

MSU  
Plant Science Research  
Greenhouse Facility  
November 2023

# Plant Science Research Greenhouse Facility Directory

Website: <https://rtsf.natsci.msu.edu/research-greenhouse-complex/>

**Dr. Chrislyn Particka, Director**

Office Location: 103A PSRG Headhouse

Cell Phone: 315-651-9682

Email: [chrislyn@msu.edu](mailto:chrislyn@msu.edu)

**Trevor Hardwick, Greenhouse Coordinator**

Office Location: 102A PSRG Headhouse

Cell Phone: 260-704-1748

Email: [hardwi31@msu.edu](mailto:hardwi31@msu.edu)

**Steven Peterson, Greenhouse Coordinator**

Office Location: 108 PSRG Headhouse

Cell Phone: 910-818-0312

Email: [pete1504@msu.edu](mailto:pete1504@msu.edu)

**Larry Thayer, Greenhouse Engineer**

Office Location: 108 PSRG Headhouse

Cell Phone: 989-413-1096

Email: [thayerl1@msu.edu](mailto:thayerl1@msu.edu)

**Rachel Wood, IPM Coordinator**

Office Location: 106 PSRG Headhouse

Cell Phone: 734-771-3945

Email: [woodrac6@msu.edu](mailto:woodrac6@msu.edu)

## **Greenhouse Faculty Oversight Committee**

### **Dr. Erik Runkle, Committee Co-Chair**

Department of Horticulture

Email: [runkleer@msu.edu](mailto:runkleer@msu.edu)

### **Dr. Thomas Sharkey, Committee Co-Chair**

Department of Biochemistry and Molecular Biology

Email: [tsharkey@msu.edu](mailto:tsharkey@msu.edu)

### **Dr. Bjoern Hamberger**

Department of Biochemistry and Molecular Biology

Email: [hamberge@msu.edu](mailto:hamberge@msu.edu)

### **Dr. Mary Hausbeck**

Department of Plant, Soil, and Microbial Sciences

Email: [hausbec1@msu.edu](mailto:hausbec1@msu.edu)

### **Dr. Roberto Lopez**

Department of Horticulture

Email: [rglopez@msu.edu](mailto:rglopez@msu.edu)

### **Dr. David Lowry**

Department of Plant Biology

Email: [dlowry@msu.edu](mailto:dlowry@msu.edu)

### **Dr. Carolyn Malmstrom**

Department of Plant Biology

Email: [carolynm@msu.edu](mailto:carolynm@msu.edu)

### **Dr. Eric Olson**

Department of Plant, Soil, and Microbial Sciences

Email: [eolson@msu.edu](mailto:eolson@msu.edu)

### **Dr. Hannah Burrack**

Department of Entomology

Email: [burrackh@msu.edu](mailto:burrackh@msu.edu)

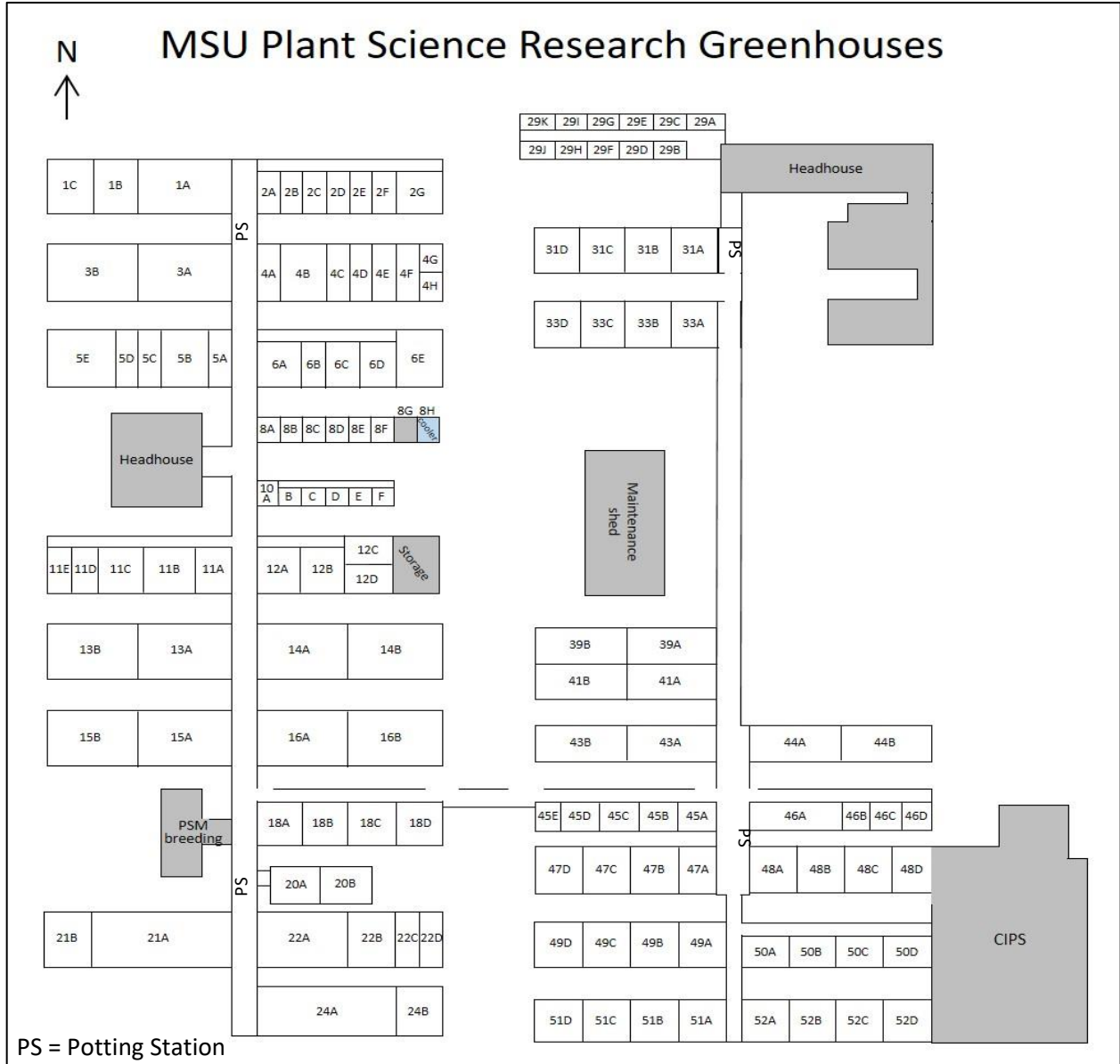
### **Dr. Jeremy Johnson**

Department of Forestry

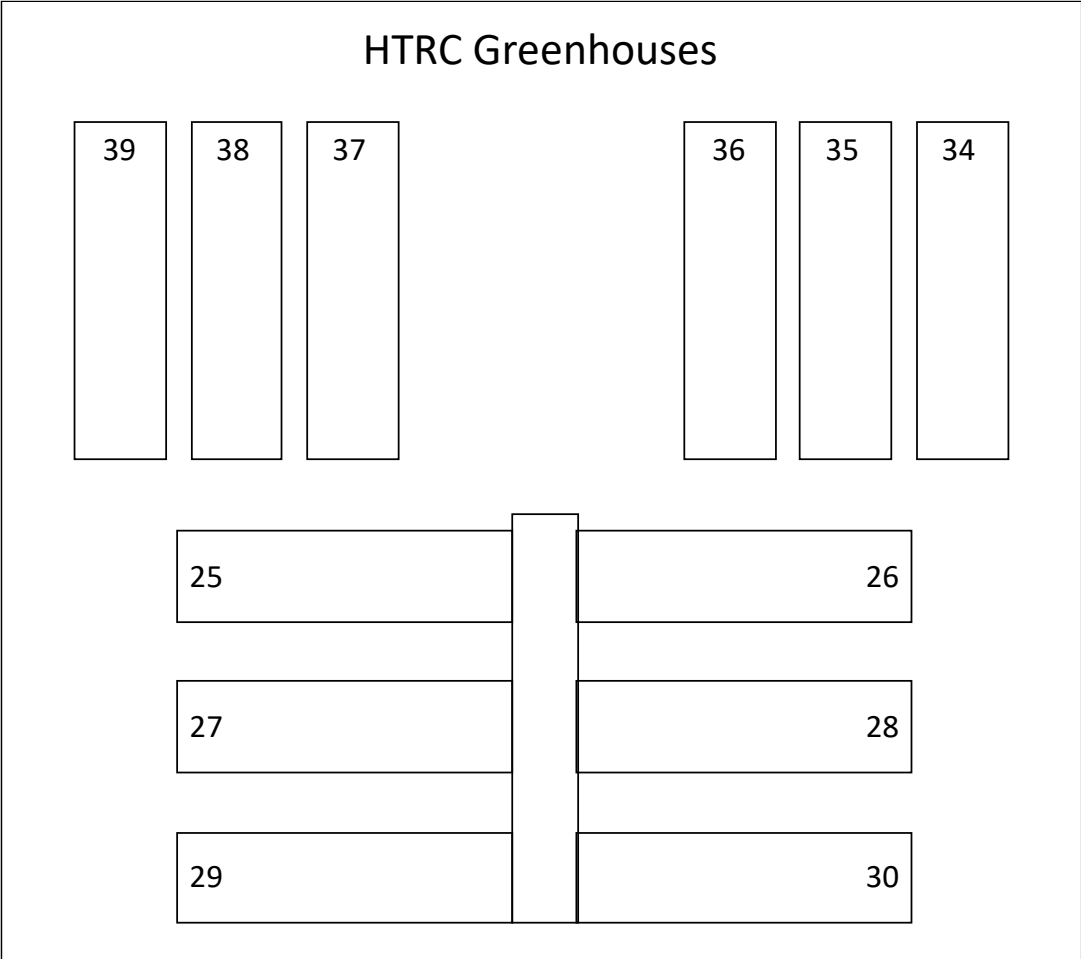
Email: [jeremyjo@msu.edu](mailto:jeremyjo@msu.edu)

# Facility Maps

## Main Campus



Horticulture Teaching and Research Center (HTRC)



## Space Allocation

Greenhouse space at the Plant Science Research Greenhouses (PSRG) or at HTRC is allocated on a first-come, first-served basis. If you need greenhouse space, please email Chrislyn Particka to discuss your needs.

All approved greenhouse users must review and follow greenhouse facility policies and procedures contained in this guide. During periods where demand for space is greater than supply, priority will be given to new faculty.

## Facility Access

Access to the PSRG is via your MSU ID card. Users must complete Worker Protection Standard Training, which must be renewed annually. Users must also complete PSRG site-specific training (email Chrislyn Particka to schedule), both on main campus and at the HTRC (if applicable).

**It is a violation of state and federal laws for any person to work in the greenhouses without having current/complete WPS training. This is strictly enforced.**

## Facility Hours

The PSRG is accessible to users at any time, including weekends and holidays. Greenhouse staff will be present Monday through Friday, 7 am to 4:30 pm.

## Services

PSRG provides the following services and supplies:

- Maintenance of the greenhouse structure and mechanics is conducted by PSRG staff; MSU Infrastructure Planning and Facilities (IPF) will be called in as needed. For greenhouse work requests, please use the online ticketing system (<https://rtsf.natsci.msu.edu/research-greenhouse-complex/greenhouse-ticketing-system/>), or scan the QR code on the sticker posted on each greenhouse door).
- PSRG staff checks and secures all exterior doors nightly.
- Plastic pots in multiple sizes are provided. Users should recycle pots after use in the appropriate location.
- Fertilizer – Two water-soluble fertilizers: Peters Excel 15-7-25 and Peters Excel pH Low 21-7-7. Osmocote Plus 15-9-12. Please read the information supplied by PSRG staff and follow directions to ensure proper use. If you would like to fertilize at a low rate every time you water, greenhouse staff can install a siphon mixer.
- Field soil and bagged Suremix potting media are located at the potting stations for your use. Diagnostic reports for the field soil are available upon request.
- Light bulbs will be purchased and replaced by PSRG staff. New light fixtures will be purchased as the PSRG budget allows.
- Hoses, siphon mixers and/or irrigation systems. Irrigation systems will be built by PSRG staff as time allows (they are not priority work items).
- Hallways and headhouse areas are kept clean and orderly by PSRG staff.
- Storage areas are available free of charge, but space must be reserved and materials must be stored in a neat and orderly fashion. Combination locks (no keyed locks) may be used only if the

combination is provided to Chrislyn Particka. Any items found stored in PSRG-maintained storage areas without PSRG staff knowledge will be discarded.

- PSRG supplies carts, wheelbarrows, brooms, dustpans, shop vacs, pressure washers, and shovels for users to move plants and potting media and maintain cleanliness of sections. PSRG-owned items are painted with purple to distinguish them from materials owned by individual programs. While these materials are intended for use by researchers, they must not be stored inside greenhouse sections.
- If you would like PSRG staff to assist you with construction or maintenance of equipment that is research related and not part of the greenhouse structure please contact Chrislyn Particka. Assistance will be provided as time allows, and charges may be incurred for such assistance.

## Greenhouse Use Standards

The ultimate responsibility for use of a greenhouse lies with the user. Users are strongly encouraged to check greenhouses and plants daily (even on weekends). While PSRG staff monitor environmental conditions in the greenhouse, users are encouraged to do so as well, and report problems to PSRG staff.

**Plants:** Greenhouse sections are to be used to grow plants for research purposes only. **No personal plants may be grown.** Once a study has ended, users should promptly dispose of or properly store all plants, potting media, and pots in a timely manner in the appropriate locations. **Food crops that are grown for research purposes must not be consumed.**

**Potting Stations:** The four potting stations located in the greenhouse hallways should be used (plants should not be potted in greenhouse sections). Please do not leave open bags of potting media on the table at the potting station. A lidded trash can is kept at each potting station for storage of opened bags of potting media. Carts are available to transport plants from potting stations to greenhouse rooms.

**Quarantine Room:** Users must inform Rachel Wood and Chrislyn Particka when they will be bringing plants or plant cuttings into the greenhouse to prevent introduction of unwanted pests. The quarantine room (45D) is available for plants to be held while they are being inspected, and if necessary, treated.

**Research with insects and diseases:** Users must inform Chrislyn Particka and Rachel Wood when research will involve insects and diseases so that arrangements can be made to prevent spread to other greenhouse sections.

**Genetically modified organisms:** Please let Chrislyn Particka know if you are conducting research with genetically modified organisms so appropriate plans can be put into place.

**Storage:** Each greenhouse section may have one small cabinet for storage of tools and supplies that are frequently used; however, no pots, trays, potting media, dried/dead plant materials, fertilizer, or other chemicals may be stored on greenhouse benches. **No pesticides are to be stored in the greenhouses at any time.** As noted above, PSRG provides storage free of charge.

**Sanitation/Cleanliness:** Users are expected to maintain greenhouses in a neat and orderly fashion. While PSRG staff clean hallways, greenhouse sections should be cleaned (e.g., potting media swept from the floors) by users. Weeds should also be pulled by users; if you think the floor drains need the attention of PSRG staff, please submit a work request via the ticketing system. As stated above, once a study has ended, users should promptly dispose of or properly store all plants, potting media, and pots

in a timely manner in the appropriate locations. Dead plants should be periodically culled and removed from the greenhouse facility.

If a greenhouse is not kept clean or free of weeds, users will receive a notice from the Greenhouse Director to remedy the problem within a short period of time. If the problem is not addressed in a timely manner, greenhouse staff will rectify the problem and the user will be charged for the labor required, with a minimum fee of \$500.

Any trash that is accumulated as you are working must be disposed of as you finish working for the day (trash should never be left in trash cans within greenhouse sections).

**Electrical hookups:** Users may not alter electrical installations. If you have any questions, please contact Larry Thayer.

**Pest Management:** The PSRG IPM Coordinator (Rachel Wood) scouts plants each week looking for signs of diseases. Users are encouraged to learn to identify common greenhouse insects and diseases and report issues to Rachel. Beneficial insects and mites and pesticides are applied by Rachel to control pests that are impacting research plants; she does not apply pesticides that are used for research purposes.

If plants are maintained in poor condition (e.g., insufficient or excess water, insufficient or excess fertilizer), it may not be possible to apply pesticides without causing damage to the plants. Further, plants that are not healthy are more likely to have pest issues.

Pesticide requests should be made via the online ticketing system by the designated “pesticide contact” for each lab group. If you are a certified pesticide applicator and want to apply your own pesticides, please contact Rachel Wood. Users must obey pesticide restricted-entry intervals (REI) and not enter sections where “danger” signs are posted. If a situation arises where early entry is necessary, users must contact Rachel or any other greenhouse staff member.

**Attire:** Greenhouse users must wear closed-toe shoes at all times. Sandals or other types of open-toe shoes are not permitted. Shorts are allowed, but users should keep their torsos covered.

**Pets:** Pets are strictly prohibited from the greenhouse at all times.

**Bicycles:** Bicycles are not permitted in the facility. Bike racks are available near entry doors.

**Hallway obstructions:** All greenhouse hallways must remain free of obstructions. PSRG potting stations, potting media, and equipment (carts, wheelbarrows, etc.) are located in hallways, but cabinets, containers, tables, or other greenhouse equipment should not be stored in hallways.