

# COMPOSTING SERIES



## Worm Castings

### About Worm Castings

Worm castings are formed with earthworms' poop. This creates a rich organic matter that is 100% humus. Worm castings are an excellent soil additive and support plant growth and overall health. Worm castings contain beneficial, rich microbiological colonies that work to fight soil-borne disease pathogens and repel insects.

Worm castings are rich in micronutrients, containing iron, sulfur, magnesium, zinc, copper and calcium. They also provide macronutrients and have a nitrogen, phosphorus and potassium (NPK) ratio of 1-0-0 to 5-5-3. The NPK value is widely variable and dependent on what the worms were feeding on and how the material has been stored. Worm castings are water soluble, and nutrients are lost when the castings are exposed to water.

Worm castings are formed as the earthworm digests organic material and then encases it in a coating before defecating. This coating makes the castings into a "time-release" soil amendment as the nutrients it contains become available slowly over time. As the castings are exposed to moisture, the nutrients become water soluble and are easily taken up by plants.

### Storing Worm Castings

Worm castings last up to six months or more when properly stored. Bagged castings sold at retail garden centers typically come in a resealable bag. The bag helps to maintain the moisture of the castings, which in turn keeps the microorganisms contained within it alive and active. Store worm castings

away from ultraviolet light and away from temperature fluctuations. When using worm castings harvested fresh from a vermicompost system, you can store them in a sealable bag or in an opaque plastic bin. The worm castings should be moist but not overly wet before storing. This may mean spreading them out to air dry a little before placing them in a storage container. The castings should be crumbly and a little bit damp when you hold them in your hands.

### Using Worm Castings

Worm castings can be used fresh and will not burn plants. They are very mild and can be applied to even very sensitive plants. The most common use for worm castings is as a soil additive. Worm castings are applied to the soil surface in potted plants and garden beds. It may be lightly worked into the soil. It may also be added to potting mix when repotting plants or filling trays or pots.

### Worm Casting Tea

Worm castings are very water soluble and can be applied as a tea. Mix worm castings with water and allow them to "steep" for a day or two before using the resulting "tea" to water your plants. The liquid application helps to get nutrients to the feeder roots of the plants quickly. This is a great thing to use when growing young seedlings.



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