



भा0कृ0अनु0प0-सरसों अनुसंधान निदेशालय
ICAR-DIRECTORATE OF RAPESEED MUSTARD RESEARCH
सेवर, भरतपुर 321 303 (राज0)
SEWAR, BHARATPUR (RAJ.) 321 303

Tel: 05644-260379/ 260154(O)
Fax: 05644-260565/261725
E-mail: director.drmr@gmail.com
Website: <http://www.drmr.res.in>



F. No. 4-155/SP/2016/

Dated: 15-12-2016

TENDER NOTICE No.- 06

Sr.No.	Name of Items	Estimated cost ₹	Qty.	Budget	Earnest Money
1.	Gel documentation unit	6.00 Lakhs	01	IRA Project	₹=12,000
2.	Gel documentation system	7.00 Lakhs	01	CRP on Hybrid	₹=14,000
3.	Elisa reader	4.00 Lakhs	01	Plan Project	₹= 8,000
4.	Refrigerated centrifuge	6.00 Lakhs	01	CRP-MB	₹=12,000
5.	Centrifugal grinding mill	5.00 Lakhs	01	Pre-Breeding	₹=10,000
6.	Thermal cycler (PCR Machine)	5.00 Lakhs	01	EMP Pre breeding	₹=10,000
7.	Culture Cabinet Rack	5.50 Lakhs	08	Extra Mural Project	₹=11,000
8.	Automatic Nitrogen Analyser	4.00 Lakhs	01	Plan Project	₹= 8,000
9.	Electrophoresis unit	0.95 Lakhs	01	XII Plan EFC	₹= 2,000

Note:- Tender document can be obtained from the AO of this office between 10.00 hours to 16.00 hours on any working day effective from the date of publication of the above said OTN (NIT) in the daily News papers upto 04-01-2017 on payment of non-refundable fee of Rs. 500/- for each item in cash or in the form of crossed Bank Draft drawn in favour of the Director, DRMR, Bharatpur (Raj.) 321 303. Tender form along with relevant detailed specifications and other terms & conditions related to the supply /payment etc. can be download from our website no. <http://www.drmr.res.in> with Tender fee amounting to Rs. 500/- each item. Tender document complete in all respects are to be submitted in two bids format Techno-commercial bids and Price bid separately under sealed cover. The Price of Indigenous items should be quoted for on FOR DRMR, Bharatpur & for Imported / Foreign Origin equipments should be quoted FOB strictly. The duly sealed consolidated envelope should be ensured to be put inside in the sealed Tender Box kept in Room no. 225 of the " Lab cum office building" at DRMR, Bharatpur (Raj.) or may be sent by Registered Post/Speed Post with acknowledgement due address to the Admn. Officer, DRMR, Sewar, Bharatpur (Raj.) latest by 1.00 PM on 09-01-2017 positively. The Techno commercial Bid will be opened on 09-01-2017 at 03:00 P.M. in presence of concerned bidders/their authorized representatives. Tender received LATE will not be entertained. The Director, DRMR, Bharatpur reserves the right to reject any or all the tenders at his discretion with out assigning any reasons whatsoever to any of the Tenderer concerned.

Admn. Officer

TENDER 2016-17

Equipment	Specifications
Refrigerated centrifuge	<ul style="list-style-type: none"> • High speed refrigerated bench top centrifuge for max. speed 30.000 rpm, gravitational fields up to more than 65.000 x g • Adaptors for various volume of centrifuge tubes • Universal laboratory centrifuge for swing-out and angle rotors – Spin control • Universal – Illuminated keys for start, stop, lid open – For sedimentation up to 4 x 100 ml in swing-out-rotors or up to 30.000 x g in angle rotors – Brushless drive practically maintenance-free – • Low speed operation from 100 rpm possible with a magnetic rotor identification to prevents rotors from over speeding, active rotor identification – Stainless steel bowl • Imbalance switch –emergency lid lock release – Easy lid opening due to pneumatic spring support • Window in the centrifuge lid for external speed control – Produced according to national and international safety regulations (e.g. EN 61010-2-020) • Very low noise level • Possibility of precooling rotors during standstill, refrigerant, (CFC-free) • Digital temperature control with a minimum temperature of 4 degree. • Stabilizer with instrument must be provided

Electrophoresis Unit

Specifications:

- 1) Maxi-Plus horizontal gel unit with removable casting trays.
- 2) With 1x UV tray (25 x 30 cm)
- 3) With 2 casting gates with integral silicone seals, 6 x 1 mm thick
- 4) With 26-well combs
- 5) With colored loading strips and buffer circulation ports.

Atkale

ument: Automatic Nitrogen/Protein Estimation System

TECHNICAL SPECIFICATIONS

- A. **Automatic Digestion System:** 10-15 Place 250 ml capacity PC Compatible Block Digestion System with all essential accessories like Digestion Tubes 250 ml – 10-15 Nos, SS Insert Rack, Exhaust Manifold, Suction assembly for safe removal of acid fumes. TFT Graphic Touch Screen Display with unique wireless mouse to operate at a distance of 2-3 mtrs. PC software performs Live graphical representation of time /temperature gradient with 70-80 programs & 12 ramps. Auto over temperature protection, auto Sensor break protection, Auto Error Indication. Direct USB Port for PC Connectivity with live process view display of various stages with print options. Remote control module for wireless data monitoring, control and transfer to PC at a distance of 30-35 feet. Unit should be upgradeable to Data Logger Module & Auto lift Module.
- B. **Automatic Distillation System:** Autosequencing Programmable Microprocessor based Distillation with inbuilt software, Color Touch Screen high resolution TFT LCD Display. Auto Intelligent run of programmable steps, Addition of Boric Acid, Dilution, KMNO₄ Addition for Available Nitrogen, Alkali Addition, Steam Processing, Residue Removal, Process over indication with inbuilt delay time features, Auto Titration Connectivity feature for future upgradation, Aspiration of Receiver Residue. Facility to program and control distillate volume for determination of available nitrogen. Auto sensing of "NO WATER" condition in condenser & steam generator with alarm & signal to alert user. Auto deactivation of operation after warning in case of user non availability. Enables automatic monitoring and measuring of high temperature in distillate with sensor for auto warning signal and safety alarm to alert user to control distillate temperature. Temperature displayed digitally. Auto reagent Level Sensor with Alarm for Reagents, Stainless steel non corrosive steam Generator Inbuilt Automatic Printer for direct print out of results without connecting to PC. Automatic calculation of results on input of titre value.
- C. **Scrubber System:** Three stage acid neutralization scrubber. Non corrosive centrifugal suction pump with inbuilt self priming feed pump for water recirculation, FRP Tank, Containers for Alkali and Water, Electrical Requirement: 230v/50Hz Mains. . Inbuilt safety features to fulfill all statutory requirement of Good laboratory Practice. Inbuilt auto error diagnostic and safety features

mukesh

Gel Documentation Unit

Specifications

- 1) GLP compliant, fully automated microprocessor based computer controlled Gel Documentation & Image analysis system, for fluorescent & colorimetric work.
- 2) With high resolution 12-20 bit scientific grade CCD camera with REAL Camera Resolution of at least REAL 3.0-4.0 million pixels. The camera resolution should be a feature of the camera hardware and should not be through software manipulation.
- 3) The camera should be equipped with latest high speed USB port for faster downloads, with fully enclosed camera/lens assembly for minimizing the risk of cross contamination of hazardous chemicals between users.
- 4) The camera should be equipped with motorized zoom lens f1.2, 10-70 mm with numerical feedback value to reduce the experimental variation.
- 5) The system should be able to capture publication quality images with a resolution of >5-8 megapixels.
- 6) Sample trays are customizable per user and recognized automatically to facilitate multi-user and multi-lab instruments.
- 7) System can take max. sample size 25 x 30 cm, max image area 25 x 25/30 cm (transilluminator of size approx. 26 x 30 cm image area), capable of capturing sharp color and monochrome images of even faint bands (of picogram density) of any small fragment of nucleic acid.
- 8) Upgradable to Chemiluminescence.
- 9) Should have at least three modes of illumination control (Trans-UV, trans-white, epi-white).
- 10) UV lighting System with image viewing area of at least 25 X 30 cm filter, and control for fully variable intensity, UV-to-White light converter for viewing protein gels and for other white light applications.
- 11) White light conversion screen for protein imaging and analysis.
- 12) Compact universal dark hood with full access sliding door and upgradeable to fluorescence, colorimetry/densitometry. UV cut off on door open with cabinet fitted to camera (camera mounted on hood/cabinet) suitable for gel documentation.
- 13) Automatic Application driven software to capture the image automatically.
- 14) Image Lab Features - Single mouse click from image capture to results and reports, very fast and efficient.
- 15) Image Lab takes seconds to obtain a perfect picture and initial analysis, Intuitive and well organized (efficient) selection of workflows based on applications.

Handwritten signature

At least 4 Position Computer Controlled Motorized Filter Wheel with necessary filters for visualization of stains like: Florescent stains (EtBr), coomassie blue, pink and silver stains, ProQ Diamond, deep purple, Sypro Ruby, Sypro Orange.

17) Versatile system to support wide range of applications like Fluorescent dye like syber green, syber safe, western blotting, 2- D, 1-D, Dot blotting, Nucleic acid detection, Quantitation etc.

18) System should be equipped with INTELLIGENT SYSTEM to automatically assess the blot, set its best exposure time and also set the best sensitivity setting and then display the image within the defined waiting period.

19) Gel Analysis Software with Automatic band matching and FREE lifetime up gradation. Software must have a GLP compliant format, Automated software for analyzing 1D gels, 2D Spot blots, Egels, Multi-layer gels (multiple well lines per gel), Zyma Gels, Colony counting, band matching etc. It should have single window for simultaneous display of all data, images, and histogram, multiplexing of images captured under different conditions and overlay them Multi-layer gel analysis facility (multiple well lines per gel). Software should have direct link to Excel and Word to display data in a variety of different ways, Dendrograms, Matching coefficients, matching matrix

20) Database Software to match unlimited number of primers in unlimited Gels; Genotyping capabilities, Create cluster analysis, RFLP, RAPD, Fingerprinting, VNTR analysis, Genotyping, and should be with FREE lifetime upgradation.

21) The system must be provided with one coloured printer with latest configuration.

22) 1 no. compatible computer with Intel i7 Processor, 4-6 GB RAM, 1-2 GB Hard Disc, Windows 10.

23) 1 no. online UPS of 2KVA compatible for the highest capacity of power supply system for atleast two hours.

24) 1 no. split air conditioner of 2 ton capacity for smooth functioning of equipment.

NOTE: The Company should provide minimum of 2 years Comprehensive Warranty (CMC) on the whole system. Quotations from firms must clearly indicate details of after-sale service including response time at DRMR, Bharatpur and list of users (in ICAR) with updated telephone numbers and addresses and provide complete literature of equipment. The system should have Q3 certificate i.e. Installation Qualification, Performance Qualification and Operational Qualification on the site. The vendor should have a good service and application support backup. CE/ISO 9001 manufacturer certificate to be enclosed with the offer.

Specification for Centrifugal mill

Feed Material :

1. Application: fine grinding of mustard seeds.
2. Feed material: hard, medium-hard, soft, brittle, elastic and fibrous. Suitable for grinding mustard seeds.
3. Suitable for grinding 2 to 10 ml of sample
4. Feed size : <10 mm
5. Feed quantity: approx 20 ml
6. Final fineness : <40 μ m
7. Size reduction principle: Impact , shearing

Note: The Company should provide minimum of 2 years comprehensive warranty (CMC) on the whole system. Quotation from firm must clearly indicate details of after sale service including response time at DRMR, Bharatpur and list of users (in ICAR) with updated telephone numbers and addresses and provide complete literature of equipment. The system should have Q3 certificate i.e Installation Qualification, Performance Qualification and operational Qualification on the site. The vendor should have a good service and application support backup. CE/ISO 9001 manufacturer certificate is to be enclosed with the offer.

Signature
04/10/16

Gel Documentation Unit

Specifications

- 1) GLP compliant, fully computer controlled Gel Documentation & Image analysis system.
 - 2) Imaging system should have Automatic capabilities with application driven; user selected or recalled by protocol, it should give 100% repeatability via recallable protocols.
 - 3) The system must have high resolution scientific grade CCD camera with effective resolution >4.0 mega pixels with True 16-18 bit Camera for noise free images with resolution of 1392 x 1040, System can take max. sample size 28 x 36 cm, max image area 19.4 x 26 cm, capable of capturing sharp color and monochrome images of even faint bands (of picogram density) of any small fragment of nucleic acid, Pixel size 4.6 X 4.6 μm . Linear dynamic range > 3.0 orders for all samples, equipped with zoom lens-f/1.2, 12-75 mm with numerical feedback value to reduce the experimental variation, +2 dioptre close-up lens and adapter for 12-75 mm zoom lens, latest high speed USB port for faster downloads.
 - 4) Fully enclosed camera/lens assembly for minimizing the risk of cross contamination of hazardous chemicals between users.
 - 5) Should have at least three modes of illumination control (Trans-UV, trans-white, epi-white). Compact universal dark hood with full access sliding door and upgradeable to fluorescence, calorimetry/densitometry. UV cut off on door open with cabinet fitted to camera (camera mounted on hood/cabinet) suitable for gel documentation.
 - 6) System should have pre-calibrated focus for any zoom settings and sample height to calculate precisely, consistently and automatically. No user intervention for focusing.
 - 7) Versatile system to support wide range of applications like Fluorescent dye like syber green, syber safe, western blotting, 2- D, 1-D, Dot blotting, Nucleic acid detection, Quantitation etc.
 - 8) System should have pre-calibrated & optimized dynamic image flat fielding for each sample tray to delivers image data that are always optimized and reproducible without imaging artifacts, providing superior image uniformity and quantitation.
 - 9) Capable of optimizing, saving, and quickly recalling the imaging acquisition settings.
 - 10) Safe DNA Imaging without UV exposure—using the Xcita UV/Blue Conversion screen to prevent damage from UV and preserve samples for downstream protein production.
 - 11) Intuitive and well organized (efficient) selection of workflows based on applications.
 - 12) All calculations are done at setup, once and for all images captures.
 - 13) Provides modularity with four samples trays to image a wide variety of applications UV for trans-UV illumination and protein detection via colorimetric and fluorescent stains, White for trans-white illumination, Blue for trans-blue illumination.
 - 14) Should be equipped with Stain-Free technology for stain- free gels and blots.
 - 15) Sample trays are customizable per user and recognized automatically to facilitate multi-user and multi-lab instruments.
 - 16) Integral Image Browser to keep track of all images in all formats. It should have option of invert image to obtain a negative or a positive display
 - 17) Analysis Software with Automatic band matching facility and FREE life time upgradation. Software must have a GLP compliant Format.
- 1-D lane analysis ; 2-D spot densitometry ; Colony or cell counts ; Microtitre plate analyses; Microarray analysis ; Multiple experiments; Rf/Molecular weight calculations; Eight position filter wheel for multiplexing; Multiplexing of images captured under different conditions and overlay them Multi-layer gel analysis facility (multiple well lines per gel)

for *Blue*

- 18) Should have comprehensive automated quantitative analysis of proteins & DNA samples in seconds.
- 19) Automatic background correction (multiple methods).
- 20) Full GLP reporting (gel, lane, MW, Qty, track histogram)
- 21) Database Software/module for large scale Genomic fingerprinting studies and cluster analysis, RAPD, RFLP, VNTR, similarity matrix, with FREE life time up gradation. Software should have direct link to Excel and Word to display data in a variety of different ways. Dendrograms, Matching coefficients, matching matrix etc. It should be able to match unlimited number of primers in unlimited gels.
- 22) Only one emission filter should be needed to accommodate a large portfolio of detection methods : ethidium bromide ,SYBR® Green , SYBR® Safe , SYBR® Gold, GelGreen, GelRed, Fast Blast TM ,SYPRO Ruby, Flamingo TM ,Oriole TM ,CY3, rhodamine, green fluorescent protein ,Hoechst, Krypton, silver stain, copper stain ,zinc stain, Coomassie Brilliant Blue, Coomassie Fluor Orange and other spectrally similar stains, labels, and dyes.
- 23) The system must be provided with one coloured printer with latest configuration.
- 24) 1 no. online UPS of 2KVA compatible for the highest capacity of power supply system for atleast two hours.
- 25) 1 no. compatible computer with latest/advanced technology.
- 26) 1 no. split air conditioner of 2 ton capacity for smooth functioning of equipment.

NOTE: The Company should provide minimum of 2 years Comprehensive Warranty (CMC) on the whole system. Quotations from firms must clearly indicate details of after-sale service including response time at DRMR, Bharatpur and list of users (in ICAR) with updated telephone numbers and addresses and provide complete literature of equipment. The system should have Q3 certificate i.e. Installation Qualification, Performance Qualification and Operational Qualification on the site. The vendor should have a good service and application support backup. CE/ISO 9001 manufacturer certificate to be enclosed with the offer.

 Bhargava

Specifications for ELISA reader

1. Suitable for quantitative and qualitative ELISA applications.
2. Wavelength range of 300 to 900 nm.
3. Suitable for reading 96 well plates.
4. Should have shaking and incubation function up to 50 degree.
5. Should be supplied along with software.
6. Should have USB port/s.
7. System should be quoted with suitable voltage stabilizer.
8. System should have international certification.
9. Company should have good number of installation and user list also attached with technical bid.
10. The Company should provide minimum of 2 years comprehensive warranty (CMC) on the whole system.
11. Quotation from firm must clearly indicate details of after sale service including response time at DRMR, Bharatpur.
12. List of users (in ICAR) with updated telephone numbers and addresses and provide complete literature of equipment.
13. The system should have Q3 certificate i.e Installation Qualification, Performance Qualification and operational Qualification on the site.
14. The vendor should have a good service and application support backup.
15. CE/ISO 9001 manufacturer certificate is to be enclosed with the offer.

Signature
15/9/16

Thermal cycler (PCR machine)**Specifications**

1. Peltier based PCR system for high throughput amplification and precise control of temperature.
2. PCR with alloy block to accommodate 96 x 0.1ml/0.2ml PCR Tube/0.2 ml PCR strips and 96 well PCR plate.
3. The system must provide a block format with temperature gradient facility. The thermal cycler must have more than 5 separate peltier blocks to provide independent temperature zones to run 5 or more different assays with varying annealing temperatures at the same time.
4. Each block to accommodate 14-16 wells and having the ability to set up PCR with a specific temperature differential of up to 4-5°C between blocks.
5. Ramp rate should be at least 5°C with average ramp rate of 3°C.
6. Temperature control range should be from 4°C to 99.9°C with temperature accuracy: $\pm 0.25^\circ\text{C}$ (40–100°C) per well and temperature uniformity: $\pm 0.3^\circ\text{C}$.
7. Instrument should be able to run on Standard mode as well as Fast mode to complete run within 40-50 min.
8. Choice of saving the methods minimum 500 programmes to the instrument memory.
9. The system should support PCR volumes ranging from 10 to 80 microlitre.
10. Instrument should display remaining runtime in larger font and the status of the run.
11. Max. no. of cycles: 90-100.
12. Lid temperatures range 40-110°C and should have better mechanism to minimize sample evaporation.
13. Auto-restart option in the event of power failure up to 90-100 minutes.
14. The heated lid should have a cushion to accommodate flat and dome capped tubes which minimize sample evaporation.
15. Should have Log book function for error messages and new calibration.
16. Mouse or stylus free navigation capability with VGA colour touch screen allowing for easy intuitive graphical user interface programming.
17. Portability: The system must have a USB port to transfer methods from one machine to another.
18. System must be provided with compatible UPS of 2.0 KVA for at least 2 hours backup.
19. The machine should be duly certified / authorized for PCR process and the vendor should produce the certificate for the same.
20. System must be provided with one No AC (2 tons) of split type.

NOTE: The Company should provide minimum of 2 years Comprehensive Warranty (CMC) on the whole system. Quotations from firms must clearly indicate details of after-sale service including response time at DRMR, Bharatpur and list of users (in ICAR) with updated telephone numbers and addresses and provide complete literature of equipment. The system should have Q3 certificate i.e. Installation Qualification, Performance Qualification and Operational Qualification on the site. The vendor should have a good service and application support backup. CE/ISO 9001 manufacturer certificate to be enclosed with the offer.

Bhatnagar *Singh*

2760
27/6/16

ICAR-DIRECTOR

Requisition for purchase of NON CONSUMABLE ITEMS under

Sl. No.	Name of item with full specification/ details
1	<p>Culture cabinet racks (8)</p> <ul style="list-style-type: none">• Fabricated out of mild steel pipes powder coated with sturdy castor wheel for smooth movement of the unit.• 4 shelves each unit and shelves are made of wooden with aluminium clad or frosted glass.• Each shelves has been provided with four LED tubes.• The unit is workable on 220V AC 50Hz single phase. Supplied complete with cord & plug.• Heavy duty electronic chokes have been mounted separately on each shelf.• Photoperiodic timer.• Temperature maintenance with thermostat and split air conditioner 4 way air swing, 2 ton.• Onsite installation. Warranty for 2 years.

Director pl.

D. Singh
25/6/16

Ap

Pu