

COMPOSTING SERIES



Backyard Composting

The best way to use your food scraps and yard debris is to compost them in your backyard. In a composting process, organic materials are naturally degraded into simple forms by the use of microorganisms and macroorganisms and to produce healthy soil. Properly composted materials will also minimize order from the waste. You can simply wire off a 3-foot-tall, 3-foot-deep and 3-foot wide area or use pallets to produce a static bin. Also, you can purchase a tumbler or commercial bin from the market.

Type of Backyard Composting:

Composting Tumbler

This equipment is ideal for decomposing kitchen waste and other organic waste. The tumbler system has one chamber for rotating compostable materials, which helps to add air to the system and break materials down quickly.

Pros

- Easy.
- Sealed and inaccessible to rodents and other pests.
- Fits in small spaces.
- Good for households with smaller amounts of waste.

Cons

- Does not kill weed seed or pathogens.
- Small volume of material able to be used.
- Can get odorous if incorrect waste or too many “greens” are added.

Dual Chamber Tumbler

This equipment has two separate chambers for decomposition of organism materials. The rotation of the chamber provides aerobic conditions to break down organic materials. In this system, one chamber could receive new organic materials while other chamber finishes the breakdown of organic materials.

Pros:

- Easy.
- Two batches can compost simultaneously.
- Smaller chambers are easier to rotate.
- Good for households with smaller amounts of waste.

Cons:

- Does not kill weed seed or pathogens.
- Small volume of material able to be used.
- Can get odorous if incorrect if too many “greens” are added.

Static Pile:

A static pile is simply a bin where organic materials are added to the top while finished, decomposed materials may be removed from the bottom. As its name suggests, the pile is not moved or broken, which limits aeration and creates anaerobic conditions. The organic materials are also broken down by microorganisms like worms, isopods and fungi.



Composting tumbler.



Dual chamber



Static Pile.

Pros

- Easy.
- Requires very little management.
- Can produce a continuous production of finished compost.
- May continually add new material to pile.

Cons

- Does not kill weed seed or pathogens.
- Takes longer than active composting.
- Animal waste should not be used.
- Must diligently keep out mature plant seeds.

Vermicomposting:

Vermicomposting, which is also known as worm casting, utilizes earthworms and microorganisms to convert organic waste into a nutrient-rich humus materials that are like humus. For best results and to minimize food safety risk, it is recommended to use a stabilized compost for vermicomposting.

Pros

- Self-sustaining once established.
- Only one bin is needed.
- Can be located inside the house.
- Earthworms reproduce and can be sold.
- Earthy odor.

Cons

- Must avoid temperature extremes (optimum 60-85 degrees Fahrenheit).
- Must add small amount of material regularly.
- Initial setup can be expensive.
- Requires regular attention.
- Harvesting is more labor intensive.
- Can attract fruit flies
- Effectively reduces pathogens.



Vermicomposting

Authors:

Achyut Adhikari, associate professor; Christopher Dunaway, assistant extension agent; Bert Hammett, extension agent; Jeff Kuehny, director, LSU AgCenter Botanic Gardens; Anna Timmerman, assistant extension agent and Joe Willis, extension agent.

Visit our website: www.LSUAgCenter.com

Pub. 0000 (Online Only) 04/22

Luke Laborde, Interim LSU Vice President for Agriculture

Louisiana State University Agricultural Center, Louisiana Agricultural Experiment Station, Louisiana Cooperative Extension Service, LSU College of Agriculture
The LSU AgCenter and LSU provide equal opportunities in programs and employment.