Work practices at the Mana center

General instructions

- 1. Before starting your work at the Mena Center, please fill in your name and the time of entry on the registration pages.
- After registration, please indicate in the Excel file on the computer, the number of pots and/or bags of soil that you will use.
- 3. Do not plant or sow in the preparation area.
- 4. Do not throw vermiculite and soil into the sink to avoid clogging the pipes!
 Soil residues should be thrown into the green bin only!
- 5. At the end of your work, make sure that the area is clean.
- 6. Fill in the time you finished working on the registration pages and sign that you have cleaned the area.

Additional instructions

- Wear a robe when entering the room. The robes hang on the doors inside the growth.
 rooms (according to the requirement of the inspectors on behalf of the Ministry of
 Agriculture).
- 2. Don't bring to the Mana rooms plants that were grown in other places.
- 3. Thoroughly clean and disinfect the shelves before and after growing the plants.
- 4. Do not water manually when the plastic molds are placed in the trays.
- 5. Empty the molds of excess water after watering.
- 6. Do not leave any form of standing water in the growing rooms.
- 7. **Never touch or handle the control panels!** If case of a problem, call the manager.
- 8. Always mark the trays <u>before</u> placing them in the growth chambers.

Important: if you have taken soil and there are 3 bags of soil left, please inform the Mana manager.

Registration

1. Make sure that the username Mana is displayed on the screen. If not, press the switch button to change computers.



- 2. Enter password: MOMOMO
- 3. The Excel file is on the drive if the window is not already open.
- 4. Select the researcher's name from a list in the table.
- 5. Fill in the name of the student/employee who used the pots and/or soil.
- 6. Fill date in DD/MM/YYYY format
- 7. Choose the type of pot from a list and specify quantity. "Soil" should be selected only if a whole bag of soil is used.
- 8. Save and close the file.

Use of growth rooms:

Treatment of seeds before sowing

- 1. Sterilize the seeds using one of the following 2 methods:
 - a. Soak the seeds for 15 minutes in 3% sodium hypochlorite solution, and then rinse with water.
 - b. Mix 100 ml of 50-80% hypochlorite and 5 ml of concentrated HCL in a beaker.

Carful: all stages must be performed in a fume hood. Worker must wear gloves, lab coat and goggles. Add the hypochlorite first, then the acid.

Place seeds in an Eppendorf tube and leave the cap open. Place the tube and the beaker with the solution in a desiccator and leave for 2 hours. Remove the test tube, close it, wrap with Parafilm, and keep in a refrigerator.

Carefully discard the solution to a waste container. Wear a lab coat, gloves, and goggles.

2. Treatment with Confidor (insecticide):

Water the soil with a 0.05% Confidor solution 2-3 day before sawing.

Careful: Confidor is toxic! Read the instruction before using the material. Wear gloves and a lab coat when handling, avoid skin or eye exposure. Wash hands thoroughly when done.

Irrigation and handling of transgenic plants

- 1. Irrigation
 - **Avoid overwatering!** It creates unventilated soil and favorable conditions for the development of insects and diseases.
 - Arabidopsis plants should be watered once a week.
 - Supervise your plants regularly to make sure that they are watered properly, that they look healthy, and that there are no pests and diseases.
 - Contact Mana manager if you need to stop or turn on irrigation.
 - **Report immediately** to the Mana manager on any problem, such as diseases, pests, water issues, plant development etc.
- 2. Wrapping of Arabidopsis plants
 - Cover the plants after flowering to prevent cross pollination and seed dispersal.
 - Plants must be removed from the growing rooms when seed ripening and the stopping of irrigation.
- 3. Elimination of experiments and sterilization of transgenic plants
 - Vacate the room at the end of the experiment. Remove all pots, trays and plants and clean the shelves.
 - Soil and pots used to grow transgenic plants must be sterilized together with the transgenic plants.
 - All plants grown in the same room with transgenic plants must also be sterilized (guidelines of the committee for transgenic plants).
 - Don't throw to the regular bin plants that are intended for sterilization.