

Vermicomposting

Other Bugs in Your Bin

As your new bin becomes established, the number and diversity of organisms living inside will increase.

They're not officially invited guests but don't be alarmed! Most of the tiny creatures at work in your bin – those you can see and cannot see – are integral to the composting food web. As long as one bug doesn't seem to greatly outnumber others, these bugs pose no problem and are actually aiding worms in breaking down foods.

The micro-organisms that live inside your worm bin will not attempt to escape, and why should they? They have everything they need inside your worm bin. They need the dampness of the bin, and they need a steady food source, and will not venture out into the sterile and dry territory of your home.

However, there are a few bugs that you do NOT want to see in your compost bin. These include fruit flies, centipedes, fungus gnats or earthworm mites. Although very rare, you want to remove these bugs from your bin. Please see below for ways to identify the bugs in your bin and control them.

Good Bugs for Your Bin

Following are the organisms alive and thriving in your worm bin. These bugs will aid in the decomposition process and are beneficial in your bin. However, if a particular population gets out of control, read below for methods of control.

Springtails (Collembola family)

White, grey or brown in colour, springtails have six legs, three distinct body segments and two antennae. Their most striking feature is a spring-like organ that they use to spring forward! If the population gets out of control, you can pick springtails by hand. You should also ensure the bin isn't too wet. Add fresh bedding and ensure ventilation.



Sow or Pill Bugs (Rolypolys)

So called because of their tendency to roll up when threatened, sow bugs shred and consume some of the toughest materials, which are high in cellulose and lignin. They have a segmented, armored shell, seven pairs of legs and two antennae. Again, you can pick pill bugs by hand. Pill bugs prefer a drier habitat, so add moisture to your bin if it is low.



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Millipedes (Diploda)

These are long, slow-moving, wormlike animals found in small numbers throughout your worm bin. Millipedes are long and segmented, with two pairs of legs per body segment and two antennae. They are vegetarian and help with the decomposition process. Millipedes are not the same as centipedes (hundred legged). Centipedes are flat-bodied and have only one pair of legs per body segment. Centipedes kill worms. Millipedes do not.



Ants

Ants aren't usually a problem in indoor worm bins. An ant infestation is usually a sign that your worm bin bedding is too dry. Add some water with a spray bottle or watering can. If that doesn't work, try sprinkling ground cinnamon wherever the ants are. Ants hate cinnamon. Don't use a poison to get rid of ants because that will hurt your worms.

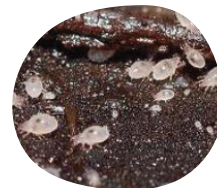
Try a student scavenger hunt of the bugs in your bin! Distribute a page of pictures and have students search through the bin. How many can they find? You could even structure your cards like a bingo board – the first to get a line or 4 corners wins!



Download a Worm
Bin Bingo card in
the Teacher
Portal

Mites (Acarina)

These are typically the most plentiful and visible inhabitants of a worm bin, feeding on decaying organic matter, fungi and other organisms. These mites will be white in colour. They are generally found on the surface amongst the upper layers of the bedding. Most mites (white in colour) are a benefit in your worm bin, though an earthworm mite (red in colour) can be harmful.



Bacteria

By far the most numerous organisms in your bin, along with molds and fungi. They all feed on decaying organic matter and produce enzymes that break down and simplify the organic matter.



Potworms (Enchytraeidae)

Potworms, otherwise known as White Worms, are white, threadlike worms which many people frequently mistake for baby redworms. Don't be fooled! Baby red wigglers are red and look exactly like their parents. Potworms thrive in moist areas, so the wetter your worm bin, the more white worms you will have. If you see an over-abundance of white worms in your worm bin, the environment is likely too wet. Add fresh bedding to absorb excess moisture and lift the bedding in your bin to bring more air into the system. If you want to get rid of even more potworms you can set up a trap for this with some bread soaked in milk. Leave the bread in the bin overnight and then remove it along with any earthworm mites that have accumulated.



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Not-So-Good Bugs for Your Bin

Centipedes (*Chilopoda*)

Centipedes resemble millipedes, although they have only one set of legs on most body segments and a large pair of pincers. Generally reddish, they move fast and are the only worm predator you're ever likely to ever see in your bin. If you see one, remove it carefully by hand. Careful, they can pinch!



Fruit Flies

Yes, like them or not, fruit flies are also valid members of your worm bin composting community. These tiny flying insects produce larvae, which are voracious decomposers. Adult fruit flies are attracted to the acids in decomposing vegetative matter. That said, they can quickly get out of hand. Ensure that your food waste is ALWAYS covered well by bedding. Use sticky traps or fly paper on the inside of your bin to trap flies. Try freezing your food waste to kill fruit fly eggs before adding to your bin. Add fresh bedding and ensure ventilation into your bin. Check out how to make your own fruit fly traps with vinegar under the troubleshooting section. You can also put 1 inch of newspaper over top of your bedding to block fruit flies in case of infestation.



Earthworm Mite

Most mites that you find in your worm bin are harmless to your worms and help with decomposition. One species of mite, called earthworm mites, can negatively impact your worm bin. Earthworm mites are reddish brown in color. In a serious earthworm mite infestation, your composting worms may refuse to eat because their food is covered in red mites. If this happens to you, remove and destroy any food scraps that are visibly covered in red mites. If you want to get rid of even more, you can set up a trap for this with some bread soaked in milk. Leave the bread in the bin overnight and then remove it along with any earthworm mites that have accumulated. Infestations to the point of slowing down or stopping worm feeding are rare, but could happen.



Spiders

Most spiders are generally harmless to worms, but they are unpleasant for the human worm farmer. For that reason, I would remove any spiders manually that you find in your worm bin.



Fungus Gnats

These can be remarkably pesky! Unlike fruit flies, which hang around the fruit, fungus gnats like light (your computer screen) and damp places. Furthermore, unlike fruit flies, they can damage plants. So even if you don't worry about the few in your bin, it's important to eradicate them from finished compost before using it. Use sticky traps at the first sign of fungus gnats, in your bin. You might even want to try adding beneficial nematodes, which you can find at a garden store. Ensure that your bin is not too wet. Add fresh bedding and ensure ventilation.

