Ant Graveyards

Introduction

In my science fair project, I figured out why ants build graveyards. The problem I am trying to solve is why ants build graveyards for their dead ants. Ants carry their dead to a special area called a graveyard. I believe ants build graveyards to prevent the spread of disease within their colony by removing the dead ants. This is important because scientists are still learning about what ants do with their dead and how it helps protect the colony.

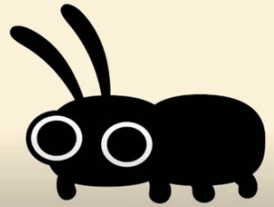
Statement of the Problem

The problem in this experiment is: Why do ants build graveyards, and how do they do it in their daily life?

Ants take their dead ants to a special graveyard area away from the nest. When an ant dies, its body releases special chemicals called fatty acids. One of these chemicals is called oleic acid. These chemicals act as a signal that tells other ants the ant has died. The smell is not bacteria, but it alerts the colony to remove the body.

Hypothesis

I believe ants build graveyards to prevent the spread of disease within their colony by removing the dead ants. Ants carry the dead ant to a graveyard area to keep the colony clean and healthy. This helps stop harmful germs or fungi, such as Beauveria bassiana, from spreading and infecting other ants. This behavior helps protect the colony from disease.



Materials

- Notes about ants
- Pictures of ant graveyards
- Pictures of ants carrying dead ants
- Graphs and charts of ant graveyard sizes

Variables

- **Independent Variable: Type of ant species**
- **Dependent Variable: Size of the graveyard**
- **Control: Same type of environment and observation method for all ants**

Procedures

1. Study different ant species and their graveyards.
2. Write down notes about ant graveyards.
3. Collect pictures of ant graveyards.
4. Collect pictures of ants carrying dead ants.
5. Compare which species have the largest and smallest graveyards.
6. Record results in charts and graphs.

Results and Data

The army ants had the biggest graveyard.

The big-headed ants and blue ants had the smallest graveyards.

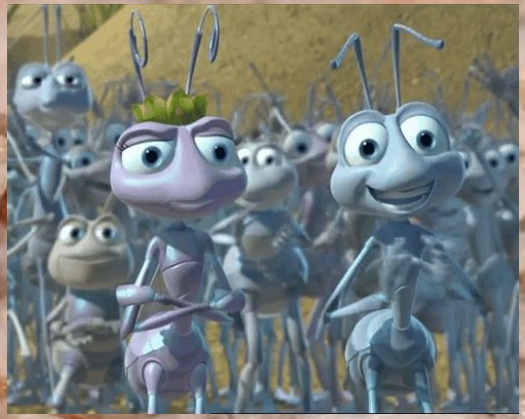
The black ants had smaller graveyards.

The, fire ants had the second biggest graveyards.

Results: Data Table

Rank	Ant Type	Relative Graveyard Size (1–100)
1	Army Ants	100
2	Fire Ants	65
3	Red Ants	50
4	Black Ants	30
5	Big Head Ants	20
6	Caterpillar Ants	15
7	Blue Ants	10

Results: Data Graph



Photographs of Project:

Ants Graveyards

Conclusion

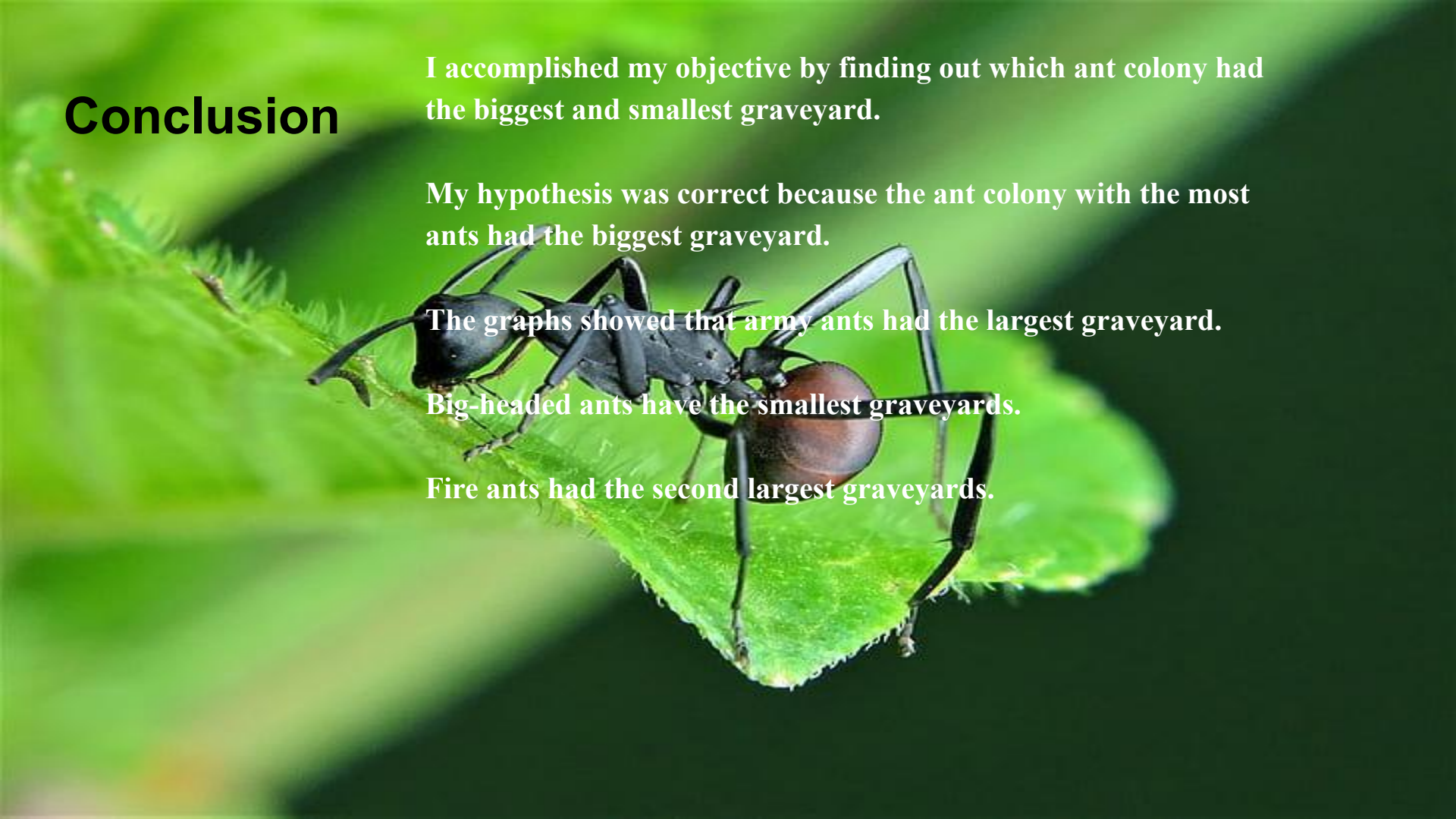
I accomplished my objective by finding out which ant colony had the biggest and smallest graveyard.

My hypothesis was correct because the ant colony with the most ants had the biggest graveyard.

The graphs showed that army ants had the largest graveyard.

Big-headed ants have the smallest graveyards.

Fire ants had the second largest graveyards.



Implicatio[illegible]d Ideas for Future Research…

The results of this investigation supported the hypothesis, showing that the data followed the expected pattern predicted before the experiment began. The experiment demonstrated that ants take their dead to a designated graveyard area. Ants build graveyards to help prevent the spread of disease within their colony by removing dead ants from the nest. Some scientists also believe this behavior may help protect and maintain the colony after [illegible] while defending it.

The results showed tha[illegible]ony had the largest graveyard. The purpose of the investigation was [illegible]which ant colony had the smallest graveyard. Overall, it was interesti[illegible]g to learn about ants and how they behave in their daily lives.

REFERENCE !!!

Google Search. (2026, January 21). Information about ant graveyards.

National Institutes of Health. (2025, November 21). Article about ant chemical signals and disease prevention. https://pmc.ncbi.nlm.nih.gov

Ant graveyards

- **Independent Variable: Type of ant species**
- **Dependent Variable: Size of the graveyard**
- **Control: Same type of environment and observation method for all ants**

Materials

Notes about ants
Pictures of ant graveyards
Pictures of ants carrying dead ants
Pictures of ant graveyard sizes.
Graphs and charts of ant graveyard

Objective

In this experiment, I will learn why ants build graveyards.

The problem in this experiment is: Why do ants build graveyards, and how do they do it in their daily life?

Ants take their dead ants to a special graveyard area away from the nest. When an ant dies, its body releases special chemicals called fatty acids. One of these chemicals is called oleic acid. These chemicals act as a signal that tells other ants the ant has died. The smell is not bacteria, but it alerts the colony to remove the body.

- Step 1: Study different ant species and their graveyards.
- Step 2: Take notes about how ants build and use graveyards.
- Step 3: Collect pictures of ant graveyards.
- Step 4: Collect pictures of ants carrying dead ants to the graveyard.
- Step 5: Learn which ant species lose the most ants.

Conclusion

I accomplished my objective by finding out which ant colony had the biggest and smallest graveyard. My hypothesis was correct because the ant colony with the most ants had the biggest graveyard. The graphs showed that army ants had the largest graveyard. Fire ants had the second largest graveyards. Blue and caterpillar ants had the smallest graveyards.

Ants take their dead ants to a special area called a graveyard. They build graveyards to help prevent the spread of disease inside their colony. When an ant dies, its body can carry germs or fungi that might make other ants sick. By moving the dead ant away from the nest, the colony stays cleaner and healthier. This behavior helps protect the entire ant colony.