



Greenhouse Policies and Procedures

Department of Biology

Syracuse University

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2020 Greenhouse Committee

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Facilities

The greenhouse on the 5th floor of the Life Science Complex (LSC) has ten independently-controlled rooms (two equipped for studying insect-plant interactions); a potting shed, seed sorting facility and an autoclave. The rooms are temperature- and humidity-controlled, and have automated supplemental lighting and watering systems. Each room typically contains at least one flood bench, and a bench with an individual pot watering system that can be fully automated.

507		515
503		517
Teaching wing		

527A Insect room		527B Insect room
525		529
523		533
Research wing		

Rooms 507 and 529 have a misting bench that can be used for germinating seeds or plants that need high humidity requirements. Exterior space around the outside of the greenhouse can be used to overwinter plants or expose them to natural conditions.

There are two wings of the greenhouse (research and teaching) that differ in the climate control systems and lighting. The research wing has air-conditioned rooms, double the intensity of overhead lighting, and screening to prevent transfer of transgenic plant material. The teaching wing has only half the density of overhead lighting and uses swamp coolers to control temperature.

The headhouse has a sink area for washing pots and trays. Assigned benches can be used for potting plant material. Each bench area has a limited amount of storage space for horticultural materials.

There are eight climate-controlled environmental chambers located in LSC 401.

Greenhouse and chamber entry is controlled by card swipe access. Permission for access is given by the Greenhouse Manager and will be only granted to users who have completed the pesticide and greenhouse training (see below).

Responsibilities of Greenhouse Management and Users

The Greenhouse Coordinator oversees the daily operation of the greenhouse/environmental chambers. Oversight includes maintaining the facility, integrated pest management, monitoring greenhouse conditions, setting environmental controls, and providing general advice for greenhouse/chamber users.

Users agree to abide by the policies outlined in this document, specifically the greenhouse/chamber user responsibilities. Users will also follow posted placards and instructions. Failure to abide by the policies set forth in this document or instruction from the Greenhouse Coordinator may result in forfeiture of greenhouse/chamber privileges.

Training

All greenhouse users will attend a short orientation session administered by the Greenhouse Coordinator before using the greenhouse.

All greenhouse users are required to view an Environmental Protection Agency-approved pesticide training video and sign required documentation acknowledging that they have viewed and understand the information in the video. This training must be completed before users can access the greenhouse, and renewed every five years.

At the conclusion of the training, all users are required to review the greenhouse policies and sign the greenhouse use consent form.

Space Allocation Policy

Users must fill out a greenhouse/chamber space request form to be evaluated by the Greenhouse Committee. Users must re-apply for space every six months.

Priorities for space assignment in bays will be (in descending order): externally funded projects, in-house funded projects, graduate student projects, undergraduate projects.

Depending on growing conditions necessary, researchers will be assigned to bays on the research (air conditioned) or teaching (swamp cooled) side of the greenhouse at the discretion of the Greenhouse Committee.

Greenhouse/Chamber Use Fees

Plan in progress as of 2020.

Greenhouse/Chamber User Consent Form

I have reviewed and understand the greenhouse policies and will follow the guidelines, posted placards and signs concerning use of the greenhouse and environmental chambers. I have attended an orientation session on the use of the greenhouse and environmental chamber facilities, and received the EPA approved pesticide hazards training.

I acknowledge that failure to abide by the greenhouse policies or instructions from the Greenhouse Coordinator may result in termination of greenhouse and environmental chamber privileges.

Print Name

Sign Name

Date

Greenhouse and Growth Chamber Rules and Regulations

I. Occupation and movement through facility

- Occupy your allocated greenhouse/growth chamber spaces only.
- Do not enter other rooms or chambers.
- Minimize space to space movement.
- Plan your work efficiently to minimize entry into multiple rooms.
- If in a space with a pest problem, leave the floor immediately when finished and do not go into other spaces. Make this your last stop of the day.
- Minimize time spent in the greenhouse and growth chamber spaces. If you do not have to be in there, don't be!
- **No unauthorized entry.** Guests should always be with an authorized escort.

II. Greenhouse/chamber sanitation and waste disposal

- Keep your occupied space clean. Disinfect floors and surfaces regularly with a bleach solution. When your experiment is finished, carefully clean all surfaces and floors with bleach, and notify the Greenhouse Coordinator that your space is empty.
- Do not enter your chamber wearing field clothing. You will bring outdoor pests with you! Change your shoes and clothing before entering your space.
- Promptly remove unused plants, dead plant material, soil, debris and other materials no longer being used for research. This includes plants growing out of the drains. All plant material is to be disposed of in the compost bins located on the loading dock of the CST building.
- Keep floors and benches free of unnecessary equipment and supplies. Do not store supplies in greenhouse/growth chamber spaces.
- Cleaned, sterilized supplies should be put away in designated areas in the headhouse.

III. Plant care

- Notify the Greenhouse Coordinator about incoming materials.
- Obtain and prepare materials for planting.
- Provide daily care, water, and fertigation.
- Monitor environmental conditions.
- Notify the Greenhouse Coordinator about any chamber problems or changes.

IV. Integrated Pest Management

- Regularly inspect yellow sticky traps for flying insects; plants for cryptic pests.
- Fill out weekly pest report sheets and follow-up with the Greenhouse Coordinator.
- Immediately report pest sightings to the Greenhouse Coordinator.

***Mist bench hygiene

Mist benches can develop bacteria on the inside of the plastic sheeting, which is extremely difficult to clean. Using the mist benches for the minimal amount of time needed and allowing them to dry before rolling up the sides can help prevent this.

Autoclave Rules and Regulations

Reminder: this is a common workspace with multiple users. As such, the following will be strictly enforced to ensure everyone has equal access. Cleanliness and sanitation are of the utmost importance. Notify the Greenhouse Coordinator of any issues concerning use.

- Transgenic, genetically modified and infested materials must be autoclaved before disposal. No waste plant or soil to be stored in the facility.
- Remove your items PROMPTLY from the autoclave.
- Plants and soils, once autoclaved, should be taken down to the compost bins located on the loading dock of the CST building.
- Plants and soil are not to be stored in the autoclave room.

Headhouse Rules and Regulations

Reminder: this is a common workspace with multiple users. As such, the following will be strictly enforced to ensure everyone has equal access.

Cleanliness and sanitation are of the utmost importance. Notify the Greenhouse Coordinator of any issues concerning use.

Do:

- Keep bench tops free of items except during active prep/potting.
- Move prepared materials to greenhouse rooms as soon as possible.
- Clean bench tops, sinks and floors after material preparation.
- Immediately sterilize any pots/trays that have contained diseased/infected plants.
- Keep sink area clear; promptly put away dry pots/trays.

Do not:

- Bring ANY plants-healthy, diseased, alive or dead-from greenhouses into the headhouse.
- Use items that belong to other users.
- Leave items in the sink area.
- Dispose of plant material or used soil in the trash can.

Introduction of outside materials into greenhouse

Material other than commercially prepared potting media and seeds must be quarantined before introduction into the greenhouse. Consult with Greenhouse Coordinator prior to bringing outside materials into the greenhouse.

When appropriate, plants must be treated and quarantined for two weeks and checked by the Greenhouse Coordinator before introduction into the greenhouse. If weather conditions allow, plants may be quarantined outside the greenhouse on the rooftop. Otherwise lab spaces may be used as allowable by PIs.

Greenhouse/Chamber Space Request Form

User details

Today's date:	
PI name:	
Researcher name(s):	
Emergency contact info:	
Project start/end dates:	
Space required:	
Shared space? Y/N:	

Project details

Description of project:	
Funding source:	

Growing requirements

Species:	
Temperature range:	
Light requirements:	
Watering requirements:	
Transgenic plants Y/N:	
Limitations on pesticides/ biocontrols:	