



# Simple Guide to Start a Worm Bin

**Mother Worms**



**3/3/2022**



# 1) Prepare Good Bedding!

- The most important factor in starting a new worm bin is their **bedding**
- This is because this is their **safe environment**- the same as your own home or room
- It is also a **valuable source of nutrition** for your worms
- **4 inches/10 cm deep** of good bedding is recommended to start, while adding more over time as the worms eat their bedding and food
- The bedding should be **moist, fluffy, have a neutral PH, and not heat up** (hot compost)



## Recommended Bedding

- Types of good recommended bedding: **finely shredded cardboard (2 cm strips or smaller), good quality potting soil, finished compost, coco coir, composted mulch, wood shavings or a combination of these materials**

Can bagged garden soil be used?

- Yes, bagged garden soil can be used as it has a neutral PH and the worms can burrow through it. However, it has **very low organic content and is not nutritious** for the worms (worms eat their bedding)
- It should be mixed with the recommended bedding materials if used



## **Bedding Not Recommended in Large Quantities**

- Types of bedding not recommended in large quantities: **strips of newspaper, fresh or rotting fruits and vegetables, fresh compost or manure, peat moss, sticks/woodchips:**
  - Newspaper: becomes mushy and mats when wet in large quantities, should be used in combination with recommended bedding
  - Fresh or rotting fruits and vegetables: if large quantities are mixed into the bedding it can heat up and kill your worms, rot and turn the bin acidic, release excess water into your bin, or attract unwanted bugs. Should only be used in small quantities with recommended bedding
  - Fresh Compost or Manure: can heat up and kill your worms if used in large quantities. Should only be used in small quantities with recommended bedding
  - Peat Moss: peat moss is acidic and must be PH neutralized before use
  - Sticks/woodchips: should not be used as bedding in large quantities as they will not break down quickly and cannot be eaten by the worms



## 2) Release your Worms Into Their Bedding

- 1) Prepare the bedding and moisten it (**a couple drops of water** should come out of your bedding when squeezed by hand)
- 2) Place your bedding in your bin (**4 inches/10 cm deep to start**)
- 3) Release your worms from their bag onto the top middle of the bedding and cover them with a plastic cover or lid (**drill plenty of air holes into any lid**)
- 4) **Shine a light directly over the top of the bin** for the first 24 hours to prevent the worms from roaming and escaping



# 3) Check for Good/Bad Signs and Adjust

- You can check your worms every couple of hours to see if they like their bedding
- Signs they like their bedding: They **have spread out evenly throughout their new bedding** within 24 hours and are not grouping or trying to escape
- Signs they do not like their bedding: They **remain grouped together**, they are climbing the walls and trying to escape, they are concentrating near the walls of the bin, they are dying
- If you see your worms do not like their bedding, it is **best to prepare new bedding** and transfer your worms into new bedding
- If your worms don't like their bedding and you cannot transfer them to new bedding, you can layer 4 inches/10 cm of moist shredded cardboard on top of your current bedding and the worms will migrate to the safety of the cardboard layer



## 4) Feed After Worms Accept Their Bedding

- After you see your worms like their new bedding, you can feed them immediately
- It is recommended to feed vegetable/fruit scraps as their first meal and the smaller the pieces the better. To do this you can put your **scraps into a blender with some water, or into a food processor, or finely chop/mince them**
- Because worms suck food into their mouths and don't have teeth to tear their food, **making the food as small and soft as possible helps them eat easier and faster**



## Things to Consider: Bin Selection

- If you are using a bin to raise your worms, **high surface area is recommended**. This is because high surface area allows air flow into the worm bedding which is beneficial for the worms and bacteria. Therefore choosing a short square/rectangular bin is better than a deep bin or bucket.
- A shallow bin is also recommended, 8 inches/20 cm is the deepest recommended bedding depth. **Deep bedding tends to compact** and create undesirable conditions in the bin. Also deep bins can become **extremely heavy** and prevent you from being able to move or lift your bin. It is recommended to harvest your castings and change the bedding once you reach 8 inches/20 cm deep.





## Things to Consider: Environment

- Find a warm place for your worms if you want to maximize their eating and reproduction. Above **20°C is good, above 24°C is excellent**, above 30°C can be negative. In 1°C - 20°C red wigglers & european nightcrawlers can survive but feeding/reproduction will slow down
- **Control the moisture in your bin.** Flooding can be prevented by drilling drainage holes in the bottom of your bin, or **mixing new food with more bedding** to control excess moisture. **Avoid feeding large whole fruits or vegetables-** instead finely chop or blend them as they can release lots of moisture suddenly when rotting
- **Avoid sealing your bin**, always have plenty of airholes for air circulation and to release excess heat which can kill your worms



## Things to Consider: Diet

- **Moderation is key.** Any food given in large quantities can become foul and destroy the environment in your bin. Therefore 1 chopped apple could be an ideal feeding but 10 chopped apples given all at once could become rancid and ruin your bin. Feed only what your worms can completely eat in 3-7 days. 1 cup of finely chopped scraps can feed 1/2 lbs of worms for 3-7 days. Gradually increase feeding amount based off their increase in eating speed.
- Common foods worms will eat: **fruits, vegetables, grains, compost, manure, decaying yard waste**
- **Onion, citrus and garlic can be fed in moderation** with other scraps and there will be no adverse effects.
- Compost worms can also eat dairy, meat, oils and fats in moderation. However these ingredients can **cause the bedding to have a foul odour for a couple weeks**. Mixing in small amounts of these ingredients with fruit and vegetable scraps **will not negatively impact your worms otherwise**.



## Things to Consider: Feeding

- Some worm farmers **bury their food scraps** in the worm bedding, **others feed on top of the bedding** and cover with a piece of plastic or newspaper. Both methods work and it is up to you to find your preference
- **Feeding small amounts more frequently** can help control moisture, reduce pests, and avoid the food heating up
- The **smaller and softer the food, the faster the worms can eat it**. The faster they can eat, the faster they make castings and more worms
- Spreading out their food into a thin layer rather than concentrating it in one ball also speeds up feeding due to **more air circulation and surface area for the worms to feed**