



Christina Mild
RIO DELTA WILD

“Wild tobacco opens star-shaped blooms in late afternoon.”

FLORA FACTS

Scientific Name: *Nicotiana repanda*

Common Names: Tabaco Cimarron, Fiddleleaf Tobacco

Family: Solanaceae, Nightshade

Tabaco Cimarron is Lovely and Poisonous

Wild Tobacco is especially pretty this winter, with extravagantly large, thin leaves. Every part of the plant is poisonous. Perhaps this is why the leaves aren't quickly devoured by wildlife.

You'll see several pretty specimens of this plant along the trails at Ramsey Nature Park.

Many of the newest transplants at that park, without the protective poisons of Wild Tobacco, quickly became meals for rabbits and rodents. Yet the deliciously large, green leaves of Wild Tobacco, *Nicotiana repanda*, remain largely uneaten.

The leaves of this species of wild tobacco are shaped like a fiddle and almost as large. They clasp the plant's stem, widely dispersed along the length and forming an impressive basal rosette upon the ground.

Dr. Al Richardson reports two similar species of wild tobacco growing in the LRGV. *Nicotiana repanda* has tubular flowers 5-8 cm in length. *N. plumbaginifolia* has shorter floral tubes of 4 cm long or less. (*Plants of the Rio Grande Delta*, 1995.) Mike Heep notes *plumbaginifolia* growing primarily in the Brownsville area.

Because *N. repanda* appears more often in printed references, it is the focus of this article.

Nicotiana repanda occurs on the Edwards Plateau, in south Texas and in adjacent Mexico. It occurs in sandy or clayey soils along streams, on flats and in depressions, in the shelter of boulders, thickets and wooded ravines. (Correll & Johnston, *Manual of the Vascular Plants of Texas*, 1979.)

Dr. Richardson notes the occurrence of this species in sandy clay on South Padre Island. Apparently the plant has good salt tolerance. (*Wildflowers and Other Plants of Texas Beaches and Islands*, 2002.)

Geyata Ajilvsgi includes *Nicotiana repanda* in previous and current editions of *Wildflowers of Texas* (1984 and 2002). She has this to say about *Nicotiana*: “The foliage of the wild tobaccos has a strong scent, and the plants' poisonous properties are well known.”

“The genus *Nicotiana*” Ajilvsgi continues, “was named for Jean Nicot, French ambassador to Portugal, who introduced tobacco to the court of France in the 16th century. Its original use was as an unrivaled insecticide and fumigant.”

Because cultivated tobacco, *Nicotiana tabacum*, is a big-money crop, many relatives, including *Nicotiana repanda*, are well-studied. An exhaustive listing of research papers regarding genetics, pest resistance and biochemistry of *Nicotiana repanda* can be found on the worldwide web. Much of the research focuses on cross-breeding wild tobacco species with cultivated tobacco for greater pest resistance and other superior genetic qualities.

Various species of wild tobacco have been used for centuries in treating miscellaneous maladies. Moistened leaves, for example, were applied directly to the forehead as a headache remedy. It is likely that new uses will be discovered in the future for various wild tobacco species occurring in the Americas.

An Aggie Horticulture website recommends *Nicotiana repanda* as an ornamental for the LRGV, using the common name: Star Tobacco. Star-shaped flowers occur on the tips of tall, slender, leafless stalks almost a meter in height.

In the LRGV, wild tobacco may bloom throughout the year if sufficient moisture is available.

Full sun to partial shade is tolerated, thus a wide range of planting sites may be considered.

Butterflies are known to nectar on many species of *Nicotiana*.

Agilvsgi reports *N. repanda* blooms open in late afternoon. Heep and I see them open at all times of day. I've seen them closing as evening approaches.

Mike Quinn, TPW Invertebrate Biologist, reports that species of *Nicotiana* are host for a number of moths, particularly in the families *Noctuidae* and *Sphingidae*. Quinn provides this URL for the Natural History Museum of London website, where one may search on insects and hostplants: <http://www.nhm.ac.uk/entomology/hostplants/>.

Quinn lists two probable moth nectarers with the requisite long proboscis for a deep-throated wild tobacco bloom. These are the beautiful Carolina Sphinx and the Five-spotted Hawkmoth, frequently misidentified as hummingbirds. These moths fly swiftly in the manner of a hummingbird. Their telltale antennae distinguish them from a bird. To the tobacco farmer, these critters are expensive pests.

Nicotiana repanda is an annual and can be propagated from seed. The mention of seed brings up the subject of collecting, as I find no commercial source for wild tobacco seed.

Collecting is becoming a larger problem every day. As people become excited about native plants and local wildlife, many become collectors, sometimes as a requirement. Many botany instructors, for example, assign their students to create collections of dried, native plant specimens.

It is time that we rethink this idea of collecting plant material, as so few native plants remain in this area. At Ramsey Park, for example, only a few blooming specimens of Wild Tobacco could be found recently in places adjacent to trails. A few students collecting the plant could quickly wipe out the entire population.

It's wonderful that many people are learning about native plants. Because of this growing interest, we need alternative "collecting" methods with less environmental impact.

My suggestion is that instructors widen their requirements from dried, pressed plants, to include photographic prints and digital photographs stored on CD or DVD. There is real need for a comprehensive digital herbarium for the LRGV. Any instructor who employs students to assist in this effort will earn high praise from me. Such a collection of images should include such details as bark characteristics, seedling growth stages, close-ups of flower parts, male and female flowers, upper and under-side leaf photos, fruiting stages, seasonal changes in foliage, and variability in leaf size and shape.

Photographs with time imprints, for example, would add to our data about when flowers are actually open.

Likewise, collection of insects for mounting is ill-advised for the novice collector. Might I suggest an insect collection restricted to mosquito or gnat species? We have no local shortage of those.

Otherwise, let's leave collecting to the experts. Most of us should probably restrict our collections to photography.

Should you collect seeds for transplanting?

If the plant is growing on a lot which will be bulldozed, collecting seed and planting it in a suitable location may preserve the plant's existence. If the plant is growing in a protected area like Ramsey Park, we should leave it undisturbed.

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