



Compost Site Management

Weed Seed Germination Testing

Why Test For Weed Seed Germination?

As a best management practice compost that you intend to sell to growers, landscapers or greenhouse producers should be tested for weed seed viability. A product that contains a significant level of viable weed seeds will cause problems for the purchaser and damage your reputation as a source of quality compost product.

Keeping Weed Seeds Out of Finished Compost

Finished compost that has undergone an appropriate hot composting process should contain few, if any, viable weed seeds. Weed seeds can contaminate finished compost during curing and storage, when no further heating takes place. Finished compost must be protected from weed seeds that can be brought in with raw materials, wind, birds, equipment and similar factors.

Weed Seed Testing

Weed seed viability should be tested for each discrete batch of finished compost that you intend to offer for sale. Use the following procedure to test for weed seeds.

- Take a sample of at least 4 liters of compost from a curing pile, following the guide "Feedstock Sampling"
- Moisten the compost sample to 60% moisture
- Fill a seeding tray, preferably two, with the sample to a depth of about 1 - 1.5 inches and record the total liters used, along with identification of the compost batch and date
- Place the seed tray in a warm location with decent light, where the temperature is maintained at or above 70° F
- Maintain soil moisture - before sprouting begins moistened cloth or paper towels placed on the compost surface helps maintain moisture level



- Once sprouting begins, place the trays in full sun or under lights if necessary
- Maintain sprouting conditions for at least three weeks
- Count total sprouts found and divide by the liters of compost used
- Record the results along with any observations such as types of weeds that germinate

Weed Seed Germination Standards

Internationally, weed content tolerance ranges from 0.8 - 5.0 seeds per liter. Some European countries have a legal requirement to test commercial compost products for weed seed germination. Denmark's voluntary standard includes three content levels, which provide a good benchmark for the kind of results you might find.

Figure 1 - Weed Seed Germination Trays



Very Low

Less than 0.5 seeds and plant parts per liter

Noticeable Content

Up to 2.0 seeds and plant parts per liter

Large (High) Content

More than 2.0 seeds and plant parts per liter

Companion Resources:

[Feedstock Sampling](#)
[Temp Probe Recalibration](#)
[Pile Monitoring and Logs](#)
[Recipe Development](#)
[Recipe Calculator](#)
[Food Scraps & Feedstock Acceptance](#)



References

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Photos

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Content Updates



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