

14.0 PATHOGEN AND INSECT USE POLICY

BTI Pathogen Use Committee 4/7/04

Recommended Guidelines for Pathogen and Insect Use at the Boyce Thompson Institute

1. The Pathogen Use Committee (PUC) will review all pathogen use in BTI Plant Growth facilities. A written request for use of new pathogens must be submitted by the Principal Investigator (PI) to the Greenhouse Manager and the PUC prior to use in BTI Plant Growth facilities. The PI will be asked to complete a Pathogen Use form (see Appendix A) to be reviewed by the PUC. If the PI is proposing to work with recombinant pathogens, he/she will be asked to submit a current rDNA MUA and Greenhouse/Growth Chamber Manual approved by Cornell's Institutional Biosafety Committee (IBC), which will be kept on file in the Greenhouse Office.
2. Each request for use of a new pathogen will be reviewed by the PUC, and space will be allocated to the laboratory by the Greenhouse Manager. If a pathogen is considered "high risk"² by the PUC, the Greenhouse Manager will attempt to find space within the BTI Plant Growth facilities that can be shared with other labs already using the pathogen successfully under strict containment measures (e.g., Tobacco Mosaic Virus or TMV). Alternatively, the Greenhouse Manager will attempt to locate space at Cornell that is already being used for the pathogen in question and can be shared with BTI scientists.
3. Compliance with containment procedures to prevent pathogen spread to non-target hosts is critical to keep BTI Growth Facilities functioning optimally for all users. All lab members who work with pathogens must understand and follow necessary containment measures for the pathogens they use. Their signature on the Pathogen Use Form will indicate that they have read and agree to comply with all necessary containment measures as outlined.
4. Some general guidelines for pathogen containment are as follows:

When possible, inoculate plants in the laboratory to keep high concentrations of pathogens away from the Plant Growth Facilities.

Transport infected plants on designated carts, which may need to be covered prior to moving infected plants. Clearly mark carts that are to be used only for designated pathogens. After use, clean and decontaminate carts.

Do not visit "clean" growth chambers or greenhouses after having gone to a pathogen containing chamber the same day.

The one-glove-rule applies in the Plant Growth Facility as well as other BTI locations.

²High risk pathogens are defined as those that 1) have a broad host range that includes plants commonly grown in BTI Growth Facilities, 2) spread easily by wind, water, touch, or environmental conditions commonly found in BTI Growth Facilities (e.g., saturated soil or free water), 3) are highly virulent and have the potential to kill large numbers of plants quickly, 4) are difficult to remove from the facility once an infestation occurs, or 5) are difficult, if not impossible, to remove by standard decontamination measures (e.g., TMV).

[Insect use survey](#)

[Pathogen use survey](#)