## Professor Jayashankar Telangana Agricultural University Administrative Office, Rajendranagar, Hyderabad – 500 030

## Memo.No.7521/Res.IV/2025

Dated:25.04.2025

Sub: PJTAU - MFPI - Quality Control Laboratory, Rajendranagar - Approval of analytical testing charges under various slabs for the year 2025-26 - Orders - Issued.

Ref: 1.Memo. No.7521/Res.III/2023-24 dt: 21.03.2024 of Director of Research, Rajendranagar.

2.Lr.No.72/MFPI-QCLab/PJTAU/2024-25, Dt:28.03.2025 of the Principal Scientist & Head, MFPI-QC Lab, Rajendranagar.

With reference to the letter under 2<sup>nd</sup> cited, the Principal Scientist & Head, MFPI-Quality Control Lab, Rajendranagar is hereby informed that, the following proposed analytical testing charges under various slabs (Commercial testing rates for various industries, Research testing rates for PJTAU scientists, students / faculty of other universities, subsidized rates for PJTAU students, MSME entrepreneurs and farmers testing rates) is hereby approved by the University to implement at the MFPI-QC Lab for the financial year 2025-26.

Further, permission is hereby also accorded to the Principal Scientist & Head, QC Lab, Rajendranagar to extend the analysis charges to MSME entrepreneurs (with registered certificates) from Govt. of India under MSME scheme to analyze their produce at par with the farmers testing rates.

Foods & Agricultural products	Commercial testing/ Industry / institute	PJTAU Research / Other than PJTAU students	PJTAU Students / MSME Entrepreneurs/ Farming community limited to 10 samples
	Minerals		
Per Mineral (Iron, Zinc, Calcium, Magnesium, Manganese, Copper)	800	750	700
Magnesium, Manganese, Copper)	Proximate ana	lysis	
Moisture	200	200	150
Ash	270	250	200
Acid insoluble Ash	350	300	250
	850	750	600
Total Protein	850	650	500
Total fat	850	650	600
Crude Fibre	1050	750	600
Carbohydrates	1050	750	600
Starch content	mins / Pigments / Bio:		
	1200	900	600
Ascorbic acid	1380	1020	800
Thiamine	1380	1020	800
Riboflavin	1380	1020	800
Niacin	1380	1020	800
Total Carotenoids	1380	1020	800
Beta Carotenes	1380	1020	800
Lycopene	1200	1000	800
Anthocyanins	500	400	300
Colour (Asta)	500	400	300
Capsaicin	800	700	600
Total Oleoresin Content			
	Sugars	750	600
Total Sugars	950	750	600
Reducing sugars	950	170	150
Acidity	350	200	100
TSS	250	170	100
Sugar : Acid Ratio	350	170	100
Pulp: Stone Ratio (For fruits)	350	170	

	Nutritional Pro	ofiling	
Amino acid profile	8000	6000	4000
Total Aox Activity	1700	1250	850
Total Phenols	1700	1250	850
Total Flavonoids	1700	1250	500
Total Chlorophyll	800	600	500
	Oil Quality para		300
Fatty acid profile	8000	5000	3500
Free fatty acids	550	450	350
Peroxide value	800	700	550
Acid value	500	400	300
Iodine number	1200	1000	900
	Anti-nutritional I		700
Phytates	2000	1350	1000
Tannins	2000	1350	1000
Oxalates	2000	1350	1000
Saponins	2000	1500	1100
Organol	eptic & Cooking Q		1100
Sensory Evaluation	2000	1500	1000
Alkali spread Value	200	200	175
Gelatinization Temperature	200	200	175
Cooking Quality (Cereal/Pulses)*	500	400	300
Functional properties of Flour**	1000	800	700
Soybean Quality ***	1000	800	700
	Grain Quality Para		700
Length, Breadth, L/B ratio, Area	350	250	200
Grain Phenol content	300	200	175
Amylose content	800	700	600
Gamma Amino Butyric acid	800	700	600
Rice Varietal Specification <sup>#</sup>	10000	8000	7500
	Radiation expos		7300
).1-2.0 kGy	800	600	400
2.0-5.0 kGy	1200	800	500
5.0-10.0 kGy	1700	1500	1000
Co	ld Plasma Exposur		1000
20-30 KV (< 5 min)	150	100	100
20-30 KV (5-10 min)	200	150	100
30-40 (< 5 min)	250	200	200
30-40 (5-10 min)	300	250	200

\* Cooking quality tests include Cooking time, Solids dispersed and water absorption

## Instructions for sample deposit:

- ➤ Samples are not drawn by MFPI QC Lab and the results are applicable to the submitted sample only. Hence sampling techniques may be followed before sample deposit.
- A sample quantity of minimum 60gms has to be sent for analysis of proximate composition (Moisture, Ash, Fat, Protein and Fiber); 100g has to be submitted for analysis of proximate composition, minerals, fatty acids and amino acids; 150 gms for cooking quality.
- Certificate of analysis will state the results for single analysis only and the lab does not conduct replicate analysis on all the samples, unless required as per the quality policy. Hence, a client requiring replicate data may submit two samples as separate entries, which will be treated as two separate samples by the lab.

<sup>\*\*</sup> Functional properties of flour include Tapped density, Bulk Density, Water absorption capacity, Oil absorption capacity, Emulsion capacity, foaming capacity / swelling index, Least gelation concentration

<sup>\*\*\*</sup> Soybean Quality – Hull fragility, Milk Yield, Milk TSS, Tofu yield, Okara yield.

# Density / Specific volume, Grain Count / Hectolitre count, Alkali spreading value, Amylose content, Average cooked rice length, Average Length – breadth ratio, Average Length, Average pre-cooked milled rice breadth, Average volume expansion ratio, Broken and fragments, Chalky grains/Kernelsn, Damaged discoloured grains, Damaged Kernels (percent m/m), Elongation ratio after cooking, Green grains, Heat – Damaged Kernels, Immature Kernels, Inorganic extraneous matter, Kernels with pinpoint, Moisture, Organic extraneous matter, Paddy grains, Under milled and red striped or red grains, Weevilled kernels.

- Lab does not have provision to dehusk / dehull / polish / process the samples. Samples will be analysed as deposited.
- > For rice varietal specification, reference samples should submitted by the vendor along with detailed sample information.
- > The parameters to be analyzed may be clearly specified along with storage conditions (if any), when the sample is deposited. All samples deposited must be accompanied with a letter enclosing all the details.
- ➤ The due date for availability of certificate of analysis is 30 days from date of receipt of sample which is indicative / provisional. Circumstances beyond the control of the laboratory, such as non-availability of critical supplies, breakdown of equipment etc may cause delay. MFPI QC Lab will make all efforts to keep the concerned client informed about delay.

M. Balram Director of Research

To

The Principal Scientist & Head, MFPI-QC Lab, Rajendranagar. &c: to Sf/Sc.

//.F.B.O.//

Superintendent