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Research
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Mapping Out Your Sustainability Plan

August 8, 2024

NC STATE UNIVERSITY

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Online Resources

- Industry Guides on Sustainability Topics
- Planning Checklists and Assessment Tools
- Sustainability News
- Funding Programs
- Industry Spotlights

sustainabloom.org

Composting Guide for the Floral Industry

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Part of the American Floral Endowment's ***Sustainabloom*** *Program*

Why Compost?

Composting is a way to divert green waste away from landfills, which create greenhouse gas emissions like methane. Finished compost can be used as a slow-release fertilizer source that can increase flower quality and yield. And you don't have to generate compost yourself — many commercial facilities exist that will accept waste and manufacture compost.

Where to Start?

If you've decided to implement a composting program at your business, start by checking for local facilities that accept and manufacture compost. A good place to begin is the U.S. Composting Council, which evaluates facilities nationwide through the Seal of Testing Assurance (STA) Certified Compost program. This program requires compost manufacturers to follow federal, state, and local guidelines and submit regular samples for testing. Visit www.compostingcouncil.org/page/participants.

If you'd prefer to compost on-site, check with your state's Master Gardener program for tips on how to get started. Always make sure to test your compost for phytotoxicity and germination rates!

Going Further

Once you've decided to start composting at your business, here are some additional tips to help ensure a successful program:

- Make sure compost bins are properly labeled and train staff on what can be considered green waste.
- Make sure waste intended for composting is free of plastics, rubber bands, and other packaging. "When in doubt, throw it out" is a common mantra to avoid contamination.
- Common compostable items include:
  - Stems, leaves, roots, and blooms
  - Growing medium
  - Paper containers and paper packaging

Look for the Seal of Testing Assurance (shown above) for a compost product. This seal means the compost is tested for pathogens and heavy metals, and a disclosure program exists with detailed physical parameters such as stability, maturity, pH, salts, and organic content. Any user can request the completed data sheet.
See acceptable ranges for flowers and vegetables: https://cdn.ymaws.com/www.compostingcouncil.org/resource/resmgr/documents/compost_use/Flowers_and_Veggetables.pdf

Guide For:

- ☑ Growers
- ☑ Wholesalers
- ☑ Retailers / Florists
- ☐ Transporters
- ☐ Suppliers

COMPOSTING AT A GLANCE

Compost is created through the controlled decomposition of organic matter by microorganisms. The process results in a soil-like substance containing carbon and other nutrients that are beneficial to plant growth.

HOW TO MEASURE

The most common way to measure floral waste diverted through composting is by weight. Try setting a goal for the amount of waste (either by weight or percentage of total) that won't end up in a landfill.

If you decide to apply compost as a fertilizer, note any changes in synthetic fertilizer requirements.

And don't forget to let your customers know your goals and progress!

GUIDE NO. 001 PREPARED BY:

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Integrated Pest Management Guide for Floral Industry *Growers*

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Integrated Pest Management at a Glance

Integrated Pest Management (IPM) is a strategy to manage pest and disease pressure in agricultural and horticultural crops. The official definition of IPM is "a sustainable approach to managing pests by combining biological, cultural, physical, and chemical tools in a way that minimizes economic, health, and environmental risks" (7 USC Sec. 136r-1).

Why Care About IPM

Many flowers cultivated for commercial production have high market value, and damage from pests or diseases can significantly impact flower quality and marketability. Flower crops are susceptible to a wide range of pests and diseases, including aphids, thrips, mites, whiteflies, botrytis, and powdery mildew (University of California, 2015).

Minimizing cosmetic damage is important for maintaining product quality and consumer satisfaction. For example, chewing or sucking insects may cause visible damage to flower petals, foliage, or stems, affecting the overall appearance of the flowers.

Through IPM practices, which encourage a thorough examination of pest pressures, a balanced use of inputs, and employing a range of options to manage pests, pest outbreaks can be prevented and use of traditional pesticides can be reduced with implications for employee health and worker safety (Pecenka et al., 2021).

Measuring the Impacts of IPM

The simplest way to see changes after IPM strategies are implemented is to measure pesticide usage. By reducing pesticides applications, IPM practices can result in the following benefits (University of California, 2001):

- Reducing resistance to chemical control methods;
- Minimizing the potential for phytotoxicity from chemical application;
- Decreasing disruptions in labor due to required pesticide reentry intervals; and
- Lowering the costs of chemical purchases and application.
- Potentially decrease chemical usage, which will result in lower risk of exposure for employees.

This requires documentation of chemical applications over time and records to support any claims of reduced pesticide use. Shifts to lower risk pesticides can also be valuable to communicate to employees and consumers. The National Pesticide Information Center maintains resources for finding lower risk pesticide products: npic.orst.edu/ingred/lowrisk.html

Guide For:

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POLLINATOR PROTECTION

Flower crops are often pollinated by insects such as bees and butterflies, and some pest management practices – such as the use of certain insecticides – can pose risks to pollinators if not applied correctly. Flower growers can adopt bee-friendly pest management and production practices to support beneficial insects, which includes providing bloom of different flowering plants throughout the season, offering nesting habitat, and reducing the use of chemicals (Pollinator Partnership, 2024).

Learn more about the "Bee Friendly Farming" certification program offered by Pollinator Partnership: www.pollinator.org/bff

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Data Collection

- Sustainability Practices and Barriers
- Plastics
  - Use/Volume
  - Container+Packaging Comparisons
- Carbon Accounting
- Test Driving Sustainability Plans

Survey ends August 9!

Take our sustainability survey!

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Ways to Get Involved

1. Check out the Sustainabloom website
2. Share sustainability resources with us
3. Take our survey
4. Let us know: What topics would you like to see addressed?
5. Consider becoming a sponsor

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SAF MIAMI 2024 August 6-9 139TH ANNUAL CONVENTION JW Marriott Miami Turnberry Resort & Spa

Mapping Out Your Sustainability Plan

Moderator: Amanda Solliday, NC State University

Panelists:

Dr. Esteban Munoz, Fresh-O-Fair

Monty Pereira, Watanabe Floral

FJ Trzuskowski, Continental Floral Greens

By the numbers

80+

Years servicing the floral industry

2

East coast distribution centers – Miami, FL, Sparta, NC

3

West coast distribution centers – Shelton, WA, Forest Grove, OR, Watsonville, CA

1,500

Acres of CFG owned cut floral greens farms

10,775

Acres of CFG owned High Mountain Blue Noble®

300,000

Square feet of refrigeration

2.5M

Acres of managed forestland in the Pacific Northwest


Memory Box (4 stems)
Round Metal Box (6 stems)
Hexagon Box (7 stems)
Picture Frame (8 stems)
Rectangle Box (16 stems)
Round Hat Box (12 stems)
Acrylic Box (16 stems)
Etui Box (18 stems)

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Thank you!

Visit Sustainabloom
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