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Page numbers for plant species shown in the Sabal refer to: “Plants of Deep South Texas” (PDST).

Dues for 2015 are due this month.

January 2015 Mtg., Native Plant Project:

Tues., January 27th, 2015: at 7:30pm

The Native Plant Project will present:

“Vines: What Are They Good For?” by Christina Mild.

Some vines are tiny, others are massively heavy. Some grow rapidly, others seem to barely grow at all. Christina will show us how to identify some of Deep South Texas’ vines and provide a few reasons why we might want to preserve them.

Refreshments will also be served, to welcome our 31st year, as well as new and re-elected board members and officers.

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

Cardiospermum dissectionum, Sapindaceae
Chihuahuan Balloon Vine. PDST 379
Gorgeous. Who cares what it’s good for??
Climbing Plants (i.e. Vines).

It appears that the origin of the word “vine” referred to grape vines, which are quite woody at their base. In general, we probably think of a longer, more flexible stem when “vine” is used to describe a plant.

On the “botgard” section of UCLA’s website, a long list of “Life Forms and Major Plant Groups” includes “Climbing plants.” This is the closest botanical-grouping I can find for the old-fashioned term “vine.”

There’s a lot more information on that website than can be included here, and it’s well worth checking it out. Each term is illustrated with a photo link, which is extremely helpful.

[botgard.ucla.edu/html/botanytextbooks/lifeforms]

On this page are excerpts from that website:

“Climbing plants use other plants or rocks and man-made structures for support. Released from the function of holding up the plant shoots, the stems possess little or no ability to bear any weight (compression), but instead they are very flexible and have considerable tensile strength, meaning that stems have evolved characteristics to resist pulling and twisting.

A vine, in the narrowest definition, is an herbaceous, relatively thin-stemmed climber that mainly colonizes either disturbed or high-light habitats. Many examples of herbaceous vines are found in the morning glory family (Convolvulaceae) and members of the gourd family (Cucurbitaceae). Some vines are even chlorophyll-lacking parasites, depending on the host plant for its nutrition as well as support, i.e., species of ... dodder (Cuscuta spp.). (A. Richardson also points out a Tillandsia which climbs with pointed, coiling leaves which draw plants higher into a tree.)

A liana or liane is a woody climber that generally has roots in woodland or forest floor but its leaves often in full sun, blanketing canopies of trees, often many meters from the ground. Lianas are especially abundant in wet tropical forests, where the flexible woody stems assume many interesting hanging forms (Examples: a tangle, braided, and looping cables). ... species may also be wrapped tightly around tree limbs, appearing to constrict the host. Vines and lianas are extremely common in seasonally dry short-tree tropical forests ... there are several fairly common lianas in temperate deciduous forests of North America, such as grapes (Vitis), poison-ivy and poison-oak (Toxicodendron), and greenbriar (Smilax).

...there are many scandent plants, such as raspberries (Rubus), (with) arching or spreading branches that rest on other plants for support.”

There are several mechanisms plants employ for climbing, and these can be active or passive.

Active mechanisms include:
- Attachment by tendrils (arising from various places)
- Twining
- Attachment using adventitious roots

Passive mechanisms utilize:
- Spines and stiff emergences
- Arrangement of branches or leaves
- Sprawling (scrambling or scandent habits)

“Tendrils are often spring-like and cinch up a plant to the support by decreasing the overall length of the tendril. This coiling feature utilizes high friction for grasping structures. For vines, tendrils are a cheap way to climb, but a tendrilar system does not hold great weight. This mechanism is good for clinging during strong winds, and absorbs and dissipates energy...”

“Twining often occurs in one direction, and many show a predisposition to turn to the right. There is a limit to the size trunk that most twiners can use, and hardly ever are twiners found around thick trunks.”

“Adventitious roots can be used to climb on the bark of any size tree. Because they root as they grow, some vines with adventitious become hemiepiphytes... Most commonly, adventitious roots arise out of stems...”

“Spines and stiff emergences provide ways to attach to other plants. Using hooks especially is common in dense stands, where hooks come in contact with other plants. Spines also have the added benefit of being antiherbivore features ...” (*Macfadyena photo below.)

“By having opposite branching or stiff, perpendicular leaves, plants can be wedged into trees to provide more support.” Examples: granjeno, lotebush.

“Scrambling plants often use stiff branches and hooks.” Example: Rio Grande Dewberry.

No doubt these attributes bring to mind difficulties you’ve experienced with “vines” in the past!

*Macfadyena unguis-cati. Cats Claw Vine, PDST 140. A. Richardson mentions the 3-clawed "tendrils." Claws dig into a tree’s bark, then the petiole shrinks. This is an invasive exotic grown locally since 1930 for the yellow flowers.
Climbing Plants with Winter Flowers

We typically see fewer blooming plants in winter. Because we’ve had plentiful moisture and cool temperatures during late fall and early winter, some of the spring wildflowers are beginning to bloom and many seedlings have germinated.

I was surprised on Jan. 3rd, 2015, canoeing* the Arroyo Colorado for the Christmas Bird Count, to see huge curtains of a white-blooming morning glory which I’ve not noticed along the arroyo on any previous trips. In all probability that plant is:

*When you’re being rowed along in a canoe by two gentlemen, should one refer to yourself as canoeing??

Ipomoea alba, Convolvulaceae
Moonflower vine, Evening Glory, PDST p193
Native to the American Tropics
Introduced and naturalized locally

Fragrant, luxurious flowers are moth-pollinated. Buds open in late afternoon and last only until morning's light transforms them into a limp shrivelled mass. In frost-free areas moonflower will grow to great heights and drape the forest canopy in great green curtains. This vine may be invasive in some areas. Due to its fast growth rate the moonflower is perfect for screening eyesores. The large white seeds resemble dried garbanzo beans and are about the same size. Reports on the web differ widely regarding edibility of plant parts.

This is a twining vine. Stems somewhat prickly.

Solanum triquetrum, Solanaceae, PDST 403
Texas Nightshade, Hierba Mora
Native distribution covers much of south Texas, as well as Northeastern Mexico.

This specimen was photographed on a Harlingen fence on 1/5/2015.
This is a perennial climber, blooming year-round. Thornless and delicate, with spindly stems, it appears to passively lean on any available support. Often growing amongst shrubs and supported by fences, Heep reports it as widespread in deep south Texas but not a dominant plant anywhere. Javelina reportedly consume the glossy leaves. Solanum flowers lack nectar. Pollinators such as bumblebees shake the anther by vibrating their thoracic flight muscles, whereby pollen is released and collected by the insect.

It is likely that two butterfly species utilize Texas Nightshade as a host plant. The Creamy Stripe-Streak has upper wings with forward edges of black on a field of powder blue. The Obscure Bolla resembles a Scallopwing. The fruits are eaten by doves and other birds, who are probably responsible for seed distribution. Because the fruit may be deadly, I’d avoid growing it in the presence of toddlers. My own daughter tried eating anything which fit into her mouth.

Photo from the web.
More Climbing Plants with Winter Flowers

The plant photo below is enlarged to show detail:

**Maurandya antirrhiniflora, Scrophulariaceae**
Snapdragon Vine, Roving Sailor, PDST 387
Native along the Rio Grande north to Colorado.
Valley populations are scattered: in coastal sands, along ditches and waterways, also in caliche/sand.

This delicate, twining vine is a real beauty, and is fairly easily cultivated. Once established, it will seed out, from small round seed capsules which hold many tiny round seeds. This photo was taken in February, which is often our coldest month of the year.

It’s hard to imagine that this gorgeous vine could ever present a problem. Even a small trellis will support it. Plant it near walkways or entryways where the fragile beauty can be enjoyed.

It is the host plant for the Common Buckeye (*Junonia coenia*) butterfly (inset photo above).

**Vigna luteola, Fabaceae**
Yellow Cowpea, Hairypod Cowpea (hairy pods above), PDST 273
Native to most of the southern states, and much of the tropics. Naturalized in much of South and Central America. Cultivated for grazing.

Several small specimens of this perennial twining vine were blooming along the Arroyo on 1/3/2015. I most often observe it along waterways. It has been grown commercially for grazing and extensively studied.

One of the best legumes for wet conditions and one of the best pioneer plants in such situations. Extremely palatable and preferentially grazed. Adapted to a wide range of soils, easily-established and tolerant of waterlogging. Less drought tolerance than many other legumes. Rather short lived. Susceptible to frost.

I am not aware of anyone actively cultivating this plant in the valley, but it has potential along watery places. It is an indicator of diversity along waterways.
Chiococca alba, **Rubiaceae** (coffee family)
David’s Milkberry, Perlilla, PDST 369

Blooming Period: spring, summer, fall, winter
Height: 6 to 10 feet.

Native Distribution includes Mexico, Florida and the tropical Americas. Rare in Texas, growing near the Rio Grande in Cameron County in far South Texas. It grows best in well-drained soils, and will adapt to many soil types. It is widespread on the recent delta, Mike Heep reports, on USFWS tracts west of Brownsville, at Loma de la Grulla just north of Port Isabel and around Rio Hondo. It also occurs in the Arroyo Colorado brush and has been cultivated at Ramsey Park and other areas.

David’s milkberry is a handsome ornamental, with thick, leathery dark green leaves and sparkling white fruits. It is an evergreen, vine-like shrub that can grow to 10 feet if support is available. It does not twine, and has no thorns or tendrils.

Chiococca alba adorns the understory of Sabal Palm Grove Audubon Sanctuary in Brownsville. Below the mighty and aged palms, this evergreen blanket is hung with rows of “milk-drop” fruit. *Chiococca* derives from *Chio* (“snow”) and *cocca* (“seed”) referring to the white fruit. The species name, *alba*, means “white.”

Small white or yellow aromatic flowers dangle like rows of tiny bells beneath smooth leaves.

During a hard freeze, Perlilla will freeze back, but Mike Heep says it re-grows quickly from the root. Provides nectar for insects, cover and food for birds. Nectar plant for Julia (*Dryas iulia*) and other butterflies. Host plant for the Miami Blue.

Tournefortia volubilis, **Boraginaceae**, PDST 150
Mexican Tournefortia, Googly-Eyed Vine

The blooms on this twining, somewhat woody vine are inconspicuous. The species name *volubilis* means coiling or twining. The black-dotted white fruits are intriguing, making this vine a good choice for a trellis near walkways.

Blooms occur in all seasons, so fruit is often present. An old name probably refers to a very large, strong root system: Bastard Rat Root.

*In Texas, this vine occurs only in our area, though it occurs further south.*

It is a host plant for the Saucy Beauty, a day-flying moth. The caterpillar is interesting and the moths are beautiful. I enjoy their presence in my yard. The mating moths photo is from NABA’s website.
Climbing Plants with Dry Fruit Capsules:

**Ipomoea amnicola, Convolvulaceae, PDST 194**
Red Center Morning Glory, introduced (Paraguay)

There are few blooms on this rapidly-growing vine during December and January, but it’s loaded with seed. From the wide distribution of this vine in towns, I’d guess that many birds eat and distribute the seeds along their favorite sunny perches. Very common in towns on fences and utility poles.

**Ipomoea cordatotriloba, Convolvulaceae (above)**
Tie Vine, Sharppod Morning Glory, PDST 195

The multitudes of seed which cover this native vine are known to be eaten by bobwhite quail. There is also evidence that it is utilized as a host plant for the Purplish Black Skipper, Variegated Fritillary and Morning Glory Pellicia butterflies. White-tailed deer consume the leaves. During summer, this vine’s purple/red blooms are quite attractive, and it’s extremely easy to grow. The photo above was taken in mid-October on my backyard fence. (Now it is loaded with seed.)

A Sprawling Climber with many Prickles:

**Rubus riograndis, Rosaceae, PDST 368**
Dewberry, Zarzamora

This plant is probably the #1 indicator of healthy diversity along the Arroyo Colorado. Massive colonies prevent erosion along the arroyo’s banks. This year most of the arroyo’s banks are covered with masses of sprawling, prickly dewberry canes. They are woody, and even the leaves often have prickles. You don’t want to crawl through a thicket of dewberry or fall into it. Blooms appear in spring, attracting nectarers. The fruit matures slowly from red to black. Several miles of Zarzamora occur along Harlingen’s Hike and Bike Trail. Every year, the colonies are mown down before the fruit ripens. We have reintroduced Zarzamora to Ramsey Park. The plants persist in Ramsey, but haven’t formed large colonies as yet. Valley natives relate tales of collecting dewberries along valley ponds and ditches, for mom to make pies and jam.
We’ve lost this wonderful, delicious tradition, and it’s worth some effort to regain what has been lost.
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Drying Seedpods on a climbing milkweed vine. Birds and mice are probably delighted to find these seedpods, filled with fluff to insulate their nests. Several native milkweed vines grow high into trees. One example is Talayote, Cynanchum racemosum, PDST 78.
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.
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NPP January meeting/speaker on:

**Tues., January 27th, 2015: at 7:30pm**

The Native Plant Project will present:

**“Vines: What Are They Good For?”**

*by Christina Mild.*

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

Christina’s PowerPoint will illustrate some of the myriad vines found in Deep South Texas.

Refreshments will also be served, to welcome our 31st year, as well as new and re-elected board members and officers.

Photo above is **Corky-Stem Passionflower, PDST 347.**

This month’s SABAL topic: “**Climbing Plants (i.e. Vines)**”