



**Greenhouse Pest Message, January 19, 2023**

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**Some Top Tips on Preventing Pest, Diseases and Abiotic Problems Before the Busy Spring Season Begins!**

- **Start and stay clean.** Disinfecting the greenhouse helps prevent pathogens such as *Rhizoctonia* and *Pythium* as well as algae which is breeding ground for fungus gnats & shore flies.
- **Control greenhouse weeds.** Many common weeds are a reservoir of greenhouse insects and mites.
- **Check your furnace** before putting crops in the greenhouse to avoid ethylene issues. See recent e-Gro article <http://www.egroblog.com/showblog.php?ID=189>
- **Inspect Incoming Plants.**
  - This is by far the most important scouting task. You don't want to inherit someone else's problems (i.e. resistant thrips, spider mites, *Bemisia* whiteflies or aphids), difficult to control mealybugs, systemic diseases, or incurable diseases (viruses).
- **Have a regular scouting program in place** including use of sticky cards and plant inspections.
- **Using Sticky Cards to Monitor for Greenhouse Pests video**  
<https://youtu.be/g4q5jNPS-4s>
- **Scouting for Key Insect and Mite Pests on Key Plants Factsheet:**  
<https://ipm.cahn.uconn.edu/wp-content/uploads/sites/3216/2022/12/2019keypestkeyplantsscoutingbperennials-6.pdf>
- **Incorporate some biological controls if you haven't already.**  
Greenhouse insects and mites do not develop resistance to being eaten! Many growers start by using beneficial nematodes sprenches against fungus gnats and thrips pupae and then graduate to using predatory mites against thrips and spider mites. See previous greenhouse pest message of January 12, for more information.
- **Make sure your injectors are working properly.** Overfertilizing plants particularly with nitrogen, increases the reproduction of aphids, whiteflies, mealybugs, and spider mites. **See Greenhouse Fertilizer Injector Calibration video** by UNH Extension  
<https://www.youtube.com/watch?v=3fzobTdmkh8>
- **Monitor nutrient levels** with in-house testing of pH and EC levels or by regularly sending samples to a soil testing laboratory. High salt levels encourage root rot diseases. Adjusting pH levels (too low & applying flowable lime) or too high (applying iron chelates) takes time plus some

products need to be washed off the leaves to avoid unsightly residues.

- **Treat incoming plugs or plants** when they are small, and easier to treat.
- **Treat starter plants with a biological fungicide** to help prevent root and stem rot diseases. Biological fungicides are also fungal antagonists that may help discourage fungus gnats. Fungus gnats are so named because they survive & thrive when they have a fungal food source. With a healthier root system, you should be able to use less fertilizers!
- **Train your employees on proper handling and planting of tender young plugs.** Too deep planting encourages root rot diseases and poor root growth.
- **Train your employees on proper watering practices.** Overwatering promotes root rot diseases, algae, fungus gnats & shore flies, downy mildews.
- **Ensure proper ventilation** (HAF fans, rollup sides) to discourage foliar diseases. Heat & vent to discourage botrytis blight.
- **Keep garbage cans tightly covered** to keep Botrytis spores or winged thrips and other insects from spreading throughout the greenhouse.
- **Keep up to date.** Do you have a copy of latest New England Greenhouse Floriculture Guide?

It is Available online at: <https://greenhouseguide.cahn.uconn.edu/> or available for purchase at: <https://www.negreenhouse.org/pest-guides.html>

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