Understanding the Growing Space Rotation

Each planting location will have a 6-7 week **planting window**. During this time, plants from seed or transfers from agar can be placed in the space. After the posted date, no new plants are permitted in this location.

The planting window is immediately followed by a 7 week **maturation window**. All plants in the space should be harvested or moved to the drying room by the posted harvest date. No new plants are permitted in the space during the maturation window.

Once empty, the planting location is **cleaned out** by greenhouse staff and heat treated for 4 days. The clean space is then opened again for a new planting window.

Staff will make weekly checks for pests and post a **pest summary**.

An **order of entry** will be posted based on pest counts. Researchers must strictly follow the order of entry so pests from infected locations are not transferred to clean spaces. Researchers will work from clean to infested rooms. Once an infested room has been visited, no re-entry to a clean room is allowed on that day.

Pest Control Strategy

During the planting and maturation windows, **beneficial insects** will be introduced into the space on a bi-weekly basis. These come in a bran which is sprinkled on the leaves and soil. Seedlings covered with domes are not treated.

If weekly pest monitoring detects high pest populations, researchers will be contacted to arrange a date for **pesticide application**. Pesticides will continue to be used in the space on a regular basis until harvest.

A log of beneficial insect releases and pest counts will be posted for each space so researchers can monitor them.

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Biological Sciences Greenhouse



Protocols For Growing Arabidopsis



9/2011

Preparing To Plant



Request media via the Greenhouse website by noon on Mondays.

Standard media: **RediEarth** incorporated with Osmocote 14-14-14 (fertilizer) Marathon (pesticide) ****HANDLE WITH GLOVES****

♦ Use new or **clean & sterile** pots, trays and domes.

Surface sterilize seed.

◆ Label all pots & flats with researcher name. Unlabeled pots will be discarded.

• Stagger plantings so not all plants are in same stage and same location at same time.

◆ Plant in the prep room or other pest and seed-free location.

Daily Care



Correct watering is the key to healthy plants.

http://bioscigreenhouse.osu.edu

- Water only as needed and NEVER allow plants to stand in water. Pour off excess water.
- ◆ Follow posted **order of entry** to greenhouses and chambers to reduce pest transfer.

♦ Make Gnatrol applications per directions.

• Wear **dedicated lab coats** in each growing space.

♦ Keep growing spaces and adjacent areas clean.

Know how to ID thrips and signs of INSV.

♦ Never move plants from one chamber/ room to another.

♦ Keep chamber/room doors closed as much as possible.

Harvest



Researchers must follow NIH guidelines for GMO disposal.

♦ Follow dates on posted signs for last planting and harvest dates.

• Cover all plants during transport to reduce seed loss and pest transfer.

 Collect seeds then promptly dispose of plants & media in GMO receptacle. NO non-compostables
(pots or labels) allowed in GMO bin.

• **Discard** unnecessary plants.

INSV infected plants will be discarded immediately.