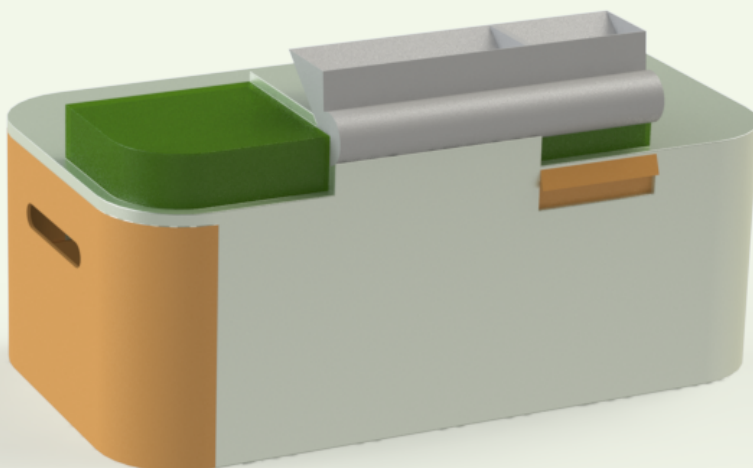




INFAKIT



USER MANUAL

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Hello new member of the INFAKIT Family!

we are happy to welcome you to the INFAKIT community, an environment-loving community that rethinks their eating habits, is open to new experiences, and is eager to learn about how nature and life cycles in nature work.

INFAKIT is a company providing mealworm home-farming kits for individual use, which supply the customer with healthy proteins, highly effective fertilizer, and brings a lot of joy and interesting discoveries to both the elderly and the young.

In four distinct stages, you yourself, starting only with the actual mealworm, are going to manage the life cycle of these insects from egg to beetle within a few months and will be able to “produce” your own proteins and fertilizer.



We, as a company, agree on the fact that climate change and environmental destruction are **the** number one challenges for our and future generations. One of the drivers of environmental change is animal farming, which is responsible for nearly 20% of worldwide greenhouse gas emissions. But not only that - the production of food for animals destroys ten- to a hundred thousand square kilometers of rainforest every year, and we are not even talking about the suffering and torture these animals must go through. This is where INFAKIT comes into play. Our company wants to help have an impact in the right direction by on the one hand helping to change people's mindset regarding insects as nutrition, and on the other hand getting our customers more aware of the sophisticated, but still very vulnerable cycles in nature.

In the following table we provide a brief overview of some of the mealworm farming's advantages when compared to cattle and other animal farming.

	Mealworm	Cattle	Pig
CO ₂ -equivalent per kilogram [kg]	2,78 kg	23 kg	7,2 kg
Land use per kilogram [m ²]	3,6 m ²	38 m ²	10,5 m ²
Proteins per 100 grams	50 g	22 g	22 g
Eatable parts [%]	100%	40%	50%
Water usage per kg [l]	15 l	15 000 l	4800 l
Required Food per kg [kg]	1,2 kg	6 kg	3kg
Price per kg [€]	14 €	8 €	7 €

As you can see mealworms are far ahead of cattle and pigs taking environmental and health aspects into account. As you are creating your own life cycle, there will be no need to buy any more mealworms but the starting set.

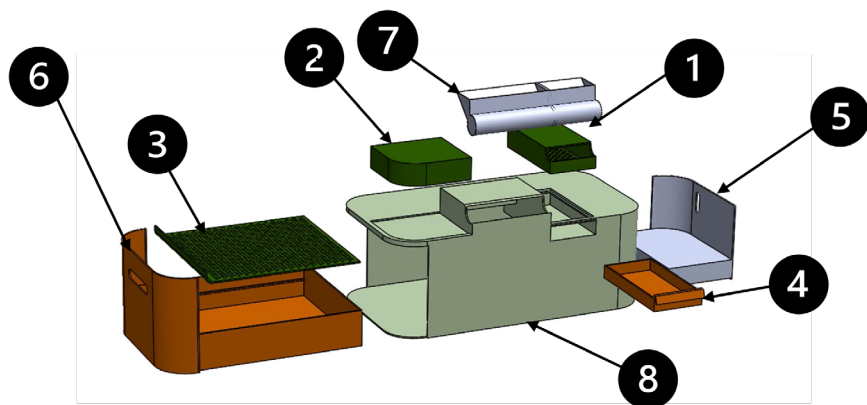
COMPONENTS

1	Beetle box
2	Pupae box
3	Mealworm box / Sieve
4	Breeding box (eggs)
5	Removable electronic box (with all electronical components)
6	Removable drawer
7	Food dispenser
8	INFAKIT box

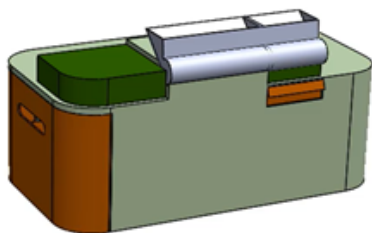
GETTING STARTED

STEP ONE

Once you took all the components out of the packaging, place them inside the INFakit as shown in the following picture...



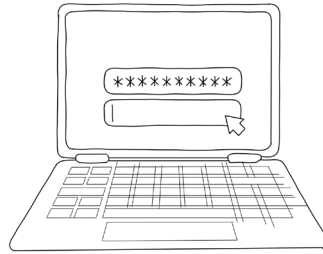
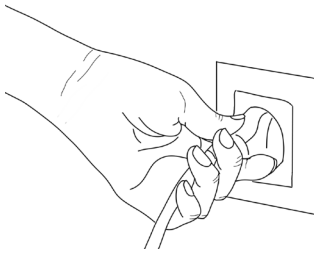
and it should look like this:



The INFakit packaging may be reused to wrap around the mealworm box, and tie it up with the opening leash mealworm. You can do so in order to hide your box, block the sunlight if the box gets too hot, or just because the mealworms like the darkness.

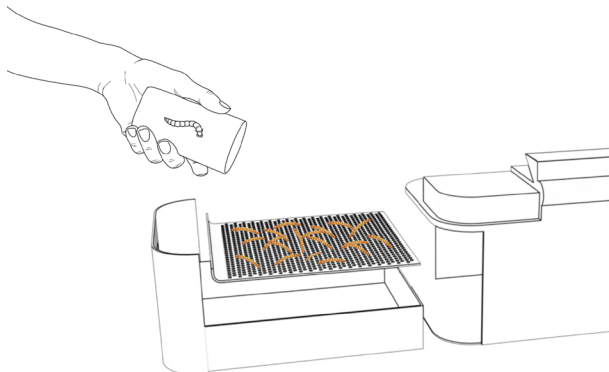
STEP TWO

Now connect your INFAKIT to the electricity. Go to our website and use the login key provided on the first page of the manual to check if all components work. Once logged in, the dispenser can be rotated manually, the fan can be started, and humidity and temperature can be read. After having all the components working, the breeding process may start.



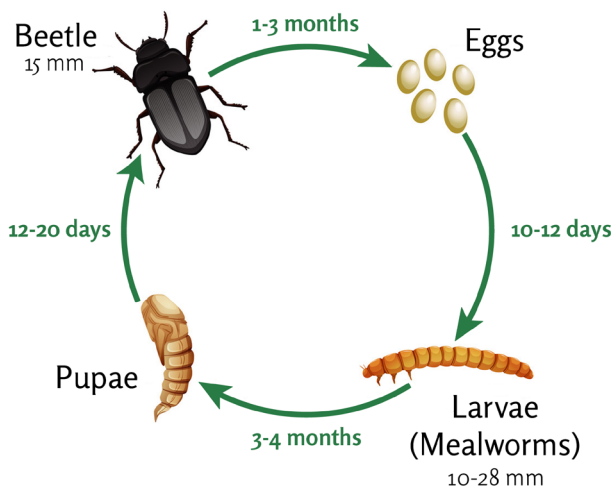
STEP THREE

Add the living, young mealworms to the mealworm box inside the removable drawer. If you want you can add sawdust as a flooring for the mealworms, but it is not needed.



STEP FOUR

Now it is time to wait. As our mealworms are young, they need some time to grow before they turn into pupae. Underneath you can see the whole life cycle and check how long it will approximately take until you reach the next step. You can feed your mealworms all kinds of waste, old bread, food waste, oatmeal, and everything else you can imagine. These little survival artists are even able to eat whole oranges or the Carolina Reaper, the spiciest chili in the world, and if they get enough “fresh” food containing water itself they do not need more added water to survive.

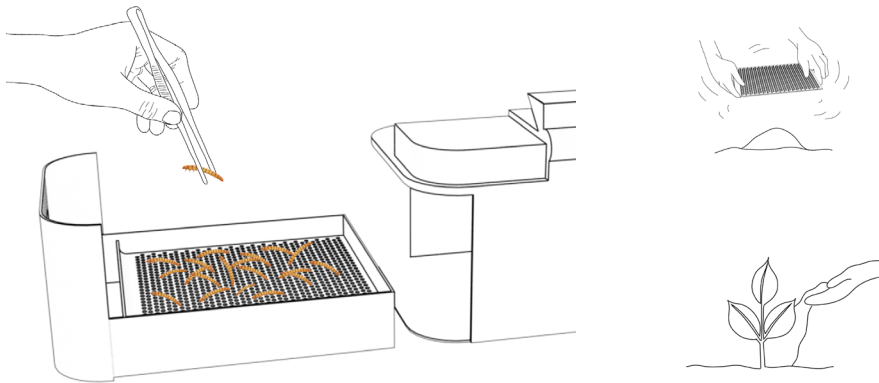


STEP FIVE

After some time, some mealworms will not move anymore and changed their look, they turned from mealworms into the pupae. Now it's time to separate these different life cycle stages from each other. Use your hands or the tweezers send with the INFAKIT. After separated around 8-12 pupae from the mealworm stage and putted into the pupae tower, you have two options.

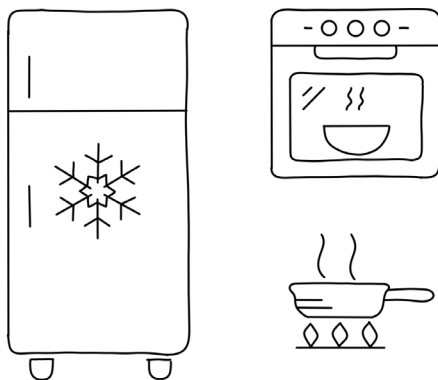
Wait for your other mealworms to grow further but observe them carefully to avoid producing too many pupae and black beetles.

Or remove the whole drawer including the sieve where the mealworms live and use it to remove the leftover frass and exuviae from the mealworms by shaking the sieve. The frass and exuviae mix is a perfect fertilizer as it contains many nutrients which plants require to grow.



STEP SIX

Once the mealworms are separated from most of the fertilizer, it is time for further processing of the insects. Do that by putting the mealworm in a cold-resistant jar and placing this jar in the freezer, this way the mealworms will die painlessly and freeze-dry a little already. Once they are dead, dry them in the oven completely (1h – 200°C) to produce flour, to store them and of course for further cooking. Or just fry them in the pan, and they will also lose most of their moisture in this process.



STEP SEVEN

As the mealworm stage is empty now or only small mealworms have been left over it is time to breed new mealworms again. After the pupae left their stadium, they become the actual black beetle. Separate the already hatched beetles from the pupae and put them into the beetle box, keep them in the box, feed them as the mealworms. After a while, some eggs will appear in the box below the beetles. If not all eggs fall through you might want to remove the beetles for a moment and transfer the eggs manually.

STEP EIGHT

Last step finally closes the whole life cycle again and provides you with new mealworms. Wait for the eggs to hatch and move the mealworms to the mealworm stage. Try not to keep the mealworms together with the eggs for too long as they will start eating the eggs after some time. There are many ways to regulate your population, the two most effective ones are the number of larvae you transfer into the beetle stage of the lifecycle, or the eggs you will leave to hatch. Both directly determine the number of mealworms in your next cycle.

Also consider using the beetles for more than one lifecycle. Once they start dying or do not lay any eggs anymore you can replace them by letting the mealworms evolve into pupae again.

Last thing to do is to share your success, the design you came up for the different boxes, what food your mealworms do and do not like and many more amazing things you explored by using one of the following hashtags on social media:

#INFAKITinspiration #INFAKITfamily or #INFAKITfun

CONGRATS!!! NOW YOU HAVE CLOSED THE WHOLE MEALWORM CYCLE AND ARE ABLE TO PRODUCE YOUR OWN PROTEIN-RICH AND HEALTHY MEAT SUBSTITUTE!

On the following pages, we would like to encourage you to try as many different mealworm dishes as possible by giving you some of the recipe ideas.



Mealworms – Sweet and tasty or spicy and crispy they can become everything you can imagine and even more. That mealworms are not only an excellent alternative to meat when it comes to environmental concerns or nutritional values has been proven many times and is commonly known. But the fact that mealworms can be just as tasty as pork or beef – this you must experience yourself!

To help you boost this experience even more we would like to provide you with three different recipe ideas and three completely different ways of eating mealworms.

We hope you enjoy our recipes and thank you for making a difference in changing the world into a more sustainable place!

SPICY ROASTED MEALWORMS

In the first recipe, we would like to present, we are going to prepare the mealworms as a side dish for other meals, mainly as an exchange for common cattle or other kinds of “common” meat.

INGREDIENTS:

- 20 g dried mealworms
- 1 tbsp butter
- 1 clove of garlic
- 0.5 onion
- 1 branch of rosemary
- 0.5 pc lemon (juice, freshly squeezed)
- 1 pinch of pepper
- 1 pinch of salt

1. If you haven't dried your mealworms yet, start drying them by placing them on a baking tray and leaving them in the oven at 200 °C for 30 mins to 60 mins.
2. Start by adding a tablespoon of butter to the frying pan and wait until it is completely melted.
3. Carefully add the finely chopped onions and garlic, but make sure not to overheat to prevent them from burning.
4. When onions start to become glazed, it is time to add the ready-to-cook mealworms and fry them for about five minutes while stirring constantly.
5. Now squeeze the lemon and pour the juice over the worms, let it fry until the lemon juice is almost completely evaporated.
6. Add rosemary salt and pepper and let them fry for some more minutes.
7. Serve them with whatever you want, we recommend for example Pasta, Asia noodles, Rice, or as an Ingredient for a wrap.

You can of course adapt that recipe with spices and other things which may suit your main dish better, for example, we recommend leaving out the rosemary and adding some soy sauce, tamarind paste, and ginger for a more Asian-style dish.

MEALWORM PROTEIN CHOCOLATE MOUNTAINS

In the following recipe, we will show you a way of preparing the mealworms as a sweet dish good for a dessert, on a hot summer day, or to go as a side snack for a movie night.

It's a very easy and fast recipe everyone can finesse.

INGREDIENTS:

- 100 g chocolate coating, dark
- 35 g mealworms (dried)
- 6 pcs strawberries, kiwi, mango, any fruit you want

1. Briefly fry the mealworms in a coated pan without fat and provide.
2. Then break the chocolate coating into bigger pieces and melt slowly in a water bath while stirring continuously.
3. Place the roasted mealworms together with the liquid chocolate in a bowl and mix carefully.
4. With the help of two teaspoons, shape the mealworm chocolate mixture into small mountains and let cool on the baking paper.
5. Serve the finished mealworm chocolate mountains with fresh sliced strawberries and decorate with the chocolate coating.

MEALWORM PROTEIN BREAD

This recipe is very suitable for all people who want to slowly overcome their dislike of eating mealworms as they are not visible in the final dish.

INGREDIENTS:

- 400 g whole flour
- 100 g mealworm flour
- 150 g seeds, mixed of choice (e.g., pumpkin seeds, linseeds, sunflower seeds, etc.)
- 1/2 liter of water
- 1 cube yeast
- 2 tsp. salt
- 2 tbsp. fruit vinegar, e.g., apple cider vinegar

1. Mix the ingredients in the above order and stir all together in a food processor or mixer to form a soft and quite liquid dough.
2. Lay a baking pan of your choice out with baking paper and carefully add the dough.
3. Place the dough in the middle rack of the cold oven and back at top/bottom heat for about an hour at 200 °C.

The bread is amazingly easy to make, full of proteins, super tasty, and juicy for a long time.

Feel free to experiment around and come up with your own ideas and recipes. Some more inspiration could be, for example as a snack like chips, together with cocoa as a protein powder or a mealworm burger patty, try around and share your recipes with the INFAKIT family by using [#Infakitrecipes](#) on social media.

In order to make it possible for you to enjoy the INFAKIT as long as possible, we try to make it as durable and stable as possible.

But something can always happen and that is why we chose to design the INFAKIT modular to be able to change broken components easily and fast.

Therefore you just need to contact our customer service, explain the problem, and together with our support we are sure that we will be able to help you enjoy your farming experience again very soon.

Read the following terms and conditions carefully before using CyberPower Racks and/or Rack Accessories (the “Product”). By using the product, you consent to be bound by and become a party to the terms and conditions of this Limited Warranty (referred to as this “Warranty”). If you do not agree to the terms and conditions of this Warranty, you should return the Product for a full refund prior to using it.

Who is providing this warranty?

TeamOnesect Inc. provides this Limited Warranty.

What does this warranty cover?

This Limited Warranty covers defects in materials and electronics in the product under normal use and conditions.

What is the period of coverage?

In the European Union and other European countries, we provide a two-year limited warranty to the original purchaser who owns the Product. For other countries, if not explicitly mentioned the same rules apply.

Who is covered?

This warranty only covers the original purchaser. Coverage ends if you sell or otherwise transfer the Product.

How to make a warranty claim?

1. Please contact our customer service (contact@infakit.com / + 351 662 5548459)
2. When you contact our customer service, together with our help we identify the Purchase Date and order number.
3. You must provide a dated receipt that proves your purchase (or other proof of the original purchase) and a description of the defect.
4. Pack and ship the Product to TeamOnesect (TeamOnesect Inc., Rua Dr. António Bernardino de Almeida 431, 4200-072 Porto, Portugal). You will have to prepay all shipping costs and are responsible for packaging and shipment.
5. After everything arrives on time and correctly, we will either send you a new INFAKIT or refund the money for the INFAKIT such as the shipping. If the found defects are due to mishandling of the INFAKIT we won't be able to refund you neither the purchase price nor the shipping costs.

How long do I have to make a claim?

All claims must be made within two weeks of the occurrence.

contact@infakit.com

+ 351 662 5548459

www.insectfarmingkit.com

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