

**College of Agriculture, Iroisemba, Imphal, Manipur.**

Sl. No.	Name of the instruments & make	Year of purchase	I/C of the equipment (scientist, Mobile No., Dept.)	Function of the equipment	Status (Working/Repairable/ Non repairable)	Log book maintained (Yes/No)	Share d with others (Yes/No)	Utilization Charge/Fee (₹)	
								Parameters	Outside Students/ Farmers & Others
1	Refrigerated Centrifuge (Floor Model) Max. vol 4×750ml Max. Speed 20,000 rpm Max. RCF $\geq 48000 \times 9$ Temp. Range 33 <sup>0</sup> to 20 <sup>0</sup> C	22/05/2006	Dr. N. Surbala Devi SSAC	Centrifugation	Working	Yes	Yes	--	100 per usage
2	N- Auto Analyser (Kelplus)	23/3/2021	Dr. N. Surbala Devi SSAC	N-Analyser	Working	Yes	Yes	Available Nitrogen	200 /sample & 250 /sample

								Total Nitrogen	250 /sample & 300/sample
3	Research Microscope with phase contrast	02/06/2006	Prof. K. Ibohal Singh, Entomology Dept. <a href="mailto:Singkhi_ento@yahoo.co.in">Singkhi_ento@yahoo.co.in</a> 9436890556	Used for gaining contrast in a translucent specimen without staining the specimen. One major advantage is that phase-contrast microscopy can be used with high-resolution objectives, but it requires a specialized condenser and more expensive objectives.	Working	Yes	Yes	Microscopic examination of all insects, pathogens & small sample plants	5 per sample

4	Rotary vacuum evaporator	2007	Prof. K. Ibohal Singh, Entomology Dept. <a href="mailto:Singkhi_ento@yahoo.co.in">Singkhi_ento@yahoo.co.in</a> 9436890556	Homogenized diet for rearing insects	Working	Yes	No	Homogenization of samples in relation to residue analysis	100 per sample
5	Honey Processing Unit	2018	Dr. Nilima Karam 7005112467 Deptt. of Entomology	Processing of honey for quality honey production	Working	Yes	No	--	100 per kg
6	Biorad Gel DOC XR+	26/6/2011	Dr. Th. Renuka, G&PB Dept.	Gel Doc XR+ system optimizes reproducibility and reliability of experimental data, enabling quantitative comparisons between different experiments.	Working	Yes	Yes	Users from other institutes with own reagents and chemicals	200 / Gel visualization
								Users from other institutes without	300 / Gel visualization

								reagents and chemicals	
7	DGG (Denaturing Garden Gel Electrophoresis) (ILS)	30/5/2018	Dr. Th. Renuka, G&PB Dept.	--	Working	Yes	Yes	Users from other institutes with own reagents and chemicals	700 / Gel running
	a. Gel Electrophoresis Unit (DNA/RNA separation) for big agarose gel (40cm* 25cm)							Users from other institutes without reagents and chemicals	1000 / Gel running
	b. Gel Electrophoresis Unit (DNA/RNA separation) for medium agarose gel (15cm* 10cm)							Users from other institutes with own reagents and chemicals	600 / Gel running

								Users from other institutes without reagents and chemicals	800 / Gel running
8	Atomic Absorption Spectrophotometer	28/03/2022	Dr. Lokesh Mishra Dr. Th. Anand Singh Mr. Sourav Das	Detects element in either liquid or solid samples through the application of characteristic wavelengths of electromagnetic radiation from a light source.	Working	Yes	Yes	DTPA-Iron	400 /sample & 500 /sample
								DTPA-Manganese	400 /sample & 500 /sample
								DTPA-Zinc	400 /sample & 500 /sample

								DTPA-Copper	400 /sample & 500 /sample
								Total Iron	400 /sample & 500 /sample
								Total Manganese	400 /sample & 500 /sample
								Total Zinc	400 /sample & 500 /sample

								Total Copper	400 /sample & 500 /sample
9	Lamba 265 Spectrophotometer with UV Lab Software Instrumental Serial No. 265K23051101 Service Order No. WO-02728696	28/02/ 2024	Dr. Lokesh Mishra Dr. Th. Anand Singh Mr. Sourav Das	Primarily used for Quantitative analysis of different biological compounds like carbohydrate, protein, vitamins, phenolic compounds, antioxidants in samples. It can also be used for determination of type of compound based on light	Working	Yes	Yes	Available Phosphorus	200 /sample & 250 /sample
								Total Phosphorus	250 /sample & 300 /sample

				spectra absorption by compounds.					
10	Spectrophotometer (Motras Scientific CFR21 Compliance High Resolution Color Touch screen)	24/12/2022	Dr. Lokesh Mishra Dr. Th. Anand Singh Mr. Sourav Das	Primarily used for Quantitative analysis of different biological compounds like carbohydrate, protein, vitamins, phenolic compounds, antioxidants in samples. It can also be used for determination of type of compound based on light spectra absorption by compounds.	Working	Yes	Yes	Total Carbohydrate  Proline, Phenols, Antioxidants	200 /sample & 250 /sample  100 /sample & 150 /sample



11	Liquid Biofertilizer Production Unit with essential accessories	22/3/2023	i. Dr. Sumitra Ph.. ii. Dr. Surbala.	Fermentation process and the quality needs to be controlled. Bacillus subtilis, aerobe bacterium growing well in temperature ranging from 30 to 37°C, can fix nitrogen gas (N <sub>2</sub> ) to ammonium form.	Working	Yes	Yes	--	6000 per batch  (without bottling)
13	Autoclave single flate type fermenter	31/03/2012	Dr. L. Nongdrenkhomba Plant Pathology	For cultivation of Fungi and bacteria.	Working	Yes	No.	--	3000 per sample
14	Sand of bench top processor (Lyophiliza)	03/09/2007	Dr. L. Nongdrenkhomba Plant Pathology	To improve the long term stability of organism	Working	Yes	No.	--	1000 per sample