



ADDENDUM NO. 01
Series of 2025

This Addendum No. 01 is issued to modify or amend items in the Bidding Documents for the **Provision of Technical and Scientific Equipment for the Operation of DA-ACEF – Upgrading Plant Tissue Culture Laboratory**. This shall form an integral part of the Bid Documents.

Name of Project:	Provision of Technical and Scientific Equipment for the Operation of DA-ACEF – Upgrading Plant Tissue Culture Laboratory
Location:	CSU Campus, Ampayon, Butuan City
Brief Description:	This project involves the procurement of tools and machineries that improve the laboratory’s research and operational functions, and serve as a training center for students which delivers a high-quality education in agriculture and agri-industry.
Approved Budget for the Contract :	Php. 4,268,286.00
Source of Funds:	Trust Receipts/Inter-Agency Transferred Fund FY 2025
Procurement Scheme:	1 LOT

Please be informed of the changes in the Bidding Documents, and the following reflect ONLY the changes. All other specifications posted on the PhilGEPS Website that are not reflected in this Supplemental Bid Bulletin remain the same. The changes/amendments are as follows:

CHANGES/AMMENDMENTS:	
FROM	TO
Contract Duration: 30 Calendar Days	Contract Duration: 60 Calendar Days
ELISA (ENZYME LINKED IMMUNOSORBENT ASSAY) READER - Wavelength selection-Monochromator - Light source Xenon flash lamp - Wavelength range 2001,000 nm with 1 nm steps - Readout range Up to 4 absorbance units - Bandwidth<2.5 nm - Linearity at 450 nm* 02.5 Abs, 2% - Accuracy at 450 nm*1.0% + 0.003 Abs (02.0 Abs), 2.0% (2.02.5 Abs) - Precision at 450 nm* SD <0.003 Abs or CV <1.0% - Plates 6- to 48-, 96-, and 384-well plates**, Plates "Measurement speed (Starting from A1 back to A1""6 sec with 96-well plate 10 sec with 384-well plate" - Plate shaking Linear - Spectral scanning speed 10 sec from 2001,000 nm with 1 nm steps - Incubation range from ambient temperature to 45C - User interfaces "Stand-alone use: 7 in. touchscreen display - Connections: 1 USB B port for PC 1 Ethernet port 3 USB A ports for devices (USB memory device and Wi-Fi dongle) " - Dimensions (H x W x D) 265 x 295 x 445 mm (10.4 x 11.6 x 17.5 in.) - Weight 11.3 kg (24.9 lb) Technical Specifications: for Microplate Readers - Supported operating systems 64-bit edition of Microsoft Windows 10 or 11 (Pro or Enterprise edition) - Disk space14 GB disk space	ELISA (ENZYME LINKED IMMUNOSORBENT ASSAY) READER - Wavelength selection-Monochromator - Light source Xenon flash lamp - Wavelength range 200-1,000 nm with 1 nm steps - Readout range Up to 4 absorbance units - Bandwidth<2.5 nm - Linearity at 450 nm* 0-2.5 Abs, 2% - Accuracy at 450 nm*1.0% + 0.003 Abs (0-2.0 Abs), 2.0% (2.0-2.5 Abs) - Precision at 450 nm* SD <0.003 Abs or CV <1.0% - Plates 6- to 48-, 96-, and 384-well plates**, Plates "Measurement speed (Starting from A1 back to A1""6 sec with 96-well plate 10 sec with 384-well plate" - Plate shaking Linear - Spectral scanning speed 10 sec from 200-1,000 nm with 1 nm steps - Incubation ranges from ambient temperature to 45C - User interfaces "Stand-alone use: 7 in. touchscreen display - Connections: 1 USB B port for PC 1 Ethernet port 3 USB A ports for devices (USB memory device and Wi-Fi dongle) " - Dimensions (H x W x D) 265 x 295 x 445 mm (10.4 x 11.6 x 17.5 in.) - Weight 11.3 kg (24.9 lb) Technical Specifications: for Microplate Readers - Supported operating systems 64-bit edition of computer Operating System (OS) 10 or 11 (Pro or Enterprise edition) - Disk space14 GB disk space



- Processor Quad-core (or dual-core with four logical processors), 2 GHz or faster - Memory 8 GB RAM - USB port available 1 (one) - Monitor Full HD with 1920 x 1080 resolution QTY: 1 UNIT: UNIT	- Processor Quad-core (or dual-core with four logical processors), 2 GHz or faster - Memory 8 GB RAM - USB port available 1 (one) - Monitor Full HD with 1920 x 1080 resolution QTY: 1 UNIT: UNIT
HIGH THROUGHPUT DNA ELECTROPHORESIS AND DOCUMENTATION With: 1 "Major Science ME15-7-10-15, Midi plus-2 Horizontal Electrophoresis System Features - Low buffer consumption Single molded tank - Three tray options available with Easy sample loading - Multi-channel pipette compatibility. Great indications for gel making and running No tape, clamps or springs needed Specifications - Dimensions (W x L x H) 10.4"x6.9"x3.5" (265x175x90mm) - Gel Dimensions (W x L) 5.9"x2.8" (150x70mm); 5.9"x3.9" (150x100mm); 5.9"x5.9" (150x150mm) - Maximum Samples 70 for 5.9"x2.8" (150x70mm) Tray (2x35 sample combs) 140 for 5.9"x3.9" (150x100mm) Tray (4x35 sample combs) 210 for 5.9"x5.9" (150x150mm) Tray (6x35 sample combs) - Buffer Volume 0.13gal (500 ml) - Construction Injection molded construction; Durable, leak proof - environment for complete safety and long life - Cassette Type Electrode Inexpensive, easy to replace; 99.99% corrosion-resistant pure platinum - Electrical Safety Lid can only be fastened in one way; Upon lid removal, power is disconnected from buffer chamber - Set includes 1 x Electrophoresis tank & lid, 1 x ME15-UV7 (15x7cm UV tray), 1 x ME15-UV10 (15x10cm UV tray), 1 x ME15-UV15 (15x15cm UV tray), 2 x ME15-20-1 (20 sample combs, 1mm thick), 1 x ME15-UV DAM (UV tray dams, 2pcs), 1 x ME15-LG (Loading guides (Set), 1 x Black & red electrophoresis cable 1 x Major Science Mini-300, Mini Pro 300V Power Supply Unit	HIGH THROUGHPUT DNA ELECTROPHORESIS AND DOCUMENTATION With: 1 Horizontal Electrophoresis System Features - Low buffer consumption Single molded tank - Three tray options available with Easy sample loading - Multi-channel pipette compatibility. Great indications for gel making and running No tape, clamps or springs needed Specifications - Dimensions (W x L x H) 10.4"x6.9"x3.5" (265x175x90mm) - Gel Dimensions (W x L) 5.9"x2.8" (150x70mm); 5.9"x3.9" (150x100mm); 5.9"x5.9" (150x150mm) - Maximum Samples 70 for 5.9"x2.8" (150x70mm) Tray (2x35 sample combs) 140 for 5.9"x3.9" (150x100mm) Tray (4x35 sample combs) 210 for 5.9"x5.9" (150x150mm) Tray (6x35 sample combs) - Buffer Volume 0.13gal (500 ml) - Construction Injection molded construction; Durable, leak proof - environment for complete safety and long life - Cassette Type Electrode Inexpensive, easy to replace; 99.99% corrosion-resistant pure platinum - Electrical Safety Lid can only be fastened in one way; Upon lid removal, power is disconnected from buffer chamber - Set includes 1 Electrophoresis tank & lid, 1 (15x7cm UV tray), 1 (15x10cm UV tray), 1 (15x15cm UV tray), 2 (20 sample combs, 1mm thick), 1 (UV tray dams, 2pcs), 1 (Loading guides (Set), 1 x Black & red electrophoresis cable 1 300V Power Supply Unit
MICROCENTRIFUGE Specification: - Max Speed: 20,500rpm	MICROCENTRIFUGE Specification: - Max Speed: 20,500rpm - Max RCF: 29200xg



• Max RCF: 29200xg • Max Capacity: 12 * 10ml • Speed Precision: +1% or +20rpm • Timing Range: 1s-999min • Noise: <65dB • Consumption 600W • Power Supply: AC 110~220V, 50/60Hz • External Size (W*D*H): 490*350*280mm • Packaging Size (W*D*H): 550*410*340mm • Net weight: 25kg • Gross Weight: 27kg	• Max Capacity: 12 * 10ml • Speed Precision: +1% or +20rpm • Timing Range: 1s-999min • Noise: <65dB • Consumption 600W • Power Supply: AC 110~220V, 50/60Hz • External Size (W*D*H): 490*350*280mm • Packaging Size (W*D*H): 550*410*340mm • Net weight: 25kg • Gross Weight: 27kg
1. MICROPLATE SPECTROPHOTOMETER • Wavelength selection • Monochromator • Light source - Xenon flash lamp • Wavelength range 2001,000 nm with 1 nm steps • Readout range Up to 4 absorbance units • Bandwidth <2.5 nm • Linearity at 450 nm* 02.5 Abs, 2% • Accuracy at 450 nm* 1.0% + 0.003 Abs (02.0 Abs), 2.0% (2.02.5 Abs) • Precision at 450 nm* SD <0.003 Abs or CV <1.0% • Plates 6- to 48-, 96-, and 384-well plates*, • Cuvette • Dimensions (H x W x D): 4058 x 12.5 x 12.5 mm • Beam center height: 8.5 mm • Beam window: 2 mm • Measurement speed - (starting from A1 back to A1) • 6 sec with 96-well plate • 10 sec with 384-well plate • Plate shaking Linear • Spectral scanning speed 10 sec from 2001,000 nm with 1 nm steps • Incubation range from ambient temperature to 45 C • General specifications • User interfaces Stand-alone use: 7 in. touchscreen display • Connections • 1 USB B port for PC • 1 Ethernet port	1. MICROPLATE SPECTROPHOTOMETER • Wavelength selection - Monochromator • Light source - Xenon flash lamp • Wavelength range 200-1,000 nm with 1 nm steps • Readout range Up to 4 absorbance units • Bandwidth <2.5 nm • Linearity at 450 nm* 02.5 Abs, 2% • Accuracy at 450 nm* 1.0% + 0.003 Abs (0-2.0 Abs), 2.0% (2.0-2.5 Abs) • Precision at 450 nm* SD <0.003 Abs or CV <1.0% • Plates 6- to 48-, 96-, and 384-well plates*, • Cuvette • Dimensions (H x W x D): Approximately 40-58 x 12.5 x 12.5 mm • Beam center height: 8.5 mm • Beam window: 2 mm • Measurement speed - (starting from A1 back to A1) • 6 sec with 96-well plate • 10 sec with 384-well plate • Plate shaking Linear • Spectral scanning speed 10 sec from 200-1,000 nm with 1 nm steps • Incubation range from ambient temperature to 45 C • General specifications • User interfaces Stand-alone use: 7 in. touchscreen display • Connections • 1 USB B port for PC • 1 Ethernet port



3 USB A ports for devices (USB memory device and Wi-Fi dongle) - Dimensions (H x W x D) 265 x 295 x 445 mm (10.4 x 11.6 x 17.5 in.) - Weight 11.3 kg (24.9 lb)	3 USB A ports for devices (USB memory device and Wi-Fi dongle) - Dimensions (H x W x D) 265 x 295 x 445 mm (10.4 x 11.6 x 17.5 in.) - Weight 11.3 kg (24.9 lb)
PIPETTE QTY: 1 UNIT : UNIT	PIPETTE QTY: 1 SET : UNIT
SHAKER Shaker orbital type - Orbital diameter 4mm - Max. Load capacity (with platform) - 2.5kg - Motor type- Brushless DC motor - Motor input power- 28W - Motor output power- 15w - Speed range- 100-800rpm - Speed display- LCD - Timer display- LCD - Time settings range- 1min-19h59min - Voltage- 100-240V,50/60Hz - Power- 30W - Weight- 8.1kg - Permissible ambient temperature and humidity- 5-40Â°C, 80%RH Dimension [WÃ—DÃ—H]- 300-340Ã—100mm - Protection class- IP21 - Data connector- RS232 QTY: 1 UNIT: UNIT	SHAKER Shaker orbital type - Orbital diameter 4mm - Max. Load capacity (with platform) - 7.5kg - Motor type- Brushless DC motor - Motor input power- 28W - Motor output power- 15w - Speed range- 100-800rpm - Speed display- LCD - Timer display- LCD - Time settings range- 1min-99h59min - Voltage- 100-240V,50/60Hz - Power- 30W - Weight- 8-12kg - Permissible ambient temperature and humidity- 5-40Â°C, 80%RH Approximate Dimension [WÃ—DÃ—H] WA: 300Ã—370 DA: 340Ã— HA: 100mm - Protection class- IP21 - Data connector- RS232 QTY: 1 UNIT: UNIT
SHAKING WATER BATH Function Operating Temp Range – RT~100Â°C Tem. Resolution Ratio - 0.1°C Tem. Motion - ±0.1°C Tem. Uniformity - ±0.2°C - Reciprocal Oscillation Amplitude - 16 or 24mm (Ex-factory is 16mm) - Reciprocating Frequency Range - 20~180(r/min)	SHAKING WATER BATH Function Operating Temp Range - RT~100Â°C Temp. Resolution Ratio - 0.1°C Temp. Motion - ±0.1°C Temp. Uniformity - ±0.2°C - Reciprocal Oscillation Amplitude - 16 or 24mm (Ex-factory is 16mm) - Reciprocating Frequency Range - 20~180(r/min)



- Reciprocating Frequency Accuracy - ± 1rpm - Capacity- 31 Liters (inside volume) Structure - Water Tank - Mirror stainless steel - Outer Shell - Cold rolling steel electrostatic - spraying exterior - Upper Cover - Mirror stainless steel - Insulating Layer - Polyurethane Heater - - Stainless Steel Heater - Driving Mode - Crankshaft+ double link + four wheels - Shelf - Mirror stainless steel - Power rating - 1.5kW - Controller - Tem. Control Mode - LCD PID Intelligent control - Reciprocating Control Mode LCD PID Intelligent control - Setting Mode - Touch button - setting Tem. Display Mode - LCD Display - Speed Display Mode LCD Display Includes: - Water bath flask seat, tube rack QTY: 1 UNIT: UNIT	- Reciprocating Frequency Accuracy - ± 1rpm - Capacity- 31 Liters (inside volume) Structure - Water Tank - Mirror stainless steel - Outer Shell - Cold rolling steel electrostatic spraying exterior - Upper Cover - Mirror stainless steel - Insulating Layer - Polyurethane Heater - - Stainless Steel Heater - Driving Mode - Crankshaft+ double link + four wheels - Shelf - Mirror stainless steel - Power rating - 1.5kW - Controller - Temp. Control Mode - LCD PID Intelligent control - Reciprocating Control Mode LCD PID Intelligent control - Setting Mode - Touch button - setting Temp. Display Mode - LCD Display - Speed Display Mode LCD Display Includes: - Water bath flask seat, tube rack QTY: 1 UNIT: UNIT
THERMAL CYCLER - Block format 96-well, 0.2 mL Features - Enabled to run Fast chemistry - Controllable ramp rate - Program overwrite protection * Auto restart (after power outages) * Edit program during experiment * One-touch incubation Max block ramp rate 4$\text{\AA}^{\circ}\text{C/sec}$ Max sample ramp rate 3$\text{\AA}^{\circ}\text{C/sec}$ Temperature accuracy $\text{\AA}\pm 0.25\text{\AA}^{\circ}\text{C}$ (35$\text{\AA}^{\circ}\text{C}$ 99.9$\text{\AA}^{\circ}\text{C}$) Temperature range 0$\text{\AA}^{\circ}\text{C}$ 100.0$\text{\AA}^{\circ}\text{C}$ - Temperature uniformity <0.5$\text{\AA}^{\circ}\text{C}$ (30 sec after reaching 95$\text{\AA}^{\circ}\text{C}$) - Temperature calibration Calibrated to standards traceable to the National Institute of Standards and Technology - Dimensions (H x W x D) 21.0 x 24.0 x 46.0 cm (8.3 x 9.5 x 18.1 in) Weight 8.3 kg (18.3 lb)Dimensions (H x W x D) 21.0 x 24.0 x 46.0 cm (8.3 x 9.5 x 18.1 in) Weight 8.3 kg (18.3 lb) - PCR volume range 10$\text{\AA}^{\circ}\text{L}$ 100 $\text{\AA}^{\circ}\text{L}$ - Instrument memory USB and 2,000 MB onboard memory; onboard capacity >1,000 protocols - Display interface 8-inch color	THERMAL CYCLER - Block format 96-well, 0.2 mL Features - Enabled to run Fast chemistry - Controllable ramp rate - Program overwrite protection * Auto restart (after power outages) * Edit program during experiment * One-touch incubation - Max block ramp rate -4 $\text{\AA}^{\circ}\text{C/sec}$ - Max sample ramp rate - 3 $\text{\AA}^{\circ}\text{C/sec}$ - Temperature accuracy: $\pm 0.25^{\circ}\text{C}$ (35$\text{\AA}^{\circ}\text{C}$ to 99.9$\text{\AA}^{\circ}\text{C}$) - Temperature range 0$\text{\AA}^{\circ}\text{C}$ to 100.0$\text{\AA}^{\circ}\text{C}$ - Temperature uniformity <0.5$\text{\AA}^{\circ}\text{C}$ (30 sec after reaching 95$\text{\AA}^{\circ}\text{C}$) - Temperature calibration Calibrated to standards traceable to the National Institute of Standards and Technology - Dimensions (H x W x D) 21.0 x 24.0 x 46.0 cm (8.3 x 9.5 x 18.1 in) Weight 8.3 kg (18.3 lb) - PCR volume range 10$\text{\AA}^{\circ}\text{L}$ 100 $\text{\AA}^{\circ}\text{L}$



- TFT LCD Power 100~240 V, 50~60 Hz, max. 600 W 3 temperature zones, 20°C range (10°C zone-to-zone) - Data connectivity - Cloud or mobile via Ethernet or WiFi *1 year warranty QTY: 1 UNIT: UNIT	- Instrument memory USB and 2,000 MB onboard memory; onboard capacity >1,000 protocols - Display interface 8-inch color - TFT LCD Power 100~240 V, 50~60 Hz, max. 600 W 3 temperature zones, 20°C range (10°C zone-to-zone) - Data connectivity - Cloud or mobile via Ethernet or WiFi *1 year warranty QTY: 1 UNIT: UNIT
VERTICAL LABORATORY AUTOCLAVE - Capacity: 75L - Chamber size: 386 mm dia x 694 mm - Sterilization temp: 105 to 136°C - Temp display accuracy: +/- 0.1°C - Max temperature: 150°C - Working pressure: 0.22 MPa - Max pressure: 0.28 MPa - Timer settings: 0 to 999 mins - Pulse exhaust times: 0 to 9 times - Pulse exhaust temp: 105 to 134 °C - Dissolution temp: 60 to 100 °C - Holding temperature: 40 to 60°C - Chamber material: SUS 304 - Safety system: Over pressure; over temperature; door sensor; anti-dry out function; over current protection; door cover is insulated to prevent burns - Baskets: 2 pcs - External dimensions: 640*550*1070mm - Electricals: AC110/220V~10%, 60/50Hz, 4700W QTY: 1 UNIT: UNIT ADDITIONAL REQUIREMENTS FOR ALL ITEMS: - Preventive maintenance every year for at least 3 years - Service Center and technical support should be within 72hrs response time	VERTICAL LABORATORY AUTOCLAVE - Capacity: 75L - Chamber size: 386 mm dia x 694 mm - Sterilization temp: 105 to 136°C - Temp display accuracy: +/- 0.1°C - Max temperature: 150°C - Working pressure: 0.22 MPa - Max pressure: 0.28 MPa - Timer settings: 0 to 999 mins - Pulse exhaust times: 0 to 9 times - Pulse exhaust temp: 105 to 134°C - Dissolution temp: 60 to 100°C - Holding temperature: 40 to 60°C - Chamber material: SUS 304 - Safety system: Over pressure; over temperature; door sensor; anti-dry out function; over current protection; door cover is insulated to prevent burns - Baskets: 2 pcs - External dimensions: 640*550*1070mm - Electricals: AC110/220V~10%, 60/50Hz, 4700W QTY: 1 UNIT: UNIT ADDITIONAL REQUIREMENTS FOR ALL ITEMS: - Preventive maintenance every year for at least 3 years - Service Center should provide technical support within 72hrs response time

For guidance and information of all concerned.

REDACTED

MICHELLE V. JAPITANA, D. Eng.
Chairperson, Bids and Awards Committee