# Orchard Park Research Greenhouse Facility Operating Policy

Rev. 4/6/2017

# **Greenhouse Space Allocation**

Use of greenhouse space is limited by assignment and availability. Please request space at least 30 days in advance. To request use of greenhouse space, follow the new user checklist: <a href="http://greenhouse.ucdavis.edu/research/newuser.html">http://greenhouse.ucdavis.edu/research/newuser.html</a>

A space request form must be filled out for all new projects, even if space is already assigned and in use, in order to inform greenhouse staff of project specific requirements and allow for adjustments to allocation at management's discretion. This is necessary to ensure the proper amount of bench space is used for a project and also to ensure minimum sanitation standards are met between projects.

# First-time Users of the Greenhouse Facility

All first-time users of the greenhouse facility are required to review and abide by the greenhouse use policy. New researchers/grad students/post-docs must also schedule an orientation session with the greenhouse manager. This session is to introduce the user to the resources and policies of the greenhouse facility, proper planting procedures, good housekeeping rules, and disease and pest avoidance.

Greenhouse users are responsible for planting and the maintenance of their plants, including staking, training, transplanting, harvesting, and weeding. The most successful projects are attended to by their respective researcher the most. Especially during project startup, expect to spend time in your greenhouse weekly. Additionally, if an undergrad or lab tech will be maintaining your plants, extensive training, communication, and follow-through is critical to project success. If researchers don't do essential tasks, the greenhouse staff will do them at PI's expense. Users are expected to maintain an active role in the progress of the greenhouse project, to notify the green house staff promptly at the end of a greenhouse project (*changes to billing will not be assumed*), to dispose of unneeded plant material, and to remove equipment at the completion of the experiment. If not removed in a timely manner, it will be removed by greenhouse staff at PI's expense.

# Safety

It is the responsibility of the lab to ensure ALL greenhouse users have adequate and timely greenhouse safety training and record keeping. Please check the training calendar or contact the CA&ES Safety Officer <u>Ron Lane</u> for the next available training session.

Pesticides, Herbicides, or other hazardous materials may not be used or stored without prior authorization from the greenhouse manager. Pesticides applied for experimental purposes are permitted with the appropriate research authorization permit, notification of greenhouse manager, and compliance with Title 3, California Code of Regulations. Campus chemical safety policy is the same at the greenhouse facility as it is in your lab. There is limited space available in our flammable liquids cabinet upon request.

Many floricultural pesticides are used that are not labeled for plants for human consumption. Never eat any plant material or fruit from the facility. Notify greenhouse manager if projects need to be compliant for human consumption; crop destruct is assumed.

#### Security

Access to the greenhouse facility is limited to authorized faculty, staff, and students. Visitors must be accompanied by a faculty member, staff member, or student while in the greenhouse area. Children must be under the direct supervision of an adult at all times. All headhouse and greenhouse doors must be locked at all times when not in use. Gates to the facility are generally open Monday - Friday 8AM - 5PM. Ask a greenhouse manager for the access code to the gate lock for after-hours access.

#### **Shoes and Clothing**

Appropriate footwear is required for all greenhouse personnel, users, and visitors entering the greenhouse facility. Shoes must be of the closed-toe type. Sandals are prohibited. Long pants and long sleeve shirts are recommended. Shorts and short sleeve shirt are permitted.

# Standard and Add-on Services Provided

These services are included with the bench rental rate:

Manual daily watering (once/day, seven days/week including holidays) or one-stake-per-pot auto irrigation, fertilizer, daily inspection and high/low temperature records, light intensity control, plant grow lights, pest control, standard size pots, and horticultural advice.

Potting media is NOT INCLUDED in the bench rate and is billed for separately. ALL potting media use by volume must be reported to the greenhouse manager in a timely manner. Complex and non-standard experimental setups are subject to additional labor and material charges.

The greenhouse manager or staff must be notified of all incoming projects and plants, and their respective needs. *Needs for new projects will not be assumed*.

# **Use of Facilities and Sanitation**

Amongst many other viruses and pathogens, **Tobacco mosaic virus** is a major issue for greenhouse grown tomatoes and other susceptible crops. Greenhouse staff will provide sanitation of equipment and greenhouses, and a basic protocol, but it is up to tomato growers to understand the severity of the risk of TMV, proper lab protocols for decontaminating seed, and taking the necessary measures to ensure they are not spreading virus between their projects – or worse – to other research at the facility. Basic sanitation protocols are available from greenhouse staff.

All greenhouse and headhouse space is to be kept clean and orderly by the users. All spilled soil or plant material in the headhouse, on route to or inside the greenhouses, on the counters, or on the carts must be thoroughly cleaned. A floor broom, bench broom, and dustpan, are provided in the headhouse. Sound sanitation practices are necessary in order to reduce disease and insect problems. You are responsible for messes; if it becomes necessary for greenhouse staff to clean a mess, responsible parties will be billed for the time.

Do not contaminate the sterilized bins of media when working in the headhouse. Operations that may compromise the sterile media must be performed away from the soil bins or inside a

greenhouse. Never return soil to the media bins, even if it is clean and unused. Only use clean implements to handle soil. Ask the greenhouse personnel about recycling clean or slightly used soil.

Plants that are infested with pests or pathogens may be removed/quarantined at the discretion of greenhouse management.

Hose nozzles must be hung up at the spigot and kept off of the ground to prevent the spread of pathogens. Hoses must be kept untangled and stretched out along the aisles to avoid a tripping hazard. All water spigots must be turned off when not in use.

Do not store field soil, pots or other supplies inside greenhouses or under benches. Contact greenhouse personnel if temporary storage space is needed for project materials and supplies.

Greenhouse doors must be kept closed while working in greenhouses to prevent the introduction of weeds and insects and to maintain environmental conditions. Notify the greenhouse personnel at one week in advance of needing extraordinary amounts of sterile media, pots, or other materials.

All needles, razor blades, and broken glass must be placed in a sharps container. Researchers must provide their own sharps container in greenhouses.

Report all pest and disease problems to the greenhouse personnel so that its spread can be contained.

Do not leave projects, equipment, supplies, or samples in the headhouse without prior permission from the greenhouse personnel.

#### **Disposal of Plant Material and Pots**

It is the responsibility of the greenhouse user to coordinate the disposal of their plant material in a timely manner after project completion.

Greenhouse users who generate plant waste from transgenic plants or invasive species are to place their waste materials in the orange transgenic dumpster on east end of the headhouse. Dispose of other plant material and soil in the dumpster to the east of the headhouse. Dispose of unusable or herbicide tainted plastic pots that are emptied of soil and plant matter in the green recycling totes near the main dumpster. Reusable pots that are empty of soil may be placed in the dirty pot bin near GH-316 for washing.

#### **Environmental Controls and Facilites**

Greenhouse environmental control equipment, including thermostats, fans, vents, timers and irrigation systems, are only operated by the greenhouse personnel. Contact the greenhouse personnel to request changes to the current environmental settings. Immediately report any malfunctions in the environmental controls to greenhouse personnel, or call Facilities Service at 530-752-1655. Approval must be obtained from the greenhouse manager before any changes, deletions or additions are made to the permanent facilities.

Outdoor growing spaces (lath, screen, field) are subject to weather extremes. Plan accordingly for freezing, intense heat, etc.

#### **Other Considerations**

There will always be greenhouse pests; eradication is impossible. If you have special project considerations like the need to not have any conventional pesticides applied, notify greenhouse manager.

At greenhouse manager's discretion, projects are subject to billable project improvement activities, including weeding, plant arrangement, and emitter organization.

ASK IF YOU ARE NOT SURE!