



The Sabal

November 2017

Volume 34, number 8

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Plant species page #s in the Sabal refer to:
“Plants of Deep South Texas” (PDST).

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NPP meeting topic/speaker:

"Caterpillar Gardening With Natives." —by *Berry Nall*
Tues., November 28th, at 7:30pm

Butterflies of the LRGV generally reproduce on plants native to the LRGV. Butterfly enthusiasts, therefore, share a common cause with native plant enthusiasts in wanting to preserve the Valley’s native flora. It is imperative that we promote the use of caterpillar host plants, in addition to flowers, in butterfly gardens. We need to work together to identify important host species and to provide good information for the culture of these plants.

Berry Nall is a pastor and teacher who is fascinated by butterflies at all stages of their lives. He gardens for caterpillars at his home in Starr County, where he has observed immature forms of about 90 species of butterflies. His butterfly photos and life history studies can be seen on his website, [leps.thenalls.net]. Please join us.

The meeting is at:

Valley Nature Center,
301 S Border, (in Gibson Park), Weslaco. 956-969-2475.



Above: Green-backed Ruby-eye butterfly, *Perichares philetus*.

Photographed by Berry Nall (with flash) in Falcon Heights, TX, 10-8-08. Females lay eggs on both sides of grass leaves. Caterpillars of this “grass skipper” eat the leaves.

The Sabal is the newsletter of the Native Plant Project.

It conveys information on native plants, habitats and environment of the Lower Rio Grande Valley, Texas.

Previous **Sabal** issues are posted on our website [www.NativePlantProject.org].

Electronic versions of our **Handbooks** on recommended natives for landscaping are also posted there.

Change of address, missing issue, or membership: <bwessling@rgv.rr.com>

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Boraginaceae — by *Christina Mild*
Photos by Dr. Alfred Richardson.

The Forget-Me-Not or Borage Family.

Several species in the family Boraginaceae are large, showy, and quite familiar to native plant lovers. Anacahuita and Anacua are some of our most familiar and beautiful trees, important to people as well as wildlife. Some of the heliotropes, smaller but familiar to many, are notable butterfly nectar plants: Scorpion's Tail, Seaside Heliotrope and Indian (purple) Heliotrope are known to many of us. Mexican Tournefortia, our beloved Googly-Eyed Vine, is another member of the Boraginaceae.

Each of these larger, more frequently-encountered members of the family, are known to be useful to wildlife. In all likelihood, the less-frequently-encountered members of this family also have important roles in the ecosystem. Until we become more familiar with them, it is unlikely that people will record the interactions they have with wildlife.

Dr. Richardson points out these characteristics of the family: "Alternate simple leaves, fruit (in our herbaceous species) usually 4 nutlets (can vary), flowers usually in coils, flower petals partially grown together, plants usually hairy."

It would be helpful to study the relevant pages of *Plants of Deep South Texas* as you read this article. In that volume, you'll get an idea of the overall growth form of each species. From this article, you'll gain a closer look at the plant's morphology, such as details of the blooms and arrangement of hairs. Once familiar with them, you might spot them in the wild, especially if we have abundant spring blooms.



Both photos are of the same species, Texas Cat's Eye. They were taken in March and April, the usual blooming period. There can be a huge difference in leaf coloration in photos dependent upon ambient light, amount of rainfall, and other growing conditions.

Cryptantha texana, Texas Cat's Eye, PDST 142.

Prickly, hairy annual.

Blooms are about 1/8" long, magnified here, white with greenish-yellow center. March-May.

Conspicuous sharp hairs surround each bloom.

The plant is low-growing; stems may be 40 cm in length. Erect or decumbent.

Usually occurs in sandy ranchland areas.

Often along fence rows.

The fruit consists of 1 nutlet.

Found in Willacy and Starr counties.

In the U.S., found only in Texas.

Also occurs north of us to Somerville County.



Boraginaceae, continued.

Heliotropium confertifolium,

Crowded Heliotrope

PDST 144.

This species is prostrate or forming low mounds, 4" tall or less. It is anchored by a woody taproot. Blooms may occur in spring, summer or fall.

Leaves appear silvery due to several types of hairs: fine, abundant pale hairs mixed with coarser spreading ones.

Gravelly or gypseous soils are preferred.

Cameron, Hidalgo and Starr counties.

Renamed as: *Euploca confertifolia* var. *confertifolia*



Heliotropium texanum,

Texas Heliotrope.

PDST 147.

Annual. Up to 18" (10-45 cm) tall.

Leaves are firm and thickish, usually bright green.

Blooms (about 1/2" wide) appear in summer and fall.

Blooms are similar in size to *H. racemosum*, below.

Fruits have 2 nutlets.

Usually found growing in sandy soils. Hidalgo and Willacy counties, generally in the loose blowing sands of inland dunes.

Heliotropium racemosum,

Coastal Plain Heliotrope.

PDST 146.

Sprawling and hairy, growing 10-40 cm tall. Hairs are stiff, straight, and closely pressed to the leaf, parting right and left at the midrib.

Blooms are larger than those of our other Heliotropes, about 5/8" diameter, fragrant, and occur in spring, summer or fall. Note the clearly-marked lobes, which are triangular and acute.

Fruits have 4 nutlets.

Found in sandy places of the Texas coastal plain: Cameron and Hidalgo counties, and probably in Starr county.





Boraginaceae, continued.

Heliotropium procumbens,

Trailing Heliotrope.

PDST 146.

Erect or leaning, herbaceous. 10-50 cm in length.
Usually growing in damp situations or on land subject to flooding. (Around edges of Falcon Lake when it recedes.)
May bloom throughout the year.

Petals seem not to be completely open, which is characteristic.
Found in Cameron, Hidalgo, Willacy & Starr counties.
Rounded leaf tips distinguish this heliotrope.



Heliotropium torreyi,

Narrow-Leaf Heliotrope.

PDST 147.

Branching shrub up to 20" tall.

These 2 photos show the differences sometimes found in length of the leaves, which can be up to 1 1/8" long.

Blooms (3/16" long) may appear during spring, summer or fall.

Rarely encountered in our area. Look for it growing on limestone or caliche in Hidalgo county.

Also occurs in Trans-Pecos and Edwards Plateau.

Reported to be good browse for sheep.



Lithospermum incisum,

Narrow-Leaf Puccoon.

PDST 148.

Perennial. Erect, up to 12" tall.

First leaves are much larger than the later-developing leaves shown here.

Flowers are about 3/4" wide, with crinkled margins.

Generally found growing in sandy soils.

Roadside wildflower more commonly found north of the LRGV.

Hidalgo county.

Roots were a source of red dye for native Americans and settlers.





Lithospermum matamorensis,

Rough Gromwell.

PDST 148.

Annual. Hairy, usually prostrate, but sometimes erect.

Leaves are up to 3" long. Upper leaves are smaller. Leaf undersides may also be covered with fine hairs.

Blooms are solitary, occurring in spring and summer. The yellow bloom-center is barely obvious in these photos.

On edges of thickets, in open areas, floodplains and weedy areas.

Cameron, Hidalgo and Willacy counties. Mainly Edwards Plateau to S. Texas.



Tiquilia canescens, **Oreja de Perro.** PDST 149.

Leaves in the left-hand photo show the coloration and shape which led to the common name of "Dog's Ear."

Blooms and leaves show variation in color dependent upon growing conditions. Blooms (only 3/16" wide) may occur at any time. Woody taproot anchors the plant into limestone, caliche or rocky calcareous soils. Cameron, Hidalgo and Starr counties. Known from the Gulf Coast to Baja California, widely known in Mexico.

Often found growing with *Heliotropium confertifolium*, **Crowded Heliotrope**, featured on page 3.

Sometimes mistaken for small specimens of Cenizo. Dr. Richardson completed a Ph.D. dissertation on Tiquilia.





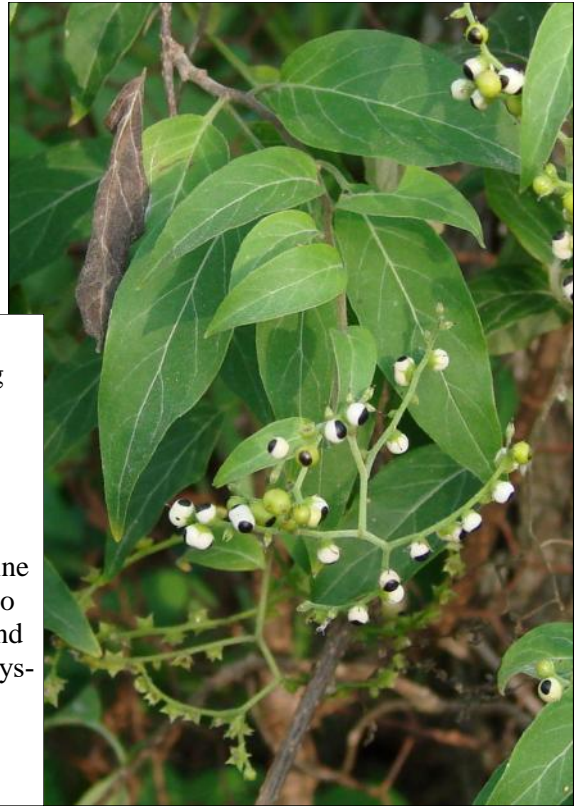
Above: Saucy-Beauty Moth photographed by Dan Jones on David's Milkberry, *Chiococca alba*. Saucy Beauty is a day-flying moth, *Phaloesia saucia*.

Right:

Tournefortia volubilis, **Googly-Eye Vine.**

PDST 150. (another Boraginaceae.)

Tournefortia is the host plant for the Saucy-Beauty Moth. This vine is not known to grow in Texas other than in Cameron and Hidalgo Counties. It is known from Florida, Mexico, Caribbean Islands and South America. It's an attractive ornamental, with a strong root system. Bastard Rat Root is a common name, perhaps created by someone trying to dig it up. (I grow it along the fence on the top tier of our terraced arroyo bank, hoping to prevent erosion.)



Host Plant Confusion.

The Saucy Beauty moth captured in photos above was moving deliberately on the David's Milkberry, possibly depositing eggs. Ken King explained to me that eggs deposited on other than a host plant may not survive. We are deeply indebted to such individuals as Berry Nall and Jan Dauphin, who observe deposited eggs to see if they will successfully complete the transformation to healthy adults.

In the past, many, including myself, have republished unsubstantiated facts about specific host plants. Many of those assumptions were based on a closely-related genus known to serve as host plant and a general assumption that closely-related species would serve as well. This is not always the case. Ken points out that many have repeated the notion that Red-Bordered Pixie butterflies will use Ebony, as well as Guamuchil, as they are both of the genus *Pithecellobium*. He assures me that Pixies (*Melanis pike*) have not been proven to successfully use Ebony as a host plant, whereas a wealth of documentation shows them to use Guamuchil (which is not native to South Texas, but is grown by many to provide food for Pixie butterflies).

Berry Nall explains further: "... generally - not always - caterpillars will use plants in the same genus. Sometimes the butterfly won't lay eggs on one species, but the caterpillars will still eat it. Sometimes they won't. But sometimes the problem is our classification: you might note that Ebony is now in the genus *Chloroleucon* instead of *Pithecellobium*, proving Pixies know more botany than humans. (Mexican Yellow is another example of a "puzzle" in that, of all the Acacias, it uses only *Acacia angustissima*. That plant was recently moved to the genus *Acaciella*.)"

Below: Red-Bordered Pixie, Caterpillar, and Chrysalis on Guamuchil leaves. Reprinted from the NABA website [www.naba.org/chapters/nabast/pixie.html]. Photographed in Edinburg, TX on October 19, 2004 by B. Bouton.



LRGV Native Plant Sources

See also our
Sponsors on right

Perez Ranch Nursery

(Betty Perez)

12 miles north of La Joya, TX

(956) 580-8915

<PerezRanchNatives@gmail.com>

These vendors may sell exotics:

National Butterfly Center

Old Military Hwy/3333 Butterfly Pk Dr

Mission, TX 78572

office (956) 583-5400

Marianna Trevino Wright, Exec.Dir.

cell 956-648-7117

<mariana@nationalbutterflycenter.org>

[http://www.nationalbutterflycenter.org]

Rancho Lomitas Nursery

(Benito Trevino)

P.O. Box 442

Rio Grande City, TX 78582

(956) 486-2576 *By appt. only

Valley Garden Center

701 E. Bus. Hwy. 83

McAllen, TX 78501

(956) 682-9411

M&G Double D Native Plants & Seeds of South Texas, (Gail Dantzker)

956-342-5979; <gdld@att.net>

7500 N 21st St; McAllen, TX 78504

[mandgdoubled.com]

Grown at The Woods, Willacy Cty., TX.

Landscapers using Natives:

Landscaping, Etc. Inc.

Noel Villarreal

125 N. Tower Rd, Edinburg

Sponsors (Native Plant Nurseries)

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Owned and operated by Mike and Claire Heep

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and revegetation in south Texas.

1714 S. Palm Court Drive, Harlingen, TX 78552

(956) 457-6834 <heep0311@yahoo.com>

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Come visit the VNC:

301 S. Border Ave.

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Above: *Heliotropium indicum*, Indian Heliotrope. PDST 145.

This purple-blooming Heliotrope is a favorite of Queen butterflies. Javier Gonzalez took this photo where he saw a bunch of Queens "nectaring on the Indian Heliotrope that's growing along the Willow Lakes. I chose the closest one to me to photograph, but when it gave me its profile it revealed itself as a Soldier." Queens are known to be attracted to this plant, even when it is completely dried out, possibly in search of compounds they need for reproductive purposes.

**NPP Board & General Meetings are held at
Valley Nature Center**

(4th Tues. each month, except thru summer)

Brd Mtgs 6:30pm — Speaker 7:30pm

2018 meeting dates: 1/23, 2/27, 3/27, 4/24, 5/22

FROM: NPP; POB 2742; San Juan, TX 78589

The **Native Plant Project (NPP)** has no paid staff or facilities. NPP is supported entirely by memberships and contributions.

Anyone interested in native plants is invited to join. Members receive 8 issues of **The Sabal** newsletter per year in which they are informed of all project activities and meetings.

Meetings are held at:

Valley Nature Center, 301 S. Border, Weslaco, TX.

Native Plant Project Membership Application

Regular \$20/yr. Contributing \$45/yr

Life \$250 one time fee/person

Other donation: _____

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NPP meeting/speaker:

The Native Plant Project will present:

"Caterpillar Gardening With Natives"
—by *Berry Nall*

Tues., Nov. 28th, at 7:30pm

Meet the man who devotes his time to learning more about butterflies and the plants they require. Berry has an incredible website:
[leps.thenalls.net]

The meeting is held at
Valley Nature Center,
301 S Border, (in Gibson Park),
Weslaco.
956-969-2475.

We hope to see you there!

In this issue: Boraginaceae: (Anacua, Anacahuita),
Heliotrope, Tournefortia and more.



Above: Chachalaca in fructing Anacua photographed by Mary Beth Stowe, at the National Butterfly Garden in Mission. Facebook post.

Below: Mercurial Skipper, *Proteides mercurius*, nectaring on blooming Anacahuita. Photographed by Juan Sebastian Chavez.

