

Plant Study

Soap Plant *Chlorogalum pomeridianum*
Liliaceae family



Plant Study: Soap Plant

by Jann Garitty

Part One: The Objective Perception Exercise

Including from the “Twelve Windows of Plant Perception” the following: Form and Gesture, Orientation in Space, Geometric Relationships, Botanical Plant Family, Orientation in Time; Daily and Seasonal Cycles, Relationship to the Environment, Relationship to the Four Elements, Relationship to the Other Kingdoms of Nature, Color, Other Sense Perceptions

Soap Plant *Chlorogalum pomeridianum* Liliaceae family

These are observations of Soap Plants which grow in many areas on the land where I live. The plants grow in the hard-packed rocky soils of the area. The plants I observed for this study grow around three sides of my house, in partly sunny locations; I can easily see them from the windows of the house. The plants in more shaded areas appear more lush; they are less quick to move through their growth and blooming cycle than their compatriots in more sunny locations. One sees a variety of sizes of the plant, and in some cases there are basal leaves but no stems are present. The plants were observed throughout the month of July and into the month of August. As I learned from my observations, the overall movement of development of this plant is from the earth upward, and from the stalk of the plant outward.

Generally speaking, Soap Plants are perennial plants endemic to Western North America, but found mostly in California. While researching this plant online, I learned that there are five species. It was confusing studying the differences between listings and images in field guide books and online, as the images shown online associated with “smallflower soap plant,” *Chlorogalum pomeridianum*, and “Red Hills Soaproot,” *Chlorogalum grandiflorum* are mixed and shown for both. However, the *Chlorogalum grandiflorum* is a more rare species, seemingly found at lower elevations than where I live, and I know that I have been studying the *Chlorogalum pomeridianum* species.

Stem

There is a smooth central stem with additional alternating branches proceeding up the main stalk, slightly spiraling as they move upward.

Lower branches and others upward have side branches.

The stem has a fine white-colored coating that rubs off when touching it. When broken open, the stem is fibrous and pithy inside.

Over many years, I have noticed that deer like to eat the tops of the tender stems while they are forming and before the flowers bloom. Some of the plants I observed this year had been eaten as well.



Leaves

The leaves are long “ribbony” shaped, ending in points, and emanate from the base of the plant and stalk; the leaves form a basal cluster. They either lie low to the ground or the slightly higher ones fold over toward the ground. There is a middle longitudinal “line” running the length of the leaves.



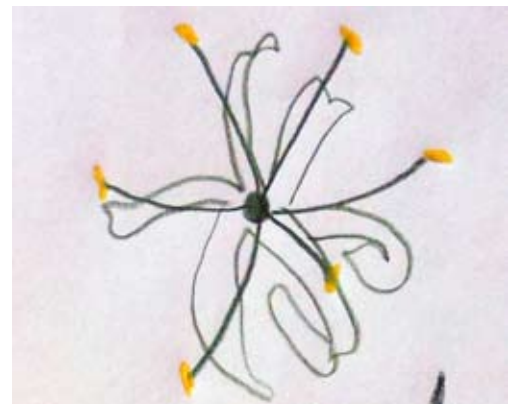
Root

The root is a bulb covered in brown coarse hair-like fibers. The root bulb itself is mucilaginous. While I didn't dig up a root bulb for this study, I have dug them up in the past.

Flower

The flower is a delicate, small, white, six-pointed star, the six-pointed star shaped flower being characteristic of the Liliaceae family. The thin flower petals fold back on themselves. There is a green nodule at the center of the flower, the pistal or ovary as I understand it to be (I am new to formal botanical study, though I have practical knowledge and use many medicinal and herbal plants). There are six stamens, seemingly the same length as the flower petals, but they project straight outward. The flowers form around the stems in an alternating pattern similar to the spiraling pattern of the stems around the central stalk, but more densely placed near each other going around the stalk.

The flowers begin blooming in the very late afternoon and early evening, and close very early in the morning. In mid-July, they are already closed when I am up at 5 AM.



There is no fragrance to the flower that I can detect one evening at 8:30 PM as I'm observing them. Bees visit this plant until sundown and a bit later. I don't notice the bees on other plants at this time, but there they are on the Soap Plant, with their weight causing the long stems of the plant to sway as though in a breeze.



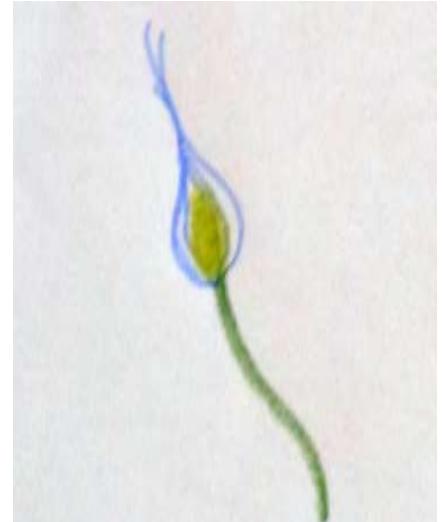
Over time, the flowers open progressively upward on the stems, and from the base of the stems toward the stem tips. The lower stems flower before those on the upper stems. Toward the end of the last blooming flowers at the top of the plant, the leaves at the ground level begin to dry out, turn brown, and dry out from the tip backwards toward the stem of the plant. Eventually, all the leaves are tannish-brown and dried out (even before the rest of the plant starts to dry out). The stalk and upper part of the plant remain green, though faded looking compared to the beginning of the plant's cycle. Then even later on, the stems begin to dry out as well, starting from the tips and progressing backwards toward the main stalk.

Seeds

The sphere-like seed pods begin to form from the pistal or ovary of the flower, within the dried out flower petals, in a progression of development from lower on the auxilliary stems to the upper ones. As they dry, the flower petals twist around together, at the top end of the pistal, then seed pod, projecting upward about twice as long as the ovary or seed pod.

Seemingly, not all the seed pods actually become mature pods. It appears that many of the seed pods which initially started to form ceased growing and dried up, as there are many whitish-tan hollow, spherical-shaped "husks" on the plant stems. The seed pods which mature seem all to appear on the upper portion of the plant.

The seed pods that do reach maturity are pea-sized, with four "lobes," and when cut open, contain four "chambers," each containing one brownish-black-skinned seed. I am struck by the general resemblance of the seed pod to the shape of the human heart, which also has four chambers. When the seeds are squeezed, one sees inside a pure white colored flesh, which produces a watery liquid that has no detected flavor.



The Elements

The polarity of the plant is expressed in the grounded root bulb and the upward airy gesture of the plant and flowers.

The bulbous root is strongly anchored in the ground, and the leaves embrace the earth. The leaves are seemingly covering the ground over the bulb to help keep it moist beneath. This is an expression of the Earth element in the plant.

The stalk, flowers and stamens soar directly upward—reaching toward the sky. There is an appearance of lightness and airiness in the flower and stamens. A grouping or clump of flowers looks "puffy," and from a distance, resemble little clouds in the sky. Photographs taken from a distance, trying to capture an image of the whole plant, resulted in images in which it was difficult to distinguish the Soap Plant from the other vegetation surrounding them. The images I captured of the plant had an etheric, elusive quality to them. All of these observations are indicative of an Air-like quality.



Water qualities are expressed in the young lush green leaves, the root bulb, pistal (later to become the seed pods) which are moist and at first look like "mini" root bulbs, and the seeds that express a watery liquid.



Part Two: The Imaginative Perception Exercise

While in the midst of the flowering stage, sitting quietly with the plant, with my eyes closed, I “hear” what might be indications for the flower essence:

For those rooted to the earthly plane who don’t remember to seek contact with the upper realms/the spirit world.

To remember to connect with spirit even while in earthly life, body and emotions.

For those who are proficient in earthly practicalities but forget/neglect their connection to realms of the spirit.

Further, the plant seems to express:

*Though I am deeply rooted on earth, I yearn for and strive to communicate with far away starry realms.
My antennae reach outward and upward to listen to the stars, the spirit realm.
I am a star-like spirit and I connect with other star-spirits of the cosmos.*



Weeks later, after sitting with the plant and writing the above, I awoke one early morning and thought further about the polarity of this plant (root bulb-flowers), and how it reminded me of archetypes represented in the tarot: first, the contrast between lower arcana cards, the "coins" or "pentacles" symbolizing earthly accomplishment, and the "rods" which symbolize spirit, growth. As written below, I learned later that the root bulb is the most used part of the plant, having many practical uses. What is striking about the flowers and upward parts of the plants, is their etheric-like qualities. Additionally, the polarity of the Soap Plant can be compared to and illustrated by the Empress and Star cards, major arcana cards of the tarot deck. Simply stated, the Empress represents accomplishment and reward on the earthly plane. In contrast, the Star card represents spiritual attainment and understanding.

While visualizing the Soap Plant that morning, I drew a tarot card which turned out to be the Queen of Pentacles; the lower arcana physical image of the Empress: "...the feminine expression of Mother Earth herself... . In her most practical mode she can become completely absorbed by the physical concerns of the earth plane, thereby limiting her imagination and scope."

Cards from the Aquarian tarot deck



Part Three: Literature Review

Including from the “Twelve Windows of Plant Perception” the following: Chemical Substances and Processes, Medicinal and Herbal Uses, and Folk Wisdom

Native California Indians had many uses for the bulb of the Soap Plant:

They made a brush from the bulb fibers, using the mucilaginous part of the root as a paste that when dried, forms a handle for the brush. My daughter, when she was younger, was taught how to make such a brush, and was told it was typically used in the processing of acorns, to sweep the fine ground meal from a basket.

The scales of the bulb contain saponins (glucosides), and form a soapy lather when mixed with water; this was used as a shampoo. The soap was reported as being effective in the treatment of dandruff.

The lather from the bulb was used to help catch fish by putting it into shallow streams where it would get into the gills of fish and they could not breathe. Another source stated that the saponins in the bulb were poisonous and killed the fish.

The bulb was baked slowly in a pit and was used for food.

The crushed bulb made a glue which was used in the making of parts of bows and arrows.

Medicinally, the mashed bulb was applied to sores and poison oak rashes. It purportedly cured rheumatic pains and relieved cramps.

In addition, it was reported that the leaves were eaten when still young and fresh. The older leaves were used for wrapping acorn bread during baking.



The “soaproot” brush that my daughter made





References

Mark, Barbara. *Learning Tarot* (self-published manuscript)

Storer, Tracy I., Robert L. Usinger and David Lukas. *Sierra Nevada Natural History*

<http://www.dcn.davis.ca.us/vme/ARNHA/soaproot.html>

<http://learnplantsnow.com/19-basic-botanical-terms/>

<http://waynesword.palomar.edu/pldec198.htm>

<http://en.wikipedia.org/wiki/Chlorogalum>

http://en.wikipedia.org/wiki/Chlorogalum_pomeridianum

http://www.calflora.org/cgi-bin/species_query.cgi?where-calrecnum=2001