

Laboratory Farm Diagnostic Services (Agri Lab), Smartchem Technologies Limited, Ishanya Mall, 4th Floor, Airport Road, Shastri Nagar, Yerawada, Pune, Maharashtra

Accreditation Standard ISO/IEC 17025: 2005

Certificate Number TC-6585

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Validity 06.06.2018 to 28.11.2019

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
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CHEMICAL TESTING

I.	SOIL AND ROCK			
1.	Soil	Soil pH @ 25 °C	FAO:19 Soil Water suspension	0.01 to 14
		Electrical conductivity @ 25°C	FAO:19 Soil Water suspension	0.01 to 20 milliS/cm
		Organic Carbon	FAO:19 Walkley and Black Method	0.01 to 5.0%
		Available Nitrogen	FAO:19 Alkaline KMnO ₄ Method	25 to 1000 kg/ha
		Available Phosphorous	FAO:19 Olsen's Method	2.24 to 180 kg/ha
		Available Potassium	FAO:19 Ammonium Acetate Extract Method	56 to 1500 kg/ha
		Available Sulphur	FAO:19 Turbidimetric Method	0.1 to 10 mg/kg
		Available Calcium	FAO:19 Ammonium Acetate Extract Method	0.3 to 50 mg/kg
		Available Magnesium	FAO:19 Ammonium Acetate Extract Method	0.03 to 50 mg/kg
		Available Boron	FAO:19 Hot Water Extract Method	0.04 to 4 mg/kg
		Available Copper	FAO:19 DTPA Extraction Method	0.1 to 20 mg/kg
		Available Iron	FAO:19 DTPA Extraction Method	0.1 to 40 mg/kg
		Available Manganese	FAO:19 DTPA Extraction Method	0.1 to 40 mg/kg

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Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
		Available Zinc	FAO:19 DTPA Extraction Method	0.03 to 10 mg/kg
		Total Calcium carbonate	FAO Total Calcium carbonate	1 to 70
2.	Plant	Total Nitrogen	AOAC official method 978.04	0.005 to 10 %
		Total Phosphorous	AOAC Official Method 985.01 & 975.03	0.005 to 10 %
		Total Potassium	AOAC Official Method 985.01 & 975.03	0.005 to 10 %
		Total Sulphur	FAO:19 Turbidimetric Method	0.005 to 10 %
		Total Calcium	AOAC Official Method 985.01 & 975.03	0.005 to 10 %
		Total Magnesium	AOAC Official Method 985.01 & 975.03	0.005 to 10 %
		Total Copper	AOAC Official Method 985.01 & 975.03	1 to 2000 mg/kg
		Total Iron	AOAC Official Method 985.01 & 975.03	1 to 2000 mg/kg
		Total Manganese	AOAC Official Method 985.01 & 975.03	1 to 2000 mg/kg
		Total Zinc	AOAC Official Method 985.01 & 975.03	1 to 2000 mg/kg
		Total Boron	AOAC Official Method 985.01 & 975.03	1 to 2000 mg/kg