

Republic of the Philippines **VISAYAS STATE UNIVERSITY**

Visca, Baybay City, Leyte

PURCHASE REQUEST

PR #: GF-2021-10-01448

Date: 10-26-2021

Category: Laboratory Equipment

Project Title/Code: Completion of Lecture Hall and Classroom Rehabilitation of Breeding Nursery Seed Storage Facility and Tissue Culture Laboratory of the

Department of Plant Breeding and Genetics

| Dep | 1./011 | ice: | DP | BG |
|-----|--------|------|----|----|
| | | | | |

Section/End-User: Darlyn A. Dupal

| # | ing Source செருவர் நிரும் - CO | Unit | Qty | Additioned Lab Equipment AR/ICS | Total Cost |
|---|---|------|-----|---------------------------------|------------|
| 1 | Autoclavable Pipetter of Single Channel, 0.2-2 μl () | рс | 1 | 17,000.00 | 17,000.00 |

Specification:

with stainless steel ejector

volume in micro liter (range: 0.2 - 2)

increment: 0.002 micro liter

systematic error in micro liter (range: ±0.024 to ±0.03)

random error in micro liter (range: ?0.012 to ?0.014)

systematic error percentage (range: ±12, to ±1.5)

random error in CV (range: ?6 to ?0.7)

each pipette should be calibrated according to ISO 8655 standards

variable volume micropipettes feature built-in tip ejectors and autoclavable tip cones

secure volume lock

five year warranty

| | | (about the same to be a second | | | |
|--|---|---------------------------------|---|-----------|-----------|
| | utoclavable Pipetter of Single hannel, 1-10 ul () | рс | 1 | 17,000.00 | 17,000.00 |

ecification:

with stainless steel ejector

volume in micro liter (range: 1 - 10)

increment: 0.02 micro liter

systematic error in micro liter (range: ±0.025 to ±0.1)

random error in micro liter (range: ?0.012 to ?0.04)

systematic error percentage (range: ±2.5 to ±1)

random error in CV (range: ?1.2 to ?0.4)

each pipette should be calibrated according to ISO 8655 standards

variable volume micropipettes feature built-in tip ejectors and autoclavable tip cones

secure volume lock

five year warranty

| | Autoclavable Pipetter of Single Channel, 10-100 ul () | рс | 1 | 15,000.00 | | 15,000.00 |
|--|---|----|---|-----------|--|-----------|
|--|---|----|---|-----------|--|-----------|

Specification:

with stainless steel ejector

volume in micro liter (range: 10 - 100)

increment: 0,2 micro liter

systematic error in micro liter (range: ± 0.35 to ± 0.8)

random error in micro liter (range: ?0.10 to ?0.15)

systematic error percentage (range: ±3.5 to ±0.8)

random error in CV (range: ?1.0 to ?0.15)

each pipette should be calibrated according to ISO 8655 standards

variable volume micropipettes feature built-in tip ejectors and autoclavable tip cones

secure volume lock

five year warranty

| Autoclavable Pipetter of Single Channel, 100-1000 ul () | pc | 1 | 15,000.00 | | 15,000.00 |
|---|----|---|-----------|--|-----------|
|---|----|---|-----------|--|-----------|

Specification:

with stainless steel ejector

volume in micro liter (range: 100 - 1000)

increment: 1 micro liter

systematic error in micro liter (range: ±3 to ±8)

random error in micro liter (range: ?0.6 to ?1.5)

systematic error percentage (range: ±3 to ±0.8)

random error in CV (range: ?0.6 to ?0.15)

each pipette should be calibrated according to ISO 8655 standards

variable volume micropipettes feature built-in tip ejectors and autoclavable tip cones

secure volume lock

| | utoclavable Pipetter of Single Channel, 2-20 ul () | рс | 1 | 17,000.00 | 17,000.00 |
|---|---|-----------------------------------|-------------------------------------|----------------------------|-----------|
| _ | pecification: | - | | | |
| | with stainless steel ejector | | | | |
| | volume in micro liter (range: 2 | - 20) | | | |
| | increment: 0.02 micro liter | | | | |
| | systematic error in micro liter (r | ange: ±0.1 | to ±0.2) | | |
| | random error in micro liter (ran | | | | |
| | systematic error percentage (ra | | | | |
| | random error in CV (range: ?1. | 5 to ?0.3) | | | |
| | each pipette should be calibrat | ed accordir | ng to ISO 8655 | standards | |
| | variable volume micropipettes | feature buil | t-in tip ejectors | and autoclavable tip cones | |
| | secure volume lock | | | | |
| | five year warranty | | | | |
| 1 | at almost Direction of Circular | | | | |
| | utoclavable Pipetter of Single Channel, 20-200 ul () | pc | 1 | 15,000.00 | 15,000.0 |
| _ | pecification: | | | | |
| | with stainless steel ejector | | | | |
| | volume in micro liter (range: 20 | 200) | | | |
| | increment: 0.2 micro liter | 1-200) | | | |
| | systematic error in micro liter (i | range: ±0.5 | to +1 6) | | |
| | random error in micro liter (ran | | | | |
| | systematic error percentage (ra | | | | |
| | systematic error percentage (18 | | | | |
| | random arror in CV (range: 21 | 0 to 20 15) | | | |
| | random error in CV (range: ?1. | | | standards | |
| | each pipette should be calibrat | ed accordir | ng to ISO 8655 | | |
| | each pipette should be calibrat variable volume micropipettes | ed accordir | ng to ISO 8655 | | |
| | each pipette should be calibrat variable volume micropipettes secure volume lock | ed accordir | ng to ISO 8655 | | |
| | each pipette should be calibrat variable volume micropipettes | ed accordir | ng to ISO 8655 | | |
| | each pipette should be calibrat variable volume micropipettes secure volume lock five year warranty Vide Mini-Sub Cell Horizontal | ed accordir | ng to ISO 8655 | | 120,000.0 |
| E | each pipette should be calibrat variable volume micropipettes secure volume lock five year warranty Vide Mini-Sub Cell Horizontal Electrophoresis System() | ed accordir feature buil | ng to ISO 8655 t-in tip ejectors | and autoclavable tip cones | 120,000.0 |
| E | each pipette should be calibrate variable volume micropipettes secure volume lock five year warranty Vide Mini-Sub Cell Horizontal electrophoresis System() pecification: | ed accordir feature buil pc | ng to ISO 8655 t-in tip ejectors | and autoclavable tip cones | 120,000.0 |
| E | each pipette should be calibrate variable volume micropipettes secure volume lock five year warranty Vide Mini-Sub Cell Horizontal Electrophoresis System() pecification: Base footprint (LxWxH): 25.5x | ed accordir feature buil pc | ng to ISO 8655 t-in tip ejectors | and autoclavable tip cones | 120,000.0 |
| E | each pipette should be calibrate variable volume micropipettes secure volume lock five year warranty Vide Mini-Sub Cell Horizontal electrophoresis System() pecification: | ed accordir feature buil pc | ng to ISO 8655 t-in tip ejectors | and autoclavable tip cones | 120,000.0 |
| E | each pipette should be calibrate variable volume micropipettes secure volume lock five year warranty Vide Mini-Sub Cell Horizontal Electrophoresis System() pecification: Base footprint (LxWxH): 25.5x | ed accordir feature buil pc | ng to ISO 8655 t-in tip ejectors | and autoclavable tip cones | 120,000.0 |
| E | each pipette should be calibrate variable volume micropipettes secure volume lock five year warranty Vide Mini-Sub Cell Horizontal Electrophoresis System() pecification: Base footprint (LxWxH): 25.5x* Base buffer volume: 650-900M | ed accordir feature buil pc | ng to ISO 8655 t-in tip ejectors | and autoclavable tip cones | 120,000.0 |
| E | each pipette should be calibrate variable volume micropipettes secure volume lock five year warranty Vide Mini-Sub Cell Horizontal slectrophoresis System() pecification: Base footprint (LxWxH): 25.5x* Base buffer volume: 650-900M Base Gel size: 15x7cm | ed accordir feature buil pc | ng to ISO 8655 t-in tip ejectors | and autoclavable tip cones | 120,000.0 |
| E | each pipette should be calibrate variable volume micropipettes secure volume lock five year warranty Vide Mini-Sub Cell Horizontal Electrophoresis System() pecification: Base footprint (LxWxH): 25.5x* Base buffer volume: 650-900M Base Gel size: 15x7cm Tray sizes: 15x10 cm | ed accordir feature buil pc | ng to ISO 8655 t-in tip ejectors | and autoclavable tip cones | 120,000.0 |

Electrode wire guard: Molded polycarbonate

Banana Plugs: Gold-plated brass, 4.4cm length

Electrode: Platinum, 0.25mm diameter

Electrical cables: Dual, 20AWG, tinned copper wire cable, Flame-retardant polyurethane insulation jacket

Electrical leads: Nickel-silver

Gel Tray: UV- transparent acrylic plastic (UVTP)

Combs: Molded plastic and machined acrylic

Gel casting device: polycarbonate 0.64 cm silicon foam

Input power: Nominal= 220-240 VAC, 50-60 Hz; 700 W maximum

Actual = 90-132 or 198-264 VAC, 50-60-Hz

Fuses: 2.5 A, 250VAC, 5mmx20mm. Type T

Input power cord: 3-wired; grounded

Output (programmable)

Voltage: 10V to 300V, fully adjustable in 1 V steps

Voltage accuracy: ±2% of reading or 3 volts, whichever is more

Current: 4mA to 400mA, fully adjusted in 1 mA steps

Current accuracy: ±2% of reading or 3mA, which ever is more

Power(maximum): 75W

Terminals: 4-pair recessed banana jack, floating parallel

Timer Control: 001-999 minutes, fully adjustable

Ripple: 1% @300 V and 70W

Line Regulation: 1% @300 V and 70W, 90-132 or 198-264 VAC Load Regulation: 1% @300 V for 50% change in output load

Drift: 1% @ after 15mins warm up at 300V and 70W

Noise: 55dBA at 1 meter

Readout stability: Volts= ± V; Current: ±1Ma

Auto power up after power failure: User selectable, setup values maintained

Safety compliance: EN-61010

EMI: Conforms to CE standard for emissions and immunity Class A, testes only at 230 V

Display function: 3-digit LED display, voltage, current or time

Function Modes: Constant voltage, constant current, timer, pause, user selectable

Automatic power up after power failure

Envi: Operating Tem (40°C); Humidity (0-95%, in the absence of condensation)

Dimensions (W x D x H): 25 x 21 x 8.5 cm

Weight: 1.1kg, unit is stackable

Inclusions: Lid with Cables, 15cm x 10cm (WxL) UV transparent tray, Leveling bubble, 15-well comb, fixed height, 1.5 mm thickness, 20-well comb, fixed height, 1.5 mm thickness, Gel caster, PowerPac Basic Power Supply

| TOTAL | | | 216,000.00 |
|--------------------------|--|--|------------|
| Purpose: For DBM Project | de la constante de la constant | | |

Funds Available: ked by: ELIZABETH S. QUEVEDO ALICIA M. FLORES Co- DPPG HEAD, BUDGET OFFICE TWG - Laboratory Equipment Approved by: Noted by: Requested by: Signature: EDGARDO E. TULIN ROMMEL M GARRIDO JR. DARLYN A. DUPAL Printed Name: PRESIDENT, VSU UNIT HEAD, PROJECT LEADER END USER Designation: