

HIWASSEE PRODUCTS SOLUTION: VERMIFLOW CFT



- Footprint – 2' x 4', can produce up to 1500–2000 lbs of vermicompost annually with optimal conditions
- Low-maintenance harvesting system is operated with a cordless drill, material is captured in collecting pans
- Ideal for small to mid-size market farms, homesteads, schools, community gardens and composting sites

Recommended resources for further education:

- **The Worm Farmer's Handbook by Rhonda Sherman** – Our go-to guide for vermicomposting tips from one of the lead experts in the field
- **The Vermi-Microbiome Project** – Dr. Zack Jones uses DNA sequencing to analyze vermicompost and the microbial implications of its applications
- **Captain Matt / Worm People** – lots of practical advise shared on YouTube and social media
- **The Urban Worm Company, Meme's Worms, and Uncle Jim's Worm Farm** – good sources for worms and vermicomposting supplies

To learn more or get a quote:

Visit our website at www.hiwasseeproducts.com
Email: info@hiwasseeproducts.com
Give us a call: 423-436-0502



VERMICOMPOSTING

HIWASSEE PRODUCTS RESOURCE GUIDES:

Soil Microscopy • **Vermicomposting** • Liquid Compost Extract



Hiwassee Products LLC • www.hiwasseeproducts.com • 423-436-0502

BENEFITS OF VERMICOMPOST

Earthworms are a fundamental keystone of the soil ecosystem. They are able to digest a wide range of both organic and inorganic materials, help aggregate the soil, and inoculate the soil with beneficial microbes that produce plant-promoting compounds. Those benefits can be replicated and concentrated in a vermicomposting system, which can produce a high volume of worm castings, or vermicompost.



Red wigglers in vermicomposting system

COMMONLY USED WORM SPECIES

(Epigeic or Surface Feeders):

- **Red wigglers** (*Eisenia Fetida*) – digestion champions, multiply quickly, hardy and adaptive
- **European or African nightcrawlers** – large, can be sold for bait

MAINTAINING FAVORABLE CONDITIONS FOR WORMS:

- Physical protection – keep predators and pests out
- Comfortable temperature – between 55°–80° F
- Moisture Control – keep around 70% moisture, include drainage
- Airflow – prevent anaerobic conditions, keep aggregated

BENEFITS OF PRE-COMPOSTING FEEDSTOCKS

(Recommended):

- Worms can process material faster, higher volume of output
- Homogenized material with reduced volume / particle size
- Higher composting temps kill pathogens and weed seeds
- Keep high temps, volatile ammonia, pests away from worms

BENEFITS OF CONTINUOUS-FLOW-THROUGH (CFT) SYSTEMS:

- Can be scaled to desired throughput/available space
- Dynamic throughput – material is regularly added and harvested
- Easy to maintain favorable conditions – can be kept in temperature controlled space, excess moisture drains out, blocks predators



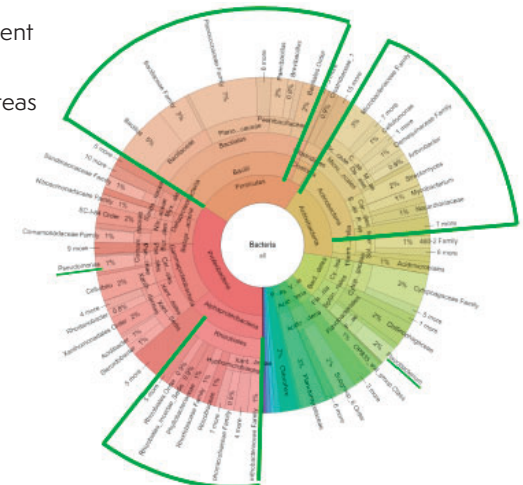
Harvesting vermicompost from the bottom of the bin.

BENEFICIAL COMPOUNDS FOUND IN VERMICOMPOST INCLUDE:

- Humic and Fulvic Acids – chelate mineral nutrients into plant-available compounds
- Auxins – promote plant cellular growth and bud development
- Gibberellins- promote seed germination
- Cytokinin – promotes leaf growth and development
- EPS – sticky substances that help aggregate soil particles

USES FOR VERMICOMPOST:

- Potting soil / dry soil amendment (10-25% by volume)
- Compost extracts / compost teas (1 lb. = 4-10 gallons)
- Biochar inoculation



Right:

Bacterial makeup of vermicompost as determined by Dr Zack Jones through DNA sequencing.

Graph used with permission