

BIOSAFETY MANUAL



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			1 of 2
Pest Management			Effective Date: March 2013 Date of Revision: NA
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<u>Purpose of procedure</u> This procedure has been developed to prevent and control insect and pest infestation on plant(s) in the greenhouse			
<u>Scope</u> This procedure is applicable to facility staff, all authorised users and visitors of the RTPC2 facility			
<u>Responsibilities</u> 1. Facility manager should conduct weekly inspection for Pest & Insect Management 2. Users should report occurrence of insect or pest infestation to RTPC2 Manager to take appropriate measure of control			
<u>Steps</u> <i>Precautions</i> Inspect new plant(s) thoroughly to prevent the accidental introduction of pests into the greenhouse: 1. Ensure that containment building is in good condition at all times. Building needs to be inspect and monitored at a weekly basis 2. Entrance door should be equipped with sticky mat 3. Keep doors, screens, strainers and ventilators in good repair 4. Switch on UV lamp during working hours 5. Use clean or sterile soils or ground media. Clean or sterilize tools, flats and other equipment 6. Maintain a clean, closely mowed area around the greenhouse to reduce invasion by pests that develop in weeds outdoors 7. Eliminate pools of standing water on floors. Algal and moss growth in these areas can be sources of fungus gnat and shore fly problems 8. Dispose of trash, boards and old plant debris in the area 9. Remove all plant(s) and any plant debris; clean the greenhouse thoroughly after each growing cycle 10. Avoid overwatering and promote good ventilation to minimize wet areas conducive to fly breeding 11. Avoid wearing yellow clothing which is attractive to many insect pests 12. Maintain a weed-free greenhouse at all times 13. Eliminate infestations by discarding or removing heavily infested plants 14. The RTPC2 facility outer vicinity shall be sprayed with commercial insecticide weekly <i>Monitoring</i> 15. Weekly inspections on plant(s) must be conducted in all sections of the greenhouse 16. Select plant(s) so that they represent the different species in the greenhouse 17. Pay particular attention to plants near ventilators, doors and fans 18. Use the following to monitor insect: 19. Sticky cards. One to three cards per 1000 square feet in the greenhouse is recommended.			

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Cards should be changed weekly

20. Mass trapping products e.g. sticky tapes. To reduce and manage insect infestations

Treatment (Out source through certified contractor)

21. Chemical Spraying

22. Infested plant(s) have to be sprayed with a systemic insecticide or disposed through autoclaving
23. Chemical rotation is required for pest and disease control to prevent resistance building
24. Wear appropriate safety equipment – spray suit, mask, gloves and boots and take all due care when handling these chemicals
25. All spray information - chemical used, rate, target pest/disease, operator and date are to be recorded in the 'pest management log sheet' kept by the Facility Manager. This is essential information and is used as a guide for chemical rotation
26. All equipment is to be washed down after use with a primary wash in the greenhouse to remove pollen granules followed by a secondary wash at the chemical wash down area to remove residual chemical on the equipment. It is then stored away
27. Any residual chemical must be disposed off in the appropriate manner
28. After chemical spraying a warning sheet must be posted on the door of the greenhouse containing information about the chemical used, date and the non contact period (usually 24 hours)

29. Fumigation

30. Sign indicating fumigation will be conducted must be displayed
31. Remove all potted plants from the greenhouse to be fumigated
32. Wear appropriate safety equipment – spray suit, mask, gloves and boots and take all due care when handling these chemicals
33. All fumigation information - chemical used, rate, target pest/disease, operator and date are to be recorded. This is essential information and is used as a guide for chemical rotation
34. Dispose of empty containers and used canisters. Return unused chemicals in property and clearly labeled containers to storage area
35. Allow enough time and use enough fans to ventilate and aerate in accordance with structural limitations
36. Before re-entry, use a suitable gas detector to determine fumigant concentration so that appropriate precautions may be taken. Most fumigants do not provide adequate odor warning
37. Remove warning signs when aeration is complete

Training required

Handling of chemical pesticide
Spill management

Location

Greenhouse area and within close vicinity and parameter of facility