TESTING AND CALIBRATION LABORATORY ACCREDITATION PROGRAM (LAP)

Scope of Accreditation

Accredited Laboratory No. 316

Legal Name of Accredited Laboratory:	**Canadian Food Inspection Agency**
Location Name or Operating as:	OTTAWA LABORATORY - FALLOWFIELD
Contact Name:	Ray Theoret
Address:	3851 Fallowfield Rd, Ottawa, ON K2H 8P9
Telephone:	+1 343 212 0212
Fax:	+1 343 212 0201
Email:	Ray.Theoret@inspection.gc.ca

SCC File Number:	15367
Accreditation Standard(s):	ISO/IEC 17025:2017 General requirements for the competence of testing and calibration laboratories
Fields of Testing:	Biological
Program Specialty Area:	Agriculture Inputs, Food, Animal Health and Plant Protection (AFAP) Test Method Development and Evaluation and Non-routine Testing (TMDNRT)
Initial Accreditation:	1999-12-17
Most Recent Accreditation:	2020-03-13
Accreditation Valid to:	2023-12-17

TEST METHOD DEVELOPMENT & EVALUATION AND NON-ROUTINE TESTING:

Note: Laboratories accredited under this Program Specialty Area have demonstrated that they meet ISO/IEC 17025 requirements for routine testing under the same product classification as described above.

Canada

Ottawa Plant Laboratory
To develop and/or validate new methods for the detection and/or identification of plant quarantine pests, invasive alien species, plant species and/or cultivars (including genetically modified) using DNA-based, biochemical, serological, and other techniques and through the collection of reference sequence and fingerprints.

Specific techniques used:

1. Isolation and culture of fungi, bacteria and nematodes
2. Microscopic examination, morphological and morphometric identification
3. Moist chambers/blotter boxes for plant material and seeds, filtration of water, soil baiting, selective size sieving
4. GC-FAME and BIOLOG carbohydrate utilization assays for bacterial identification
5. ELISA for seedborne virus identification
6. DNA based methodologies including DNA extraction, Agarose Gel Electrophoresis, PCR (end-point PCR, qPCR, conventional PCR) SNP genotyping, Capillary DNA genetic analyser for Sanger sequencing and microsatellite analysis, next generation sequencing and isothermal amplification

Ottawa Animal Health Laboratory (OAHL)
To develop, optimize, validate and transfer new methods for improving the diagnosis and control of diseases in animals in support of Program activities related to disease detection and surveillance.

Specific techniques used:

1. Conventional culture methods of bacterial agents,
2. Virus cell culture, titration, isolation, growth, purification of whole virus and components and virus neutralization assays
3. Antibody purification (affinity columns), antibody labelling (FITC and enzymes),
4. Enzyme linked immunosorbent assays (ELISAs) - indirect and competitive and ligand based EIAs, fluorescence polarization assay (FPA)
5. Histopathology, immunofluorescence staining of infected cells and tissues (direct and indirect)
6. Protein based techniques including protein concentration estimation assays, polyacrylamide gel electrophoresis (SDS-PAGE), Western blot, Immunblot, protein misfolding cyclic amplification (PMCA), real-time quaking induced conversion assay (RT-QuIC)
7. RNA/DNA based methods including extraction, nucleic acid measurement (spectrophotometric or fluorescent methods), RT-PCR (reverse transcription PCR), qPCR (real-time PCR), RT-qPCR, multi-locus variable-number tandem repeat analysis, DNA sequencing including Sanger and Illumina technologies
8. Mouse bioassay

Food Safety Research
To develop and evaluate new testing methodologies for the isolation, characterization and detection of microbial pathogens in foods.

1. Bacterial culture, isolation and identification tools including conventional culture methods, immunomagnetic separation and biochemical procedures
2. Molecular cloning of bacterial genes
3. Expression and purification of recombinant proteins
4. Identification of bacterial proteins using mass spectrometry
5. Techniques for extraction, purification and quantitation of DNA/RNA and proteins including gel and capillary electrophoresis and sequencing
6. Immunological tools (agglutination, ELISA and Western blotting)
7. DNA/RNA based techniques including: PCR (conventional, multiplex and real-time) SNP analysis, loop-mediated isothermal nucleic acids amplification, whole genome sequencing and bioinformatics tools

ANIMAL AND PLANTS (AGRICULTURE)

Ottawa Plant Laboratory - Entomological Examinations*

III. SOP# OPL-PR012	IV. Identification of Insects, Mites and Terrestrial Molluscs
V.	VI.

Ottawa Plant Laboratory - Genotyping/Botanical Examinations*

VII. SOP# OPL-PR084	VIII. Diagnostic Testing for LMOs
IX. SOP# OPL-PR085	X. Genotyping of Plant Varieties using Amplified Fragment Length Polymorphism (AFLP)
XI. SOP# OPL-PR109	XII. Botanical Identification of Plant Species
XIII. SOP# OPL-PR126	XIV. Genotyping of Plant Varieties using SSRs

Ottawa Plant Laboratory - Nematological Examinations*

XV. LDP# PQ-LD003	XVI. The Extraction, Recovery, Mounting and Identification of Plant Parasitic Nematodes from Soil, Plant Medium and Plant Material.

Ottawa Plant Laboratory-Phytopathological – Examinations*

XVII. SOP# OPL-PR028	XVIII. Seed Wash Extraction for all Ustilaginales and other Fungal Spores Transported by Grain and Straw
XIX. SOP# OPL-PR037	XX. Detection of *Curtobacterium flaccumfaciens pv.flaccumfaciens* in seed
XXI. SOP# OPL-PR038	XXII. Detection of *Xanthomonas translucens* pathovarsin seed
XXIII. SOP# OPL-PR041	XXIV. Detection of *Pseudomonas syringae, pv. atrofacians, striafaciens* and *coronafaciens* in seed
XXV. SOP# OPL-PR098	XXVI. Detection of *Phytophthora ramorum* by TaqMan Real Time PCR using a Liquid Handling Robotic System
XXVII. SOP# OPL-PR100	XXVIII. General Diagnostic Procedures for Plant, Seed, Soil and Water Samples Submitted for the Routine Diagnosis of Plant Diseases and for the Identification of Plant Pathogens

Veterinary-OAHL-Anatomic Pathology – Histopathology, Mycobacterial Diseases

XXIX. SOP# MY-PR036	XXX. Histopathological Interpretation of Tissues Submitted from Animals Suspected of Tuberculosis
XXXI. SOP# MY-PR099	XXXII. Detection of Mycobacterium tuberculosis Complex Organisms in Formalin-fixed, Paraffin-embedded Tissues by PCR Amplification of an IS6110 Insertion Sequence

Veterinary-OAHL-Anatomic Pathology - Rabies

XXXIII. LDP# RA-LD001	XXXIV. Fluorescent Antibody Test (FAT) for the Detection of Rabies Virus Antigen

Veterinary-OAHL-Anatomic Pathology-Transmissible Spongiform Encephalopathy

XXXV. SOP# TS-PR023	XXXVI. Detection of Central Nervous System Tissue in Beef by Histological Examination of Hematoxylin and Eosin Staining and GFAP Immunohistochemistry
XXXVII. SOP# TS-PR026	XXXVIII. Detection of Prion Protein Associated with BSE, Scrapie and CWD using the Bio-Rad TeSeE™ Purification Kit and TeSeE™ SAP Detection Kit
XXXIX. SOP# TS-PR040	XL. Genotyping Sheep for Scrapie Susceptibility/Resistance by Real-Time PCR
XLI. SOP# TS-PR044	XLII. Confirmation of Prion Protein Specific for Scrapie and CWD Using BioRad's TeSeE™ Western Blot Kit
XLIII. SOP# TS-PR046	XLIV. Immunohistochemical Detection of Prion Protein in Animal Transmissible Spongiform Encephalopathies: Scrapie in Sheep and Goats
XLV. SOP# TS-PR048	XLVI. Immunohistochemical Detection of Prion Protein in Animal Transmissible Spongiform Encephalopathies: Chronic Wasting Disease (CWD) in Deer and Elk
XLVII. SOP# TS-PR056	XLVIII. Allelic Determination for Elk Codon 132 and White-Tailed Deer Codon 96 by Real-Time PCR

Veterinary-OAHL-Microbiology-Animal Health Microbiology

XLIX. LDP# AHML-LD001	L. Bovine Genital Campylobacteriosis - Procedure for the Isolation and Identification of *Campylobacter fetus*
LI. LDP# AHML-LD004	LII. Contagious Equine Metritis: Procedure for the Isolation and Identification of *Taylorella equigenitalis*
LIII. LDP# AHML-LD005	LIV. Salmonellosis: Procedure for the Isolation and Identification of *Salmonella* Serovars
LV. SOP# AHML-PR007	LVI. Detection of *Campylobacter fetus ssp*. in Clark's TEM samples, and identification of suspect *C.fetus ssp*. pure culture isolates, using an antigen capture Monoclonal antibody based ELISA procedure

LVII. SOP# AHML-PR013	LVIII. Detection of *Taylorella equigenitalis* from submitted sample swabs from horses and proficiency panel samples, and to help confirm the accurate identification of pure culture suspect isolates as *T.equigenitalis*, including *discrimination from Taylorella asinigenitalis* using a Quantitative Real-Time PCR (qPCR)

Veterinary-OAHL-Microbiology-Mycobacterial Diseases

LIX. SOP# MY-PR022	LX. Differentiation of mycobacterial isolates on the basis of growth characteristics and preparation of inoculum for identification
LXI. SOP# MY-PR032	LXII. The Processing of Specimens for Mycobacterial Isolation

Veterinary-OAHL-Serological Diagnosis, Brucellosis

LXIII. LDP# BR-LD009	LXIV. Protocol for the Agar Gel Immunodiffusion Test for the detection of antibodies to Paratuberculosis in animal serum
LXV. LDP# BR-LD011	LXVI. Protocol for the *Brucella* Buffered Plate Agglutination Test (BPAT) for the detection of antibodies to *Brucella abortus, melitensis and suis*
LXVII. LDP# BR-LD022	LXVIII. Protocol for the *Brucella* EDTA modified Tube Agglutination Test (TAT) for the detection of antibodies to *Brucella abortus, B. melitensis and B. suis*
LXIX. LDP# BR-LD026	LXX. Protocol for the Tube Agglutination Test for the Detection of Antibodies to Equine Paratyphoid
LXXI. SOP# BR-PR005	LXXII. Micro Complement Fixation Test
LXXIII. SOP# BR-PR007	LXXIV. Macro Complement Fixation Test
LXXV. SOP# BR-PR038	LXXVI. Use of the *Mycobacterium paratuberculosis* Antibody Test kit (ELISA) for the Diagnosis of *Mycobacterium paratuberculosis* infections in cattle
LXXVII. SOP# BR-PR040	LXXVIII. Fluorescence Polarization Assay (FPA) (single tube) for detection of serum antibody to *Brucella spp*: Presumptive serological diagnosis in bison, cervids, sheep and goats
LXXIX. SOP# BR-PR041	LXXX. Competitive Enzyme Linked Immunosorbent assay (C ELISA)for Detection of Serum Antibodies to *Brucella spp*.: Presumptive serological diagnosis in cattle, bison and cervids
LXXXI. SOP# BR-PR042	LXXXII. Indirect Enzyme Immunosorbent Assay (I-ELISA)for Detection of Serum Antibodies to *Brucella spp*.: Presumptive serological diagnosis in goats, pigs and sheep
LXXXIII. SOP# BR-PR048	LXXXIV. High Throughput 96 Well Fluorescence Polarization Assay (FPA) for detection of porcine antibody to *Brucella spp.*

LXXXV. SOP# BR-PR047	LXXXVI. High Throughput 96 Well Fluorescence Polarization Assay (FPA) for detection of bovine antibody to *Brucella spp.*
LXXXVII. SOP#SDU-PR004	LXXXVIII. Use of the Mycobacterium Bovis Antibody Test kit (ELISA) for the diagnosis of Mycobacterium bovis infections in cattle
LXXXIX. SOP#SDU-PR008	XC. Use of the BOVIGAM® *Mycobacterium bovis* Gamma Interferon Test Kit (Phase 2) for the in vitro diagnosis of bovine tuberculosis in cattle

Number of Scope Listings: 44

Notes:

CLIENTS SERVED: Normally Reserved for Internal Clients

LDP, SOP: Subject Laboratory's Internal Procedures

ISO/IEC 17025: General Requirements for the Competence of Testing and Calibration Laboratories

RG-PT-Annex A: SCC Requirements and Guidance –Proficiency Testing for Testing and Medical Laboratories, Annex A: Agriculture Inputs, Food, Animal Health and Plant Protection (AFAP) Testing Laboratories

RG-TMDNRT: SCC Requirements and Guidance for Accreditation of Laboratories Engaged in Test Method Development and Non-Routine Testing

Ottawa Plant Laboratory - Entomological Examinations)*
Testing conducted at:
Canadian Food Inspection Agency (CFIA)
Ottawa Plant Laboratory (Central Experimental Farm) - Entomology
960 CARLING AVENUE, BUILDING 18 and K. W. Neatby Building
Ottawa, Ontario K1A 0C6
Canada

This document forms part of the Certificate of Accreditation issued by the Standards Council of Canada (SCC). The original version is available in the Directory of Accredited Laboratories on the SCC website at www.scc.ca.

Elias Rafoul
Vice-President, Accreditation Services
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