



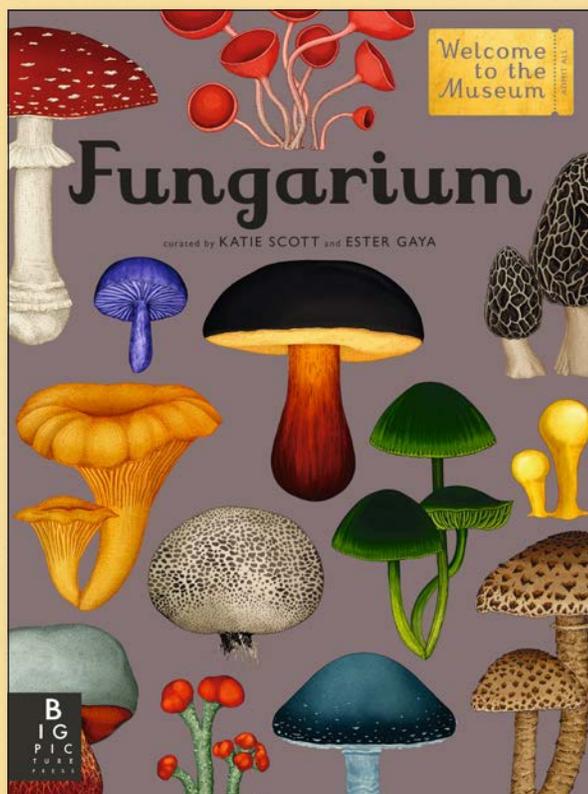
# Fungarium



## Ten Things You Never Knew About Fungi

1. *Mycophobic* means fearing mushrooms. *Mycophilic* means loving mushrooms. (Which are you?)
2. Of the estimated 2.2 to 3.8 million species of fungus on Earth, fewer than 5 percent have been identified. We are discovering new species all the time. There may very well be one in your backyard.
3. Bracket fungi and corticioid fungi are the only organisms that can break down the lignin of wood. Without them, dead wood couldn't decay and forests would be full of wood and leaf litter.
4. Mycorrhizal networks—sometimes called the “wood wide web”—are systems of fungi and plant roots that communicate and share nutrients. Around 90 percent of plants on Earth could not survive without them.
5. In classical times, it was believed that mushrooms were caused by lightning strikes.

6. Some fungi infect insects and change their behavior. The zombie ant fungus releases chemicals into the brain of an ant, forcing it to walk to a high branch. The fungus grows in the ant's body, and it can disperse its spores widely because of the ant's high position.
7. Ants and termites were the world's first farmers—of fungus! They farm fungus for food. Leaf-cutting ants chew leaves into little balls for fungus to grow on while termites eat dead grass and plants and then grow fungus on their dung.
8. There are 22,000 known mushroom-producing species on Earth. Out of these a mere 120 species are seriously poisonous. Nonetheless, mushroom gatherers should beware! Some poisonous species look a lot like edible species, such as the false morel (poisonous) and the true morel (edible).
9. The ergot fungus, found growing on rye, causes hallucinations. It may have been behind the behaviors that led to the 1692 Salem witch trials.
10. *Tolypocladium inflatum*, a fungus that infects scarab beetles, has revolutionized the field of human organ transplantation. It naturally produces a compound called cyclosporine to help it evade beetles' immune systems. Cyclosporine is now used in immunosuppressant drugs to stop transplant patients' bodies from rejecting new organs.



## Fungarium

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