

Accreditation No: LAB 133

Awarded to

Soil & Water Testing Laboratory for Research. Rawalpindi. Pakistan.

The scope of accreditation is in accordance with the standard specifications outlined in the following page(s) of this document. The accredited scope shall be visible and legible in areas such as customer service, sample-receiving section etc and shall not mislead its users.

The accreditation was first time granted on **14-03-2018** by Pakistan National Accreditation Council.

The laboratory complies with the requirements of ISO/IEC 17025:2017.

The accreditation requires regular surveillance, and is valid until 13-03-2021.

The decision of accreditation made by Pakistan National Accreditation Council implies that the organization has been found to fulfill the requirements for accreditation within the scope.

The organization however, itself is responsible for the results of performed measurements/tests.

PAKISTAN NATIONAL ACCREDITATION COUNCIL

07-02-2020 Date ____Sd____ Director General



Testing Laboratory.

Accreditation Scope of Soil & Water Testing Laboratory for Research Rawalpindi. Pakistan.

Permanent laboratory premises X

Materials/Prod ucts tested	Testing field (e.g. environmental testing or mechanical testing)	Types of test/ Properties measured	Reference to standardized method (e.g. ISO 14577-1:2003)/ Internal method reference
Fertilizer Macronutrients	Chemical Testing	Total Nitrogen in solid/liquid fertilizer Ammonical Nitrogen in solid/liquid fertilizer Nitrate Nitrogen in solid/liquid fertilizer	Official Methods of Analysis of AOAC International, 20 th Edition, 2016. Method No. 2.4.05 (AOAC Official Method 978.02), Fertilizers Chapter 2 Page 14- 15.
		Total Phosphate in solid/liquid fertilizer	Pakistan standard for Single Super Phosphate (2 nd edition) PS: 67-1996. PSQCA. Karachi Vogel's Text book of quantitative chemical analysis 6 th edition, Pearson education, India
		Total Potassium in solid/liquid fertilizer	Richards. L. A. 1954. Diagnosis and improvement of saline and alkali soils. USDA, Agric., Handbook 60, Washington, D.C.
Fertilizer Micronutrients		Zinc (Zn) in solid/liquid/ mixed fertilizer	Official Methods of Analysis of AOAC International, , 20 th Edition, 2016. Method No. 2.6.01 (AOAC Official Method 965.09), Fertilizers Chapter 2, Subchapter 6, Page 29-30
Fertilizer Micronutrients	Chemical Testing	Cupper (Cu) in solid/liquid/ mixed fertilizer	Official Methods of Analysis of AOAC International, 20 th Edition, 2016. Method No. 2.6.01 (AOAC Official Method
_07-02-2020			Sd



	965.09), Fertilizers Chapter 2, Subchapter 6, Page 29-30
Ferrous (Fe) in	Official Methods of Analysis of AOAC
solid/liquid/ mixed	International, 20 th Edition, 2016. Method
fertilizer	No. 2.6.01 (AOAC Official Method
	965.09), Fertilizers Chapter 2,
	Subchapter 6, Page 29-30
Manganese (Mn) in	Official Methods of Analysis of AOAC
solid/liquid/ mixed	International, 20 th Edition, 2016. Method
fertilizer	No. 2.6.01 (AOAC Official Method
	965.09), Fertilizers Chapter 2,
	Subchapter 6, Page 29-30
Boron (B) in	Official Methods of Analysis of AOAC
solid/liquid/ mixed	International, 20 th Edition, 2016. Method
fertilizer	No. 2.6.04 (AOAC Official Method
	982.01), Fertilizers Chapter 2,
	Subchapter 6, Page 28.
Chelated (Zn, Cu, Fe	Vogel's Textbook of quantitative
& Mn) in	chemical Analysis, Sixth Edition. J
solid/liquid fertilizer	Mendham, R C Denney, J D Barnes, M
1	J K Thomas
	Official Methods of Analysis of AOAC
	International, 20 th Edition, 2016,
	Method No. 2.6.01 (AOAC Official Method 065 00) Fartilizare Chapter 2
	Method 965.09), Fertilizers Chapter 2, Page 29-30