

Rakesh Kumar Dogra, IFS
Deputy Director General (A)
D'te of Administration



दूरभाष / Phone: 0135-2758295 (का) / (O)
 0135-2224856 (का) / (O)

फैक्स / Fax: 0135-2750297(का) / (O)
 ई-मेल / E-mail: ddg_admin@icfre.org

भारतीय वानिकी अनुसंधान एवं शिक्षा परिषद

INDIAN COUNCIL OF FORESTRY RESEARCH AND EDUCATION

(पर्यावरण, वन एवं जलवायु परिवर्तन मंत्रालय भारत सरकार की एक स्वायत्त संस्था)

(An autonomous Body of Ministry of Environment, Forest & Climate Change, Govt. of India)

पो० ॐ - न्यूफ़ॉरेस्ट, देहरादून-248 006 (उत्तराखण्ड)

P.O. New Forest, Dehra Dun - 248006

No. 01-13/GA&CS/Admin/ICFRE/2022-23

Dated: 14 April, 2023

NOTIFICATION

In continuation of notification dated 09.01.2023 the user testing and identification charges of ICFRE and its Institutes with minor modification.

The details are as under:-

1. SOIL TESTING

S.No.	Parameter	Price in ₹
1.	pH	100/-
2.	EC	100/-
3.	Organic Carbon (OC) / Organic Matter	100/-
4.	Major nutrients (N, P, K, Ca, Mg, Na)	300/- each and 1500/- complete
5.	Micronutrients (Mg, Ni, Zn, Fe, Co, Cr, Cu, Mn)	300/- each and 2000/- package
6.	Texture analysis	500/-
7.	Bulk Density	150/-
8.	Total soil analysis (above all)	4000/-
9.	Exch. Cations (Ca++, Mg2+ and K) and extractable bases	1000/-
10.	Dry matter / Moisture percent	100/-
11.	CHN auto analyser (Carbon, Hydrogen, Nitrogen, Sulphur)	1200/-
12.	Total Carbon	1000/-
13.	Boron and sulphur	500/-
14.	Organic carbon estimation using TOC Analyzer	IFGTB: 1500/- Sample

2. WATER TESTING

S.No.	Parameter	Price in ₹
1.	pH	100/-
2.	TDS	100/-
3.	EC	100/-
4.	Na, K, Ca, Mg, Cl, CO ₃ , HCO ₃	200/- element and 1200/- for all

5.	Total Water analysis	1300/-
Effluent analysis		
1.	COD (Chemical Oxygen Demand),	1980/-
2.	BOD	3300/-

3. PLANT/FUNGUS/INSECT ETC. TESTING

S1. No.	Parameter	Price in ₹
1.	Cu, Mn, Fe, Zn	250/- element and 800 for all
2.	N, P, K, Ca, Mg, NA	250/- element and 1300 for all
3.	Total Plant Analysis	2000/-
4.	Molecular Characterization of a Clone/ germplasm	RAPD & ISSR – Rs. 7000/- Rs. 12500 for 10 samples for one primer RAPD & ISSR (non commercial)
5.	Plant Identification charges	250/- specimen
6.	HPLC	3000/-
7.	GC-MS	Rs. 3000/- For academic & Govt. R&D Institutions Rs. 8000/- For industry and other commercial organizations
8.	UV-Visible	500/-
9.	Library assisted identification per peak	Rs. 1500/- For academic & Govt. R&D institutions Rs. 2500/- For industry and other commercial organizations
10.	Submission/identification of Voucher specimen and allotment of accession number	600/-
11.	Identification of fungal diseases specimen	1000/-
12.	Identification of lichen species	1000/-
13.	Insect Pest/Pathogen Identification by comparison	Students & Farmers 500 per specimen (insect) 1000 (Fungi) 3000 (Bacteria) Industries & Forest Dpt. 1000 per specimen (insect) 1500 (Fungi) 4500 (Bacteria)
14.	Insect Pest/Pathogen Identification by studying taxonomic characters	Students & Farmers 1000 per specimen (insect) 6000 (Fungi) 9000 (Bacteria) Industries & Forest Dpt. 2000 per specimen (insect) 7500 (Fungi) 11000 (Bacteria)
15.	Biocontrol agent-egg parasitoid-tricho card (25000/card)	200 per card
16.	Laboratory testing of pesticide (biopesticide/insecticide) against insect defoliator/white grub	20000 per defoliater 40000 per white grub
17.	Field testing of insecticides against termites and insect defoliators	100000/-

18.	Identification of beneficial soil microbes	1200/-
19.	Testing of Biofertilizers	10000/-
20.	Issue of Phytosanitary Certificates a. Seed material	1000/-
21.	Issue of Phytosanitary Certificates b. Planting material	2200/-
22.	Testing of wood preservative/fire retardants (toxicity/performance) lab test against fungus	3000/-
23.	Testing treated/untreated timbers synthetic materials against: decay and mould growth	3000/-
24.	Screening of germplasms for pest/disease resistance through rapid screening in lab and field	100000/-
25.	Isolation and pure culturing of Bacteria, fungus & virus	5900/- Fungi 11800/- Bacteria
26.	Clonal Fidelity testing of plant samples	10000/-sample
27.	Identification services for decay fungi/mould	1000/-species
28.	Identification of fungal specimen and its matching with herbarium	250/-
29.	Testing antifungal activity of samples	2500/-
30.	Quality analysis of mycorrhizal and rhizobium biofertilizers inoculum	200/-
31.	Micro photography of fungi	100/-
32	Supply of fungus culture per tube	1000/- species
33	Testing of bio- efficacy of preservatives/ insecticides against borers	20000/- per test
34	Sandalwood farming and managing its health Consultancy	5000/-
35	Testing of wood preservatives /fire retardants <ul style="list-style-type: none">• Termite mound tests• Laboratory tests against fungus bottle block bioassay• Stake test• National• International	40,000/- 50,000/- 100000/- US \$20000

4. SEED TESTING

Sl. No.	Parameter	Price in ₹
1.	Seed germination and viability test	500 per sample (Seed germination test)
2.	Seed purity tests	400 per sample (Including disease and pest damage)
3.	Moisture content of seeds	200 per sample
4.	Purity, Germination %, moisture content, Disease, insect damage	1000 per sample

5. OIL TESTING

S1. No.	Parameter	Price in ₹
1.	Density	200/- sample
2.	Refractive Index	200/- sample
3.	Acid Value	300/- sample
4.	Saponification Value	400/- sample
5.	Iodine Value	600/- sample
6.	Unsaponifiable Matter	600/- sample
7.	Oil Percentage	700/- sample
8.	Peroxide value	400/- sample
9.	Viscosity	400/- sample
10.	Cloud Point for biodiesel	600/- sample
11.	Pour Point for biodiesel	600/- sample
12.	Flash Point for biodiesel	600/- sample

6. LAB TESTS

- Spectrophotometric analysis

S1. No.	Parameter	Price in ₹
1.	Determination of phenols (if standards available)	600/- per sample
2.	Determination of tannins (if standards available)	600/- per sample
3.	Determination of carbohydrates (if standards available)	600/- per sample
4.	Determination of starch	600/- per sample
5.	Determination of chlorogenic acid (if standards available)	600/- per sample
6.	Determination of Protein (if standards available)	600/- per sample
7.	Dietryfibre analysis	1500/-
8.	TLC	1100/-
9.	Ash content	1100/-
10.	Moisture analysis	1100/-
11.	Protein	1000/-
12.	Total Sugar	1000/-

Other Test

1.	Identification of fungal diseases sample	1000/-
2.	Supply of pure Trichoderma powder	1500/-
3.	Supply of VAM	1000/-
4.	Consortium of Biofertilizer Bacillus + Azotobactor	1000/-
5.	Testing of Antifungal properties of sample	2000/-
6.	Testing of Insecticidal properties of sample	2000/-
7.	Determination of free amino acid	600/-
8.	Determination of phenolic acid (if standards and other chemicals are available)	5000/- per sample
9.	Determination of auxin (if standards and other chemical available)	4200/- per sample

10.	Chemo profiling of medicinal plants with the help of HPTLC	2000/- for the first sample & Rs. 500/- per subsequent sample of the same species.
11.	Cation Exchange Capacity (CEC) and Exchangeable cations of Soil	400/-
12.	Leaf area measurement	200/-
13.	Available Nutrients (K)	300/- per sample
14.	Identification of spider up to family level	100/- per specimen
15.	Identification of spider up to genus level	300/- per specimen
16.	Identification of spider up to species level	500/- per specimen

7. WOOD ANALYSIS: LAB

S1. No.	Parameter	Price in ₹
1.	Identification of Wood	11000/-
2.	Identification of wood (Police enquiry)	30000/-
3.	Charcoal Identification	30000/-
4.	Fibre Analysis	5500/-
5.	Hand sample (charges per sample)	5500/-
6.	Herbarium specimen Identification	500/-
7.	Testing of Biopiracy sample	11000/-
8.	Dietary fibre analysis	1650/-
9.	Determination of Essential Oil	1000/-
10.	Melting point determination	550 For academic & Govt. R&D institutions 1000 For industry and other commercial organizations
11.	Ash content	610 For academic & Govt. R&D institutions 1100 For industry and other commercial organizations
12.	Moisture content	610 For academic & Govt. R&D institutions 1100 For industry and other commercial organizations
13.	pH value	610 For academic & Govt. R&D institutions 1100 For industry and other commercial organizations
14.	T.L.C analysis	610 For academic & Govt. R&D institutions 1100 For industry and other commercial organizations
15.	Estimation of a single constituent in essential oil /fatty oil by GLC (if standard available)	3300 For academic & Govt. R&D institutions 6000 For industry and other commercial organizations
16.	HPLC	5500 For academic & Govt. R&D institutions 10000 For industry and other commercial organizations

8. ANALYSIS OF RAW MATERIAL -WOOD

Sl. No.	Parameter	Price in ₹
1.	N/10 NaOH Solubility.	700/-
2.	Hot water solubility.	700/-
3.	Holo-Cellulose	2500/-
4.	Klason Lignin.	2200/-
5.	Ligning (%)	2500/-
6.	Cellulose (%)	2500/-
7.	Cold water Solubility (%)	700/-
8.	Alcohol - Benzene Solubility (%)	1000/-
9.	Pentosan.	2200/-
10.	Ash	610/-
11.	Silica	2750/-

9. ANALYSIS OF PULP AND PAPER

Sl. No.	Parameter	Price in ₹
1.	N/10 NaOH Solubility.	610/-
2.	Alpha-Cellulose.	2200/-
3.	Klason Lignin	2200/-
4.	Pentosan.	2200/-
5.	Ash.	610/-
6.	Silica.	2200/-
7.	Kappa Number.	1100/-

Pulp Evaluation

1.	Beating & Sheet Formation & Pulp evaluation	9900/-
2.	Evaluation of rosin chemicals	4400/-
3.	Baur Mc Nett Fiber classification	4400/-
4.	Freeness (Canadian)	1100/-

Paper Testing

1.	Ash content	610/-
2.	Bursting strength	610/-
3.	Cobb sizing test	610/-
4.	Grammage	610/-
5.	Folding endurance	610/-
6.	Moisture	610/-
7.	pH (Hot extract).	610/-
8.	Porosity (Bendtson).	610/-
9.	Tearing strength	610/-
10.	Thickness.	610/-
11.	Tensile strength (Breaking Length/Tensile Index).	610/-
12.	Wax pick strength	830/-
13.	Klemn Absorbency	610/-
14.	Stiffness	610/-
15.	Dynamic contact angle of water with paper	2200/-

10. ANALYSIS OF OPTICAL AND CHEMICAL PROPERTIES OF WOOD

Sl. No.	Parameter	Price in ₹
1.	Brightness	610/-
2.	Opacity	610/-
3.	Gloss	610/-
Non Fibrous Raw Material		
1.	Alum	2200/-
2.	Soda Ash	610/-
3.	Rosin	2200/-
4.	Starch	610/-
5.	Lime stone	1100/-
6.	Available lime index	610/-
Black Lignin Analysis		
1.	pH 30 degree C	610/-
2.	Total Solids	660/-
3.	Suspended solids.	1100/-
4.	Residual active alkali.	1100/-
5.	Total Alkali	1100/-
6.	Silica content.	1650/-
7.	Sulfates ash and organic matter.	1650/-
8.	Sulfates	1650/-
9.	Chlorides.	1650/-
10.	Lignin content (UV method)	1100/-
11.	Total sugar	2750/-
12.	Reducing sugar	2200/-
Lime sludge analysis		
1.	Loss on ignition.	610/-
2.	Silica as SiO ₂ .	1650/-
3.	Residual CaO.	1650/-
4.	Residual alkali as Na ₂ O.	1650/-
Other tests		
1.	Raw material evaluation-Chipping, chip classification, Proximate chemical analysis, pulping optimization (Soda or Kraft), and evaluation of unbleached pulp including kappa number, sheet making and testing for physical strength properties. (For each raw material) Charges are calculate as follows:- Cost of inputs like chemical, energy plus salary of staff for actual days required to complete the work with 100% overhead surcharges.	33000/-
2.	Proximate analysis (fixed carbon content, volatile content, ash content and moisture content)	4000/-
3.	Moisture absorption behavior of preservative treated wood	10000/-
4.	UV resistance of preservative treated/coated wood (for 500 Hours of exposure)	50000/-
5.	Leachability studies for the preservative treated wood for	15000/-

	total Leachates (Not for individual chemical constituents)	
6.	Detection and estimation of heartwood content in standing trees of sandalwood and redsanders (Electric resistance tomograph (ERT) Non-destructive method	200/-
7	Determination of calorific value of wood	3000/-
8	Wood Polymer composites	6000/-

11. TIMBER MECHANICS DISCIPLINE

Sl. No.	Parameter	Price in ₹
1.	Physical test e.g Moisture content specific gravity, weight, water absorption, swelling etc. of wood and wood products.	2,200/- per specimen/ test
2.	Mechanical test e.g Bending compression, Tension, Hardness, Shear, Nail withdrawal resistance, screw withdrawal resistance etc of wood and wood products.	3000/- per specimen/test
3.	Panel door shutter/ window and ventilator shutter as per IS: 1003 & TADS (excluding identification, checking of chemical treatment, moisture content etc.)	22,000/- per door shutter
4.	Flush door Shutter as per IS: 2202 and IS: 2191	22000/- per door shutter
5.	Door shutter Methods of test as per IS: 4020 (Pt-1 to 16)	22000/- per door shutter
6.	Single test as per IS: 4020 (Pt- 1 to 16)	3300/- per test
7.	Testing of LVL door shutter as per TADS: 15 (excluding identification/ Moisture content.)	33000/- per door shutter

WOOD PRESERVATION

1.	Determination of penetration and retention of preservative in the treated wood	11,000/- per sample
2.	Preservative treatment. Revised preservative treatment charges + service tax	70/- per cft+ chemical charges
3.	Testing of preservative in plywood/fire retardants	13,200/- per sample/test
4.	Toxicity/performance screening test by Agar method	11,000/- wood/fungus
5.	Laboratory test against fungus bottle block bioassays	22,000/- wood/fungus
6.	Plywood as per IS:303, IS:710, IS:4990 etc. (Moisture, glue shear strength in three conditions and tensile strength) other than preservative test	6000/- per sample
7.	Block board as per IS:1659	6000/- per sample
8.	Particle board (plain, veneered and laminated), fibreboard, insulation board, MDF board etc as per relevant standard (excluding thermal conductivity, dielectric constant, sound absorption etc.)	6000/- per sample

TESTING OF WOOD ADHESIVE

9.	a) Performance of UF, PF, Polyvinyl acetate adhesive	6000/- per sample
10.	b) Purity of phenol/formalin	3000/- per sample
11.	Confiscated or Commercial Drug sample Identification	11,000 + GST
12.	Identification and certification of Medicinal Plants used in research submitted as Herbarium sheets	500/plant

12. CHARGES FOR USING OF INSTRUMENTS

Sl. No.	Instrument	Price in ₹
1.	Spectrophotometer (UV-VIS)	250/-
2.	Nanodrop Spectrophotometer	400/-
3.	Gel Doc System	400/-
4.	Microscopes	500/-
5.	Soxhlet apparatus	1500/-
6.	Rotary evaporaior	1500/-
7.	Microtome	200/-
8.	Autoclave	1000/-
9.	PCR	2000/-

13. WOOD SEASONING DISCIPLINE

Sl. No.	Species	Thickness	No. of Samples	Rate in ₹
1.	Sal, Asna, Jamun, Silver Oak, Walnut, Kusum, Oak, Eucalyptus	2 Cm & below	Above 25	2063/-
			Below 25	1763/-
		Above 2 Cm up to 3 Cm	Above 25	2375/-
			Below 25	2013/-
		Above 3 Cm up to 5 Cm	Above 25	2900/-
			Below 25	2200/-
		Above 5 Cm up to 7 Cm	Above 25	3150/-
			Below 25	2900/-
		Above 7 Cm up to 9 Cm	Above 25	3563/-
			Below 25	3150/-
		Above 9 Cm up to 11 Cm	Above 25	4375/-
			Below 25	3563/-
		Above 11 Cm up to 14 Cm	Above 25	5200/-
			Below 25	4388/-
2.	Sissoo, Teak, Haldu, Deodar, Birch, Toon, Kikar, Siris, Champak, Bottle brush, Holock	2 Cm & below	Above 25	1762.5/-
			Below 25	1625/-
		Above 2 Cm up to 3 Cm	Above 25	2125/-
			Below 25	1875/-
		Above 3 Cm up to 5 Cm	Above 25	2650/-
			Below 25	2125/-
		Above 5 Cm up to 7 Cm	Above 25	2900/-
			Below 25	2650/-
		Above 7 Cm up to 9 Cm	Above 25	3150/-
			Below 25	2900/-
		Above 9 Cm up to 11 Cm	Above 25	3563/-
			Below 25	3150/-
		Above 11 Cm up to 14 Cm	Above 25	4388/-
			Below 25	3563/-
3.	Mango, Kanju, Kuyhan, Chir,	Above 14 Cm up to 15 Cm	Above 25	5200/-
			Below 25	4388/-
		2 Cm & below	Above 25	1513/-
			Below 25	1438/-
		Above 2 Cm up to 3 Cm	Above 25	1763/-

	Poplar		Below 25	1563/-
		Above 3 Cm up to 5 Cm	Above 25	2125/-
			Below 25	1763/-
		Above 5 Cm up to 7 Cm	Above 25	2650/-
			Below 25	2125/-
		Above 7 Cm up to 9 Cm	Above 25	2900/-
			Below 25	2650/-
		Above 9 Cm up to 11Cm	Above 25	3150/-
			Below 25	2900/-
		Above 11 Cm up to 14 Cm	Above 25	3563/-
			Below 25	3150/-
		Above 14 Cm up to 15 Cm	Above 25	4388/-
			Below 25	3563/-
4.	Semul, Fir, Spruce	2 Cm & below	Above 25	1363/-
			Below 25	1300/-
		Above 2 Cm up to 3 Cm	Above 25	1513/-
			Below 25	1438/-
		Above 3 Cm up to 5 Cm	Above 25	1763/-
			Below 25	1563/-
		Above 5 Cm up to 7 Cm	Above 25	2125/-
			Below 25	1763/-
		Above 7 Cm up to 9 Cm	Above 25	2650/-
			Below 25	2125/-
		Above 9 Cm up to 11 Cm	Above 25	2900/-
			Below 25	2650/-
		Above 11 Cm up to 14 Cm	Above 25	3150/-
			Below 25	2900/-
		Above 14 Cm up to 15 Cm	Above 25	3563/-
			Below 25	3150/-

OTHER TESTS

Sl. No.	Tests	Rates in ₹ for Academic/ R&D	Rates in ₹ for Industry
1.	ESI (+ve mode) MS analysis of Purified component (Direct injection)	3500/- per sample	7000/- per sample
2.	ESI (-ve mode) MS analysis of Purified component (Direct injection)	3500/- per sample	7000/- per sample
3.	ESI (+ve mode) MS-MS analysis of Purified component (Direct injection)	4000/- per sample	8000/- per sample
4.	ESI (-ve mode) MS-MS analysis of Purified component (Direct injection)	4000/- per sample	8000/- per sample
5.	LCQTOFMS profiling with matching of database available with the equipment (Qualitative analysis)	5000/- per sample	10000 per sample
6.	LCQTOFMSMS analysis	5000/- per sample + 1000/- per precursor ion	10000/- per sample + 2000/- per precursor ion
7.	Quantitation of targeted metabolite	6000/- per sample + 1000 per precursor ion	12000/- per sample + 2000 per precursor ion

8.	Quantitation of pharmaceutical drug	6000/- per sample	12000/- per sample
HPLC (PDA Detector) Analysis			
9.	HPLC qualitative analysis	8000/- per sample	8000/- per sample
10.	HPLC quantitative analysis	8000/- per sample + 2000/- per analyte	8000/- per sample + 2000/- per analyte
11. GC-MS (Single Quad) analysis			
11a.	GC-MS profiling of essential oil/volatiles with matching of library available with the equipment	8000/- per sample	8000/- per sample
11b.	GC-MS analysis of essential oil/volatiles for identification/confirmation of analyze (s)	3300/- per sample	8000/- per sample + 2000/- per analyte
12. GC-FID Analysis			
12a.	Estimation of a single analyte in essential oil/fatty oil	3300/- per sample	6000/- per sample
13. HPTLC Analysis			
13a.	Estimation of a single marker constituent in plant extract	5500/- per sample	10000/- per sample
13b.	TLC Analysis	610/- per sample	1100/- per sample
13c.	Melting point determination	550/- per sample	1000/- per sample
13d.	Ash content	610/- per sample	1100/- per sample
13e.	Moisture content in a plant material	610/- per sample	1100/- per sample

**FRC-LE, AGARTALA
(Bamboo treatment methods)**

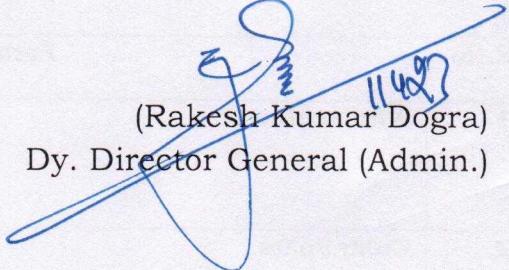
S.No.	Parameter	Price in ₹
1.	Wholeculm	Pressure impregnation using Boucherie apparatus
		Boiling Method Using bamboo treatment tanks
2.	Culm Splits	Boiling Method Using bamboo treatment tanks

IFP, Ranchi

S.No.	Parameter	Price in ₹
1	Improved seed (Stones) of Aeliacompsita	3000/-
2	Advance generation Seed (Stones) of Melia composita	6000/-
3	Improve Seedling of Melia composita	25/-
4	Advance generation Seedling of Melia composite	30/-
5	ETP of Poplar of new variety clone viz IFP-BPA-30, IFP-BPA-33, IFP-BPA-34, IFP-BPA38, IFP-BPA-41	50/-
6	ETP of poplar general	30/-
7	In vitro starter (live) culture	1500/-
8	In vitra starter (live) culture (One culture having 2-3 shoots	500/-
9	Hardened tissue culture raised plant (Bambod species)	65/-
10	Hardened tissue culture raised plant (Medicinal Plant Rauwolfia serpentina)	40/-

11	Hardened tissue culture raised plant (Medicinal Plant Aloe vera)	20/-
12	Seedlings raised from seeds of PTs (Neem)	40/-
13	Seedlings raised from seeds of PTs (Melia dubia)	50/-
14	Seedlings (2 year old)	40/-
15	Leaves of Aloe vera	35/- per kg
16	Hands on tissue culture stock	2000/- one week per person
17	Bamboo species clonal stock	60/-
18	Bamboo species Seedling stock	30/-
19	Known clump of Bamboo rhizome under license agreement	30000/-
20	Fresh interpretation and creation of GIS database for one effective 1:50 K SOI topo map to cover an area i.e 650 Sq.Km (approx)	76400/- for creation of GIS ready each map sheet area
21	Forest Area Mapping (1:50 K)	5000/- per square km.
22	LULC Preparation using satellite imagery (1:50 k)	5000/- per square km.
23	Digitization using satellite imagery or Google Earth (1:50 K)	5000/- per square km.
24	Assets Mapping using Google Earth	10/- per Assets

The charges/rates prescribed above are minimum (excluding GST) and applicable to all the Institutes under, ICFRE. Further, the Directors of the Institutes are empowered to renotify the rates at higher than the common minimum rates in their Institutes, if the need be, with reference to a particular location.



(Rakesh Kumar Dogra)
Dy. Director General (Admin.)

Copy to:

1. All DDGs, Director(IC), ICFRE
2. Directors of the Institutes under ICFRE