

# CARNIVOROUS PLANTS



Plants that consume living creatures may seem like they come from a fantasy story about a far-off place, but they are common in many places around the world. What's more, you can grow carnivorous plants inside your home to enjoy yourself and fascinate others. These species are exotically beautiful and undeniably intriguing, yet remarkably easy to care for.

## How They Eat

Plants typically produce their own food through the process of photosynthesis, in which they convert light energy into sugars, and the nutrients they absorb from soil. Carnivorous plants have adapted to living in bogs, where there is lots of moisture but little soil to provide vital nutrients. Carnivorous plants make up for the lack of soil nutrients (*especially nitrogen*) by capturing and digesting protein-rich insects and occasionally small amphibians and even mammals.

Carnivorous plants lure their prey into their traps with sweet-smelling nectar, bright colors, and tiny prickly leaf hairs. The plants break down the flesh with powerful digestive enzymes and extract the nutrients.

## Plant Picks

**Venus Flytraps** (*Dionaea muscipula*). If you've ever heard of carnivorous plants, chances are it was the Venus flytrap. It has hinged leaves shaped like an open coin purse that clamp shut over the prey, which are lured inside by a sweet-smelling nectar. The leaves are lined with teeth-like fibers that trigger an electric charge when touched, causing the leaves to close up. Each trap on the plant can only open and close several times before it dies and falls off. Then the plant produces a new trap from its underground stems. The flowers are white with green veins running from the base of the petal toward the edges.

**Pitcher Plants** (*Sarracenia spp.*). Pitcher Plants come in a variety of yellow, pink, and purple shades, but the best choice for indoor growing is purple pitcher plant (*Sarracenia purpurea*). They have upright, tubular leaves that unfurl in shades of burgundy with red veins. The external surface is waxy and feels hard to the touch. Foraging, flying, or crawling insects are attracted by the reddish color and the sweet-smelling nectar. The rim of the pitcher (*or tube*) is slippery when moistened by condensation or nectar, causing insects to fall into the trap and preventing them from climbing out. Some types of pitcher plants are hardy enough to survive winters in the mid-Atlantic region and can be grown around water gardens.

**Sundews** (*Drosera spp.*). Sundews are covered in orange, hair-like filaments that are covered in a sticky substance that both traps and digests insects. The tentacles protrude from their leaves, each with a sticky gland at the tip. These droplets look like dew glistening in the sun. Once an insect becomes stuck, nearby tentacles coil around the insect and smother it. Sundews can reach up to 10 inches tall, but many varieties grow closer to the ground. Their leaves form a small rosette that is less 1 inch in diameter. Cape Sundew (*Drosera capensis*) is often recommended for beginners because it tolerates a wide range of temperatures. It grows large and fast, and the leaves move dramatically when the plant is fed. In the right conditions, Cape Sundew will put up scores of showy pink or purple flowers on tall stems, which produce hundreds of seeds you can use to start new plants.

**Butterwort** (*Pinguicula primuliflora*). A small plant with soft yellowish-green leaves, butterwort bears pink, yellow, purple, or white flowers in spring. It looks less menacing than Venus flytraps, but it is just as deadly to insects that land on the wet-looking leaves in search of moisture. Their leaves are covered with tiny hairs that secrete a sticky liquid which look like water droplets. The fluid ensnares insects and, as they struggle, they gather more of the liquid on them. The plant responds by secreting digestive enzymes that dissolve and digest the insides of the prey.

## Good Conditions

**Light.** Carnivorous plants are adapted to growing in bogs, where there are few, if any, trees to provide shade. That means they do best in bright, sunny conditions. Full sun also brings out the red highlights that are one of the key attractions of many carnivorous plants. Windowsills that face south and west typically offer the most light for indoor plants. Tropical varieties benefit from being under artificial grow lights, such as LED fixtures, during the shorter days of winter, but those adapted to temperate climates need a dormancy period (*more on that below*).



# CARNIVOROUS PLANTS *continued*

## Good Conditions cont.

**Soil.** The bogs in which carnivorous plants grow tend to be rich in peat and sand. You can replicate these conditions with a growing medium that includes sphagnum peat moss and horticultural sand (*don't use construction-grade or beach sand*). A blend of one part peat moss with one part sand works well for most carnivorous plants. Use plastic rather than terra cotta pots to retain moisture.

**Water.** Keep the soil wet or at least damp all of the time. The easiest way to do this is by setting the pots in trays or saucers that you continually refill. Pitcher plants can grow in soggy soil with the water level in the saucer as deep as half of the pot, but most carnivorous plants prefer damp to wet soil; keep the water at about one-quarter inch and refill as soon as it is nearly gone. Water from below by adding water to the tray, rather than watering the plant, so you don't wash away the sticky substances on the plants' leaves. Use rainwater or distilled water for carnivorous plants. Tap water is too rich in minerals, which can over-fertilize the plants and cause them to burn out.

## Care and Maintenance

**Feeding.** Most carnivorous plants only need an insect or two a month. Even indoors, they are typically able to capture their own prey, but you can also provide them with insects you catch or you can pick up bloodworms from pet stores, where they're sold as fish food. When feeding your Venus flytrap, tickle the hairs a bit with a toothpick to simulate the feeling of a moving insect in order to trigger the trap to close. Despite what you may see in online videos, feeding carnivorous plants with raw meat or cheese can harm them.

**Dormancy.** Carnivorous plants that are native to temperate climates, such as pitcher plants, live healthier and longer if they get a dormancy period in winter. When they are not allowed to rest, they may exhaust their growing energy and die after a few seasons. Some types, such as the sundews, form winter buds, while Venus flytraps and pitcher plants produce winter leaves or drop their leaves. Carnivorous plants enter dormancy when winter conditions begin. When the plants begin to show signs of dormancy, water them less, leaving the soil only slightly damp. Reduce the length of daylight they get and keep them cool (55 to 65 degrees F) for about three months. Then move them back to their sunny spots and watch as they begin growing and capturing prey again.

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