

AMERICAN Pitcher Plants

Sarracenias are fascinating and fierce, in a passive sort of way, and not as challenging to grow as you might think.

The warm-temperate and permanently wet bogs and marshes of the coastal plains of eastern and south eastern United States gave us these magnificent plants, with leaves that have evolved into funnels in order to trap and digest insects. This adaptation allows them to absorb nitrogen from the insects, which is necessary because the soils in these areas are normally nutrient poor due to the continued leaching away of the nutrients (particularly the nitrates) by the moving water. Also, because the water has a low pH (is acidic) those nitrates that are present are rendered unavailable for uptake by the plants.

The genus *Sarracenia* is restricted to North America and includes about 11 species. They are perennials that grow by means of underground rhizomes and produce pitchers from the rhizomes in spring. The plants become dormant in winter, start the new season with flowers and follow these with new leaves. The modified leaves, usually called 'pitchers', are made up of four sections:

- The operculum, or lid, covers at least part of the mouth or opening and prevents excessive rainwater from filling the pitcher. It also serves to guide the insects to the opening with a combination of colour, scent and downward pointing hairs. This operculum is not a moving part and it does not snap shut (as is sometimes believed).

- The 'mouth' is the entrance to the pitcher and is surrounded by the peristome.
- The peristome produces copious amounts of nectar, which lures insects to land on it and then crawl inside. The inside part immediately below the peristome has a waxy surface and is extremely treacherous for insects, usually causing those that venture to this point to slip and fall into the pitcher.
- The pitcher tube has downward pointing hairs that prevent insects from crawling out, so once an insect gets to that point it has little or no chance of escaping.



SARRACENIA
purpurea hybrid



SARRACENIA
'Jotahip Soper'

SARRACENIA
leucophilla hybrid



SARRACENIA
'Jotahip Soper'




SARRACENIA
'Farhamii'



SARRACENIA leucophilla hybrid





SARRACENIA
'Farhamii'

This part of the plant has the digestive gland that excretes the enzymes which are necessary to help break down the bodies of the trapped insects. It also has the areas that absorb the nutrients as they are released.

GOOD 'HUNTERS'

As the summer progresses the plants are so effective at attracting and 'capturing' insects that the pitcher tubes begin to fill with the exoskeletons that remain after the soft parts of the insects have been absorbed. This is one of the reasons for the deciduous nature of the plants in this genus: rather than finding a way to clean the pitchers, the plants just produce new pitchers at the start of the next growing season.

GROWING SARRACENIAS IN SA

Sarracenias are easy to grow in most areas of our country as they can withstand hot summers and cold winters. In their natural habitat they even receive snow occasionally, an indication that they are able to withstand cold weather. In order for them to thrive you need to take note of the following:

- They grow in full sun in nature. They are not suited to being grown indoors as they require the maximum amount of light, especially in the growing season. Full sun is therefore crucial for best results. The more light the plants receive, the more colourful and robust the growths will be.
- They should be grown in pots, with the pots standing in water to a depth of 2 cm because they should be constantly wet. The water level can be dropped in the winter months, when the plants are dormant, but the pots still need to stand in water permanently. Plants can be most easily propagated vegetatively by rhizome divisions done in spring just as growth resumes. The best growing medium is pure imported peat, as it can most closely imitate the nutrient poor, acidic, constantly wet soil that Sarracenia species grow in under natural conditions. It is essential to re-pot the plants annually because the peat breaks down quite quickly when it is exposed to tap water, which is mostly alkaline, also, over time, nutrients and salts may build up in the peat. If too many nutrients are present the roots of the plants will burn and the plant will eventually die. For this same reason one must entirely avoid adding any type of fertiliser.

TRY THESE

The following plants are recommended due to the ease with which they grow, their good colouring and the fact that they are most readily available in South Africa, although you will usually have to obtain them from specialist growers or nurseries: **SARRACENIA alata**, **S. purpurea**, **S. leucophylla**, and the hybrids 'Juthatip Soper' and 'Stevensii'. 🌱

Information and photographs supplied by Plantae Orchids, Brits. For more information and to locate American pitcher plants contact Nollie on 084 752 6823 or e-mail info@plantae.co.za.