



KERALA AGRICULTURAL UNIVERSITY
Regional Agricultural Research Station (Southern Zone)
Department of Plant Pathology
College of Agriculture, Vellayani, Trivandrum 695 522.

No. RARS/SZ(5)/1208/2019 (Plan fund)

Date: 10.03.2021

TENDER NOTICE

Sealed competitive tenders are invited for the supply of “Fluorescence Microscope with Digital camera and software with branded PC”
(Specification attached)

Sl. No.	Equipment	Cost of tender form (Rs.)
1	Fluorescence Microscope with Digital camera and software with branded PC	0.2% of the cost of tender rounded to the nearest multiple of 100, subject to a minimum of 400/- and maximum 1500/- + GST as applicable

Tender forms can be down loaded from KAU website (www.kau.edu/tenders). On submitting the tender form, the cost of the tender form as mentioned above may be drawn by DD in favour of “**Associate Director of Research, RARS (SZ), College of Agriculture, Vellayani**” payable at **State Bank of India, Vellayani Branch, Thiruvananthapuram** should be enclosed.

EMD @ 1% of the quoted amount should be as separate DD drawn at the same address along with an agreement executed in Kerala stamp paper worth Rs. 100/- should be enclosed with the tender. The name of the equipment for which the rate is quoted, notification number and date of opening of tender should be written on the top of the envelope. Sealed tenders addressed to “**Associate Professor and Head & P. I., Department of Plant Pathology, College of Agriculture, Vellayani P.O., Thiruvananthapuram – 695 522**” should reach this office on or before 2.00 pm on 25/03/2021 (Thursday) and will be opened at 3.00 pm on the same day in the presence of such of the tenderers or their authorized representatives. The tenders received after the stipulated date and time will not be accepted in any circumstances.

All terms and conditions prescribed for Government tenders as amended from time to time are applicable in this case also. The under signed has the right to accept or reject any or all tenders without assigning any reason thereof.

Further details can be had from the under signed during the office hours between 10.00 am and 5.00 pm (**8547195426**) and also through KAU web site.

Terms and conditions:

- * Fluorescence Microscope with Digital camera and software with branded PC should have a minimum of two year of manufacturer warranty and three year of AMC from the date of complete installation and not from the date of delivery.
- * The items should be delivered to “Department of Plant Pathology, College of Agriculture, Vellayani, Thrivananthapuram – 695 522”
- * The products should be internationally branded and CE certified.
- * The firms or companies quoting the price should have service personals or centers or service support based in Kerala should have quote from manufacturer for the quoted model and the supporting document should be submitted.
- * The firms or companies quoting the price should submit the brochure for the model from the manufacturer including web link and the country of origin of the equipments.
- * The price quoted should be inclusive of all taxes, costs for clearance, transportations, loading and unloading etc.
- * On receipt of purchase order from this office, the tenderer should execute another agreement in Kerala Stamp Paper worth Rs.100/- (Rupees one hundred only) and furnish a security deposit of 5% of the cost of the Fluorescence Microscope with Digital camera and software with branded PC quoted in the form of term deposit / bank guarantee / demand draft drawn in favour of “**Associate Director of Research, RARS (SZ), College of Agriculture, Vellayani**” payable at **State Bank of India, Vellayani Branch, Trivandrum**. The format of the agreement can be downloaded from the above website given in item 1. Firms who are exempted from payment of EMD should furnish copy of the currently valid certificate from the Store Purchase Department, Govt. of Kerala.
- * All Taxes, duty, freight etc. as applicable may be specified in the tender.
- * Rates quoted should be valid for a minimum period of 180 days from the date of opening the tender.
- * Users list of the equipments are to be enclosed while submitting the tender
- * Delivery: Within **two weeks** from the date of receipt of purchase order.
- * The equipment should be delivered and installed at the “Department of Plant Pathology, College of Agriculture, Vellayani, Thrivananthapuram – 695 522” at your own expenses and any packing, forwarding, freight, loading/unloading/handling or installation charges will be met by the firm.

**Sd/
Associate Professor and Head
& P.I. of the Project**

1. Fluorescence Microscope with Digital camera and software with branded PC

Ergonomically designed stand preferably with international standard certification; Rugged and sturdy stand with High Power LED Fluorescence; It should have low positioned co-

axial coarse and fine focus knobs Integrated Carrying Handle at the back; The stand should have a built-in stabilized power supply for 24V/60W illuminator with mains connection to 110-240V, 50/60Hz; Microscope Should have High power 10W LED Transmitted illumination for high demanding illumination needs; should be Supplied with Interchangeable 12V/35W halogen illumination for Specific application; Special skin-friendly material coated on all operating elements; 30deg. Trinocular tube; Interpapillary adjustment from 55 to 75 mm or better; Sidentopf designed Binocular Photo tube with (0:100/0:100) swiveling for comfortable two position height observations; Wide field 10x/ 23mmFOV mm or more with focusable front lens with provision to insert graticules including rubber eyecups; Microscope should have Snap button for capturing images without computer and should have Light Intensity manager; Microscope Should have Eco Mode (automatically goes to standby after being idle for 15 minutes); Microscope should have 5X Coded revolving nosepiece with precision click stops to accommodate 5 objectives; Should be supplied Objective A Plan 5x/0.12NA, A plan 10X/0.25NA, A Plan 20X/0.45NA , N Plan 40x/0.65NA and N Plan 100xOil/1.25NA; Should have Condenser 0.9 to 1.25NA or Better; Should have Solid-State Light source, Type GB-UV 3-channel fluorescence light source with integrated control with continuous brightness adjustment, quickly switchable and adjustable by stand alone; Equipped with 3 solid state LED lamps. - Green (565nm) for excitation of Cy3, TRITC, DsRed and similar dyes - Blue (470nm) for excitation of eGFP, Fluo4, FITC and similar dyes - UV (385nm) for excitation of DAPI, Alexa 405, Hoechst 33258; All the objectives should be of Anti-fungal treated; Dual layered mechanical stage with hardcore anodized surface with 220x150mm or better with XY movement of 75x50mm with low positioned co-axial X Y movement knobs with friction adjustment mechanism.

Scientific digital Microscopy Cooled Camera 5MP(CMOS) - Sensor Size : 11.25 mm x 6.3mm; Ineterface :USB 3.0; Exposure time : .100 μ s -4s or better; Gain -1x to16x adjustable; Pixel Size : 3.45 μ m X3.45 μ m or better; Fast readout with 36 full frame images per second@ 5MP resolution; Cooling : temperature stable at 25°C for ambient Temperature between 18°C to 30°C; Should have Global shutter readout avoids CMOS rolling shutter image distortions; Digitalization : 12bit or better; Camera should have Black and White Image Modes.

Software for Area, Linear Measurement, Z stacking and Panorama, annotation and microbar Insertion. software for image capture, annotation, analysis, calibration, Microbar Incretion, Measurement of length, area of the specimen, Multichannel etc. should include panorama and manual Z staking software. It should have RoHS, CE and CSA safety certificate.

Note: Microscope, camera and Software from the same manufacturer.

Should supplied with Branded PC, i5 Processor, 8GB ram, 2GB graphics card , 22" Monitor, Win 10 original, key board and Mouse etc.