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**RIO DELTA WILD**

Publication Date: April 3, 2004

**Below, LEFT:** (purple bloom) Swan-Flower in bloom.

**Below, RIGHT:** Pipevine Swallowtail butterfly larva feeding on host plant.



#### FLORA FACTS

Scientific Name: *Aristolochia longiflora*

Common Names: Swan-Flower

Family: Aristolochiaceae (Dutchman's Pipe)

#### **Swan-Flower Sought by Butterfly**

Nature fieldtrips can be an amazing experience, with each person noting different details surrounding them. While one person photographs the tiniest details of a flower, another points out a camouflaged reptile, and someone spots a wandering butterfly.

It's important to continue this fieldtrip tradition of learning and exploring our locale together. The role of organizing and publicizing that sort of trip is taken on by local nature clubs.

One such fieldtrip recently visited the sandy plains north of Raymondville, where wildflowers are resplendent in spring. The exact location I speak of lies four miles north of the Raymondville McDonald's.

From the car window, you can see Indian Paintbrush, Coreopsis, Thistle, Lazy Daisy and Prickly Poppy strewn about in beautiful bands of bold color. What you find upon descending from the vehicle is truly amazing.

Frank Wiseman, a Master Naturalist from Harlingen, has created a plant species list for this location. It includes forty-three plants which we've been able to identify with certainty. Several native plant enthusiasts continue work on the list, which may well grow to sixty species or more.

Noting that many LRGV roadsides grow little besides guinea grass, one wonders why this particular spot is so diverse.

The fact that all the wildflowers haven't been mown down is an important factor. Frank Boggus of Harlingen told me recently that Bluebonnets once adorned local roadsides by the millions. Where mowing takes place, they are no longer in abundance.

Ken King, a local naturalist, explains that much of the diversity north of Raymondville is due to gophers. The presence of these busy creatures can be noted by multitudes of sandy mounds.

Gophers churn up the soil, aerating it, providing good drainage and creating tunnels where assorted reptiles fertilize the soil. To prove Ken's point, Lucy Wilkinson of Harlingen pointed out

a horny toad. The reptilian camouflage upon a sandy mound was so excellent that a dozen of us clustered about failed to note the horny critter.

Ken tells me that gophers disappear along with the disappearance of sandy soils as one travels south from the ranch country.

The featured plant in today's article grows entirely hidden amongst multitudes of more spectacular plants upon that sandy plain.

It is an uncommon species of Pipevine known as Swan-Flower. The plant is completely unremarkable, looking much like grass. You would probably yank it from a flower bed if it should arise there, mistaking it for a nondescript grass or weed. On close examination, one notes that this plant lacks the parallel veins of a grass blade.

Swan Flower occurs "In hard packed sandy silt and in sandy loam in open grassy areas or in shade in south Texas, (blooming from) March to November; also in adjacent Mexico." (Correll & Johnston, "Manual of the Vascular Plants of Texas," 1979.)

I was able to photograph Swan-Flower in bloom at Valley Nature Center, where Ken King created growing space for a rescued specimen. Never had I seen this small plant in the wild until Ken pointed it out during the wildflower fieldtrip on March 20, 2004.

Lucy Wilkinson of Harlingen helped to make that find possible. She spied the fascinating larva which feeds on Pipevine, a larva which becomes the Pipevine Swallowtail butterfly. "The Pipevine must be around here, somewhere," Ken told us, and everyone began to search around, knowing only that the plant would look something like grass. Ken was the one who spotted the small Pipevine, and we placed the larva on it. The fascinating creature began to eat without hesitation. It was one of the softest creatures I've ever held, almost like freshly-risen bread dough.

The spotted larva will become a gorgeous butterfly. For a photo of an adult Pipevine Swallowtail butterfly, visit the website of Gil Quintanilla. Quintanilla, who resides in Mission, has posted many gorgeous butterfly photos at: <http://community.webshots.com/user/gquin>.

Shinner and Mahler's "Flora of North Central Texas" (1999) contains good summaries about different families of plants. Here are details about the Pipevines from that source:

Pipevines are often aromatic. Some are cultivated for their unusual flower shapes. The flowers are typically a long tube, curved and strikingly pipe-like in shape. Some are sticky, attracting and capturing insects which are digested for the plant's use.

Flowers are bisexual. Fruit is a capsule.

All species of Pipevine contain alkaloids or aristolochic acid. These compounds are carcinogenic and nephrotoxic. The leaves of many Pipevines are eaten by larvae of Pipevine Swallowtail butterflies. Toxic compounds contained in the plant leaves are sequestered within the adult butterfly, presumably making them unpalatable to birds.

Pipevines were the source of the active ingredient in snakeroot oil sold by itinerant doctors who staged medicine shows in the western United States in the Nineteenth Century.

The Greek roots of *Aristolochia* are *aristos*, meaning best and *lochia*, delivery. According to the "doctrine of signatures" of ancient medicine, plants were attributed healing powers mirrored by their appearance. A fancied resemblance between the shape of a human fetus and the Pipevine's bloom led to use in childbirth to alleviate pain. Having experienced childbirth, I can say that women are keen to try most anything doctors suggest.

*Aristolochia* is grouped with several other plant families as "paleoherbs." Some botanists believe they are an early evolutionary branch leading to the monocots. This view is supported by the existence of three-part flowers as well as by molecular data.

On a practical note, butterflies are appearing in greater numbers as the days become warmer. They're looking for nectar and for the special plants their larvae feed upon. Hopefully they'll be able to find some good possibilities growing in your yard. It's a great time for planting.

Happy Spring!

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