Landscape Services

Safety Standard Operating Procedure

(Revised 1/2023)

Greenhouse Integrated Pest Management

This SSOP provides guidance on greenhouse integrated pest management. As with any equipment or tools, the most basic premise for safe operation is reading and adhering to the manufacturer’s instructions and warnings. This SSOP is not a substitute for the owner’s manual produced by the manufacturer.

**Safety requirements PPE required:** chemical splash goggles, long sleeves, long pants, chemical resistant boots that cover the ankles, chemical gloves, full face respirator, and half respirator.

**Note:** Clean all PPE after each use and store in a clean uncontaminated area.

**Scheduled:** Daily

**Record keeping requirements:** Oklahoma law requires noncommercial/service technicians to keep records on all pesticides applied. This includes restricted and non-restricted use pesticides. Records must be kept for two years, located at the principal place of business.

**General information**

Pest management is one of the most important practices necessary in greenhouse agriculture production. Losses caused by insects, diseases, weeds, and nematodes can be enormous. Landscape Services greenhouse IPM loss prevention approach is through daily house monitoring and proper pest identification.

**Scouting Greenhouses**

1. **Daily scouting**
   - Pest on plants.
   - Moisture content of plant pots.
   - Counting insects caught on mechanical traps.

**Sanitation of Greenhouses**

1. **Clean polycarbonate, glass, benches, and floors with detergent or mild soap before seasonal color grow out.**
   - Remove as much dirt and organic matter from glass or polycarbonate as possible.
   - Clean the top of and underneath the benches.
   - Use long handled scrub brush to remove dirt, algae, and debris from floor.
   - Remove grates and clean trench drains and catch basins.
2. Ongoing greenhouse cleaning

- Sweep loose potting soil and leaf debris as needed daily.
- Wash and disinfect greenhouse tools often.
- Immediately cleanup mess created from any greenhouse project. e.g., dead heading, trimming, or moving plant material.

Mechanical control

1. Traps for monitoring and control of insects

- Sticky aphid whitefly traps used during growing season. Replaced monthly.
- Sticky thrips leafminer trap used during growing season. Replaced monthly.

Cultural control

1. Potting Soil
   - Use only proven labeled non-moisture holding potting soil mixtures.
   - All opened/unused potting soil and soil compost is stored inside closable airtight carts.

2. Watering
   - Finish all greenhouse watering before noon to allow for drying time of plant material.

Chemical Control (Licensed Greenhouse or service tech applicators only!)

1. Weeds
   - Identify weed. Spray as needed at labeled rate.

2. Diseases
   - Identify Disease. Spray as needed at labeled rate.

3. Insects and nematodes
   - Identify pest. Spray as needed at labeled rate.
   - During growing season, greenhouse houses can be preventively sprayed on 14 day cycle with proper chemical rotation practices.