San Gabriel Valley Cactus and Succulent Society

Succulent of the Month April 2003 - Gasteria

Gasteria are a popular and easily grown genus of plants that has been collected and kept as house plants since the 17^{th} century. They are readily distinguished from *Aloe* and *Haworthia* (both very close relatives) by the shape of their flowers. *Gasteria* flowers are carried on a long scape (leafless flower stalk). They generally hang down as they open, and have a swollen (gasteriform) portion at the base of the flower. The word *Gasteria* comes from the Greek "gaster" meaning stomach or belly.



Gasteria obtusifolia entered in the 2001 Intercity Show by Jim Hanna

Gasteria vary in size from about an inch to several feet in diameter. Almost all plants start out with the leaves in two rows (distichous), although most eventually begin to spiral, either remaining in a distichous spiral, or changing into a rosette form. *Gasteria* are very variable in appearance. They have definite juvenile and adult forms, have local variations in appearance, and have form and growth habits that are dependent on the soil type and amount of sunlight.

Typical natural habitats are humus rich, sandy soils. They grow on dry rocky hillsides and generally grow under larger shrubs, particularly when young. They also can be found in rock fissures or in the shade of large rocks. The roots are shallow and thick which helps the plants obtain moisture from barely wet soils, and nourishment from decaying leaves and debris from larger shrubs.



Gasteria 'Cape Velvet' entered in the 2001 Intercity Show by T & J Glavich

Gasteria cultivation is easy. They are mostly winter and spring growers, but exhibit some growth all year except for the hottest part of the summer. They are tolerant of almost any growing mix, although they do best with high organic content mixes, similar to their natural growing conditions. They prefer partial shade, particularly in the afternoon; however the best color is obtained by giving them as much light and sun, short of sunburn, as possible.

Gasteria are generally free from most pests. The one difficulty is 'black spot', a fungus that attacks many *Gasteria*. The fungus is rarely fatal, but causes large unsightly black spots on the leaves. There is no way to remove the spots, and since the leaves remain on the plants for several years, the fungus can quickly ruin show plants. The fungus can be minimized by keeping the leaves dry, and particularly keeping dew off the leaves. It can be prevented by regular application of systemic fungicides, but vigilance is required. Funginex is a popular rose fungicide that works fairly well on controlling black spot.

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Gasterias are readily propagated from offsets at the base, which can be simply pulled off and planted. Leaf cuttings will also root easily. *Gasterias* left in the open in California will be rapidly pollinated by hummingbirds, although the resulting seed is then an uncontrolled and unknown hybrid. Controlled pollination is easily accomplished with a small brush, or toothpick. Seed can be collected as soon as the fruits start to dry.



Gaster-Aloe hybrid 'Royal Highness'

Gasteria hybridize easily, and cross pollination can produce interesting plants. Many hybrids are available, as are several variegated cultivars. Examples of both are shown above. Intergeneric hybrids with *Aloes* and *Haworthias* are also available.

Great Gasterias:

Gasteria nitida var. *armstrongii* (usually found as *Gasteria armstrongii*) This is a small plant, with distichous leaves only a few inches long. The leaves are dark green (almost black in some cases), and are tuberculate (covered with small bumps) It offsets freely from the base, forming nice clumps. Larger specimens can be obtained by over-potting.



Gasteria sp. variegate entered in the 2001 Intercity Show by Laura Oster

Gasteria batesiana is another of the dark green tuberculate species. The leaves spiral with age to form rosettes. The plant is much larger than *Gasteria armstrongii*, and the tubercles are often a lighter green than the main body, giving the plant a speckled appearance.

Gasteria carinata var. *verrucosa* (often found as *G. verrucosa*) is a lighter colored species. It is larger than G. batesiana, with thinner leaves, The tubercles are much larger, and often merge into large areas of glaucous green on a dark green background.

Gasteria carinata v. *carinata* cv. 'Grat Brak' often found as *G. schweickerdtiana* is a particularly beautiful plant. In this cultivar the tubercles on the underside of the leaves form bands. Tubercles also merge on both the upper and lower leaves to form glaucous green stripes on a dark green background.

References

- A. J. van Jaarsveld, Gasterias of South Africa
- B. Sajeva and M. Costanzo, Succulents, The Illustrated Dictionary

Tom Glavich March 2003