

To be done per feeding (3-4 times/week)

- Add approx. **30-40 g of waste per day** to your container: document specific weight and type of waste
 - It is not necessary to feed every day, just multiply the amount for the respective days:
 $1 \text{ day} = 30\text{-}40 \text{ g}$; $2 \text{ days} = 60\text{-}80 \text{ g}$; $3 \text{ days} = 90\text{-}120 \text{ g}$
- Documentation and weighting of larvae
- Document noticeable observations

How to weight correctly:

1. Put your precision scale on an **even surface** and **switch it on**
2. Check if the shown **unit is set as g** (gram)
 - a. This is indicated by the small “g” on the **upper edge** of the display
 - b. If something other than “g” is shown, repeatedly press **MODE** until “g” is selected
3. Check if the **display shows 0.00** (otherwise press **TARE** and check again)
4. **WEIGHT WASTE**: put the waste **separated by type** in the **middle of the scale** and **document the weight** as well as the **type of weighted waste** (see *Table 1*)

Table 1 – Example for filling out the experimental protocol - waste

Day	Date	Weight waste	Type of waste	Observations
13	01.01.2020	_____6____ g	_Apple core_	<ul style="list-style-type: none"> • The larvae visibly grew compared to the last feeding • The colour of the waste turned brown • The larvae try to escape from the container
		_____12____ g	_Old bread_	
		_____10____ g	Lettuce leaves	
		_____5____ g	_Pasta_____	
		_____9____ g	_Banana_____	
		_____g	_____	

5. **WEIGHT LARVAE**: Carefully fish out **5 larvae** from the container using your **forceps**, put them in the **middle of the scale** and **document the weight** (see *Table 2*). Put the larvae **back into the container**.

Table 2 – Example for filling out the experimental protocol - larvae

Day	Date	Weight larvae	Description of the larvae
13	01.01.2020	5 larvae weighted together : ____0.21____ g	The larvae are approximately 5 mm in length, light brown in color and slightly hairy

6. **Carefully wipe the surface** of the scale with a wet tissue or similar.

Important: This is an experiment with biologically degradable material, therefore, mold can occur due to the natural rotting processes. This can for example happen, when too much waste was added and the larvae are overwhelmed with the degradation. High humidity in the container could also favor the growth of mold. By reducing the feeding amount and using drier wastes (e.g. bread, salad) you can counteract the mold formation.

Six-legged Livestock

Rearing Black Soldier Fly on Biowaste

Problems? Questions? Contact us or drop by at our department!

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Your data

First name: _____

Last name: _____

Age: _____

City: _____

Phone: _____

Mail: _____

Your experimental environment

Start of experiment: _____

Initial weight of larvae (total): _____

Where will the house be set-up: _____

Ambient temperature: _____

Termination of experiment: _____

Please contact us after termination of the experiment!

Experimental protocol – Week 1 - Waste

Day	Date	Weight waste	Type of waste	Observations
1		----- g	-----	
		----- g	-----	
		----- g	-----	
		----- g	-----	
		----- g	-----	
2		----- g	-----	
		----- g	-----	
		----- g	-----	
		----- g	-----	
		----- g	-----	
3		----- g	-----	
		----- g	-----	
		----- g	-----	
		----- g	-----	
		----- g	-----	
4		----- g	-----	
		----- g	-----	
		----- g	-----	
		----- g	-----	
		----- g	-----	
5		----- g	-----	
		----- g	-----	
		----- g	-----	
		----- g	-----	
		----- g	-----	
6		----- g	-----	
		----- g	-----	
		----- g	-----	
		----- g	-----	
		----- g	-----	
7		----- g	-----	
		----- g	-----	
		----- g	-----	
		----- g	-----	
		----- g	-----	

Experimental protocol – Week 3 - Larvae

Day	Date	Weight of larvae	Description of larvae
15		5 larvae weighted together: ----- g	
16		5 larvae weighted together: ----- g	
17		5 larvae weighted together: ----- g	
18		5 larvae weighted together: ----- g	
19		5 larvae weighted together: ----- g	
20		5 larvae weighted together: ----- g	
21		5 larvae weighted together: ----- g	

Experimental protocol – Week 3 - Waste

Day	Date	Weight waste	Type of waste	Observations
15		-----g	-----	
		-----g	-----	
		-----g	-----	
		-----g	-----	
		-----g	-----	
16		-----g	-----	
		-----g	-----	
		-----g	-----	
		-----g	-----	
		-----g	-----	
17		-----g	-----	
		-----g	-----	
		-----g	-----	
		-----g	-----	
		-----g	-----	
18		-----g	-----	
		-----g	-----	
		-----g	-----	
		-----g	-----	
		-----g	-----	
19		-----g	-----	
		-----g	-----	
		-----g	-----	
		-----g	-----	
		-----g	-----	
20		-----g	-----	
		-----g	-----	
		-----g	-----	
		-----g	-----	
		-----g	-----	
21		-----g	-----	
		-----g	-----	
		-----g	-----	
		-----g	-----	
		-----g	-----	

Experimental protocol – Week 1 - Larvae

Day	Date	Weight of larvae	Description of larvae
1		5 larvae weighted together: ----- g	
2		5 larvae weighted together: ----- g	
3		5 larvae weighted together: ----- g	
4		5 larvae weighted together: ----- g	
5		5 larvae weighted together: ----- g	
6		5 larvae weighted together: ----- g	
7		5 larvae weighted together: ----- g	

Experimental protocol – Week 2 - Waste

Day	Date	Weight waste	Type of waste	Observations
8		----- g	-----	
		----- g	-----	
		----- g	-----	
		----- g	-----	
		----- g	-----	
9		----- g	-----	
		----- g	-----	
		----- g	-----	
		----- g	-----	
		----- g	-----	
10		----- g	-----	
		----- g	-----	
		----- g	-----	
		----- g	-----	
		----- g	-----	
11		----- g	-----	
		----- g	-----	
		----- g	-----	
		----- g	-----	
		----- g	-----	
12		----- g	-----	
		----- g	-----	
		----- g	-----	
		----- g	-----	
		----- g	-----	
13		----- g	-----	
		----- g	-----	
		----- g	-----	
		----- g	-----	
		----- g	-----	
14		----- g	-----	
		----- g	-----	
		----- g	-----	
		----- g	-----	
		----- g	-----	

Experimental protocol – Week 2 - Larvae

Day	Date	Weight of larvae	Description of larvae
8		5 larvae weighted together: ----- g	
9		5 larvae weighted together: ----- g	
10		5 larvae weighted together: ----- g	
11		5 larvae weighted together: ----- g	
12		5 larvae weighted together: ----- g	
13		5 larvae weighted together: ----- g	
14		5 larvae weighted together: ----- g	