

### **Integrated Pest Management Program**

Department of Plant Science and Landscape Architecture UConn Extension

### Greenhouse Pest Message, May 23, 2024 Leanne Pundt, UConn Extension

### Fertilizing Plants in Retail Settings

Plants need to be fertilized especially while in outdoor retail yards. Both rainfall and watering with plain water leach nutrients. Plants may then exhibit deficiency symptoms such as yellow or reddish foliage. If no additional fertilizers are applied, plant quality may deteriorate, especially plants that will not be transplanted, such as hanging baskets. Plants in packs, 4-inch and other small containers are also susceptible to nutrient deficiency. The limited soil volume in the smaller containers allows the nutrients to quickly leach from the container.

Depending on the plant needs and container size, some options include using a watersoluble fertilizer or topdressing with a controlled- release fertilizer according to label directions (if it was not applied prior to shipping). Retailers should ask their wholesale suppliers if controlled-release fertilizer was added to the growing media or look for fertilizer prills in planters.

Before fertilizing, check hanging baskets and mixed combination planters for controlled release fertilizer (CRF) prills. Squeeze a few to see if the prills are depleted. If you find mostly empty prills, or if prills were washed out, another application of CRF may be needed. A good option for mixed planters and hanging baskets is to top-dress with controlled-release fertilizer according to the label directions just before the plants are sold.

If applying water soluble fertilizers, ideally, plants should be fertilized with every irrigation using a fertilizer injector. For retailers who don't have a fertilizer injector, an inexpensive "Hozon" proportioner can be used. A Hozon is a much better option than lawn and garden injectors which are designed for home gardeners. A Hozon has a ratio of about 1:16; 1 gallon of fertilizer stock will make 16 gallons of fertilizer solution. The goal is to maintain plant quality, not to promote growth. Therefore, the optimum fertilization program should include a neutral fertilizer (e.g. 17-4-17) at a low rate (between 50 to 100 ppm N) with low phosphorus (P). The purpose is to maintain the pH and electrical conductivity (EC) of the growing media and feed plants with enough nutrients to prevent nutrient deficiencies.

Fertilizing with every watering may not be an option if staff and/or injectors are limited. In that case, a higher fertilization rate (150-200 ppm N) may be used once a week. See the chart, "Ratios and Concentrations for Constant Feeding" below. Maintaining fertility levels in the sales area helps promote sales.

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#### Resources

Maintaining High Quality Plants in Retail Setting. e-Gro, UConn http://www.e-gro.org/pdf/2016\_531.pdf Don't Let Your Plants Go Hungry in Retail, e-Gro, UNH Extension Chart- Ratios and Concentrations for Constant Feeding

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