**Space Request – Weld Hill Growth Facilities**

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| Name: | Cat Chamberlain | | | | | | | | Today’s Date: | | | | | | 16 November 2017 | |
| Email: | [cchamberlain@g.harvard.edu](mailto:cchamberlain@g.harvard.edu) | | | | | | | | Position: | | | | | | Graduate Student | |
| Dept.: | OEB | | | | | | | | Faculty Advisor: | | | | | | Lizzie Wolkovich | |
| **Start date**: | January 1, 2018 | | | | | | | | **Exit date:** | | | | | | October 1, 2019 | |
| **Please provide a brief description of your project:** | | | | | | | | | | | | | | | | |
| Growing saplings from seed and assessing the freezing tolerance of various temperate forest species. | | | | | | | | | | | | | | | | |
| **Amount of Space Requested (e.g., sq. ft., 1 bench, 1 large chamber):** | | | | | | | | | | | | | | | | |
| Greenhouse | | | | | **~ 3 benches** | | | | | | | | | | | |
| Growth Chamber | | | | | **Not until 2019** | | | | | | | | | | | |
| Outdoor growing space | | | | | **No** | | | | | | | | | | | |
| Will additional space be required? | | | | | **Growth Chamber space will be needed** | | | | | | | | | | | |
| If yes, how much space and when? | | | | | **One chamber from February 2019 – June 2019** | | | | | | | | | | | |
| **Preferred Environmental Conditions:** | | | | | | | | | | | | | | | | |
| In the greenhouses, the minimum temperature range is about 3 to 5 °C. Heating and cooling cycles are initiated when the temperature is about +/- 3 °C. Sometimes, especially in the summer, the equipment (heating or cooling) may be running at its maximum but may not be able to achieve the desired set points. | | | | | | | | | | | | | | | | |
| **Enter a discrete number for growth chamber conditions and a range for greenhouse conditions. If you would like help to determine the appropriate conditions, leave the table blank.** | | | | | | | | | | | | | | | | |
| **Condition** | | **Day** | | | | | | | | | **Night** | | | | | **Units** |
| Start time | |  | | | | | | | | |  | | | | |  |
| Temperature | | Ambient | | | | | | | | | Ambient | | | | | °C |
| Relative humidity | | Ambient | | | | | | | | | ambient | | | | | % |
| (Supplemental) light levels | | Ambient | | | | | | | | | Ambient | | | | | µmols |
| CO2 levels (if applicable) | | Ambient | | | | | | | | | Ambient | | | | | ppm |
| Please list any desired special programming | | | | | | None needed! | | | | | | | | | | |
| Do you want a copy of the greenhouse or growth chamber climatic data? | | | | | | | | | | | | | | That would be amazing! | | |
| **Organisms:** | | | | | | | | | | | | | | | | |
| What organism(s) will you be using? | | | | Acer saccharum, Quercus rubrum, Betula alleghaniensis, Quercus alba, Betula papyrifera, Ulmus americana, Alnus incana, Viburnum cassinoides, Acer rubrum, Hammamelis virginiana, Fagus grandifolia, | | | | | | | | | | | | |
| Have you worked with these plants previously? | | | | | | | Yes | | | | | | | | | |
| What is the source of the plants? | | | Cold Stream Farms – bare root seedlings | | | | | | | | | | | | | |
| What will happen to your plants when you have finished with them? | | | | | | | | | | | | Donate them | | | | |
| If you will be applying or using any BL-1 organisms (such as noxious plants, transgenics, or pathogens), please provide details below. | | | | | | | | | | | | | | | | |
|  | | | | | | | | | | | | | | | | |
| Do you have an approved COMS registration for BL-1 work? | | | | | | | | | |  | | | | | | |
| Please note: This facility is currently BL-1P approved. An appropriate and approved COMS will be required before any space request is granted involving BL-1 work and current EHS Biosafety training is required. | | | | | | | | | | | | | | | | |
| **Plant Care:** | | | | | | | | | | | | | | | | |
| Would you like the Plant Growth Facility Staff to provide NO CARE, DAILY CARE, or WEEKEND/HOLIDAY ONLY CARE? | | | | | | | | | Daily care please | | | | | | | |
| Please specify details (e.g., water as needed, fertilize weekly): | | | | | | | | | | | | | | | | |
| Water as needed | | | | | | | | | | | | | | | | |
| Please list your preferred fertilizer regiment (or you may request assistance to determine an appropriate regiment): | | | | | | | | | | | | | | | | |
| I may need assistance on this one | | | | | | | | | | | | | | | | |
| **Pest Control:** | | | | | | | | | | | | | | | | |
| What is your tolerance level to pests (e.g., “kill them all”)? | | | | | | | | | | | | Keep them maintained like usual | | | | |
| Do you have a preference for methods (e.g., biological control, pesticides)? | | | | | | | | | | | | | Only request is to treat each individual the same, regardless of number of pests | | | |
| Please provide details for your preferences or needs for pest control:  (e.g., certain beneficial insects may interfere with controlled pollination studies) | | | | | | | | | | | | | | | | |
|  | | | | | | | | | | | | | | | | |
| **Potting Media and Containers:** | | | | | | | | | | | | | | | | |
| The following potting media components and containers are on hand **in limited quantities** in the potting room. Specialty materials are not provided by the Plant Growth Facility and will need to be ordered by the researcher.  **Potting Media:** Pro-Mix BX or similar, sand, Turface, perlite, vermiculite  **Containers:** Belden mini square, 4” square pots, 4” square tall pots, 6” pan, 6” round standard, 10” round azalea | | | | | | | | | | | | | | | | |
| What potting media do you require? | | | | | | | | Germination mix and Forest mix | | | | | | | | |
| What type and quantity of containers are needed? | | | | | | | | Germination pan (~10) and 4” square pots (~150) Deepots – about 480 (regular size thick wall) | | | | | | | | |
| **Additional Comments:** | | | | | | | | | | | | | | | | |
| **Thanks Kea!! Commercial stock to be planted in Fall 2018; Assign to Mark, Nick, and Larry for chilling (0-5 C) starting Nov 1 – Jan 31, then assign to GH 7 (Feb 1 to June 30) and Peter for freezing (-3C), Feb 1 to June 30** | | | | | | | | | | | | | | | | |