



AREA V RESEARCH

B. FUNDINGS AND OTHER RESOURCES

B.5. List of the Patents, Licenses, Copyrights and Other Research Outputs

IP and Tech Transfer Division

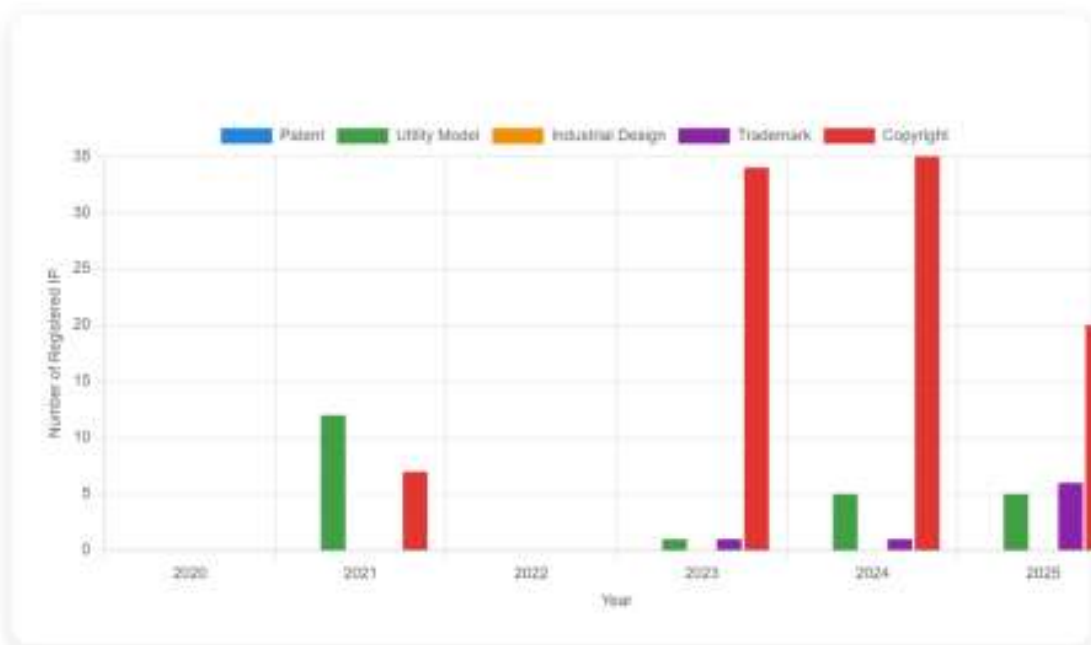
IP protection, technology evaluation, licensing, and commercialization



Business Development Unit

Strategic planning, partnerships, startup incubation, and growth support

UNIVERSITY INTELLECTUAL PROPERTY RIGHTS



Industrial Design

2017

Registration Number

Title of Invention

Inventor

A Classroom Armchair

COMPONENT UNITS



IP and Tech Transfer Division

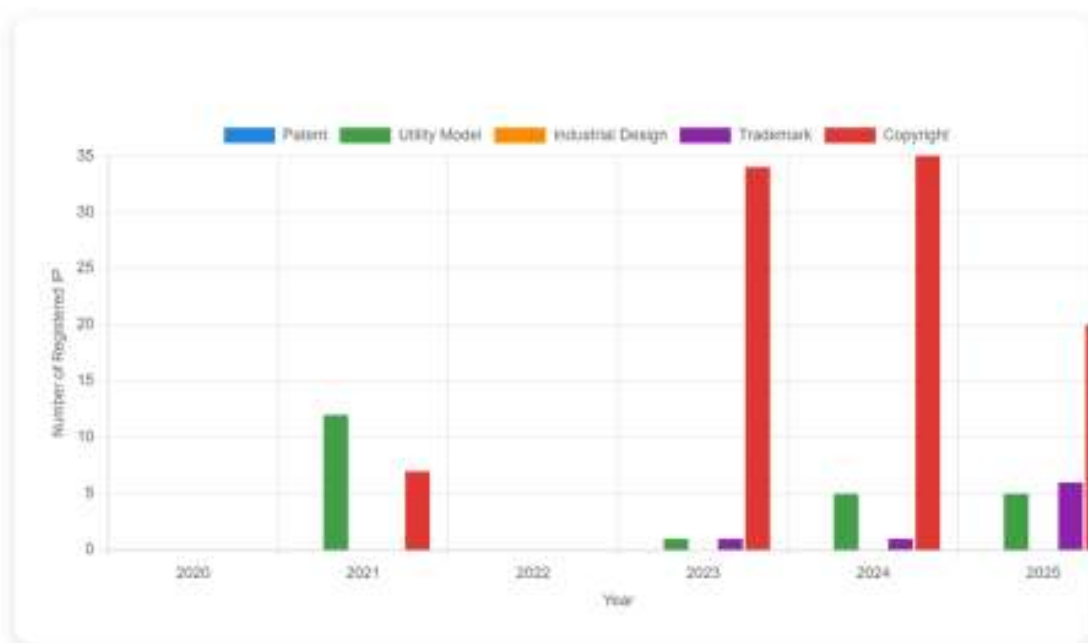
IP protection, technology evaluation, licensing, and commercialization



Business Development Unit

Strategic planning, partnerships, startup incubation, and growth support

UNIVERSITY INTELLECTUAL PROPERTY RIGHTS



Industrial Design

Utility Model

2025

Registration Number

Title of Invention

Inventor

PH22025050482

Herbal Gel-Based Mosquito Repellent Composition

Sedra A. Murray

PH22022050914

Method for Profiling and Identification of Philippine Palm Species

Edward Barlaan

PH22024050517

Method for Preserving Quail Eggs (*Coturnix coturnix*)

Romiel John Basan, Cyril Guzman

PH22024051197

Method for Identification, Detection and Quantification of Fusarium Wilt Disease Pathogens in Banana using Digital PCR

Edward Barlaan

PH22023051074

Animal Feeding Apparatus

Madell Pana, Ronielyn Pinsoy, Jenife Labado, Fritzie Nahilat, Irelyn Jasmin

PH22024051198

Method for Identification and Detection of Panama Disease Pathogens in Banana using Quantitative Real-Time PCR

Edward Barlaan

2024

PH22022050910

Method for Identification, Detection and Quantification of Banana Bunchy Top Virus using Digital PCR

Edward Barlaan

PH22022050911

Method for PCR-Based Identification and Detection of Banana Bunchy Top Virus in Banana Varieties

Edward Barlaan

PH22022050912

Method for Profiling and Identification of True Criollo Cacao Types

Edward Barlaan

PH22022050913

Method for Identification and Detection of Banana Bunchy Top Virus using Quantitative Real-Time PCR

Edward Barlaan

PH22024050107

Process of Utilizing Mangosteen (*Garcinia mangostana*) Rind Powder as Feed Additive for Broiler Chicken Diet

Roy Ricabar, Elizabeth Dequito, Mark Steven Estefania, Julius Jerome Ele, Abdul Mamaco, Jelford Sumaya, Jack Robert Labrador, Saban Belongan, Josie Artos

2023

PH22024050107

Process of Utilizing Mangosteen (*Garcinia mangostana*) Rind Powder as Feed Additive for Broiler Chicken Diet

Roy Ricabar, Elizabeth Dequito, Mark Steven Estefania, Julius Jerome Ele, Abdul Mamaco, Jelford Sumaya, Jack Robert Labrador, Saban Belongan, Josie Artos

2021

DNA Probe Kit for PCR-based Identification and Detection of Banana Bunchy Top Virus in Banana Varieties

DNA Primer Kits for Identification and Fingerprinting of True Criollo Cacao Types

DNA Probe Kits for Identification and Detection of Panama Disease Pathogens in Banana Using Digital PCR

DNA Probe Kits for Identification and Fingerprinting of True Criollo Cacao Types

DNA Primer Kits for Identification, Detection and Quantification of Banana Bunchy Top Virus Using Digital PCR

DNA Primer Kits for Identification and Fingerprinting of Philippine Coconut Varieties

DNA Primer Kits for Identification and Fingerprinting of Philippine Recommended Cacao Varieties

DNA Probe Kits for Identification and Detection of Banana Bunchy Top Virus Using Quantitative Real-time PCR

DNA Probe Kits for Identification and Detection of Panama Disease Pathogens in Banana Using Quantitative Real-time PCR

DNA Probe Kits for Identification and Detection of Moko and Bugtok Disease Pathogen in Banana Using Quantitative Real-time PCR

DNA Primer Kits for Profiling and Identification of Philippine Palm Species

DNA Probe Kits for Identification and Detection of Moko and Bugtok Disease Using Digital PCR

2018

Method for enhancement of tissue culture propagation protocol using male bud/floral apex of banana

Sales, E.K. & Roca, H.R. Republic of the Philippines – Bureau of Patents

2017

Propagation of rubber rootstocks via micro cuttings

Roca, H.R. Republic of the Philippines – Bureau of Patents

A Combined Trophy and Paper Weight with Pen Holder

Pinsoy, R.F. Republic of the Philippines – Bureau of Patents

2016

Electronic Oil Level Indicator

Akoy, N.E. & Calabit, M.C. Republic of the Philippines – Bureau of Patents

COMPONENT UNITS



IP and Tech Transfer Division

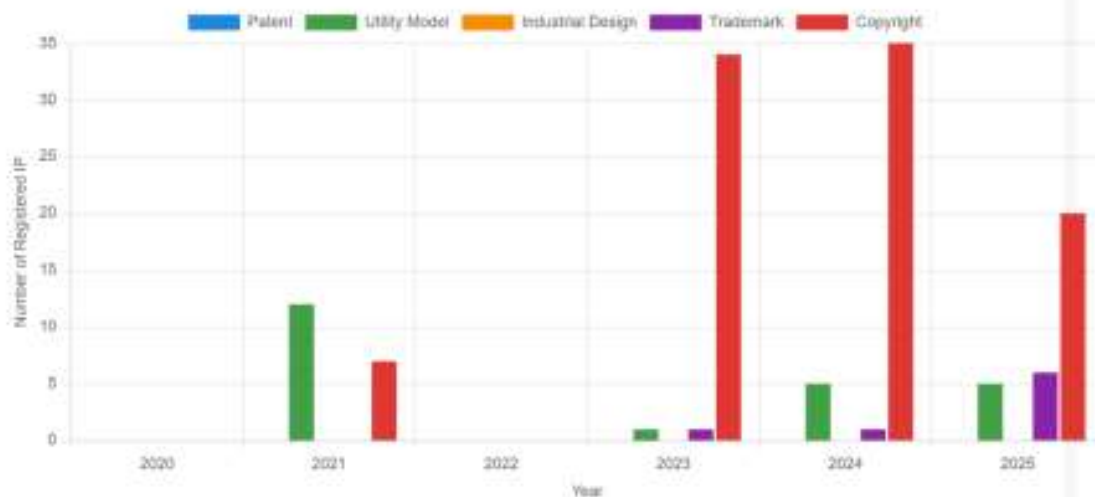
IP protection, technology evaluation, licensing, and commercialization



Business Development Unit

Strategic planning, partnerships, startup incubation, and growth support

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Industrial Design

Utility Model

Trademark

2026



ISMART INSTRUMENTATION SYSTEM MODELING, ASSEMBLY AND RESPONSE TESTING LABORATORY
Registration Number: 4/2025/00509838

2025



UNIVERSITY OF SOUTHERN MINDANAO SEAL
Registration Number: 2/2024/00528207



USM FOODS
Registration Number: 4/2024/00534702



USM INTELLECTUAL PROPERTY, TECHNOLOGY TRANSFER, AND BUSINESS DEVELOPMENT OFFICE
Registration Number: 4/2025/00517783



UNIVERSITY OF SOUTHERN MINDANAO DEPARTMENT OF BUSINESS ADMINISTRATION
Registration Number: 2/2025/00517785



UNIVERSITY OF SOUTHERN MINDANAO JUNIOR MARKETING EXECUTIVES SOCIETY

Registration Number: 4/2025/00517786



USMART TBI

Registration Number: 4/2025/00510811



USM

Registration Number: 4/2025/00528572



THE MINDANAO TECH VANGUARDS OF STUDENTS' RIGHTS SINCE 1955

Registration Number: 4/2025/00516076

2024



DAEC DEPARTMENT OF AGRICULTURAL ECONOMICS

Registration Number: 4/2024/00524996

2023

USM FOODS CHICKEN PATER

Registration Number: 4/2022/00531800

Copyright

2025

Transfer Certificate Number

Title of Creative Works

Authors

2025-04353-A-TCCR

BAKAWAN: Mangrove Species in Sta. Cruz, Davao del Sur

Cherie Cano Mangaoang, Novie James Dayadas Ligue, Ralph Jay Jauod Baylon, Jaypee Kadalem Balera, Rodger Morgia Bruno, Bonifacio Sangcom Declerdo, Jr., Angelie Clua Abler, Ellen Angelic Agni Biene

2025-03056-A-TCCR

Feasibility Study

Mitzi Aileen M. Alba

2025-03055-A-TCCR

Professional Salesmanship

Analyn A. Gonzales

2025-03053-A-TCCR

Pricing Strategy

Cheryl Y. Dulay

2025-03051-A-TCCR

Strategic Management Module

Lotis D. Cubin

2025-03049-A-TCCR

Learning Module in Entrepreneurial Management

Jalaloden B. Marohom

2025-02400-A-TCCR

Trees and Shrubs of Tampakan-Lutayan Watershed

Ronielyn Pinsoy, Dhealyn Decee Sabit, Stephen Dave Dupo, Carmee Lyn Paylangco, April Geraldine Quinonero, Ma. Karysa Garcia, Jeconi Joice Paler

2025-02398-A-TCCR

Fishes of Lake Buluan

Ronielyn Pinsoy, Dhealyn Decee Sabit, Stephen Dave Dupo, Carmee Lyn Paylangco, April Geraldine Quinonero, Ma. Karysa Garcia, Jeconi Joice Paler

2025-02396-A-TCCR

Plankton of Lake Buluan

Ronielyn Pinsoy, Dhealyn Decee Sabit, Stephen Dave Dupo, Carmee Lyn Paylangco, April Geraldine Quinonero, Ma. Karysa Garcia, Jeconi Joice Paler

2025-02394-A-TCCR

Birds and Insects of the Tampakan-Lutayan Watershed

Ronielyn Pinsoy, Dhealyn Decee Sabit, Stephen Dave Dupo, Carmee Lyn Paylangco, April Geraldine Quinonero, Ma. Karysa Garcia, Jeconi Joice Paler

2025-01045-N-TCCR

Smart Cacao Pests and Diseases mobile Application (SCAPAD)

Maricel Dayaday, Denver Von Ariaga, Kim Jon Bonete, Jeffrey Lavarias

2025-01043-A-TCCR

Halal Aquaculture

Jurhamid Imlan, Pia Amabelle Flores

2025-00581-A-TCCR

Economics of Halal Production

Francisco Gil Garcia, Jalaloden B. Marohom

2025-00558-L-TCCR

Lecture Video in Introduction to Veterinary Endocrinology

Garry D. Lasaga

2025-00556-N-TCCR

Controlled Temperature Data Logger for Solar Dryer

Maricel Dayaday, Renel M. Alucilja, Richell Joy Cuarteros, Denver Von Ariaga, Jeffrey Lavarias

2025-00554-N-TCCR

Fermentation Temperature Data Logger

Maricel Dayaday, Renel M. Alucilja, Richell Joy Cuarteros, Denver Von Ariaga, Jeffrey Lavarias

2025-00536-N-TCCR

ChevonPro Insights

Jalaloden Marohom, Ivy Mar Cabornida

2025-00534-A-TCCR

General Guidelines for Halal Food Production

Josephine Migalbin, Sandra Joy Pahm, Jurhamid Imlan, Mark Al-Jamie Muttulani

2025-00532-A-TCCR

Halal Crop Production

Mark Al-Jamie Muttulani, Sandra Joy Pahm

2025-00530-A-TCCR

Halal Slaughtering

Jurhamid Imlan

2024

2024-06346-A-TCCR

Lecture Slides in Veterinary Clinical Pharmacology

Garry D. Lasaga

2024-06254-A-TCCR

FT 113 Commercial Cooking II (Coldkitchen)

Josephine Gonzaga, Dennis Muyco, Jestony Pan

2024-06211-K-TCCR

Photo of Philippine Tree Squirrel

Jennet Mag-aso, Francisco Gil Garcia, Rezin Cabantug, Andrea Kate Castaneda

2024-06209-K-TCCR

Photo of Philippine Leaf Warbler

Jennet Mag-aso, Francisco Gil Garcia, Rezin Cabantug, Andrea Kate Castaneda

2024-06207-K-TCCR

Photo of Yellow-billed Whistler

Jennet Mag-aso, Francisco Gil Garcia, Rezin Cabantug, Andrea Kate Castaneda

2024-06205-K-TCCR

Photo of Brown Shrike

Jennet Mag-aso, Francisco Gil Garcia, Rezin Cabantug, Andrea Kate Castaneda

2024-06203-K-TCCR

Photo of Philippine Cuckoo-Dove

Jennet Mag-aso, Francisco Gil Garcia, Rezin Cabantug, Andrea Kate Castaneda

2024-06201-K-TCCR

Photo of Philippine Bulbul

Jennet Mag-aso, Francisco Gil Garcia, Rezin Cabantug, Andrea Kate Castaneda

2024-06199-K-TCCR

Photo of Thicket Flycatcher

Jennet Mag-aso, Francisco Gil Garcia, Rezin Cabantug, Andrea Kate Castaneda

2024-06197-K-TCCR

Photo of Swiftlet

Jennet Mag-aso, Francisco Gil Garcia, Rezin Cabantug, Andrea Kate Castaneda

2024-06195-K-TCCR

Photo of Orange-bellied Flowerpecker

Jennet Mag-aso, Francisco Gil Garcia, Rezin Cabantug, Andrea Kate Castaneda

2024-06193-K-TCCR

Photo of Buff-Spotted Flameback

Jennet Mag-aso, Francisco Gil Garcia, Rezin Cabantug, Andrea Kate Castaneda

2024-06191-K-TCCR

Photo of White-throated Kingfisher

Jennet Mag-aso, Francisco Gil Garcia, Rezin Cabantug, Andrea Kate Castaneda

2024-06189-K-TCCR

Photo of Little-pied Flycatcher

Jennet Mag-aso, Francisco Gil Garcia, Rezin Cabantug, Andrea Kate Castaneda

2024-06187-K-TCCR

Photo of Turquoise Flycatcher

Jennet Mag-aso, Francisco Gil Garcia, Rezin Cabantug, Andrea Kate Castaneda

2024-06185-K-TCCR

Photo of Asian Glossy Starling

Jennet Mag-aso, Francisco Gil Garcia, Rezin Cabantug, Andrea Kate Castaneda

2024-06183-K-TCCR

Photo of Muller's Toad

Jennet Mag-aso, Francisco Gil Garcia, Rezin Cabantug, Andrea Kate Castaneda

2024-06181-K-TCCR

Photo of Mindanao Lorikeet

Jennet Mag-aso, Francisco Gil Garcia, Rezin Cabantug, Andrea Kate Castaneda

2024-06179-K-TCCR

Photo of Coletto

Jennet Mag-aso, Francisco Gil Garcia, Rezin Cabantug, Andrea Kate Castaneda

2024-06177-K-TCCR

Photo of Black-and-Cinnamon Fantail

Jennet Mag-aso, Francisco Gil Garcia, Rezin Cabantug, Andrea Kate Castaneda

2024-06175-K-TCCR

Photo of Coppersmith Barbet

Jennet Mag-aso, Francisco Gil Garcia, Rezin Cabantug, Andrea Kate Castaneda

2024-06173-K-TCCR

Photo of Black-naped Monarch

Jennet Mag-aso, Francisco Gil Garcia, Rezin Cabantug, Andrea Kate Castaneda

2024-06171-K-TCCR

Photo of Sailfin Water Lizard

Jennet Mag-aso, Francisco Gil Garcia, Rezin Cabantug, Andrea Kate Castaneda

2024-06169-K-TCCR

Photo of Whiskered Treeswift

Jennet Mag-aso, Francisco Gil Garcia, Rezin Cabantug, Andrea Kate Castaneda

2024-06167-K-TCCR

Photo of Red-eared Parrotfinch

Jennet Mag-aso, Francisco Gil Garcia, Rezin Cabantug, Andrea Kate Castaneda

2024-06165-K-TCCR

Photo of Black-winged Kite

Jennet Mag-aso, Francisco Gil Garcia, Rezin Cabantug, Andrea Kate Castaneda

2024-06163-K-TCCR

Photo of Citrine Canary Flycatcher

Jennet Mag-aso, Francisco Gil Garcia, Rezin Cabantug, Andrea Kate Castaneda

2024-06149-A-TCCR

FT 212 Advanced Baking

Josephine Gonzaga, Jenny Mamacus, Dennis Muyco

2024-05421-A-TCCR

Workbook in Entrepreneurial Mind

Esmaira Gunsayan, Irving Fajarito, Jr., Jeannie Duka, Julee Ann Zamora

2024-05419-A-TCCR

Enterprise Development Training Module

Esmaira Gunsaya, Irving Fajarito, Jr., Jeannie Duka, Victor Dapon

2024-05831-A-TCCR

Improvised Tire Wrench

Jayson Evangelio

2024-05656-A-TCCR

Design and Development of Conical Ice Bucket: Input to Instructional Materials

Sheila Mae Hortillosa

2024-02199-A-TCCR

HVAC 111: Basic Electricity and Technology Process

Vanessa Jane Lim, James J. Lim

2024-02201-A-TCCR

HVAC 123: Mechanics of Fluids

Vanessa Jane Lim, James J. Lim

2021

Document Management System for BOR Meeting

Ryan Z. Gonzaga, Eugene Ranjo

USM Library Information System

Ryan Z. Gonzaga, Eugene Ranjo

Automated System for Organizational Election

Paul John B. Ongcoy, Ryan Z. Gonzaga

University of Southern Mindanao Student Portal

Melecio A. Cordero Jr., Eugene G. Ranjo, Joefranie G. Ocampo

Francisco Gil N. Garcia, Melecio A. Cordero Jr., Arjay S. Agbunag

Online USMCEE Registration

Melecio A. Cordero Jr., Eugene G. Ranjo, Arjay S. Agbunag

USM Document Tracking System

Francisco Gil N. Garcia, Melecio Cordero Jr., Ryan Z. Gonzaga

2019

Duriologue (A Catalog of Durian Durio Zibethinus Murr.) Germplasm in the Philippines

Sales, E.K. Republic of the Philippines – National Library of the Philippines and Intellectual Property Office

University Research Handbook

Sales, E.K. Republic of the Philippines – National Library of the Philippines and Intellectual Property Office

2018

Completion Rate and Correlates of LET Performance of Science Major Graduates in CED-USM

Soriano, H.A.S. & Farala, E.J. The National Library of the Philippines and the Intellectual Property Office of the Philippines

2017

SHS Preferred Tracks and Readiness of Secondary Schools for Implementation in North Cotabato

Soriano, H.A.S. The National Library of the Philippines and the Intellectual Property Office of the Philippines

MEET OUR TEAM

A Trophy and Paper Weight with Decorative Article

Pinsoy, R.F. Republic of the Philippines – Bureau of Patents

Utility Model
Trademark
Copyright

MEET OUR TEAM

USM Intellectual Property, Technology Transfer and Business Development Office
Innovation and Technology Support Office

JALALODEN B. MAROHOM, DBA
Director

AIRAH D. SARIP
Research Assistant

Vision

Quality and relevant education for its clientele to be globally competitive, culture-sensitive and morally responsive human resources for sustainable development.

Mission

Help accelerate socio-economic development, promote harmony among diverse communities and improve quality of life through instruction, research, extension and resource generation in Southern Philippines.

Our Address

Bal Matabay Plang Avenue
Poblacion, Kabacan
Cotabato 5407
Philippines

Visitor Counter

Today's Visitors: 3
Last 7 Days Views: 123
Total Visitors: 2,809,327

Data Protection

About
Security Breach Incident
Students, Alumni & Prospective Students
Employees
Visitors
Website Users

S.2.4**Patented Outputs**

TYPES OF INCENTIVES	SENIOR AUTHOR/ CO-AUTHOR	NO. OF CO-AUTHORS	RECEIVABLE INCENTIVES	LEGAL BASIS FOR THE RECEIVABLE INCENTIVE
Local Publication	Co-Author	2	5, 000.00	URDEC Reso 004, s 2017 URDEC Reso 005, s 2017 BOR Reso 050, s 2017 BOR Reso 093, s 2017
International Publication	Senior Author	1	25, 000.00	BOR Reso 088, s 2016 URDEC Reso 005, s 2017 BOR Reso 093, s 2017
International Publication	Co-Author	2	12, 500.00	BOR Reso 088, s 2016 URDEC Reso 005, s 2017 BOR Reso 093, s 2017
International Publication	Co-Author	1	25, 000.00	BOR Reso 088, s 2016 URDEC Reso 005, s 2017 BOR Reso 093, s 2017
International Publication	Senior Author	3	25, 000.00	BOR Reso 088, s 2016 URDEC Reso 005, s 2017 BOR Reso 093, s 2017
International Publication	Senior Author	-	50, 000.00	BOR Reso 088, s 2016

				URDEC Reso 005, s 2017 BOR Reso 093, s 2017
International Publication	Senior Author	2	25, 000.00	BOR Reso 088, s 2016 URDEC Reso 005, s 2017 BOR Reso 093, s 2017
International Publication	Co-Author	5	5, 000.00	BOR Reso 088, s 2016 URDEC Reso 005, s 2017 BOR Reso 093, s 2017
International Publication	Senior Author	5	25, 000.00	BOR Reso 088, s 2016 URDEC Reso 005, s 2017 BOR Reso 093, s 2017
International Publication	Co-Author	3	8, 333.33	BOR Reso 088, s 2016 URDEC Reso 005, s 2017 BOR Reso 093, s 2017
International Publication	Co-Author	7	3, 571.43	BOR Reso 088, s 2016 URDEC Reso 005, s 2017 BOR Reso 093, s 2017
PATENT	Senior Author	-	50, 000.00	URDEC Reso 004, s 2017 BOR 050, s 2017

Excerpts from USM R&D JOURNAL (WJB Saliling. 2015)

Other Modes of Publication and Intellectual Property

In lieu of publication, a researcher may opt to submit evidence of patent or utility model. A patent is equivalent to an international article and a utility model is equivalent to a local article.

LIST OF PATENTED, LICENSED RESEARCH

Category	Title of Technology/Invention/ Innovation	Amount Generated
Patents/Utility Model	<ul style="list-style-type: none"> •Formulation for Blue Ternate Liquid Soap and the Process Thereof •Method of Treating Robusta Coffee Berries for Good Quality Coffee •Product of Processing Kulitis-Vanilla (KuliVa) Ice Cream •Nematode Picking Tool •Method for Antibiotic Residual Detection in Chevron •Bat Box for Artificial Roosting Shelter of Insect Bats •Sweet Cured Halal Chevron and Process Thereof •Chili Corned Halal Chevron and the Process Thereof •Garlic-Enhanced Halal Chevron Jerky and the Process Thereof •Electronic Oil Level Indicator •Improved Abacus •Method for Enhancement of Tissue Culture Propagation Protocol using Male Bud/Floral Apex of Banana •Propagation of Rubber Rootstocks via Micro cuttings •A Combined Trophy and Paper Weight with Pen Holder 	Pre-commercialization stage
Licenses	<ul style="list-style-type: none"> •USM Foods Chevron Tapa label •USM Foods Chevron Tocino label •USM Foods Chevron Carne Norte label •USM Foods label •Journal of Agricultural Research, Development, Extension and Technology label 	Pre-commercialization stage
Copyrights	<ul style="list-style-type: none"> •Milenyong Asyano (2020) •Instructional Materials on How to Operate the 3 in 1 Charging, Welding, Starting Aid "CWS" Machine (2020) •3 in 1 "CWS" Machine Operating Manual (2020) •Development and Evaluation of 3 in 1 "CWS" machine (2020) •Illustration On Optimization Of Hydraulic Pressures In Pipe Network Using H-Raphson Computer Program (2020) •Network Profile for Pipe Network Using mycode.m (Computer Program) (2020) 	Pre-commercialization stage

	<ul style="list-style-type: none"> •Pressure Optimization for Pipe Network Using h_optimization.m (Computer Program) (2020) •USM Library Information System (Computer Program) (2020) •Automated System for Organizational Election (Computer Program) (2020) •ECE Reviewer Android App (Computer Program) (2020) •Faces of Diversity, Nurtures of Life's Bounty (Book) (2020) •Computer Program Nodal Outflows using wds_outflow3.m (2020) •Manual on Macro-Propagation Technique: An Alternative Way of Producing Quality Planting Materials of Lakatan •Duriologue (A Catalog of Durian Durio Zibethinus Murr.) Germplasm in the Philippines (2019) •University Research Handbook (2019) •SHS Preferred Tracks and Readiness of Secondary Schools for Implementation in North Cotabato (2017) •Completion Rate and Correlates of LET Performance of Science Major Graduates in CED-USM (2017) 	
	<ul style="list-style-type: none"> • Faces of Diversity, Nurtures of Life's Bounty: Documentation of the Cultural Heritage of B'laan, Erumanen ne Menuvu, Teduray, & T'boli in Region XII (Coffeetable book) 	Published (for copyrighting, patenting)
	<ul style="list-style-type: none"> • Bigbook (Stories (folktales) collected in the research, "Analysis of Obo Manobo Oral Folkstories") 	For copyrighting/ patenting
	<p>Workbooks/Modules (Developed by Faculty of the Department of English Language and Literature)</p> <ul style="list-style-type: none"> • Literature of the Philippines • Mythology and Folklore • Literary Criticism • English Syntax • English Discourse • Purposive Communication • Introduction to Linguistics • Special Topics in English Language Studies • Survey of English and American Literature • The Language of Non-Literary Texts 	For copyrighting/ patenting

	<p>Print-based IEC materials</p> <ul style="list-style-type: none">• How to Write a Letter of Request (Basic technical Writing for Barangay Officials)• Problem Solving Skills in Conflict Resolution: The Power of Collaboration• Problem Solving Skills in Conflict Resolution: The Power of Active Listening• Expanding your Circle: The Power of Networking• Preparing for a Presentation• How to Write a Persuasive Speech (A tool for every successful leader)• Writing an Invitation Letter: The Ultimate Guide• Writing Effective Minutes of a Meeting	<p>For copyrighting/patenting</p>
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REPUBLIC OF THE PHILIPPINES
THE NATIONAL LIBRARY OF THE PHILIPPINES AND THE INTELLECTUAL PROPERTY OFFICE OF THE PHILIPPINES

Certificate of Copyright Registration and Deposit


Registration No. A-2016-00832

Be it known that on November 25, 2016, Khadiqia O. Balah of Kabacan Cotabato caused the registration and deposit with the National Library of the Philippines (NLP), through the Intellectual Property Office of the Philippines (IPOPHL), of the work with the following specifications:

Title	Psychological Testing Notes
Author (s)	Khadiqia O. Balah
Class	Class A (Books, pamphlets, articles, e-books, audio books, comics, novels, and other writings)
Creation Date	June 3, 2016
Period of Protection	Life of the author and for fifty (50) years after his death

Registration and deposit is made for the purpose of completing the records of the National Library in accordance with Section 191 of Republic Act No. 8293, The Intellectual Property Code of the Philippines.

Issued on November 28, 2016 in the City of Taguig, Philippines.

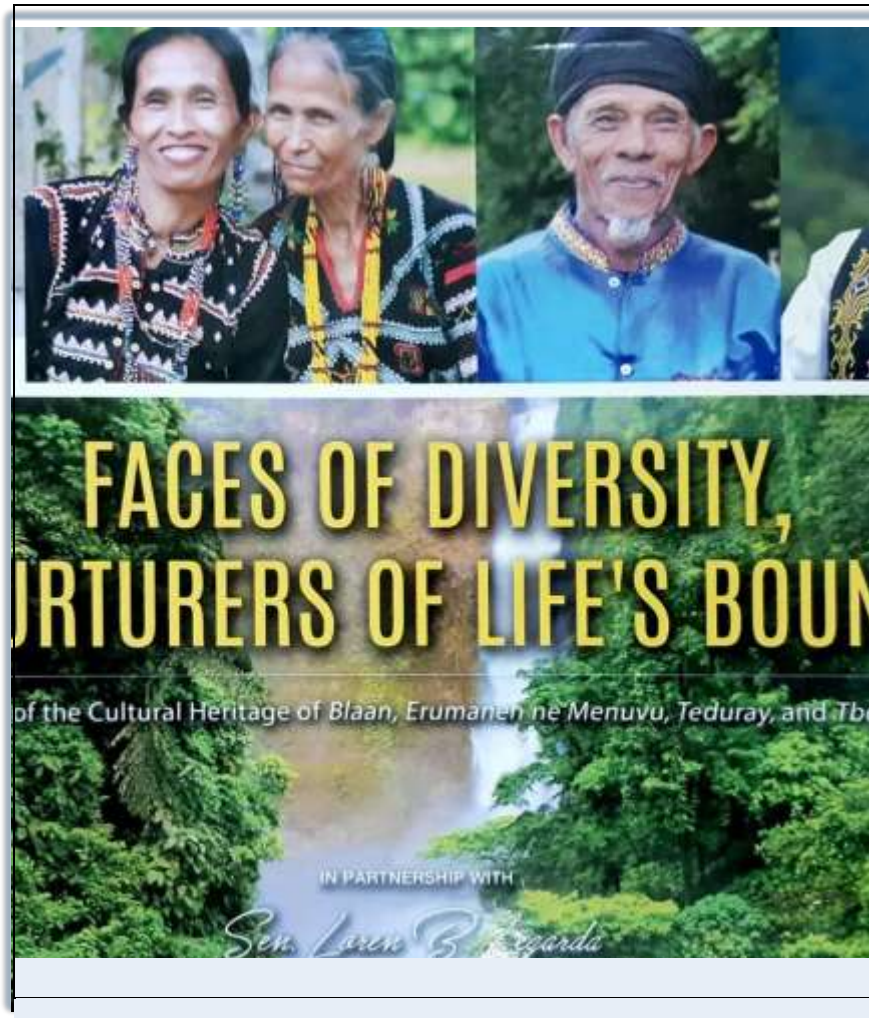

Josephine R. Santiago
Director General

Intellectual Property Office of the Philippines

N.B. A certified true copy of the affidavit of ownership is found at the back of this certificate and forms an integral part of the certificate.

RESEARCH OUTPUTS FOR COPYRIGHTING, PATENTING

A. Faces of Diversity, Nurtures of Life's Bounty: Documentation of the Cultural Heritage of B'laan, Erumanen ne Menuvu, Teduray, & T'boli in Region XII (Coffetable Book)



Faces of Diversity, Gifts of Life's Bounty

A joint undertaking of:

SEN. LOREN B. LEGARDA

Senator, Senate Committee on Cultural Communications,
Climate Change and Environment and Natural Resources,
17th Congress of the Philippines

USM

University of Southern Mindanao
Kabacan, Cotabato



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Published by Image World Digital Printing, Inc.
Printed in the Philippines

searchers

EDITORIAL

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Project Lead
President, University of S

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Program Co-ordinator
Director, H

YVONNE V. S.
Program Co-ordinator
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Team Leader
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WILLIE JONES
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Director, H

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Team Leader

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AMME ROSE
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IP Center for Research, Edu

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Team Leader, Photogra
Head, University Public Rel

MICHAEL D.
Team Leader, W

CINDY GLENN
Research A

Copy of TRM in
docs.

Budget No. 32148

NAME/ OFFICE	ACTION TAKEN	DATE & TIME		SIGNATURE	REMARKS
		RECEIVED	RELEASED		
Nikki Jane Corpuz	Receive documents	OCT 28	2021	[Signature]	
Neneng Gadingan/ Xavia Larioy/ April Maria Carña/ Apoli Pastillero & Charles Velasco	Pre-audit & itc Preparation				
Bernabe Mondia/ Quenielyn Lu	Signing of IEV & DV	1/3		[Signature]	
Bernabe Mondia	Signing for recommending approval (Admin)				
Nikki Jane Corpuz	Deliver documents to President's office				
President/ Authorized Representative	Approval of documents				
Nikki Jane Corpuz	Receive duly approved documents				
Fresther Jhon Mayuga	Released approved documents				

Appendix 11
02-101 101-2021-10-1482
10/28/2021

Amount
388,080.00

FUND 101	To payment of plagiarism software					
	Total					388,080.00

<p>A. Certified: Charges to appropriation/allotment are necessary, lawful and under my direct supervision and supporting documents valid, proper and legal</p> <p>Signature: <u>[Signature]</u></p> <p>Printed Name: MA. TEODORA CABASAN</p> <p>Position: Director, RDO Head, Requesting Office/Authorized Representative</p> <p>Date: _____</p>	<p>B. Certified: Allotment available and obligated for the purpose adjustment necessary as indicated above</p> <p>Signature: <u>[Signature]</u></p> <p>Printed Name: CHARISSE ANGELA S. QUIAMBAO</p> <p>Position: OIC Budget Officer Head, Budget Division/Unit/Authorized Representative</p> <p>Date: October 28, 2021</p>
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C. STATUS OF OBLIGATION							
Reference			Amount			Balance	
Date	Particulars	ORS/IEV/Check/ ADA/TRA No.	Obligation	Payable	Payment	Not Yet Due	Due and Demandable
			(a)	(b)	(c)	(a-b)	(b-c)
10/28/21	To payment of Plagiarism Software, P.O. # 333	02-101 101-2021-10-1482	388,080.00				



UNIVERSITY OF SOUTHERN MINDANAO
Kabacan, Cotabato
Philippines

OBLIGATION REQUEST AND STATUS

Appendix 11

Serial No. : **02-101 101-2021-10-1482**
Date : **10/28/2021**

Entity Name

Payee **LYTECH SOURCE PHILIPPINES, INC.**

Office

Address: **MAKATI CITY**

Responsibility Center

MFO/PAP

UACS Object Code

Amount

To payment of Plagiarism Software, P.O. # 333

A.III.c

50214990 00

388,080.00

FUND 101

Total

388,080.00

A. Certified: Charges to appropriation/allotment are necessary, lawful and under my direct supervision, and supporting documents valid, proper and legal

Certified: Allotment available and obligated for the purpose adjustment necessary as indicated above

Signature *Teodora Cabasan*

Signature *Charisse Quiambao*

Printed Name: **MA. TEODORA CABASAN**

Printed Name: **CHARISSE ANGELA S. QUIAMBAO**

Position: Director, RDO
Head, Requesting Office/Authorized Representative

Position: OIC Budget Officer
Head, Budget Division Unit/Authorized Representative

Date : _____

Date: **October 28, 2021**

C. STATUS OF OBLIGATION

Date	Particulars	Reference ORS/JEV/Check/ ADA/TRA No.	Amount			Balance	
			Obligation	Payable	Payment	Not Yet Due	Due and Demandable
			(a)	(b)	(c)	(a-b)	(b-c)
10/28/21	To payment of Plagiarism Software, P.O. # 333	02-101 101-2021-10-1482	388,080.00				



UNIVERSITY OF SOUTHERN MINDANAO
Kabacan, Cotabato
Philippines

DISBURSEMENT VOUCHER

Appendix 32

Fund Cluster : fund 101	
Date: _____	
DV No. : _____	

Mode of Payment: MDS Check Commercial Check ADA Others (Please specify)

Payee: **LIBTECH SOURCE PHILIPPINES, INC.** TIN/Employee No.: _____ ORS/BURS No.: _____

Address: **MAKATI CITY**

Particulars	Responsibility Center	MFO/PAP	Amount
To payment as per supporting papers hereto attached...		Php	388,080.00
Charge to: RDO FUND 101			20,790.00
Less:		5% 17,325.00 1% 3,465.00	
Recommending Approval: EIMER M. ESTILLOSO VPAF			
Amount in Words	TOTAL AMOUNT DUE		367,290.00

Three hundred sixty seven thousand two hundred ninety pesos only

A. Certified: Expenses/Cash Advance necessary, lawful and incurred under my direct supervision.
Heban
MA. TEODORA N. CABASAN
RDO Director
Printed Name, Designation and Signature of Supervisor

B. Accounting Entry:

Account Title	UACS Code	Debit	Credit

C. Certified:

Cash available
 Subject to Authority to Debit Account (when applicable)
 Supporting documents complete and amount claimed proper.

D. Approved for Payment

Signature	
Name	BERNABE B. MONDIA
Position	CHIEF ADMINISTRATIVE OFFICER Director, FMS/Authorized Representative
Date	
Signature	
Name	FRANCISCO GIL N. GARCIA
Position	SUC PRESIDENT IV Agency Head/Authorized Representative
Date	

Signature	
Name	QUENIELYN L. DURENDES
Position	SUPERVISING ADMINISTRATIVE OFFICER Head, Accounting Unit/Authorized Representative
Date	

E. Receipt of Payment

Check/ADA No.:	Date:	Bank Name & Account Number:	JEV No.
Signature:	Date:	Printed Name:	Date



Official Receipt No. & Date/Other Documents



INSPECTION AND ACCEPTANCE REPORT

Appendix 62

Entity Name : UNIVERSITY OF SOUTHERN MINDANAO Fund Cluster : FUND 101

Supplier : <u>LibTech Source Philippines, Inc.</u>		IAR No. : _____	
PO No./Date : <u>333-10/28/2021</u>		Date : _____	
Requisitioning Office/Dept. : <u>RDO</u>		Invoice No. : <u>10615</u>	
Responsibility Center Code : _____		Date : <u>11/12/21</u>	
Stock/ Property No.	Description	Unit	Quantity
1	Plagiarism Software	lot	1
	Product Cost Inclusions: • Full version (includes Originality Check, Peer Mark, Grade Mark and ETS Rater). • Free Instructor Licenses up to 50% of the Student Licenses • Unlimited Submissions • Integrations to your LMS • 1000 users • 1 year subscription 1. Content Databases a. Student Paper Repository • Discourage improper collaboration and prevent student collusion • 1.3 billion student papers b. Current & Archived Internet • Prevent copy-paste culture • 85+ billion archived web pages c. Scholarly Repository • Avoid academic and research misconduct • 170+ million journals and publications 2. Repositories a. Local b. Consortia 3. Formative options a. Grammar checker (ETS Rater) b. Robust rubrics c. GradeMark/PeerMark		
INSPECTION		ACCEPTANCE	
Date Inspected : <u>11/12/2021</u>		Date Received : <u>11/12/2021</u>	
<input checked="" type="checkbox"/> Inspected, verified and found in order as to quantity and specifications  JEAN E. AUSTRIA Inspection Officer/Inspection Committee		<input checked="" type="checkbox"/> Complete <input type="checkbox"/> Partial (pls. specify quantity)  MA. TEODORA N. CABASAN RDO, Director	

USM-SYS-F31-Rev.1.2020.03.02

19-Rev.1.2020.03.02

Computer software
1087020

USM PRESIDENT *Head of the Procuring Entity*



UNIVERSITY OF SOUTHERN MINDANAO
Kabacan, Cotabato
Philippines

PURCHASE ORDER

Appendix 6a

Supplier: LibTech Source Philippines, Inc. Address: Makati City TIN: 007-882-258-000	P.O. No.: <u>277</u> Date: <u>11/10/21</u> Mode of Procurement: Direct Contracting
--	--

Gentlemen:
Please furnish this Office the following articles subject to the terms and conditions contained herein.

Place of Delivery: USM Date of Delivery: 30days UPON THE RECEIPT OF THE P.O.	Delivery Term: _____ Payment Term: UPON COMPLETION OF DELIVERY
---	---

Stock/ Property No.	Unit	Description	Quantity	Unit Cost	Amount
1	lot	Plagiarism Software Product Cost Inclusions: • Full version (includes Originality Check, Peer Mark, Grade Mark and ETS Rater) • Free Instructor Licenses up to 50% of the Student Licenses • Unlimited Submissions • Integrations to your LMS • 1000 users • 1 year subscription 1. Content Databases a. Student Paper Repository • Discourage improper collaboration and prevent student collusion • 1.3 billion student papers b. Current & Archived Internet • Prevent copy-paste culture • 85+ billion archived web pages c. Scholarly Repository • Avoid academic and research misconduct • 120+ million journals and publications 2. Repositories a. Local b. Comvoria 3. Formative options a. Grammar checker (ETS Rater) b. Robust rubrics c. GradeMark/PearMark	1	388,080.00	388,080.00
TOTAL					388,080.00

(Total Amount in Words) Three Hundred Eighty-Eight Thousand Eighty Pesos

In case of failure to make the full delivery within the time specified above, a penalty of one-tenth (1/10) of one percent for every day of delay shall be imposed on the undelivered items.

Conformed by:
FRANCISCA B. BASILAN
FINANCE & ADMIN MANAGER
LIBTECH SOURCE PHILS., INC.

Date: Nov. 10, 2021

Noted:
MA. TEODORA N. CABASAN
RDO Director
SHIRLY J. MONDIA
Requisitioning Office

Very truly yours,
FRANCISCO GIL N. GARCIA, Ph.D.
SUC President IV

Fund Cluster: RDO FUND 201

Funds Available: _____

BERNABE B. MONDIA
Chief Admin. Officer

QUENIELYN E. DURENDES
Supervising Admin. Officer

ORS/BURS No.: _____

Date of the ORS/BURS: _____

Amount: _____

Computer Software 108702



Kabacan, Cotabato
Philippines



BIDS AND AWARDS COMMITTEE

RECORDS OFFICE

RESOLUTION NO. 229
Series of 2021

Number: 10-009
Received: [Signature]
Date: 09/21/21
Time: 9:30 Am

WHEREAS, the University of Southern Mindanao is a State University covered by the Government Procurement Reform Act, otherwise known as **Republic Act No. 9184** "An Act providing for the Modernization, Regulation and Standardization of the Procurement Activities of the Government and for other Purposes":

WHEREAS, Ma. Teodora N. Cabasan, Director, RDC/end-user requested for the renewal of the plagiarism software with Approved Budget of Contract (ABC) amounting to **Three Hundred Eighty-Eight Thousand Eighty Pesos (P388,080.00)** with the corresponding Purchase Request (PR) No. 685 dated August 12, 2021 through **Direct Contracting (Sec 50 of IRR, RA 9184)**;

WHEREAS, LibTech Source Philippines, Inc. is the Exclusive Distributor of Turnitin LLC products in the Philippines. LibTech Source Philippines, Inc have the right to submit tender and negotiate the said products being sold under the name of Turnitin LLC.:

WHEREAS, after careful evaluation of the bids submitted by the supplier, the TWG recommended to award the said supplies to **LibTech Source Philippines, Inc.** as the Exclusive Distributor of Turnitin LLC products in the Philippines in accordance with the provisions stipulated the Revised IRR of RA 9184 on Direct Contracting;

WHEREAS, the BAC adopted the TWG recommendation to award the said items **LibTech Source Philippines, Inc.** for the best interest of the University;

NOW, THEREFORE, premises considered, the body, after finding that it is vital to the satisfaction of the end-user and the University of Southern Mindanao. **WE**, the members of the Bids and Awards Committee (BAC) and the Technical Working Groups (TWG), hereby, **RESOLVE** to recommend to the **Head of the Procuring Entity (HOPE)**, as **We**, hereby **RECOMMEND**:

1. That, the award be given to **LibTech Source Philippines, Inc.** amounting to **Three Hundred Eighty-Eight Thousand Eighty Pesos (P388,080.00)** through **Direct Contracting** of the Revised IRR of RA 9184;
2. That, the Notice be issued of Award to **LibTech Source Philippines, Inc. as the Exclusive Distributor of Turnitin LLC products in the Philippines** and in conformity with the specifications set by the end-user and upon the recommendation and evaluation of the Technical Working Group (TWG).

RESOLVED, this **27th day of September 2021** during the Regular Meeting of the Bids and Awards Committee at the 2nd Floor, Commercial Building, University of Southern Mindanao, Kabacan, Cotabato, Philippines.

[Signature]
BONIFACIO C. SOLSOLOY
BAC Member

[Signature]
SAQUE JAMILBAHAR
BAC Member

[Signature]
AMORSOLO L. DELA CRUZ
BAC Vice Chairman

[Signature]
EIMER M. ESTILLOSO
BAC Chairman

Action Taken:
 Approved
 Disapproved

[Signature]
FRANCISCO GIL N. GARCIA
USM PRESIDENT / Head of the Procuring Entity
Date: 10/21/21


Recommended for AWARD

The following item are found to be a **Sole Distributorship** and are recommended for **LIBTECH SOURCE PHILIPPINES, INC.**


Qty	UOM	Requisitioner's Description	Unit Price	Total Price	Basis
1	lot	Plagiarism Software		388,080.00	SCRB <i>g</i>
		Product Cost Inclusions: Full version (includes Originality Check, Peer Mark, Grade Mark and ETS Rater) Free Instructor Licenses up to 50% of the Student Licenses Unlimited Submissions Integration to your LMS 1000 users 1 year subscription a. Student Paper Repository <ul style="list-style-type: none"> • Discourage improper collaboration and prevent student collusion • 1.3 billion student papers b. Current & Archived Internet <ul style="list-style-type: none"> • Prevent copy-paste culture • 170+ million journals and publications c. Scholarly Repository <ul style="list-style-type: none"> • Avoid academic and research misconduct • 170+ million journals and publications d. Repository <ul style="list-style-type: none"> • Local • Consortia e. Formative options <ul style="list-style-type: none"> • Grammar checker (ETS Rater) • Robust rubrics GradeMark/PeerMark			
TOTAL				388,080.00	SCRB <i>g</i>

Other stipulations: (a) USM may enter into contract with **LIBTECH SOURCE PHILIPPINES, INC.** for items stated above; (b) the terms and conditions for after-sales services should be included in the contract.

Prepared and Submitted by:


EUGENE G. RANJO
 Member, TWG for IT

Noted:


MA. TEODORA N. CABASAN
 End-User


EIMER M. ESTILLOS
 Chairman, BAC

Technical Specifications			Offer			Remarks on Conformity
Qty	UOM	Requisitioner's Description	Qty	UOM	Bidder's Offer	
1	lot	Plagiarism Software	1	lot	Plagiarism Software	Conformed
		Product Cost Inclusions: Full version (includes Originality Check, Peer Mark, Grade Mark and ETS Rater) Free Instructor Licenses up to 50% of the Student Licenses Unlimited Submissions Integration to your LMS 1000 users 1 year subscription a. Student Paper Repository <ul style="list-style-type: none"> • Discourage improper collaboration and prevent student collusion • 1.3 billion student papers b. Current & Archived Internet <ul style="list-style-type: none"> • Prevent copy-paste culture • 170+ million journals and publications c. Scholarly Repository <ul style="list-style-type: none"> • Avoid academic and research misconduct • 170+ million journals and publications d. Repository <ul style="list-style-type: none"> • Local • Consortia e. Formative options <ul style="list-style-type: none"> • Grammar checker (ETS Rater) • Robust rubrics • GradeMark/PeerMark 			Product Cost Inclusions: Full version (includes Originality Check, Peer Mark, Grade Mark and ETS Rater) Free Instructor Licenses up to 50% of the Student Licenses Unlimited Submissions Integration to your LMS 1000 users 1 year subscription a. Student Paper Repository <ul style="list-style-type: none"> • Discourage improper collaboration and prevent student collusion • 1.3 billion student papers b. Current & Archived Internet <ul style="list-style-type: none"> • Prevent copy-paste culture • 170+ million journals and publications c. Scholarly Repository <ul style="list-style-type: none"> • Avoid academic and research misconduct • 170+ million journals and publications d. Repository <ul style="list-style-type: none"> • Local • Consortia e. Formative options <ul style="list-style-type: none"> • Grammar checker (ETS Rater) • Robust rubrics • GradeMark/PeerMark 	

Recommended for POST-DISQUALIFICATION

The following bids were recommended for **post-disqualification**:

Bid Item#	Qty	UOM	Requisitioner's Description	ABC	Grounds
			NONE		

Items above are further recommended for	Re-bid
	Another round of post-qualification

Legal Eligibility

Requirements	Means of Verification	Findings
Mayor's Permit	Document presented	Permit No. 10523 dated 01/12/2021, Signed: Hon. Mar-Len Abigail S. Binay, City Mayor, Makati City Permit No. 162733 dated 01/20/2020, Signed: Atty. Jared G. Limquiaco, City Mayor, Cebu City
PhilGEPS Registration Number	Document presented	Platinum Membership with Certificate Reference No: 20110252387218945391
Business Tax Return	Tax Clearance	TCBP No: 13-081-03-12-RO309-2021-E Issued By/Signatory: Rosa Maria R. Jingo Issuance Date: 18 March 2021
Sole Distributorship	Document presented	Certification of Sole Distributorship dated 8 January 2021, Signed: Jane Fogarty, General Counsel, Turnitin LLC
Omnibus Sworn Statement	N/A	N/A
Assessment	ELIGIBLE	

Financial Requirement

Bid Item#	Qty	UOM	Requisitioner's Description	ABC	Bid Price	Remarks
1	1	lot	Plagiarism Software	388,080.00	388,080.00	Conformed
			Product Cost Inclusions: Full version (includes Originality Check, Peer Mark, Grade Mark and ETS Rater) Free Instructor Licenses up to 50% of the Student Licenses Unlimited Submissions Integration to your LMS 1000 users 1 year subscription a. Student Paper Repository <ul style="list-style-type: none"> • Discourage improper collaboration and prevent student collusion • 1.3 billion student papers b. Current & Archived Internet <ul style="list-style-type: none"> • Prevent copy-paste culture • 170+ million journals and publications c. Scholarly Repository <ul style="list-style-type: none"> • Avoid academic and research misconduct • 170+ million journals and publications d. Repository <ul style="list-style-type: none"> • Local • Consortia e. Formative options <ul style="list-style-type: none"> • Grammar checker (ETS Rater) • Robust rubrics • GradeMark/PeerMark 			
TOTAL				388,080.00	388,080.00	Conformed

Technical Requirements



UNIVERSITY OF SOUTHERN MINDANAO
Kabacan, Cotabato, Philippines

Bids and Awards Committee
TECHNICAL WORKING GROUP

POST- QUALIFICATION EVALUATION REPORT

Project Details

TWG Report#	2021-19886-388,080.00				
Name of Project	Plagiarism Software				
Source of Fund	RDO 101				
Implementing Unit	Research and Development Office (RDO)				
Mode of Procurement	Small Value Procurement	Type	Information Technology		
PR Number	685	PR Date	08/12/2021		
Bid/RFQ Number	19886	Date Opened:	09/13/2021		
Period of Post-Qualification: from	September 16, 2021	to	September 20, 2021	Round	FIRST
Results of Post-Qualification	1 Lot for Award				
Bidder	LIBTECH SOURCE PHILIPPINES, INC.				

List of Competing Bidders

1	entities participated in the bidding process of	1	Lot
Name of Bidder		Address	
LIBTECH SOURCE PHILIPPINES, INC.		Unit 3, 2 nd Floor, Eight One Eight Building, Arnaiz Road, San Lorenzo Village, Makati City	

Lowest Bids

1	Lot were found to be with Sole Distributorship of		
Name of Bidder		LIBTECH SOURCE PHILIPPINES, INC.	
Bid Item#	Qty	UOM	Requisitioner's Description
1	1	lot	Plagiarism Software Product Cost Inclusions: Full version (Includes Originality Check, Peer Mark, Grade Mark and ETS Rater) Free instructor Licenses up to 50% of the Student Licenses Unlimited Submissions Integration to your LMS 1000 users 1 year subscription a. Student Paper Repository <ul style="list-style-type: none"> • Discourage improper collaboration and prevent student collusion • 1.3 billion student papers b. Current & Archived Internet <ul style="list-style-type: none"> • Prevent copy-paste culture • 170+ million journals and publications c. Scholarly Repository <ul style="list-style-type: none"> • Avoid academic and research misconduct • 170+ million journals and publications d. Repository <ul style="list-style-type: none"> • Local • Consortia e. Formative options <ul style="list-style-type: none"> • Grammar checker (ETS Rater) • Robust rubrics • GradeMark/PeerMark



REQUEST FOR QUOTATION/CANVASS

Date: **AUGUST 26, 2021**

20110 252387218 945391
 PHILCEPS Membership #

Company Name: **LIBTECH SOURCE PHILIPPINES, INC.**

Address: **UNIT 3 2/F 818 BULO, BRUNING MANSION
 JAM LORANZO ULLARDO, MARICAN CITY**

REQUEST FOR QUOTATION / BID NO. 19886

The University of Southern Mindanao invites PHILCEPS registered suppliers for the items Description:

ITEM DESCRIPTION	UNIT	QTY	Unit Price	Approved Budget for the Contract (ABC)
Plagiarism Software Product Cost Inclusions: <ul style="list-style-type: none"> • Full version includes Originality Check, Peer Mark, Grade Mark and ETS iPaper! • Free instructor licenses up to 10% of the Student License • Unlimited Submissions • Integrations to your LMS • 1000 users • 1 year subscription • Content Databases • Student Paper Repository • Discourage improper collaboration and prevent student collusion • 1.5 billion student papers • Current & Archived Internet • 100,000,000+ books eLibrary • 100+ billion archived web pages • Journals Repository • 100+ academic and research misconduct • 100+ million journal and publications • Repositories • Local • Cloud • Formative options • Grammar Checker (ETS iPaper) • Student Alerts • GradeMark/PaperMark 			P 388,000.00	

OPENED

Date: _____
 Signature:

Purpose: for the renewal of the plagiarism software
 Charge to: RDO 000

The deadline of submission of quotation shall be on _____ The bidders shall send their duly accomplished quotation form to BAC Office: USM Kabacan 9407 Cotabato. Late submission shall be rejected.

INSTRUCTIONS:

1. All entries shall be typed or written in a clearly legible manner in indelible ink
2. Prices are inclusive of taxes, delivery and other incidental costs
3. Supplier shall offer one (1) item/brand only. Alternative Bids shall be rejected
4. Specifications provided are minimum; hence, higher specifications may be accepted subject to evaluation
5. Delivery and installation schedule must be 30 days upon receipt of the Purchase Order
6. Import documents of equipment shall be submitted prior to payment.

For more information, please contact the BAC Secretariat at telephone no. (0641) 672-2785/09665331153

USM BAC reserves the right to waive any formality in the responses to the eligibility requirements and to this invitation. It also reserves the right to re-evaluate and/or disqualify any bidder, or declare a failure of bidding, or not award the contract, no assurance that a contract shall be entered into as a result of this invitation.

MARY JEAN TY COLONGON

FINANCE & ADMINISTRATIVE STAFF

8558191 / 09154735552 | jeancolongonpbsasi@gmail.com

FERNANDO A. CULOBALA
 Member, IAS
 9/15/21

EIMER M. ESTILLOSA
 BAC SECRETARY

I. AKSNI E. CATUBAY



UNIVERSITY OF SOUTHERN MINDANAO
Kabacan, Cotabato
Philippines

PURCHASE REQUEST

Fund Cl

Office/Section RDO	PR No.: <u>688</u>	Responsibility Center Code : _____	Quantity	Unit Cost	Total Cost
1		Plagiarism Software	1	388,080.00	388,080.00
		Product Cost Inclusions:			-
		• Full version (includes Originality Check, Peer Mark, Grade Mark and ETS Rater).			-
		• Free Instructor Licenses up to 50% of the Student Licenses.			-
		• Unlimited Submissions			-
		• Integrations in your LMS			-
		• 1000 users			-
		• 1 year subscription			-
		1. Content Databases			-
		a. Student Paper Repository			-
		• Discourage improper collaboration and prevent student collusion			-
		• 1.3 billion student papers			-
		b. Current & Archived Internet			-
		• Prevent copy-paste culture			-
		• 85+ billion archived web pages			-
		c. Scholarly Repository			-
		• Avoid academic and research misconduct			-
		• 170+ million journals and publications			-
		2. Repositories:			-
		a. Local			-
		b. Consortia			-
		3. Formative options			-
		a. Grammar checker (ETS Rater)			-
		b. Rubric rubrics			-
		c. GradeMark/PeerMark			-
TOTAL					388,080.00

Stacks not available: *Shirly J. Mondia*
SHIRLY J. MONDIA
Administrative Officer IV *08/12*

Okay as to appropriation: *Charisse Angeles Quiambao*
CHARISSE ANGELES QUIAMBAO
OIC Budget Officer *08/12*

Purpose: for the renewal of the plagiarism software

Charge to: RDO Fund 101 (Plagiarism)

Requested by: *Flaban*
Signature: _____
Printed Name: MA. TEGDORA N. CABASAN
Designation: RDO, Director

Approved by: *Francisco Gil M. Garcia*
Signature: _____
Printed Name: FRANCISCO GIL M. GARCIA
Designation: SUC President IV



PhilGEPS

Philippine Government Electronic Procurement System

Central Portal for
Philippine Government
Procurement Opportunities

Award Notice Abstract (Ref No.: 3354755)

Status: Update

<p>Control Number: PO 333</p> <p>Approved Budget: Php388,080.00</p> <p>Procurement Mode: Direct Contracting (Sec. 50)</p> <p>Classification: Goods</p> <p>Condition: Exclusive Dealer / Manufacturer</p> <p>Category: Information Technology</p> <p>Applicable Procurement Rules: Implementing Rules and Regulations</p> <p>Funding Source: Government of the Philippines (GOP)</p> <p>Funding Instrument: General Appropriations Act</p> <p>Area of Delivery: Cotabato</p> <p>Delivery Period: 30Day/s</p> <p>Contact Person: Margie Galang</p> <p>Created By: AIVIE MAE ALIUDIN</p>	<p style="text-align: center;">UNIVERSITY OF SOUTHERN MINDANAO USM Avenue North Cotabato Kabacan Cotabato, Region XII, Philippines</p> <p style="text-align: center;">Plagiarism Software (Direct Contracting Exclusive Dealer / Manufacturer)</p> <p>Awardee : LIBTECH SOURCE PHILIPPINES INC.</p> <p>Address : Unit 3, 2nd floor, Eight One Eight Bldg., Arnaiz Road San Lorenzo Village, Makati City Metro Manila, NCR, Philippines</p> <p>Contact Person : Amy Sablaon</p> <p>Designation : Finance and Administrative Manager</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Line Item</th> <th style="text-align: left;">Product/Service/Project Name</th> <th style="text-align: left;">Budget</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">1</td> <td>Plagiarism Software, Renewal of Subscription, 43230000, 1, Lot</td> <td>Php388,080.00</td> </tr> </tbody> </table> <p>Reason for Award : Exclusive Distributor</p>	Line Item	Product/Service/Project Name	Budget	1	Plagiarism Software, Renewal of Subscription, 43230000, 1, Lot	Php388,080.00	<p>Award Type: Award Notice (Direct Contracting)</p> <p>Contract Amount: Php388,080.00</p> <p>Award Date: 28-Oct-2021</p> <p>Publish Date: 03-Dec-2021</p> <p>Date Last Updated: 03-Dec-2021</p> <p>Contract Number: PO 333</p> <p>Proceed Date: 10-Nov-2021</p> <p>Contract Effectivity Date: 10-Nov-2021</p> <p>Contract End Date: 11-Dec-2021</p> <p>Created By: AIVIE MAE B. ALIUDIN</p> <p>Date Created: 03-Dec-2021</p> <p>Approver: AIVIE MAE B. ALIUDIN</p> <p>View Documents: 3</p>
Line Item	Product/Service/Project Name	Budget						
1	Plagiarism Software, Renewal of Subscription, 43230000, 1, Lot	Php388,080.00						



BIR Form No <h1 style="margin: 0;">2307</h1> January 2019 (ENCS)	<h2 style="margin: 0;">Certificate of Creditable Tax Withheld At Source</h2>	2307 01/18ENCS
---	--	----------------

Fill in all applicable spaces. Mark all appropriate boxes with an "X".

1 For the Period	From	12	01	2021	(MMDDYYYY)	To	12	31	2021	(MMDDYYYY)
------------------	------	----	----	------	------------	----	----	----	------	------------

Part I - Payee Information

2 Taxpayer Identification Number (TIN)	007	882	768	0000
--	-----	-----	-----	------

3 Payee's Name (Last Name, First Name, Middle Name for Individual OR Registered Name for Non-Individual)
LIBTECH SOURCE PHILIPPINES, INC

4 Registered Address	4A Zip Code

5 Foreign Address, if

Part II - Payor Information

6 Taxpayer Identification Number (TIN)	000	565	842	0000
--	-----	-----	-----	------

7 Payor's Name (Last Name, First Name, Middle Name for Individual OR Registered Name for Non-Individual)
UNIVERSITY OF SOUTHERN MINDANAO

8 Registered Address	8A Zip Code
KABACAN COTABATO	9407

Part III - Details of Monthly Income Payments and Tax Withheld for the Quarter

Income Payments Subject to Expanded Withholding Tax	ATC	AMOUNT OF INCOME PAYMENTS				Tax Withheld For the Quarter
		1st Month of the Quarter	2nd Month of the Quarter	3rd Month of the Quarter	Total	
Total					-	-
Money Payments Subject to Withholding of Business Tax (Government & Private)						
FWVAT on payments for purchases of Goods	WV010				346,500.00	17,325.00
Total					346,500.00	17,325.00

We declare, under the penalties of perjury, that this certificate has been made in good faith, verified by me, and to the best of my knowledge and belief, is true and correct, pursuant to the provisions of the National Internal Revenue Code, as amended, and the regulations issued under authority thereof. Further, we give our consent to the processing of our information as contemplated under the "Data Privacy Act of 2012 (R.A. No. 10173)" for legitimate and lawful purposes.

QUENIEL N. DURENDES	Signature over Printed Name of Payor/Payor's Authorized Representative/Tax Agent (Indicate Title/Designation and TIN)
---------------------	--

Tax Agent Accreditation No./Attorney's Roll No. (if applicable)	Date of Issuance	Date of Expiry
---	------------------	----------------

CONFORME: LIBTECH SOURCE PHILIPPINES, INC
Signature over Printed Name of Payee/Payee's Authorized Representative/Tax Agent (Indicate Title/Designation and TIN)

Tax Agent Accreditation No./Attorney's Roll No. (if applicable)	Date of Issuance	Date of Expiry
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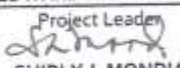
*NOTE: The BIR Data Privacy is in the BIR website (www.bir.gov.ph)



UNIVERSITY OF SOUTHERN MINDANAO
Kabacan, Cotabato
Philippines

PURCHASE ORDER

Appendix 61

Supplier : STRATEGIC RESEARCH & DEVELOPMENT CENTER, INC.		P.O. No. : _____			
Address : MAKATI CITY		Date : April 8, 2020			
PHILGEPS # _____		Mode of Procurement : Small Value			
TIN : _____					
Gentlemen: Please furnish this Office the following articles subject to the terms and conditions contained herein:					
Place of Delivery : <u>USM</u>		Delivery Term : <u>FOB Destination</u>			
Date of Delivery : <u>15 days UPON RECEIPT OF THE P.O.</u>		Payment Term : <u>UPON COMPLETION OF DELIVERY</u>			
Stock/ Property No.	Unit	Description	Quantity	Unit Cost	Amount
	unit	SPSS IBM SYSTEM DOEKZLL (Number of Users: 1) - Statistics Standard - Authorized user license + SW subscription & Support 12 months) Module Included: - IBM SPSS statistics base - IBM SPSS advanced statistics - IBM SPSS Regression - IBM SPSS Custom Tables	1	294,060.00	294,060.00
		charge to: Admin Cost			
TOTAL					294,060.00
(Total Amount in Words) TWO HUNDRED NINETY FOUR THOUSAND SIXTY PESOS ONLY					
In case of failure to make the full delivery within the time specified above, a penalty of one-tenth (1/10) of one percent for every day of delay shall be imposed on the undelivered item/s.					
Conforme:		Noted: 		Very truly yours,	
		EDWARD A. BARLAAN	FRANCISCO GIL N. GARCIA SUC President IV		
Signature over Printed Name of Supplier		Project Leader			
Date		 SHIRLY J. MONDIA Requisitioning Office			
Fund Cluster : _____		ORS/BURS No. : _____			
Funds Available : _____		Date of the ORS/BURS: _____			
		Amount : _____			
BERNABE B. MONDIA Chief Admin. Officer		QUENIELYN L. DURENDES Supervising Admin. Officer			

ORIGINAL

BIDS AND AWARDS COMMITTEE**RESOLUTION NO. 039**
Series of 2020

WHEREAS, the University of Southern Mindanao is a State University covered by the Government Procurement Reform Act, otherwise known as **Republic Act No. 9184** "An Act providing for the modernization, Regulation and Standardization of the Procurement Activities of the Government and for other Purposes";

WHEREAS, consistent with section 3 (b) Governing Principles on Government Procurement through **Small Value Procurement**, as stipulated in **Section 53.9** of IRR of 9184, herein Bids and Awards Committee extends equal opportunity to all qualified bidders for the **Supply and Delivery of Information Technology - Software with ABC of Three Hundred Thousand Pesos (P300,000.00) only** and PR No.03 dated January 08, 2020 with **Dr. Edward A. Barlaan**, end-user;

WHEREAS, after posting of the **Request for Quotation - Bid No.16027** with PhilGEPS Ref No. **6806045** published on January 21, 2020 to January 28, 2020, with **one (1) supplier** submitted bid proposal on the day of the deadline: **Strategic Research & Development Center, Inc.;**

WHEREAS, after the BAC opened the bids on **February 17, 2020** they found out that **Strategic Research & Development Center, Inc.** as the **lone bidder**, thus, the Technical Working Group (TWG) was tasked to conduct post-qualification;

WHEREAS, after careful post-qualification and evaluation conducted on **February 21, 2020 to March 3, 2020** the TWG recommended to award the item to **Strategic Research & Development Center, Inc.** which complied the specifications set by the end-user and within the approved budget;


NOW, THEREFORE, premises considered, the body, after finding that the TWG Evaluation Report is vital to the satisfaction of the end-user and the University of Southern Mindanao, **WE**, the members of the Bids and Awards Committee (BAC) and the Technical Working Group (TWG), hereby, **RESOLVE** to recommend to the **Head of the Procuring Entity (HOPE)**, as **We**, hereby **RECOMMEND**:

1. That, the award be given to **Strategic Research & Development Center, Inc.** amounting to **Two Hundred Ninety-four Thousand Sixty Pesos (P294,060.00) only.**
2. That, the Notice of Award be issued to as the **Lowest Calculated and Responsive Bid (LCRB)** in conformity with the specifications set by the end-user and upon the recommendation and evaluation of the Technical Working Group (TWG).


RESOLVED, this **9th day of March 2020** during the Regular Meeting of the Bids and Awards Committee at the Boardroom, USM Administration Building, University of Southern Mindanao, Kabacan, Cotabato, Philippines.


BONIFACIO SOLSOLOY
BAC Member


ALRIS JOHN CALVO
BAC Member


SAQUE J. AMILBAHAR
BAC Member


AMORSOLO L. DELA CRUZ
BAC Vice Chairman


CAVETANO C. POMARES
BAC Chairman

Action Taken:

Approved
 Disapproved


FRANCISCO GIL N. GARCIA
USM PRESIDENT /Head of the Procuring Entity

Date: 04-6-20 *afg*

UNIVERSITY OF SOUTHERN MINDANAO
Kabacan, Cotabato, Philippines

Bids and Awards Committee
TECHNICAL WORKING GROUP

POST- QUALIFICATION EVALUATION REPORT

Project Details

TWG Report#	2020-16027-300K		
Name of Project	For Statistical use of research of USM		
Source of Fund	ADMIN COST – Statistical Software		
Implementing Unit	Research & Development Services		
Mode of Procurement	Small Value Procurement	Type	Goods
PR Number	03	PR Date	01/08/2020
Bid/RFO Number	16027	Date Opened:	02/17/2020
Period of Post-Qualification: from	21 Feb 2020	to	3 Mar 2020
		Round	FIRST
Results of Post-Qualification	1 item for AWARD		
Bidder	Strategic Research & Development Center, INC		

List of Competing Bidders

1	entities participated in the bidding process of	1	Item(s)
	Name of Bidder		Address
	Strategic Research & Development Center, INC		424-425 Cityland Pasong Tamo Tower, Chino Roces Avenue, Makati City

Lowest Bids

1	Item(s) were found to be lowest bids of		
	Name of Bidder	Strategic Research & Development Center, INC	
Bid Item#	Qty	UOM	Requisitioner's Description
1	1	unit	SPSS IBM SYSTEM <i>DOEKZLL (Number of Users: 1)</i>
			- Statistics Standard
			- Authorized User License + SW Subscription & Support 12 Months
			<i>Module Included:</i>
			- IBM SPSS Statistics Base
			- IBM SPSS Advanced Statistics
			- IBM SPSS Regression
			- IBM SPSS Custom Tables

Legal Eligibility

Requirements	Means of Verification	Findings
Mayor's Permit	Document presented	Expiration Date: 31-Dec-2020 Permit No. 45548 Place of Issue: Makati City Signatory: Mar-Len Abigail S. Binay Issuance Date: 31-Jan-2020
PhilGEPS Registration Number	PhilGEPS Website	Platinum No. 2010-67455 September 25, 2020; Certificate Ref. No. 2019034855A
Business Tax Return	Tax Clearance Certificate presented	Expiration Date: 10-Jan-2021 TCC No: 08A-048-01-10-0018-2020 Signatory: Benilda M. Nicosia Issuance Date: 10-Jan-2020
Certification of Authorized Distributor	Document presented	Issued By: IBM Philippines, INC Place of Issue: Taguig City Signatory: Marie Christine Llanto-Ravelo Issuance Date: 03-03-2020
Assessment	ELIGIBLE	

Requirement

Item#	Qty	UOM	Requisitioner's Description	ABC	Bid Price	Remarks
1	1	unit	SPSS IBM SYSTEM D0EKZLL	300,000.00	294,060.00	Conformed

Technical Requirements

Technical Specifications			Offer			Remarks on Conformity
Qty	UOM	Requisitioner's Description	Qty	UOM	Bidder's Offer	
1	Unit	SPSS IBM SYSTEM D0EKZLL	1	Unit	SPSS IBM SYSTEM D0EKZLL (Number of Users: 1) - Statistics Standard - Authorized User License + SW Subscription & Support 12 Months Module Included: - IBM SPSS Statistics Base - IBM SPSS Advanced Statistics - IBM SPSS Regression - IBM SPSS Custom Tables	Conformed

Recommended for POST-DISQUALIFICATION

The following bids were recommended for post-disqualification:

Bid Item#	Qty	UOM	Requisitioner's Description	ABC	Grounds
-	-	-	-	-	-

Items above are further recommended for	N/A
---	-----


Recommended for AWARD

The following items are found to be **responsive** and are recommended for award to - **Strategic Research & Development Center, INC**


Qty	UOM	Requisitioner's Description	Unit Price	Total Price	Basis
1	Unit	SPSS IBM SYSTEM D0EKZLL (Number of Users: 1)	294,060.00	294,060.00	LCRB
		- Statistics Standard			
		- Authorized User License + SW Subscription & Support 12 Months			
		Module Included:			
		- IBM SPSS Statistics Base			
		- IBM SPSS Advanced Statistics			
		- IBM SPSS Regression			
		- IBM SPSS Custom Tables			

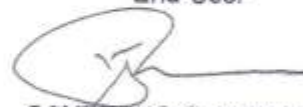
Other stipulations: (a) USM may enter into contract with **Strategic Research & Development Center, INC** for items stated above; (b) the terms and conditions for after-sales services should be included in the contract.

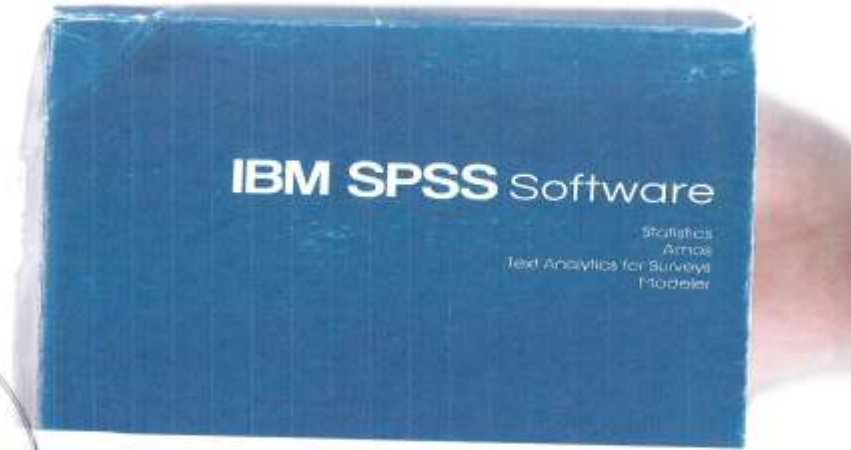
Prepared and Submitted by:


EUGENE G. RANJO
 Member, TWG for IT

Noted:


EDWARD A. BARLAAN
 End-User


CAYETANO C. POMARES
 Chairman, BAC



STRAND is an authorized reseller of
IBM SPSS in the Philippines.



CERTIFICATE OF REGISTRATION UTILITY MODEL

REGISTRATION NO. 2/2021/050826

Having complied with the provisions of Republic Act No. 8293 and its regulations, this Office certifies that this Registration with the following particulars was registered on **23 March 2022** with a term until **16 July 2028**, unless otherwise earlier cancelled.

This registration grants the registrant the right to restrain, prohibit any unauthorized person or entity from making, using, offering for sale, selling or importing a product (if a registered product) and exporting any product obtained directly or indirectly from such process (if a registered process).

Registrant:
UNIVERSITY OF SOUTHERN MINDANAO [Kabacan, Cotabato (North Cotabato), PH]

Title of the Utility Model:
PROCESS OF PRODUCING MOLASSES MINERAL SALT BLOCK FORTIFIED WITH TUBLI (Derris elliptica) ROOT POWDER

Makers:
LUMBAO, Lilian A. [Kabacan, Cotabato (North Cotabato), PH]

Publication Date:
23 March 2022



Lolibeth R. Medrano
Atty. **LOLIBETH R. MEDRANO**
Director of Patents

Scan to secure copy of the Full Doc.

INTELLECTUAL PROPERTY OFFICE OF THE PHILIPPINES
Bureau of Patents

Gawad Likha

is awarded to

*Josephine R.
Flores*

*for demonstrating exceptional commitment to
research through the generation and utilization
of intellectual property assets
in the year 2023.*

Given this 27th day of September 2024.

**Formulation of feed Additives using Azolla
for Native Chicken**
22021050823

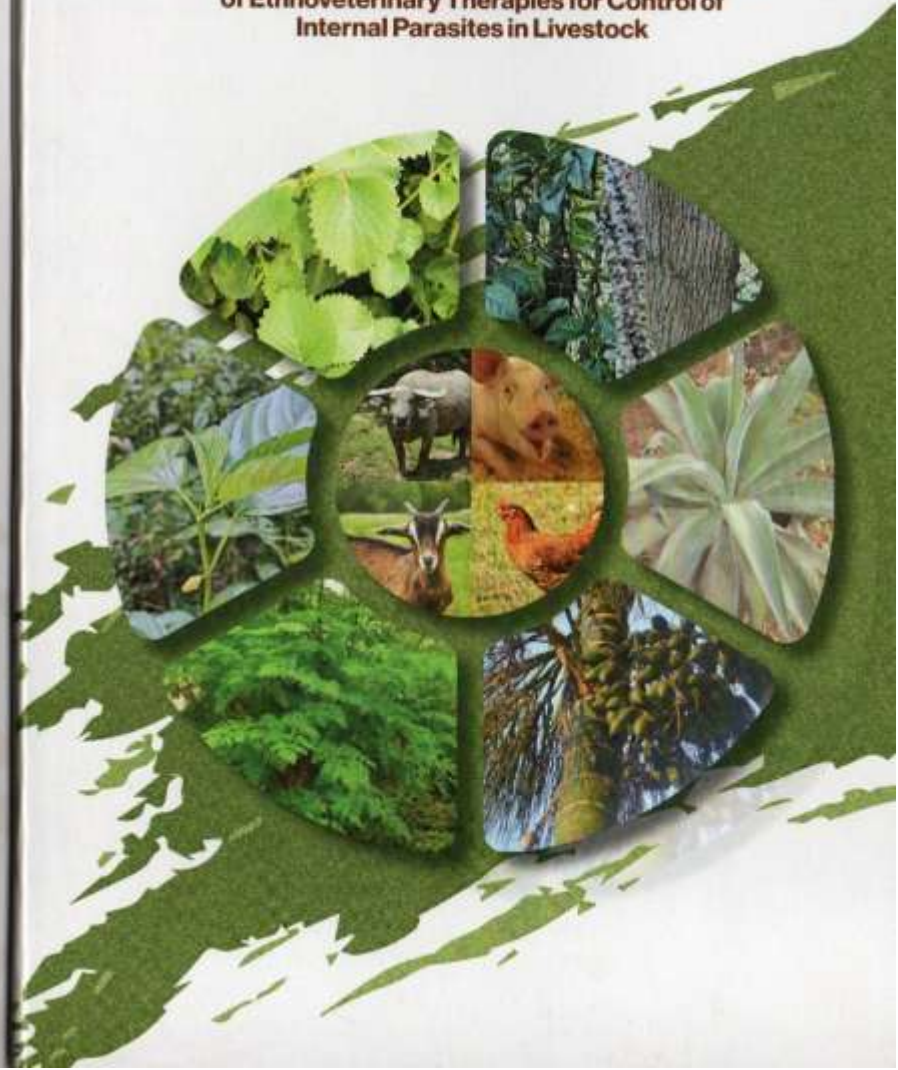
**Formulation of Betel Nut Capsule as Anti-
helminthic for Goats**
22021050893



Francisco G. N. Garcia, PhD
SUC President IV
University of Southern Mindanao

COMPENDIUM

of Ethnoveterinary Therapies for Control of
Internal Parasites in Livestock



Republic of the Philippines
University of Southern Mindanao
Kabacan, Cotabato



Vision

Quality and relevant education for its clientele to be globally competitive, culture sensitive and morally-responsive human resources for sustainable development.

Mission

To accelerate the socio-economic development, promote harmony among diverse communities in Southern Philippines, and improve the quality of life through instruction, research, extension and production.

ACKNOWLEDGMENT

The production of this compendium is supported by the University of Southern Mindanao. All sources of data and information integrated in this handbook are hereby acknowledged.

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Jatropha curcas
Jatropha curcas
Jatropha curcas



Common Names

Tuba-Tuba; Tubang-bakod; Sambo; Tagumbao;
Kasla; Tangantangan; Physic Nut



Description

Jatropha curcas is a species of flowering plant belonging to the family Euphorbiaceae, that is native to the American tropics, such as Mexico and Central America (Janick and Pauli, 2008). It has spread to other regions in the world and has become naturalized in many areas (Cabi.org). The plant is found throughout the Philippines (<http://mixph.com/2007/08/growing-jatropha-tuba-tuba.html>). Retrieved May 23, 2023.

Anthelmintic benefit

In vitro killing of adult *Trichostrongylus spp.* by 40%, 50%, 60% and 70% concentrations of a methanolic extract from *J. curcas* leaves. The 40% concentration had killed adult worms after 12 hours of incubation; the 50% and 60% on the 9th hour; and the 70% on the 12th hour (Fugata, 2009).

In vitro effects of 40, 50, 60 and 70 percent leaf extract were demonstrated on eggs of *Trichostrongylus spp.* through inhibition of the hatching of eggs of the worms after 48 hours of incubation (Fugata, 2009).

Saluyot Saluyot Saluyot



Common Names

Saluyot; Pasau-na-bilog; Egyptian spinach;
Indian jute; wild jute; bush okra



Description

Corchorus olitorius is a year-round growing herb in the Family Malvaceae. The plant is a green leafy, and flower-bearing. It is natural to the tropical and subtropical regions throughout the world (Wikipedia). It has a height of 1-1.5 meters, heavily projected branches, and partly woody shrub. The leaves are ovate-lanceolate, glossy, dark green up to 5-15 cm long with finely serrated margins. The flower is small (2-3 cm in diameter), has no stalk attached at the junction of the leaves, solitary, and yellow-colored with five petals fruits that are 3 cm long and 1-2 cm in diameter, which enclose seeds (<http://www.stuartxchange.com/Pasau.html>).

Anthelmintic benefit

In vitro killing of adult *Hemonchus contortus* (abomasal worm): methanolic extract from unripe fruits and seeds at 70%, 80%, 90%, and 100% concentrations had killed adult worms. The 100% concentration had caused 100% mortality after 15 hours of incubation while the 70%, 80% and 90% had killed adult worms after 18 hours of incubation.

Egg hatch assay: All the concentrations had inhibited the hatching of eggs of *H. contortus*. The 100% and 90% concentrations had significantly similar number of eggs that were inhibited. The 70% and 80% concentrations had also inhibited the hatching of eggs, with the number of inhibited eggs significantly higher than the number of inhibited eggs observed in the negative control (distilled water) (Adamat, 2009).

Oreganum vulgare
Oreganum vulgare
Oreganum vulgare



Common Names
Origanum; Wild marjoram



Description

Oregano is an aromatic perennial herb of the mint family. Its leaves are compact and oval and arranged opposite each other. They are covered with glandular trichomes (plant hairs). The stems, when young, are typically square and hairy, and when these age, they become woody. Oregano flowers are small and are in clusters, and range from white to pink or pale purple in color (<https://www.britannica.com/plant/oregano> - retrieved March 31, 2023).

Anthelmintic benefit

Oregano oil extracted from the leaves and administered at a dose of 600 mg/kg body weight to goats naturally infected with common gastro-intestinal nematodes orally. A reduction in fecal egg counts of up to 74.69% on the 3rd week after a single treatment was observed. The efficacy of the oregano was comparable with that of levamisole as positive control (Abrenica, 2020).

antiparasitic

NEEM NEEM NEEM



Common Names

margosa, neem, nimtree or Indian lilac



Description

Neem trees are attractive broad-leaved evergreens that can grow up to 30 m tall and 2.5 m in girth. Their spreading branches form rounded crowns as much as 20 m across (<https://www.britannica.com/plant/neem-tree>). Retrieved May 23, 2023.

Anthelmintic benefit

A 150 ml neem tree leaf extract showed an efficacy of 62.10% in reducing fecal egg counts in goats naturally infected with trichostrongylid nematode. This was comparable to the efficacy of ivermectin (73.82%). At post-mortem examination of the treated goats, no worms were observed in those goats given 150 ml of neem leaf extract (Octavio, 2019).

शुद्धीकरण, दवा

Ipil-Ipil Ipil-Ipil Ipil-Ipil



Common Names

Lead Tree, Reuse Wattel, White Popinac, Horse Tamarind, Wild Tamarind, Leucaena, Jumbie Bean, Jumbay, Ipil-ipil, Petai Jawa



Description

Ipil-ipil belongs to the Leguminosae family, one of the fastest-growing leguminous trees. It contains a percentage of protein and vitamin A (<https://www.google.com/search?q=ipil+description&oq=ipil+description+&aqs=chrome>). Retrieved May 26, 2023.

Anthelmintic benefit

A 150 mg/kg BW concentration of leaf crude extract given at 0, 7, 14 and 21 days of the experiment had reduced the fecal egg counts to as much as 93.44% in goats naturally infected with trichostrongylid nematodes (Dandal, 2021).



Saluyot

Saluyot, jute



Madre-de-Cacao

Cacao de nance, Cachanance



Tuba-tuba

Tubang-bakod; Sambo; Tagumbao;
Kalunay; Kasla; Tangantangan; Physic Nut

COMBINED KAKAWATE SALUYOT AND TUBA-TUBA

Description

Tuba-tuba is an erect, branched shrub usually less than one meter high.

Madre de Cacao does not become very tall, ranging in height from 6-33 ft. It has a smooth trunk, with whitish to gray-brown coloration.

Saluyot is famous for its sturdy, natural fiber but there are cultivars that are grown as a leafy vegetable. The young leaves are used fresh or dried.

Anthelmintic benefit

Combined ethanolic extract (100% kakawate, 100% saluyot and 100% tuba-tuba seeds) at a dose of 12 kg body weight administered to goats naturally infected with common gastrointestinal nematodes once orally. A reduction in fecal egg counts of up to 61.75% on day 7 after treatment was observed (Aballe, 2013).

KULTIS KULTIS KULTIS



Common Names

Amaranth, Chinese spinach, Tampala, Pigweed,
Kultis, Uray and Kudjapa



Description

Spinach is a herbaceous plant whose leaves, green and arranged in rosette, are eaten raw or cooked. The leaves have an oval shape and are wrinkled; they can be whole or sawed. It is a very nutritious, tasteful and easy-to-digest plant (<https://iveg.pcaarrd.dost.gov.ph/resource/journal/BPIKultis>). Retrieved May 7, 2023.

Anthelmintic benefit

Spinach pure extract administered at a dose of 100 mg/kg body weight to goats naturally infected with common nematodes once orally had reduced the fecal egg counts of the parasites in goats up to 86.20% on day 14 after a single dose (Viado, 2013).



Mango Mango Mango



Common Names

Mampalang (Sul.), pahutan, paho or pajo,
Manggang- kalabau



Description

Mangifera indica, commonly known as mango, is a species of flowering plant in the family Anacardiaceae. It is a large fruit tree, capable of growing to a height of 30 meters (<https://www.google.com/search?q=mango+description&oq=mango+description>. Retrieved May 26, 2023).

Anthelmintic benefit

The concentrations of 30%, 40%, 50% and 60% of the hydro-alcoholic extract of mango seed kernels were used in vitro against adult *Trichostrongylus* spp. The mango seed kernel extract with the concentrations 30%, 40% and 50% killed all the adult *Trichostrongylus* spp. within 15-18 hours of exposure while the 60% concentration killed all the adult parasites within 12-15 hours of exposure (Bernabe, 2009).

Mango seed extract administered to pigs naturally infected with gastrointestinal nematodes once orally at a dose of 800 mg of mango seed extract /kg body weight had reduced the fecal egg counts to 88.57% at day 28 after treatment (Reyno, 2021).

MAKABUHAY MAKABUHAY MAKABUHAY



Common Names

Makabuhay; Panyawan



Description

The plant is generally found in most islands of the Philippines. It is a climbing vine that grows in the wild and can be propagated through stem cutting. It can grow to a height of 4 to 10 meters. The leaves are thin-sheathed, heart-shaped, smooth and shining, 6 to 12 cm in length and 7 to 10 cm in width. It bears flowers that are pale green and short-pedicelled, and fruits that measure 7 to 8 mm long (Dweck, 2006).

Anthelmintic benefit

1. An ethanolic extract (200 mg/kg) of the stem administered to goats naturally infected with common gastro-intestinal nematodes had caused a reduction in the fecal egg counts after treatment with the highest efficacy of 83.81% on the 5th day post-treatment (Cagungao, 2017).
2. Capsulated extract administered to goats infected with *Hemonchus contortus* at a dose of 30 mg/kg body weight had resulted in 97.5% fecal egg count reduction (Dondonayos, 1998).
3. A powdered preparation of stem extract had been found to have similar efficacy to albendazole (commercial drug) when administered to buffaloes infected with liver fluke, *Fasciola gigantica* (Presto, 2007).

Tubli Tubli Tubli



Common Names

Derris; Tubli; Tuba



Description

Derris elliptica (Roxb) (Benth) is a leguminous plant. It is a vine with brown hairs covering its stems. The leaves are pinnate and grow up to 30-50 cm long and the oblong leaflets are 9 to 13 cm long. It bears pods which are 5 to 8 cm long and contain 1 to 3 seeds (wikipedia.org/wiki/Derris_elliptica). Retrieved August 7, 2023.

Anthelmintic benefit

Root powder (at 30%) incorporated into molasses-mineral-salt block and used as lick of goats naturally infected with common gastro-intestinal nematodes. The fecal egg counts of the nematodes in goats had decreased up to 88.27% on the 4th week, and 97.21% on the 6th week (Anunciado, 2021).

Carabao Grass

Carabao Grass

Carabao Grass



Common Names

yard-grass, goose grass, wiregrass, or crowfoot



Description

Goose Grass is a summer annual about 1/2–2' tall that is tufted at the base, sending up multiple ascending culms with alternate leaves. Most of the leaves are located toward the base of the culms. The culms are green, glabrous, and somewhat flattened; they are mostly hidden by the sheaths. The leaf blades are up to 10" long and 8 mm. (<https://www.google.com>). Retrieved May 26, 2023.

Anthelmintic benefit

In-vivo administration of 2,000 mg goose grass leaf extract /5 kg BW of goats had reduced the fecal egg counts of trichostrongylid nematodes in goats by 100% on Day 14 after a single treatment (Eway, 2021).

Banana Banana Banana



Common Names
Banana, Cavendish banana , Saging



Description

A banana is a curved, yellow fruit with a thick skin and soft sweet flesh. A banana is a tropical fruit that is quite popular all over the world. It grows in bunches on a banana tree (<http://www.google.com/searchq=banana+description>). Retrieved May 26, 2023.

Anthelmintic benefit

A concentration of 9 ml/kg BW banana peel crude extract once a day on the 1st, 8th, and 15th day of the experiment had reduced the fecal egg counts to as much as 68.82% in backyard native chickens naturally infected with gastrointestinal nematodes (Maquerme, 2022).

BETEL NUT BETEL NUT BETEL NUT



Common Names

Becc. Bunga de Jolo , Actinorhynchus calapparia
Vidal. Bungang tsina



Description

Bunga is an erect, solitary tree growing to 25 meters high, and marked with annular scars. Leaves about 3 to 4 meters long with numerous leaflets, 60 to 90 centimeters long, the upper ones confluent (<http://www.stuartxchange.com/Bunga.html>).

Anthelmintic benefit

1. Betel nut extract (750 mg/kg) administered to goats naturally infected with common nematodes showed an efficacy of 71.78% on Day 7 and 75.41% on Day 14 after a single dose of treatment (Viado, 2013).

MAKABUHAY MAKABUHAY MAKABUHAY



Common Names
Panyawan



Description

Makabuhay can be found in wild forests and can be identified by its heart-shaped leaves. Makabuhay is a shrub whose aerial roots climb other trees usually neem or mango trees (<https://www.google.com/search?q=makabuhay+plant+description>). Retrieved May 26, 2023.

Anthelmintic benefit

1. Mixed makabuhay (250 mg/kg bw) and bunga (1500 mg/kg bw) extract administered to goats naturally infected with fasciolosis once orally had reduced the egg gram count of fasciola up to 90-100% at 21st day of treatment (Jaro, 2016).

MARIGOLD MARIGOLD MARIGOLD



Common Names
Tagetes, marigolds



Description

Members of the genus *Tagetes* have attractive yellow, orange, or red composite flowers that are solitary on the stems or clustered. The leaves are arranged opposite each other on the stem and are usually finely cut (<https://www.britannica.com/plant/marigold>) (<https://www.britannica.com/plant/marigold>). Retrieved May 22, 2023.

Anthelmintic benefit

In vivo, 100 mg/kg bw of marigold flower extract given once had significantly reduced the fecal egg counts of goats naturally infected with trichostrongylid nematodes on Days 1 to 21 post treatment. This was comparable to the positive control levamisole (Bernal, 2013).

Azadirachta indica
Azadirachta indica
Azadirachta indica



Common Names

margosa, neem, nimtree or Indian lilac



Description

The neem tree (*Azadirachta indica*) is one of nature's most versatile plants, and is best known for its highly effective insecticidal oil. However, as every part of the tree is used in different ways, there's a lot to discover about this fascinating species (<https://medium.com/@FastTreeRemovalServicesAtlanta/neem-tree-3information-uses>). Retrieved June 5, 2023.

Anthelmintic benefit

Neem leaf powder (at 30%) incorporated into molasses-mineral-salt block as licks in goats naturally infected with common gastro-intestinal nematodes. Fecal egg count reduction of up to 76.19% on the 6th week of ad-libitum access to the blocks (Bragado, 2021).





Damong Maria

mugwort, wormwood, and sagebrush.



Marigold

pot marigold, marygold, poet's marigold, Scotch marigold, Scottish marigold



Saluyot

Saluyot, jute

COMBINED CAPSULATED EXTRACTS OF SALUYOT, DAMONG MARIA AND MARIGOLD

Description

Damong Maria- an erect perennial herb, hairy, aromatic, rank smelling, often half-woody, growing to a height of 1 meter or less.

Marigold- members of the genus *Tagetes* have attractive yellow, orange, or red composite flowers that are solitary on the stems or clustered.

Saluyot - is famous for its sturdy, natural fiber but there are cultivars that are grown as a leafy vegetable. The young leaves are used fresh or dried.

Anthelmintic benefit

Combined capsulated extracts of saluyot, damong Maria and marigold (100% saluyot, 40% damong maria and 80% marigold) administered to infected goats with common nematodes once at a dose of 100mg/ kg body weight had resulted in 89.95% fecal egg count reduction at Day 7 after treatment (Halili, 2012).

Agave sisalina
Agave sisalina
Agave sisalina



Common Names

Sisal; Sisal hemp; Agave; Century plant; Sisal agave;



Description

Sisal is a monocotyledonous plant. It is a woody herb with a rosette of thick fleshy spiny leaves that are sword-shaped. The leaves measure up to 2 meters long, with spiny edges, and sharp, dark brown tip (The Environmental Weeds of Australia, Sheldon Navie & Steve Adkins, May 26, 2023).

Anthelmintic benefit

The efficacies of ethanolic extract of sisal leaves (at 200 mg/kg body weight; 400 mg/kg body weight; 600 mg/kg body weight) administered as a single dose to goats naturally infected with common gastro-intestinal nematodes were as follows (Navos, 2021):

200 mg/kg bw: 71.08% (1st week); 81.89% (2nd week); 80.14% (3rd week);
400 mg/kg bw: 70.36% (1st week); 81.78% (2nd week); 76.24% (3rd week); and
600 mg/kg bw: 81.61% (1st week); 92.70% (2nd week); 86.92% (3rd week).

The efficacies were significantly similar with that of levamisole (a commercial drug).

MAKABUHAY MAKABUHAY MAKABUHAY



Common Names
Tinospora, Makabuhay, Boraphet



Description

Makabuhay is a climbing, dioeciously vine reaching a height of 4 to 10 meters. Stems are up to 1 centimeter thick and somewhat fleshy, with scattered protuberances. Leaves are thin, ovate, 6 to 12 centimeters long, and 7 to 12 centimeters wide, with pointed and truncate or somewhat heart-shaped based, smooth and shining (<https://www.google.com/search?q=description+of+makabuhay>). Retrieved (May 7, 2023).

Anthelmintic benefit

The concentrations of 600 mg/kg BW and 300 mg/kg BW of the stem extract of makabuhay had reduced the fecal oocyst counts to as much as 87.54% and 75.74%, respectively in goats naturally infected with coccidia on Day 28 after a single treatment (Saladino, 2021).

Moringa oleifera
Moringa oleifera
Moringa oleifera



Common Names

Malunggay; Marungay; Calamungay; Horseradish tree, Drumstick tree; Ben oil tree



Description

Moringa oleifera is an angiosperm plant that is native of the Indian subcontinent. It is a small deciduous tree with a sparse foliage. The tree can grow to a height of 10-12 m. It has a spreading open crown, typically umbrella-shaped. Leaves are alternate; 7-60 cm long, tripinnately compound with each pinnate bearing 4-6 pairs of leaflets that are dark-green, elliptical to obovate, and 1-2 cm in length. Its fruit is typically a 3-valved capsule, 10 to 60 cm in length. When young, the fruit is green and when it matures it turns brown (FAO, 2014).

Anthelmintic benefit

In vitro killing of adult *Trichostrongylus* spp. by 40%, 50%, 60% and 70% concentrations of a methanolic extract from *J. curcas* leaves. The 40% concentration had killed adult worms after 12 hours of incubation; the 50% and 60% on the 9th hour; and the 70% on the 12th hour (Fugata, 2009).

In vitro effect of 40, 50, 60 and 70 percent leaf extract was demonstrated on eggs of *Trichostrongylus* spp. through inhibition of the hatching of eggs of the worms after 48 hours of incubation (Fugata, 2009).

Gliricidia sepium
Gliricidia sepium
Gliricidia sepium



Common Names
Madre-de-Cacao; Kakawate



Description

Madre-de-Cacao is a medium-sized legume which belongs to the family Fabaceae. It reaches a height of 2-15 m and occasionally 20 m. It has a smooth grey-brown or pale whitish grey bark on young branches. The leaves are 15-35 cm long and arranged alternately or sometimes sub-opposite; they are pinnate with an odd terminal leaflet, and 6-24 opposite leaflets per leaf. The leaflets are narrowly elliptic to elliptic with pointed tips, and range in size from 44 to 83 mm long, 17-48 mm wide (Rojas-Sandoval, 2017).

Anthelmintic benefit

1. Leaf powder of madre-de-cacao was incorporated in molasses-mineral salt block at 50% and 60% concentrations. The blocks were used as licks for goats naturally infected with common gastro-intestinal nematodes. On the sixth week, a reduction in fecal egg counts of up to 72% (at 50%) and up to 85.38% (at 60%) was observed. These efficacies were significantly similar with that of the positive control which was ivermectin (a commercial drug) (Enriquez, 2021).

2. A combination of leaf powder of madre-de-cacao (30%) and leaf powder of moringa (30% malunggay) incorporated in molasses-mineral-salt block. The blocks were used as licks for goats naturally infected with common gastro-intestinal nematodes. An efficacy of 74.79% on the 6th week was observed, which was comparable with the efficacy of Ivermectin (Paule, 2021).

Bitter Gourd

Bitter Gourd

Bitter Gourd



Common Names

bitter melon; Goya; bitter apple; bitter gourd;
bitter squash; balsam-pear, ampalaya



Description

This herbaceous, tendril-bearing vine grows up to 5 m (16 ft) in length. It bears simple, alternate leaves 4–12 cm (1.6–4.7 inch) across, with three to seven deeply separated lobes. Each plant bears separate yellow male and female flowers (<https://www.google.com/search?q=bitter+gourd&oq=bitter+gourd>. Retrieved June 20, 2023).

Anthelmintic benefit

The efficacy of three concentrations of leaf extract of the plant (300, 600, & 1000 mg leaf extract/kg BW of goats) was evaluated in goats naturally infected with trichostrongylid nematodes. The concentration of 1000 mg/kg BW given once exhibited 89.69% efficacy in reducing the number of eggs of the parasites in the goats' feces. The efficacy was comparable to levamisole (Millondaga, 2022).



Tobacco Tobacco

Common Names

Tobacco; Ciggies, darts, durries, rollies, smokes, fags, butts, cancer sticks.

Tobacco is the common name of several plants in the genus *Nicotiana* of the family Solanaceae, and the general term for any product prepared from the cured, aged, and processed in various ways.

Anthelmintic benefit

The efficacies of combined tobacco and nutgrass extract (500mg tobacco and 1250 mg nutgrass/kg BW, 1000mg tobacco and 2500 mg nutgrass/kg BW, 2000 mg tobacco and 5000 mg nut / kg BW, 2500mg tobacco and 6250 mg nutgrass/kg BW) in reducing fecal egg counts in goats naturally infected with trichostrongylid

Nutgrass Nutgrass

Common Names

Nutgrass: Coco grass, Ground almond, Java grass, Red nutgrass.

Nutgrass - A very troublesome weed of crops, orchards, vineyards, fallows, lawns, footpaths, gardens, parks, pastures, waste areas and disturbed sites. Nutgrass (brisbane.qld.gov.au) retrieved June 20, 2023.

nematodes were as follows (Quinlat, 2022):

500 mg tobacco and 1250 mg nutgrass (93.40%)

1000 mg tobacco and 2500 mg and nutgrass (95.27%)

2000 mg tobacco and 5000 mg nut grass-(97.74%)

2500mg tobacco and 6250 mg nutgrass (98.99%)

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