



Vermicompost



By Christopher, Leah, Elijah, Yair, and Isabella

What is vermicompost? By Isabella

Vermicompost is the use of earthworms, for example, red wigglers, to convert organic waste into a rich, fertile soil which is good for farming and growing crops. It is also a much cleaner, organic, and healthier option when it comes to nature. It lets people have fun and learn things at the same time.

This picture shows the red wiggler worms in the vermicompost



This picture shows the worms, soil and other materials getting mixed around



How does vermicompost work?

By Leah

Some farmers choose to use vermicomposting, instead of the standard way of farming, which is with regular soil you could buy from a store. They use leftovers, dead leaves, newspaper, etc. cut them into smaller pieces, and put them in multiple bins. There will also be a bin with just soil. Then, you put the worms in, red wiggly worms. The worms will eat the scraps you put in the bins. The worms will then fertilize the soil, which now the farmer can use to plant crops. It is an amazing way to plant organic crops.



This picture shows the soil being mixed so it isn't too bunched for the worms.

Where is vermicompost used? by Elijah

Vermicompost is used in greenhouses gardens and almost anywhere people would need fertilizers. People use it for farming to keep their crops more strong. It is all natural and it is like recycling. It is like this because you are reusing food scraps instead of throwing it out.

In this picture we are giving new food to the worms.



In this picture the worms had converted the food into fertile soil. We saw a lot of worms.



In this picture you see a lot of red wiggler worms.



Why is vermicompost used?

By Yair

Vermicompost acts as a fertilizer for plants to grow. It is also used as an organic way to plant. In vermicompost, worms, especially the red worm, eat or decompose (break down) paper, such as newspaper, plants, and water. Vermicompost is used to make your daily wastes into fertilizer through worms and make plants grow.

In this picture we are mixing the soil so the worms can get the food.



This is a picture of one of the many worms we use to compost with.



Who Would Use Vermicompost?

By Christopher

Vermicompost, who would use it? Well a lot of people actually. Farmers, our school or people who just want to grow food.

I'll tell you some pros and cons:

Farmer:

- Pros: Crops would grow and taste better. Wouldn't have to worry about buying high quality soil any more.
- Cons: Birds would target your farm more.

Our school:

- Pros: Educational.
- Cons: Everyone will freak out if they escape.

People who just want to grow food:

- Pros: Wouldn't have to buy soil as much.
- Cons: If you don't like newspaper, too bad; you need to get newspaper for your vermicompost!!



In this picture it shows a lot of red wiggler worms in the soil that they are making fertile

What does the vermicompost look like in the WMS greenhouse?

By Isabella

The vermicompost is a normal sized black box that has 3 layers. It is sitting right next to the biomes in the greenhouse. Our greenhouse is pretty small so everything in there isn't really that big to begin with. The vermicompost is filled with soil, newspaper (most likely shredded up), food, and of course worms.



In this picture it shows our vermicompost in the WMS greenhouse.

What did each person do while in the greenhouse? By: Leah

The jobs that were available were, taking pictures, bunching the food up for the worms and measuring, putting food in the bin, mixing the soil, and making sure all the worms are in the bin. We each took turns with different jobs when we went to the greenhouse to make sure it was fair for all of us. For example, one day Yair could be taking pictures and Leah wanted to too. They would compromise and decide that next time, someone else would take pictures so they each got what they wanted. These jobs were important because these jobs are helping the worms stay alive and make the rich, fertile soil as the outcome.



This is a picture of the food that we give worms to eat.

Data Table

By Isabella

These measurements show the weight of all the food from the 4 days we went to the greenhouse. One day it was leaves. Another day it was banana peels, egg shells, etc.

Day 1	Day 2	Day 3	Day 4
120.5 g	578.3 g	214.6 g	149.8 g

Summary: what are your thoughts on vermicompost?

Our thoughts are that it is an organic way of making plants grow. In this system both the worms and plants benefit in this system. Worms are fed with food such as paper or vegetables/fruit and take out the waste. The waste benefits the plant by acting as a fertilizer. The soil can be used in farms, or to decorate parks by planting vegetation or grass.



In this photo there are worms in the vermicompost bin at the greenhouse.



In this photo we are mixing in the soil so there aren't any clumps for the worms.