

United States Department of Agriculture
Animal and Plant Health Inspection Service
4700 River Road
Riverdale, MD 20737

Permit to Move Live Plant Pests, Noxious Weeds, and Soil
Interstate Movement
Regulated by 7 CFR 330

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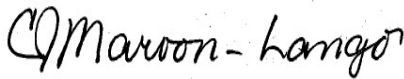
PERMITTEE NAME:	Dr. AnnaLiisa Fabritius	PERMIT NUMBER:	P526P-15-02331
ORGANIZATION:	AL&L Crop Solutions, Inc.	APPLICATION NUMBER:	P526-150116-012
ADDRESS:	7769 N. Meridian Rd. Vacaville, CA 95688	FACILITY NUMBER:	3638
MAILING ADDRESS:	7769 N. Meridian Rd. Vacaville, CA 95688	HAND CARRY:	No
PHONE:	(310) 447-8900	DATE ISSUED:	05/05/2015
FAX:		EXPIRES:	05/05/2018
DESTINATION:	7769 N. Meridian Rd., Vacaville, CA 95688		

Under the conditions specified, this permit authorizes the following:

Article Category: Plant Pathogens - Bacteria; BioControl Organisms - Exploration/Investigation

<u>Regulated Article</u>	<u>Life Stage(s)</u>	<u>Intended Use</u>	<u>Shipment Origins</u>	<u>Originally Collected</u>	<u>Culture Designation</u>
Acidovorax avenae subsp citrulli	Petri dishes/culture tubes	Research - Growth Chamber (lab included)	Continental U.S.	Originally Collected from Within the Continental U.S.	
Agrobacterium rhizogenes	Petri dishes/culture tubes	Research - Growth Chamber (lab included)	Continental U.S.	Originally Collected from Within the Continental U.S.	
Agrobacterium tumefaciens	Petri dishes/culture tubes	Research - Growth Chamber (lab included)	Continental U.S.	Originally Collected from Within the Continental U.S.	
Agrobacterium vitis	Petri dishes/culture tubes	Research - Growth Chamber (lab included)	Continental U.S.	Originally Collected from Within the Continental U.S.	
Clavibacter michiganensis subsp michiganensis	Petri dishes/culture tubes	Research - Growth Chamber (lab included)	Continental U.S.	Originally Collected from Within the Continental U.S.	
Clavibacter michiganensis subsp nebraskensis	Petri dishes/culture tubes	Research - Growth Chamber (lab included)	Continental U.S.	Originally Collected from Within the Continental U.S.	
Clavibacter michiganensis subsp sepedonicus	Petri dishes/culture tubes	Research - Growth Chamber (lab included)	Continental U.S.	Originally Collected from Within the Continental U.S.	
Clavibacter michiganensis subsp. insidiosus	Petri dishes/culture tubes	Research - Growth Chamber (lab included)	Continental U.S.	Originally Collected from Within the Continental U.S.	

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Curtobacterium flaccumfaciens pv. betae	Petri dishes/culture tubes	Research - Growth Chamber (lab included)	Continental U.S.	Originally Collected from Within the Continental U.S.
Curtobacterium flaccumfaciens pv. flaccumfaciens	Petri dishes/culture tubes	Research - Growth Chamber (lab included)	Continental U.S.	Originally Collected from Within the Continental U.S.
Erwinia amylovora	Petri dishes/culture tubes	Research - Growth Chamber (lab included)	Continental U.S.	Originally Collected from Within the Continental U.S.
Erwinia carotovora subsp. carotovora	Petri dishes/culture tubes	Research - Growth Chamber (lab included)	Continental U.S.	Originally Collected from Within the Continental U.S.
Erwinia sp.	Petri dishes/culture tubes	Research - Growth Chamber (lab included)	Continental U.S.	Originally Collected from Within the Continental U.S.
Pseudomonas marginalis pv. alfalfae	Petri dishes/culture tubes	Research - Growth Chamber (lab included)	Continental U.S.	Originally Collected from Within the Continental U.S.
Pseudomonas sp.	Petri dishes/culture tubes	Research - Growth Chamber (lab included)	Continental U.S.	Originally Collected from Within the Continental U.S.
Pseudomonas syringae pv. lachrymans	Petri dishes/culture tubes	Research - Growth Chamber (lab included)	Continental U.S.	Originally Collected from Within the Continental U.S.
Pseudomonas syringae pv. maculicola	Petri dishes/culture tubes	Research - Growth Chamber (lab included)	Continental U.S.	Originally Collected from Within the Continental U.S.
Pseudomonas syringae pv. phaseolicola	Petri dishes/culture tubes	Research - Growth Chamber (lab included)	Continental U.S.	Originally Collected from Within the Continental U.S.
Pseudomonas syringae pv. pisi	Petri dishes/culture tubes	Research - Growth Chamber (lab included)	Continental U.S.	Originally Collected from Within the Continental U.S.
Pseudomonas syringae pv. syringae	Petri dishes/culture tubes	Research - Growth Chamber (lab included)	Continental U.S.	Originally Collected from Within the Continental U.S.
Pseudomonas syringae pv. tomato	Petri dishes/culture tubes	Research - Growth Chamber (lab included)	Continental U.S.	Originally Collected from Within the Continental U.S.
Rhodococcus fascians	Petri dishes/culture tubes	Research - Growth Chamber (lab included)	Continental U.S.	Originally Collected from Within the Continental U.S.
Xanthomonas axonopodis pv. glycines	Petri dishes/culture tubes	Research - Growth Chamber (lab included)	Continental U.S.	Originally Collected from Within the Continental U.S.
Xanthomonas campestris pv. campestris	Petri dishes/culture tubes	Research - Growth Chamber (lab included)	Continental U.S.	Originally Collected from Within the Continental U.S.
Xanthomonas campestris pv. malvacearum	Petri dishes/culture tubes	Research - Growth Chamber (lab included)	Continental U.S.	Originally Collected from Within the Continental U.S.
Xanthomonas campestris pv. zinniae	Petri dishes/culture tubes	Research - Growth Chamber (lab included)	Continental U.S.	Originally Collected from Within the Continental U.S.

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Xanthomonas fragariae	Petri dishes/culture tubes	Research - Growth Chamber (lab included)	Continental U.S.	Originally Collected from Within the Continental U.S.
Xylella fastidiosa (NOT citrus variegated chlorosis strains)	Pest-infected plant material, Plant Parts	Research - Growth Chamber (lab included)	Continental U.S.	Originally Collected from Within the Continental U.S.

PERMIT GUIDANCE

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This permit does not authorize importation or interstate movement, of strains of genetically engineered regulated organisms (created by the use of recombinant DNA technology).

This permit does not fulfill the requirements of other federal or state regulatory authorities. As appropriate, please contact the U.S. Environmental Protection Agency, the U.S. Fish and Wildlife Service, the U.S. Food and Drug Administration, the Centers for Disease Control and Prevention, the APHIS Veterinary Services unit, or your State's Department of Agriculture to ensure proper permitting.

If you are considering renewal of this permit, an application should be submitted at least 90 days prior to the expiration date of this permit to ensure continued coverage. Permits requiring containment facilities may take a longer period of time to process.

Receipt or use of foreign isolates or samples from countries under sanctions requires specific permission from the U.S. Department of Treasury (see <http://www.treasury.gov/resource-center/sanctions/Programs/Pages/Programs.aspx> for current country/regional listings) for current country listings.

If an animal pathogen is identified in your shipment, to ensure appropriate safeguarding, please refer to http://www.aphis.usda.gov/import_export/animals/animal_import/animal_imports_anproducts.shtml.

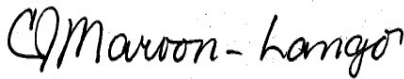
If a human pathogen is identified, please see the CDC Etiologic Agent Import Permit Program at <http://www.cdc.gov/od/eaipp/>.

PERMIT CONDITIONS

This permit authorizes the interstate movement of pure cultures of the organisms listed in the permit, from the continental U.S., to AnnaLiisa Fabritius of AL&L Crop Solutions, Inc., located at 7769 N. Meridian Rd., Vacaville, CA 95688. This authorization is for research use in the laboratory and growth chamber. Experiments with the regulated articles must be conducted in the inspected facility #3638. Infected plants and plant inoculations are not authorized in the greenhouse.

1. The permit holder must:
 - (a) comply with all requirements and permit conditions,
 - (b) maintain a valid permit so long as the regulated organisms are alive,
 - (c) not assign or transfer this permit to other persons,
 - (d) safeguard and dispose of the regulated organisms during the term of this permit,
 - (e) take all necessary precautions to prevent the unauthorized release of regulated organisms. In the event of an unauthorized release, the permit holder must notify the permit unit,
 - (f) adequately mitigate environmental impacts resulting from unauthorized release of regulated organisms,
 - (g) contain any/all organisms not authorized under this permit,
 - (h) notify the permit unit of the receipt of unauthorized organisms,
 - (i) notify the permit unit if facilities are destroyed or decommissioned for any reason,
 - (j) maintain an official permanent work assignment at the address on this permit,

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- (k) notify the permit unit in advance of any change in the permit holder's work assignment,
- (l) destroy all regulated organisms prior to departure from the organization unless other arrangements are confirmed by the permit unit prior to parting, and
- (m) notify the permit unit of the destruction of regulated organisms.

Notifications to the permit unit must be made via 866-524-5421 or pest.permits@aphis.usda.gov within one business day of the event triggering a notification.

2. This permit does not authorize movement or use of plant pathogens listed in the Public Health Security and Bioterrorism Preparedness and Response Act of 2002. If any organism listed as a Select Agent is identified from materials associated with this research, the permit holder is required to notify APHIS, Agricultural Select Agent Program (ASAP) immediately by phone at 301-851-3300, and within seven (7) days submit APHIS/CDC Form 4 (Report of Identification of a Select Agent or Toxin in a Clinical or Diagnostic Laboratory) to APHIS, ASAP; 4700 River Rd, Unit 2, Riverdale, MD 20737 (see instructions at: http://www.aphis.usda.gov/programs/ag_selectagent/index.shtml). Failure to comply with this requirement is a violation of the Agricultural Bioterrorism Protection Act of 2002.
3. Without prior notice and during reasonable hours, authorized PPQ and/or State regulatory officials shall be allowed to inspect the conditions associated with the regulated organisms authorized under this permit.
4. All operations must be consistent with information submitted in association with the above listed APHIS-designated facility #3638.
5. All packages containing the regulated organism(s) for transport must minimally consist of both inner (primary) and outer (secondary) packages securely sealed and escape-proof so that both are effective barriers to leakage. More than one inner container may be placed in the secondary container. The inner package(s) shall contain all organisms and must be cushioned and sealed in such a way that it remains sealed during the shock, impact and pressure changes that may occur. When transporting liquid media in the primary container, the secondary container must contain sufficient inert absorbent material to absorb the entire liquid contents of the primary container(s) in case of breakage or leakage. The outer shipping container and/or the secondary container must be rigid and strong enough to withstand typical shipping conditions (dropping, stacking, impact from other freight, etc.) without opening.

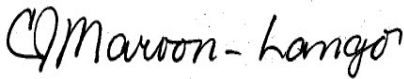
This permit authorizes the shipment of cultures of the regulated organisms isolated in the United States only. FOREIGN ISOLATES ARE PROHIBITED.

6. All packages must be opened in a laminar flow biosafety cabinet that meets or exceeds Class II, Type A. This type of cabinet uses HEPA filtration. All isolations and culture transfers must be conducted in a laminar flow biosafety cabinet that meets or exceeds Class II, Type A.

You must have the cabinet serviced every year per manufacturer's instructions.

7. All un-used and leftover organisms, and all packaging materials in contact with organisms and/or contaminants, must be autoclaved after removing the regulated articles.
8. Research involving the regulated organisms must be performed in a controlled environment. The regulated organisms must neither be used in field research nor released into the environment.
9. Pests must be kept only within the laboratory or designated area at the permittees address as authorized by the permit conditions.
10. While in storage, all cultures must be kept locked (e.g. in freezer, cabinet), with access limited to authorized personnel or they must be in a restricted access building that requires a key card entry and access is restricted to authorized personnel only; or it must be in locked room restricted to authorized personnel only.
11. The growth chamber must be locked and access restricted only to authorized personnel; or it must be in a restricted access building that requires a key card entry and access is restricted to authorized personnel only; or it must be in locked room restricted to authorized personnel only.
12. The growth chamber/greenhouse in which infected plant material is maintained must be located at a reasonable distance from the growth chamber/greenhouse for healthy plants, insectary, and the outside door.

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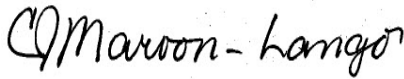
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13. Measures to control insects [especially insect vectors if the pathogen is insect vectored;(e.g. black lights, yellow sticky boards, insecticides)] must be in place to minimize volunteer insect transmission in the growth chambers.
14. No intentional vector transmission studies are allowed.
15. All plant water run-off must be collected and disinfected.
16. All necessary precautions must be taken to prevent the escape of the regulated material.
17. The permit holder or authorized individual must notify APHIS Plant Protection and Quarantine (PPQ) Pest Permitting Branch (PPB) within 10 working days of the confirmation that an organism is identified as (a) a species new to science, (b) an organism not known to occur in the United States, or (c) a pest managed by an APHIS program (program pest; http://www.aphis.usda.gov/plant_health/plant_pest_info/index.shtml). Include the permit number, the origins and dates of receipt of the samples, and the identified organism. The notification must be sent to USDA/APHIS/PPQ/RPM/PPB, 4700 River Rd., Unit 133, Riverdale, MD 20737, faxed to 301-734-8700 or emailed to Pest.Permits@aphis.usda.gov Attn: Clarissa Maroon-Lango, as Word, Excel or pdf documents. Notifications must also be sent to the State Plant Health Director (SPHD) and State Plant Regulatory Official (SPRO) of the state of origin of the specific sample within 10 working days (see http://www.aphis.usda.gov/services/report_pest_disease/report_pest_disease.shtml and <http://www.nationalplantboard.org/member/index.html> for contact information).
18. Upon completion of research, all infected plant material, soil, cultures or anything that has contacted the regulated organisms must be devitalized by autoclaving, incineration, or other equivalent methods. Glassware and other materials used to conduct research must be decontaminated by soaking in a fresh bleach solution of 10 percent (1:10) for at least 30 minutes, in 70 percent ethanol, with quaternary ammonium compounds, or flamed with ethanol.
19. Autoclaving Waste
 - a. Waste must be autoclaved at 121 degrees Centigrade (250 degrees Fahrenheit) for a minimum of 30 minutes.
 - b. Autoclave tape or other indicators must be placed on each bag or sharps container prior to treatment. The autoclave tape or other indicator on each container must be checked to verify color change before disposal.
 - c. The autoclave log must be completed by each user for each autoclave cycle. All parameters must be noted as listed on the log for each autoclave load.
 - d. If the autoclave does not attain the minimum time and/or temperature or the autoclave tape does not change color, a notation must be made in the comment section of the autoclave log. The load must then be re-autoclaved after placing new tape on the material. If minimum time and temperature is not attained on the second cycle, users must contact the person responsible for maintaining the unit to initiate repairs. Waste must then be treated at the alternate autoclave facility.
 - e. Thermometers on the autoclave must be calibrated annually, and a written record must be maintained. Calibration must be done by an authorized autoclave service company during routine servicing.
 - f. Every 6 months, you must use a commercially available test indicator kit that uses bacterial spores *Bacillus stearothermophilus* that are rendered unviable at 250 degrees F or 121 degrees C. For the test, ampoules of *B. stearothermophilus* are autoclaved along with a load of waste. Upon completion of the cycle, the ampoules are incubated for 48 hours and then observed for any sign of growth, which indicates insufficient sterilization. If any growth is observed, you must have the autoclave serviced and retested.
20. There is to be no further distribution of these organisms without prior approval from State and Federal regulatory officials. A valid permit is required for movement of the regulated materials.
21. Any alteration, forgery or unauthorized use of this permit and associated Federal Forms are subject to civil penalties of up to \$250,000 (7 U.S.C.s 7734(b) or imprisonment of not more than 5 years, or both (18 U.S.C.s 1001).

END OF PERMIT CONDITIONS

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