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PR-2023-1109-155448

OP 11/14/23 *dfm*



Republic of the Philippines  
**VISAYAS STATE UNIVERSITY**  
Visca, Baybay City, Leyte

*TD DPM*

## PURCHASE REQUEST

PR No.: **TF-2023-11-02725**

Date: **11-09-2023**

PPMP No. : **16-4-913-2023-7-0-4**

Category: **Laboratory Equipment**

Duration: **2023-09-01**  
to  
**2024-08-31**

Dept./Office: **DPM**

Project Title/Code: **Upgrading of a**

Section/End-User: **Justine Bennette H. Millado**

**Mass Production Facility for Biological Control Agents to Support Sustainable Pest Management of Coconut**

Item #	Item Description	Unit	Qty	Unit Price	PAR/ICS	Total Cost
1	<b>Analytical Balance (Maximum Capacity 220g)</b>	unit	1	85,500.00		85,500.00

### Specification:

#### FEATURES:

- Large viewing angle with bright backlit LCD display. 2 line display provides additional information or guidance prompts to the user. Capacity bar displays the weighing progress.
- A static removal bar (constructed of permanent static electric dissipative ABS) provides a convenient grounding location.
  - Four quick keys enable easy operation of multiple weighing modes.
  - RS232 and USB device ports allow for easy connectivity to PCs and PLCs. Equipped with a security lock to prevent unauthorized use.

#### SPECS:

Capacity (g): 220  
Readability: 0.1 mg  
Repeatability std (g):  $\pm 0.0001$   
Linearity (g):  $\pm 0.0002$   
Weighing Units: gram, milligram, mesgal, momme, Newton, ounce, pennyweight, Baht, carat, grain, pound, Tael (Hong Kong), Tael, (Singapore), Tael (Taiwan), tical, tola, troy ounce  
Pan Size:  $\varnothing$  90 mm  
Power Requirements: AC Adapter Input: 100-240 VAC 0.3A 50-60 Hz

AC Adapter Output: 12 VDC 0.84A

Shipping Dimensions: 507 × 387 × 531 mm

Net Weight: 5.1 kg

2	Compound Light Microscope with Camera	pc	1	275,000.00		275,000.00
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**Specification:**

Specifications:

Head - Trinocular, 30° incline, 360° rotatable

Interpupillary Adjustment- Siedentopf compensation-free gemel, 48-75 mm

Ocular Diameter- 30mm

Ocular Diopters- left ocular

Eyepieces- 10X

Photo Port- height-adjustable YX series, 23mm tube mount

Objective Lenses- Infinity-corrected

Objective Parfocal Distance- 45mm

Objective Mounting Thread- RMS 20.32mm

Objective Turret- Reverse quintuple, ball-bearing movement

Focusing System- Coaxial coarse and fine focus, tension control

Focus Range- Travel - 24mm

Coarse Stroke - 37.7mm per rotation

Fine Stroke - 0.1mm per rotation

Stage Design- Double-layer with caliper

Stage Dimensions- 185mm x 142mm

X-Y Translation Range- 75mm x 55mm

Transmitted Illumination- 6V30W halogen, continuous-adjustment,

rear-mount housing with aspherical collector

Condenser- NA0.9/0.25 achromatic swing condenser with iris diaphragm

Sub-stage Condenser-holder - rack and pinion

3	Freezer	unit	2	75,000.00		150,000.00
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**Specification:**

Microprocessor temperature control with LED display

The inner temperature range: -25?~-30?

Multiple sensors to display or control the temperature

Lock protection and Malfunction alarms

Uses a highly efficient famous brand compressor and fan  
with shelves/drawers

CFC-Free/HCFC refrigerant

AC 220V with AVR

Minimum 100L capacity

Around 590x590x900(mm)

4	<b>Gel Imaging Device</b>	unit	1	145,000.00		145,000.00
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**Specification:**

Exceptional Resolution – 5MP Scientific Camera

Ready to Use – Ready to connect to PC out of the box

Innovative cabinet – Built in UV transilluminator, safety shut off switch and viewing port

Large Field of view – 20cm x 24 cm viewing area

No focus needed – never have to touch camera

AutoExposure – no manual manipulation of aperture or shutter speeds required.

Camera- 5 MP (2592 x 1944), scientific grade sensor

Power- 150v/400ma

Lens- 8 mm, F 1.4 hands free lens with Smart Capture technology

Cabinet- Built in UV transiluminator with safety cut-off switch

Dimensions- 34.6 x 31.1 x 68.6 cm

Weight- 21.4 kg

5	<b>Horizontal Electrophoresis Apparatus</b>	unit	1	95,000.00		95,000.00
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**Specification:**

Output voltage/current- 10V to 150V/10 - 400 mA

Timer- 0 - 99 hr or continuous, audible alert

Overall Dimensions (W x D x H)- 10 x 6.7 x 2.5 in./24.5 x 17 x 6.2 cm

Gel Capacity- 1 large (12.5 x 12 cm), 2 small (12.5 x 6 cm), 4 micro (6 x 6 cm)

Program memory- Last programmed parameters saved

Electrical- Universal 100V- 240V, 50/60 Hz

6	<b>Inverted Microscope with Camera and Monitor</b>	unit	1	330,000.00		330,000.00
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**Specification:**

Total Magnification 100X~400X (Standard)

Eyepiece: WF10X, Ø22mm, WF16X (Optional), Ø11mm

Eyepiece Diameter: around Ø30mm

Parfocal Distance: around Ø10mm

BF Objective: 10X/0.25, 20X/0.40, 40X/0.60

Phase Contrast Objective: 10X/0.25 (20X 40X optional)

Nosepiece: Quadruple

Focusing minimum division of the focusing: around 2 um/ Effective distance: around 11mm

Double Layer Mechanical Stage (Size: around 112 x 79)

Condenser: LWD condenser, around W.D. 70mm, with phase-contrast

Petri Dish: around 86mm x 129.5mm, suitable for circle dish Ø87.5mm

around 34mm x 77.5mm, suitable for circle dish Ø68.5mm

around 57mm x 82mm

Phase Contrast System: Sliding phase contrast equipment, center adjustable

Light Source: at least 9W LED, with brightness control

Electrical: 220VAC, 50 Hz, with voltage regulator

7	<b>Laminar Flow (Double)</b>	unit	1	220,000.00		220,000.00
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**Specification:**

External Size (W\*D\*H)- 1040\*660\*1770mm

Internal Size (W\*D\*H)- 940\*560\*545mm

Work Surface Height- 750mm

Display- LED Display

Airflow Velocity- Average of 0.3~0.5m/s

Material- Main Body: Cold-rolled

steel with anti-bacteria

powder coating

Work Table: 304

stainless steel

Pre-filter- Polyester fiber, washable

HEPA Filter- 99.995% efficiency at 0.3 $\mu$ m

Noise- <65dB

Front Window- Manual, 5mm toughened glass, anti-UV

Max Opening- 310mm

UV Lamp- 20W\*1

Emission of 253.7 nanometers

LED Lamp- 12W\*1

Consumption- 350W

Caster- Universal caster with leveling feet

Power Supply- AC220V $\pm$ 10%, 50/60 Hz; 110V $\pm$ 10%, 60 Hz

Standard Accessory- LED lamp; UV lamp\*2; Base stand.

Optional Accessory- Electric height adjustable base stand

Gross Weight- 150kg

Package Size (W\*D\*H)- 1190\*890\*1340mm

8	Laminar Flow Hood/Cabinet	unit	1	148,250.00		148,250.00
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**Specification:**

Polypropylene with Transparent PVC side windows, Washable polyurethane foam filter,

Particle count exceeds Class 100 requirements

Final Filters:HEPA: 99.99% efficient at around 0.3µm particles

Fan Motor:.333 HP at high speed; .25 HP at low speed

Average airflow velocity: around 90 feet/minutes (fpm)

Electrical:220VAC, 50 Hz

Size: Around 2x4 ft

Low noise at 52.4 dBA

9	pH Meter	unit	1	85,000.00		85,000.00
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**Specification:**

**pH**

Range -2.000 to 20.000 pH

Resolution 0.001, 0.01, 0.1 pH

Accuracy ±0.002 + 1 LSD

Calibration Up to 6 (USA, NIST, DIN, or custom buffer sets)

Connectors BNC

**mV**

Range ±2000.0 mV

Resolution 0.1 mV

Accuracy ±0.2 mV

Calibration Offset up to +150 mV

Connectors BNC

**Temperature**

Range 0.0 to 100.0°C (32.0 to 212°F)

Resolution 0.1°C or °F

Accuracy ±0.3°C (±0.5°F)

Connectors 2.5 mm phono

Temperature compensation: manual or automatic from 0 to 100°C (32 to

212°F)

Memory: up to 500 data sets with time/date stamp

Output: RS-232, 9-pin female

Display: 3 1/4 " x 2 7/16 " (8.3 x 6.2 cm) graphic LCD with backlight

Operating temperature: 0 to 50°C (32 to 122°F), noncondensing humidity

Power: universal 110/240 VAC, 50/60 Hz with adapter; UL/CSA listed

#### Dimensions

Meter: 6 1/8 " x 6 7/8 " x 2 3/4 " (15.5 x 17.5 x 6.9 cm)

Boxed: 12" x 9" x 5" (30.8 x 15.5 x 12.4 cm)

#### Weight

Meter only: 1.4 lb (0.6 kg); Boxed: 4 lb (1.8 kg)

10	Stereo zoom microscope with camera and monitor	pc	1	200,000.00		200,000.00
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#### Specification:

##### Microscope Specs:

Viewing Head-Trinocular body with viewing head that rotates 360°. Head locks in place with tightening screw. Dual diopters on each eyetube. Light is directed 100% to eyetubes and trinocular port.

Eyepieces- Widefield 10x eyepieces / FN 20mm. Accepts 24mm diameter reticle.

Zoom Ratio- 6.4:1

Objectives- Zoom range of 0.7x- 4.5x.

Stand- Rugged cast metal frame track stand with white enamel finish. Transmitted and reflected LED illumination. Top and bottom LED lights each have their own rheostat controls. Supplied with 95mm frosted stage plate and black/white stage plate. Two locked-on stage clips. CE Certified. 115~230V.

Focusing- Coarse focus adjustment.

Working Distance- 100mm

Illumination- Transmitted and Reflected LED illumination with intensity control and on/off switch for each light.

C-Mount Adapter- 0.35x C-Mount Adapter

Camera- HD 1080p camera, live resolution 1920×1080 pixels. 2mp image capture to SD card. Live image 1080p / 60 fps. HDMI connection to 12" HD monitor. Image capture to SD Card. Camera controls for exposure, gain, white balance, color adjustment, sharpness. Includes mouse for on-screen controls. HDMI direct connection to monitor.

Monitor- 12" LCD HDMI monitor, 1080p. LED backlight. Monitor mounts directly to HD camera and includes 110~240V power cord and HDMI cable.

Dimensions- 9.5? W x 11.5? D x 15? H.

Weight- 11 lbs.

Warranty- 5-year limited warranty on microscope, 1 year on tablet camera.

**TOTAL**

**1,733,750.00**

Purpose: For precise observation and documentation of microscopic specimens, enhancing research and education. Lab equipment

Checked by:

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Funds Available:

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**NICK FREDDY R. BELLO**

TWG - Laboratory Equipment

HEAD, ACCOUNTING OFFICE

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END USER

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**DANIEL LECHE C. TANDON**  
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VC PRESIDENT, VSU

11/14/23