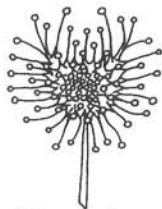


THE SAVAGE GARDEN



“FEEDING YOUR PLANTS”

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Keywords: cultivation:general

In horticulture, feeding one's plants usually means the application of fertilizers. With carnivorous plants, of course, we are speaking literally!

If you are growing your plants outdoors, feeding them certainly will not be necessary. Outdoors, carnivorous plants will lure, catch and eat numerous insects on their own—flies, ants, gnats, moths, beetles. Plants cultivated outdoors will attract and feed on prey similar to those they lure in their natural habitats. Flying insects are usually the most common victims. But even ants will not necessarily be deterred by water trays that surround the pots. Older trumpet leaves may lean over and touch the ground, forming a bridge for ants to cross. Some people I know purposely put twigs or sticks across water barriers to entice crawling insects to visit their potted plants, a visit the insect may later regret. Be warned, however, that bridges to pots set in water trays will also allow certain pests to access your plants, and a slug may eventually be caught in a flytrap only after having munched a few holes in a tender and newly emerging *Sarracenia* leaf.

Outdoors, some carnivores will catch startlingly large quantities of insects. A sundew's leaves may be black with gnats, every flytrap leaf may be shut tight upon flies, and *Sarracenia* trumpets may topple from the weight of hundreds, if not thousands, of prey. The pitiful buzzing of trapped yellow jackets or flies may be unsettling to some people. I warn the sensitive never to peer down the tube of a trumpet plant that is infested with ants and flies. The ants, quite insane by their trapped predicament, will be unmerciful upon the helpless housefly who tumbles into their madhouse prison. (At times I have been so disturbed by their suffering I have freed ladybugs and even yellow jackets from an agonizing death.)

Even carnivorous plants indoors on sunny windowsills or in ventilated terrariums will catch prey. This can surprise people who do not even know these bugs are their house guests. Flies, gnats and moths are the most frequent prey. Greenhouses, too, are usually crawling with various potential plant foods, unless insecticides are heavily used.

And here lies a warning about ants. Although I have rarely encountered this with outdoor plants, while ants in a greenhouse will provide ample food to American or tropical pitcher plants, they will also sometimes cultivate scale insects and aphids from which the ants extract honeydew. This may be an ironic revenge tactic of the ants (if they were able to think!): plant eats ants, ants farm scale on plant, scale eats plant, ants feed on scale. Nature works in funny ways.

Ant colonies in the greenhouse are often of the mobile sort. A queen may set up a nest in a potted *Nepenthes* then wonder why all her workers are disappearing. (I have never found ant nests to do any particular damage to the roots of a potted carnivorous plant.) When the pot is watered, the whole nest swarms in a panic, carrying eggs and pupae out of the deluge. They promptly move the nest to another pot, or return when the water drains. If you have ant nests in your potted greenhouse plants, keep an eye on them. At the first sign of scale, you will have to use an insecticide. You may want to discourage ants by laying a few flea collars around the infested pots to keep the ants away.

When it comes to plants grown in insect-free areas, you have several possibili-

ties on how to feed them. One method is to feed them by hand. Forceps or tweezers are helpful. If you catch a fly on a windowsill, it is usually much easier to apply the doomed insect by means of forceps into the maws of a venus flytrap. Since you will have to stimulate the trigger hairs within the trap, you cannot simply drop the fly in—often the fly escapes just as the trap closes. Be sure to wash your hands after handling germ-ridden flies and urge children to do likewise. Otherwise feed plants cleaner food such as sow bugs or pill bugs.

Many carnivorous plants eat tiny insects. You may gather small ants from a trail on a sidewalk with a damp paper towel and drop them into a paper cup. Your neighbors may think you are strange, but if they know you grow carnivorous plants, they think you are strange anyway! You will have to separate the ants from the grains of sand and other debris. Then the ants can be then sprinkled onto sundews and butterworts.

Alternatively, some windowsill plants may be placed outdoors temporarily to catch their own food. Be careful not to place them in an area hotter or sunnier than their normal environment or the plant may burn or go into shock. Shade is best for a windowsill plant placed outdoors for "the hunt."

Aquatic bladderworts typically feed on minute swimming things like daphnia or water fleas. You can collect these in almost any pond or lake in paper cup or ziplock bag, add this water into the water bowl where you grow your *Utricularia*.

Perhaps the easiest way to feed most carnivorous plants grown in an insect-free environment is to visit your local pet shop. Here you will usually find a great assortment of insect food, particularly if the shop caters to reptile and amphibian fanciers. Live crickets, from pinhead sized newborns to adults can be used to feed plants ranging from venus flytraps to pitcher plants. Wingless fruitflies can be fed to sundews, butterworts, rainbow plants, and other sticky plants. Mealworms will drown quickly when dropped into various pitcher plants, but make sure they do not escape or they may infest your soil.

You may also freeze these insects for future use, whether you purchase them or catch them yourself. If feeding your plants live insects makes you feel ill or guilty, there are also various dried insect food available at good pet shops, which most carnivorous plants readily accept. Some are even vitamin fortified! Dried flies, *Musca* larvae and ant eggs will save you much fuss and bother. Even plants such as sundews, which normally require some moving stimuli to activate the feeding process, will soon curl around and drool over a dried insect applied to the leaf.

Carnivorous plants will also sometimes eat human food. (I am not suggesting you feed your plants humans. That is highly illegal!) But some carnivorous plants will accept tiny bits of raw hamburger, cheese, powdered milk and even chocolate. But these food products may be harmful to your plant. A sundew leaf may curl around a bit of Hershey's chocolate, secreting digestive juices and making a pig out of itself. But a few days later, mold or fungus may set in, so it is best to avoid such food as a regular part of their diet.

Do carnivorous plants really need to eat insects for their health and well being? The answer is more of a yes than a no. Insect food is highly beneficial to most carnivorous plants in providing them with the extra nutrients they need to flower, set seed and grow larger each year. Since they grow in such poor soils, when deprived of such nutrients and minerals a gradual decline in the plant's health will occur. They may not flower or set seed. The following year the plant may grow weaker, and the year after that, weaker still.

This does not mean you have to feed your plants on a daily basis during the growing season! A once-a-month feeding schedule from spring through autumn will usually do the trick. A few houseflies for your flytrap and a dozen or so crickets for your pitcher plants will usually provide them with the minerals they need for good growth. But you will probably notice that your healthiest plants are the ones that have eaten the most!