Post-Assessment: Carnivorous Plants

UNIT: Bioluminescence

TRANSCRIPT

You might have seen animal-eating monster-looking plants on TV, like Carnivine in Pokémon, or in video games, like this one. But are there plants like this in real life?

This is a plant called a Venus flytrap. It's what artists use to create some of the plant monsters we see in movies. Watch what happens when a bug touches one of its leaves. Woah! The Venus flytrap snaps shut, and the bug can't get out—it's trapped.

Eventually, the bug dies, and the plant begins to soak up the nutrients from the bug's body. Kind of like how a sponge soaks up water. But trapping a bug isn't as easy as it looks.

Since carnivorous plants like the Venus flytrap don't have legs to chase after prey like an animal would, they have to find ways to get the bugs to come to them.

Now, if you were a bug near this Venus flytrap, you would be able to smell it, and it would smell like something pretty sweet. And that's one way the Venus flytrap can attract bugs—it smells good to them. But that's not the only way to attract bugs.

This is an Australian sundew plant. See the raindrops on the stem? The drops attract thirsty bugs who want to drink. But here's the thing—those drops aren't for drinking—they're for sticking, kind of like glue.

See, attracting a bug isn't the only problem a carnivorous plant has. They have to keep it trapped long enough to eat it, which is hard to do without any arms or paws. So once

a bug lands on the sundew sticky leaves, it gets stuck and trapped by the plant's long tentacles. Sticky glue is one way bug-eating plants keep their prey stuck long enough to eat. But it's not the only way. Here's another one.

Doesn't it look like a cobra? The cobra lily attracts bugs in the same way a Venus flytrap does, with a sweet smell. But they don't have sticky stems like the Australian sundew does. So how do they keep the bugs trapped? By confusing them. Once a bug climbs into the tube-like top, the light shining through the tiny windows in the leaves makes the bug think that the exit is at the bottom. So it starts to climb down and down, looking for a way out. And slippery walls make it really hard to crawl out.

Eventually, the bug gets super tired and falls into a pool of liquid at the bottom of the tube where it drowns and gets eaten.

Okay. So, we've talked about some plants that eat bugs, but are there any carnivorous plants that actually eat bigger animals, not just insects? Amazingly, there are. Take a look at this one. Isn't it huge?

The giant montane pitcher plant is the largest carnivorous plant in the world. It's called a pitcher because its big bowl-shaped flower fills up with water, like a water or lemonade pitcher.

The montane attracts bugs and animals with a sweet smell, like the Venus flytrap. But when the animals try to eat some, they slip on the slippery leaves and fall into the water. And when they do, they can't escape and get eaten by the plant. Usually, the montane only eats ants, but every once in a while, it eats bigger animals, like lizards, birds, and even mice.