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RIO DELTA WILD

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Garlic Guinea Weed photographed at Nature Conservancy's Southmost Preserve, Brownsville.



FLORA FACTS

Scientific Name: *Petiveria alliacea*

Common Names: Garlic Guinea Weed, Hierba de las Gallinitas

Family: Phytolaccaceae (Pokeweed)

Smelly Weed Is Strong Medicine

Ken King introduced me to *Petiveria alliacea* several years ago as we walked through Valley Nature Center's nature park in Weslaco. He probably said "this plant is highly aromatic."

My mental translation was "this plant smells really good," but I couldn't smell it at all.

It's likely that my sinuses were clogged from allergies to pollen, molds and multiple other things. A sample of the plant went into my pants pocket, became well-pressed in the dirty clothes pile and was placed on my dresser for later study.

Many months later, I realized Ken had slipped me something most people consider stinky. Garlic Guinea Weed is the locally-common name for this infrequently-encountered plant.

Perhaps this is a clue to why my husband often searches for the source of disagreeable odors which I fail to notice.

It's difficult to find Garlic Guinea Weed growing in the wild around here, though you can probably find numerous bottles of herbal remedies which contain some part of *Petiveria alliacea*. The common name *Anamu* is used in the Dominican Republic. In Guatemala, the plant is known as *Apacin*. Over 30 common names from around the world and a wealth of information about medicinal use can be found at: <http://rain-tree.com/anamu.htm>.

By contrast, you'll find little published information on the plant in local field guides. This is probably because the flowers are small and the plant is rather uncommon.

In the LRGV, Garlic Guinea Weed may be encountered on back trails at Santa Ana NWR. Mike Heep has provided specimens which are planted at Valley Nature Center and at Ramsey Nature Park in Harlingen.

My photographs were taken at Southmost Nature Preserve in Brownsville, owned by Texas Nature Conservancy. Manager Max Pons was gracious enough to lead a group of six people into a remote remnant of Sabal Palm forest. *Petiveria* is one of many diverse species found there which are unique to extreme south Texas.

The range of *Petiveria alliacea* is described by Correll & Johnston as: "In dense thickets and open woods in extreme south Texas, (blooming) June – August; also Florida and tropical America." ("Manual of the Vascular Plants of Texas," 1979.) The worldwide range includes tropical areas of Central and South America, the Caribbean and Africa. In the U.S., colonies of this delicate plant are also found in Puerto Rico and the Virgin Islands.

The plant is perennial and herbaceous, forming colonies of attractively-large, dark-green leaves. Tiny white flowers adorn erect arching spikes. These star-like flowers often sway in the breeze like tiny moving fairy lights on a delicate wand. Photography isn't the easiest task, as the slightest movement wafts these thin flower spikes out-of-focus.

On the website of Cornell University, a graduate student has compiled five pages of information on *Petiveria alliacea* as part of a medicinal plant database. Thirty-one medicinal uses are listed there, including treatments for intestinal parasites in livestock and hysteria, rheumatism and rabies in humans.

I have been near hysteria while trying to photograph this plant, unaware that treatment lay beneath my nose.

Extracts of the plant can also cause abortion and inhibit mitosis (the sort of normal cell division necessary to grow new skin and blood cells on a daily basis), so caution is advised.

In addition to traditional medicinal use, *Petiveria* has gained the attention of a number of organic chemists. At least twelve different biologically-active compounds have been assayed from root, leaf and seed of the plant.

Studies on the plant's chemistry continue. A study published in November 2001 reported the presence of two diastereomers of S-benzyl-L-cysteine, isolated from fresh roots. This is reportedly the first evidence that these compounds occur in nature.

There is too little of the plant growing locally to be harvested for economic gain. Few people encounter it on a frequent basis.

The future value of *Petiveria alliacea* to this area may be in landscaping. It is an attractive, colony-forming perennial herb which survives well in partial shade. The star-like white flowers add interest and contrast beneath the semi-shade of clustered palms.

Not every homeowner, however, will want to grow it.

Mike Heep comments: "That plant is attractive. But I just can't handle that smell. So I have never planted it around (my house). Underneath the largest *Esenbeckia* in those woods south of San Benito (on a USFWS tract) there is a lot of *Petiveria*."

For those who don't notice the stench, the spot Heep describes must be quite pleasant.

Technical assistance by Mike Heep, native plant nurseryman and UTPA Instructor. Mrs. Mild holds a Masters degree in Biological Sciences. She may be contacted at RioDeltaWild@aol.com.