

----- Original Message -----

Subject:Re: Biological Agents Registry Form (Krishna)

Date:Thu, 03 Mar 2011 11:45:12 -0500

From:R Greg Thorn <rgthorn@uwo.ca>

To:Jennifer Stanley <jstanle2@uwo.ca>

Hi Jennifer:

Leptosphaeria maculans (asexual state *Phoma lingam*) and *Alternaria brassicae* are both plant pathogens of concern to Canadian crops. I will be interested to see what containment level is suggested by CFIA, although I suspect it might be CL1+. Both fungi infect crop plants by airborne spores, thus any work in the Krishna lab should attempt to minimize the production of airborne inoculum. If a wet-inoculation method is used (pricking, painting or dipping, as opposed to misting particulate inoculum onto plant surfaces) in enclosed spaces (lab, greenhouse, growth chamber) there should be little or no risk. These fungi are not known to cause any disease in humans or animals.

So long as these precautions are taken, and all cultures and contaminated materials are treated as biohazardous waste and are properly autoclaved prior to disposal (as stated in the BARF), I see no problems with the proposed research.

Cheers,
Greg



New Info

----- Original Message -----

Subject:RE: Biological Agents Registry Form: Kristna

Date:Wed, 23 Mar 2011 10:58:03 -0400

From:Wang, Aiming <Aiming.Wang@agr.gc.ca>

To:Jennifer Stanley <jstanle2@uwo.ca>

CC:jsmillar@uwo.ca

Hi Jennifer:

I have reviewed the document you sent. *Leptosphaeria maculans* is a fungal pathogen that causes blackleg disease on Brassicas. *Alternaria brassicae* affects most cruciferous crops. To my knowledge, both of them are endemic in Canada and are not regulated in Canada. If these two pathogens are only used for test in growth chambers or contained greenhouse (not in the field) and infected materials are disposed by autoclaving, I think it is Ok. I do not think this work requires a level 2 licence. However, if Dr. Krishna wants to import these pathogens from other countries, CFIA will not likely issue a permit before the lab is qualified for level 2 work.

Best wishes,

Aiming

Aiming Wang, PhD

Research Scientist | Chercheur

Southern Crop Protection and Food Research Centre | Centre de recherches du Sud sur la phytoprotection et les aliments

Agriculture and Agri-Food Canada | Agriculture et Agroalimentaire Canada

1391 Sandford St.

London, ON, N5V 4T3, Canada

Aiming.Wang@agr.gc.ca

Telephone: 519-457-1470 ext. 313

Facsimile: 519-457-3997

Government of Canada | Gouvernement du Canada

<http://www4.agr.gc.ca/AAFC-AAC/display-afficher.do?id=1181925102228&lang=eng>

701 Jennifer
SSB 4190C

Jan 19 2011
Revised with
information
on Section
1.2.

THE UNIVERSITY OF WESTERN ONTARIO
BIOLOGICAL AGENTS REGISTRY FORM
Approved Biohazards Subcommittee: October 14, 2010
Biosafety Website: www.uwo.ca/humanresources/biosafety/

This form must be completed by each Principal Investigator holding a grant administered by the University of Western Ontario (UWO) or in charge of a laboratory/facility where the use of Level 1, 2 or 3 biological agents is described in the laboratory or animal work proposed. The form must also be completed if any work is proposed involving animals carrying zoonotic agents infectious to humans or involving plants, fungi, or insects that require Public Health Agency of Canada (PHAC) or Canadian Food Inspection Agency (CFIA) permits.

This form must be updated at least every 3 years or when there are changes to the biological agents being used.

Containment Levels will be established in accordance with Laboratory Biosafety Guidelines, 3rd edition, 2004, Public Health Agency of Canada (PHAC) or Containment Standards for Veterinary Facilities, 1st edition 1996, Canadian Food Inspection Agency (CFIA).

Completed forms are to be returned to Occupational Health and Safety, (OHS), (Support Services Building, Room 4190) for distribution to the Biohazards Subcommittee. For questions regarding this form, please contact the Biosafety Officer at extension 81135 or biosafety@uwo.ca. If there are changes to the information on this form (excluding grant title and funding agencies), contact Occupational Health and Safety for a modification form. See website: www.uwo.ca/humanresources/biosafety/

| | |
|---------------------------|--|
| PRINCIPAL INVESTIGATOR | Priti Krishna |
| DEPARTMENT | Biology |
| ADDRESS | B&G Sci Rm 3061 |
| PHONE NUMBER | Ext 86473 |
| EMERGENCY PHONE NUMBER(S) | 519-438-9518 |
| EMAIL | pkrishna@uwo.ca |

Location of experimental work to be carried out: Building(s) B&G Sci Bldg Room(s) 3061

*For work being performed at Institutions affiliated with the University of Western Ontario, the Safety Officer for the Institution where experiments will take place must sign the form prior to its being sent to the University of Western Ontario Biosafety Officer (See Section 15.0, Approvals).

FUNDING AGENCY/AGENCIES: NSERC, AAFC-ABIP, OMAFRA
GRANT TITLE(S):
Functions of Hsp90,
Brassio steroid mediated stress tolerance
Sea buckthorn transcriptome and metabolome

List all personnel working under Principal Investigators supervision in this location:

| <u>Name</u> | <u>UWO E-mail Address</u> | <u>Date of Biosafety Training</u> |
|-----------------------|--|-----------------------------------|
| Jason Lehrer | jlehrer@uwo.ca | Feb 20 th , 2009 |
| Maryam Khodai-Kalaiki | mkhodaik@uwo.ca | Oct 14 th , 2009 |
| Bishun Prasad | bprasad2@uwo.ca | Nov 17 th 2010 |
| Tawhid Rahman | trahman3@uwo.ca | Dec 7 th 2010 |
| Tahira Fatima | tfatima@uwo.ca | March 2009 |
| Sangita Sahni | ssahani3@uwo.ca | Nov 17 th , 2010 |
| Rajesh gupta | g_rkumar2000@yahoo.co.in | |
| | | |
| | | |

See E-mail

Please explain the biological agents and/or biohazardous substances used and how they will be stored, used and disposed of. Projects without this description will not be reviewed.

1. *E.coli* (DH5 α) used for cloning, disposed by autoclaving
2. *Arabidopsis* and *Brassica napus* transgenic plants (used for research only to understand functional significance of gene(s), disposed by autoclaving.
3. Ethidium Bromide, used in DNA and RNA visualization, disposed by chemical waste disposal through RPR Environmental.
4. Acrylamide: Used in Protein Gel electrophoresis, , disposed by chemical waste disposal through RPR Environmental.
5. *Leptosphaeria maculans* & *Alternaria brassicae* ~~agents~~ ^{will be} used for pathotesting, disposed by autoclaving.

Please include a one page research summary or teaching protocol.

The highly conserved and abundant molecular chaperone Hsp90 (heat shock protein 90) plays key roles in signal transduction, protein degradation and trafficking, chromatin remodeling, epigenetic regulation, and morphological evolution. The significance of Hsp90 is indicated by its 1) **indispensable role in regulating cell growth** through modulations of various signal transduction pathways and its participation in protecting cells from stress; 2) **potential as a capacitor for morphological evolution**, linking response to environmental stresses with development in a way that could influence evolutionary change; 3) **position as a cancer chemotherapeutic target** due to its interactions with key oncogenic client proteins. Hsp90 inhibitors like geldanamycin (GA) and radicicol (RA) interrupt the intrinsic ATPase activity of Hsp90, causing degradation of the client proteins via the ubiquitin-proteasome pathway.

The current project is focused on obtaining a detailed understanding of the functions of Hsp90 in plants and its mode of action. Hsp90 is of particular interest in plants because plants are subjected to sudden changes in their environment that invoke rapid molecular responses, the Hsp90 protein family is the largest in plants as compared to other organisms, and plants contain an additional compartment, the plastid. The study of Hsp90 functions in plants will undoubtedly lead to novel aspects of Hsp90, advancing the link between stress, development and evolution. A good knowledge of the plant Hsp90 system will facilitate our understanding of how proteins are folded, stabilized, activated and trafficked in plant cells.

In recent years we have identified components of the ethylene signaling pathway, ethylene receptors ERS2 and EIN4, and the negative regulator CTR1) as potential novel client proteins of Hsp90. In addition we have uncovered by an in silico approach 24 novel tetratricopeptide repeat (TPR) domain proteins in Arabidopsis as novel co-chaperones of plant Hsp90. This first ever near to complete set of potential TPR co-chaperones uncovered in any organism suggests that the Hsp90 chaperone machinery relies on TPR co-chaperones more than it was previously realized.

The objectives of this project are to 1) characterize in detail Hsp90 complexes in the ethylene signaling pathway and define the functional interrelationships between Hsp90 and its co-chaperones within these complexes; 2) determine effects of Hsp90 manipulation by biochemical and genetic means on ERS2, EIN4 and CTR1 protein and complex stability, as well as on ethylene responses at the plant level; and 3) confirm interactions with the newly identified TPR proteins, determine their functions and the functional significance of their interactions with Hsp90.

The proposed research will lead to new functional dimensions of Hsp90, presenting new opportunities for agrobiotechnology.

1.0 Microorganisms

1.1 Does your work involve the use of biological agents? YES NO
 (non-pathogenic and pathogenic biological agents including but not limited to bacteria and other microorganisms, viruses, prions, parasites or pathogens of plant or animal origin)? If no, please proceed to Section 2.0

Do you use microorganisms that require a permit from the CFIA? YES NO

If YES, please give the name of the species. _____

What is the origin of the microorganism(s)? _____

Please describe the risk (if any) of escape and how this will be mitigated:

Please attach the CFIA permit.

Please describe any CFIA permit conditions:

1.2 Please complete the table below:

| Name of Biological Agent(s)* (Be specific) | Is it known to be a human pathogen? YES/NO | Is it known to be an animal pathogen? YES/NO | Is it known to be a zoonotic agent? YES/NO | Maximum quantity to be cultured at one time? (in Litres) | Source/Supplier | PHAC or CFIA Containment Level |
|--|--|--|--|--|---------------------|--|
| <i>E. coli</i> (DH5 α , BL21) | Yes <input checked="" type="radio"/> No | Yes <input checked="" type="radio"/> No | Yes <input checked="" type="radio"/> No | 0.1L | existing lab strain | <input checked="" type="radio"/> 1 2 2+ 3 |
| <i>Leptospira maculosa</i> | Yes <input checked="" type="radio"/> No | Yes <input checked="" type="radio"/> No | Yes <input checked="" type="radio"/> No | 0.1L | AAFC | <input checked="" type="radio"/> 1 2 2+ 3 |
| <i>Albarnaria brassicae</i> | Yes <input checked="" type="radio"/> No | Yes <input checked="" type="radio"/> No | Yes <input checked="" type="radio"/> No | 0.1L | AAFC | <input checked="" type="radio"/> 1 2 2+ 3 |
| <i>Agrobacterium</i> | Yes <input checked="" type="radio"/> No | Yes <input checked="" type="radio"/> No | Yes <input checked="" type="radio"/> No | 0.1L | existing | <input checked="" type="radio"/> 1 2 2+ 3 |

not sure about these... we are inquiring.

*Please attach a Material Safety Data Sheet or equivalent from the supplier.

2.0 Cell Culture

2.1 Does your work involve the use of cell cultures? YES X NO

If no, please proceed to Section 3.0

2.2 Please indicate the type of primary cells (i.e. derived from fresh tissue) that will be grown in culture:

| Cell Type | Is this cell type used in your work? | Source of Primary Cell Culture Tissue | AUS Protocol Number |
|-------------------|--------------------------------------|---------------------------------------|---------------------|
| Human | Yes No | | Not applicable |
| Rodent | Yes No | | |
| Non-human primate | Yes No | | |
| Other (specify) | Yes No | | |

2.3 Please indicate the type of established cells that will be grown in culture in:

| Cell Type | Is this cell type used in your work? | | Specific cell line(s)* | Containment Level of each cell line | Supplier / Source of cell line(s) |
|-------------------|--------------------------------------|----|------------------------|-------------------------------------|-----------------------------------|
| Human | Yes | No | | | |
| Rodent | Yes | No | | | |
| Non-human primate | Yes | No | | | |
| Other (specify) | Yes | No | | | |

*Please attach a Material Safety Data Sheet or equivalent from the supplier. (For more information, see www.atcc.org)

2.4 For above named cell types(s) indicate PHAC or CFIA containment level required 1 2 2+ 3

3.0 Use of Human Source Materials

3.1 Does your work involve the use of human source materials? YES X NO

If no, please proceed to Section 4.0

3.2 Indicate in the table below the Human Source Material to be used.

| Human Source Material | Source/Supplier /Company Name | Is Human Source Material Infected With An Infectious Agent? YES/UNKNOWN | Name of Infectious Agent (If applicable) | PHAC or CFIA Containment Level (Select one) |
|--|-------------------------------|--|--|---|
| Human Blood (whole) or other Body Fluid | | Yes Unknown | | <input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 2+ <input type="radio"/> 3 |
| Human Blood (fraction) or other Body Fluid | | Yes Unknown | | <input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 2+ <input type="radio"/> 3 |
| Human Organs or Tissues (unpreserved) | | Yes Unknown | | <input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 2+ <input type="radio"/> 3 |
| Human Organs or Tissues (preserved) | | Not Applicable | | Not Applicable |

4.0 Genetically Modified Organisms and Cell lines

4.1 Will genetic modifications be made to the microorganisms, biological agents, or cells described in Sections 1.0 and 2.0? X YES NO If no, please proceed to Section 5.0

4.2 Will genetic modification(s) involving plasmids be done? X YES, complete table below NO

| Bacteria Used for Cloning * | Plasmid(s) ** | Source of Plasmid | Gene Transfected | Describe the change that results from transformation or tranfection |
|---------------------------------------|--|-------------------|--|--|
| <i>E. coli</i> Strain BL21, DH5 alpha | Gateway cloning vectors, plant expression vectors, other cloning vectors | Bacteria | CML10, CBP, CML44, DWF4, TPR and other genes of plant origin | Bacteria express proteins when expression vector is used, Plants express the gene and show phenotypes after stress treatments. |

* Please attach a Material Data Sheet or equivalent if available.

** Please attach a plasmid map.

4.3 Will genetic modification(s) of bacteria and/or cells involving viral vectors be made?

YES, complete table below X NO

| Virus Used for Vector Construction | Vector(s) * | Source of Vector | Gene(s) Transduced | Describe the change that results from transduction |
|------------------------------------|-------------|------------------|--------------------|--|
| | | | | |

* Please attach a Material Safety Data Sheet or equivalent.

4.4 Will genetic sequences from the following be involved? **The answer to 4.4 to 4.7 is NO**

- ◆ HIV YES, please specify _____ NO
- ◆ HTLV 1 or 2 or genes from any Level 1 or Level 2 pathogens O YES, specify _____ NO
- ◆ SV 40 Large T antigen YES NO
- ◆ E1A oncogene YES NO
- ◆ Known oncogenes YES, please specify _____ NO
- ◆ Other human or animal pathogen and or their toxins YES, please specify _____ NO

4.5 Will virus be replication defective? YES NO

4.6 Will virus be infectious to humans or animals? YES NO

4.7 Will this be expected to increase the containment level required? YES NO

5.0 Human Gene Therapy Trials

5.1 Will human clinical trials be conducted involving a biological agent? YES X NO
 (including but not limited to microorganisms, viruses, prions, parasites or pathogens of plant or animal origin)
 If no, please proceed to Section 6.0

5.2 If YES, please specify which biological agent will be used: _____
 Please attach a full description of the biological agent.

5.2 Will the biological agent be able to replicate in the host? YES NO

5.3 How will the biological agent be administered? _____

5.4 Please give the Health Care Facility where the clinical trial will be conducted: _____

5.5 Has human ethics approval been obtained? YES, number: _____ NO PENDING

6.0 Animal Experiments

6.1 Will live animals be used? YES X NO If no, please proceed to section 7.0

6.2 Name of animal species to be used _____

6.3 AUS protocol # _____

6.4 Will any of the agents listed in section 4.0 be used in live animals YES, specify: _____ NO

6.5 Will the agent(s) be shed by the animal: YES NO, please justify: _____

9.7 Do you use insects that require a permit from the CFIA permit? YES NO
If YES, Please attach the CFIA permit & describe any

See E-mail

10.0 Plants

10.1 Do you use plants? X YES NO If no, please proceed to Section 11.0

10.2 If YES, please give the name of the species. *Arabidopsis thaliana* and *Brassica napus*

10.3 What is the origin of the plant? Canada and USA

10.4 What is the form of the plant (seed, seedling, plant, tree...)? seed, seedling, mature plant

10.5 What is your intention? X Grow and maintain a crop O "One-time" use

10.6 Do you do any modifications to the plant? X YES NO
If yes, please describe: Overexpression of genes CML10, CBPs, DWF4

10.7 Please describe the risk (if any) of loss of the material from the lab and how this will be mitigated: **There is no risk and we dispose off transgenic material after autoclaving**

10.8 Is the CFIA permit attached? YES X NO
If YES, Please attach the CFIA permit & describe any CFIA permit conditions:
We have obtained a permit to import seeds of Arabidopsis mutants from resource center and other origins

11.0 Import Requirements

11.1 Will any of the above agents be imported? X YES, please give country of origin_USA NO
We have obtained a permit to import seeds of Arabidopsis mutants from resource center and other origins

If no, please proceed to Section 12.0

11.2 Has an Import Permit been obtained from HC for human pathogens? YES X NO
(not required)

11.3 Has an import permit been obtained from CFIA for animal or plant pathogens? YES X NO
We obtained plant pathogen cultures from within Canada

11.4 Has the import permit been sent to OHS? YES, please provide permit # _____ NO

12.0 Training Requirements for Personnel Named on Form

All personnel named on the above form who will be using any of the above named agents are required to attend the following training courses given by OHS:

- ◆ Biosafety
- ◆ Laboratory and Environmental/Waste Management Safety
- ◆ WHMIS (Western or equivalent)
- ◆ Employee Health and Safety Orientation

As the Principal Investigator, I have ensured that all of the personnel named on the form who will be using any of the biological agents in Sections 1.0 to 9.0 have been trained.

Please see this



SIGNATURE _____

13.0 Containment Levels

13.1 For the work described in sections 1.0 to 9.0, please indicate the highest HC or CFIA Containment Level required. X 1 2 2+ 3

13.2 Has the facility been certified by OHS for this level of containment?
YES, permit # if on-campus _____
NO, please certify
X NOT REQUIRED for Level 1 containment

14.0 Procedures to be Followed

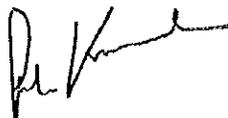
14.1 Please describe additional risk reduction measures will be taken beyond containment level 1, 2, 2+ or 3 measures, that are unique to this agent.

All material is disposed by autoclaving

14.2 Please outline what will be done if there is an exposure to the biological agents listed, such as a needlestick injury or an accidental splash:

Wash thoroughly with soap, wipe with ethanol and apply antibacterial ointment although the material is non-contagious

14.3 As the Principal Investigator, I will ensure that this project will follow the Western Biosafety Guidelines and Procedures Manual for Containment Level 1 & 2 Laboratories (and the Level 3 Facilities Manual for Level 3 projects). I will ensure that UWO faculty, staff and students working in my laboratory have an up-to-date Hazard Communication Form, found at <http://www.wph.uwo.ca/>



SIGNATURE _____ Date: _ Nov 22, 2010

15.0 Approvals

1) UWO Biohazards Subcommittee: SIGNATURE: _____
Date: _____

2) Safety Officer for the University of Western Ontario
SIGNATURE: _____
Date: _____

3) Safety Officer for Institution where experiments will take place (if not UWO):
SIGNATURE: _____

Date: _____

Approval Number: _____ Expiry Date (3 years from Approval): _____

Special Conditions of Approval:

----- Original Message -----

Subject:Re: Biological Agents Registry Form

Date:Mon, 22 Nov 2010 07:30:56 -0500

From:Maryam Khodai-Kalaki <mkhodaik@uwo.ca>

To:priti krishna <prishna@uwo.ca>

CC:jstanle2@uwo.ca

E-mail

Dear Priti and Jennifer,

I took Biosafety training course on 14th of October 2009.

Warm regards,

Maryam

----- Original Message -----

From: priti krishna <prishna@uwo.ca>

Date: Monday, November 22, 2010 12:11 am

Subject: Biological Agents Registry Form

To: Jennifer Stanley <jstanle2@uwo.ca>

Cc: Maryam Khodai-Kalaki <mkhodaik@uwo.ca>, Rajesh Kumar Gupta <rgupta48@uwo.ca>

- > Hi Jennifer
- > please find attached. Rajesh is a new student and is still to
- > complete his training.
- > Maryam will provide her date of course completion.
- > thanks for your help
- > priti

----- Original Message -----

Subject:Re: Biological Agents Registry Form: Krishna

Date:Mon, 22 Nov 2010 12:30:13 -0500

From:priti krishna <pkrishna@uwo.ca>

To:Jennifer Stanley <jstanle2@uwo.ca>, Ray Williamson <purraw@uwo.ca>

1. I understand that you imported seeds of Arabidopsis mutants from the U.S. (resource center and other origins). Did you have to get a CFIA import permit first and then get the shipment from your American supplier(s)?

Jennifer, we need the permit only if we are using courier and it has to go through customs and safety etc. If we import by regular mail, then we are not asked for the permit although declaration of the material s there.

2. For question 11.3, what plant pathogen cultures do you use?

Leptosphaeria maculans: DAOM 194244 (Saskatchewan) virulent
Alternaria brassicae: Canadian strain from B. rapa (Saskatchewan)

we just obtained them from

Carolyn Babcock Curator / Conservatrice
Canadian Collection of Fungal Cultures / La collection canadienne de cultures fongiques
Agriculture and Agri-Food Canada/Agriculture et Agroalimentaire Canada
Rm. 1015 K.W. Neatby Bldg / Salle 1015 Fedifce K.W. Neatby
960 Carling Avenue / 960 avenue CarlingOttawa, Ontario
Canada K1A 0C6

babcockc@agr.gc.ca
Telephone/Téléphone: 613-759-1772
Facsimile/Télécopieur: 613-759-1924

E-mail

thanks
priti

The application submitted in Nov. already indicates that we have a permit - so why the question? + the following e-mails. Jan 19th 2011.



Office of Biohazard Containment and Safety
Science Branch, CFIA
59 Carleton Drive, Ottawa, Ontario K1A 0Y9
Tel: (613) 221-7068 Fax: (613) 228-6129
Email: ImportZoopath@inspection.gc.ca

Bureau du confinement des biorisques et sécurité
Direction générale des sciences, ACIA
59 promenade Carleton, Ottawa, Ontario K1A 0Y9
Tél: (613) 221-7068 Téléc: (613) 228-6129
Courriel: ImportZoopath@inspection.gc.ca

October 20th, 2009

Ms. Shamiia Survery / Mr. Michael Decosimo
Cedariane Laboratories Ltd
4410 Paletta Court
Burlington, Ontario L7L 5R2

By Facsimile: (289) 288-0020

SUBJECT: Importation of *Escherichia coli* strains

Dear Ms. Survery / Mr. Decosimo:

Our office received your query about the importation of *Escherichia coli* from the American Type Culture Collection (ATCC) located in Manassas, Virginia, United States. The following *Escherichia coli* strains are consider to be level 1 animal pathogens:

- | | | | | |
|---------------|--------------------|-----------|-------------------|----------------|
| • 5K | • CIE85 | • J52 | • MC4100 (MuLac) | • U5/41 |
| • 58 | • DH1 | • J53 | • MG1655 | • W208 |
| • 58-161 | • DH10 GOLD | • JC3272 | • MM294 | • W945 |
| • 679 | • DH10B | • JC7661 | • MS101 | • W1485 |
| • 1532 | • DH5 | • JC9387 | • NC-7 | • W3104 |
| • AB284 | • DH5-alpha | • JF1504 | • Nissle 1917 | • W3110 |
| • AB311 | • DP50 | • JF1508 | • One Shot STBL3 | • WA704 |
| • AB1157 | • DY145 | • JF1509 | • OP50 | • WP2 |
| • AB1206 | • DY380 | • JJ055 | • P678 | • X1854 |
| • AG1 | • E11 | • JM83 | • PA309 | • X2160T |
| • B | • EJ183 | • JM101 | • PK-5 | • X2541 |
| • BB4 | • EL250 | • JM109 | • PMC103 | • X2547T |
| • BD792 | • EMG2 | • K12 | • PR13 | • XL1-BLUE |
| • BL21 | • EPI 300 | • KC8 | • Rri | • XL1-BLUE-MRF |
| • BL21 (DE3) | • EZ10 | • KA802 | • RV308 | • XLOLR |
| • BM25.8 | • FDA Seattle 1946 | • KAM32 | • S17-1λ -PIR | • Y10 |
| • C | • Fusion-Blue | • KAM33 | • SCS1 | • Y1090 (1090) |
| • C-1a | • H1443 | • KAM43 | • SMR10 | • YN2980 |
| • C-3000 | • HF4714 | • LE450 | • SOLR | • W3110 |
| • C25 | • HB101 | • LE451 | • SuperchargeEZ10 | • WG1 |
| • C41 (DE3) | • HS(PFAMP)R | • LE452 | • SURE | • WG439 |
| • C43 (DE3) | • Hfr3000 | • MB408 | • TOP10 | • WG443 |
| • C600 | • Hfr3000 X74 | • MBX1928 | • TG1 | • WG445 |
| • Cavalli Hfr | • HMS174 | • MC1061 | | |

The Office of Biohazard Containment and Safety (BCS) of the Canadian Food Inspection Agency (CFIA) only issues import permits for microorganisms that are pathogenic to animals, or parts of microorganisms that are pathogenic to animals. As the products listed above are not considered pathogenic to animals, the Office of BCS does not have any regulatory requirements for their importation.

Please note that other legislation may apply. You may wish to contact the Public Health Agency of Canada's (PHAC) Office of Laboratory Security at (613) 957-1779.

Note: Microorganisms pathogenic to animals and veterinary biologics require an import permit from the CFIA.

Sincerely,

Cynthia Labrie
Head, Animal Pathogen Importation Program
Office of Biohazard Containment & Safety

Krishna

Subject: Re: Fwd: Import/containment requirements
From: Cinthia Labrie <Cinthia.Labrie@inspection.gc.ca>
Date: Fri, 28 Jan 2011 16:43:26 -0500
To: jstanle2@uwo.ca

Hi Jennifer,

Arabidopsis and Brassica are plants.

Leptosphaeria maculans and Agrobacterium spp. are microorganisms affecting plants, they are not animal pathogens (level 1 organism for my office).

To find out the containment level for plant pest, please contact the CFIA Plant Health and Biosecurity Directorate / Import Permit Office to see if they regulate it: PermitOffice@inspection.gc.ca or by phone: 613-773-7361

If it is regulated by their office a requires a specific plant pest containment level, they should transfer you to our certification group here for evaluation.

Have a nice day,

Cinthia Labrie

Cinthia Labrie
Head, Animal Pathogen Import Program
Office of Biohazard Containment & Safety, CFIA
Government of Canada
1400 Merivale Road, Ottawa, ON K1A 0Y9
Phone: 613-773-6528; Fax: 613-773-6521
cinthia.labrie@inspection.gc.ca

|| ImportZoopath 2011-01-28 09:27 >>>

||

|| Jennifer Stanley <jstanle2@uwo.ca> 2011-01-27 16:41 >>>

||

Hello there -

Can you let me know the import/containment requirements:

Arabidopsis thaliana
Brassica napus
Leptosphaeria maculans
Agrobacterium

Regards,
Jennifer

Subject: Re: import/containment requirements
From: Import Permit Office - Plant Health <PermitOffice@inspection.gc.ca>
Date: Mon, 31 Jan 2011 13:35:37 -0500
To: Jennifer Stanley <jstanle2@uwo.ca>

Hello Ms. Stanley,

The best suggestion I can give you, is to send in an application form and have it go through our process to get a concrete and full answer. These items listed below will have to be reviewed by specialists which is part of our normal review process, and they will be able to tell you if a permit is required or not by either sending a letter indicating a permit is not required or sending you a permit if all is approved.

You can find the application form located here:

http://active.inspection.gc.ca/tech/pdf.asp?v9plac5256e_re

This link may also be of some help to you. It is known as AIRS and it can give you a brief view at what needs a permit and what doesn't, but again I would suggest to send in an application.

<http://inspection.gc.ca/english/imp/airse.shtml>

Have a nice day,

Mackenzie

Import Permit Office/Bureau des permis
Canadian Food Inspection Agency/Agence canadienne d'inspection des aliments
permitoffice@inspection.gc.ca
Telephone: 613-773-7361
Fax: 613-773-7229

||| Jennifer Stanley <jstanle2@uwo.ca> 2011/01/28 5:03 pm >>>

Hello there -

Can you let me know the import/containment requirements:

Arabidopsis thaliana
Brassica napus
Leptosphaeria maculans
Agrobacterium

Regards,
Jennifer

Krishna

----- Original Message -----

Subject:FW: regulation of plant pathogens
Date:Fri, 11 Feb 2011 13:20:30 -0500
From:Donly, Cam <Cam.Donly@AGR.GC.CA>
To:Jennifer Stanley <jstanle2@uwo.ca>

Hi Jennifer,

As you can see from this email I received from CFIA they will not provide any information unless there is an application to import a pathogen. So I can't see any way to confirm the containment information provided by the applicant of the proposal. You could maybe ask the PI to provide whatever documentation her Ag Canada collaborators (through the ABIP program) that she is going to receive the materials from have obtained. That's the only way I can see to confirm the containment levels for these organisms.

Sorry I can't be more helpful,
Cam

-----Original Message-----

From: Import Permit Office - Plant Health
Sent: Friday, February 11, 2011 9:43 AM
To: Donly, Cam
Subject: Re: regulation of plant pathogens

Hello Mr. Donly,

In response to your questions below, each pathogen is evaluated separately.
Due to the volume of work we are currently experiencing, we can only evaluate specific pathogens and define their containment level if an import permit application is sent in, which we can then take the proper steps to evaluate each pathogen as needed.

Regards,

Mackenzie

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>>> "Donly, Cam" <Cam.Donly@AGR.GC.CA> 2011/02/10 2:05 pm >>>
Dear CFIA Plant Health and BioSecurity Directorate,

I need to know the containment regulations that would apply to 2
specific
plant pathogens: *Leptosphaeria maculans* and *Alternaria brassicae*. Can
you tell
me if these organisms are regulated and if so what level containment
regulations would apply please? I am inquiring for the biosecurity
committee
at my university to allow evaluation of research projects proposing to
work
with these organisms and any information you can provide would be
helpful in
our evaluation of the procedures proposed.

Thank you for your help,

Cam Donly

B.C. Donly, PhD

Research Scientist / Chercheur scientifique
Agriculture and Agri-Food Canada / Agriculture et Agroalimentaire
Canada

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1391 Sandford Street / 1391, rue Sandford
London, Ontario / London (Ontario)
N5V 4T3

Subject: Re: Biological Agents Form Review (Ag Canada) - Dr. Krishna
From: Jennifer Stanley <jstanle2@uwo.ca>
Date: Fri, 04 Feb 2011 19:46:53 -0500
To: "Donly, Cam" <Cam.Donly@AGR.GC.CA>

Hi Cam
Thanks for the update
Have a great weekend
Jennifer

On 2/4/2011 9:18 AM, Donly, Cam wrote:

Hi Jennifer,

I have tried to get in contact with someone at CFIA about the pathogens in the proposal but have heard nothing so far. Unfortunately CFIA is notorious for this so I can only tell you I will let you know as soon as I hear anything.

Cheers,
Cam

-----Original Message-----

From: Jennifer Stanley [<mailto:jstanle2@uwo.ca>]
Sent: Monday, January 31, 2011 12:46 PM
To: Donly, Cam
Cc: Jack Millar
Subject: Biological Agents Form Review (Ag Canada) - Dr. Krishna

Thanks Cam -

Please see attached. Thanks so much for helping us on this one.

Regards,
Jennifer

On 1/28/2011 9:08 AM, Donly, Cam wrote:

No problem Jennifer, send it along and I will have a look. AAFC does not do any significant regulation any more though, it is all done by CFIA, so I may need to check with them.

Cam

-----Original Message-----

From: Jennifer Stanley [<mailto:jstanle2@uwo.ca>]
Sent: Thursday, January 27, 2011 6:18 PM
To: Donly, Cam
Cc: Jack Millar
Subject: Biological Agents Form Review (Ag Canada)

Hi Kam -

We have a researcher using agents (plants, plant pathogens, etc) which are not human pathogens, but may be regulated by Agriculture Canada and/or the CFIA.

The Committee is wondering if you would mind looking at it on behalf