



Pitcher plant crown jewel of Delaware

By Robert Naczi

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Among Delaware's wealth of native plants, one group stands apart for its unusual lifestyle and stunning appearance: the carnivorous plants.

Carnivorous plants have oddly shaped leaves that attract, trap, digest, and absorb nutrients from a wide variety of small animals (mostly insects).

Despite the name, carnivorous plants do not eat, nor do they use animals for their food. Like other green plants, carnivorous plants make their own food.

A green plant's food is sugar it manufactures from carbon dioxide and water, using sunlight and chlorophyll (to drastically simplify the complex process of photosynthesis). A plant cannot live on sugars alone, however. Nutrients such as nitrates and phosphates are necessary.

Carnivorous plants grow in environments that are nutrient-poor, such as sand, peat, and ponds with soft water. In such habitats, the carnivorous habit is adaptive because it enables these plants to obtain essential nutrients from the bodies of animals that are otherwise unavailable or in dangerously low supply in the environment.

Growing wild in Delaware are 15 different species of carnivorous plants. Our most fascinating species is the Purple Pitcher Plant (*Sarracenia purpurea*). Pitcher plants are so named and instantly recognizable because of their hollow, tubular, pitcher-like leaves with a bold pattern of red veins



Submitted photo

Pitcher plants are so named and instantly recognizable because of their hollow, tubular, pitcher-like leaves with a bold pattern of red veins against a reddish or pale green background.

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The bold colors, as well as nectar produced on pitcher exteriors, attracts prey. Rainwater collects in the pitchers, and aids in trapping the prey. Ants, spiders, beetles, millipedes, slugs, and flies are some of the common prey of these fascinating plants.

Most of the digestion of prey is accomplished by bacteria that thrive inside pitchers. Bacterial decomposition releases nutri-

of their natural environments — high light levels, wet and nutrient-poor soils, water as pure as possible (distilled or rain water, but not tap water), and a dormant period during winter.

Editor's note: Dr. Robert Naczi is curator of Claude E. Phillips Herbarium, Delaware State University on the campus of Delaware State University. The herbarium is Delaware's center for research, education, and outreach about plant identifications, locations, and uses. Call 857-6452 (Dr. Susan Yost) to arrange a tour and call 857-6450 (Dr. Naczi) for more information about this article.

ents that are then absorbed by specialized glands on the inside of pitchers.

The Purple Pitcher Plant is the most common and northernmost-ranging of 11 species in its genus. It and the other sarracenias are all commercially available, and gaining in popularity in outdoor and terrarium gardening.

In order to grow them successfully, one needs to simulate the most important particulars