Boulder Worms November 1, 2009

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You can also find most of the content in this newsletter on my blog: http://bouldervermicomposting.com

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-------- PREPARING YOUR WORM BIN FOR WINTER

Winter is coming, at least in the northern hemisphere, and that means that you need to spend some time thinking about your worm bin. I had a reader (Linda, my future mother in law) as about this.

Now, if your worm bin is inside, the only thing you need to do is make sure it can handle your food waste. If you have been splitting your feeding between an outside and inside worm bin, or an inside bin and a compost pile, then the inside worm bin probably doesn't have the population to handle all your waste. Up the feeding slowly, and throw some of your food waste away.

If, like me, you have an outside worm bin, then you will want to do a couple of things.

1. Clear out some of the vermicompost and castings. This is the perfect time to do so (or, maybe last month was). Your worms have been working hard all summer, and you've probably had the chance to give them a lot of food. You might have been so busy enjoying the summer that you let them fill up their bin. I took out about 18 gallons of worm castings and vermicompost (and I'm sure, a few worms and cocoons) from my worm bin, and put it in my garden for next summer. This will open up space for you to feed the worms for the winter.

2. Make sure the worms have the ability to 'go to ground'. If your compost bin is in contact with the ground, the worms can retreat into the ground if the bin starts to get cold. This is good advice for the summer as well. If you have an independent bin, you can bury it in the ground a bit. If you have your worm bins on a balcony, you might want to bring them inside, at least on any nights where it is going to be freezing for a long period of time.

3. Make sure you can still feed your worms. Your worms can last for weeks without food, but not months. Also, the composting of the food can provide some warmth to counter balance the cold.

4. You can provide them insulation (here's an example of using straw to insulate against the Canadian winter: http://www.redwormcomposting.com/large-scale-vermicomposting/winter-worm-composting-01-23-09/), but make sure you can get in and feed them at least once every couple of weeks. I insulate them by making sure plenty of leaves are on top of their food. (Fall is also a great time to pick up leaves to provide bedding for your worms all next year.)

That said, I live in Boulder, Colorado, where we have some cold weeks and some warm weeks every winter. (We're USDA zone 5: http://www.usna.usda.gov/Hardzone/ushzmap.html) And by warm, I mean 'above freezing'. If you live in zone 8 or zone 9, you probably don't have to worry at all. And if you live in zone 1 or 2 and want to keep worms outside, I'd suggest heavy insulation, or moving them to the garage.

-------- MYCO-VERMICOMPOSTING

The Mad Bioneer (http://madbioneer.blogspot.com/), aka Edmund Williams, over in Arizona, has a fascinating post on combining vermicomposting with mycoculture, or the raising of mushrooms (http://madbioneer.blogspot.com/2009/02/i-have-been-growing-mushrooms-for-years.html). I've raised mushrooms briefly, but only for food, not for composting purposes. It looks liek worms and mushrooms complement each other, at least when your primary material is wood chips. The mushrooms can break down the wood chips, and the worms can eat what's broken down, as well as the mycelium (mushroom 'roots').

He also shares lessons. He talks about what you can expect in terms of mushroom production:

"The worms will reduce the number of mushrooms you get from the wood chips by at least half. I don't think they can really get into the log to steal from there. They eat the mycelium, weakening the mycelium and reducing its ability to produce mushrooms. So if you are doing it for mushroom production, have more of a two-bin system. Let the mushrooms grow alone on the wood chips first, then let the worms have a crack at it to finish it off. If you try the worms first and then the mycelium, the worms get a lovely snack and you get no mushrooms at all. I tried inoculating a worm bin with some mushroom spawn that I didn't really have plans for. I came back a few days later to see if it had taken off and it was completely gone. The worms had eaten it."

Watch out for those red wigglers! They eat everything.

And also about what he thinks the soil nutrition content is for the broken down wood chips (not too balanced):

"Lately some of my plants in the compost have been kind of pathetic looking. I think it might be due to the nutrient content of the soil. After all, it was made from pure wood chips. I haven't had a chance to test the soil, but my guess is that it is a little low in nitrogen at least and possibly potassium and phosphorus. I would recommend the addition of a good organic rock-based fertilizer regularly with the various layers of organic matter that you add. The rock-based fertilizer, such as greensand for potassium and rock phosphate for phosphorus, will have more staying power in the soil than the quick-fix type fertilizers. I don't know of a rock-based source of nitrogen, so I use blood meal. They will also be good for the mushrooms that you get in there, as they are used to breaking down rock for minerals. A little sand or pea gravel in the layers might also be good to help out the soil structure. Of course, ignore this if you are composting in one place and using the compost elsewhere."

This makes sense. The redworms can turn nutrients into different, more accessible forms, but, as I mention in my post about sending my worm castings to a soil lab, the chemical contents of your bin depend on what you put into it. Earthworms aren't alchemists!

Regardless, this sounds like an adventure in composting. Definitely read the whole article. I also enjoyed one of his other articles about mycorrhizal fungus.

You can find more about Edmund and his adventures and experiments in his blog (http://madbioneer.blogspot.com/) and twitter account (http://twitter.com/madbioneer)

-------- ADMINISTRIVIA

You may have noticed that there was no October Boulderworms. Sorry about that--life got in the way.

I also wanted to let you know that I'm twittering, and you can follow me here: http://twitter.com/boulderworms

-------- THANKS

Thanks for reading! Any comments or suggestions are welcome. Feel free to reply to this email or contact me using this form: http://bouldervermicomposting.com/contact/

Until next time,

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