12-21-B4	separated	hard	rough	bland
M241-3	distinct grains stick together	hard	rough	slightly perceptible
M211-3	distinct grains stick together	hard	rough	bland
M227-2	distinct grains stick together	hard	rough	bland
M211-2	separated	hard	rough	slightly perceptible
M202-5	distinct grains stick together	hard	smooth	bland
BR-210	distinct grains stick together	tough	slightly smooth	rawtaste
M120-1	distinct grains stick together	tough	rough	slightly perceptible
M219-3	distinct grains stick together	hard	rough	tasty
M208-4	distinct grains stick together	tender	slightly smooth	slightly perceptible
M43-4-1	separated	hard	rough	slightly perceptible
M137-2	separated	hard	slightly smooth	slightly perceptible
Red Borong	distinct grains stick together	tough	slightly smooth	bland
5AG	distinct grains stick together	tough	slightly smooth	slightly perceptible
M11-20-3	distinct grains stick together	hard	rough	slightly perceptible
M37-W	separated	tender	slightly smooth	slightly perceptible

Table 8 continued

Rice Cultivars	Cohesiveness	Tenderness	Texture	Taste
M115-2R	distinct grains stick together	hard	smooth	slightly perceptible
M78-2-1	separated	tough	slightly smooth	slightly perceptible
M92-2-1	distinct grains stick together	tough	rough	bland
10AG	distinct grains stick together	tough	rough	bland
M97-1-2	separated	hard	slightly smooth	slightly perceptible
M126-1	separated	tough	slightly smooth	slightly perceptible
M160-1	distinct grains stick together	tough	slightly smooth	slightly perceptible
M192-4	distinct grains stick together	tough	rough	bland
M11-11-1	separated	hard	rough	bland
M5BD-1	separated	hard	rough	bland
GL3-1	separated	tough	slightly smooth	bland
Sampaguita	distinct grains stick together	tough	slightly smooth	slightly perceptible
M278-2	distinct grains stick together	tender	slightly smooth	tasty
M11-10-4	separated	hard	rough	bland
M119-4	distinct grains stick together	tough	slightly smooth	slightly perceptible
Prakmalis	distinct grains stick together	tough	rough	slightly perceptible
Dinorado	separated	rough	slightly smooth	slightly perceptible
M130	distinct grains stick together	tender	smooth	slightly perceptible
SW-01VR	separated	hard	rough	slightly perceptible

DISCUSSION

The findings of this study show that there are MASIPAG rice selections which are high yielding, early maturing, resistant to pests and weeds; have good eating quality, low seed requirement and good stand; need no chemicals and fertilizers; and can adapt to the local climate. These results are supported by the findings of two previous studies by the author (Famoso, 2005; Famoso, 2006) where some of the MASIPAG rice selections have the above-mentioned favorable characteristics and that the yields of two selections exceeded the 5 t/ha national average yield of rice. The results from this study also confirm the preference of farmers

for MASIPAG rice selection with high yield and good eating quality (Dusaran & Pabulayan, 2002).

It is a fact that consumer preference for rice is largely based on eating quality which includes the aroma. All the 40 selections were adjudged as aromatic. However, only BR 210, 10 AG, Sampaguita and M130 maintained their aroma when the cooked rice has cooled. This result on Sampaguita is supported by the findings of Arancon (1996 in PhilDHRRA, 2004).

CONCLUSIONS

Based on the above observations, it is concluded that rice cultivar Red Borong is highly adaptable to the CPU farm conditions and could be grown there. Red Borong can be grown for its high grain yield. BR210, 10 AG, Sampaguita and M130 can also be grown for their aroma; and M37-W, M278-2 and M130 for their tenderness; and Elon Elon Red, M219-3 and M278-2 for their taste.

RECOMMENDATIONS

It is recommended that another trial for dry season planting be conducted to further assess and compare the agronomic and yield characteristics, milling recovery, and eating quality of these cultivars.

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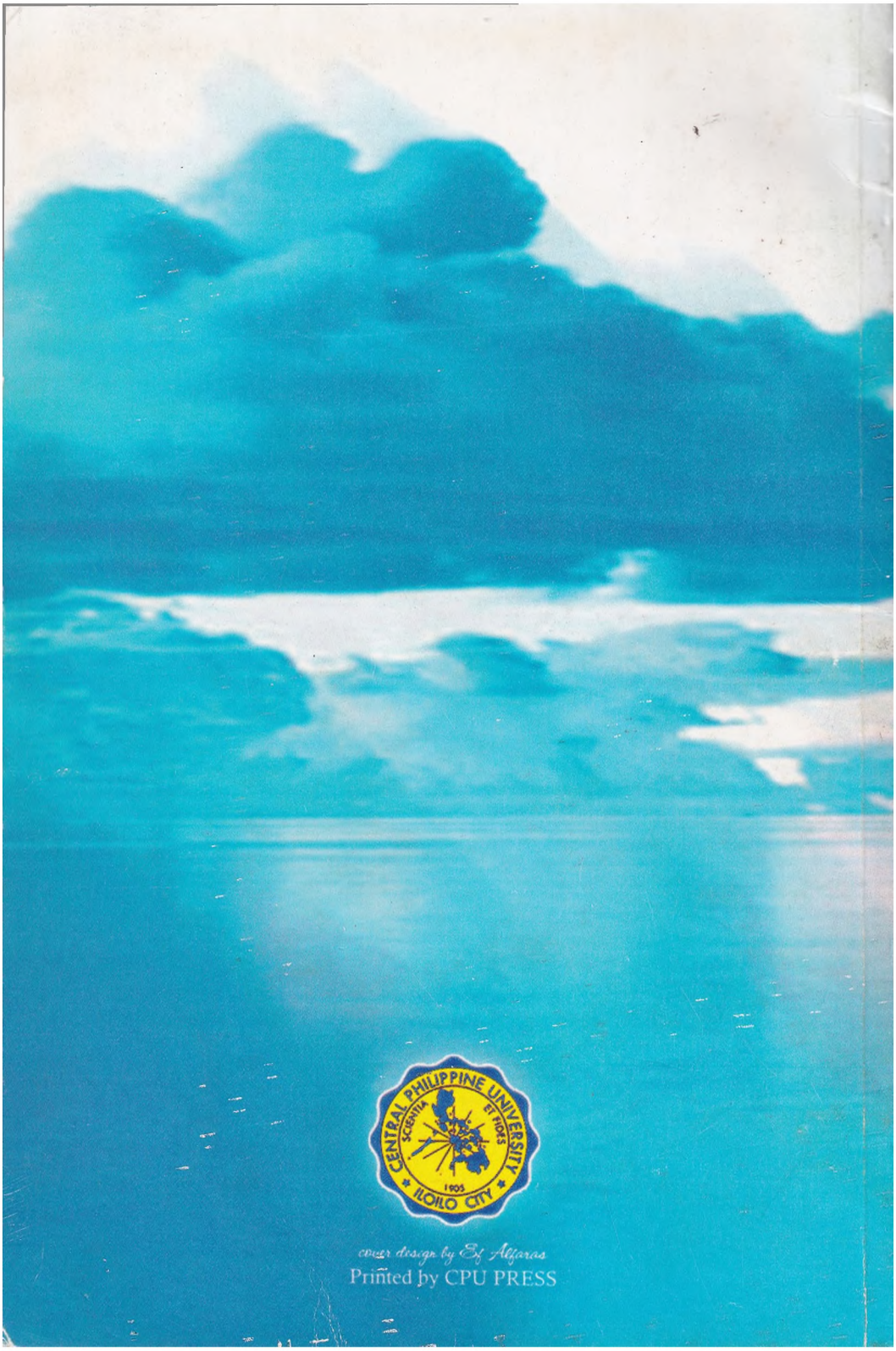

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