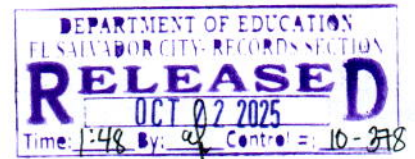




Republic of the Philippines
Department of Education
REGION X- NORTHERN MINDANAO
SCHOOLS DIVISION OF EL SALVADOR CITY



October 13, 2025

DIVISION MEMORANDUM
No. 378, s. 2025

ANNOUNCEMENT OF WINNERS FOR THE
DIVISION SCIENCE AND TECHNOLOGY FAIR 2025

To: Secondary School Heads
All Others Concerned

1. Following Division Memorandum No. 343, s. 2025, titled **Division Science and Technology Fair (DSTF) 2025**, the Office extends its warmest congratulations to the school heads, science coordinators, teachers and the technical working group for the successful conduct of the DSTF 2025.
2. Attached are the winners for the DSTF 2025.
3. All **First-place** winning entries in paper presentation will represent the Division in the Regional Science and Technology Fair 2025. The winning researchers must submit the revised soft and hard copies of the research papers to the Curriculum Implementation Division (CID) thru Marie Jade A. Cacayan on or before November 3, 2025.
4. Further, the following personnel are hereby designated to review the entries of the Division to the Regional Science and Technology Fair.

Name	School/ Station	Designation/ Position
Marie Jade A. Cacayan	Division Office	Education Program Supervisor
Anabelle M. Mamacalay	Division Office	Education Program Supervisor
Therese Angeli M. Romasanta	El Salvador City NHS	School-in-charge
Jessica C. Micabalo	Molugan NHS	School-in-charge
Daryl Jay H. Divino	Sinaloc NHS	Special Science Teacher 1
Jaen Kieth F. Rocios	Sinaloc NHS	Special Science Teacher 1

5. All learner-researchers, one coach per entry, and the Review Committee are required to attend the following activities.
 - a. Online consultations with the panelist on October 16, 2025, and
 - b. Finalization Workshop for Science Investigatory Projects: Preparation for the Regional Science and Technology Fair on November 4 – 5, 2025 at Division Conference Hall, Division Office, Poblacion, El Salvador City.
6. Participation shall be subject to the *no-disruption-of-classes policy* stipulated in DepEd Order No. 09, s. 2005 entitled Instituting Measures to *Increase Engaged*

Time-On-Task and Ensuring Compliance Therewith. The concerned school head is advised to assign teachers to handle the classes of the identified teacher-participant.

7. This Office shall adhere to Equal Opportunity Principle (EOP) in the steps undertaken for this purpose. Hence, all decisions and actions shall be based on guidelines set forth, with no discrimination on the account of age, gender, identity, sexual orientation, civil status, disability, religion, ethnicity or political affiliation.

8. This Office directs the immediate and wide dissemination of this Memorandum is desired.


RANDOLPH B. TORTOLA
Schools Division Superintendent

Encl: As stated

*To be indicated in the Perpetual Index
under the following subjects:*

CONTESTS
SCIENCE EDUCATION

Re: Announcement of Winners for the Division Science and Technology Fair 2025

CID/ mjac

Attachment No. 1 to Division Memorandum No. 318 s. 2025

A. Paper presentation

Life Science Individual

Rank	Research Project Title	Student Researcher	Coach	School
First	Bridging Tradition and Science: Phytochemical and Medicinal Potential of <i>Cocos nucifera</i> root	Sandy Jane C. Nob	Yuriel Clint C. Bejiga and Maria Cecilia U. Obligado	Cogon National High School
Second	Blue Bottle Trap: A house fly (<i>Musca domestica</i>) Trap through the fermentation process of Banana (<i>Musa acuminata</i>) Pseudostem Extract	Claire Lhaarnie R. Quilab	Christian Delle Ragmac and Lougie Mae Batalla	Kalabaylabay Integrated School

Life Science Team

Rank	Research Project Title	Student Researcher	Coach	School
First	LeafShield: Ripening Delay Activity of Guava (<i>Psidium guajava</i>) Leaf-Infused Biopolymer Film on Latundan Banana (<i>Musa acuminata</i> × <i>balbisiana</i> AAB Group)	Precious Elain A. Racaza, Kingstone M. Appegu, and Erica D. Rapirap	Ma. Cecilia U. Obligado and Christine Heazel O. Francisco	Cogon National High School
Second	Evaluating the Effectiveness of Antipolo (<i>Artocarpus Blancoi</i>) Sap as Natural Fly Trap: Potential for Eco-Friendly Pest Control	Loui Jay B. Mambayla, Carl Hasheem O. Jaudian, and Khet Marydhal O. Maestre	Kristianne Marie M. Yamaro	San Francisco de Asis National High School
Third	Fermentation Monitoring of Pretreated Napier Grass Using <i>Saccharomyces cerevisiae</i> and <i>Aspergillus oryzae</i>	Emmanuel N. Virtudez, Nikko John A. Carcallas, and Mil Antoneth C. Paderog	Dexby P. de Guzman	El Salvador City National High School

Physical Science Individual

Rank	Research Project Title	Student Researcher	Coach	School
First	Baking Soda Treated Nipa (<i>Nypa fruticans</i>) fibers as a Mitigating agent in Oil Spill Control	Mae Kyla Grace B. Ralozo	Christian Delle Ragmac, and Sahanie Mikunog	Kalabaylabay Integrated School
Second	Moringa Seeds Powder as Purifying Agent for Used Palm Oil	Kristine P. Cajilla	Rheza Mae P. Ebal	Molugan National High School
Third	BanaHair Net: Development and Evaluation of Eco-Friendly Hairnets Made	Kristine Love J. Igloria	Clember Lei B. Abasula and	Cogon National High School

	from Banana Pseudo-Stem Fibers		Maritess T. Jariolne	
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Physical Science Team

Rank	Research Project Title	Student Researcher	Coach	School
First	Sustainable Cockle Shells – Carbonized Rice Hull Particulate Blends: Bromothymol Blue Adsorption Studies using Smartphone Camera Colorimetry	Trisha A. Burton, Teresa A. Ragmac, and Aouie L. Ralozo	Dexby P. de Guzman	El Salvador City National High School
Second	pHloral Strips: Developing Biodegradable pH Strips from <i>Clitoria ternatea</i> Flower Extract	Andy Marie T. Salvador, Vanessa Cezanne S. Velez, and Dave Brazane J. Magdale	Jaen Kieth F. Rocios	Sinaloc National High School
Third	Veti-Rope: An Alternative Sustainable Power Fiber	Chynna S. Rabanes, April Ann M. Ozaeta, and Chars Allan A. Alolino	Lynnel B. Uayan	Himaya National High School

Mathematics and Computational Sciences Individual

Rank	Research Project Title	Student Researcher	Coach	School
First	Modeling Blood Pressure Transitions Among Public School Teachers in El Salvador City Using a Multistate Markov Chain Model: Basis for Hypertension Prevention Programs	Rheil Evans T. Lunio	Jun Mark Rey O. Nob, and Liza May D. Nob	Cogon National High School
Second	Computational Analysis of Solar Energy Potential in El Salvador City using Copernicus Atmosphere Monitoring Service Data (2016–2024)	Harris Kim B. Palasan	Dexby P. de Guzman	El Salvador City National High School
Third	Police Utilization for Local Impact and Safety (PULIS): Optimizing PNP Deployment Using the AHP Model	Crisha Jay F. Sabayanan	James Rey G. Saludaes	Molugan National High School

Mathematics and Computational Sciences Team

Rank	Research Project Title	Student Researcher	Coach	School
First	Forecasting Land Use- Land Cover of El Salvador City using Artificial Neural Network Algorithm and Sentinel-2 Data	Christopher Kyle D. Taclindo, Trixcy Angel M. Gador, and	Dexby P. de Guzman	El Salvador City National

		Ryzel Kate T. Aliñabon		High School
Second	Machine Learning-Based Poverty Risk Analysis Using Decision Tree, Random Forest, and Neural Network Models for Targeted Government Financial Assistance	Jhairus James M. Abang, Shaina Necole O. Mugot, and Cyril Jane L. Bragat	Jun Mark Rey O. Nob, and Liza May D. Nob	Cogon National High School
Third	Deriving Geometric Formulas For Vertices, Edges, And Diagonals In Extended Cube Structures	Kyrelle Loraine C. Isidto, and Caila Jade S. Francis	James Rey G. Saludares	Molugan National High School

Robotics and Intelligent Machines Individual

Rank	Research Project Title	Student Researcher	Coach	School
First	Solar-Powered GSM based Fence Alarm: A Touch-Activated Security Solution for Homes and School Campuses	Errienne Kate O. Batalla	Sherwin D. Oranio	Cogon National High School
Second	Parking System with Real-Time Slot Detection and Access Control	Aurish Joy Vecino	Rheza Mae P. Ebal	Molugan National High School

Robotics and Intelligent Machines Team

Rank	Research Project Title	Student Researcher	Coach	School
First	Step- Sense: Piezoelectric-Powered Smart Shoe for Obstacle Detection and Navigation in Visually Impaired Mobility	Julyan A. Villavelez, Keith Nob, and Rianna T. Lorono	Eden J. Laserna and Rheaneza A. Loon	Cogon National High School
Second	Sound Activated Lighting: Arduino-Based Clap and Voice Control System	Scott Lawrence B. Unsay, Davefranz T. Geralde, and Kiexiah Nichole P. Labis	Nemelie P. Ral	Molugan National High School
Third	GABAY: An ESP32-Based Smart Cane with Obstacle Detector, Camera Sensor, And Voice Assistive System For The Blinds	Niña Nicole N. Macahilos, Ramon D. Jamis Jr., and Niel A. Lumajang	Sherwin D. Oranio	Cogon National High School

STEM Innovation Expo Individual

Rank	Research Project Title	Student Researcher	Coach	School
First	Valorization of Banana Agricultural Waste and Plastic Waste into Eco-Board Composites	Karen R. Capili	Liza May D. Nob and Jun Mark Rey O. Nob	Cogon National High School

Second	Individual and Synergistic properties to Ameliorate Water Turbidity using Moringa Oleifera Seeds and Activated Charcoal	Ryan Matthew S. Agan	Christian Delle Ragmac and Lougie Mae Batalla	Kalabaylabay Integrated School
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First	Banana Peel Bioplastic-Coated Ammonium Sulfate as Controlled-Release Fertilizer	Cety V. Baguio, Rhennazel C. Eco, and Evanise Seann G. Gule	Dexby P. de Guzman	El Salvador City National High School
Second	Robo-Fog: An Arduino-Based Robot System for Fire Hazard Detection, Alerting, and Emergency Suppression	Maricris D. Uy, Carl Laurence N. Cagubcub, and Zyhra Jane R. Esperanza	Phoebe Joy M. Pacut and Yuriel Clint C. Bejiga	Cogon National High School
Third	BeepVision: Innovative Eyewear for Safe Navigation of Visually Challenged Individuals	Nick Charlo J. Ytang, Cris Lymond Ahl C. Romarate, and Justin T. De Guzman	Giovanni A. Mangayan	Molugan National High School

B. Special Award on Poster Presentation

Life Science Poster Presentation Individual

Rank	Research Project Title	Student Researcher	Coach	School
First	Bridging Tradition and Science: Phytochemical and Medicinal Potential of <i>Cocos nucifera</i> root	Sandy Jane C. Nob	Yuriel Clint C. Bejiga and Maria Cecilia U. Obligado	Cogon National High School
Second	Blue Bottle Trap: A house fly (<i>Musca domestica</i>) Trap through the fermentation process of Banana (<i>Musa acuminata</i>) Pseudostem Extract	Claire Lhaarnie R. Quilab	Christian Delle Ragmac and Lougie Mae Batalla	Kalabaylabay Integrated School

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Second	Moringa Seeds Powder as Purifying Agent for Used Palm Oil	Kristine P. Cajilla	Rheza Mae P. Ebal	Molugan National High School
Third	Natural Ink Production Using Mahogany (<i>Swietenia macrophylla</i>) Extract for Black Pigments	Nikki Shane S. Buray	Carmina Jessica B. Mendez and Joerigene Odette C. Neri	Sambulan National High School

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Third	Development of Bio-Based Glue from Milk Fish (<i>Chanos chanos</i>) Scale: A Sustainable Adhesive Alternate	Chynna S. Rabanes, April Ann M. Ozaeta, and Chars Allan A. Alolino	Lynnel B. Uayan	Himaya National High School

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Second	Solar Powered Remote Controlled Car Automatic Water Sprinkler	Shesa Febrina F. Butaslac, and Ashlyn Jave B. Jamlan	Nemelie P. Ral	Molugan National High School
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