

Laboratory Pesticide Residue and Food Quality Analysis Laboratory, University of Agricultural Sciences, Lingasugur Road, Raichur, Karnataka

Accreditation Standard ISO/IEC 17025: 2005

Certificate Number TC-7571

Page 1 of 7

Validity 12.07.2018 to 11.07.2020

Last Amended on --

Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
-----	----------------------------	-------------------------	---	--

### CHEMICAL TESTING

I.	RESIDUES IN FOOD PRODUCTS			
1.	<b>Pesticides</b>			
a.	<b>Rice, Wheat and Sorghum Redgram, Black Gram, Green Gram, Bengal Gram</b>	2,4-DDT	SOP/PRFAQL /101/00 based on AOAC official method of analysis, 2007.01. 20th edition, 2016, chapter 10 by GC-MS/MS and LC-MS/MS Technique. Issued on 01.05.2016	10 µg/kg to 1000 µg/kg
		4,4-DDT		10 µg/kg to 1000 µg/kg
		4-bromo,2-chlorophenol		10 µg/kg to 1000 µg/kg
		Alachlor		10 µg/kg to 1000 µg/kg
		Aldrin		10 µg/kg to 1000 µg/kg
		Alpha-HCH		10 µg/kg to 1000 µg/kg
		Beta-endosulfan		10 µg/kg to 1000 µg/kg
		Beta-HCH		10 µg/kg to 1000 µg/kg
		Bifenthrin		10 µg/kg to 1000 µg/kg
		Butachlor		10 µg/kg to 1000 µg/kg
		Chlorfenvinfos		10 µg/kg to 1000 µg/kg
		Chlorpyrifos		10 µg/kg to 1000 µg/kg
		Chlorpyrifos-methyl		10 µg/kg to 1000 µg/kg
		Cyfluthrin		10 µg/kg to 1000 µg/kg
		Cypermethrin		10 µg/kg to 1000 µg/kg
		Deltamethrin		10 µg/kg to 1000 µg/kg
	Diazinone	10 µg/kg to 1000 µg/kg		
	Endosulfan sulfate	10 µg/kg to 1000 µg/kg		
	Endrin	10 µg/kg to 1000 µg/kg		
	Ethofenprox	10 µg/kg to 1000 µg/kg		
	Parathion	10 µg/kg to 1000 µg/kg		
	Fenitrothion	10 µg/kg to 1000 µg/kg		
	Fenpropathrin	10 µg/kg to 1000 µg/kg		
	Fenvalerate	10 µg/kg to 1000 µg/kg		
	Fluchloralin	10 µg/kg to 1000 µg/kg		
	Heptachlor	10 µg/kg to 1000 µg/kg		
	Iprobenfos	10 µg/kg to 1000 µg/kg		
	Lamda-cyhalothrin	10 µg/kg to 1000 µg/kg		

**Laboratory** Pesticide Residue and Food Quality Analysis Laboratory, University of Agricultural Sciences, Lingasugur Road, Raichur, Karnataka

**Accreditation Standard** ISO/IEC 17025: 2005

**Certificate Number** TC-7571

Page 2 of 7

**Validity** 12.07.2018 to 11.07.2020

Last Amended on --

Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
		Methyl parathion		10 µg/kg to 1000 µg/kg
		p,p-DDE		10 µg/kg to 1000 µg/kg
		Permethrin		10 µg/kg to 1000 µg/kg
		Phenthoate		10 µg/kg to 1000 µg/kg
		Propanil		10 µg/kg to 1000 µg/kg
		Triallate		10 µg/kg to 1000 µg/kg
		Trifluralin		10 µg/kg to 1000 µg/kg
		Acephate		10 µg/kg to 1000 µg/kg
		Benalaxyl		10 µg/kg to 1000 µg/kg
		Bendiocarb		10 µg/kg to 1000 µg/kg
		Bitertenol		10 µg/kg to 1000 µg/kg
		Buprofezin		10 µg/kg to 1000 µg/kg
		Carbaryl		10 µg/kg to 1000 µg/kg
		Carbendazim		10 µg/kg to 1000 µg/kg
		Carbofuron		10 µg/kg to 1000 µg/kg
		Chlorantraniliprole		10 µg/kg to 1000 µg/kg
		Coumatetryl		10 µg/kg to 1000 µg/kg
		Difenconazole		10 µg/kg to 1000 µg/kg
		Dimethoate		10 µg/kg to 1000 µg/kg
		Emamectinbenzoate		10 µg/kg to 1000 µg/kg
		Fenpyroximate		10 µg/kg to 1000 µg/kg
		Hexaconazole		10 µg/kg to 1000 µg/kg
		Hexythiazox		10 µg/kg to 1000 µg/kg
		Imidacloprid		10 µg/kg to 1000 µg/kg
		Isoproturon		10 µg/kg to 1000 µg/kg
		Metalachlor		10 µg/kg to 1000 µg/kg
		Metalaxyl		10 µg/kg to 1000 µg/kg
		Methoxyfenozide		10 µg/kg to 1000 µg/kg
		Metribuzin		10 µg/kg to 1000 µg/kg
		Omethoate		10 µg/kg to 1000 µg/kg
		Paclobutrazole		10 µg/kg to 1000 µg/kg
		Penconazole		10 µg/kg to 1000 µg/kg
		Pendimethalin		10 µg/kg to 1000 µg/kg
		Phosalone		10 µg/kg to 1000 µg/kg

Laboratory

Pesticide Residue and Food Quality Analysis Laboratory, University of Agricultural Sciences, Lingasugur Road, Raichur, Karnataka

Accreditation Standard ISO/IEC 17025: 2005

Certificate Number TC-7571

Page 3 of 7

Validity 12.07.2018 to 11.07.2020

Last Amended on --

Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
		Phosphomidon		10 µg/kg to 1000 µg/kg
		Pretilachlor		10 µg/kg to 1000 µg/kg
		Profenofos		10 µg/kg to 1000 µg/kg
		Pymetrozine		10 µg/kg to 1000 µg/kg
		Quinalphos		10 µg/kg to 1000 µg/kg
		Spinosad		10 µg/kg to 1000 µg/kg
		Tetraconazole		10 µg/kg to 1000 µg/kg
		Thiacloprid		10 µg/kg to 1000 µg/kg
		Thiobencarb		10 µg/kg to 1000 µg/kg
		Triademefon		10 µg/kg to 1000 µg/kg
		Triademenol		10 µg/kg to 1000 µg/kg
		Triazophos		10 µg/kg to 1000 µg/kg
<b>b.</b>	<b>Pomegranate, Grapes, Banana, Mango, Sweet Oranges, Guava, Tomato, Brinjal, Okra, Green and Red Chillies, Cabbage, Cauliflower and Capsicum</b>	2,4-DDT	SOP/PRFAQL /102/00 based on AOAC official method of analysis, 2007.01. 20th edition, 2016, chapter 10 by GC-MS/MS and LC-MS/MS Technique.	10 µg/kg to 1000 µg/kg
		4,4-DDT		10 µg/kg to 1000 µg/kg
		Alachlor		10 µg/kg to 1000 µg/kg
		Aldrin		10 µg/kg to 1000 µg/kg
		Alpha-HCH		10 µg/kg to 1000 µg/kg
		Beta-endosulfan		10 µg/kg to 1000 µg/kg
		Beta-HCH		10 µg/kg to 1000 µg/kg
		Bifenthrin		10 µg/kg to 1000 µg/kg
		Butachlor		10 µg/kg to 1000 µg/kg
		Chlorfenvinfos		10 µg/kg to 1000 µg/kg
		Chlorpyrifos		10 µg/kg to 1000 µg/kg
		Chlorpyrifos-methyl		10 µg/kg to 1000 µg/kg
		Cyfluthrin		10 µg/kg to 1000 µg/kg
		Cypermethrin		10 µg/kg to 1000 µg/kg
		Deltamethrin		10 µg/kg to 1000 µg/kg
	Diazinone	10 µg/kg to 1000 µg/kg		
	Endosulfan sulfate	10 µg/kg to 1000 µg/kg		
	Endrin	10 µg/kg to 1000 µg/kg		
	Ethofenprox	10 µg/kg to 1000 µg/kg		
	Parathion	10 µg/kg to 1000 µg/kg		
	Fenitrothion	10 µg/kg to 1000 µg/kg		
	Fenpropathrin	10 µg/kg to 1000 µg/kg		

Laboratory Pesticide Residue and Food Quality Analysis Laboratory, University of Agricultural Sciences, Lingasugur Road, Raichur, Karnataka

Accreditation Standard ISO/IEC 17025: 2005

Certificate Number TC-7571

Page 4 of 7

Validity 12.07.2018 to 11.07.2020

Last Amended on --

Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
		Fenvalerate		10 µg/kg to 1000 µg/kg
		Fluchloralin		10 µg/kg to 1000 µg/kg
		Heptachlor		10 µg/kg to 1000 µg/kg
		Iprobenfos		10 µg/kg to 1000 µg/kg
		Lamda-cyhalothrin		10 µg/kg to 1000 µg/kg
		Methyl parathion		10 µg/kg to 1000 µg/kg
		p,p-DDE		10 µg/kg to 1000 µg/kg
		Permethrin		10 µg/kg to 1000 µg/kg
		Phenthoate		10 µg/kg to 1000 µg/kg
		Tetraconazole		10 µg/kg to 1000 µg/kg
		Triallate		10 µg/kg to 1000 µg/kg
		Trifluralin.		10 µg/kg to 1000 µg/kg
		Acephate		10 µg/kg to 1000 µg/kg
		Benalaxyl		10 µg/kg to 1000 µg/kg
		Bendiocarb		10 µg/kg to 1000 µg/kg
		Bitertenol		10 µg/kg to 1000 µg/kg
		Buprofezin		10 µg/kg to 1000 µg/kg
		Carbaryl		10 µg/kg to 1000 µg/kg
		Carbendazim		10 µg/kg to 1000 µg/kg
		Carbofuron		10 µg/kg to 1000 µg/kg
		Chlorantraniliprole		10 µg/kg to 1000 µg/kg
		Difenconazole		10 µg/kg to 1000 µg/kg
		Dimethoate		10 µg/kg to 1000 µg/kg
		Emamectinbenzoate		10 µg/kg to 1000 µg/kg
		Fenpyroximate		10 µg/kg to 1000 µg/kg
		Hexaconazole		10 µg/kg to 1000 µg/kg
		Hexythiazox		10 µg/kg to 1000 µg/kg
		Imidacloprid		10 µg/kg to 1000 µg/kg
		Isoproturon		10 µg/kg to 1000 µg/kg
		Metalachlor		10 µg/kg to 1000 µg/kg
		Metalaxyl		10 µg/kg to 1000 µg/kg
		Methoxyfenozide		10 µg/kg to 1000 µg/kg
		Metribuzin		10 µg/kg to 1000 µg/kg
		Omethoate		10 µg/kg to 1000 µg/kg

Laboratory **Pesticide Residue and Food Quality Analysis Laboratory, University of Agricultural Sciences, Lingasugur Road, Raichur, Karnataka**

Accreditation Standard **ISO/IEC 17025: 2005**

Certificate Number **TC-7571**

Page 5 of 7

Validity **12.07.2018 to 11.07.2020**

Last Amended on --

Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
		Paclobutrazole		10 µg/kg to 1000 µg/kg
		Penconazole		10 µg/kg to 1000 µg/kg
		Pendimethalin		10 µg/kg to 1000 µg/kg
		Phosalone		10 µg/kg to 1000 µg/kg
		Phosphomidon		10 µg/kg to 1000 µg/kg
		Pretilachlor		10 µg/kg to 1000 µg/kg
		Profenofos		10 µg/kg to 1000 µg/kg
		Pymetrozine		10 µg/kg to 1000 µg/kg
		Quinalphos		10 µg/kg to 1000 µg/kg
		Spinosad		10 µg/kg to 1000 µg/kg
		Tetraconazole		10 µg/kg to 1000 µg/kg
		Thiacloprid		10 µg/kg to 1000 µg/kg
		Thiobencarb		10 µg/kg to 1000 µg/kg
		Triademefon		10 µg/kg to 1000 µg/kg
		Triademenol		10 µg/kg to 1000 µg/kg
		Triazophos		10 µg/kg to 1000 µg/kg
<b>2.</b>	<b>Trace Metal Elements</b>			
<b>a.</b>	<b>Cereals, Pulses &amp; its Products</b>	Lead	AOAC official method of analysis 2013.06, 20 <sup>th</sup> edition, 2016, chapter 09. SOP/PRFQAL/211/00	0.001 mg/kg to 3.75 mg/kg
		Cadmium		0.001 mg/kg to 2.25 mg/kg
		Arsenic		0.001 mg/kg to 1.65 mg/kg
		Mercury		0.001 mg/kg to 1.50 mg/kg
		Copper		0.001 mg/kg to 45.0 mg/kg
		Zinc		0.001 mg/kg to 75.0 mg/kg
		Tin		0.001 mg/kg to 75.0 mg/kg
<b>II.</b>	<b>FOOD &amp; AGRICULTURAL PRODUCTS</b>			
<b>1.</b>	<b>Cereals, Pulses &amp; its Products</b>			
<b>a.</b>	<b>Rice</b>	Moisture	IS 4333 : 2002 (RA 2012) SOP/PRFQAL/201/00	1 % to 25 %
		Ash	IS 1155 : 1968 (RA 2010) SOP/PRFQAL/202/00	0.05 % to 5 %
		Crude Protein	AOAC 984.13, 20 <sup>th</sup> edition, 2016	1 % to 20 %

Laboratory

Pesticide Residue and Food Quality Analysis Laboratory, University of Agricultural Sciences, Lingasugur Road, Raichur, Karnataka

Accreditation Standard ISO/IEC 17025: 2005

Certificate Number TC-7571

Page 6 of 7

Validity 12.07.2018 to 11.07.2020

Last Amended on --

Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
			SOP/PRFQAL/205/00	
		Crude Fat	AOAC 2003.06, 20 <sup>th</sup> edition, 2016 SOP/PRFQAL/209/00	0.01 % to 10 %
		Crude Fibre	AOAC 962.09, 20 <sup>th</sup> edition, 2016 SOP/PRFQAL/210/00	0.05 % to 10 %
		Carbohydrates	IS 1656 : 2007 (RA 2009)	50 % to 90 %
<b>b.</b>	<b>Rice Flour</b>	Moisture	IS 4333 : 2002 (RA 2012) SOP/PRFQAL/201/00	1 % to 10 %
		Ash	IS 1155 : 1968 (RA 2010) SOP/PRFQAL/202/00	0.05 % to 5 %
		Crude Protein	AOAC 984.13, 20 <sup>th</sup> edition, 2016 SOP/PRFQAL/205/00	1 % to 20 %
		Crude Fat	AOAC 2003.06, 20 <sup>th</sup> edition, 2016 SOP/PRFQAL/209/00	0.01 % to 10 %
		Crude Fibre	AOAC 962.09, 20 <sup>th</sup> edition, 2016 SOP/PRFQAL/210/00	0.05 % to 10 %
		Carbohydrates	IS 1656:2007 (RA 2009)	50 % to 90 %
<b>c.</b>	<b>Red Gram</b>	Moisture	IS 4333:2002 (RA 2012) SOP/PRFQAL/201/00	1 % to 25 %
		Ash	IS 1155 : 1968 (RA 2010) SOP/PRFQAL/202/00	0.05 % to 10 %
		Crude Protein	AOAC 984.13, 20 <sup>th</sup> edition, 2016 SOP/PRFQAL/205/00	10 % to 50 %
		Crude Fat	AOAC 2003.06, 20 <sup>th</sup> edition, 2016 SOP/PRFQAL/209/00	0.01 % to 10 %
		Crude Fibre	AOAC 962.09, 20 <sup>th</sup> edition, 2016	0.05 % to 10 %

Sumit Sundriyal  
Convenor

Anuja Anand  
Program Manager

Laboratory

Pesticide Residue and Food Quality Analysis Laboratory, University of Agricultural Sciences, Lingasugur Road, Raichur, Karnataka

Accreditation Standard ISO/IEC 17025: 2005

Certificate Number TC-7571

Page 7 of 7

Validity 12.07.2018 to 11.07.2020

Last Amended on --

Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
			SOP/PRFQAL/210/00	
		Carbohydrates	IS 1656 : 2007 (RA 2009)	30 % to 75 %
d.	Red Gram Dhal	Moisture	IS 4333 : 2002 (RA 2012) SOP/PRFQAL/201/00	1 % to 20 %
		Ash	IS 1155 : 1968 (RA 2010) SOP/PRFQAL/202/00	0.05 % to 10 %
		Crude Protein	AOAC 984.13, 20 <sup>th</sup> edition, 2016 SOP/PRFQAL/205/00	10 % to 50 %
		Crude Fat	AOAC 2003.06, 20 <sup>th</sup> edition, 2016 SOP/PRFQAL/209/00	0.01 % to 10 %
		Crude Fibre	AOAC 962.09, 20 <sup>th</sup> edition, 2016 SOP/PRFQAL/210/00	0.05 % to 10 %
		Carbohydrates	IS 1656 : 2007 (RA 2009)	30 % to 75%
2.	<b>Bakery &amp; Confectionery Products</b>			
a.	Biscuit	Moisture	IS 4333 : 2002 (RA 2012) SOP/PRFQAL/201/00	1 % to 10 %
		Ash	IS 1155 : 1968 (RA 2010) SOP/PRFQAL/202/00	0.05 % to 10 %
		Crude Protein	AOAC 984.13, 20 <sup>th</sup> edition, 2016 SOP/PRFQAL/205/00	1 % to 50 %
		Crude Fat	AOAC 2003.06, 20 <sup>th</sup> edition, 2016 SOP/PRFQAL/209/00	0.01 % to 50 %
		Crude Fibre	AOAC 962.09, 20 <sup>th</sup> edition, 2016 SOP/PRFQAL/210/00	0.05 % to 20 %
		Carbohydrates	IS 1656:2007 (RA 2009)	10 % to 90 %