
# MS HORTICULTURE

## AREA II

**Graduate School, University of Southern Mindanao**

AACCUP Accreditation

September 9-11, 2026

# TABLE OF CONTENT

# AREA II: PERFORMANCE OF GRADUATES


## ABSTRACT

### UNIVERSITY OF SOUTHERN MINDANAO GRADUATE TRACER STUDY: INPUT FOR INSTITUTIONAL QUALITY ASSURANCE

*Riceli C. Mendoza, Nora B. Bolences, Julius Jerome G. Ele, Jonald L. Pimentel, Jeannie U. Duka, Ma. Lezel P. Pataray, Ivy Mar Cabornida, Melecio C. Cordero, Jr., Elizabeth Molina, Manuel J. Tayong, Emmalyn Mamaluba, Abdulnasser G. Makalugi, Norge D. Martinez, Ronielyn F. Pinsoy & Leorence C. Tandog.*

This third phase of graduate tracer study is spurred with the desire to initiate and entrench GTS as means by which quality assurance in the university is achieved. Since the dynamics of employment is dependent on the kind of competencies needed, universities have to be forward looking to address and engineer desirable changes. In light with the current issue, this study is conducted to determine the employability of USM graduates and enhancement of program offered by the university in order to meet the changing educational, socio-economic, industrial and technological demands on the new century. This study used descriptive survey method involving graduates from 2018-2021. As of data gathering, 52.05% of the expected 20% of the total graduates were able to answer the questionnaire crafted by the Commission on Higher Education (CHED) and slightly modified for the purpose of the study. Said research instrument was sent in google forms where data from all responses were available immediately after each form submission in the responses tab.

Results revealed that there were 1, 041 undergraduate respondents who answered the survey questionnaire where 63.21% of them were females while 36.79% were males. A greater percentage (82.32%) of the respondents were gainfully employed with 55.52% of them had jobs related to the course completed and only 17.68% were unemployed.

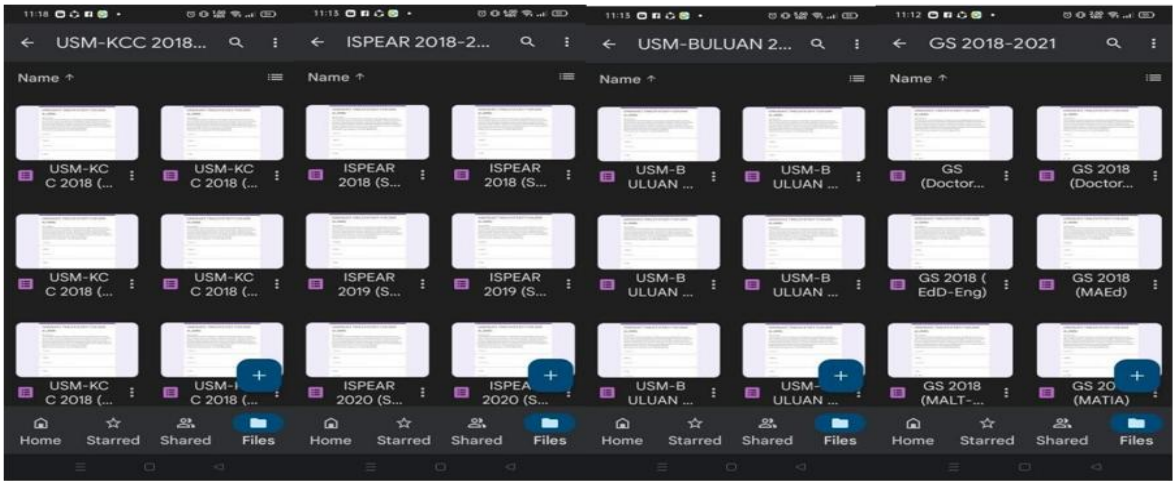
Concurrently, 93 post-graduates respondents were able to answer the survey questionnaire with 74.19% female and 25.81% male. Most of them were teachers, instructors and professors. For the undergraduates respondents , 79.35% were very much satisfied with the degree's flexibility/adaptability; 65.03% strongly agreed with the respect being shown to them in their learning environment and 85.40% identified library as the most adequate facility in the university. Moreover, being computer literate had prepared them for being employed. Having communication skills helped them in their present job . On respondents perception on

competencies, the following results revealed that a) 72.91% asked questions for clarification from the appropriate source b.) 72.91%) tried to find the best method to do a given job c) 37.85% believed that every person in the world should be treated equally d) 71.57% was on values and e) the content of the curriculum offered was considered to be the university's most observed strength. However, exchange programs was identified as weak area. In terms of communication skills, most respondents could express themselves easily and as graduates, they considered themselves as compliant, determined and flexible. It was true that (41.69%) of the respondents agreed that respecting opponent/s was part of their teamwork and problem- solving skills while (67.92%) of them believed that teamwork was best when everyone was involved in taking decisions as part of their leadership skills.

For the post graduates, all respondents were employed; 35.48% were very much satisfied with their job and 81.72% of the respondents had jobs related to their post graduate degree. A great majority (80.65% ) rated that academic knowledge had the highest contribution of their degree at USM, and more than half ( 62.37%) answered expanding knowledge of fields related to the current areas of professional specialization as a reason for pursuing post graduate at USM. After earning their post graduate, 83.87% continued working as employees or stay in their current job. In terms of the learning environment, 76.34% strongly agreed in showing respect to a person and 86.02% identified classrooms as the university's most adequate facility. On the perception of competencies, values and skills, there were 69.89% of them answered admitting to mistakes; 69.89% believed that every person in the world should be treated equally, and 39.78% considered solving a problem focusing on its main point. Results further showed that respondents affirmed that they could express themselves easily and 91.39% considered themselves as calm, happy, compatible and cooperative. It was true to the 56.99 of the respondents that respecting opponent/s was part of their teamwork and problem-solving skills while 69.89% believed that teamwork was best when involving everyone in taking decisions as part of the leadership skills .

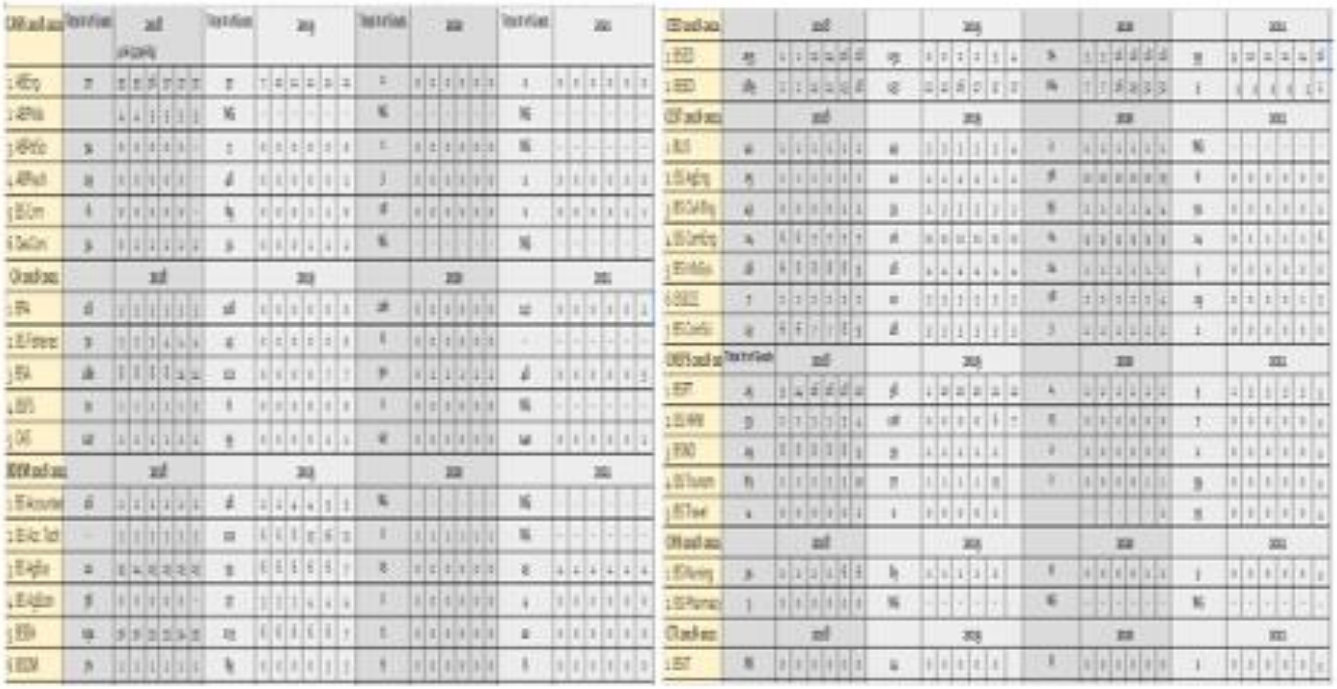
Keywords: graduate tracer study, level of satisfaction, learning environment, relevance of curriculum, and competencies


- Questionnaires transferred in Google Forms for baccalaureate and graduate degree. Sorted per program offered in all colleges at USM-Kabacan, Buluan and KCC from year 2018 to 2021.



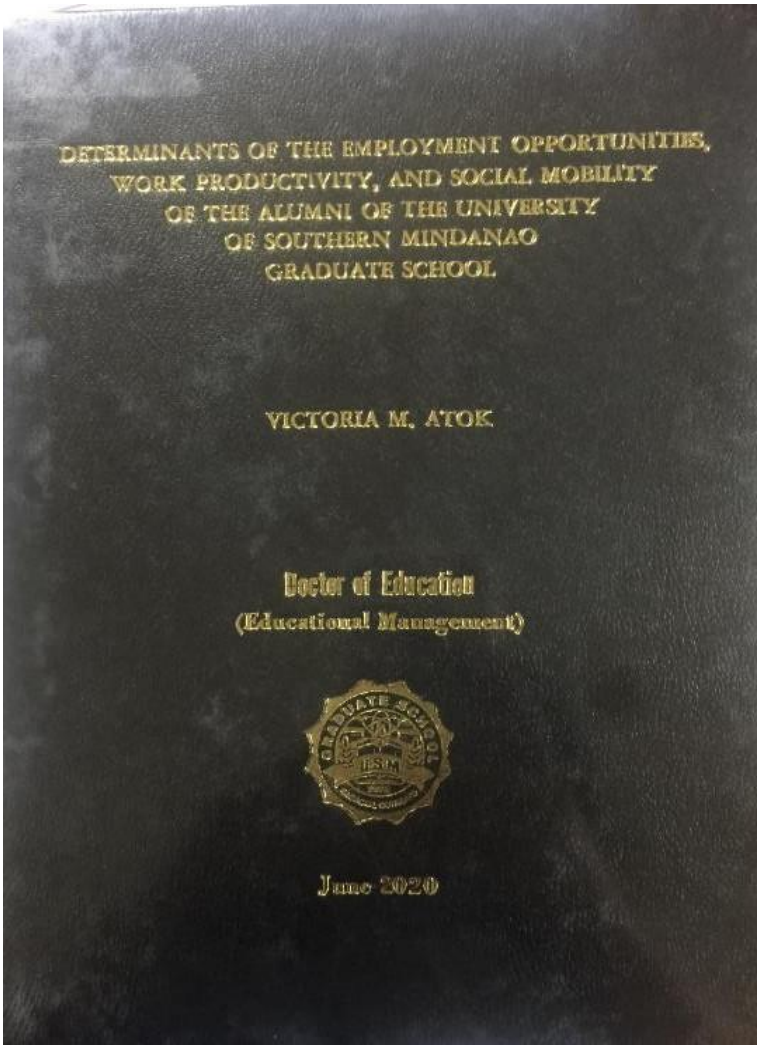

- Meeting for Faculty and Full-time Researchers conducted by the RDO to discuss the progress and fund utilization of the research, as well as the preparation for the Mid-year In-house Review.

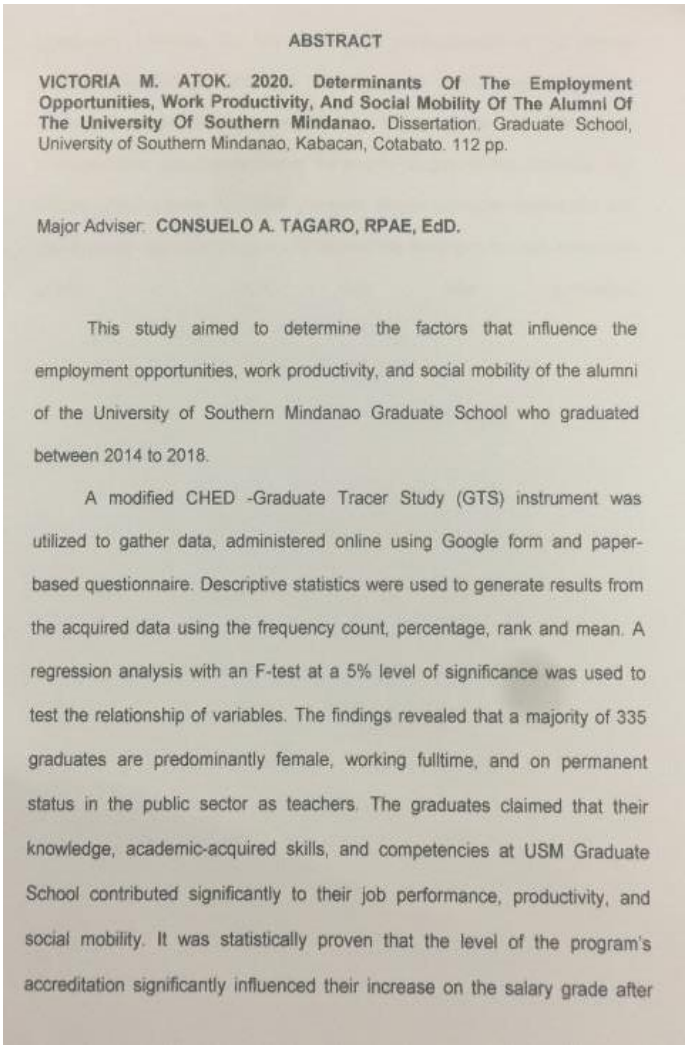
- Created Tally sheet for the monitoring of responses



- Data of all responses generated in spreadsheets

# Tracer Study



ABSTRACT

VICTORIA M. ATOK. 2020. **Determinants Of The Employment Opportunities, Work Productivity, And Social Mobility Of The Alumni Of The University Of Southern Mindanao.** Dissertation. Graduate School, University of Southern Mindanao, Kabacan, Cotabato. 112 pp.

Major Adviser: **CONSUELO A. TAGARO, RPAE, EdD.**

This study aimed to determine the factors that influence the employment opportunities, work productivity, and social mobility of the alumni of the University of Southern Mindanao Graduate School who graduated between 2014 to 2018.

A modified CHED -Graduate Tracer Study (GTS) instrument was utilized to gather data, administered online using Google form and paper-based questionnaire. Descriptive statistics were used to generate results from the acquired data using the frequency count, percentage, rank and mean. A regression analysis with an F-test at a 5% level of significance was used to test the relationship of variables. The findings revealed that a majority of 335 graduates are predominantly female, working fulltime, and on permanent status in the public sector as teachers. The graduates claimed that their knowledge, academic-acquired skills, and competencies at USM Graduate School contributed significantly to their job performance, productivity, and social mobility. It was statistically proven that the level of the program's accreditation significantly influenced their increase on the salary grade after

In the study of Atok (2020), 99.4 of the graduates of USM graduates are employed, about 64% indicated that they landed their First employment upon finishing graduate studies at USM

## 2.1 EMPLOYABILITY AND WORK PERFORMANCE OF THE MS IN HORTICULTURE (2016-2026)

Based on the 29 MS in Horticulture graduates listed in Table 1A, all graduates are employed or engaged in professional work. This gives an overall employability rate of 100% (29 out of 29 graduates). The graduates are employed in universities, government agencies, DepEd, international organizations, and other institutions, with several occupying academic, administrative, research, agricultural, and technical positions.

### Tracer Narrative Report on the Employability of MS in Horticulture Graduates

Table 1A presents the employability of graduates of the Master of Science in Horticulture (MS Horticulture) program based on their year of graduation, current position/designation, nature of appointment, and employing agency. The tracer data demonstrate a 100% employment rate among the 29 graduates included in the report, indicating that all graduates have successfully transitioned into employment or professional engagement after completing the program.

The graduates demonstrate diverse and relevant career pathways in the academe, government service, basic education, agricultural development, research, and technical fields. A substantial number have established careers in higher education institutions, including the University of Southern Mindanao (USM), North Eastern Mindanao State University (NEMSU), Cotabato Foundation College of Science and Technology (CFCST), Southern Philippines Agri-Business and Marine and Aquatic School of Technology, South Cotabato State College, Sultan Kudarat State University, and Davao del Sur State College. Several graduates have progressed to the ranks of Associate Professor and Assistant Professor, while others have assumed program head, campus coordinator, dean, research unit head, and other administrative responsibilities.

The tracer results also show that the MS Horticulture graduates are contributing to government and public-sector agricultural development. For example, graduates are employed as agriculturists and teachers under government agencies, while others hold technical and coordination positions. One graduate is serving as a Project Coordinator/Agriculture Technologist Specialist with the FAO-UN, demonstrating the applicability of the degree beyond the local and academic setting. The employment records further indicate that the program develops graduates who are capable of assuming leadership and specialized responsibilities. Several graduates serve as school heads, learning area coordinators, program heads, research coordinators, deans, campus coordinators, and other institutional officials. These positions reflect the graduates' professional advancement and the relevance of their horticultural knowledge and graduate-level training to their respective workplaces.

The distribution of graduates by year also demonstrates sustained employability. The 2013 graduates recorded a 100% employment rate, as did the graduates from 2016, 2019, 2020, 2025, and 2026. Although the 2026 graduates are recent graduates, all five listed graduates have already secured professional positions or engagements, reflecting the strong employment prospects of MS Horticulture graduates.

**Employability Summary**

| Year Graduated | No. of Graduates | Employed | Employment Rate |
|---|---|---|---|
| 2013 | 2 | 2 | **100%** |
| 2016 | 4 | 4 | **100%** |
| 2019 | 14 | 14 | **100%** |
| 2020 | 3 | 3 | **100%** |
| 2025 | 1 | 1 | **100%** |
| 2026 | 5 | 5 | **100%** |
| **Total** | **29** | **29** | **100%** |

The tracer study provides strong evidence that the **MS in Horticulture program has excellent graduate employability**, with **100% of the 29 documented graduates employed or professionally engaged**. The graduates have secured positions in academic institutions, government agencies, DepEd, international organizations, and agricultural and technical sectors. Moreover, the presence of graduates in higher academic ranks and administrative positions demonstrates not only employability but also **career progression and professional advancement**.

This result indicates that the MS Horticulture program provides **relevant, market-responsive, and career-enhancing graduate education**, equipping its graduates with competencies that are applicable to teaching, research, agricultural production, extension, administration, and other professional functions. The sustained employment of graduates across different cohorts further supports the program's contribution to **human resource development and the advancement of horticulture and agricultural development in the Philippines**.

The table below presents the list of MS Horticulture alumni who have demonstrated outstanding professional performance and/or have attained significant positions in their respective organizations.

**Table 1A. Employability of MS in Horticulture Graduates**

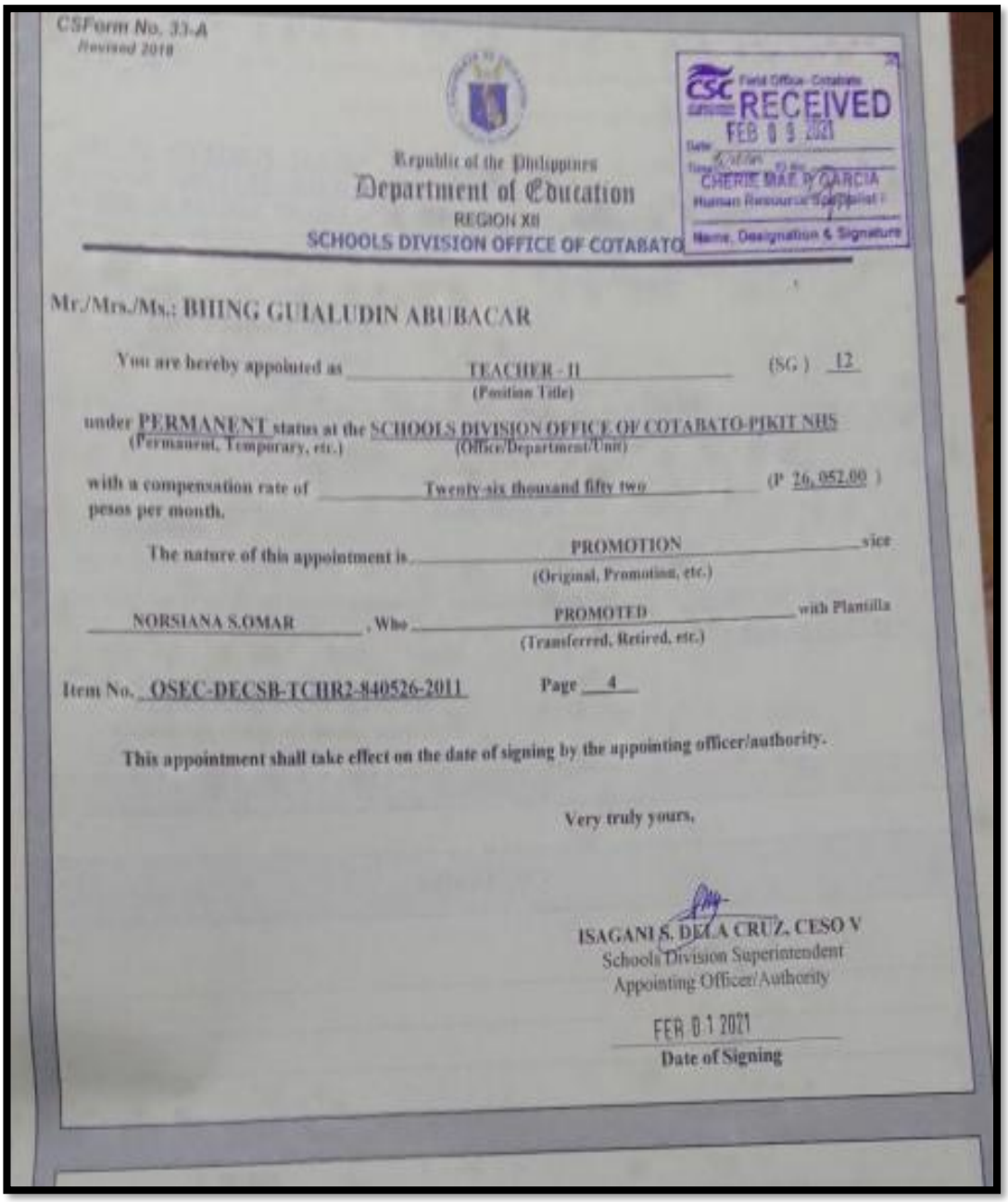
| NAME | YEAR GRADUATED | POSITION/DESIGNATION | NATURE OF APPOINTMENT | AGENCY |
|---|---|---|---|---|
| Ivy Mar Cabornida | 2013 | Associate Professor V | Permanent | University of Southern Mindanao |
| Nenita M. Basilio | 2013 | Associate Professor II | Permanent | University of Southern Mindanao |
| Muttulani, Mark Al-jamie J. | 2016 | Associate Professor IV | Permanent | University of Southern Mindanao |
| Garrigues, Marlon | 2016 | Associate Professor I | Permanent | North Eastern Mindanao State University (NEMSU) |
| Mamon, Noe S. | 2016 | Assistant Professor III | Permanent | University of Southern Mindanao |
| Denona, Mylene Grace | 2016 | Assistant Professor I/ Dean-Institute of Agriculture | Permanent | South Cotabato State College |
| Abubacar, Bhing G. | 2019 | Teacher II/ Gulayan sa Paaralan In-Charge | Permanent | DepEd |
| Alcala, Noel B. | 2019 | Meat Processor III | | |
| Ayob, Jamaloden T. | 2019 | Teacher III/ OIC-School Head | Permanent | DepEd |

| | | | | |
|---|---|---|---|---|
| Bantilan, Jovelyn L. | 2019 | Teacher I/ TVL Learning Area Coordinator | Permanent | DepEd |
| Ceriales, Rico Jay S. | 2019 | Instructor I | Permanent | Cotabato Foundation College of Science and Technology |
| Garrigues, Richel B. | 2019 | Asst Professor I/ Faculty, Research Unit Head | Permanent | North Eastern Mindanao State University (NEMSU) |
| Gayao, Leo M. | 2019 | Asst. Professor IV/ USM Alamada Campus Coordinator | Permanent | University of Southern Mindanao |
| Gumama, Fatima S. | 2019 | Asst. Professor I/ BSA Horticulture Coordinator | Permanent | Cotabato Foundation College of Science and Technology |
| Mariano, Imelda A. | 2019 | Asst. Professor IV/ BSA/BAT Program Head | Permanent | Southern Philippines Agri-Business and Marine and Aquatic School of Technology |
| Mostrales, Reme E. | 2019 | Project Coordinator/ Agriculture Technologist Specialist | Permanent | FAO-UN |
| Ratilla, Emilyn B. | 2019 | Teacher I | Permanent | DepEd |

| | | | | |
|---|---|---|---|---|
| Sacriz, Mercy A. | 2019 | Teacher III/ Coordinator ICT, Brigada Eskwela, SIP, LIS | Permanent | DepEd |
| Toraja, Dailyn G. | 2019 | Teacher III/ SHS Coordinator | Permanent | DepEd |
| Traya, Jejie Rose F. | 2019 | Teacher III/ TLE Coordinator/PTA/SGC Secretary | Permanent | DepEd |
| Alamada, Judy Rose C. | 2020 | Assistant Professor IV/ Supervisor-CFCST Antipas Extension Unit | Permanent | Cotabato Foundation College of Science and Technology |
| Dela Cruz, Robin A. | 2020 | Agriculturist II/ Acting Municipal Agriculturist | Permanent | DA- Kabacan |
| Esgrina Jr., Francisco O. | 2020 | Associate Professor III | Permanent | Cotabato Foundation College of Science and Technology |
| Ronnie Espano | 2025 | Instructor | Permanent | Makilala Institute Science and Technology |
| Jules Wesley F. Marcelino | 2026 | DOST Strand N-SEI Scholars | Permanent | Sultan Kudarat State University |
| Jake Aquino | 2026 | Instructor | | Davao del Sur State College (DSSC) |
| Riza D. Meperanum | 2026 | DOST Strand N-SEI Scholars | | USM |

| | | | | |
|---|---|---|---|---|
| Mariel P. Amoy | 2026 | DOST Strand N-SEI Scholars | | USM |
| Kleah O. Dacanay | 2026 | DOST Strand N-SEI Scholars | | USM |

**Evidence of Employment of MS Horticulture Graduates**



CSForm No. 33-A
Revised 2018

Republic of the Philippines
Department of Education
REGION XII
SCHOOLS DIVISION OFFICE OF COTABATO

CSC Field Office- Cotabato RECEIVED FEB 0 9 2021
CHERIE MAE P. GARCIA
Human Resource Specialist
Name, Designation & Signature

Mr./Mrs./Ms.: BHING GUIALUDIN ABUBACAR

You are hereby appointed as TEACHER - II (Position Title) (SG) 12

under PERMANENT (Permanent, Temporary, etc.) status at the SCHOOLS DIVISION OFFICE OF COTABATO-PIKIT NHS (Office/Department/Unit)

with a compensation rate of Twenty-six thousand fifty two (P 26,052.00) pesos per month.

The nature of this appointment is PROMOTION (Original, Promotion, etc.) vice

NORSIANA S.OMAR, Who PROMOTED (Transferred, Retired, etc.) with Plantilla

Item No. OSEC-DECSB-TCHR2-840526-2011 Page 4

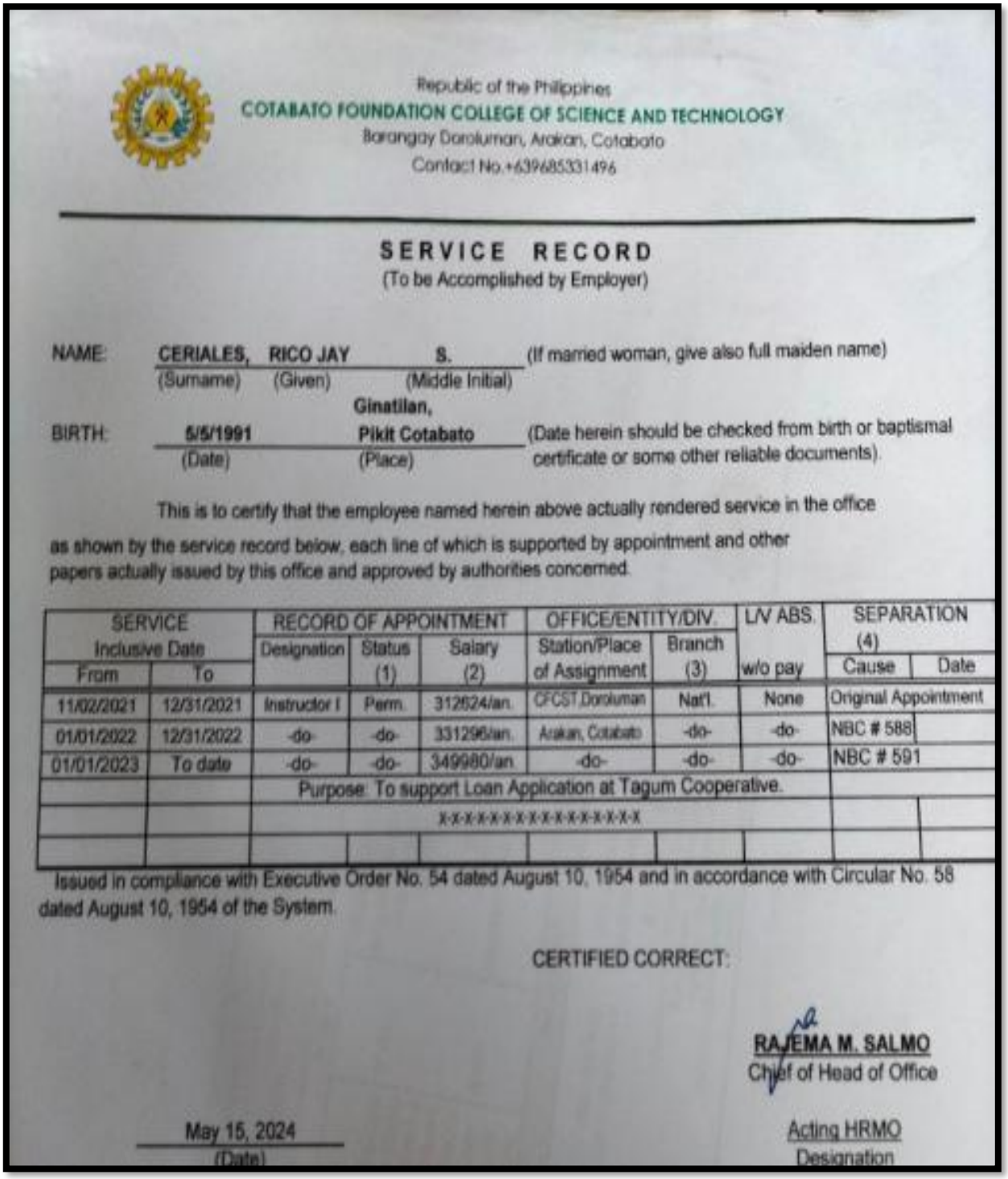
This appointment shall take effect on the date of signing by the appointing officer/authority.

Very truly yours,

ISAGANI S. DELA CRUZ, CESO V
Schools Division Superintendent
Appointing Officer/Authority

FEB 01 2021
Date of Signing

**Ms. Bheng Abubakar appointment as Teacher II in DepEd**



Republic of the Philippines
COTABATO FOUNDATION COLLEGE OF SCIENCE AND TECHNOLOGY
Barangay Doroluman, Arakan, Cotabato
Contact No.+639685331496

# SERVICE RECORD

(To be Accomplished by Employer)

NAME: **CERIALES, RICO JAY S.** (If married woman, give also full maiden name)
(Surname) (Given) (Middle Initial)

BIRTH: **5/5/1991** **Ginatilan, Pikit Cotabato** (Date herein should be checked from birth or baptismal certificate or some other reliable documents).
(Date) (Place)

This is to certify that the employee named herein above actually rendered service in the office as shown by the service record below, each line of which is supported by appointment and other papers actually issued by this office and approved by authorities concerned.

| SERVICE Inclusive Date | | RECORD OF APPOINTMENT | | | OFFICE/ENTITY/DIV. | | L/V ABS. | SEPARATION (4) | |
|---|---|---|---|---|---|---|---|---|---|
| From | To | Designation | Status (1) | Salary (2) | Station/Place of Assignment | Branch (3) | w/o pay | Cause | Date |
| 11/02/2021 | 12/31/2021 | Instructor I | Perm. | 312624/an. | CFCST,Doroluman | Nat'l. | None | Original Appointment | |
| 01/01/2022 | 12/31/2022 | -do- | -do- | 331296/an. | Arakan, Cotabato | -do- | -do- | NBC # 588 | |
| 01/01/2023 | To date | -do- | -do- | 349980/an | -do- | -do- | -do- | NBC # 591 | |
| | | Purpose: To support Loan Application at Tagum Cooperative. | | | | | | | |
| | | x-x-x-x-x-x-x-x-x-x-x-x-x-x-x-x-x-x-x | | | | | | | |
| | | | | | | | | | |

Issued in compliance with Executive Order No. 54 dated August 10, 1954 and in accordance with Circular No. 58 dated August 10, 1954 of the System.

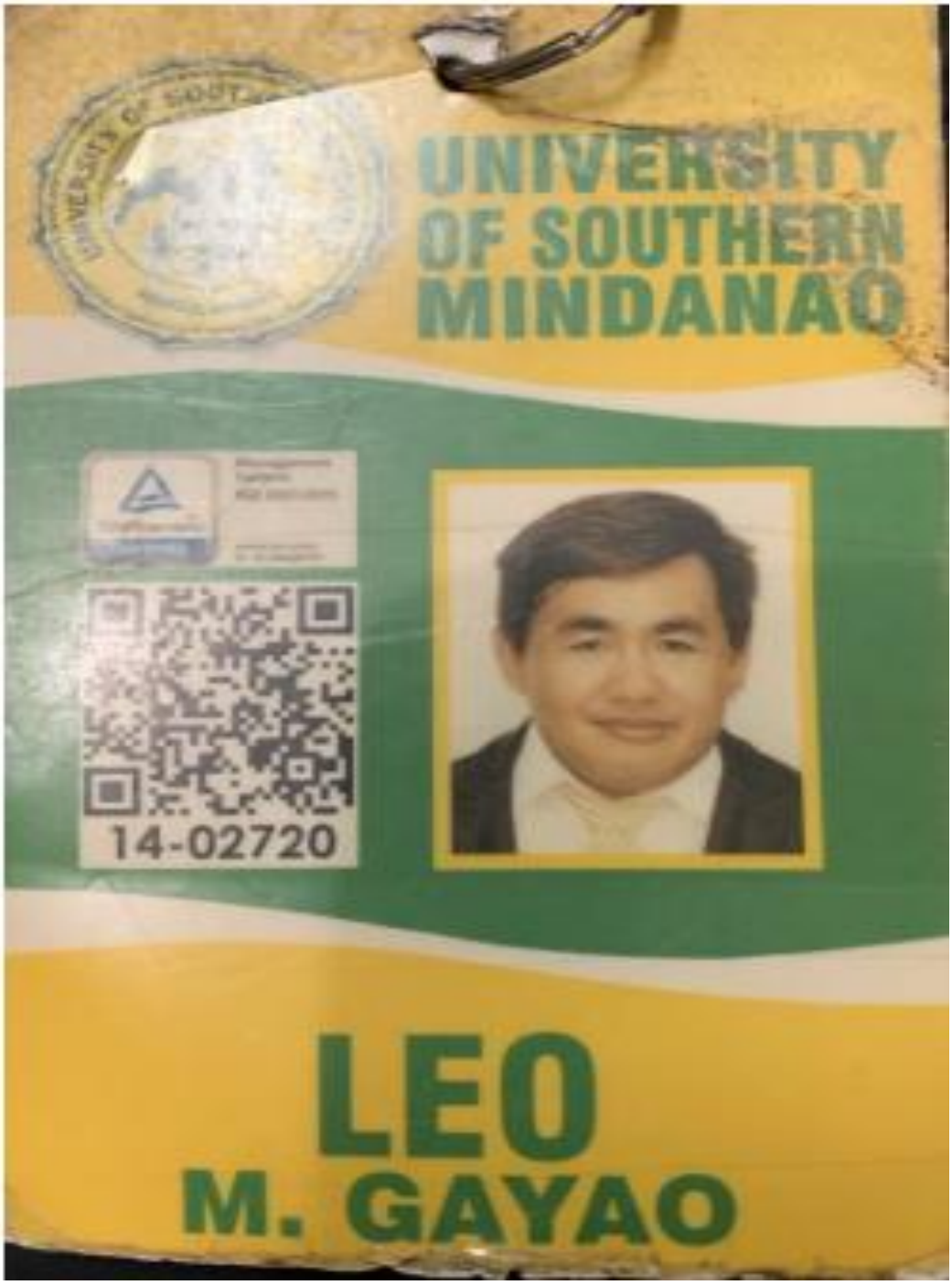
CERTIFIED CORRECT:

**RAJEMA M. SALMO**
Chief of Head of Office

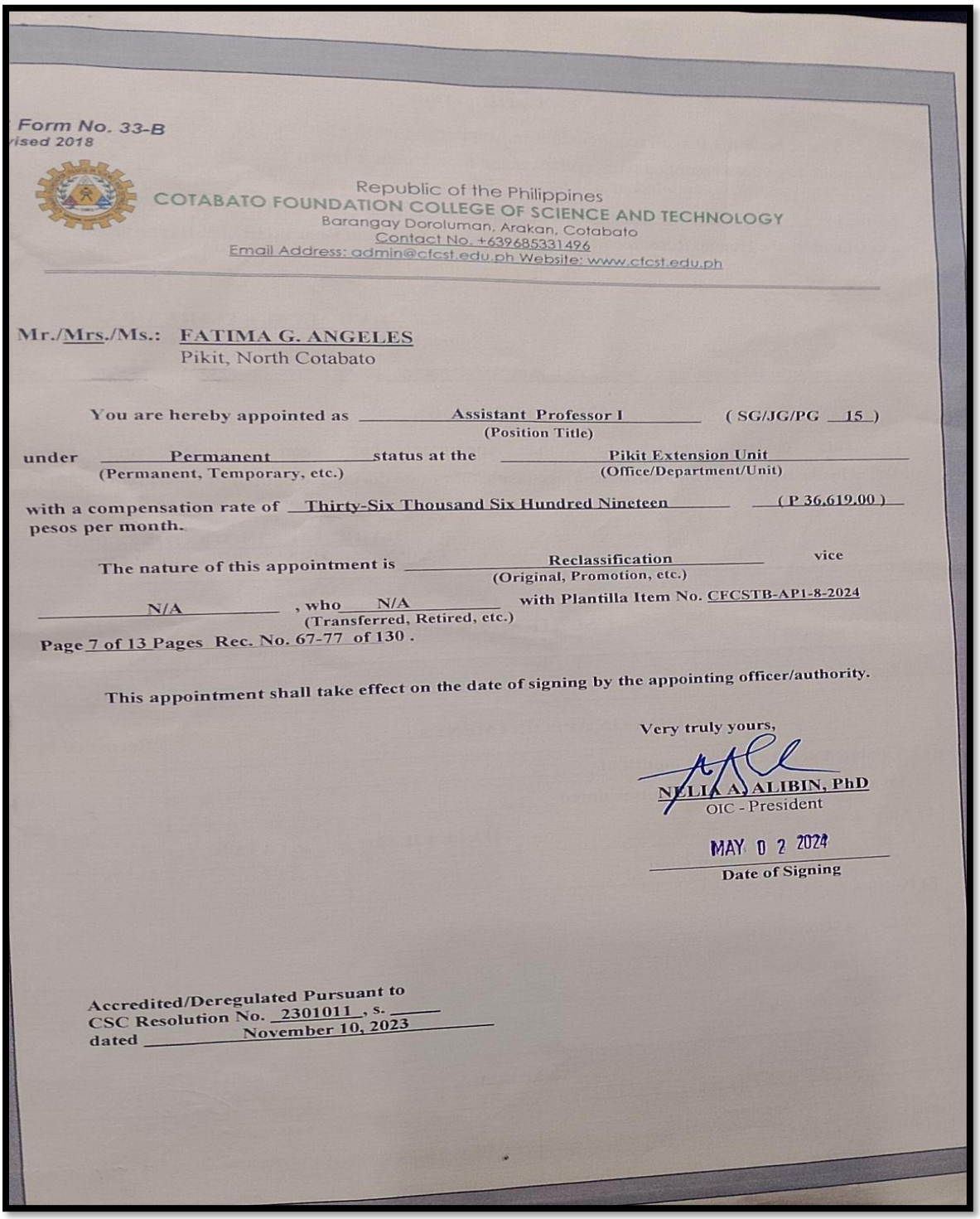
May 15, 2024
(Date)

Acting HRMO
Designation

**Mr. Rico Ceriales service record as Instructor I in CFCST**




**Mr. Leo M. Gayao (MS Horticulture alumni) employed in University of Southern Mindanao, PPALMA Campus**



Form No. 33-B
Revised 2018

Republic of the Philippines
COTABATO FOUNDATION COLLEGE OF SCIENCE AND TECHNOLOGY
Barangay Doroluman, Arakan, Cotabato
Contact No. +639685331496
Email Address: admin@cfcst.edu.ph Website: www.cfcst.edu.ph

Mr./Mrs./Ms.: FATIMA G. ANGELES
Pikit, North Cotabato

You are hereby appointed as Assistant Professor I (SG/JG/PG 15)
(Position Title)

under Permanent status at the Pikit Extension Unit
(Permanent, Temporary, etc.) (Office/Department/Unit)

with a compensation rate of Thirty-Six Thousand Six Hundred Nineteen (P 36,619.00)
pesos per month.

The nature of this appointment is Reclassification vice
(Original, Promotion, etc.)

N/A , who N/A with Plantilla Item No. CFCSTB-AP1-8-2024
(Transferred, Retired, etc.)

Page 7 of 13 Pages Rec. No. 67-77 of 130 .

This appointment shall take effect on the date of signing by the appointing officer/authority.

Very truly yours,

NELIA A. ALIBIN, PhD
OIC - President

MAY 0 2 2024
Date of Signing

Accredited/Deregulated Pursuant to
CSC Resolution No. 2301011, s. _____
dated November 10, 2023

**Ms. Fatima G. Angeles copy of appointment as Assistant Professor I in CFCST**

SPAMAST

CERTIFICATE OF EMPLOYMENT

TO WHOM IT MAY CONCERN:

This is to certify that **MRS. IMELDA A. MARIANO, Assistant Professor IV,** permanent, is an employee of this agency, **Southern Philippines Agri-Business and Marine and Aquatic School of Technology (SPAMAST),** Malita, Davao Occidental, assigned in the Institute of Agricultural Studies and Development Communication beginning September 16, 2004 up to present.

This certification is being issued upon the request of the abovementioned employee for whatever legal purpose it may serve.

Done this 21st day of August 2024 at SPAMAST, Malita Davao Occidental.

ATTY. PALOMA G. GRADO
Human Resource Management Officer III

College Seal

www.spamast.edu.ph https://www.facebook.com/SPAMASTOP op@spamast.edu.ph

**Ms. Imelda Mariano (MS Horticulture Alumni) Certificate of Employment as Assistant Professor in SPAMAST.**

Republic of the Philippines
Bangsamoro Autonomous Region in Muslim Mindanao
Ministry of Basic, Higher and Technical Education
DIVISION OF MAGUINDANAO DEL SUR
**DATU PAGLAS NATIONAL HIGH SCHOOL**
Poblacion, Datu Paglas, Maguindanao Del Sur

# CERTIFICATE OF EMPLOYMENT

**TO WHOM IT MAY CONCERN:**

This is to certify that **Ms. MERCY A. SACRIZ** has been employed at DATU PAGLAS NATIONAL HIGH SCHOOL as a Senior High School Teacher handling TVL- major subject from June 1, 2020 up to the present.

During her tenure, **Ms. Sacriz** has demonstrated exceptional dedication and professionalism in their teaching duties. They have been responsible for teaching Grade 12 TVL- major subjects and STEM 12 class adviser, developing lesson plans, evaluating student performance, and contributing to the overall academic and extracurricular programs of the school.

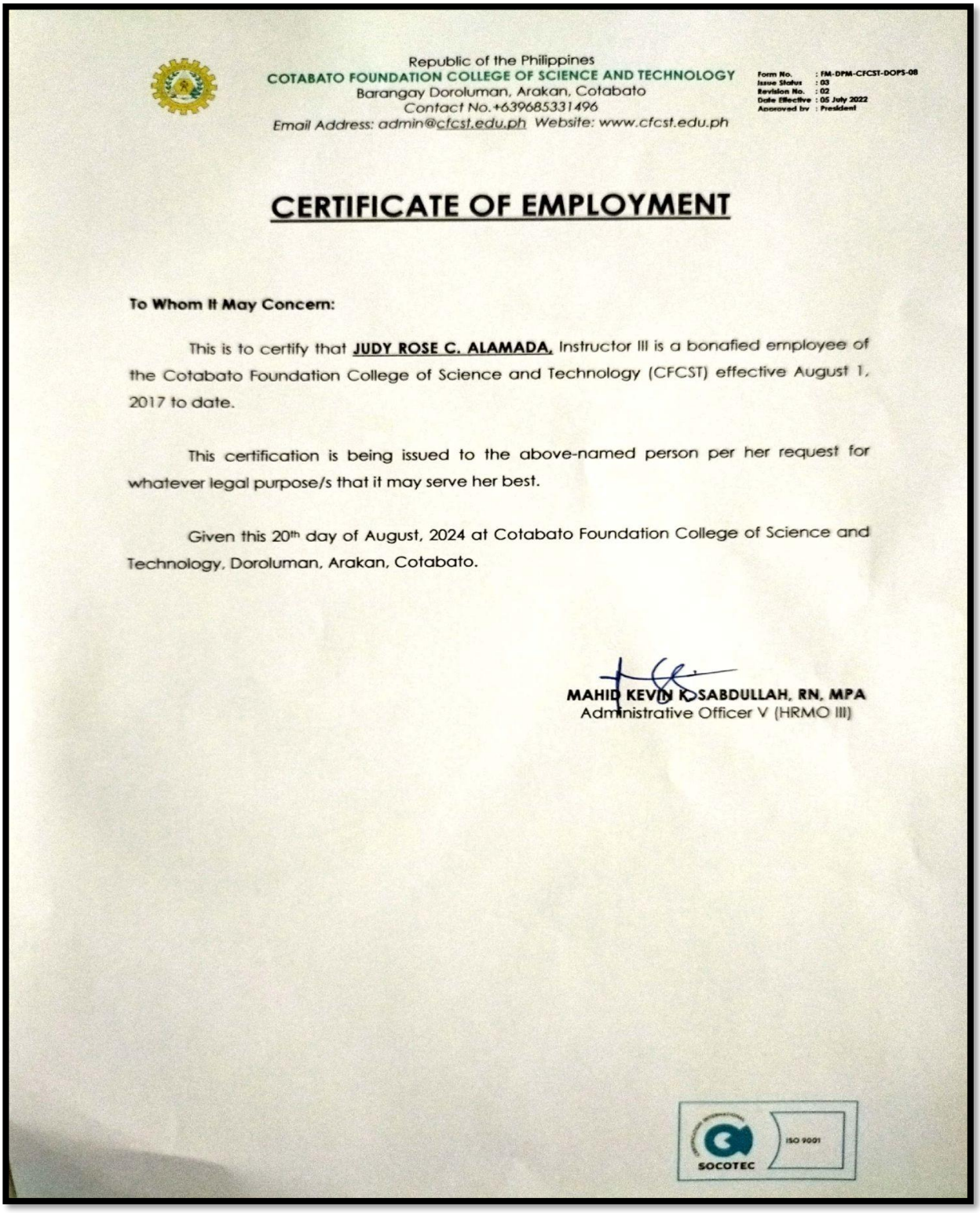
This certification is issued upon the request of **Ms. MERCY A. SACRIZ** for whatever legal purpose it may serve.

Issued this 20th day of June, 2023 at Datu Paglas National High School, Poblacion, Datu Paglas, Maguindanao Del Sur, BARMM.

**BADRIA K. TALEMBO, PhD**
Principal 1

**BAI MERIAM A. KAWIT, AL-HADJA**
Schools Division Superintendent

**Ms. Mercy Sacriz (MS Horticulture Alumni) Certificate of Employment as Teacher in DepEd**



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COTABATO FOUNDATION COLLEGE OF SCIENCE AND TECHNOLOGY
Barangay Doroluman, Arakan, Cotabato
Contact No.+639685331496
Email Address: admin@cfcst.edu.ph Website: www.cfcst.edu.ph

Form No. : FM-DPM-CFCST-DOPS-08
Issue Status : 03
Revision No. : 02
Date Effective : 05 July 2022
Approved by : President

# CERTIFICATE OF EMPLOYMENT

**To Whom It May Concern:**

This is to certify that **JUDY ROSE C. ALAMADA,** Instructor III is a bonafied employee of the Cotabato Foundation College of Science and Technology (CFCST) effective August 1, 2017 to date.

This certification is being issued to the above-named person per her request for whatever legal purpose/s that it may serve her best.

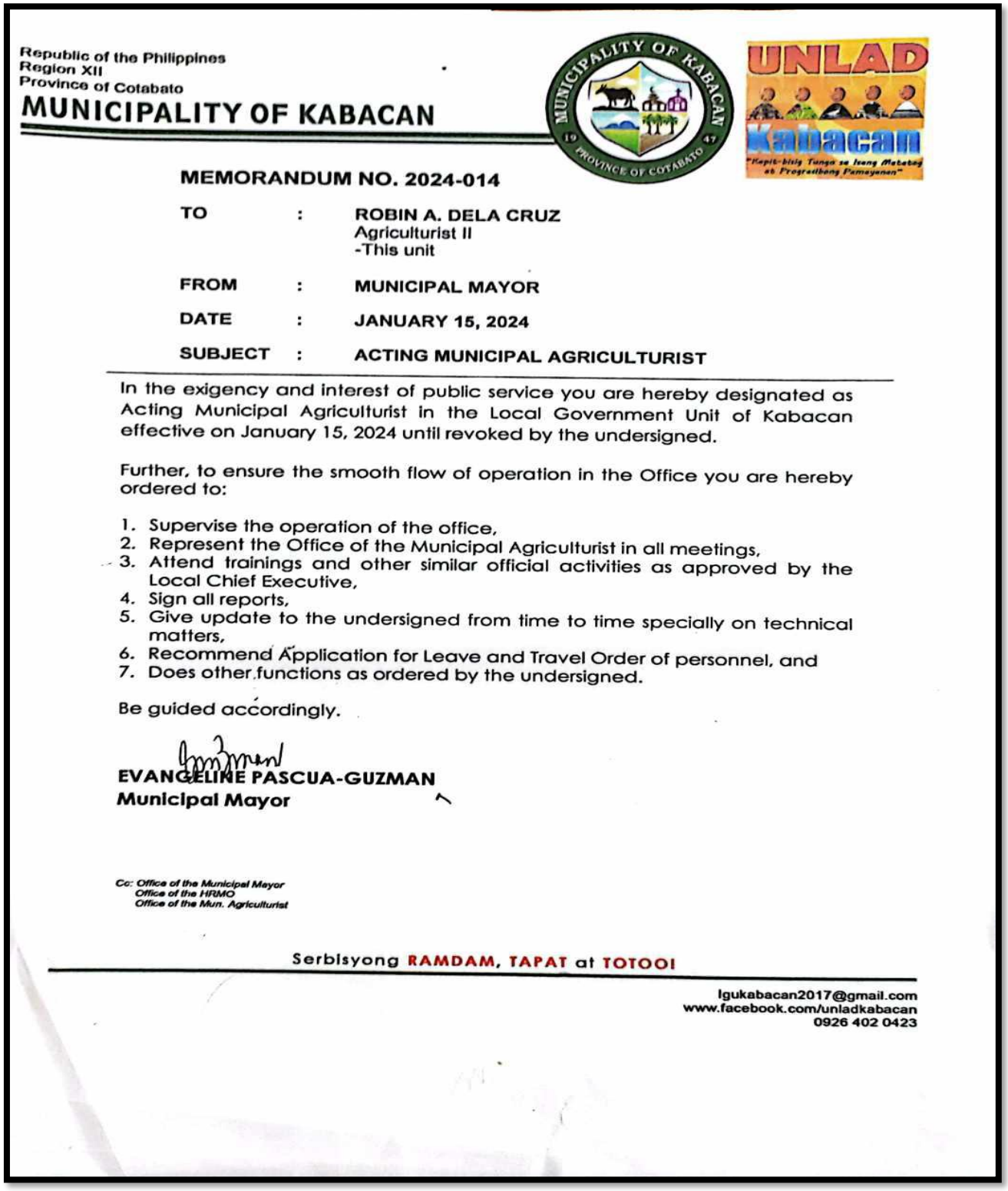
Given this 20th day of August, 2024 at Cotabato Foundation College of Science and Technology, Doroluman, Arakan, Cotabato.

**MAHID KEVIN K. SABDULLAH, RN, MPA**
Administrative Officer V (HRMO III)

ISO 9001
SOCOTEC

**Ms. Judy Rose Alamada (MS Horticulture Alumni), Certificate of Employment as Instructor III at CFCST, Antipas Campus**


**Ms. Judy Rose Alamada (MS Horticulture Alumni) in her promotion as Assistant Professor IV in CFCST**



Republic of the Philippines
Region XII
Province of Cotabato

**MUNICIPALITY OF KABACAN**

**MEMORANDUM NO. 2024-014**

| | | |
|---|---|---|
| **TO** | : | **ROBIN A. DELA CRUZ**<br>Agriculturist II<br>-This unit |
| **FROM** | : | **MUNICIPAL MAYOR** |
| **DATE** | : | **JANUARY 15, 2024** |
| **SUBJECT** | : | **ACTING MUNICIPAL AGRICULTURIST** |

In the exigency and interest of public service you are hereby designated as Acting Municipal Agriculturist in the Local Government Unit of Kabacan effective on January 15, 2024 until revoked by the undersigned.

Further, to ensure the smooth flow of operation in the Office you are hereby ordered to:

1. Supervise the operation of the office,
2. Represent the Office of the Municipal Agriculturist in all meetings,
3. Attend trainings and other similar official activities as approved by the Local Chief Executive,
4. Sign all reports,
5. Give update to the undersigned from time to time specially on technical matters,
6. Recommend Application for Leave and Travel Order of personnel, and
7. Does other functions as ordered by the undersigned.

Be guided accordingly.

**EVANGELINE PASCUA-GUZMAN**
**Municipal Mayor**

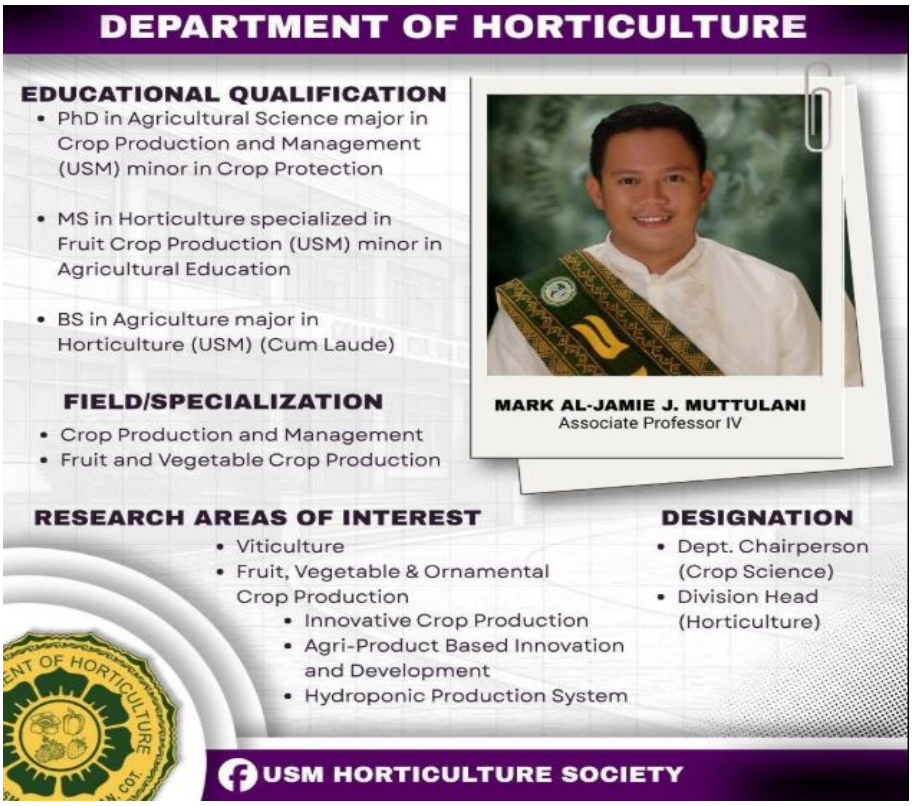
*Cc: Office of the Municipal Mayor*
*Office of the HRMO*
*Office of the Mun. Agriculturist*

Serbisyong RAMDAM, TAPAT at TOTOO!

lgukabacan2017@gmail.com
www.facebook.com/unladkabacan
0926 402 0423

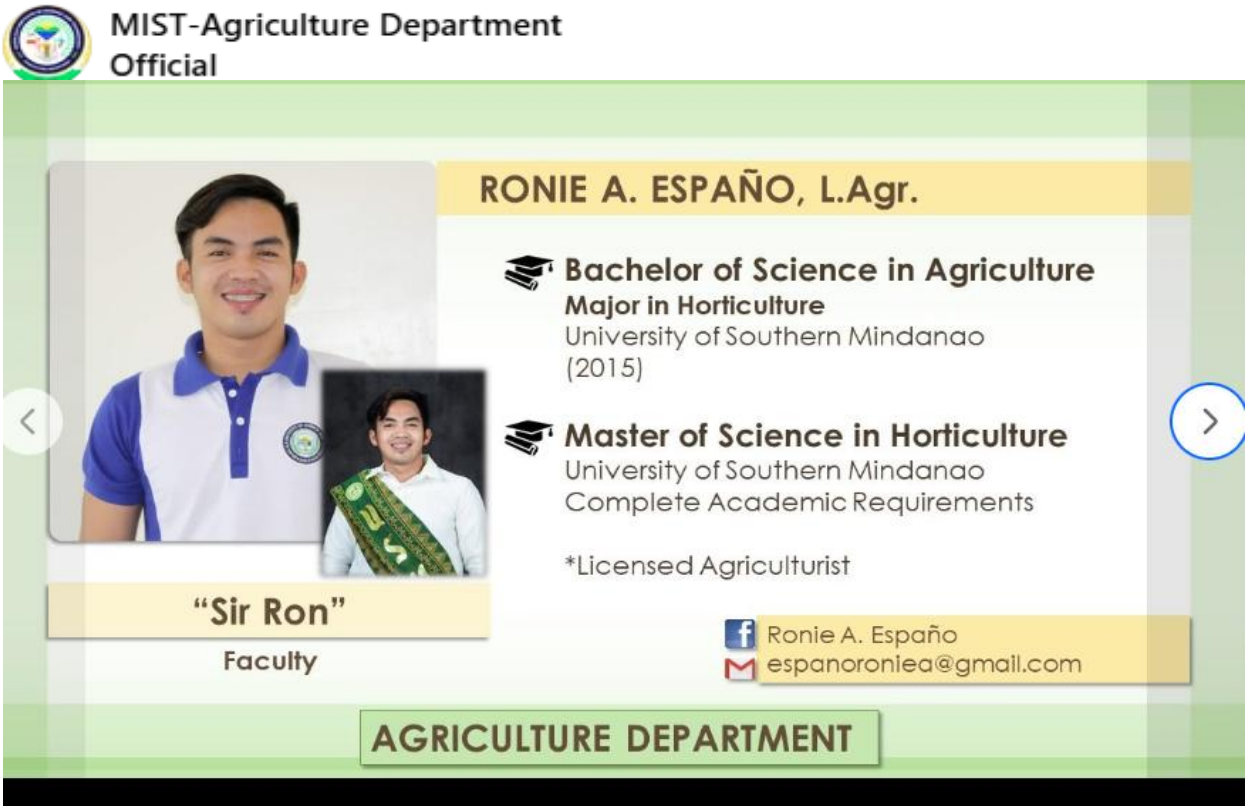
**Mr. Robin Dela Cruz (MS Horticulture Alumni designated as Acting Municipal Agriculturist in Kabacan)**


**Ms. Richel B. Garrigues (MS Horticulture Alumni) employed as Assistant Professor I in NEMSU, San Miguel Campus**

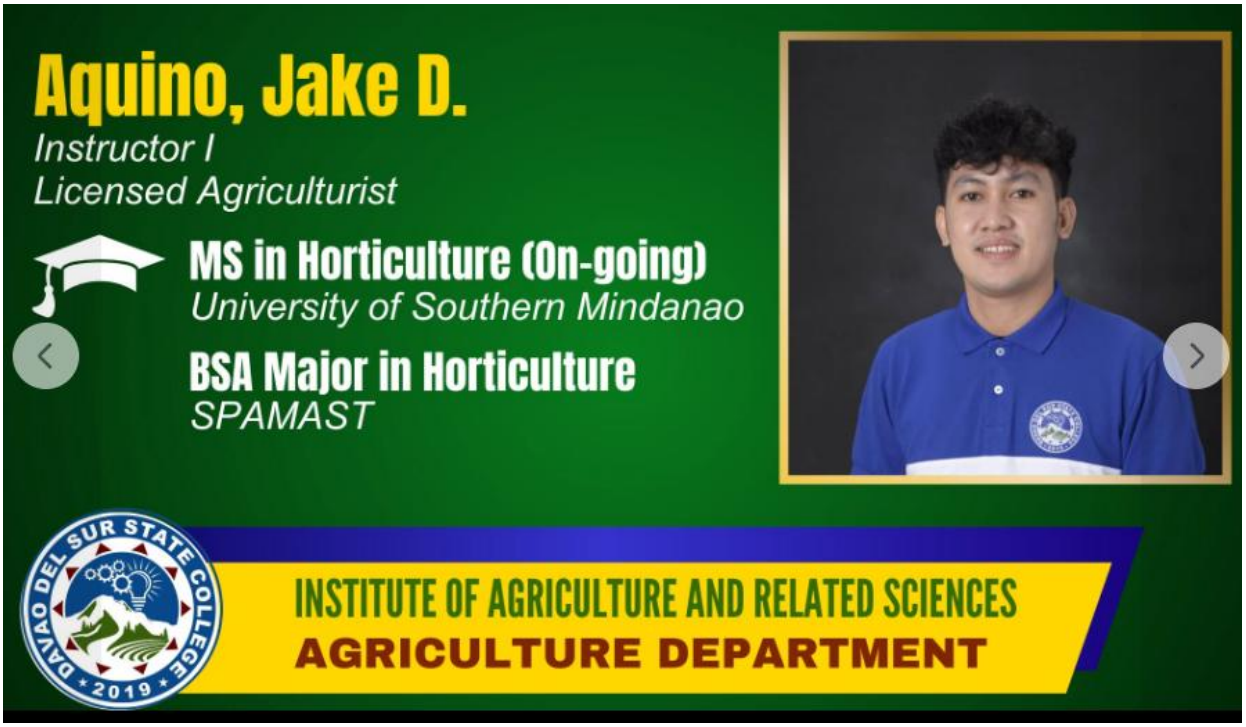



**Prof. Mark Al-jamie J. Muttulani (MS Horticulture Alumni) employed at University of Southern Mindanao as Associate Professor IV**


**Prof. Noe S. Mamon Jr. (MS Horticulture Alumni) employed at University of Southern Mindanao as Assistant Professor III**




**Mr. Ronnie A. Espano (MS Horticulture Alumni) employed at Makilala Institute Science and Technology**




**Mr. Jake Aquino (MS Horticulture Alumni) employed at Davao Del Sur State College former SPAMAST)**

## 2.2 PROMINENT GRADUATES OF MS HORTICULTURE GRADUATES (2016 – 2026)

### 2.2.1 IMPORTANT DESIGNATIONS

Table 2. Prominent Graduates in the Master of Science in Horticulture with High Positions/Great Achievements (2016 – present).

| Name of MS Horticulture Graduate | Year Graduated | Agency | Position | Important Designation Held (Term) |
|---|---|---|---|---|
| 1. Mark Al-jamie J. Muttulani | 2016 | University of Southern Mindanao | Associate Professor IV | Deputy Director-SOXAARRDEC |
| 2. Leo M. Gayao | 2019 | University of Southern Mindanao | Assistant Professor IV | Campus Head Coordinator-USM PALMA Campus |
| 3. Marlon Garrigues | 2016 | North Eastern Mindanao State University (NEMSU) | Associate Professor I | Assistant Campus Director- NEMSU, San Miguel |
| 4. Denona, Mylene Grace | 2016 | South Cotabato State College | Assitant Professor I | South Cotabato State College, Dean, Institute of Agriculture |
| 5. Dela Cruz, Robin A. | 2016 | LGU-Kabacan-MAO | Agricultural Technologist II | Municipal Agriculturist-LGU Kabacan |
| 6. Judy Rose Alamada | 2020 | Cotabato Foundation College of Science | Assistant Professor IV | Supervisor of the CFCST Antipas Campus, & Director- Innovation and |

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| | | and Technology | | Technology Transfer |
| 7. Ivy Mar Cabornida | 2013 | University of Southern Mindanao | Associate Professor V | Former Dean, CHEFS, USM |

The data presented in Table 2 highlights the remarkable professional achievements and career advancement of graduates of the Master of Science in Horticulture (MS Horticulture) program. The graduates have successfully established themselves in various government institutions, higher education institutions, and local government units, demonstrating the relevance and contribution of the program to their professional growth.

Among the notable graduates is Mark Al-Jamie J. Muttulani, who graduated in 2016 and is currently an Associate Professor IV at the University of Southern Mindanao (USM). He also serves as Deputy Director of SOXAARRDEC, reflecting his significant involvement in academic, research, and institutional development activities. His leadership role demonstrates the capacity of MS Horticulture graduates to assume higher-level responsibilities in research and development.

Leo M. Gayao, a 2019 graduate, is an Assistant Professor IV at the University of Southern Mindanao and serves as Campus Head Coordinator of USM PALMA Campus. His designation reflects his advancement into academic and administrative leadership within the university.

Similarly, Marlon Garrigues, a 2016 graduate, is an Associate Professor I at North Eastern Mindanao State University (NEMSU) and has served as Assistant Campus Director of NEMSU–San Miguel. His academic rank and administrative designation demonstrate his professional growth and contribution to higher education.

Another notable graduate is Mylene Grace Denona, who graduated in 2016 and is an Assistant Professor I at Tarlac Agricultural University. She has also served as Dean of the Institute of Agriculture at South Cotabato State College, highlighting her competence in academic leadership and agricultural education.

Robin A. Dela Cruz, a 2016 graduate, is an Agricultural Technologist II at the LGU-Kabacan Municipal Agriculture Office and has served as Municipal Agriculturist of the Municipality of Kabacan. His career exemplifies the application of horticultural knowledge and skills in local agricultural development and extension services.

Meanwhile, Judy Rose Alamada, a 2020 graduate, is an Assistant Professor IV at the Cotabato Foundation College of Science and Technology (CFCST) and serves as Supervisor of the CFCST Antipas Campus. Her academic rank and supervisory

designation demonstrate the early professional advancement of recent MS Horticulture graduates.

Furthermore, Ivy Mar Cabornida, an MS Horticulture graduate of 2013 from the University of Southern Mindanao, currently serves as an Associate Professor V at USM. She is recognized as one of the prominent graduates of the program, having demonstrated leadership and professional excellence through her service as Former Dean of the College of Education, Health, and Food Sciences (CHEFS), USM, reflecting the significant contribution of MS Horticulture graduates to academic leadership and institutional development.

Overall, the career trajectories and leadership designations of these graduates demonstrate the high employability, professional competence, and leadership potential developed through the MS Horticulture program. Their appointments as professors, campus administrators, deans, supervisors, and municipal agriculture leaders provide strong evidence that the program equips its graduates with the knowledge and skills necessary to excel in academic, government, research, extension, and administrative positions. These accomplishments further affirm the program's significant contribution to producing competent horticulture professionals and leaders who actively contribute to agricultural and community development.


**Prof. Mark Al-jamie J. Muttulani (MS Horticulture Alumni) designated as Deputy Director of SOXAARRDEC Consortium**


Source: https://www.facebook.com/photo/?fbid=122175260192975981&set=pcb.122175260258975981

**Prof. Leo M. Gayao (MS Horticulture Alumni) designated as USM Palma Cluster Campuses Program Coordinator**


**Dr.. Marlon M. Garrigues (MS Horticulture Alumni) appointed as Assistant Campus Director of North Eastern Mindanao State University- San Miguel Campus**


South Cotabato State College · I-follow
Setyembre 24, 2025 ·

**HAPPENING NOW | Technology Week 2025 of the Institute of Agriculture officially begins!**

Technology Week 2025 officially kicks off at **South Cotabato State College – Institute of Agriculture (IA)** with the theme "Cultivating Knowledge, Nurturing Innovation, and Fostering Future Agriculturists for Sustainable Growth," this three-day celebration (September 24–26) highlights the vital role of agri-tech in shaping a resilient and forward-looking agricultural sector.

The opening program was led by Dr. Mylene Grace C. Denona, Dean of the Institute of Agriculture, and graced by Dr. Joebert C. Legreso, Vice President for Academic Affairs, and Mr. Hope P. Esparagosa, MAgDev, Director for Instruction together with the dedicated faculty and staff of IA.

Let the innovation begin!

**Dr. Mylene Grace C. Denona (MS Horticulture Alumni) appointed as Dean of the Institute of Agriculture- South Cotabato Stage College gave here opening message during their Agritechnology Day Activity**



**Source:** https://cfcst.edu.ph/key-officials/

**Prof. Judy Rose C. Alamada (MS Horticulture Alumni), Designated as Supervisor, Antipas Extension Campus of CFCST, and Director- Innovation and Technology Transfer**

Republic of the Philippines
Region XII
Province of Cotabato
MUNICIPALITY OF KABACAN

MEMORANDUM NO. 2024-014

TO : ROBIN A. DELA CRUZ
Agriculturist II
-This unit

FROM : MUNICIPAL MAYOR

DATE : JANUARY 15, 2024

SUBJECT : ACTING MUNICIPAL AGRICULTURIST

In the exigency and interest of public service you are hereby designated as Acting Municipal Agriculturist in the Local Government Unit of Kabacan effective on January 15, 2024 until revoked by the undersigned.

Further, to ensure the smooth flow of operation in the Office you are hereby ordered to:

1. Supervise the operation of the office,
2. Represent the Office of the Municipal Agriculturist in all meetings,
3. Attend trainings and other similar official activities as approved by the Local Chief Executive,
4. Sign all reports,
5. Give update to the undersigned from time to time specially on technical matters,
6. Recommend Application for Leave and Travel Order of personnel, and
7. Does other functions as ordered by the undersigned.

Be guided accordingly.

EVANGELINE PASCUA-GUZMAN
Municipal Mayor

Cc: Office of the Municipal Mayor
Office of the MBMO
Office of the Mun. Agriculturist

Serbisyong RAMDAM, TAPAT at TOTOO!

lgukabacan2017@gmail.com
www.facebook.com/unladkabacan
0926 402 0423

**Memorandum Order, designating Mr. Robin Dela Cruz (MS Horticulture Alumni), as Acting Municipal Agriculturists Office of Kabacan**

### 2.2.2 RESEARCH ENDEAVORS

**Table 3. Prominent Graduates in the MS in Horticulture with Research Endeavors (2016 – 2026)**

| Name of MS Horticulture Graduates | Year Graduated | Agency | Position | Research Endeavors |
|---|---|---|---|---|
| Mark Al-jamie J. Muttulani | 2016 | University of Southern Mindanao | Associate Professor IV | Seed Propagation Techniques in Growing Various Herbs and Spices and Their Pesticidal Efficacy Against Bacterial and Fungal Diseases of Bell Pepper (Capsicum annuum) (2023)-USM Fund<br><br>Upgrading of Tissue Culture Facility in USM (2020-2022)-DA BAR ACEF Fund<br><br>Organic Based Interventions of Selected Vegetable Crops and Sheep Nutrition (2022)-USM Fund<br><br>Germplasm Collection, Propagation and Fertilization of Anthurium in USMARDC (2022)-USM Fund<br><br>Influence of Plant Growth Regulators to Improve Hybrid Nut Production in Dwarf Coconuts<br><br>Development of Appropriate Treatments |

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| | | | | to Coconut Inflorescence to Improve Hybridization Operations. |
| Noe. S. Mamon Jr. | 2016 | University of Southern Mindanao | Assistant Professor III | CA-CaRE: “Capacity and Resiliency Enhancement” for Agricultural Technologists |
| Rico Jay Ceriales | 2019 | Cotabato Foundation College of Science and Technology | Instructor I | Diversity Assessment and characterizations of herlum rice along Arakan Valley |
| Imelda A. Mariano | 2019 | Southern Philippines Agri-Business and Marine and Aquatic School of Technology | Assistant Professor IV | Consumers’ Preferences on Different Kalamansi Nip Variants (Plain Kalamansi, with Carrots, with Cucumber, with Chayote)<br><br>Field Evaluation of Four Citrus Species Cuttings Thru Balance Fertilization Program<br><br>Horticultural And Physiological Parameters of Adlai (Coix Lacryma - Jobi L.) As Influenced By Different Fertilizer Application Schemes<br><br>Assessment Of Coffee and Cacao Farmers in Selected Municipalities of Davao Occidental<br><br>Effects of Mulching Based Sea weed Extract Bio stimulants applied on growth and yield of Pomelo |

| | | | | |
|---|---|---|---|---|
| | | | | Community-Based Production of Dragon Fruit Seedlings (Hylocereus undatus) in Buhangin, Malita, Davao Occidental |
| Jake D. Aquino | 2026 | Davao Del Sur State College | Instructor I | Value Chain Analysis and Investment Road Map of Arabica Coffee in Davao Del Sur<br><br>Regenerative Agriculture and Artificial Intelligence in Scaling-Up Key Commodity Crops in Daval Del Sur<br><br>Regenerative and Agriculture and Artificial Intelligence in Sustaining Mangrove Ecosystems for Resilient and Innovative Coastal Communities in Davao Del Sur<br><br>Declaration of Mt. Altut Tuna as a Local Conservation Area of Brgy. Colonsabac Matanao, Davao Del Sur Philippines |

The Master of Science in Horticulture (MS Horticulture) program of the University of Southern Mindanao (USM) has demonstrated its capacity to produce graduates who have established meaningful careers and have actively contributed to agricultural research, instruction, technology development, and community-based initiatives. From 2016 to 2026, graduates of the program have assumed professional positions in higher education institutions and government-related agricultural programs, while continuously engaging in research endeavors addressing current issues and emerging needs in horticulture and allied agricultural sciences. Their professional accomplishments and research involvement provide evidence of the program's contribution to developing competent, research-oriented, and socially responsive horticulture professionals.

Table 3 presents selected prominent graduates of the MS in Horticulture program and their research endeavors from 2016 to 2026. The graduates represent different cohorts and institutions, demonstrating that the competencies developed through the program have been applied beyond USM and have contributed to agricultural research and development in various areas of Mindanao.

Among the notable graduates is Mark Al-jamie J. Muttulani, who completed the MS in Horticulture program in 2016 and currently serves as an Associate Professor IV at the University of Southern Mindanao. His professional trajectory demonstrates the application of advanced horticultural knowledge to research, instruction, facility development, and agricultural innovation. His research endeavors encompass seed propagation techniques and the pesticidal efficacy of herbs and spices against bacterial and fungal diseases of bell pepper, an initiative funded by USM in 2023. He has also been involved in the Upgrading of the Tissue Culture Facility at USM, supported through the DA-BAR Agricultural Competitiveness Enhancement Fund (ACEF), which contributed to strengthening institutional capacity for plant biotechnology and propagation research. Other research engagements include organic-based interventions for selected vegetable crops and sheep nutrition, germplasm collection, propagation and fertilization of *Anthurium* at the USM Agricultural Research and Development Complex, and studies on the use of plant growth regulators to improve hybrid nut production in dwarf coconut. He has likewise participated in the development of appropriate treatments for coconut inflorescences to improve hybridization operations. These research activities reflect the graduate's sustained engagement in applied research addressing crop production, crop protection, propagation, biotechnology, and agricultural productivity.

Another graduate of the 2016 cohort, Noe S. Mamon Jr., is currently an Assistant Professor III at the University of Southern Mindanao. His research and development involvement includes the CA-CaRE: "Capacity and Resiliency Enhancement" for Agricultural Technologists, reflecting the application of his academic preparation toward strengthening the capacity and resilience of agricultural practitioners. His involvement demonstrates the broader contribution of MS Horticulture graduates not only to crop production research but also to human resource development and agricultural extension.

Rico Jay Ceriales, a 2019 MS Horticulture graduate, currently serves as an Instructor I at the Cotabato Foundation College of Science and Technology. His research endeavor on the diversity assessment and characterization of heirloom rice along the Arakan Valley demonstrates the application of research skills toward the documentation, characterization, and conservation of locally important agricultural genetic resources. This work is particularly relevant to sustainable agriculture and biodiversity conservation because it recognizes the importance of traditional crop varieties as valuable resources for future agricultural development.

Imelda A. Mariano, a 2019 graduate who currently serves as an Assistant Professor IV at the Southern Philippines Agri-Business, Marine and Aquatic School of Technology (SPAMAST), has demonstrated extensive engagement in applied agricultural and horticultural research. Her research endeavors include studies on consumers' preferences for different kalamansi-based products, field evaluation of citrus species cuttings under balanced fertilization, and the influence of different fertilizer application schemes on the horticultural and physiological parameters of adlai (*Coix lacryma-jobi* L.). She has also been involved in the assessment of coffee and cacao farmers in selected municipalities of Davao Occidental, evaluation of seaweed-extract-based biostimulants and mulching on pomelo growth and yield, and community-based production of dragon fruit seedlings in Buhangin, Malita, Davao Occidental. These research activities illustrate the diverse application of horticultural science in crop propagation, crop nutrition, value addition, farmer assessment, production technology, and community development.

The program has also produced recent graduates who are already contributing to research and development despite being at the early stages of their professional careers. Jake D. Aquino, a 2026 graduate, currently serves as an Instructor I at Davao del Sur State College. His research and development activities include the Value Chain Analysis and Investment Road Map of Arabica Coffee in Davao del Sur, as well as initiatives focusing on regenerative agriculture and artificial intelligence for scaling up key commodity crops. He is also involved in research addressing the application of regenerative agriculture and artificial intelligence in sustaining mangrove ecosystems for resilient and innovative coastal communities in Davao del Sur. His participation in the declaration of Mt. Altut Tuna as a Local Conservation Area in Barangay Colonsabac, Matanao, Davao del Sur, Philippines, further demonstrates the expanding scope of MS Horticulture graduates into resource conservation, climate resilience, agricultural innovation, and community-based environmental management.

Collectively, the research endeavors of these graduates demonstrate that the MS Horticulture program has developed professionals capable of addressing agricultural concerns using research-based and multidisciplinary approaches. Their research interests extend from conventional horticultural production and crop propagation to plant tissue culture, crop protection, crop nutrition, postharvest technology, agricultural value chains, biotechnology, biodiversity conservation, regenerative agriculture, artificial intelligence, and environmental sustainability. This diversity of research areas indicates

that the competencies developed through the program remain relevant to the changing needs of the agricultural sector.

The professional positions occupied by these graduates also provide evidence of their employability and career advancement. Several graduates have progressed into faculty positions at the associate professor level, while others have assumed instructor and academic research roles in higher education institutions. Their continued engagement in research, extension, teaching, and development initiatives demonstrates the multiplier effect of the MS Horticulture program, wherein graduates apply their acquired knowledge and competencies in their respective institutions and communities.

Furthermore, the research endeavors of the graduates contribute to the attainment of institutional and national priorities in agriculture. Studies on crop propagation, organic inputs, tissue culture, plant growth regulators, crop protection, and postharvest technologies support productivity and sustainable production. Research involving coffee, cacao, banana, citrus, dragon fruit, rice, adlai, pomelo, and other priority crops contributes to the development of commodity-based agricultural systems. Meanwhile, studies involving regenerative agriculture, artificial intelligence, biodiversity, mangrove ecosystems, and conservation demonstrate the graduates' responsiveness to emerging challenges related to climate change, environmental sustainability, food security, and rural development.

The accomplishments of these graduates therefore serve as significant indicators of the effectiveness and relevance of the MS in Horticulture program. Their career progression, research productivity, institutional involvement, and community-oriented initiatives demonstrate that the program is producing graduates who are not only employable but also capable of generating and applying knowledge for the advancement of horticulture and agriculture. The sustained research engagement of graduates from different cohorts further reflects the program's success in cultivating a culture of inquiry, innovation, and evidence-based problem solving.

Overall, the achievements of the prominent MS Horticulture graduates from 2016 to 2026 provide substantial evidence of the program's contribution to human resource development and agricultural research in Southern Philippines. Their accomplishments in academe, research, technology development, conservation, and community-based agricultural initiatives affirm the program's continuing relevance and its capacity to produce graduates who contribute meaningfully to institutional, regional, and national agricultural development.

### 2.2.3 RESEARCH PUBLICATIONS

**Research publications of prominent graduates of the MS Horticulture from 2016-2026**

| Author/ Co-Author | Title | Name of Journal | Scope |
|---|---|---|---|
| Mark Al-jamie J. Muttulani (MS Horticulture Graduate 2016) | Grape (Vitis vinifera L.) propagation using different types of cuttings and root-initiating substances | Journal of Agricultural Research, Development, Extension and Technology | International<br><br>Link: https://scholar.google.com/citations?view_op=view_citation&hl=en&user=JbTmQw6AoE0C&citation_for_view=JbTmQw6AoE0C:u5HHmVD_uO8C |
| | Postharvest quality and physicochemical analysis of strawberry (Fragaria ananassa L.) to various application of mulching and organic fertilizers | Bhartiya Krishi Anusandhan Patrika | International<br><br>Link: https://scholar.google.com/citations?view_op=view_citation&hl=en&user=JbTmQw6AoE0C&citation_for_view=JbTmQw6AoE0C:IjCSPb-OGe4C |

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| Response of Mulching and Organic Fertilizers on the Growth Performance of Strawberry (Fragaria ananassa L.) in Southern Philippines. | Current Agriculture Research Journal | International<br><br>Link: https://scholar.google.com/citations?view_op=view_citation&hl=en&user=JbTmQw6AoE0C&citation_for_view=JbTmQw6AoE0C:2osOgNQ5qMEC |
| Response of banana varieties and seaweed extracts on plantlet formation and root development using corms | Journal of Tropical Agriculture | International<br><br>Link: https://scholar.google.com/citations?view_op=view_citation&hl=en&user=JbTmQw6AoE0C&citation_for_view=JbTmQw6AoE0C:roLk4NBRz8UC |
| Utilization of Carbonized Wastes as Ethylene Absorbers for Shelf-life Extension of Major Tropical Fruits in Southern Philippines | Asian Journal of Dairy and Food Research | International:<br><br>Link: https://scholar.google.com/citations?view_op=view_citation&hl=en&user=JbTmQw6AoE0C&citation_for_view=JbTmQw6AoE0C:UebtZRa9Y70C |

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| Basal Scarification: A Technique for Improved Grapevine Rooting and Propagation | Bhartiya Krishi Anusandhan Patrika | International<br><br>Link: https://scholar.google.com/citations?view_op=view_citation&hl=en&user=JbTmQw6AoE0C&citation_for_view=JbTmQw6AoE0C:Se3iqnhoufwC |
| Enhancing hydroponic leaf lettuce (Lactuca sativa) production through optimized nutrient formulations | Asian Journal of Agriculture | International<br><br>Link: https://scholar.google.com/citations?view_op=view_citation&hl=en&user=JbTmQw6AoE0C&citation_for_view=JbTmQw6AoE0C:eQOLeE2rZwMC |
| Plant-based hydrating solutions for extending vase life and postharvest quality of chrysanthemum (Dendrathema x grandiflorum) | Current Agriculture Research Journal | International<br><br>Link: https://scholar.google.com/citations?view_op=view_citation&hl=en&user=JbTmQw6AoE0C&citation_for_view=JbTmQw6AoE0C:UeHWp8X0CEIC |
| Varietal Screening and Maturity Stage Evaluation of Corn (Zea mays L.) Microgreens | Asian Journal of Dairy and Food Research | International<br><br>Link: https://scholar.google.com/citations?view_op=view_citation&hl=en&u |

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| | Through Sensory and Acceptability Study as Potential Food in Southern Philippines | | ser=JbTmQw6AoE0C&citation_for_view=JbTmQw6AoE0C:YsMSGLbcyi4C |
| | Propagation and productivity evaluation of Anthurium (Anthurium andraeanum) using organic fertilizers in tropical conditions | Journal of Agricultural Research, Development, Extension and Technology | International<br><br>Link: https://scholar.google.com/citations?view_op=view_citation&hl=en&user=JbTmQw6AoE0C&citation_for_view=JbTmQw6AoE0C:u-x6o8ySG0sC |
| Noe S. Mamon Jr. (MS Horticuture Graduate 2016) | Fertilizer integration on cacao cum rubber: implications on cacao growth, yield, disease occurrence and profitability | American Journal of Agricultural Science, Engineering, and Technology | International<br><br>Link: https://journals.e-palli.com/home/index.php/ajaset/article/view/93 |
| Rico Jay Ceriales (MS Horticulture Graduate 2019) | Characterization Of Semi-Processed Rubber (Hevea brasiliensis Willd.) Treated With Different Coagulants | International Journal of Research and Innovation in Applied Science (IJRIAS) | International<br><br>Link: https://rsisinternational.org/journals/ijrias/ |

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| Imelda A. Soriano (MS Horticulture Graduate 2019) | Rooting Response and Subsequent Growth of Selected Citrus Sp. to Application of Different Hormones | SPAMAST Research Journal | National<br><br>Link: https://spamastresearchjournal.ph/index.php/srj/article/view/4 |
| Judy Rose Alamada (MS Horticulture Graduate 2020) | Inland Fish Diversity and Conservation Challenges in Pulang River, Central Mindanao, Philippines | Annual Research & Review in Biology | International<br><br>Link: https://journalarrb.com/index.php/ARRB/article/view/2224 |
| Francisco Jr. O. Esgrina (MS Horticulture Graduate 2020) | Maximizing Pleurotus ostreatus yield with sustainable agricultural waste substrates in Arakan, Cotabato, Philippines | Nusantara Bioscience | International<br><br>Link: https://scholar.google.com/citations?view_op=view_citation&hl=en&user=qbDxNBoAAAAJ&citation_for_view=qbDxNBoAAAAJ:Tyk-4Ss8FVUC |
| | Response of different avocado microclonal rootstock varieties to etiolation time. | Nativa | International<br><br>Link: https://scholar.google.com/citations?view_op=view_citation&hl=en&user=qbDxNBoAAAAJ&citation_for_view=qbDxNBoAAAAJ:2osOgNQ5qMEC |

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|---|---|---|---|
| | Optimizing the productivity of eggplant grown in polybags with the application of buffalo manure tea | The Journal of Agriculture and Development | International<br><br>Link: https://scholar.google.com/citations?view_op=view_citation&hl=en&user=qbDxNBoAAAAJ&citation_for_view=qbDxNBoAAAAJ:eQOLeE2rZwMC |
| | Microclonal success of avocado using different scions and clonal rootstock varieties | Asia - Pacific Journal of Science and Technology | International<br><br>Link: https://scholar.google.com/citations?view_op=view_citation&hl=en&user=qbDxNBoAAAAJ&citation_for_view=qbDxNBoAAAAJ:Y0pCki6q_DkC |
| | Growth vitamin hormone and shading intensity affect the rhizo-caulogenesis of etiolated avocado microclonal rootstocks | Asian Journal of Agriculture | International<br><br>Link: https://scholar.google.com/citations?view_op=view_citation&hl=en&user=qbDxNBoAAAAJ&citation_for_view=qbDxNBoAAAAJ:zYLM7Y9cAGgC |
| Maron M. Garrigues (MS Horticulture Graduate 2016) | Meliponiculture in the Philippines: A Comprehensive Review of its Socio-Economic Significance, | International Journal of Research and Innovation in Applied Science (IJRIAS) | International<br><br>Link: https://rsisinternational.org/journals/ijriss/articles/meliponiculture-in- |

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| | Ecological Role, and Future Prospects | | the-philippines-a-comprehensive-review-of-its-socio-economic-significance-ecological-role-and-future-prospects/ |
| | Sweet Pepper (Capsicum annuum L) Under Organic Nutrient Management â€“ A Comparative Study of Agronomic and Economic Outcomes | IDEAS | International<br><br>Link: https://ideas.repec.org/a/bjf/journl/v10y2025i7p1348-1363.html |
| Mylene Grace Denona (MS Horticulture Graduate 2016) | Enhancing Leaf Mustard Yield with Nitrogen-based Fermented Plant Juice | JARDET | International<br><br>Link: https://www.researchgate.net/profile/Mylene-Grace-Denona |
| Riza D. Meperanum (MS Horticulture Graduate 2026) | Plant-based hydrating solutions for extending vase life and postharvest quality of chrysanthemum (Dendrathema x grandiflorum) | Current Agriculture Research Journal | International<br><br>Link: https://scholar.google.com/citations?view_op=view_citation&hl=en&user=JbTmQw6AoE0C&citation_for_view=JbTmQw6AoE0C:UeHWp8X0CEIC |

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|---|---|---|---|
| Jules Wesley F. Marcelino (MS Horticulture Graduate 2026) | Utilization of Carbonized Wastes as Ethylene Absorbers for Shelf-life Extension of Major Tropical Fruits in Southern Philippines | Asian Journal of Dairy and Food Research | International:<br><br>Link: https://scholar.google.com/citations?view_op=view_citation&hl=en&user=JbTmQw6AoE0C&citation_for_view=JbTmQw6AoE0C:UebtZRa9Y70C |
| Mariel P. Amoy (MS Horticulture Graduate 2026) | Response of banana varieties and seaweed extracts on plantlet formation and root development using corms | Journal of Tropical Agriculture | International<br><br>Link: https://scholar.google.com/citations?view_op=view_citation&hl=en&user=JbTmQw6AoE0C&citation_for_view=JbTmQw6AoE0C:roLk4NBRz8UC |

The research productivity of graduates is another important indicator of the effectiveness and relevance of the Master of Science in Horticulture program of the University of Southern Mindanao. From 2016 to 2026, prominent graduates of the program have produced and co-authored research publications covering a broad range of horticultural and allied agricultural disciplines. As presented in the research publication table, these scholarly works have been published in journals with national and international scope, demonstrating the capacity of the graduates to communicate research findings to the broader academic and scientific community.

Among the most productive graduates is **Mark Al-jamie J. Muttulani**, a 2016 MS Horticulture graduate, whose publications cover diverse areas of horticultural science. His research publications include studies on **grape propagation using different types of cuttings and root-initiating substances**, **the postharvest quality and physicochemical characteristics of strawberry under different mulching and organic fertilizer treatments**, and the **growth performance of strawberry in response to mulching and organic fertilizers in Southern Philippines**. These studies demonstrate a sustained research interest in crop propagation, sustainable crop production, postharvest management, and the adaptation of horticultural technologies to local conditions.

His publications also include research on **banana propagation**, particularly the response of different banana varieties and seaweed extracts on plantlet formation and root development using corms. This research is relevant to the development of efficient and cost-effective propagation techniques for banana, one of the economically important crops in the Philippines. Another significant research output is the **utilization of carbonized wastes as ethylene absorbers for extending the shelf life of major tropical fruits in Southern Philippines**, which demonstrates the integration of waste utilization, postharvest technology, and sustainable agricultural practices.

Additional publications of Muttulani focus on **basal scarification as a technique for improved grapevine rooting and propagation**, **optimized nutrient formulations for hydroponic leaf lettuce production**, **plant-based hydrating solutions for extending the vase life and postharvest quality of chrysanthemum**, **varietal screening and maturity-stage evaluation of corn microgreens**, and **propagation and productivity evaluation of *Anthurium* using organic fertilizers under tropical conditions**. Taken together, these publications demonstrate the breadth of research competencies acquired and applied by the graduate, encompassing plant propagation, crop nutrition, protected and soilless production, postharvest technology, ornamental horticulture, sustainable agriculture, and food-related horticultural innovations.

The publication record of **Noe S. Mamon Jr.**, also a 2016 graduate, includes research on **fertilizer integration in cacao-cum-rubber systems**, particularly its implications for cacao growth, yield, disease occurrence, and profitability. The study reflects the application of horticultural and crop production principles to diversified and economically

important farming systems. It also demonstrates the relevance of graduate research to practical concerns involving productivity, disease management, and farm profitability.

**Rico Jay Ceriales**, a 2019 graduate, has contributed to research on the **characterization of semi-processed rubber (*Hevea brasiliensis*) treated with different coagulants**. Although focused on rubber, the study demonstrates the interdisciplinary nature of the graduate program and its relevance to industrial and perennial crops. The research contributes to understanding processing-related characteristics of an economically important agricultural commodity.

The research productivity of **Imelda A. Soriano**, a 2019 MS Horticulture graduate, includes the study **"Rooting Response and Subsequent Growth of Selected Citrus Sp. to Application of Different Hormones."** Published in a national research journal, the study directly reflects the application of plant propagation and plant growth regulator principles that are central to horticultural science. The research provides practical information relevant to the efficient propagation and establishment of citrus crops.

**Judy Rose Alamada**, a 2020 graduate, has contributed research on **inland fish diversity and conservation challenges in the Pulang River, Central Mindanao, Philippines**. While extending beyond conventional horticultural production, the study demonstrates the broader environmental and conservation orientation of graduates and their ability to apply research methodologies to natural resource management and biodiversity concerns.

Another 2020 graduate, **Francisco Jr. O. Esgrina**, has produced several research outputs addressing agricultural biotechnology, sustainable production, and crop propagation. His publications include research on **maximizing *Pleurotus ostreatus* yield using sustainable agricultural waste substrates in Arakan, Cotabato**, as well as studies on **avocado microclonal rootstocks**, including responses of different microclonal rootstock varieties to etiolation time, microclonal success using different scions and clonal rootstock varieties, and the influence of growth-promoting substances and shading intensity on rhizo-caulogenesis of etiolated avocado microclonal rootstocks. These studies demonstrate the application of research in mushroom production, agricultural waste utilization, plant biotechnology, and advanced propagation techniques.

**Maron M. Garrigues**, a 2016 graduate, has contributed scholarly work on **meliponiculture in the Philippines**, examining its socioeconomic significance, ecological role, and future prospects. Her research broadens the contribution of horticulture graduates toward sustainable agricultural systems and ecological services, particularly through the integration of pollinator-related enterprises and environmental conservation. Her publication on sweet pepper under organic nutrient management likewise addresses agronomic and economic outcomes, highlighting the importance of sustainable nutrient management and profitability in vegetable production.

The publication record of **Mylene Grace Denona**, a 2016 graduate, includes research on **enhancing leaf mustard yield using nitrogen-based fermented plant juice**. This work

is particularly relevant to sustainable horticulture because it explores locally derived organic inputs as potential alternatives or complements to conventional fertilizers. Such research contributes to the program's broader thrust toward environmentally sound and resource-efficient crop production.

The research outputs of the program's recent graduates likewise demonstrate an immediate transition from graduate-level research to scholarly publication. **Riza D. Meperanum**, a 2026 graduate, is associated with research on **plant-based hydrating solutions for extending the vase life and postharvest quality of chrysanthemum**. **Jules Wesley F. Marcelino**, another 2026 graduate, contributed to research on the **utilization of carbonized wastes as ethylene absorbers for shelf-life extension of major tropical fruits in Southern Philippines**. **Mariel P. Amoy**, also a 2026 graduate, contributed to research on the **response of banana varieties and seaweed extracts on plantlet formation and root development using corms**. These outputs demonstrate that the research generated within the graduate program can progress toward dissemination through scholarly publication.

The overall publication record demonstrates several notable characteristics of the MS Horticulture program. First, the research outputs are **multidisciplinary**, covering fruit crops, vegetable crops, ornamental plants, plantation and industrial crops, postharvest technology, plant propagation, plant biotechnology, organic and sustainable agriculture, agricultural waste utilization, and environmental conservation. Second, the publications demonstrate **strong local and regional relevance**, with several studies conducted under conditions prevailing in Southern Philippines. This is particularly significant because the research addresses practical production constraints and opportunities faced by farmers, agricultural institutions, and communities in Mindanao.

Third, the publication record demonstrates the graduates' ability to disseminate research through **internationally and nationally scoped journals**. The presence of publications in journals with international scope indicates the capacity of graduates to contribute to the wider body of agricultural knowledge, while publications in national journals provide avenues for sharing technologies and findings that are directly relevant to Philippine agriculture.

The publications also reflect the application of research competencies developed through the MS Horticulture curriculum. Topics such as propagation, plant growth regulators, crop nutrition, postharvest physiology, organic fertilization, tissue culture, crop protection, and sustainable production are consistent with the core competencies expected of graduate students in horticulture. The progression from graduate research to publication further indicates that the program encourages graduates to transform research findings into scholarly outputs and practical knowledge.

The research publications of prominent MS Horticulture graduates from 2016 to 2026 provide compelling evidence of the program's contribution to research and knowledge generation. The quantity and diversity of publications, together with their national and

international reach, demonstrate that graduates have acquired the research competencies necessary to investigate agricultural problems, generate evidence-based solutions, and communicate their findings through scholarly channels. Their research productivity strengthens the visibility of the MS Horticulture program and contributes to USM's mission of advancing science, technology, innovation, and sustainable agricultural development.

### 2.2.4 Patent/Copyright/Utility Model/Developed and Applied

Table 5. Prominent Graduates in the Master of Science in Horticulture with Patent/Copyright/Utility Model/Developed Applications (2018 – present).

| Name of MS Horticuture | Year Graduated | Agency | Position | Patent/ Copyright/ Utility Model/ Developed Applications (2018-present) |
|---|---|---|---|---|
| Mark Al-jamie J. Muttulani | 2016 | University of Southern Mindanao | Associate Professor IV | Copyright General of the creative work entitled "General Guidelines for Halal Production" Copyright Registration No: 2025-00534-A-TCCR<br><br>Copyright Registration Work entitled "Halal Crop Production" Copyright Registration No:2025-00532-A-TCCR |



Mark Al-jamie J. Muttulani, an MS Horticulture graduate of 2016 from the University of Southern Mindanao (USM), is currently serving as an Associate Professor IV at the University of Southern Mindanao. His professional career demonstrates a strong commitment not only to teaching and research but also to the development and protection of innovative and knowledge-based outputs.

From 2018 to the present, Dr. Muttulani has contributed to the development of intellectual property outputs, particularly in the area of Halal crop production and agricultural practices. Among his notable accomplishments are the copyright registrations for instructional and technical materials that support the promotion and application of Halal principles in agriculture.

His registered creative works include “General Guidelines for Halal Production,” with Copyright Registration No. 2025-00534-A-TCCR, and “Halal Crop Production,” with Copyright Registration No. 2025-00532-A-TCCR. These copyrighted works reflect his efforts to generate practical and knowledge-based resources that can be utilized by students, researchers, practitioners, and other stakeholders in promoting Halal-compliant agricultural production.

These intellectual property accomplishments demonstrate the relevance and impact of the MS Horticulture program in developing professionals who are capable of producing innovative, useful, and protected knowledge outputs. Dr. Muttulani's accomplishments further exemplify how graduate education in horticulture can contribute to research, instruction, innovation, and the advancement of sustainable and specialized agricultural practices.

2.2.5 Expert and Consultancy Services and Regional/National Technical Working Group Members

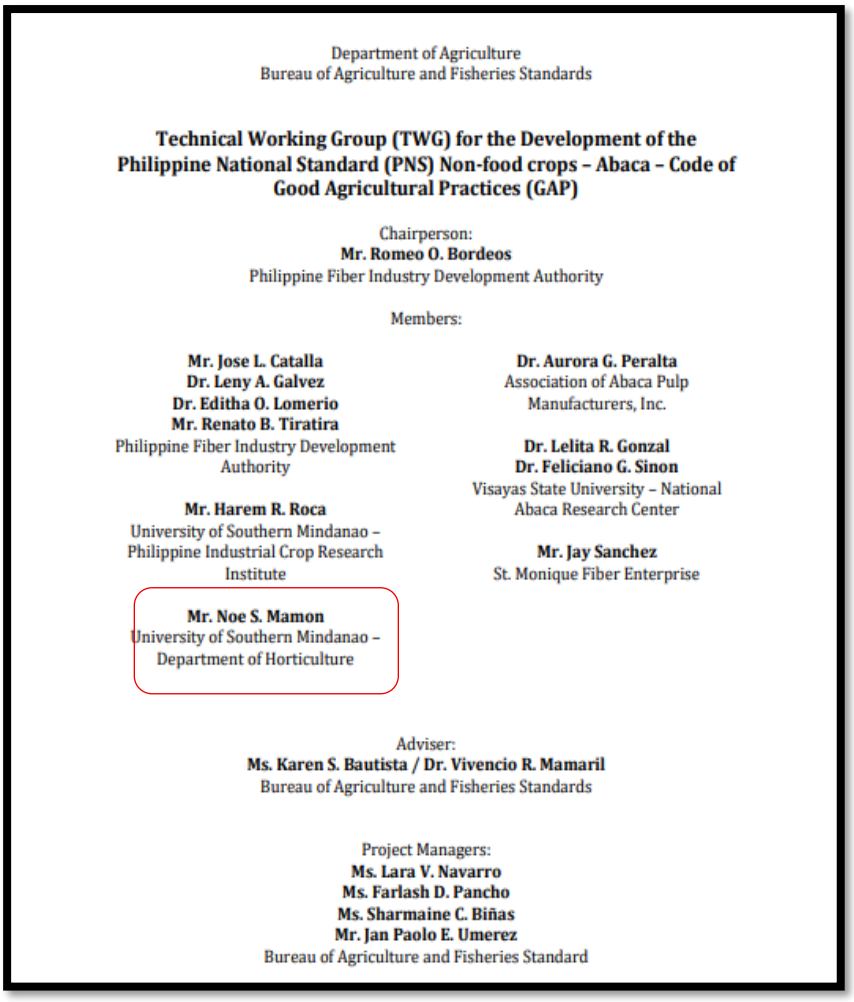
Table 6. Prominent Graduates in the Master of Science in Horticulture with Expert and Consultancy Services and Regional/National Technical Working Group Members (2016 – present).

| **Name of MS Horticulture Graduate** | **Year Graduated** | **Agency** | **Position** | **Expert and Consultancy Services and Regional and National Working Group Members (2016- Present)** |
|---|---|---|---|---|
| Mark Al-jamie J. Muttulani | 2016 | University of Southern Mindanao | Associate Professor IV | Consultancy Agricultural Productivity Enhancement (CAPE) of DOST Program in Region 12<br><br>TWG members in the Development of PNS on Pummelo-Product Standard-Grading and Classification-Member<br><br>Technical Working Group (TWG) 7th Meeting for the Development of the Philippine National Standard (PNS) on Durian — Code of Practice (COP) — Good Agricultural Practices (GAP)-Member |

| | | | | |
|---|---|---|---|---|
| | | | | Fruit Crops National Seed Industry Council TWG- Fruit Crops member |
| Noe S. Mamon | 2016 | University of Southern Mindanao | | Technical Working Group (TWG) for the Development of the Philippine National Standard (PNS) Non-food crops – Abaca – Code of Good Agricultural Practices (GAP)- Member |

The MS in Horticulture program has produced graduates who actively contribute their expertise to agricultural development programs and the formulation of national standards. **Mark Al-jamie J. Muttulani**, a 2016 graduate and Associate Professor IV at the University of Southern Mindanao, has served as a consultant under the DOST Consultancy Agricultural Productivity Enhancement (CAPE) Program in Region 12. He has also contributed as a member of various Technical Working Groups (TWGs) involved in the development of Philippine National Standards (PNS), including the PNS on Pummelo-Product Standard, Grading and Classification; the PNS on Durian—Code of Practice (COP)-Good Agricultural Practices (GAP); and the Fruit Crops National Seed Industry Council TWG.

Similarly, **Noe S. Mamon**, also a 2016 MS Horticulture graduate of USM, has served as a member of the TWG for the development of the Philippine National Standard on Abaca—Code of Good Agricultural Practices (GAP). These engagements demonstrate the program's contribution to producing graduates whose technical expertise extends beyond academic institutions and supports national efforts in agricultural standardization, productivity enhancement, quality assurance, and the promotion of good agricultural practices.



Department of Agriculture
Bureau of Agriculture and Fisheries Standards

**Technical Working Group (TWG) for the Development of the Philippine National Standard (PNS) Non-food crops – Abaca – Code of Good Agricultural Practices (GAP)**

Chairperson:
**Mr. Romeo O. Bordeos**
Philippine Fiber Industry Development Authority

Members:

**Mr. Jose L. Catalla**
**Dr. Leny A. Galvez**
**Dr. Editha O. Lomerio**
**Mr. Renato B. Tiratira**
Philippine Fiber Industry Development Authority

**Mr. Harem R. Roca**
University of Southern Mindanao – Philippine Industrial Crop Research Institute

**Mr. Noe S. Mamon**
University of Southern Mindanao – Department of Horticulture

**Dr. Aurora G. Peralta**
Association of Abaca Pulp Manufacturers, Inc.

**Dr. Lelita R. Gonzal**
**Dr. Feliciano G. Sinon**
Visayas State University – National Abaca Research Center

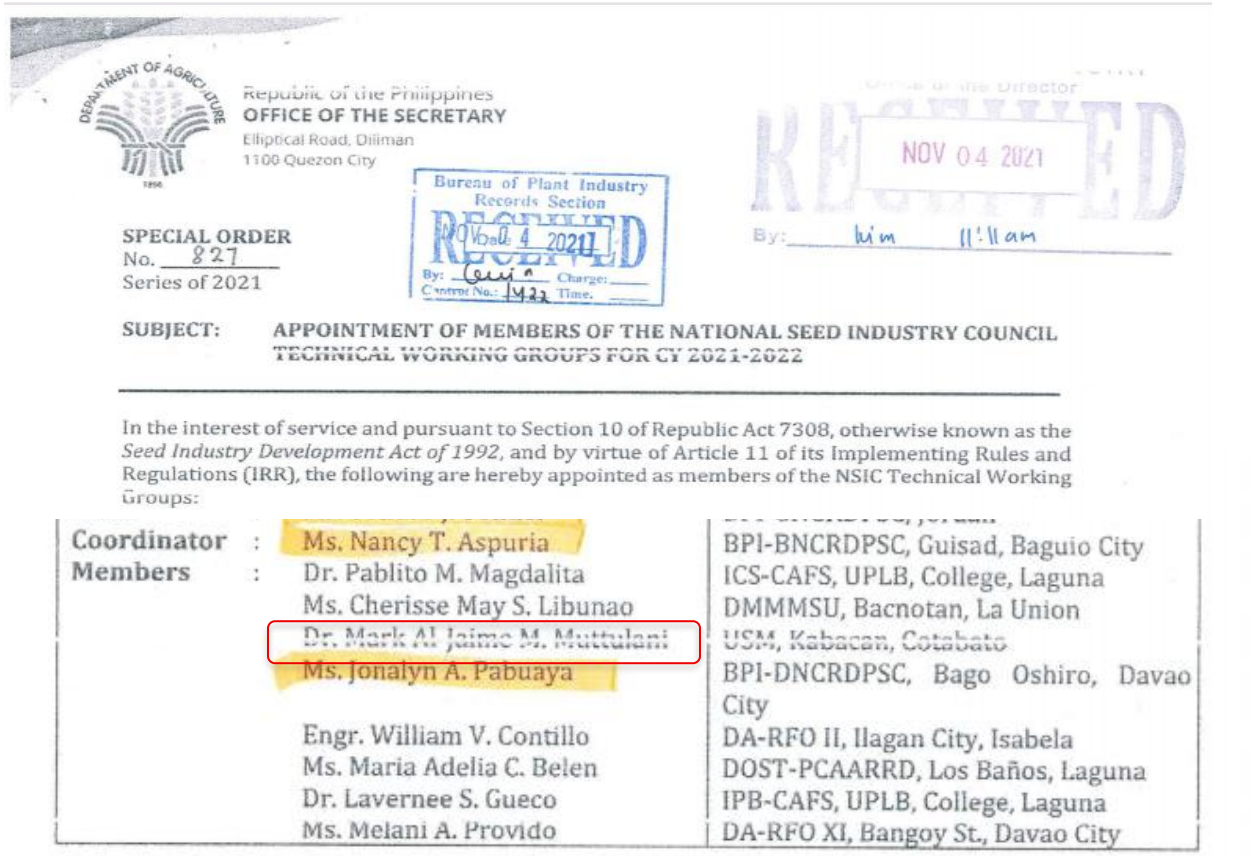
**Mr. Jay Sanchez**
St. Monique Fiber Enterprise

Adviser:
**Ms. Karen S. Bautista / Dr. Vivencio R. Mamaril**
Bureau of Agriculture and Fisheries Standards

Project Managers:
**Ms. Lara V. Navarro**
**Ms. Farlash D. Pancho**
**Ms. Sharmaine C. Biñas**
**Mr. Jan Paolo E. Umerez**
Bureau of Agriculture and Fisheries Standard

https://philfida.da.gov.ph/images/Publications/PNS/PNS-Non-food-Abaca-GAP.pdf

Prof. Mamon (MS Horticulture Alumni) as member of TWG for the Development of the Philippine National Standard (PNS) Non-food crops – Abaca – Code of Good Agricultural Practices (GAP).



Republic of the Philippines
OFFICE OF THE SECRETARY
Elliptical Road, Diliman
1100 Quezon City

Bureau of Plant Industry
Records Section
RECEIVED
Nov 4 2021
By: Charge:
Control No.: 1422 Time:

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By: lim 11:11 am

SPECIAL ORDER
No. 827
Series of 2021

SUBJECT: APPOINTMENT OF MEMBERS OF THE NATIONAL SEED INDUSTRY COUNCIL TECHNICAL WORKING GROUPS FOR CY 2021-2022

In the interest of service and pursuant to Section 10 of Republic Act 7308, otherwise known as the *Seed Industry Development Act of 1992*, and by virtue of Article 11 of its Implementing Rules and Regulations (IRR), the following are hereby appointed as members of the NSIC Technical Working Groups:

| | | | |
|---|---|---|---|
| **Coordinator** | : | Ms. Nancy T. Aspuria | BPI-BNCRDPSC, Guisad, Baguio City |
| **Members** | : | Dr. Pablito M. Magdalita | ICS-CAFS, UPLB, College, Laguna |
| | | Ms. Cherisse May S. Libunao | DMMMSU, Bacnotan, La Union |
| | | Dr. Mark Al Jaime M. Muttulani | USM, Kabacan, Cotabato |
| | | Ms. Jonalyn A. Pabuaya | BPI-DNCRDPSC, Bago Oshiro, Davao City |
| | | Engr. William V. Contillo | DA-RFO II, Ilagan City, Isabela |
| | | Ms. Maria Adelia C. Belen | DOST-PCAARRD, Los Baños, Laguna |
| | | Dr. Lavernee S. Gueco | IPB-CAFS, UPLB, College, Laguna |
| | | Ms. Melani A. Provido | DA-RFO XI, Bangoy St., Davao City |

Prof. Muttulani (MS Horticulture Alumni) serving as Fruit Crops TWG Member of NSIC for 2021-2022

Republic of the Philippines
Department of Agriculture (DA)
**Bureau of Agriculture and Fisheries Standards (BAFS)**
*"...ensuring consumer safety and promoting global competitiveness of Philippine agricultural and fishery products, and machinery..."*

| Page | : | 1 of 1 |
|---|---|---|
| | | |
| | | |
| *Reference Numbers* | | |

July 13, 2026

## CERTIFICATION

This is to certify that **Mark Al-Jamie Muttulani**, **PhD** of the University of Southern Mindanao (USM), was an active and valued member of the Technical Working Group (TWG) for the Philippine National Standard (PNS) on Pummelo — Product Standard — Grading and Classification (PNS/BAFS 11:2025). As a TWG member, he is responsible for providing scientific and technical data and information to support the development of the standard. His participation was aligned with the Special Order (SO) No. 745 series of 2025 that officially created the TWG for the said PNS.

This certification is issued upon the request of the above-named for whatever legal purpose it may serve.

**ALPHA M. LANUZA, DVM**
Chief Science Research Specialist
Standards Development Division (SDD), BAFS-DA

Prof. Muttulani (MS Horticulture Alumni)) certification as active member of Technical Working Group for the PNS on Pummelo- Product Standard Grading and Classification

**Awards received by SUC graduates (All batches)**

| TITLE | NAME OF AWARDEE | AWARD GIVING BODY | NATURE OF AWARD (Insitutional/ National International |
|---|---|---|---|
| Recipient of USM Gawad Parangal: Gawad Lathala and Gawad Sulong sa Pananaliksik | **Mark Al-jamie J. Muttulani** | University of Southern Mindanao | Institutional |
| 3rd Best Paper-Innovation Research Category (USM In-House Review 2023)<br><br>3rd Best Paper- Basic Research Category (USM In-House Review 2022) | **Mark Al-jamie J. Muttulani** | University of Southern Mindanao | Institutional |
| 2nd Plance- Best Paper and Poster in Innovation Category- 1st R & D Symposium on Agriculture, Aquatic and Natural Resources | **Mark Al-jamie J. Muttulani** | University of Southern Mindanao | Institutional |
| 2022 Most Outstanding Teacher | **Abubakar, Bhing** | Department of Education Pikit National High School | Institutional |
| Best Webpage- Champion Secondary Level | **Mercy Sacriz** | ARMM, Division of Maguindanao | Instutional |
| Winning Coach in Academic | **Mercy Sacriz** | Datu Paglas National High School | Institutional |
| Most Deligent Teacher | **Mercy Sacriz** | Datu Paglas National High School | Institutional |

| | | | |
|---|---|---|---|
| Most Maintain Classroom, 2020 | **Mercy Sacriz** | Datu Paglas National High School | Institutional |
| Certificate of Recognition as trainor to the out of school youth USAID Opportunity 2.0 | **Mercy Sacriz** | Caraga Integrated School, USAID, EDC | Institutional |
| Exemplary Award as Brida Eskwela Coordinator, 2024 | **Mercy Sacriz** | BARMM, Ministry of Basic, Higher and Technical Education, Division of Maguindanao de Sur | Institutional |
| Certification of Recognition as Resource Person to the In Service (INSET) Training Program (2024) | **Mercy Sacriz** | BARMM, Ministry of Basic, Higher and Technical Education, Division of Maguindanao de Sur | Institutional |
| Best Research Paper Award | **Mercy Sacriz** | International Conference of Multidisciplinary Research | International |
| Best Paper Research Award | **Richel Garrigiues, Marlon Garrigues** | International Conference of Multidisciplinary Research | International |
| Best Paper Finalist | **Riza D. Meperanum** | Philippine Fruits Association | National |

The Master of Science in Horticulture program of the University of Southern Mindanao (USM) has produced graduates who have demonstrated excellence in research, teaching, innovation, and professional service. The awards and recognitions received by its graduates provide evidence of their professional competence and the effective application of knowledge and skills gained from the program. These accomplishments also reflect the program's contribution to developing graduates who are capable of making meaningful contributions to their respective institutions and communities.

Among the notable awardees is **Mark Al-jamie J. Muttulani**, a graduate of the MS in Horticulture program, who has received several institutional recognitions from the University of Southern Mindanao. He was a recipient of the **USM Gawad Parangal: Gawad Lathala and Gawad Sulong sa Pananaliksik**, recognizing his accomplishments in research and scholarly publication. He also received **3rd Best Paper Awards** in both the **Innovation Research Category during the USM In-House Review 2023** and the **Basic Research Category during the USM In-House Review 2022**. Furthermore, he was awarded **2nd Place for Best Paper and Poster in the Innovation Category** during the **1st R&D Symposium on Agriculture, Aquatic and Natural Resources**. These recognitions demonstrate his sustained commitment to research excellence, innovation, and the dissemination of research outputs, while also reflecting the research competencies developed through the MS Horticulture program.

Other graduates have likewise distinguished themselves in the field of education and professional service. **Abubakar Bhing**, for instance, was recognized as the **2022 Most Outstanding Teacher** at Pikit National High School under the Department of Education. This recognition reflects his dedication to teaching and his contribution to the delivery of quality education. Similarly, **Mercy Sacriz** has received multiple awards and recognitions for her outstanding performance as an educator and school leader. Her accomplishments include being recognized as **Best Webpage Champion at the Secondary Level**, a **Winning Coach in Academic Competitions**, **Most Diligent Teacher**, and recipient of the **Most Maintained Classroom Award in 2020**. These awards demonstrate her commitment to teaching excellence, student development, and the improvement of the school learning environment.

Mercy Sacriz has also extended her professional contributions beyond classroom instruction. She received a **Certificate of Recognition as a Trainer for Out-of-School Youth under the USAID Opportunity 2.0 Program**, demonstrating her involvement in community and youth development initiatives. In 2024, she was recognized with an **Exemplary Award as Brigada Eskwela Coordinator**, highlighting her leadership and active participation in school-community partnership activities. She was also recognized as a **Resource Person for the In-Service (INSET) Training Program in 2024**, demonstrating her capacity to share professional knowledge and expertise with fellow educators.

The research accomplishments of the graduates are likewise demonstrated through recognition at the international level. **Mercy Sacriz** received a **Best Research Paper Award** during the **International Conference of Multidisciplinary Research**, reflecting the quality and relevance of her research work. Similarly, **Richel Garrigues and Marlon Garrigues** received a **Best Paper Research Award** at the same international conference. These recognitions demonstrate that graduates of the program are capable of producing research outputs that gain recognition beyond the institutional level and contribute to broader academic and professional discourse.

The program's recent graduates have also begun to demonstrate research excellence at the national level. **Riza D. Meperanum** was recognized as a **Best Paper Finalist** by the **Philippine Fruits Association**. This achievement is particularly significant as it demonstrates the capacity of recent graduates to present and communicate research findings in a national professional forum. It also reflects the relevance of horticultural research to the Philippine fruit industry and its stakeholders.

Taken collectively, these awards and recognitions demonstrate the diverse ways in which MS Horticulture graduates contribute to their professions. Their achievements encompass **research excellence, scholarly publication, innovation, teaching, academic leadership, coaching, community engagement, training, and professional service**. The range of awards—from institutional recognition at USM, to national-level distinctions, and international research awards—indicates the growing professional impact and visibility of the program's graduates.

These accomplishments further provide evidence that the competencies developed through the MS Horticulture program extend beyond the completion of graduate studies. Graduates have successfully translated their knowledge and research skills into productive professional activities, resulting in recognized contributions to their institutions, communities, and professional organizations. Their achievements serve as positive indicators of the program's effectiveness in developing competent, research-oriented, innovative, and socially responsive professionals.

The awards and recognitions received by MS Horticulture graduates affirm the quality and relevance of the program. The accomplishments of graduates in research, innovation, education, leadership, and community service strengthen the program's contribution to USM's mission of producing graduates who can address agricultural and societal challenges through knowledge, research, and professional excellence. These achievements provide strong supporting evidence for the program's attainment of its intended graduate outcomes and its continuing commitment to excellence in graduate education.


**Prof. Mark Al-Jamie J. Muttulani**, an **MS Horticulture alumnus of the University of Southern Mindanao**, received the awards (Gawad Lathala, Gawad Tagumpay at Gawas Sulong sa Pananaliksik)


Prof. Muttulani (MS Horticulture alumnus wins) 3rd Best Paper-Innovation Research Category (USM In-House Review 2023)



Prof. Mark Al-jamie Muttulani (MS Horticulture Alumni) and team wins 2nd best paper and poster in1st USM R& D Symposium on Agriculture, Aquatic and Natural Resources

Casuga Integrated School

USAID FROM THE AMERICAN PEOPLE

EDC Education Development Center

CERTIFICATE

*Of Recognition*

IS GIVEN TO

**MERCY A. SACRIZ**

for imparting her knowledge, valuable insights and inspirations to the Out of School Youth of USAID Opportunity 2.0, as trainer.

Given this 27th day of June 2022 at Casuga Integrated School, Purok 5 Barangay Malagos Baguio District, Davao City, Philippines

ENGR. NARCISO C.PONCE JR.
General Manager

CHERRYLIN B. CASUGA
School President

TESDA Accredited

Republic of the Philippines
Bangsamoro Autonomous Region in Muslim Mindanao
Ministry of Basic, Higher and Technical Education
DIVISION OF MAGUINDANAO DEL SUR
Pob. Shariff Aguak, Maguindanao Del Sur

**CERTIFICATE OF RECOGNITION**

*is awarded to*

**MERCY A. SACRIZ**

On his/her **EXEMPLARY AWARD AS BRIGADA ESKWELA COORDINATOR** effort initiated, encourage, and strengthen cooperation and collaboration among education stakeholders through the spirit of volunteerism or bayanihan that contribute to the success of Brigada Eskwela Implementation of the Department of Education for school year 2023-2024 with a theme "***BAYANIHAN PARA SA MATATAG NA PAARALAN.***"

Awarded this 23rd day July of 2024 at the Division Office, Shariff Aguak, Maguindanao del Sur.

BRIGADA ESKWELA'23 Bayanihan para sa Matatag na Paaralan

CERTIFICATE NO. BE-054

NORIE M. MAMALINTA, ALHADJA
OIC-Schools Division Superintendent

MATATAG

BRIGADA ESKWELA EXEMPLARY AWARDS 2024

Republic of the Philippines
Bangsamoro Autonomous Region in Muslim Mindanao
Ministry of Basic, Higher and Technical Education
DIVISION OF MAGUINDANAO DEL SUR
DATU PAGLAS NATIONAL HIGH SCHOOL
Poblacion, Datu Paglas, Maguindanao Del Sur

**CERTIFICATE OF RECOGNITION**

is presented to

**MERCY A. SACRIZ**

*For her valuable and exemplary service rendered as **RESOURCE SPEAKER** during the In-Service Training (INSET) Program entitled "School Improvement Plan and RPMS" held at Datu Paglas National School, Poblacion Datu Paglas, Maguindanao Del Sur.*

*Given this 23rd day of February 2024 at Datu Paglas National High School, Poblacion Datu Paglas, Maguindanao Del Sur.*

BADRIA K. TALEMBO, PhD
Principal 1

NORIE M. MAMALINTA, Al-Hadja
Schools Division Superintendent

INSET20

Republic of the Philippines
Bangsamoro Autonomous Region in Muslim Mindanao
Ministry of Basic, Higher and Technical Education
DIVISION OF MAGUINDANAO DEL SUR
DATU PAGLAS NATIONAL HIGH SCHOOL
Poblacion, Datu Paglas, Maguindanao del Sur

**CERTIFICATE of Appreciation**

is awarded to

**MERCY A. SACRIZ**

in grateful acknowledgement of her invaluable support and services rendered as a RESOURCE SPEAKER during the 2023 BRIGADA ESKWELA KICK - OFF Activity with the Theme of "Matatag na Bayan para sa Maunlad na Paaralan" held on August 1-15, 2023 at Datu Paglas National High School, Datu Paglas, Maguindanao del Sur, thereby contributing immeasurably to the prestige and success of the program.

Given this 15th day of August, 2023 at Datu Paglas National High School Poblacion, Datu Paglas, Maguindanao del Sur

BADRIA K. TALEMBO, PhD
Principal 1

BAI MERIAM A. KAWIT, AL- HADJA
Schools Division Superintendent

Republic of the Philippines
Bangsamoro Autonomous Region in Muslim Mindanao
Ministry of Basic, Higher and Technical Education
Division of Maguindanao – I
**DATU SAUDI UY AMPATUAN DISTRICT**

**CERTIFICATE OF RECOGNITION**

is given to

*MERCY A. SACRIZ*

in sincere acknowledgement for the valuable service as QUIZ MASTER in the activities which conducted during the District Math Quiz Bee year 2022-2023 as part of the Enhancing Math Learning.

Given this on September 26, 2022 at Datu Pendililang Piang Elementary School – Datu Saudi Ampatuan, Maguindanao del Sur.

ALTON D. AMPANG
District Supervisor

Ms. Mercy Sacriz (MS Horticulture alumni) received multiple awards of recognition to different award giving bodies as presented.

BEST RESEARCH PAPER AWARD

FIRST PLACE
(FOR CATEGORY SDG 1-2)

is given to

MARLON GARRIGUES, RICHEL B. GARRIGUES,
ROMNICK GUILLERMO, GLENN C. BIACOLO, JOSIE C.ALEGADO

NORTH EASTERN MINDANAO STATE UNIVERSITY

for presenting the paper titled

"DISTRIBUTION AND IMPACT ASSESSMENT OF MELIPONICULTURE ON CROP PRODUCTION IN SURIGAO DEL SUR"

during the "Excritus Del San 4th International Conference on Multidisciplinary Research (ICMR 2023)" with the theme:

"Utilizing Sustainable Development Goals (SDGs) as a Universal Research Agenda on Emerging Global Communities"

held on 05-07 October 2023 at the Garden Orchid Hotel, Canelar, Zamboanga City, Philippines.

Given this 7th day of October 2023 at Garden Orchid Hotel, Canelar, Zamboanga City, Philippines.

Prof. Marlon M. Garrigues and Ms. Richel Garrigues (both MS Horticulture Alumni) received best paper award in the 4th International Conference on Multidisciplinary Research (ICMR 2023).


Ms. Bhing G. Abubakar received the 2022 Most Outstanding Teacher in Pikit NHS Salindaw Ka Awarding Program Ceremony.


**PhilFruits Association**
Agosto 1 ·

[Event Highlight | Best Scientific Paper Competition]

The afternoon session is filled with insightful learning and engaging discussions as researchers presented their latest findings through the best scientific paper competition.

The Best Paper Competition was evaluated by a distinguished panel of judges: Dr. Pablito M. Magdalita (PFA President and Chair of the Papers Committee), Dr. Analissa Aquino of the University of the Philippines Los Baños, and Dr. Lorina A. Galvez of Visayas State University. Their expertise and dedication helped recognize the outstanding research presented during the competition.

We would also like to recognize the dedicated members of the Papers Committee for their invaluable contributions in shortlisting candidates for the Best Paper Competition: Dr. Felipe S. Dela Cruz, Jr., Ms. Glaisa R. Garcia, and Engr. Maria Katrina N. Alaon. Their commitment and support played an essential role in ensuring the smooth conduct of the paper evaluation and selection process.

The best paper finalist are:

Upcycling Fruit Waste into High-Value Biofertilizers: Enhancing Strawberry Yield, Quality, and Profitability under Lowland Tropical Conditions
Riza D. Meperanum*, Mark Al-Jamie J. Muttulani, and Lorelyn Joy N. Turnos-Milagrosa

**PhilFruits Association, Inc.**
IPB, College of Agriculture and Food Science, University of the Philippine Los Baños
College, Los Baños, Laguna 4031
Email: philfruits.nfs@gmail.com
Mobile : 0917-1033-014

17 June 2026

**RIZA D. MEPERANUM**
Graduate School
University of Southern Mindanao
Kabacan, Cotabato, Philippines

Dear **Ms. Meperanum**:

Greetings from the PhilFruits Association, Inc.!

We are pleased to inform you that your abstract entitled, **"UPCYCLING FRUIT WASTE INTO HIGH-VALUE BIOFERTILIZERS: ENHANCING STRAWBERRY YIELD, QUALITY, AND PROFITABILITY UNDER LOWLAND TROPICAL CONDITIONS"**, co-authored by Mark Al-Jamie J. Muttulani and Lorelyn Joy N. Turnos-Milagrosa, has been considered for presentation in the **Best Paper competition** in the **32nd National Fruit Symposium** to be held at the **Development Academy of the Philippines, Tagaytay City, Cavite** on **July 13-17, 2026.** Your temporary presentation number **is BP1 (Best Paper 1)**

Ms. Riza D. Meperanum (MS Horticulture alumni), selected as Best Paper finalist in the 32nd National Fruits Symposium held at Tagaytay City