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RIO DELTA WILD



“Stinging Nettle photographed at Valley Nature Center in Weslaco.”

FLORA FACTS

Scientific Name: *Urtica chamaedryoides*
Common Names: Ortiguilla, Heartleaf Nettle
Family: Urticaceae, Nettle.

Encounters with a Stinging Nettle

Most of us have a mental image of “stinging nettle,” but our images may not be identical. At least four plant families may bear specialized stinging hairs (cystoliths) earning them the common name of nettle.

In Texas, these include several true stinging nettles of the family Urticaceae. Bull

Nettle and Noseburn are of the family Euphorbiaceae. Stinging Cevallia is of the family Loasaceae. (Delena Tull, *Edible and Useful Plants of Texas and the Southwest*, 1987.)

Heartleaf Stinging Nettle, *Urtica chamaedryoides*, grows as a small colony in my backyard. It’s grown there for as long as I can remember in a low, shaded place where the soil is good. I only notice it when the ground is moist. When drought is upon us, it seems to disappear.

Ortiguilla, as Spanish speakers refer to the plant, has become a bit of a pest in Florida. Preferring moist, shaded, rich soil, it thrives in areas disturbed and fertilized by man: along fence lines and in shady spots.

Mike Heep remembers resting in Ortiguilla along the fence where he practiced bull riding. In comparison to his other aches and pains, stinging skin was but a minor distraction.

Joe Ideker pointed out a colony of Ortiguilla as we walked through Valley Nature Center’s Nature Park in Weslaco. “Those are important plants for butterflies,” Joe told me. *Urtica chamaedryoides* and close relatives are host plants for Red Admirals and Question Marks. The Nettle family serves as host plant for larvae of Blomfield’s & Karwinsky’s Beauty. These impressive butterflies roost in mountains of Mexico.

An annual plant with square stems and toothed leaves, Ortiguilla has inconspicuous pale green flower clusters. The plant depends upon wind pollination, rather than pollinating insects, and is considered to be of ancient origin.

The sting of *Urtica chamaedryoides* is more painful than that of other nettles, earning it the common name Fireweed. Young horses quickly learn to avoid the plant. There is a case report of hunting hounds in Arkansas which, after running through a large field of the plant, suffered nausea, vomiting, ataxia progressing to rear leg partial paralysis and hemorrhaging from the nose. After 36 hours the animals returned to normal.

These pretty plants should be seen and not felt. How do they defend themselves so well?

Stinging hairs are scattered over the surface of the leaves and stem. These cystoliths have brittle, rigid shafts and bulb-like bases. The base holds a clear fluid containing urticating (irritating) substances.

Some references attribute the glass-like nature of a cystolith to calcium carbonate. Others speak of silica deposited in the cell wall. In any case, the result is a glass-like tube. The very fragile tip of this tube breaks off at an angle and results in a perfect tool for piercing skin.

The irritating substance injected when skin makes contact is complex and contains compounds as yet uncharacterized. It is known to contain histamine (a potent vasodilator involved in allergic reactions), acetylcholine and serotonin. One researcher suggests the urticating substance resembles insect venoms in its actions. Individual response varies, just as some people are highly allergic to wasps or bees and others suffer little.

Urtica dioica, a similar species, is native to the Old World and naturalized throughout much of temperate America. In Germany, it is cultivated and utilized by man medicinally, as a vitamin-rich food, for fiber, as a wool dye and a source for chlorophyll.

Stinging Nettle is a pretty plant which is appropriate for butterfly gardens and wildscaped areas. It would be unwise to encourage the plant in preschool playgrounds or in a dog's kennel. Control by mowing results in diminutive plants with even more stinging hairs.

The tiny seeds of *Urtica* are covered by a wet and sticky "halo" which probably adheres to any passing animal or mower blade for transport to a new location.

For more information about the stinging nettles, I recommend Botany Circular No. 34, Fla. Dept. Agric. & Consumer Services. You can find this by searching the web via www.google.com.

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