

	ACCREDITATION DOCUMENT	F-06/02 Issue Date: 18/08/2020 Rev. No: 09 LAB 189
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Accreditation No: LAB 189

Awarded to

**Gonal International Quality Control Laboratory,
Multan, 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 **24-01-2020** by Pakistan National Accreditation Council.

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

The accreditation requires regular surveillance, and is valid until **23-01-2026**.

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

14-06-2023

Date

SD

Director General



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Testing Laboratory.

Accreditation Scope of Gonal International Quality Control Laboratory, Multan, Pakistan.

Permanent laboratory premises

Materials/Products 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
Pesticides (Finished/Formulated products) Acetamiprid, Imidacloprid, Chlorpyrifos, Pyriproxyfen, Triazophos, Lufenuron, Fipronil, Monomehypo, Bifenthrin, Lambda Cyhalothrin and Clothianidin Fertilizers (Finished/Formulated products) Potash (K ₂ O), Phosphorous (P ₂ O ₅), Nitrogen, Zinc (Zn), Sulfur (S), Ferrous (Fe), Copper (Cu) and Humic Acid.	Physical Testing	Qualitative determination of (pH)	(GONAL/QCL/pH) Verified Method based on CIPAC Hand Book, Volume J (2000), Method # MT 75.3 Page 131 pH meter
Pesticides (Finished/Formulated EC, SL, EW & OD Products) Acetamiprid, Imidacloprid, Chlorpyrifos, Triazophos, Pyriproxyfen, Lufenuron, Fipronil, Monomehypo, Bifenthrin, Lambda Cyhalothrin and Clothianidin		Qualitative determination of (Emulsion)	(GONAL/QCL/Em) Verified Standard Method based on CIPAC Hand Book, Volume F, (1994 reprinted 2007) Page 108, 109. Method # MT36.1 Physical Appearance
Pesticides (Finished/Formulated products) Acetamiprid, Imidacloprid, Chlorpyrifos, Pyriproxyfen, Triazophos, Lufenuron, Fipronil, Monomehypo, Bifenthrin, Lambda Cyhalothrin and Clothianidin		Qualitative determination of (Density)	(GONAL/QCL/D) Verified Standard Method based on CIPAC Hand Book, Volume -F (1994 reprinted 2007) Page #13, Method # MT 3.2 Pyknometer Method

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<p>Fertilizers (Finished/Formulated products) Potash (K₂O), Phosphorous(P₂O₅). Nitrogen, Zinc, Sulfur (S),Ferrous(Fe),Copper(Cu) and Humic Acid</p>			
<p>Pesticides (Finished/Formulated Wp, Sp, WS, WDG, SC Products) Acetamiprid, Imidacloprid,Chlorpyrifos, Pyriproxyfen,Triazophos, Lufenuron, Fipronil, Monomehypo ,Bifenthrin, Lambda Cyhalothrin and Clothianidin</p>		<p>Quantitative determination of (Suspension)</p>	<p>(GONAL/QCL/Sus.) Verified Standard Method based on CIPAC Hand Book, Volume F, (1994 reprinted 2007), Page 45. Method # MT 15.1 Gravimetric</p>
<p>Pesticides (Finished/Formulated WP, SP, WS, WDG Products) Acetamiprid, Imidacloprid,Chlorpyrifos, Pyriproxyfen,Triazophos, Lufenuron, Fipronil, Monomehypo, Bifenthrin, Lambda Cyhalothrin and Clothianidin</p>		<p>Quantitative determination of (Wettability)</p>	<p>(GONAL/QCL/Wet) Verified Standatd Method based on CIPAC Hand Book, Volume F, (1994 reprinted 2007) Page164. Method # MT53.3 Gravimetric</p> <p>)</p>

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<p align="center">Fertilizers (Formulation/Finished & Technical) (Solids & Liquids) Potash (K₂O) Phosphorous (P₂O₅) Nitrogen (Uric, Nitric, Ammoniacal & Total), Zinc (Zn), , Sulfur (S), Ferrous(Fe), Copper(Cu) and Humic Acid</p>	<p align="center">Chemical Testing</p>	<p>Quantitative determination of Potash (Active)</p>	<p align="center">(GONAL/QCL/K₂O) Verified Standard Testing Method of Potassium based on Method #971.01. AOAC Official Method of Analysis. (Flame Photometer Technique)</p>
		<p>Quantitative determination of (P₂O₅) (Active)</p>	<p align="center">(GONAL/QCL/P₂O₅) Verified Official Methods of Analysis of AOAC International, 18th Edition 2005, Current Through Revision, 4 2011, method # 2 4 05 (AOAC Method 978 2) Fertilizer Chapter 2, Page 14 -15. (Titration Method)</p>
		<p>Quantitative determination of (Nitrogen (Active Ingredient Ammoniacal, Uric, Nitric and Total Nitrogen)</p>	<p align="center">GONAL/QCL/N AOAC, Official method of Analysis, 18th Edition, 2005, Current Through Revision, 4, 2011, Method No. 2.4.05 (AOAC Official Method 978.02) Fertilizers Chapter 2, Page 14-05 (Kjeldahl Method)</p>
		<p>Quantitative determination of Zinc (Active Ingredient)</p>	<p align="center">(GONAL/QCL/Zn) Verified HACH Kit Method USEPA 8009 Spectrophotometer Method</p>
		<p>Quantitative determination of Sulfur (S) (Active Ingredient)</p>	<p align="center">(GONAL/QCL/S) Analytical Method of Member Companies of the Corn Refiners Association, Inc. Accepted 11-12-71 Revised 3-1-95</p>
		<p>Quantitative</p>	<p align="center">(GONAL/QCL/Fe)</p>

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		<p>determination of Ferrous (Fe) (Active Ingredient)</p> <p>Quantitative determination of Ferrous (Cu) (Active Ingredient)</p> <p>Quantitative determination of Humic Acid (Active Ingredient)</p>	<p>AOAC International 20th Edition, Method # 2.6.01-C(e1) Fertilizers Chapter 2, Sub chapter 6, Page # 29-30.</p> <p align="center">(GONAL/QCL/Cu)</p> <p>AOAC International 20th Edition, Method # 2.6.01-C(e1) Fertilizers Chapter 2, Sub chapter 6, Page # 29-30.</p> <p align="center">(GONAL/QCL/HA)</p> <p>F.J. Stevenson, J. Environ. 1972.1.333</p> <p>A.K. fataftah, PhD Thesis, North Eastern University, Boston, 1997.</p> <p>TL Senn and AR Kingmann, A review & Humic Acid research.</p>
<p align="center">Pesticides (Finished & Formulated/SL/WP/SP/WDG/W G/SC Products & Technical)</p> <p align="center">Acetamiprid Chlorpyrifos Pyriproxyfen Triazophos Imidacloprid Lufenuron Fipronil, Monomehypo, Bifenthrin, Lambda Cyhalothrin and Clothianidin</p>		<p>Quantitative determination of (Acetamiprid) (Active Ingredient)</p> <p>Quantitative determination of (Chlorpyrifos) (Active Ingredient)</p> <p>Quantitative</p>	<p align="center">(GQCL/001)</p> <p>Inhouse modified validated method, based on CIPAC Hand Book, Volume L, page 4, Method 649. HPLC Technique</p> <p align="center">(GQCL/002)</p> <p>Inhouse modified validated method based on CIPAC Hand Book, Volume 1C. Page #2028. Method # 221-B HPLC Technique</p> <p align="center">GQCL/003.</p>

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		determination of (Pyriproxyfen Active Ingredient)	Inhouse modified validated method based on CIPAC Hand Book, Volume M, Page # 180 – 182, method # 715 HPLC Technique
		Quantitative determination of (Triazophos) (Active Ingredient)	GQCL/004 Inhouse modified validated method based on CIPAC Hand Book, Volume K. Page # 288 – 290. Method # 353 HPLC Technique
		Quantitative determination of (Imidacloprid) (Active Ingredient)	GQCL/005. Inhouse modified validated method based on CIPAC 582CIPAC Hand Book, Volume K Page # 70 – 73. Method # 582 HPLC Technique
		Quantitative determination of (Lufenuron) Active Ingredient)	GQCL/006. Inhouse modified validated method based on CIPAC Hand Book, Vol M, Page # 106. Method # 704/TC/M HPLC Technique
		Quantitative determination of (Fipronil) Active Ingredient)	GQCL/007. Inhouse modified validated method based on CIPAC Hand Book, Vol J, Page # 60-65. Method # 581/TC/M HPLC Technique
		Quantitative	GQCL/008. Inhouse modified validated method based on

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		<p>determination of (Monomehyppo) Active Ingredient)</p> <p>Quantitative determination of (Bifenthrin) Active Ingredient</p> <p>Quantitative determination of (Lambda Cyhalothrin) Active Ingredient</p> <p>Quantitative determination of (Lambda Cyhalothrin) Active Ingredient</p>	<p>Standard Method for Analysis of Technical & Formulated Pesticides. Page # 86,87 HPLC Technique Reference: Company Method, Pak China Agro Chemicals,Pvt,Ltd</p> <p align="center">-</p> <p align="center">GQCL/009 Inhouse modified validated method based on NLA-PT-TP07-03,Page # 8-9 (Standard Method for Analysis of Technical & Formulated Pesticides, page #36-37) HPLC Technique</p> <p align="center">(GQCL/010) Inhouse modified validated method, based on CIPAC Hand Book, Volume E, page 49-53, Method 463. GLC Technique</p> <p align="center">GQCL/011. Inhouse modified validated method based on CIPAC Hand Book, Vol N, Page # 17-17. Method # 738 HPLC Technique</p>
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