



**TAMIL NADU AGRICULTURAL UNIVERSITY**  
**Horticultural College and Research Institute, Periyakulam - 625 604**

Dr. G.J.Janavi , Ph. D.,  
Professor & Head, Dept. of Veg. Science

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**No.P&H/DVS /HCRI- PKM / NADP - Moringa / Insect proof shade net house /2020** dated  
14.12.2020

**LETTER CALLING FOR SEALED TENDERS**

It is proposed to establish two mist chambers as specified below and you are therefore requested to send your Tenders.

1.	Items to be purchased	:	Insect proof shade net house 1200 m <sup>2</sup> ( size 30 m x 40 m – one number)
2.	Due date and time for receipt	:	29.12.2020, 02.00 pm
3.	Date & Time of Opening	:	29.12.2020, 03.00 pm
4.	Mode of sending	:	Sealed cover addressed to The Dean, Horticultural College and Research Institute, Periyakulam 625604.Superscribed as <b>“Tender for insect proof shade net houses due on 29.12.2020”</b>
5.	Tender Document fee	:	Nil
6.	E.M.D.	∴	Rs.10,000/- (Rupees Ten thousand only)
7.	Validity of the tender	:	Tender should be valid up to a minimum of <u>90 days</u> from the due date.

**Conditions:**

- i. The rate and the taxes thereon if any should be furnished separately either in FC / INR.
- ii. The amount should be shown both in figures and in words. Corrections if any should be attested properly. Tenders with corrections not attested will be rejected.
- iii.
  - a) Tenderers claiming exemption from paying the EMD should produce necessary evidence / documents in support of their request.
  - b) EMD in respect of unsuccessful tenderer will be refunded after the supply of material by L1 bidder. EMD in respect of successful tender will be refunded after the expiry of the warranty period;
  - c) No interest is payable on EMD
- iv. Tender should be furnished for the exact specifications as given in this letter. Tenders not in accordance with the specification will be rejected. **In the case of equipments, the relevant brochure / pamphlet of the equipment containing the features and specifications should necessarily be attached with the Tender / Quotation.**
- v. The supply/ completion of work should be effected within 30 days from the date of work order.

- vi. Warranty period should be indicated. Warranty of 3 years is essential.
- vii. After warranty condition for AMC should be indicated.
- 8. If the successful tender fails to supply the item within the stipulated time, the EMD will be forfeited apart from initiating further action for consequential loss if any to the Tamil Nadu Agricultural University.
- 9. Tender shall be furnished in the prescribed format enclosed in the tender document duly signed by the tenderer accepting the condition and the tender format shall be sent. Tender not furnished in the prescribed format itself will be rejected.
- 10. Tenderer may be present or send their
- 11. representative on the date of opening. The under signed have the right to accept (or) reject any tender without assigning any reason thereof.

Sd/xxx

**Professor & Head**

## **TECHNICAL SPECIFICATIONS FOR INSECT PROOF SHADE NET HOUSE**

<b>Sl.No.</b>	<b>Items</b>	<b>Description/Specifications</b>
1.	Product	Insect proof shade net house
2.	Size	1200 m <sup>2</sup> ( size 30 m x 40 m – one number)
3.	Shape	Flat Structure
4.	Height from ground level	4 meters
5.	Foundation	GI pipe = 1 ¼" (40 mm OD)
6.	Column	GI Pipe 1 ½" (48 mm OD) thickness 2mm, length 4m
7.	Top pipe grid	GI Pipe 1" (32 mm OD) thickness 2mm, length 6m,
8.	Boundary Purlin	GI Pipe 1 ¼" (40 mm OD) thickness 2mm, length 6m
9.	Corners and pipe couplers	Size 1 ½ "(48 mm OD) Thickness 2mm, Length 0.15m
10.	Column Brazing X pipes	GI Pipe = 1 ¼" (OD 40 mm) Thickness 2.0 mm for all corners.
11.	Nut Bolts, Clamps etc.,	Nut bolt size 3/8, galvanized. Clamps: 2mm thick GI strip of 180 GSM Zinc coated.
12.	Angles (MS)	40 mm x 40mmx6mm thick to connect purlin to truss members.
13.	Aluminium Profile	The shade nets are fixed to the structure by a locking profile made of extruded aluminum profile. Made of alloy aluminum (approximately 220-250g / running meter) Should be suitable for double spring locking. Thickness: Minimum 1.0mm.
14.	Zig Zag Spring	Made of minimum of 2.3 mm thick Steel that is coated with plastic & it will lock and hold nets in aluminum profile.
15.	Insect proof net (Top)	40 mesh nylon net, UV Stabilized, sulphur resistant for top and all the four sides.
16.	Secondary Shade Net	Thermal screen/Aluminate: It should be made from HDPE with hot dip aluminium coating. Minimum GSM should be 100 and minimum aluminium coating should be of 25 micron. Opening and closing arrangement either manual or auto should be provided to the thermal screen to increase its utility.
17.	GI wire grid for crop support	Provision of 12 gauge GI wire at a spacing of 0.75m in the direction of the crop row supported by 8 gauge GI wire and suitable tighter should be provided.
18.	Door	Hinged door (single, minimum 2m length, 1m width, GI frame locking arrangement. (Connected to the ante room)
19.	Ante Room	The main purpose of the ante room is to ensure sanitation and for reducing the chances for entry of insects and pests through personnel. Size should be at least 2m length x 2m width, 2.0m height, ante room door situated diagonally opposite to nethouse door with locking arrangement.
20.	Foundation	Cement + sand + jelly ratio must be 1:2:4, pipe length at least 1 m & pit size of at least 2.5ft D x 1ft B x 1ftL (0.75x0.3x0.3m)
21.	Misting Popup sprinklers and emitting laterals	Hanging type micro sprinkle nozzle for very fine water particles (foggers & mister) and fittings & accessories. PVC mains / sub mains, control valves, flush valves, proper zoning based on water availability, disc filter and venturi fertilizer injector with pressure gauge, required no of pop up sprinkler.
22.	Motor Pump	2 HP Pumping unit (mono block motor pump) with complete accessories and electrification for misting and sprinkler

23.	Submersible motor pump	7.5 hp 20 stage submersible motor pump with complete accessories (Pipes & electrical items etc.,) for lifting water from bore well (300 feet depth)
24.	Water tank	2000 lit water tank (3layers)
25.	<ol style="list-style-type: none"> <li>1. Each bidder should quote the prices for different units and the total price for the item as per class 9 of tender schedule.</li> <li>2. The comparison and finalization of the tender will be made based on the total cost of the tender value.</li> </ol>	

**General instructions**

- All plastic materials used in the chamber should be tested by the CIPET standards / certified agency for quality assurance (if applicable).
- All materials used in the chamber should be as per BIS standards.
- Maximum welded joints should be avoided

**TAMIL NADU AGRICULTURAL UNIVERSITY**

Office of the Professor and Head  
Dept, of Vegetable Science  
Horticultural College and Research Institute  
Tamil Nadu Agricultural University  
Periyakulam East - 625 604

**TENDER SCHEDULE**

Tender schedule for insect proof shade net house to The Professor & Head, Dept. of Vegetable Science, Horticultural College and Research Institute, Periyakulam, 625 604.

<b>Sl. No.</b>	<b>Particulars and Specifications</b>	<b>Quantity required</b>	<b>Unit Price FC / INR</b>	<b>Total Cost FC / INR</b>
<b>1.</b>	<b>TECHNICAL SPECIFICATIONS</b>			
<b>A</b>	<b>Insect proof shade net house :</b> 1200 m <sup>2</sup> ( size 30 m x 40 m – one number) Flat Structure Height from ground level 4 meters			
	<b>Foundation:</b> GI pipe = 1 ¼” (40 mm OD)			
	<b>Column :</b> GI Pipe 1 ½ ” (48 mm OD) thickness 2mm, length 4m			
	<b>Top pipe grid :</b> GI Pipe 1” (32 mm OD) thickness 2mm, length 6m,			
	<b>Boundary Purlin :</b> GI Pipe 1 ¼” (40 mm OD) thickness 2mm, length 6m			
	<b>Corners and pipe couplers :</b> Size 1 ½ “(48 mm OD) Thickness 2mm, Length 0.15m			
	<b>Column Brazing X pipes :</b> GI Pipe = 1 ¼” (OD 40 mm) Thickness 2.0 mm for all corners.			
	<b>Nut Bolts, Clamps etc., :</b> Nut bolt size 3/8, galvanized. Clamps: 2mm thick GI strip of 180 GSM Zinc coated.			
	<b>Angles (MS):</b> 40 mm x 40mmx6mm thick to connect purlin to truss members.			
	<b>Aluminium Profile :</b> The shade nets are fixed to the structure by a locking profile made of extruded aluminum profile. Made of alloy aluminum (approximately 220-250g / running meter) Should be suitable for double spring locking. Thickness: Minimum 1.0mm.			
	<b>Zig Zag Spring :</b> Made of minimum of 2.3 mm thick Steel that is coated with plastic & it will lock and hold nets in aluminum profile.			
	<b>Insect proof net (Top) :</b> 40 mesh nylon net, UV Stabilized, sulphur resistant for top and all the four sides.			
	<b>Secondary Shade Net :</b> Thermal screen/Aluminate: It should be made from HDPE with hot dip aluminium coating. Minimum GSM should be 100 and minimum aluminium coating should be of 25 micron. Opening and closing arrangement either manual or auto should be			

	provided to the thermal screen to increase its utility.			
	<b>GI wire grid for crop support</b> Provision of 12 gauge GI wire at a spacing of 0.75m in the direction of the crop row supported by 8 gauge GI wire and suitable tighter should be provided.			
	<b>Door :</b> Hinged door (single, minimum 2m length, 1m width, GI frame locking arrangement. (Connected to the ante room)			
	<b>Ante Room:</b> The main purpose of the ante room is to ensure sanitation and for reducing the chances for entry of insects and pests through personnel. Size should be at least 2m length x 2m width, 2.0m height, ante room door situated diagonally opposite to net house door with locking arrangement.			
	<b>Foundation :</b> Cement + sand + jelly ratio must be 1:2:4, pipe length at least 1 m & pit size of at least 2.5ft D x 1ft B x 1ftL (0.75x0.3x0.3m)			
	<b>Misting Pop up sprinklers and emitting laterals</b> : Hanging type micro sprinkle nozzle for very fine water particles (foggers & mister) and fittings & accessories. PVC mains / sub mains, control valves, flush valves, proper zoning based on water availability, disc filter and venturi fertilizer injector with pressure gauge, required no of pop up sprinkler.			
	<b>Motor Pump</b> : 2 HP Pumping unit (mono block motor pump) with complete accessories and electrification for misting and sprinkler			
	<b>Submersible motor pump</b> : 7.5 hp 20 stage submersible motor pump with complete accessories (Pipes & electrical items etc.,) for lifting water from bore well (300 feet depth)			
	<b>Water tank</b> : 2000 lit water tank (3layers)			
<b>B</b>	<b>Labour Charge</b>			
2.	<b>Origin (Indian/Imported)</b>			
3.	<b>Make &amp; Model - Brand name to be specified</b>			
4.	<b>GST</b>			
5.	<b>Customs &amp; Central Exercise duty (imported items)</b>			
6.	<b>Customs Clearance Charge</b>			

7.	<b>Insurance</b>		
8.	<b>Transport and Delivery</b>		
9.	<b>Installation</b>		
10.	<b>Training</b>		
11.	<b>Discount if any.</b>		
12.	<b>Total cost of the instruments after discount if any (both in figures and in words)</b>		
13.	<b>Validity of the quotation/ tender</b>		
14.	<b>Comprehensive warranty</b>		
15.	<b>AMC</b>		
16.	<b>Delivery Period</b>		
17.	<b>Mode of Payment (INR or LC)</b>		
19.	<b>We shall abide by the terms and conditions stipulated in the tender notice dt. 14.12.2020</b>		
	<b>Signature of the Tenderer with seal</b>		