

#### **THANK YOU!**

Thank you for your purchase and your **trust** in our products. We believe the item arrived in the same condition as we shipped it.

Our goal is to make ant keeding as widespread and popular as fish, cat or dog keeding is nowadays. That's why we focus on easy maintenance, intuitive use and **elegant design.** Information materials and manuals, available on the web or in paper form, are also an integral part of the design.

Please let us know how you like the formicarium and how your colony is doing. This will help us improve our service and products and help other keepers and enthusiasts. The best place to use is Instagram, where you can find more advice, tips and experiences from other keepers. If for any reason we haven't met your expectations; don't hesitate to contact us and we will do our best to make it right.

We wish you a lot of fun and believe that our products, designed and manufactured in the Czech Republic, will serve you well and long.

On behalf of HappyAnt,

Martin Kust Founder & CEO



FOLLOW NEWS FROM THE WORLD OF ANTS ON OUR INSTAGRAM!



@happyant\_shop



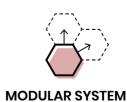
#### MADE IN CZECHIA



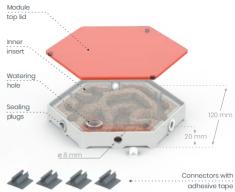
**QUALITY & DESIGN** 



**REUSABLE PRODUCT** 







# ARENA

The arena is the space in which ants search and hunt for food. This is where water, insects, fruit and other things that ants need to live are replenished.

The ants take what your colony needs back to the nest module, and you can watch them undisturbed thanks to the transparent walls and lid.

# MODULE

The module is an integral part of the entire ant farm - the formicarium. It serves as a home for the ants. Inside each module there are corridors and chambers where the ants live, rest, and care for new individuals. It is also the place where the queen herself is found, and she can be in peace and safety. That's why each module is equipped with a red lid to dim the light and simulate the environment of a real antiill.

#### A / NEW ANT COLONY IN THE TEST TUBE

Whether you acquired the colony in the wild or purchased it on the e-shop, the queen and her first workers will be in the test tube. The test tube should be filled to ¼ with water and sealed with cotton wool, as shown in the picture.

In the test tube, the colony can be fed easily, for example with a tiny drop of honey, a fly or a piece of fruit.

Move the ant colony to the formicarium only when it has 10 or more workers, or if the back of the test tube has run out of water or the cotton wool has started to mould.





After receiving the colony from the e-shop you should check that everything is in order and let the colony **rest for a few days** in he dark at room temperature.

For easier feeding and maintenance you can place the open test tube **into the arena**, where there will be water, food and possibly a new clean test tube. You'll attach the module later.

### **B** / PREPARING THE MODULE

If the module does not yet contain the material in which the ants will live, separate the clear Plexiglas by pushing it out through one of the six holes on the sides, for example with a skewer. You can either insert cork, a plastic piece with chambers, or sand. The clear Plexiglas is then carefully pushed back into position so that it does not protrude over the edges.

If your colony did not do well, you can disassemble the module again in the same way, replace the material with a new material and start a new colony.



11P

Once the clear Plexiglas is back, you can fill the sand in through one of the holes on the sides to make the module really full.

#### . ! CAUTION ! \_ \_

Never remove the clear Plexiglas and put it back if there are still live ants in the module - you could easily crush them.

## C / MOVING THE COLONY TO THE FORMICARIUM

Finally it's here! Your colony has at least 10 workers and is ready to explore new territories! Make sure the module is properly connected to the arena. Start watering the module (see next chapter) and prepare the first food for the arena. You can add in decorations if you want to.

Remove the top lid of the arena and the ceiling and place an open test tube with an ant colony inside. There's no hurry, the worker ants will take their time to explore new territory and will eventually move to the module together with the queen. The whole process can take one to two weeks. For speeding up the process you can light the arena with a flashlight and keep the module dimmed by the red lid.

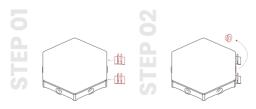
#### \_ \_ ! CAUTION !\_ \_

Treat the ants in the test tube cautiously. They will be able to leave the arena themselves, without your help.

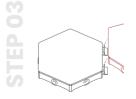
#### -! CAUTION!-

Make sure that all the holes in the formicarium are sealed and that all the parts are connected well.

#### SCHEME OF ATTACHING THE PARTS



PREPARE THE CONNECTORS REMOVE THE PLUG





CONNECT ANOTHER MODULE USE ADHESIVE TAPE

## D / FOOD AND DRINK

Your colony needs three basic ingredients to live; water, sugars and protein. The ants get their water from the moisture in the module, but it's a good idea to give them a spare source in the arena as well. This could be a test tube filled with water and plugged with cotton wool. Sugars are especially important for workers who need energy. A bottle cap filled with a teaspoon of honey is the great solution.

Protein is used for the growth and development of small larvae, as it is the most important for them. The best source of protein is small insects in the form of flies, mosquitoes, crickets or worms. Especially for small colonies, it is necessary to kill the insects beforehand so that the ants are able to consume them safely.

Water and honey should be in the arena at all times, while insects should only be needed once every 2 weeks or so, depending on how hungry the colony is. Fruit can also be an interesting addition to the diet. Some species require a special diet - Messor barbarus

(harvester ant) for example, feeds on various types of grains and seeds.

# Give the ants smaller portions of food so that it does not rot in the arena.

# Find out which type of food your colony likes the best.

## E / PLACEMENT OF THE FORMICARIUM

Place the formicarium in a quiet place with a constant temperature, such as a shelf, a table or a chest of drawers. The ant farm together with the tools should be preferably placed on a solid mat or a tray to make handling as easy as possible.



# Openly accesible water placed in the formicarium is the biggest danger for workers – they can easily drown even in a drop of water. Always place a piece of paper or cloth into the water and honey, so that the ants can climb out.

# Ant farms should never be placed under direct sunlight – the ants would overheat

## F / WATERING THE MODULE

Your colony needs sufficient moisture in the nest-module to function properly. Here is a table of the required humidity for each species:

\*\*nest humidity\*\*

Lasius niger (black garden ant)	50 - 60%	(cca 2 ml of water per week)
	n-black carpenter ant) 50 - 60%	(cca 2 ml of water per week)
Messor barbarus (harvester ar	it) 60 - 65%	(cca 3 ml of water per week)

Pipette the required amount of water into the watering hole in the module and watch where the colony moves to within a few days. If the workers stay close to the water source, this means you should water more, and vice versa.

If ants live in the plastic material, stuff the watering hole with cotton wool, which will soak up the water and keep the moisture in the module longer.

You can buy hygrometers that will help you determine the correct humidity.

#### -! CAUTION!

Especially with cork material, there is a risk of mould. If it appears, start watering less.



### **G / TEMPERATURE**

The ideal temperature in a formicarium is the same as the temperature in a real anthill in nature. For European ant species this is roughly equivalent to room temperature. However, a slightly higher temperature helps the whole colony to develop and therefore grow faster, so you can add heating to the formicarium over time. You can either use a heating pad, a cable or a lamp. Table of required temperatures for each species:

\*\*temperature\*\*

Lasius niger (black garden ant)	21 - 24 °C
Camponotus ligniperda (brown-black carpenter ant)	21 - 24 °C
Messor barbarus (harvester ant)	23 - 26 °C



#### \_! CAUTION!.

Always use heating in combination with a thermostat, otherwise you risk overheating the colony.

# When the formicarium is heated from above (with a lamp) the module does not mist over as much

# Just before installing the heater, reduce the humidity to a minimum so that the module does not mist over

## H / CLEANING AND MAINTENANCE

To keep your colony healthy, remove food debris regularly and keep the arena clean. Tweezers and cotton wool or a piece of cloth are the best for this. Use tweezers to pull out large pieces of food and cotton wool soaked in lukewarm water to wipe the bottom of the arena dry again.

If you leave the arena ceiling closed and use the opening in the middle, the ants won't escape through the walls. Worker ants will often hide in the module during cleanup, and only a few will remain in the arena, so cleanup should be easy. If a worker slips out of the formicarium, no big deal, just scoop up the worker on an A4 paper and dump it back into the arena.

For a thorough cleaning you can remove the entire ceiling, but in that case it's better to move all the workers to the module and seal the entrance with a piece of cotton wool for a while.

# For larger colonies it is worth to have two arenas that you alternately disconnect, clean and reconnect.

# For easier maintenance it is better to have fewer decorations in the arena.

#### ! CAUTION ! \_

- # Do not use chemical cleaning agents. Lukewarm water is sufficient.
- # The inside of the module is not meant to be cleaned. The ants themselves must take care of that.



## I/HIBERNATION

Except for tropical species, the ant colony needs to hibernate every winter. In nature, the anthill is covered with snow, the ants hide deeper in the nest and come out again in spring, full of strength and energy. That is why even formicaria are placed in a cold environment of 5 - 10 °C in winter. However, the temperature should change gradually over several days. Therefore, place the formicarium first in a 15 °C place (e. g. a cold corridor) and then in a cellar or fridge.

#### Table of recommended hibernating periods

Lasius niger	(black garden ant)	November - March
Camponotus ligniperda	(brown-black carpenter ant)	November - March
Messor barbarus	(harvester ant)	December - February
Camponotus nicobarensis		no hibernation

Place the formicarium into a thermobox during the hibernating period, it will keep the temperature stable and the place dark.

## \_! CAUTION!

# Water condensation occurs when the temperature warms up too quickly and the ants could drown in the water drops.

# The temperature must never fall below 0 °C.



#### A YEAR WITH ANTS

#### **SPRING**

The colony awakens from hibernation and its activity increases rapidly. They seek food and warmth intensely, which helps the rapid development of new workers. Observe the rapid growth of the colony and give it plenty of food

Feeding: 1x week Watering: 1x every 10 days Tidying: 1x a month



#### SUMMER

Colony growth and activity continue; workers search for food for larvae and adjust the anthill so that the colony can continue to expand. Keep ideal temperature and humidity in the formicarium and clean the arena regularly.

Feeding: 1x week Watering: 1x week Tidying: 2x a month

Maintain the correct temperature with a heating pad and a thermostat.

#### WINTER

During the winter, ants especially need rest and a constant low temperature. That's why it's enough to check on them once a month to refill the water and food.

Feeding: 1x a month Watering: 1x a month Tidying: -



Use a thermobox and hibernation labels.

#### **AUTUMN**

Colony activity slowly decreases and ants begin to prepare for hibernation. However, interesting things are still happening in the anthill. Make sure the arena is free of rotting food debris and that the humidity in the module is correct.

Feeding: 2x a month Watering: 1x every 10 days Tidying: 1x a month



With a second arena, cleaning is much easier.

#### **HIBERNATION LABELS**

/	* ( )
Species:	Species:
Start of hibernation:	Start of hibernation:
End of hibernation:	End of hibernation:
Note:	Note:
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Species:	Species:
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## **RULES / NOTES**



1) DO NOT KNOCK ON ANTS (they're at home, but they will not open the door)
2)
3)

#### **CONTACT US**







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## Share your stories

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