

Orchid



All bee orchids are pollinated by bees. However, some other orchids are pollinated by butterflies, moths, or birds.

Do You Know?

There are over 25,000 species of orchids. They live on every continent except Antarctica.



Tricksters

You might dress up for fun. But plants called *orchids* (OR-kidz) “dress up” to trick insects!

Orchids have many kinds of cells. Some of them help the plant reproduce. Orchids make small grains, called *pollen*, on their flowers. The plants use that pollen to reproduce.

Orchids must spread their pollen from one plant to another to make seeds. Some orchids trick insects into helping them. They do so by looking—and smelling—like the insects.

Plants called *bee orchids* make flowers that look like female bees. A male bee flies to each flower, thinking he’s found a mate. Pollen from the orchid sticks to the bee. Then he flies away, carrying the pollen to a flower on a different orchid plant.



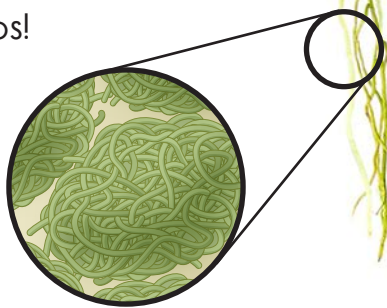
A male bee carrying pollen packets from an orchid on its back

THE FRIENDLY FUNGUS

An orchid seed is very small, and it can't grow on its own. It needs help from a tiny living thing called a *fungus*. The fungus breaks through the outer layer of the seed's cells, called the *cell wall*. As the plant grows, the fungus lives in the roots and provides the orchid with nutrients.

Orchids make their own food using water, carbon dioxide from the air, and light. This process is called *photosynthesis*. Most orchids also continue to get food from the fungus. Every little bit helps!

A tiny fungus (see inset) grows in the roots of an orchid, helping the plant grow.



YUMMMM!

Can you guess a common flavoring that comes from an orchid? (Hint: It's in a popular kind of ice cream.)

It's vanilla! The sweet smell and tasty flavor come from the vanilla orchid's seedpods. Workers dry and chop the pods. Then they mix the pods with water and alcohol. The mixture is slowly heated to draw the flavor from the pods into the liquid. People use this liquid, called *vanilla extract*, in ice cream, baked treats, and perfumes.

vanilla orchid pods

Vanilla orchids grow in tropical parts of the world.

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The smallest orchid flowers are about 2 millimeters (1/16 in.) wide. Even these tiny orchids are made of many cells. However, their petals are just one cell thick!

