

**KERALA AGRICULTURAL UNIVERSITY**

College of Horticulture,  
Department of Agricultural Entomology  
Vellanikkara, Thrissur, Kerala India, 680656

No. ENT/RKVY-2/18-19/1

dt: 10/05/2018

**LIMITED TENDER NOTICE**

Sealed limited tenders are invited for supply of **Rotatory Vacuum Flash Evaporator** for the Pesticide Residue Lab of College of Horticulture, Vellanikkara, Thrissur. Limited tender should be addressed to the Professor and Head, Department of Agricultural Entomology, College of Horticulture, Vellanikkara, Kerala Agricultural University, KAU P.O., Thrissur - 680656

**Location and supply of Installation**

One instrument will be required to be installed at, Pesticide Residue Laboratory, College of Horticulture, Vellanikkara, KAU P.O., Thrissur - 680656

**Place and deadline for receipt of limited tender:** Department of Agricultural Entomology, College of Horticulture, Vellanikkara Time: 12.30 p.m. on 24/05/2018

**Place, date & Time for opening of limited tender:**

Place	Date	Time
Department of Agricultural Entomology, College of Horticulture, Vellanikkara	<b>24/05/2018</b>	<b>02.30 p.m.</b>

All the rules/ regulations of departmental purchase of Govt. of Kerala as provided in the Store Purchase Manual Revised Edition 2013, G.O (P) No.3/2013/SPD, dated 21-06-2013, available in the website <http://www.spd.kerala.gov.in/docs/revised.pdf> or in [www.kau.in/tenders](http://www.kau.in/tenders) will be applicable. More information regarding the limited tender can be obtained from the Professor and Head, Department of Agricultural Entomology, College of Horticulture, Vellanikkara, Kerala Agricultural University, KAU P.O., Thrissur - 680656 (Phone: 0487-2438335) during office hours.

1. Tender should be submitted in the prescribed form which can be downloaded from the website <http://www.kau.in/tenders> The cost of the tender forms will not be refunded under any circumstances.

2. The sealed cover containing the tender should be superscribed "Rotatory Vacuum Flash Evaporator should be addressed to "Professor and Head, Department of Agricultural Entomology, College of Horticulture, Vellanikkara, Kerala Agricultural University, KAU P.O., Thrissur – 680656". Each limited tender should be accompanied by two crossed Demand Drafts separately for cost of tender and EMD drawn in favour of "Professor and Head, Department of Agricultural Entomology, College of Horticulture, Vellanikkara" payable at the State Bank of India, KAU Campus Branch, Thrissur. The amount payable as GST for the cost of tender must be given as separate crossed Demand Draft drawn in favour of "Professor and Head, Department of Agricultural Entomology, College of Horticulture, Vellanikkara" payable at the State Bank of India, KAU Campus Branch, Thrissur.

**DD & Agreement to be enclosed:**

- DD for cost of tender: 0.2 % of the quoted amount rounded to the nearest multiple of 100, subject to a minimum of Rs.400 and maximum of Rs.1500 + GST @12% (Separate demand drafts)
- DD for Earnest Money Deposit: 1% of the total rupee equivalent cost of the quoted

items rounded to the nearest rupees (subject to minimum of Rs.1500/-)

- c. The limited tender should be accompanied by an agreement in Kerala Stamp Paper worth Rs.200/- (Rupees two hundred only) and format can be downloaded from <http://www.kau.in/tenders>

Late and incomplete tenders and tenders without EMD, cost of tender or agreement will not be accepted.

3. On receipt of purchase order from this office, the limited tenderer should execute another agreement in Kerala Stamp Paper worth Rs.200/- (Rupees two hundred only) and furnish a security deposit of 5% of the cost of the equipment quoted in the form of term deposit/bank guarantee/demand draft drawn in favour of “Professor and Head, Department of Agricultural Entomology, College of Horticulture, Vellanikkara”, and payable at SBI, KAU Campus Branch, Thrissur. 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.
4. The exact specifications, details of make, model, name of manufacturer, country of origin of the item etc. must be clearly specified. Original brochures with detailed technical literature and illustrations of the units quoted are to be included along with the offer. Details of trainings to be offered, warranty, maintenance service contract offered after expiry of normal warranty, availability of spare parts and nearest service centre/service personal available should be indicated. Offers without these are liable to be rejected.
5. Evidence of exclusive/authorized dealership/distributorship from foreign principals should be provided along with the offers for overseas products.
6. In the case of electrically operated equipment, the circuit diagram will have to be supplied. If the power requirement is beyond 20 Amp/220 volts, then the quote should be inclusive of the new power line drawing and cost for the operation of equipment. This should be quoted separately.
7. The cost of the item, insurance and freight (CIF) and charges for delivery of item at Pesticide Residue Laboratory, College of Horticulture, Vellanikkara should be separately stated. We are exempted (regd. with DSIR) from payment of customs and excise duty for our procurements. As we are a public funded research institution a concessional GST rate of 5% is applicable to us. Hence prices quoted should be exclusive of these. Offers shall be made CIF Kochi by airfreight for imported instruments and F.O.R destination for indigenous accessories. For imported items, clearing charges, customs and excise duty (whether applicable) and charges for insuring up to College of Horticulture, Vellanikkara, Thrissur, Kerala against all risks including total loss for CIF value plus 10% should be included in the insurance charge. Prices inclusive of GST and other taxes, transportation charges and Installation charges may be indicated separately wherever applicable. In the case of imported equipment only 80% of the total CIF charge for imported components will be paid as DD/ letter of credit as the case may be against satisfactory shipping documents including certificates of insurance. Bank charges (State Bank of India) incurred in connection with payment against documents through bank will be to the account of the tenderer.

Bid Currencies

**Prices shall be quoted in the following currencies:-**

- 1. For goods and services that the Bidder will supply from within the Purchaser's country, the prices shall be quoted in the Indian Rupees.**
  - 2. For goods and services that the Bidder will supply from outside the Purchaser's Country, the prices shall be quoted in any one of the easily convertible foreign Currency.**
8. The rates quoted should be inclusive of all charges and period of firmness of the quoted prices during which the tenderer is to keep the rate firm, should be clearly stated in the offer. **The period of firmness shall not be a date earlier to 90 days.** The Professor and Head shall have the right to extend firmness period for 90 more days without change in quoted rates.
9. Period of firmness of limited tender: Ninety days from the date of opening of tender **(24/05/2018, 02.30 p.m.).**
10. The firm shall produce stamped signed pre-receipted invoice (original) in all case where advance/final payment for release of shipping documents are made through bank.
11. In the case of imported equipment, all quoted prices with different currencies will be converted to INR for comparison on equitable bases as per the selling exchange rate of State Bank of India on the tender opening (24-05-2018)
12. The decision of the purchase committee in finalizing the tenders shall be final and binding.
13. If any Bandh/strike/any unexpected holidays occurs on the date of opening of tender, the tender will be opened at the same time on the next working day.
14. On acceptance, the supply order will be placed and the invoice should be addressed in favour of "Professor and Head, Department of Agricultural Entomology, College of Horticulture, Vellanikkara, Kerala Agricultural University, KAU P.O., Thrissur – 680656" The payment will be effected only after satisfactory supply, installation of the item at Pesticide Residue Lab, College of Horticulture, Vellanikkara, KAU P.O., Kerala India, 680656 in working condition and necessary demonstration by authorized service personnel.
15. Withdrawal of the limited tenders after its acceptance or failure to supply the equipment or not according to the specification will entail cancellation of the tender.
16. The successful tenderer should supply the items to Pesticide Residue Lab, College of Horticulture, Vellanikkara, KAU P.O., Kerala India, 680656, within one month from the date of the receipt of the supply order. The Professor and Head, Department of Agricultural Entomology, College of Horticulture, Vellanikkara, reserves the right to remove the defaulted name from the list of suppliers permanently or for a specific period.
17. List of users of the equipment (same model and make) giving the exact address, e-mail and phone number of the contact persons and the model number of the units available at these locations have to be provided.
18. Professor and Head, Department of Agricultural Entomology, College of Horticulture, Vellanikkara, Kerala Agricultural University, KAU P.O., Thrissur – 680656 has the right to accept or reject any or all of the offers without assigning any reason.
19. All the rules and regulation applicable to Government Tenders are provided in the Store Purchase Manual Revised Edition 2013, G.O (P) No.3/2013/SPD, dated 21- 06-2013, available in the website <http://www.spd.kerala.gov.in/docs/revised.pdf> More information regarding the limited tender can be obtained from Professor and Head, Department of

Agricultural Entomology, College of Horticulture, Vellanikkara, Kerala Agricultural University, KAU P.O., Thrissur – 680656 (Phone: 0487-2438335)during office hours.

The detailed specification, tender form, format of agreements etc. can be downloaded from the KAU website [www.kau.in/tenders](http://www.kau.in/tenders) will be applicable to this tender also.

20. Country of origin/assembly and Country of import should be specifically written in the Tender document.

1. **Any attempt to manipulate the specification sheet/ instrument performance evaluation performed in the application laboratory / quote sub standard / refurbished equipment /accessory /internal parts will be viewed seriously as per guidelines issued by CVC in their regulations which forms a part of the G.O as Appendices.**
2. **Only specification sheets available in the website of the principal company is taken as approved specification of that quoted model. The electronic version of the same may be reproduced on demand. Unauthorized /doubtful specification sheets containing tenders are rejected.**

21. **A comprehensive warranty for 5 years for the complete equipment. After the warranty period; three year AMC charges should be included in the tender**

22. **After Sale Service-**

If the Supplier, having been notified, fails to remedy the defect(s) within one week the Purchaser may proceed to take such remedial action as may be necessary, at the Supplier's risk and expense and without prejudice to any other rights which the Purchaser may have against the Supplier under the Contract. If the equipment is not rectified within one week, then warranty will be extended to the extent of instrument lying idle without repair, and **impose a penalty over it @ Rs.500/day** for Rotatory Vacuum Flash Evaporator. **During the warranty and AMC period, three preventive maintenance per year and unlimited break down visits on request should be provided by the firm.**

**SPECIFICATION FOR ROTATORY VACUUM FLASH EVAPOATOR**

Required Technical Specification	Complying (Yes/No)	Remarks	Documentary evidence enclosed?
<b>Heating bath and rotating evaporation flask</b>			
Speed – 25 – 250 rpm variable or higher with accuracy of $\pm 5$ rpm			
Speed display - Digital			
Heating bath with digital control and display			
Bath should accommodate flasks of size 100 ml to 5000 ml			
Operating Voltage/frequency: 220-240 V, 50 Hz			
Temperature range : ambient to 210°C			
Temperature accuracy $\pm 1^{\circ}\text{C}$			
Heating power: Specify			
Controller : micro processor			

controller			
Heater cut off at 5 <sup>0</sup> C from the set temperature			
Vapour temperature display with accuracy $\pm 1^{\circ}\text{C}$			
Programmable ramps			
<b>Separation elbow</b>			
Head angle adjustable 45 <sup>0</sup>			
Stroke displacement			
Flask height from bath – adjustable (motor lift)			
<b>The condensation shaft</b>			
Condenser type ; Vertical			
Cooling surface : min 1400cm <sup>2</sup>			
Coolant – can used from ambient to - 20 <sup>0</sup> C			
Grease free PTFE valves			
<b>Collection vessel</b>			
1 L to 3 L capacity			
<b>Vacuum pump</b>			
For dry, oil-free applications in the low vacuum range			
Pumping speed 50/60 Hz			
Ultimate vacuum (should be less than 9 mbar)			
Operating pressure, specify			
Fully automatic pump system with built-in solvent library and vacuum adjustable from main unit			
Digital display of vacuum			
Chemically resistant diaphragm pumps (MPC) are resistant to aggressive solvents and acidic vapours - diaphragms and gas contacting parts consist of PTFE and PTFE compounds (grease free) and the pumping and connection heads are carbon fiber reinforced with electrical conductivity.			
<b>Chillers</b>			
Operating temperature range -20 to RT			
Chiller with refrigerating unit and circulation pump			
Evaporator (cooler), tank, housing and pressure suction pump made of stainless steel			
Level indicator with sight glass			
Modern and easy to use microprocessor controller with a large digital temperature display			
Indicators for pump, cooling and heating			

<b>Memory</b>			
Minimum five programme memory with auto setting of bath temperature, vacuum and chillers temperature for distillation of different solvents.			
<b>Additional Accessories required</b>			
Glass wares- 1L receiving flask – 2 nos 3L receiving flask- 1Nos Distillation flask 3 L – 1No Distillation flask 1L – 2Nos Distillation flask 0.5L – 1No Distillation flask 250mL – 1Nos			
Connection hoses – 5m each			

The undersigned reserves all right to accept or reject any quotation without assigning reasons thereof and decision taken by him shall be final.

Yours faithfully,

Professor and Head  
Department of Agricultural Entomology