

Dr. Dipankar Chakraborti
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Tel: +91-33-2461 5445

QUOTATION NOTICE

Ref. No.: DBT/DC/Equip/22-23/1

Dated: 27.05.2022

Quotations for the following item is invited from authorized parties for supplying the under noted items for the DBT grant no. BT/PR24618/NER/95/779/2017 under Dr. Dipankar Chakraborti at Department of Genetics. Suppliers are hereby requested to submit their quotation including the current GST registration certificate, PAN no., copy of registration certificate with statutory authorities and other credentials **within 5 days** from the publication of this notice in a sealed envelope addressed to the undersigned. **Please provide a tender complete in all aspects, otherwise, it won't be considered.** The authority reserves the right to accept/reject any quotation without showing any reason thereof.

INSECT GROWTH CHAMBER

STRUCTURE

Double walled Construction, gap between walls filled with 3" PUF insulation, stainless steel Mirror polished inner chamber & heavy gauge powder coated CRC exterior. Double door, inner full viewing door and outer door insulated with lock & key arrangement. 50mm validation Port with silicon rubber seal to insert Sensor for validation purpose.

To be supplied with 5 Nos stainless steel selves. The selves should be replaceable with appropriate combination of light setting and space & height in multilevel shelves.

TEMPERATURE RANGE

10 degree centigrade to 50 degree centigrade with an accuracy ± 0.5 -1 degree centigrade. Instrument will be controlled by dual setting Microprocessor based digital Temperature Indicator cum Controller so that to set two different temperature for day & night or through a profile Digital Microprocessor having 4 programmable each 16 steps (total 64 steps) of RAMP/SOACK profile.

Illumination with fluorescence LED tubes (24 wt, 12 Nos) accounts for artificial day/night cycle illumination conditions are regulated automatic Microprocessor based Programmable

TIMER

The system monitor should be able to store the temperature (day/night) cycle data for at least one week.

Air Circulation: Flange Motor with Impeller and blower. The air flow design should discharge uniform flow of air horizontally across the shelves when multiple shelves are under use.

Heating System: Cylindrical shape ISI Mark Heater made in brass,

COOLING SYSTEM

Hermitically sealed CFC free EMERSON Compressor (minimum 1 ton) with R134a refrigerant.

The unit mounted on castor wheels with front lock arrangement. The unit is operated by 220/230 Volts, 50Hz. AC Mains.

HUMIDITY CREATION

Humidity should be created through steam injection process and to be controlled by microprocessor based digital P.I.D indicator cum controller with humidity sensor.

SAFETY DEVICE

There will be incorporation of a safety device inside the Growth Chamber to switch off the lights if temperature increases due to any fault in the compressor and simultaneous maintenance of the Room/ambient temperature.

CAPACITY: 16 Cuft

Servo control Stabilizer of 5Kva to be supplied with the instrument.

Annual maintenance contract to be included for 3 years.

Yours faithfully,

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QUOTATION NOTICE

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Refrigerated Centrifuge

| Item | Make | Specification | QTY |
|--------------------------------|------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|
| Refrigerated Centrifuge | Remi make. Model: NEYA -16R | Maximum speed: 16000 rpm (fixed angle) Temperature range: 0°C to +40°C Display temperature: Yes (°C and °F) Programs: 10 programs with protection function Maximum capacity: 4 x 175 ml (swing out) – 6 x 100 ml (fixed angle) Controlled by microprocessor and backlit color LCD display with Digital adjustment of acceleration and deceleration levels 24 x 2ml Angle Rotor for 2ml Micro Tubes with Reducers RE 2-05 (for 0.5ml) & RE 2-02 (for 0.2ml)- A 24-2 Servo control Stabilizer | 1 |

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QUOTATION NOTICE

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Upgradation of existing gel documentation system

| Item | Specification | QTY |
|--------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|
| Upgradation of existing gel documentation system | <p>Gel Doc Upgradation of Existing instrument:</p> <p>Existing instrument Transilluminator Add on SmartDoc 2.0</p> <p>Imaging enclosure works with all common smart phones System includes blue light illumination base, orange viewing cover, and orange photo filter Ideal for common safe stains (SmartGlow™, SYBR Green, GelGreen™, etc.) Visible blue light will not damage DNA Gel viewing and gel access for DNA band cutting Optional amber viewing glasses, for band excision Imaging enclosure can also be used on existing transilluminators Maximum Gel Size: 15 x 15cm Excitation Source: High Intensity Blue LED Photo Filter : Orange PMMA, 12mm Aperture Viewing Cover: Orange PMMA, 18 x 18 cm Phone Compatibility: iPhone™, Android™, etc. (Smart phones and tablets with a camera)</p> <p>CAMERA FEATURES:</p> <ul style="list-style-type: none">· Monochrome CCD Camera. | 1 |

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|--|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| | <ul style="list-style-type: none"> · Scientific 0 grade Sony sensor. · Image resolution of 4.2 Megapixels · Pixel size : 4.65 um x 4.65um · Low noise. High speed data interface. · Automatic & Manual Exposure. · manual F1.2, 8 - 48mm zoom lens · Fully upgradeable to chemiluminescence · Dynamic range of 3.5 orders of magnitude. <p>1D Analysis Software features-freeware</p> <ul style="list-style-type: none"> · Recognize number gel lanes manually. · Bands and background automatically. · Add or delete any band, adjust or move any lane as you want Density contrast. · Scan appointed gel lane, describe the scan curve, and then compute the density integral calculus and peak value of each band in this lane. Compare the volume of one spot to a reference. · Cancel or redo all the operations infinitely. <p>Compatible Desktop : 1TB,Widow 10, i3 11 th generation , 22 inche Screen, wireless optical mouse & Keyboard</p> | |
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QUOTATION NOTICE

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Metagenomic analysis of soil samples

| Item | Specification | No. of samples |
|------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|
| NGS based ITS amplicon sequencing from soil samples | Source sample: Soil <u>Deliverables</u> Sample processing: DNA isolation, amplification and QC Sequencing platform : 250 PE in Illumina NovaSeq 6000 Data to be generated : Minimum 0.1 Million reads Analysis : Standard | 4 |

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ddRAD sequencing based SNP genotyping in *Helopeltis theivora*

| Item | Specification | No. of samples |
|----------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|
| ddRAD sequencing based SNP genotyping in <i>Helopeltis theivora</i> | Source sample: <i>Helopeltis theivora</i> (Insect; Tea mosquito bug) Sample Processing – DNA Isolation and its QC using Bioanalyzer. Library Preparation using recommended protocol and Sequencing on illumina platform to generate 150-200 MB/samples data. Bioinformatics: Analysis: Call rate QC, Clustering and Genotype Matrix development using Gene Studio Software, use Plink and custom R scripts to provide comprehensive report. Structural and functional annotation of SNP dataset Association mapping for different morphological traits along with LD score. | 24 |

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Sanger sequencing

| Item | Specification | No. of samples |
|--------------------------|---------------------------------------------|-----------------------|
| Sanger sequencing | Sanger sequencing from purified PCR product | 100 reactions |

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DNA primers

| Item | Specification | No. of samples |
|--------------------|------------------------------|-----------------------|
| DNA primers | 25 nmole DNA Oligo, IDT make | 2200 bases |

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