beanstack originals



Read on to find out all about mind control in the animal world.

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When you imagine a zombie, do you think of an undead creature hungry for brains? Don't worry—those don't exist. But there are plenty of spooky, zombielike critters to still make you say "eek!"

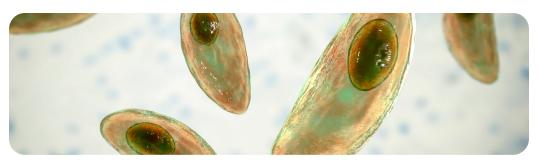
## **Creepy Cordyceps**

It might sound like a spooky story, but there are creatures that can take over the minds of others. They can even force them to do things. One of these organisms is cordyceps, a type of fungus. A fungus is a plantlike living thing such as mold or mushrooms. However, cordyceps has some unique abilities: it can create zombies! Ant zombies, that is.

To reproduce, or make more cordyceps, the fungus sends out small body parts called spores. Don't worry: these spores are totally harmless to humans. In fact, some people even drink tea made from cordyceps. But if a cordyceps spore touches an ant, it creates an ant zombie. The cordyceps takes over the ant by growing inside the ant's body. Soon, it can control the ant's movements. The cordyceps makes the ant climb up high, usually on a tree or plant. Once the ant dies, the fungus sprouts from the ant's body. Then, it sends out more spores to make more ant zombies!



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3D illustration of the parasitic protozoans Toxoplasma gondii.

#### **Zombie Mice**

Toxoplasma gondii is a tiny organism—a living creature so small you would need a microscope to see it. But it also has the power to create zombies! Toxoplasma gondii is a parasite that infects cats. A parasite is an organism that lives in, or on, another living thing, known as a host. Parasites get the things they need to survive, like food, from their host. The parasite Toxoplasma gondii is usually harmless to cats. But for mice, it's a different story.

#### DID YOU KNOW?

Deep in the ocean, there is a type of "zombie worm." This marine worm feeds on the bones of animals that have died and drifted to the seafloor. Toxoplasma gondii can only reproduce, or make more Toxoplasma gondii, inside of a cat's stomach. But to get there, it needs to be eaten. And to do that, it creates mouse zombies! Toxoplasma gondii takes over a mouse's brain. It makes the mouse lose all of its natural fear

of cats. Soon, the zombie mouse might even approach the cat. And then? Well, it's dinnertime for the cat.

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A close-up of a jewel wasp.

## Beware the Jewel Wasp

Ready for one more real-life zombie? First, meet the jewel wasp, a tiny wasp about as long as the tip of your pinky finger. Jewel wasps make zombies from cockroaches. Like the oth-

#### FUN FACT

There is such a thing as a "good" parasite that keeps its host healthy.

er mini-monsters you've read about, jewel wasps create zombies by taking over a living thing's brain. How does the jewel wasp do this? It stings a cockroach right in its brain. There, the wasp injects a type of mind-control venom. Next, the wasp leads her new zombie cockroach back to her burrow. Then, she lays an egg. Thanks to the mind-control venom, the zombie cockroach stands guard over the egg. What happens next? The egg hatches, and the larva, or baby wasp, eats the cockroach!