

## **UGA Department of Plant Pathology Greenhouses Policies and Procedures**

The UGA Department of Plant Pathology has two greenhouse complexes available for use by faculty, students, and staff. These two sites are located at 2500 South Milledge Ave. (building #2921) and at College Station Rd. / Riverbend Rd. (building #2412). The two greenhouse sites operate as a common facility for those involved in departmental research and teaching programs.

The Greenhouse Supervisor, **Matt Seader**, is responsible for care and maintenance of the greenhouse complexes. The greenhouse assistant and Research Professional is **Sarah Jackson**. The greenhouse committee chair is **Mike Deom**.

Contact information:

Emergency:

Dial 911

UGA Police 706-542-2200 (non-emergency only)

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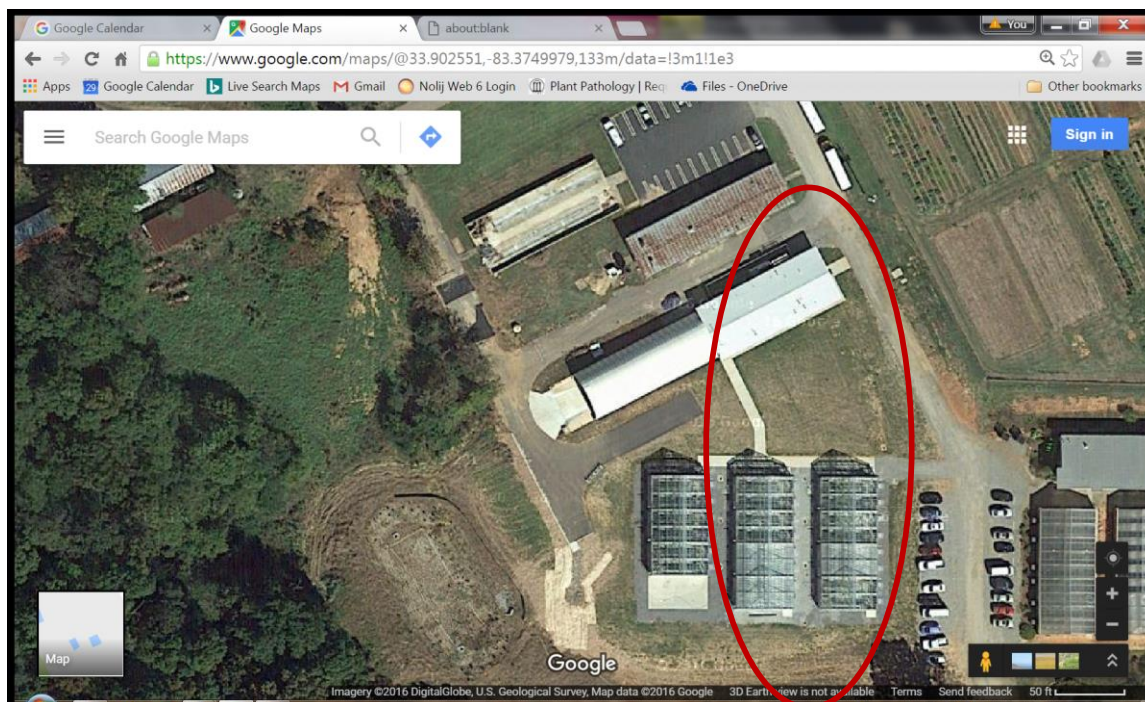
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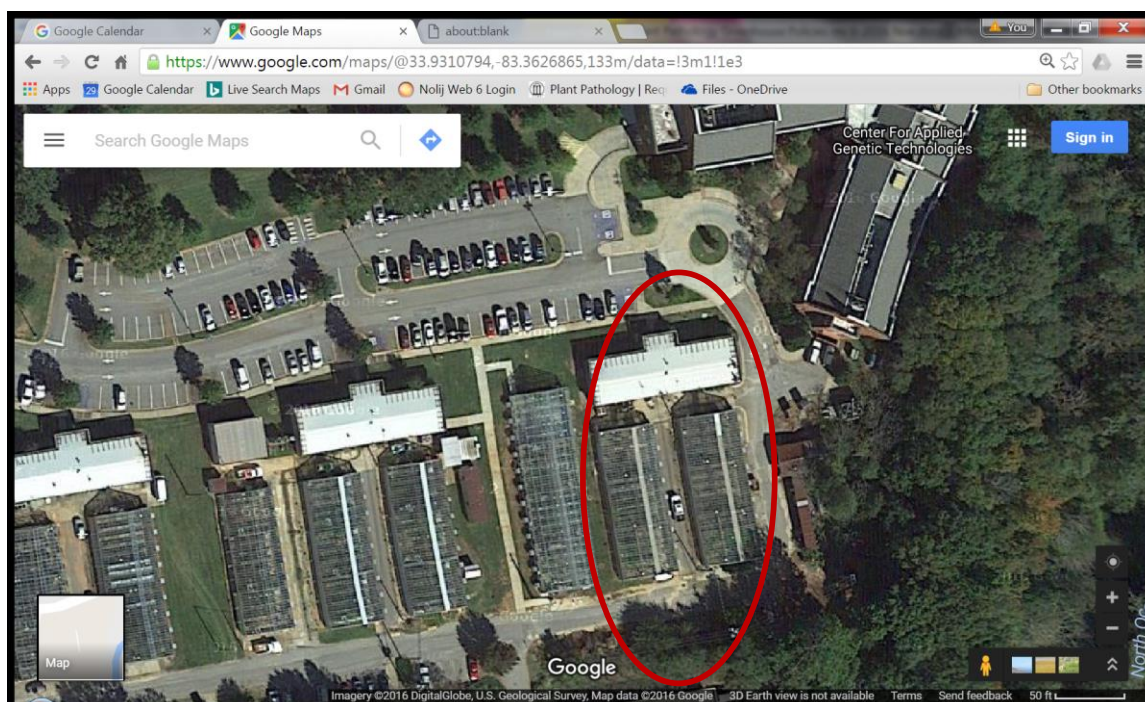
706-542-1270

The Plant Pathology greenhouses at South Milledge Ave. consist of 8 glass-covered greenhouse sections, each providing approximately 1,500 square feet of growing space. The greenhouses utilize Wadsworth control systems and employ gas heaters, retractable shade, and cooling pad systems to control temperatures. Also available are 7 reach-in size growth chambers and 2 smaller dew chambers. The greenhouse building also provides laboratory workspace, indoor and outdoor potting areas, storage areas for supplies and chemicals, and office space.

The Plant Pathology greenhouses at College Station Rd. / Riverbend consist of 6 glass-covered greenhouse sections, each providing approximately 2,000 square feet of growing space. The greenhouses utilize Wadsworth control systems and employ gas heaters and cooling pad systems for controlling temperatures. The site offers a steam generator to sterilize soil, pots, and plant materials, and has indoor and outdoor work and storage areas. Also located at this site are office and lab work areas.



Plant Pathology greenhouse complex at 2500 South Milledge Ave.



Plant Pathology greenhouse complex at Riverbend Rd.

## **General Policies and Procedures**

### **Greenhouse Operating and Hours:**

Regular weekday operating hours are from 8:00 AM to 5:00 PM Monday through Friday. For access during weekend hours, please contact Matt Seader for details. Doors remain unlocked during regular operating hours, and are locked during off-hours. If visiting the greenhouses during off-hours, please lock the doors when leaving the complex. Please contact the Greenhouse Supervisor for information on obtaining keys to each complex.

The greenhouse staff are responsible for seeing that the headhouses and greenhouses are kept clean, orderly, and in good working condition. Everyone – greenhouse staff, faculty, graduate students, staff and greenhouse workers – are expected to keep the greenhouses clean and in order. If a greenhouse user observes problem areas that need attention or cleaning, they should bring these concerns to the attention of the Greenhouse Supervisor. We should all take pride and responsibility for the appearance of the facilities. Greenhouse staff are responsible for the mechanical operation of the greenhouses and growth chambers, including cooling systems, heaters, temperature controls, fans, vents and keeping the cooling pads and reservoir tanks clean and in good working order.

### **Greenhouse Usage Allocation/Space Assignments:**

Greenhouse and growth chamber space is limited, so please be considerate when planning usage. Common-use greenhouse space is assigned by the Greenhouse Supervisor on an as-needed basis. All requests for space are considered and assigned accordingly. Requests for space should be made in writing via e-mail and also directly with the Greenhouse Supervisor, preferably with a 2-week lead time. In the request, an outline of the expected usage should be provided, along with generic requirements, such as the required soil type. For example, a request could be made for 3 benches of space in a greenhouse section, for 300 4" pots using standard potting soil, for a total of 30 days beginning in 2 weeks. In general, space is allocated first-come, first-serve and scheduled out on a calendar day basis. The same procedure is used for scheduling special-use facilities in the greenhouse, such as the mist chamber and mist bench. Graduate students should ask their major professor or lab coordinator to make the request for space.

For greenhouses and growth chambers, 60 days is the maximum time a space can be allocated to one user before the user needs to reserve another 60 days. This request for repeat usage should be in writing to the Greenhouse Supervisor. If an individual is on the waiting list for a growth chamber, they will be given priority for the next 60-day time period. The Department is not in a position to guarantee long-term usage of a departmental growth chamber to one user.

### **Greenhouse User Responsibilities:**

It is the responsibility of every greenhouse user to maintain their individual work environments. The basic principle is "if you make a mess, clean it up". Contact greenhouse staff if you require assistance. It is the responsibility of every greenhouse user to follow procedures to ensure all users' effective use of the greenhouses, growth chambers, and work areas. As a plant pathology greenhouse, we must take care to avoid cross-contamination. Please keep this in mind at all times. All growth chambers and greenhouses are to be completely cleaned and sanitized between studies. Please sweep under benches if you spill soil on the floors. For safety reasons, closed-toed shoes are recommended in greenhouses.

Graduate student researchers are responsible for their own potting, planting, data

collection/observation, and discarding of plant material. Plants should be discarded and benches cleaned as soon as an experiment is terminated. Please inform greenhouse staff when an experiment has concluded, and greenhouse or growth chamber space will be available for the next experiment. For any special requirements, please contact the Greenhouse Supervisor.

Mandatory greenhouse training sessions for new users will be held within 1 month of the start of each fall and spring semester. The Greenhouse Supervisor will contact faculty, staff, and students by e-mail regarding the training sessions.

#### Materials and Supplies:

All greenhouse soil, including standard bag soil such as Fafard potting soils and custom mixed blends, will be charged to the greenhouse user on a cost recovery basis. Once a bag of soil is opened, it becomes the property of the greenhouse user and should be labelled and stored appropriately for future use. The greenhouse user is responsible for determining what type of soil they require, and the amount of soil required for their study. When submitting a request for greenhouse space, the request should include the required soil type and amount. It is the responsibility of the greenhouse user to communicate with the Greenhouse Supervisor exactly how much soil is used and when, so that a greenhouse staff can make sure that sufficient standard bag soil and custom-mix components are available in a timely manner for future greenhouse users. Requirements for standard soil bags should be given to the greenhouse managers at least 2-3 days prior to when the soil is needed. Greenhouse users will each be assigned 55-gallon buckets to store their own soil. If desired, opened partial soil bags can be added to a general use storage container to be used by all greenhouse users.

Custom-mixed soil can be requested as needed. Generally, custom-mixes include various amounts of pine bark, peat moss, sand, field soil and/or fertilizers. Procuring soil materials needed for custom soil mixes will be the responsibility of the individual users. Greenhouse staff will assist in the mixing and sterilization of custom mixes. Requirements for special soil mixes should be given to the greenhouse managers at least 2 weeks prior to when the soil is needed, and a specific time for mixing and sterilization will be coordinated with the greenhouse staff.

Other general-use materials and supplies are made available to all users of the greenhouse facility through departmental funds. This includes, pots, labels, safety supplies (gloves, masks), and other consumable supplies. For any special-use materials, discuss arranging purchases with the Greenhouse Supervisor. Please allow ample time for ordering any special-use materials.

#### Care of Plants:

Greenhouse staff will provide routine care of all plants in the greenhouses and growth chambers. This includes watering, fertilizing and all pest control. A record of the date of application and the chemical and rate used will be kept for all pesticide applications, and this record will be available to users during normal working hours.

Plants are watered on an as-needed basis by greenhouse staff. Weekend watering is conducted by hourly student worker staff.

Fertilizing of plants will follow a schedule provided by greenhouse staff. Fertilizing schedules can be customized as needed (see below).

All pest control will be conducted by greenhouse staff. This includes, but is not limited to, applications of weed, insect, and disease controls. Grass and weeds growing under the greenhouse

benches will be removed as they develop. Weeds will also be controlled around the greenhouses and grass areas will be trimmed as needed.

If a greenhouse user requires customized watering, fertilizing, and/or pest management, please send an e-mail request to the Greenhouse Supervisor. For the benefit of greenhouse staff and student workers, customized management schedules must also be indicated with laminated signs on the greenhouse benches or growth chambers holding those plants. Complex watering, fertilizing, and/or pest management schedules (e.g., multiple treatments) are beyond the scope of routine greenhouse management and must be undertaken by the greenhouse users themselves.

#### Discarding of Plants/Soil and Care of Pots:

When an experiment is completed, it is the responsibility of the researcher to see that the plants and soil are properly discarded in accordance with the recommended sanitation procedures.

Soil and plant refuse can be discarded in the large, red 55-gallon trash drums or metal drums. Used pots and flats are to be placed in the designated area for sterilizing and/or washing. Each greenhouse site has a designated area for compostable refuse. Please see greenhouse staff for details.

Please contact greenhouse staff if steam sterilization is required for soil, plants, or pots. It is the responsibility of the researcher to decide if steam sterilization is required.

All disposable pots, gloves, labels, and other trash should be discarded into containers designated for regular trash. Please do not discard labels, pots or other trash in the plant material trash containers. Usually, greenhouses have small 5-gallon buckets or trash bag lined trash cans for regular trash.

## Special Note about Pesticide Applications

All pesticides (including insecticides, fungicides, herbicides, disinfectants, etc.) are to be applied by properly licensed greenhouse staff only.

**"Do Not Enter - Danger"** signs are posted on the entrance to any greenhouse section whenever pesticides are applied. These signs will have an "REI" written on the sign, which indicates the safe Re-Entry Interval. The "REI" indicates the amount of time that must pass before re-entry to the area is safe without proper PPE protective equipment.

**Please be aware - a "Do Not Enter" sign means DO NOT ENTER.** This is not a suggestion - this is required by both Federal and State laws. Entry into a pesticide-treated area without proper PPE is a violation of law and can be extremely hazardous to your health.

Matt Seader and Sarah Jackson make all of the routine pesticide applications in greenhouses. Before each application, signs are posted in each greenhouse, and a notice will be posted in the building regarding the chemical and time of application. Attempts will be made to notify the specific greenhouse space user of the pesticide application earlier that week/day. Usually pesticides will be applied in the evenings after 5:00 PM, and most will have a 12-hour REI. Please note, pesticides are applied when needed, so applications generally do not follow a calendar schedule.

**If a greenhouse user plans to apply pesticides of any kind** (commercial, experimental, restricted, off-the-shelf, etc.) they must notify the Greenhouse Supervisor directly. This will ensure all requirements are taken care of before application.

If there is ever any need to enter a greenhouse while the signs are posted, please contact the Greenhouse Supervisor directly at 706-830-5172 or [seader@uga.edu](mailto:seader@uga.edu) so that early entry can be arranged if possible.

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