



Blue ants: Division of labor in an ant colony

You need: Three chamber-nest including hungry Temnothorax ants (food bowl has been taken out at least four days in advance), spring steel tweezers, brush, metal plate, beaker, honey, blue food coloring, spoon, stereo microscope

1. Place a drop of colored honey on a metal plate and place it directly in front of the inlay nest.
2. Observe and describe
 - the behavior and number of workers who exit the inlay nest and start feeding on the blue honey,
 - the body of feeding ants with the aid of stereo microscopes with lights on,
 - the behavior of single workers after having fed on the blue honey and returning to the nest,
 - the behavior and appearance of those colony members (different castes and offspring!) who have not left the inlay nest.
3. Explain the circulation of nutrition in an ant colony (trigger and transfer!) with the aid of your observations and M1.
4. Explain the advantages of the ants' nutrition from the evolutionary perspective.

 **Attention:** Leave the blue honey inside the three chamber-nest until the next lesson. Observe the ants' appearance in the inlay nest once again.

M1: Two worker ants transferring nutrition

