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Weekly Newsletter
from Agresource Inc.
for turning waste into
opportunity

Whole Cycle Tuesday



"Nature does not hurry, yet everything is accomplished."
– Lao Tzu

Takeaway

A slowly decomposing pile may break down the pumpkin flesh without ever providing enough heat to kill the seeds. Home compost piles often fail to reach sufficient temperatures for dependable seed destruction.

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Keeping this year's pumpkins from becoming next year's pumpkin patch

With Halloween behind us, pumpkins are moving from front steps into compost piles. Their flesh and rinds break down readily, returning organic material to the soil. But will composting destroy the seeds?

The answer depends on how hot the compost gets, how long that heat lasts, and whether the seeds actually experience it.

Where the heat comes from

An active compost pile generates its own heat. As microorganisms consume organic materials, they release energy, warming the surrounding pile. With enough material, oxygen, moisture, and a balanced mix of ingredients, temperatures can rise into the thermophilic—or heat-loving—range, commonly around 130–160°F. This heat accelerates decomposition and helps reduce viable seeds and plant pathogens.

Pumpkins supply moist, readily decomposable material. Mixing broken-up pumpkins with dry leaves and other structural materials helps distribute that moisture and maintain the air spaces microorganisms need.

What heat does to seeds

A seed contains a living embryo protected by a seed coat. Sufficient heat damages the tissues and biological systems that allow it to germinate. A seed can therefore lose its ability to grow before it has visibly decomposed. Seed destruction is a combination of temperature, exposure time, and moisture. Different species tolerate heat differently. University of Minnesota Extension reports that maintaining moist compost at approximately 140°F for three days can reduce weed seed viability substantially. That is a useful illustration of sustained heat treatment, rather than a universal guarantee for every seed—including pumpkin seeds.

Give fall pumpkins a productive next use

Before composting, remove candles, stickers, and decorations. Break pumpkins into smaller pieces and blend them throughout the active material. If you use a cool backyard pile and want to avoid volunteer pumpkins, remove the seeds first.

Properly managed composting turns seasonal leftovers into a useful soil amendment while greatly reducing the chance of carrying viable seeds into gardens and landscapes. The important ingredient is sustained, well-distributed heat throughout the composting process.