# A pine forest in Petén: Pine and tasiste palm ecosystem in the Bajo de Santa Fé

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#### Caption for front cover photograph:

In the far background, you can see a thin brighter colored area. This, I estimate, is a different kind of bajo ecosystem. I estimate that the vegetation in Bajo Santa Fe changes every several hundred meters.

Aerial photographer: Haniel López, experienced drone pilot for registered drones of FLAAR Mesoamerica, May 15, 2023. PANAT, Petén, Guatemala.

Camera: drone DJI Mavic 3.

#### **Hotel Tikal Inn**

We thank Roxana Ortiz for offering to provide lodging for our research team at the Tikal Inn for our field trips starting in October 2022 and in the year 2023. Every workday is exhausting because we are carrying and then using very heavy cameras, super-telephoto lenses, sturdy tripods, large gimbals, or ball tripod heads. Thus, it is crucial for the health of Dr. Nicholas to be able to rest and totally recuperate every night in order to be ready for the following day of botanical and zoological adventures in Parque Nacional Tikal.

In order to post photographs on botanical and zoological websites, you can't do this if there is either no Internet or weak Internet. Therefore, it is very helpful that, when we are provided rooms and meals, a functional Internet is available at the Hotel Tikal Inn.

Contact info:

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We appreciate a donation during November 2021 and a follow-up donation in June 2022 to help cover the costs of FLAAR research projects of those years (2021-2022) specifically to assist and support the current FLAAR project of exploring remote areas to find and document flora and fauna in the Reserva de la Biosfera Maya (RBM), Petén, Guatemala.

This donation is from a family in Chicago in honor of the decades of botanical fieldwork of botanist Dr John D. Dwyer, who worked in many areas of Mesoamerica, including Petén.

This donation is also in recognition of the urgency and need for the conservation of both wildlife and rare plants in the biodiverse ecosystems of the Reserva de la Biosfera Maya (RBM) of Guatemala. Parque Nacional Yaxha, Nakum and Naranjo (PNYNN) and Parque Nacional Laguna del Tigre are the first two parts of the over 5 million acres of the RBM where we have initiated field work in 2021 and 2022. In July 2022 we initiated fieldwork in cooperation and coordination with the biologists of PANAT at Tikal to study epiphytic plants (orchids, bromeliads, cacti, ferns that grow high up in tres); plus other biology topics of mutual interest and importance to document. Photographs are donated to the park administrators. Contact sheets are being prepared to also donate to CONAP.

Storage space in Santa Elena/Flores area is essential because we need to store our equipment. To drive all this equipment over 1,000 kilometers back and forth to our research office in Guatemala City would damage the equipment (due to all the holes and other broken open areas in the paved highway). Thus, we appreciate the



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Aerial photo by: Haniel Lopez, experienced drone pilot for registered drones of FLAAR Mesoamerica, May 15, 2023, 2:04 pm. PANAT, RBM, Petén, Guatemala.



Aerial photo by: Haniel Lopez, experienced drone pilot for registered drones of FLAAR Mesoamerica, May 15, 2023, 2:05pm. PANAT, RBM, Petén, Guatemala.

Pine trees intermixed with lots of Tasiste palms. Several other tree species as well, including oaks (we also estimate some Nance). Notice the "island" of higher trees at upper right. This is the archaeological site "Isla de los Pinos".

With LiDAR it would be possible to tell whether the "island" has naturally different soil so tree species are the kind that grow higher.

Aerial photo by: Haniel Lopez, experienced drone pilot for registered drones of FLAAR Mesoamerica, May 15, 2023, 2:04pm. PANAT, RBM, Petén, Guatemala.





Lots more pine in this photo; but still lots of tasiste palm and tree species.

Aerial photo by: Haniel Lopez, experienced drone pilot for registered drones of FLAAR Mesoamerica, May 15, 2023, 2:04pm. PANAT, RBM, Petén, Guatemala.

## Introduction to Pine-Oak-Tasiste Palm "Island" surrounded by Bajo de Santa Fe

The Pine area outside Parque Nacional Tikal has been known since Lundell and others first reported it circa 1961. In subsequent years lots of archaeologists, ecologists, and soil scientists have studied the Bajo de Santa Fe. Most research projects have focused on finding and mapping Maya settlements (usually in higher areas on the edge or surrounded by the lower, more flat Bajo de Santa Fe).

The Maya were fully capable of constructing water conduits, constructing pens for fish, turtles, or snails (or crocodiles). These need to be found by LiDAR (by other capable projects; our 5-year permit is for flora, fauna and biodiverse ecosystems).

From an ecological point of view, the pine forest in the Bajo de Santa Fe can be considered an island due to the fact that it is isolated from any other conifer forest and also because the pines of this forest are compactly distributed in no more than 200 hectares. The National Council for Protected Areas in Guatemala [CONAP] (2003), mentions that the nearest pine forests are 60 km away in Belice, and 107 km in Guatemala. Therefore, this area is the only one throughout the Maya Biosphere Reserve where a gymnosperm forest can be found. The rest of the reserve is covered by broadleaf angiosperm forests. As a result, the survival of the pine trees is considered to be compromised since their genome cannot interact with other populations.

Moreover, it has been considered that anthropogenic activities such as timber extraction, fires, and the construction of highways could put this forest at risk. CONAP has reported the natural regeneration to be very low and this increases the vulnerability of the ecosystem to these risks.

Another interesting aspect of this forest is its origin. The forest is located less than 200 m away from the archaeological site "Isla de Los Pinos" and 2 km apart from the site Jahuia. The former has been considered to be a suburban center while the latter an urban center, both believed to be occupied by the Maya in the Preclassic and Early Classic periods (Fialko, 2005). For that reason, it was hypothesized that the forest had an anthropogenic origin; however, it was later determined that this was not the case and that in fact, it originated naturally (Dvorack, et al. 2005). Bestelmeyer (2000) suggests that pine-oak formations dominated the vegetation of Petén and spread throughout the area in the last glacial period.

All the previous characteristics make this pine area stand out as an interesting ecosystem with a unique ecology. Other characteristics that are not discussed here, such as the fact that the pines have survived here even when the whole Bajo de Santa Fe is a floodable area (Dvorack, et al. 2005) have already been described by other studies. Also, more studies should be carried out to better know the vegetation and other aspects of the ecosystem. However, among all the existing publications, there appears to be a lack of nice, good quality photographs that show the ecosystem and the plants that grow in it. That being the case, the FLAAR team decided to explore the area and do the first photographic documentation of the ecosystem.

While tackling the planification aspects, we weren't able to find any publication where the coordinates of this forest were mentioned. The only mention for any reference point is the recurrent piece of information that the forest is located 4 km East of the upper right corner limits of Tikal's national park (CONAP, 2003). The very few publications that talk about this pine forest and that are available online include the Tikal Park Master Plan for the years 2004-2008 (CONAP, 2003), an archaeological study by Fialko (2008), and a genetic study that covers various aspects of the ecosystem's ecology (Dvorak, et al. 2005). Further on, we got in contact with people from CONAP and the administrators of Tikal National Park. By doing that we found out that the local people can actually take you to this forest since they know about it and also know how to get there.

We also looked for the forest in every satellite view available online, and in the orthophotos of Guatemala's National Geographic Institute. We found out that the forest can be spotted in these. In fact, and with a trained eye after looking at several satellite views of different areas of Peten, the limits, dimension and shape of this forest can be observed in most of the satellite views available online.

We were also able to spot tasiste clusters in these orthophotos, which happened to be the images with the best resolution for the aerial view of this area. The existence and presence of the tasiste palm (*Acoelorraphe wrighti*) has already been reported (CONAP, 2003). However, this aspect caught our attention since we have been working and documenting where else does tasiste grow in the Maya Biosphere Reserve and other areas of Petén. So far, and to our knowledge, the pine forest hasn't been included in any reserve and it has been well documented which are the threats and vulnerabilities that put its survival at risk. It had already been suggested to local authorities to include the forest in the Tikal National Park territory in 2003 (CONAP, 2003), but this suggestion was not followed at that point. In that sense, it would be worth it to evaluate again incorporating the pine area in the park.

Photography by: Haniel López, FLAAR Mesoamerica drone pilot, May 15, 2023, 2:05 pm. PANAT, RBM, Petén, Guatemala. Camera: Mavic 3 drone

# Accepted botanical name and synonyms for

Pinus caribaea Morelet

**Scientific Name:** *Pinus caribaea* Morelet.

**Preferred Common Name:** Caribbean pine.

#### **Other Scientific Names:**

Pinus bahamensis Grisebach Pinus cubensis Sarg. ex Griseb. var. anomala Rowlee Pinus hondurensis Sénécl Pinus recurvata Rowlee Pinus taeda var heterophylla Elliot.

#### Common names in English:

Caribbean pine tree, Caribbean pitch pine, Cuban pine, Nicaragua pine, Nicaraguan pine, pitch pine, yellow pine.

#### Common names in Spanish:

Ocote blanco, pino amarillo, pino antillano, pino caribaea de Honduras, pino caribeño, pino colorado, pino de la costa, pino macho.

#### Local common names in Guatemala:

Ocote blanco and Pino de Petén.

## **Botanical description for** *Pinus caribaea* Morelet

Resinous trees up to 30 m tall, often branchless until a considerable height. Bark gray to reddish brown, fissured and eventually shed in large flat wide plates. Leaves usually in groups of 3's, rarely 4's or 5's; crowded at ends of branches, usually falling in second year, light or yellowish green, linear, rigid, apex a horny point, margin serrulate, 15-25 cm long, basal sheath persistent, light brown becoming dark brown or blackish, 1-2 cm long. Male strobile numerous in sessile clusters, 1-3 cm long. Cones subterminal, reflexed, conical, 5-10 cm x 2.5-3.5 cm when closed, deciduous; scales tan or reddish brown, spreading or reflexed, swollen ending in a minute prickle less than 1 mm long. Seeds usually mottled gray or light brown, narrowly ovoid, approximately 6 mm long, with a developed, usually persistent wing approximately 2.5 cm long (Stanley and Ross, 1989).

## **Distribution and habitat of** *Pinus caribaea* Morelet

Native to southern Mexico, Central America and the Caribbean. There are three varieties of this species noted in its natural ranges: *Pinus caribaea* var. *bahamensis* which can be found in the Bahamas, Puerto Rico, and The Turks and Caikos Islands; *Pinus caribaea* var. *caribaea* which is found in western Cuba; and *Pinus caribaea* var. *hondurensis* that ranges from southern Mexico, to Belize, Guatemala, El Salvador, Honduras and Nicaragua.

It can be found growing at low elevation from sea level to 850 m. It is very common in habitats such as coastal flats, hills and mountain slopes in tropical and subtropical wet forest (Francis, 1992).

*P. caribaea* var. *hondurensis* forms the pine forest of Belize and has been documented growing in the savannas of the same country. The open forest is most widespread on the coastal plains in the vicinity of Stann Creek. In Guatemala, the same variety forms open woods of very limited extent but of particular high quality for commercialization at an elevation of 460 m, mainly in the vicinity of Poptún. Open forests of the *hondurensis* variety occupy very large areas of the Mosquito Coast of Honduras. They also occur sporadically further inland on foothills at altitudes of 900 m. In Nicaragua the species is mainly confined to the Mosquito Coast and there is a southward extension of individuals in the coastal savanas of Honduras (Poynton, 1977). It is worth mentioning that *P. caribaea* is planted in many lowland tropical sites, with Australia, South Africa, Tanzania, Trinidad and Suriname constituting examples of countries where plantations have been more successful. In that sense, it is said to have been planted in tropical dry forests, tropical wet forests, tropical premontane wet forests, and tropical montane wet forests in elevations from sea level up to 1500 m.

### **Relatives of** *Pinus caribaea*

Pinaceae is a family of gymnosperms including about 11 genera and 210 species The members of this family are mostly resinous trees or rarely shrubs found mostly in temperate regions of the Northern Hemisphere. The genus *Pinus* includes 105 species. *P. caribaea* belongs to the *Diploxylon* group. which is characterized by species that develop hard timber and also because they have 2 xylem bundles. Between the three varieties mentioned before, the number of needles per fascicle, cone size, and seed wing anatomy constitute the main differences. Prior to 1950, *P. caribaea* was confused in literature with *P. elliottii* var. *elliottii* and *P. elliottii* var. *densa*, from the United States. Later, Little and Dorman (1952) confirmed the differences also applied to the range of Cuba, Central America and the Caribbean.

### Uses of Pinus caribaea

The wood is commonly used in the construction of houses, light flooring, carpentry, furniture, boxes, pallets, turnery and toys. After treatment with preservers, it is used in poles, posts, railway sleepers and mine props. Resin-soaked wood is popular for boat decking, because of its high durability. The wood is also suitable for interior trims, veneers, piles, particle boards and fiber boards. It is used as fuelwood and for the production of charcoal and paper. The trees yield a good quality of oleoresin which is distilled to give turpentine and rosin. Turpentine is used in paint and batik industries, and rosin is used in the production of papel, soap and glue. Also, the trees are planted as windbreaks, as ornamentals and as shade trees. *P. caribaea* leaf oil is sometimes used for medicinal baths and the seeds are consumed in some regions.

Notice that there are no more pines at the diagonal right area; but Tasiste palms everywhere (surrounding the pine and also outside in the Tasiste-dominated bajo). Is the pine area higher ground level or simply different soil so the pine grows tall and in the surrounding bajo all the trees are shorter?

Photography by: Haniel López, FLAAR Mesoamerica, May 15, 2023, 2:05pm. PANAT, RBM, Petén, Guatemala. Camera: Mavic 3.



Pine, pine everywhere. Lots of Tasiste palm as well. Note that many of the other tree spaces have lost their leaves since May is the end of the dry season.

Photography by: Haniel López, FLAAR Mesoamerica, May 15, 2023, 2:05pm. PANAT, RBM, Petén, Guatemala. Camera: Mavic 3.

## Bajo de Santa Fe, Reserva de la Biosfera Maya (RBM),

east side of Tikal (PANAT)



This scenery is very interesting: the "island" of tall trees in the middle and the "savanna-like" area at upper left which appears as a brighter green patch with "The "island" of tall trees in the middle is the archaeological site "Jahuia". The pine patch can be spotted far in the distance as a patch of darker green, and right next to it at the left, the Mayan site "Isla Los Pinos".

Aerial photo by: Haniel Lopez, experienced FLAAR drone pilot with FLAAR drone Mavic 3; palm trees made visible in Adobe Photoshop by Nicholas Hellmuth.



With a Phase One iXM 100MP UAV camera, we could get better resolution so you could see more when you go into the photo. But, more importantly, you can fly the DJI M600 much further, so we could photograph all the lower flatter different vegetation areas at the middle left, upper left, and upper right.

Cropped by Nicholas Hellmuth from a RAW drone photo by Haniel Lopez.



The first question is whether the bright green area in the middle-left is from sunlight through the clouds; or is this an area of different vegetation? But in the background, you can see the awesome biodiversity of the gigantic area of the Bajo de Santa Fe. Every half kilometer there is something new and different. The video by Haniel Lopez from the same drone (0853.MP4) The area with higher, darker vegetation in the middle is the site "Isla Los Pinos" and next to it, at the right, is the pine forest. In this photo, the site "Jahuia" is visible in the lower portion.

Cropped by Nicholas Hellmuth from a RAW drone photo by Haniel Lopez.



Crop to get a tad closer to this other "island". This is a close up view of the archaeological site Jahuia. The area behind is potentially very different from the bajo area in front. This is all West, Northwest of the El Pinal.

Cropped by Nicholas Hellmuth from RAW drone photo, DJI Mavic 3, by Haniel Lopez.



Several other species of tall palms; so more than just tasiste palms (and those are no longer a major component). The vegetation here is more what I see on karst hilltops though this "hill" is only a few meters above the ground level of the surrounding bajo.

Vilma Fialko and her team, plus the other talented ecologists and geographers have provided lots of helpful documentation of the Bajo de Santa Fe. Now FLAAR can add fresh new insights so that other teams (with better funding) can achieve even more. It helps other teams prepare their own project proposals if they have our photographs and our initial reports available to use.

This island needs to be mapped, literally, mapped from above, with multi-spectral software, and a tabulation made of what trees are here compared to what is in the nearby El Pinal area compared to the bajo in front of this island and the lower bajo across the backside.

No photographs are included in the scan of this WRIGHTIA publication. WRIGHTIA VOLUME 2 May 1961 NUMBER 3

## PLANTAE MAYANAE—II COLLECTIONS FROM PETEN AND BELICE

### **Cyrus Longworth LUNDELL**

Exploration of the lowlands of Guatemala during 1960 was centered in northern Peten, chiefly in the Tikal National Park and around the eastern end of Lake Peten. The work was greatly facilitated by the staff of the Tikal Project of the University of Pennsylvania Museum, and by Mr. Jorge Ibarra, Director of the Museo Nacional de Historia Natural of Guatemala. The investigations were continued under a grant from The Rockefeller Foundation for an "evaluation of the ancient agriculture of the lowland Maya area of Guatemala".

Numerous additions to the flora, and some species and genera, apparently undescribed, are represented in the accumulated collections. Noteworthy among these is a striking new genus in the Sapindaceae family, which I have named Tikalia, commemorating the metropolis of the ancient Maya. This large tree is a conspicuous element in the upland forest (Ramonal) at Tikal.

In the exploration of their petroleum concession in northern Peten, which encompasses the area in which the Tikal National Park is located, an Esso Standard geological party encountered a small pineland area in the great swamp, Bajo de Santa Fe. This was indicated as situated on Brecha "J" Petrolera, an east-west survey line that crosses the swamp to the northeast of Tikal. Since no pineland (pinal) had been known previously to exist in northern Peten, and a study of such an isolated association would be of interest botanically, a party under the leadership of my field assistant, Elias Contreras, opened a trail into the area.

Shortly after my arrival at Tikal on February 22, 1960, an aerial reconnaissance at the Bajo de Santa Fe was made to locate the pine area and the extent of the pine stands more accurately. Setting a course of 77° from Tikal, the pineland was discovered to be about ten miles ENE of Tikal, along the northern limits of the Tikal National Park. The principal strand forms a kettle-shaped hammock covering not over two square kilometers with an island of upland forest (Ramonal) located to its north at the base of the "kettle". Another much smaller stand was noted to the East, the pines towering conspicuously above the low swamp forest.

On March 6, a muleback trip from Tikal was made to explore the pineland (pinal), and three days were spent in the area. The camp was set up on a ruin-covered island of upland forest (Ramonal) several miles west of the pinal

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Brecha "'J"' Petrolera, the upland forest gives way abruptly to a swamp forest dominated by the logwood (tinta), Haematoxylon campechianum L., and the typical gnarled low forest of the tintal association. An aguada in the heart of this tintal was named Aguada Lagarto, after its inhabitants. Progressing eastward the tintal association gives way to the hololal, in which the "holol"' tree, Quercus oleoides Schlecht. & Cham., dominates, and in which the "tasiste"' palm, Paurotis psilocalyx (Burret) Lundell, is a characteristic ele- ment. Progressing through the hololal association, an area is reached in which tall scattered pines grow, and this is the pinal proper (see figs. 21 and 22). Aside from the pines, some of which reach a diameter of over two feet and a height of some eighty feet, the pinal association floristically is almost identical to that of the hololal with species of Paurotis, Myrica, Quercus, Ateleia, Byrsonima, Croton, Sebastiania, Ilex, Eugenia, Rapanea, and Cameraria forming the open canopy of low, mostly gnarled trees, less than thirty feet in height. Below in the undergrowth Psychotria fruticetorum Standl., and two melastomes, Clidemia neglecta D. Don and Miconia ciliata (Rich.) DC., are conspicuous. Open areas are very limited and in these

Fig. 21. The pinal of Bajo de Santa Fe, with Elias Contreras standing in the foreground. Note the size of the trunk of the pine, *Pinus caribaea* Mor., in the center background. The palm is *Paurotis psilocalyx* (Burret) Lundell. The small slender trees and shrubs are typical of the pinal, hololal, and tintal associations.

#### 1961 LUNDELL: PLANTAE Mayanae—II 113

Fig. 22. A towering pine, *Pinus caribaea* Mor., in the pinal of Bajo de Santa Fe. These trees are scattered through the low swampy hammock. and in open undergrowth, the tussock forming sedge, *Rhynchospora cephalotes* (L.) Vahl dominates. Over much of the hololal and pinal, an impenetrable cover is formed by the "'saw-grass" *Sclerta bracteata* Cav.

The pinal of the Bajo de Santa Fe has essentially the same floristic composition and general appearance as the hammocks in the pinelands of northern British Honduras and the everglades of southern Florida. Two related species of *Pinus* and *Paurotis* characterize both.

Although the pinal association of Bajo de Santa Fe is distinctive, it is not particularly rich in species, so there will not be a substantial number of additions to the flora of northern Peten. The Melastomataceae family, notable by their scarcity in other associations, are conspicuous here although only three species have been collected. The herbs, mostly grasses and sedges, are typical pineland species.

The pinal was of possible importance to the ancient Maya as a local source of torchwood, for pine torches were used extensively.

All collections in the pinal, and its marginal hololal association, are included in the following list. Of the seventy-eight species recorded, fifty-six are new records for northern Peten (see Lundell, The Vegetation of Peten, Carnegie Inst. Publ. 478: 49-81. 1937). These are indicated by an asterisk.

- Pinaceae
- Palmae
- Fagaceae
- Leguminosae
- Aquifoliaceae
- Myrtaceae
- Myricaceae
- Leguminosae
- Erythroxylaceae
- Malpighiaceae
- Euphorbiaceae
- ApocynaceaeRubiaceae

Aquifoliaceae

• Sapindaceae

Bombacaceae

Flacourtiaceae

Melastomataceae

Myrtaceae

• Myrsinaceae

Ebenaceae

Sapotaceae

#### WRIGHTIA [Vol. 2, No. 3 LARGE AND MEDIUM SIZED TREES:

- Pinus caribaea Mor.
- Paurotis psilocalyx (Burret) Lundell.
- Quercus oleoides Schlecht. & Cham.
- Ateleia cubensis Griseb.
- Haematoxylon campechianum L.
- Tlex guianensis (Aubl.) Kuntze.
- Bugenia Winzerlingit Standl.

#### SMALL TREES AND SHRUBS:

- Myrica cerifera L.
- Calliandra emarginata (Humb. & Bonpl.) Benth.
- Erythroxylon brevipes DC.
- Byrsonima bucidaefolia Standl.
- Byrsonima crassifolia (L.) H.B.K.
- Heteropteris Lindeniana Juss.

- Croton jutiapensis Croizat.
- Croton reflexifolius H.B.K.
- Sebastiania adenophora Pax & Hoffm.
- [lex guianensis (Aubl.) Kuntze.
- Allophylus cominia (L.) Swartz.
- Hampea trilobata Stand.
- Xylosma anisophylla Stand.
- Calyptranthes Karlingvi Standl.
- Hugenia fadyenti Krug & Urban.
- Eugenia Lundellii Stand.
- Clidemia neglecta D. Don.
- Clidemia rubra (Aubl.) Mart.
- Miconia ciliata (Rich.) DC.
- Parathesis cubana (A.DC.) Mol. & Maza.
- Papanea guianensis Aubl.
- Diospyros bumelioides Standl.
- Achras zapota L.
- Bumelia mayana Stand.
- Cameraria latifolia L.
- Plumeria obtusa L. var. sericifolia (Wright) Wood- son.
- Machaonia lindeniana Baill.
- Psychotria fruticetorum Stand.
- Randia aculeata L.

#### LIANAS, CLAMBERING PLANTS AND VINES:

	Chiococca alba (1.) Hitche.					
• Dioscoreaceae	Perymenium peckii Rob.					
• Polygalaceae	Vernonia sp. (Lundell 16718).					
• Asclepiadaceae	Panicum sp.					
• Rubiaceae	Panicum sp.					
• Compositae	Fuirena bulbipes Blake.					
	Ehynchospora cephalotes (L.) Vahl.					
• <i>Dioscorea</i> sp. (Lundell 16741).	Rhynchospora cyperoides (Swartz) Mart.					
• Bredemeyera lucida (Benth.) Benn.	Rhynchospora fascicularis (Michx.) Vahl.					
<ul> <li>Metastelma barbigerum Scheele.</li> </ul>	Rhynchospora sp. (Contreras 525).					
	Rhynchospora sp. (Contreras 527).					
HERBS	Scleria bracteata Cav.					
	• Cipura paludosa Aubl.					
• Gramineae	• Oxalis neaei DC.					
• Cyperaceae	Sauvagesia erecta L. Turnera ulmifolia L.					
• Tridaceae						
• Oxalidaceae	• Coutoubea spicata Aubl.					
• Ochnaceae	(Thinia spicata (Aubl.) Moldenke.					
• Turneraceae	Borreria sp. (Contreras 524).					
• Gentianaceae	Coccocypselum hirsutum Bartl.					
• Verbenaceae	• Wedelia parviceps Blake.					
• Rubiaceae	Polypodium plumula H. & B.					
Compositae	Catopsis morreniana Mez.					
	Catopsis sessiliflora (R. & P.) Mez.					
EPIPHYTES	Tiliandsia bulbosa Hook.					
	Tillandsia circinnata Schlecht.					
• Polypodiaceae	Tillandsia dasyliritfolia Baker.					
• Bromeliaceae	Tillandsia festucoides Brongn. ex Mez.					
Orchidaceae	Tillen deie strenten bulle Cebeidur					

Tillandsia streptophylla Scheidw.

LUNDELL: PLANTAE Mayanae—II

#### LIANAS, CLAMBERING PLANTS AND VINES:

- Dioscoreaceae
- Polygalaceae
- Asclepiadaceae
- Rubiaceae
- Compositae
- Dioscorea sp. (Lundell 16741).
- Bredemeyera lucida (Benth.) Benn.
- Metastelma barbigerum Scheele.

#### HERBS

- Gramineae
- Cyperaceae
- Tridaceae
- Oxalidaceae
- Ochnaceae
- Turneraceae
- Gentianaceae
- Verbenaceae
- Rubiaceae
- Compositae

#### **EPIPHYTES**

- Polypodiaceae
- Bromeliaceae
- Orchidaceae

#### LUNDELL: PLANTAE Mayanae—II

- Chiococca alba (1.) Hitche.
- Perymenium peckii Rob.
- Vernonia sp. (Lundell 16718).
- Panicum sp.
- Fuirena bulbipes Blake.
- Ehynchospora cephalotes (L.) Vahl.
- Rhynchospora cyperoides (Swartz) Mart.
- Rhynchospora fascicularis (Michx.) Vahl.
- Rhynchospora sp. (Contreras 525).
- Rhynchospora sp. (Contreras 527).
- Scleria bracteata Cav.
- Cipura paludosa Aubl.
- Oxalis neaei DC.
- Sauvagesia erecta L.
- Turnera ulmifolia L.
- Coutoubea spicata Aubl.
- (Thinia spicata (Aubl.) Moldenke.
- Borreria sp. (Contreras 524).
- Coccocypselum hirsutum Bartl.
- Wedelia parviceps Blake.
- Polypodium plumula H. & B.
- Catopsis morreniana Mez.
- Catopsis sessiliflora (R. & P.) Mez.
- Tiliandsia bulbosa Hook.
- Tillandsia circinnata Schlecht.
- Tillandsia dasyliritfolia Baker.
- Tillandsia festucoides Brongn. ex Mez.
- Tillandsia streptophylla Scheidw.

- Epidendrum diffusum Sw.
- Epidendrum nocturnum Jacq.
- Epidendrum radiatum Lindl.
- E'pidendrum sp. (Contreras 549).
- Laelia digbyana Benth.
- Mavillaria uncata Lindl.
- Polystachya clavata Lindl.
- Trigonidium Egertonianum Batem. ex Lindl.

#### PARASITIC PLANTS

- Loranthaceae
- Lauraceae
- Struthanthus cassythoides Millsp.
- Cassytha filiformis L.

#### 115 -116 WRIGHTIA [Vol. 2, No. 3]

The presence of a pine studded hammock in a logwood swamp is unusual, and soil samples were taken from the pinal and these are compared with soil samples from the tintal of Bajo de Santa Fe near Aguada Pucte at Tikal. A report on these has been prepared by Dr. W. Derby Laws and published herewith (Wrightia 2: 127-132. 1961). He concludes (L.c., p. 132) that there is little difference chemically in the soil from the tintal and from the pinal, but that the pinal soil is lower in clay content and higher in sand content. Also, the organic matter in the top twelve inches of soil from the pinal was more carbonaceous than organic matter from soil of the same depth in the tintal. The Bajo de Sante Fe is a subsidence basin of Eocene limestone in which the heavy clay soils are of great depth, evidently accumulated from erosion of the agricultural uplands. The very low phosphorus contents of these soils are of possible significance.

The pinal is a peculiar local edaphic area worthy of further investigation geologically and ecologically.

### **APPENDIX A**

List of Plants by Lundell and his Team that they documented in the El Pinal area adjacent to Northeast border of PANAT *By Mariana Rivas* 

More than just pine and tasiste palms, what Cyrus Lundell and his team accomplished was to make a list of 78 species (so 76 plant species in addition to pine and tasiste palm). Considering how remote this pine hammock is, that's a super helpful list. The guide that took us to this area from Uaxactun said that lots of student groups and scholars visit this pine area (perhaps one group per year). So surely someone can add plants to the list of Lundell. In the meantime, what the FLAAR team is accomplishing is organizing the list alphabetically by Genus (if you need the alphabetical order by plant family you can create that easily from our list). The published list of Lundell was

neither in alphabetical order nor by plant family; it was by habit. Plus, we are updating the Genus and species names.

Note: Species marked with "\*\*" indicate that the genus has changed or been updated.

**Legend:** "M": Medical; "E": Edible; "O": Other; "NU": Few or no reports of uses.

Genus, species from	What is the accepted name	Plant family	Uses						Uses			
<sup>•</sup> Lundell's 1961 list in alphabetical order	accepted name for this plant today?		Medicinal (M)	Edible (E)	Other (O)	No Uses Reported (NU)	Notes of uses					
Acacia	Acacia	Fabaceae	Х		Х		M: cholesterol control, high blood pressure treatment, diabetes control.					
							O: essential oils, dye, glue.					
							(Maroyi; 2017; KHNI, 2020; Gaia Herbs, 2023).					
Aesculus	Aesculus	Sapindaceae	Х	Х	Х		M: Conditions control such as varicose veins, chronic venous insufficiency, and edema in the extremities.					
							E: Fruits and leaves (mainly for cattle).					
							O: Wood used for building material					
							(Mohammad y Silvam 2019; Idris, et.al., 2020).					
Aesculus discolor var. flavescens	Aesculus discolor f. flavescens (Sarg.) Geerinck	Sapindaceae			Х	Х	O: May be used as ornamental mainly Few is known of its uses. (Royal Botanic Gardens, 2023; Tropicos, 2023).					

Genus, species from	What is the accepted name	Plant family	Uses					
<sup>-</sup> Lundell's 1961 list in alphabetical order	for this plant today?		Medicinal (M)	Edible (E)	Other (O)	No Uses Reported (NU)	Notes of uses	
Aesculus pavia	Aesculus pavia L.	Sapindaceae	Х		Х		M: Pioneers made home remedies from the bitter bark.	
							O: seeds and crushed branches to stupefy fish and hunt them.	
							Mainly ornamental.	
							(Missouri Botanical Garden, 2023; Wildflower, 2023).	
Aesculus	Aesculus	Sapindaceae	Х	Х	Х		M: Conditions control such as varicose veins, chronic venous insufficiency, and edema in the extremities.	
							E: Fruits and leaves (mainly for cattle).	
							O: Wood used for building material	
							(Mohammad y Silvam 2019; Idris, et.al., 2020).	
Aesculus discolor var.	Aesculus discolor f.	Sapindaceae			Х	Х	O: May be used as ornamental mainly Few is known of its uses.	
flavescens	flavescens (Sarg.) Geerinck						(Royal Botanic Gardens, 2023; Tropicos, 2023).	
Aesculus pavia	Aesculus pavia L.	Sapindaceae	Х		Х		M: Pioneers made home remedies from the bitter bark.	
							O: seeds and crushed branches to stupefy fish and hunt them.	
							Mainly ornamental.	
							(Missouri Botanical Garden, 2023; Wildflower, 2023).	

Genus, species from	What is the accepted name	e Plant e family					
Lundell's 1961 list in alphabetical order	for this plant today?		Medicinal (M)	Edible (E)	Other (O)	No Uses Reported (NU)	Notes of uses
Agave	Agave L.	Xyridaceae	Х	Х	Х		M: Treatment for diseases such as Cancer and Alzheimer.
							E: Drinks and foods.
							O: Building material; ornamental.
							(Glafiro y Álvarez, 2011; Castillo, et.al., 2020; Petruzzello, 2023).
Agave lechuguilla	Agave lechuguilla Torr.	Xyridaceae		Х	Х		E: Pulque, mescal, and tequila are made from the fermented sap of the flower stalk.
							O: Leaf fibers are utilized for crafting cordage, which serves various purposes such as making bowstrings, nets, baskets, mats, sandals, blankets, and fabric. Roots can be pounded and soaked in water, then employed for producing soap and shampoo.
							(Glafiro y Álvarez, 2011; Carmona, et.al., 2017).
Amsinckia intermedia	Amsinckia intermedia Fisch. & C.A.Mey	Boraginaceae				X	NU: Mainly a weed; few or no reports of uses. (CULVENOR y Smith, 2023 (1964)).
Amsinckia	Amsinckia Lehm.	Boraginaceae		Х			E: Seeds are eaten; leaves and flowers mainly for cattle; the seeds of other members of the genus are dried then ground into a powder and made into cakes which are eaten raw. No more details are given. (COLEGATE, et.al., 2014; NCEGP, 2023).
Amsinckia lycopsoides	Amsinckia lycopsoides Lindl. ex Lehm.	Boraginaceae		Х			E: Seeds are eaten; leaves and flowers for cattle mainly. Some animals could be sensitive to the toxins of the plant.
							(Natural Medicinal Herbs, 2023; Native Plant Trust: Go Botany, 2023).

Genus, species from	What is the accepted name	Plant family	Uses				
'Lundell's 1961 list in alphabetical order	for this plant today?		Medicinal (M)	Edible (E)	Other (O)	No Uses Reported (NU)	Notes of uses
Amsinckia micrantha	Amsinckia menziesii (Lehm.) A.Nelson & J.F.Macbr.	Boraginaceae				Х	NU: Manly wild weed.
Antennaria	Antennaria Gaertn	Asteraceae	Х	Х			M: They are used in infusions to treat liver and gallbladder problems, as an astringent for diarrhea, and to soothe cough-related irritation.
							O: Dried flowers have a pleasant scent and contain beneficial compounds like tannins, essential oils, phytosterols, and bitter substances. Ingredients for perfumes, soups, and shampoo.
							(Plants for a Future, 2010; De Gezelle, 2014).
Anthurium tetragonum Anthurium	Anthurium schlechtendalii subsp.	Araceae			Х		O: Dried flowers have a pleasant scent: used as essential material for oils or soup.
tikalense	schlechtendalii						(Estrada et.al., 2018).
Anthurium	Anthurium Schott	Araceae		Х	Х		M: Certain types of Anthurium are employed in traditional medicine to address health issues such as hypertension and urinary tract infections.
							O: Ornamental mainly.
							(Chen, et.al., 2003; Rolling Nature, 2018; Sariwati, et.al, 2019; Calderon, et.al, 2023; NCEG, 2023).
Arceuthobium ampylopodum	Arceuthobium campylopodum subsp. laricis (M.E.Jones)	Santalaceae			Х		O: Blooming plant employed for decorative purposes in gardens and parks, it also serves as ground cover to combat soil erosion.
	Nickrent						(FLAAR Mesoamerica; Flora of North America, 2023).

Genus, species from	What is the accepted name	Plant family	Uses				
<sup>·</sup> Lundell's 1961 list in alphabetical order	for this plant today?		Medicinal (M)	Edible (E)	Other (O)	No Uses Reported (NU)	Notes of uses
Arceuthobium divaricatum	Arceuthobium divaricatum Engelm.	Santalaceae			Х	Х	O: Might be used as an ornamental plant. NU: Mainly wild plants.
Arceuthobium	Arceuthobium M.Bieb.	Santalaceae	Х			Х	M: In some indigenous cultures, various parts of Arceuthobium have been used for traditional medicinal purposes, such as treating conditions like coughs, colds, or tuberculosis. Note that the use of mistletoe in traditional medicine is not widely accepted and should be approached with caution. NU: Mainly wild plants. (Agrios, 2005; Kupeli,et.al, 2010; Sotero, 2018).
Ardisia Austin-Smithii Gentlea minor	<i>Ardisia</i> Austin- Smithii Lundell	Primulaceae	X	X	Х		M: Parts of Ardisia plants (fruits and leaves mainly) have been used to treat a range of health conditions such as cancer, swelling, rheumatism, earache, cough, fever, diarrhea, broken bones, dysmenorrhea, respiratory tract infections, traumatic injuries, inflammation, pain, snake and insect bites, birth complications and to improve general blood circulation, among others. The efficacy and safety of these traditional uses may vary and require further scientific investigation. Used for herbal teas and remedies. E: Herbal teas. O: Ornamental, decoration, dye production.
							(Gónzález y Ramirez, 2012; Da Cheng, 2015; Mundo Forestal, 2022).

Genus, species from Lundell's	What is the accepted name	Plant family		•		Uses	
Lundell's 1961 list in alphabetical order	for this plant today?		Medicinal (M)	Edible (E)	Other (O)	No Uses Reported (NU)	Notes of uses
Ardisia lilacina	Ardisia bartletii subsp. lilacina (Lundell) Pipoly & Ricketson	Primulaceae				Х	
Ardisia bartlettii	Ardisia bartlettii	Primulaceae				Х	
Ardisia densiflora Ardisia gentlei Ardisia sessiliflora Ardisia spicigera	Ardisia bracteosa A.DC.	Primulaceae			Х	X	O: Ornamental, decoration. (FLAAR Mesoamérica, 2024).
Ardisia compressa Kunth Ardisia irasuensis Ardisia nicaraguensis	Ardisia compressa Kunth	Primulaceae	X		X		M: Has qualities used in traditional medicine and teas; leaves and flowers are used for the remedies. O: Ornamental. (Ramirez, et.al., 2010; Da Cheng, 2015; Rare Palms Seeds, 2023).
Ardisia hyalina	Ardisia hyalina Lundell	Primulaceae	X		Х		M: Used to make herbal tea and as a medicinal plant to treat various aliments. O: Used as an ornamental plant in gardens and as a houseplant. (FLAAR Mesoamerica, 2024).

Genus, species from	What is the accepted name	Plant family				Uses	
<sup>'</sup> Lundell's 1961 list in alphabetical order	for this plant today?		Medicinal (M)	Edible (E)	Other (O)	No Uses Reported (NU)	Notes of uses
Ardisia crenipetala Ardisia liebmannii	Ardisia liebmannii Oerst	Primulaceae			Х		NU: Few or no reports of its uses.
Ardisia rekoi							
Ardisia mexicana	Ardisia mexicana Lundell	Primulaceae	Х		Х		M: Like other species of the genus, leaves and berries used in traditional herbal medicine. Medicinal properties to control digestive issues and respiratory problems.
							O: Ornamental plant, wildlife attraction as birds that eat their fruits, shade, and ground cover.
							(Kobayashi y Mejía, 2005; Vianey, 2015).
Ardisia minor	Ardisia minor King & Gamble	Primulaceae	Х		Х		M: Employed to treat a range of ailments, such as coughs, colds, and digestive issues.
							O: Ornamental, landscaping, wildlife attraction, horticultural interest.
							(Kobayashi y Mejía, 2005; González y Ramírez, 2011).

Genus, species from Lundell's	What is the accepted name for this plant	Plant family	Uses									
<sup>·</sup> Lundell's 1961 list in alphabetical order	for 'this plant today?		Medicinal (M)	Edible (E)	Other (O)	No Uses Reported (NU)	Notes of uses					
Ardisia hirtella Ardisia hirtella Ardisia mitchellae Ardisia nigrescens Var. Donnell- Smithii Ardisia oliveri Ardisia	Ardisia nigrescens Oerst.	Primulaceae	(M)	(E)	(O) X	Reported (NU) X	O: Ornamental, landscaping, wildlife attraction. NU: Few or no reports of its uses. Mainly a wild plant. (FLAAR Mesoamerica, 2024).					
Ardisia seibertii Ardisia skutchii												
Ardisia subcoriacea												

Genus, species from Lundell's 1961 list in alphabetical order	What is the accepted name for this plant today?	Plant family	Uses				
			Medicinal (M)	Edible (E)	Other (O)	No Uses Reported (NU)	Notes of uses
Ardisia wagneri	Ardisia opegrapha subsp. wagneri (Mez) Pipoly & Ricketson	Primulaceae				X	
Ardisia panamensis	Ardisia pallidiflora Ridl.	Primulaceae	Х		Х		M: Leaves and berries might be used in teas and infusions to treat disease such as coughs, colds or digestive issues.
							O: Mainly ornamental.
							(Kobayashi y Mejía, 2005; González y Ramírez, 2011).
Ardisia panamensis	Ardisia panamensis Lundell	Primulaceae	Х		Х		M: Leaves, berries, and flowers used in teas or remedies to cure pathologies associated with digestive issues. No scientific confirmation exists for these remedies.
							O: Mainly ornamental.
							(Kobayashi y Mejía, 2005; González y Ramírez, 2011).
Ardisia pellucida	Ardisia pellucida Oerst.	Primulaceae	Х		Х		M: Medicinal properties, such as treating fever, skin diseases, and digestive problems.
							O: Ornamental plants in gardens.
							(Kobayashi y Mejía, 2005; González y Ramírez, 2011).
Ardisia pectinata	Ardisia pellucida subsp. pectinata (Donn.Sm.) Ricketson & Pipoly	Primulaceae				X	NU: Few or no reports of its uses.

Genus, species from	What is the accepted name	Plant family				Uses	
Lundell's 1961 list in alphabetical order	for this plant today?		Medicinal (M)	Edible (E)	Other (O)	No Uses Reported (NU)	Notes of uses
Ardisia pulverulenta	Ardisia pulverulenta Mez	Primulaceae				Х	NU: Few or no reports of its uses.
Ardisia revoluta	Ardisia revoluta Kunth.	Primulaceae	Х		Х		M: Infusions and teas from leaves, flowers or berries used to treat fever or digestive problems. O: Ornamental, wildlife attraction. (Selina Wamucii, 2023).
Ardisia scoparia	Ardisia revoluta Kunth	Primulaceae				Х	
Ardisia schippii Standl.	Ardisia schippii Standl.	Primulaceae				Х	
Ardisia angustialata Ardisia mcvaughii Ardisia staminosa Gentlea mcvaughii Gentlea micrantha Parathesis micranthera	Ardisia staminosa Lundell	Primulaceae	X		X		M: Used as treatment of various ailments, including skin conditions, fever, and as an anti-inflammatory agent. O: Ornamental; mainly a wild plant. (Kobayashi y Mejía, 2005; González y Ramírez, 2011; Selina Wamucii, 2023).

Genus, species from Lundell's	What is the accepted name	Plant family				Uses	
Lundell's 1961 list in alphabetical order	for this plant today?		Medicinal (M)	Edible (E)	Other (O)	No Uses Reported (NU)	Notes of uses
Ardisia Gentlea	**Ardisia Sw.	Primulaceae	Х		Х		M: The uses can vary widely, including treatments for fever, skin conditions, and other ailments. The safety and efficacy of these traditional uses may not be well-established and should be approached with caution.
Graphardisia							O: Ornamental, wildlife attraction, landscaping, scientific research.
lcacorea							(Kobayashi y Mejía, 2005; González y Ramírez, 2011).
Synardisia							
Ardisia tacanensis	Ardisia tacanensis	Primulaceae	Х		Х		M: Berries and leaves infusion to treat fever and digestive problems.
	Lundell						O: Ornamental; mainly a wild plant.
Gentlea tacanensis							(FLAAR Mesoamérica, 2023).
Ardisia	Ardisia	Primulaceae			Х	Х	O: Ornamental.
brevipes	tuerckheimii Donn.Sm						NU: Few or no reports of its uses.
Ardisia carlsonae	Donnion						
Ardisia erythrocarpa							
Ardisia tuerckheimii							
Ardisia vatteri Gentlea vatteri	Ardisia vatteri Standl. & Steyerm.	Primulaceae	Х		Х		M: Used in traditional medicine to treat various ailments such as fever, diarrhea, and dysentery.
							O: Mainly ornamental.
							(Kobayashi y Mejía, 2005; González y Ramírez, 2011).

Genus, species from Lundell's	What is the accepted name	Plant family					
Lundell's 1961 list in alphabetical order	for this plant today?	his plant oday?	Medicinal (M)	Edible (E)	Other (O)	No Uses Reported (NU)	Notes of uses
Synardisia venosa	** Ardisia venosa Mast. ex Donn.Sm.	Primulaceae	Х		Х		M: Used in traditional medicine to treat various ailments such as fever, diarrhea, and dysentery.
Ardisia venosa							O: Mainly ornamental.
							(Kobayashi y Mejía, 2005; González y Ramírez, 2011).
Caballeria venosissima Myrsine venosissima Ardisia venosissima Stylogyne haenostemona Ardisia breviflora Ardisia meiantha Ardisia meridensis Ardisia haenostemona Ardisia cobinsonii Mez	**Ardisia venosissima (Ruiz & Pav.) J.F.Macbr	Primulaceae	X		X		O: Ornamental, wildlife attraction. Wild plants mainly.

Genus, species from	What is the accepted name	Plant family				Uses	
<sup>'</sup> Lundell's 1961 list in alphabetical order	for this plant today?		Medicinal (M)	Edible (E)	Other (O)	No Uses Reported (NU)	Notes of uses
Ardisia alba Ardisia escuintlensis Ardisia sexpartite Ardisia	Ardisia verapazensis Donn.Sm.	Primulaceae	Х			Х	M: Like other species might be used as treatment for diseases like fever, digestive problems, skin problems. NU: Few or no reports of its uses. (FLAAR Mesoamérica, 2023).
verapazensis Ardisia cucullata	Ardisia verapazensis subsp. cucullata (Lundell) Pipoly & Ricketson	Primulaceae	Х			X	M: Like other species might be used as treatment for diseases like fever, digestive problems, skin problems. NU: Few or no reports of its uses. (FLAAR Mesoamérica, 2023).
Armoracia	<i>Armoracia</i> G.Gaertn.,B. Mey. & Scherb.	Brassicaceae	Х	Х	Х		M: Used as a digestive aid due to its pungent properties, which can stimulate digestion and relieve minor digestive issues. Used as a remedy for respiratory ailments; leaves and flowers have antimicrobial properties. E: Condiment and flavoring. O: Garden plant, ornamental. (Herz, 2017; Petrovića, et.al., 2017).
Arundo farcta	Arthrostylidium farctum (Aubl.) Soderstr. & Lourteig	Poaceae			Х	Х	O: Fence material. NU: Few or no reports of its uses.

Genus, species from	What is the accepted name	Plant family		Uses						
<sup>•</sup> Lundell's 1961 list in alphabetical order	in doday?		Medicinal (M)	Edible (E)	Other (O)	No Uses Reported (NU)	Notes of uses			
Arundo	Arundo L.	Poaceae		Х			E: Can be eaten or processed to make food.			
							(Proyecto Sierra de Baza, 2023).			
Asimina	Asimina L.	Annonaceae		Х	Х		E: Fruits, leaves and roots of some species can be eaten.			
							O: inner bark was used for rope, string, and lacing. Splints used for basketry and matting. Wood used as construction material.			
							(González, et.al., 2011; Berry, et.al., 2024).			
Asimina parviflora	Asimina parviflora	Annonaceae	Х	Х	Х		M: Leaves and bark of the plant have been used for their potential medicinal properties.			
	(Michx.) Dunal						E: Fruit is edible; leaves used as infusions or to make tea.			
							O: Material for construction, ornamental, wildlife attraction.			
							(González, et.al., 2011; Berry, et.al., 2024).			
Azolla	Azolla Lam.	Salviniaceae				Х	NU: Few or no reports of its uses.			
Azolla mexicana	Azolla microphylla Kaulf.	Salviniaceae				X	NU: Few or no reports of its uses.			
Colubrina vellozii	Banara serrata (Vell.) Warb.	Salicaceae	Х				M: Used as treatment for osteoarthritis, asthma, diabetes, stroke, and skin problems.			
							(Sellina Wamucii, 2024).			
Bartonia	Bartonia Muhl. ex Willd.	Gentianaceae					Few reports of the uses of this genus.			
Bartonia paniculata	Bartonia paniculata	Gentianaceae			Х	X	O: Serves as a host plant for certain animals like butterfly species.			
	(Michx.) Muhl						NU: Few or no reports of its uses.			
							(FLAAR Mesoamérica, 2023).			

Genus, species from	What is the accepted name	Plant family				Uses	
Lundell's for this plant 1961 list in today? alphabetical order		Medicinal (M)	Edible (E)	Other (O)	No Uses Reported (NU)	Notes of uses	
Bartonia texana	Bartonia paniculata subsp. texana (Correll) K.G.Mathews, Dunne, E.York & Struwe	Gentianaceae	Х			X	NU: Few or no reports of its uses.
Bartonia verna	Bartonia verna (Michx.) Raf. ex Barton	Gentianaceae			Х		O: Serves as an ornamental addition to garden landscapes, boasting an extended blooming season that mainly includes insects like bees and butterflies.
							Also used as a source of food for silkworms.
							(Sellina Wamucii, 2024).
Bartonia virginica	Bartonia virginica (L.) Britton, Sterns & Poggenb.	Gentianaceae				Х	
Bauhinia	Bauhinia Plum. ex L.	Fabaceae	Х	Х	Х		M: Certain parts are used for their potential medicinal properties; treatment of medical complications like ulcers.
							E: Condiment, flavoring. Young leaves and flowers of certain Bauhinia species are used in cooking. They are prepared as vegetables and added to salads, soups, or other dishes.
							O: Ornamental, horticultural interest; fiber and wood used as construction material. Wildlife attraction: the nectar-rich flowers of Bauhinia species attract pollinators, especially bees.
							(Shreedhara, et.al, 2009; Mishra, 2013; Prabhu, et.al. 2021).

Genus, species from	What is the accepted name	Plant family		Uses						
<sup>·</sup> Lundell's 1961 list in alphabetical order	st in   todaý?   tical	Medicinal (M)	Edible (E)	Other (O)	No Uses Reported (NU)	Notes of uses				
Blomia	Blomia Miranda	Sapindaceae				Х				
Blomia Prisca Cupania prisca	Blomia prisca (Standl.) Lundell	Sapindaceae				Х				
Jacquinia aurantiaca var. albiflora Jacquinia albiflora	**Bonellia albiflora (Lundell) B.Ståhl & Källersjö	Primulaceae	Х		Х		<ul> <li>M: In traditional Maya medicine, it is employed as an antitussive, applied to treat skin and oral injuries, and to alleviate toothache discomfort.</li> <li>O: Serves an ecological role as a wildflower, horticultural use, might be used as an ornamental plant.</li> </ul>			
							(Moo, et.al., 2013).			
Jacquinia aurantiaca	**Bonellia macrocarpa (Cav.) B.Ståhl & Källersjö	Primulaceae	Х		Х		<ul> <li>M: Used for addressing coughs and sore throats, oral ulcers, and toothache.</li> <li>O: Serves an ecological role as a wildflower, horticultural use, might be used as an ornamental plant.</li> </ul>			
							(Caamak, et.al., 2011; Florida Natural Areas Inventory).			
Brosimum gentlei Brosimum terrabanum	Brosimum alicastrum Sw.	Moraceae	X	Х	Х		M: Bark, leaves, and latex have been used in traditional medicine for their potential medicinal properties. They have been applied to treat ailments such as wounds, skin conditions, and digestive issues.			
							E: The seeds of the breadnut tree are edible and can be roasted, boiled, or ground into flour.			
							O: Wood of the breadnut tree is sometimes used for construction, furniture making, and other wood-based applications.			
							(Useful Tropical Plants, 2022; Losoya, et.al., 2023).			

Genus, species from	What is the accepted name	Plant family				Uses	
<sup>'</sup> Lundell's 1961 list in alphabetical order	for this plant today?		Medicinal (M)	Edible (E)	Other (O)	No Uses Reported (NU)	Notes of uses
Brosimum belizense	Brosimum lactescens	Moraceae		Х	Х		E: Seeds and other parts like leaves might be eaten by some communities.
Brosimum	(S.Moore) C.C.Berg						O: Wood and fiber as construction material.
ojoche	0.0.0019						(Osa Conservation, 2022).
Brosimum	Brosimum K.	Moraceae	Х	Х	Х		M: Bark, leaves, and latex have been used in traditional medicine by indigenous communities for their potential medicinal properties.
							E: Fruit and seeds are eaten by some Maya communities.
							O: Wood and fiber as construction material; horticultural interest. May hold cultural or religious significance for local communities; may be part of traditional rituals and ceremonies.
							(Santillán, et.al., 2020; Barragan, et.al., 2022).
Bursera	Bursera Jacq. ex L.	Burseraceae	Х	Х	Х		M: Extracts or infusions used to treat ailments including respiratory issues, skin conditions, and gastrointestinal problems.
							E: Infusions, tea.
							O: Resin Production, wood, and fiber as construction material; ornamental.
							(Marcotullio, et.al., 2018).
Bursera longicuspis	Bursera ovalifolia Engl.	Burseraceae	Х	Х	Х		M: Uses can include treatments for various ailments, such as digestive issues and skin conditions.
							E: Seeds can be eaten. O: Horticultural interest, wood and fiber used as construction material.
							(Marcotullio, et.al., 2018; Useful Tropical Plants, 2023).

Genus, species from	What is the accepted name	Plant family				Uses	
<sup>'</sup> Lundell's 1961 list in alphabetical order	n today?		Medicinal (M)	Edible (E)	Other (O)	No Uses Reported (NU)	Notes of uses
Bursera permollis	Bursera permollis Standl. & Steyerm	Burseraceae	X			X	M: Used in traditional medicine by indigenous communities for their potential medicinal properties. However, specific information on the traditional uses is limited and should be approached. NU: Few or no reports of its uses.
							(Marcotullio, et.al., 2018).
Bursera simaruba Bursera	Bursera simaruba Sarg.	Burseraceae	X		Х		M: Traditional uses may include treatments for various ailments, such as wounds, skin conditions, digestive issues, and respiratory complaints.
simaruba var. yucatanensis							O: Resin production, wood, and fiber as construction material.
							(Useful Tropical Plants, 2023; Plants for a Future, 2024).
Calyptranthes chytraculia var americana	Calyptranthes chytraculia var. americana McVaugh	Myrtaceae				Х	NU: Few or no reports of its uses.
Calyptranthes lindeniana	Calyptranthes lindeniana O.Berg	Myrtaceae	Х	Х	Х		M: Leaves and bark have been used in traditional medicine for their potential medicinal properties. Applied to treat various ailments, such as digestive issues and respiratory complaints.
							E: Fruit is edible.
							O: Aromatic plant, ornamental, may have cultural significance and be integrated into local traditions, recipes, and cuisine in the regions where it grows.
							(FLAAR Mesoamérica, 2023).

What is the accepted name	Plant family				Uses	
for this plant today?		Medicinal (M)	Edible (E)	Other (O)	No Uses Reported (NU)	Notes of uses
**Cardamine concatenata (Michx.) O.Schwarz	Brassicaceae		Х	Х		E: Young leaves and tender shoots are edible and have been historically consumed by some indigenous peoples and foragers. They can be added to salads or cooked.
						O: Horticultural interest, wildlife gardens.
						Wild weeds mainly.
						(NCEG, 2023; Wisconsin Horticulture: Division Of Extension, 2023).
**Cardamine L.	Brassicaceae	Х	Х			M: Used in traditional herbal medicine for their potential medicinal properties. They may be employed to treat minor ailments, such as digestive issues, respiratory complaints, and skin conditions.
						E: Several <i>Cardamine</i> species are edible and are used in culinary applications. The leaves, young shoots, and sometimes the seeds of these plants are consumed in salads, sandwiches, and various dishes.
						Wild weeds mainly.
						(Picture This, 2023; Picture This, 2024).
Cardiospermum dissectum Radlk.	Sapindaceae	Х	Х	Х		O: Cultural or traditional significance and may be integrated into local traditions and ceremonies; horticultural interest, ornamental. NU: Few or no reports of its uses.
	<ul> <li>accepted name for this plant today?</li> <li>**Cardamine concatenata (Michx.) O.Schwarz</li> <li>**Cardamine L.</li> <li>Cardiospermum dissectum</li> </ul>	accepted name for this plant today?family**Cardamine concatenata (Michx.) O.SchwarzBrassicaceae**Cardamine L.Brassicaceae**Cardamine L.BrassicaceaeCardiospermum dissectumSapindaceae	accepted name for this plant today?familyMedicinal (Medicinal (M)**Cardamine concatenata (Michx.) O.SchwarzBrassicaceaeImage: Concatenata (Michx.) O.Schwarz**Cardamine L.BrassicaceaeX**Cardamine L.BrassicaceaeXCardiospermum dissectumSapindaceaeX	familyMedicinal (M)Edible (E)**Cardamine concatenata (Michx.) O.SchwarzBrassicaceaeX**Cardamine L.BrassicaceaeXX**Cardamine L.BrassicaceaeXXCardiospermum dissectumSapindaceaeXX	accepted name for this plant today?familyMedicinal (M)Edible (E)Other (O)**Cardamine concatenata (Michx.) O.SchwarzBrassicaceae SicaceaeXXX**Cardamine L.Brassicaceae BrassicaceaeXXX**Cardamine L.Brassicaceae SicaceaeXXXCardiospermum dissectumSapindaceaeXXX	accepted name for this plant today?familyMedicinal (M)Edible (E)Other (O)No Uses Reported (NU)**Cardamine concatenata (Michx.) O.SchwarzBrassicaceae scienceXXX**Cardamine L.Brassicaceae scienceXXX**Cardamine L.Brassicaceae scienceXXXCardiospermum dissectumSapindaceaeXXX

Genus, species from	What is the accepted name	Plant family				Uses	
Lundell's 1961 list in alphabetical order	for this plant today?		Medicinal (M)	Edible (E)	Other (O)	No Uses Reported (NU)	Notes of uses
Cardiospermum halicacabum	Cardiospermum halicacabum L.	Sapindaceae	X		Х		<ul> <li>M: Used to treat skin conditions, inflammation, arthritis, and other minor ailments. Used for treatment of rheumatism, abdominal pain, orchitis, dropsy, lumbago, skin diseases, cough, nervous disorders, and hyperthermia.</li> <li>O: Cultural or traditional significance and may be integrated into local traditions and ceremonies, ornamental.</li> <li>(Elangovan, et.al., 2022; Flora &amp; Fauna Web, 2023).</li> </ul>
Cardiospermum	Cardiospermum L.	Sapindaceae	X		Х		M: Utilized in the management of conditions such as rheumatism, abdominal pain, orchitis, dropsy, lumbago, skin disorders, cough, nervous, respiratory ailments, and hyperthermia. O: Horticultural interest, ornamental, wildlife attraction. (A-Vogel, 2023; Just, 2024).
Carex subulata	Carex collinsii Nutt.	Cyperaceae				Х	
Carex	Carex L.	Cyperaceae			Х	X	O: Carex species are used mainly as ornaments. Employed for soil stabilization on inclines and serves as an appealing enhancement for rock gardens. NU: Few or no reports of its uses. (Toccano, 2021)
Carex hirtella	Carex plectobasis V.I.Krecz.	Cyperaceae			Х	X	(Toscano, 2021). O: Used mainly as ornaments. Employed for soil stabilization on inclines and serves as an appealing enhancement for rock gardens.
							NU: Few or no reports of its uses.
							(Selina Wamucii, 2023).

Genus, species from Lundell's	What is the accepted name	Plant family	Uses							
<sup>·</sup> Lundell's 1961 list in alphabetical order	for this plant today?		Medicinal (M)	Edible (E)	Other (O)	No Uses Reported (NU)	Notes of uses			
Carex latifolia	Carex sylvatica subsp. latifrons (V.I.Krecz.) Ö.Nilsson	Cyperaceae				Х				
Casearia bartlettii	Casearia bartlettii Lundell	Salicaceae	Х		Х	Х	M: Like other members of the <i>Casearia</i> genus, Casearia bartlettii may possess medicinal properties in its leaves, bark, and roots that make it a potential candidate for treating various conditions, including digestive problems, skin ailments, and respiratory issues.			
							O: Mainly ornamental; wildlife attraction. (Selina Wamucii, 2023).			
Casearia	Casearia	Salicaceae		X		X	E: Some communities might eat their fruit.			
hintonii	elegans Standl.	Sancaceae		Λ		~	N: Few or no reports of its uses.			
							(FLAAR Mesoamérica).			
Casearia	Casearia Jacq.	Salicaceae	Х	Х	Х		M: Some of the plants of the genus Casearia, exhibit cardiac and diuretic effects. They are used in the management of gastric ulcers, circulation issues, migraine headaches, prostate ailments, heart conditions, and elevated cholesterol levels.			
							E: Edible fruit (some species), leaves used for tea or infusions.			
							O: Leaves and flowers contain essential oils. Wood used as construction material. Wood is also utilized as a source of fuel and in the production of charcoal.			
							(Xia, et.al., 2014).			

Genus, species from	What is the accepted name	Plant family				Uses	
Lundell's 1961 list in alphabetical order	for this plant today?		Medicinal (M)	Edible (E)	Other (O)	No Uses Reported (NU)	Notes of uses
Celastrus	Celastrus L.	Celastraceae	Х	Х	Х		M: Seeds, flowers, roots and bark mainly used on several medical treatments for leprosy, gout, fevers, paralysis, cognitive dysfunction, epilepsy, insomnia, rheumatism, gout, and dyspepsia. The genus presents analgesic, aphrodisiac, diaphoretic, emetic, emmenagogue, stimulant and tonic properties.
							E: Young flowers of some species are cooked and eaten as vegetables.
							O: Seeds and fruits used to extract essential oils for soup or perfumes. Oils are also meant to treat pathologies or ailments; might be used as an ornamental plant.
							(Shen, et.al., 2019; Harikesh, et.al., 2021).
Celastrus scandens	Celastrus scandens L.	Celastraceae	Х				M: Root possesses diaphoretic, diuretic, and emetic properties. Traditionally used as a folk remedy for chronic liver and skin conditions, which may include skin cancer. Also employed in the treatment of rheumatism, dysentery, and suppressed menses.
							(Plants for a Future, 2024).
Cenchrus	Cenchrus L.	Poaceae	Х		Х	Х	M: Some species of the genus Cenchrus have shown cytotoxic activity in cancer cells in their roots.
							O: Feeding material for cattle.
							NU: Few or no reports of its uses.
							Mainly a wild plant.
							(Light, et.al., 2022; Plants for a Future, 2023).

Genus, species from	What is the accepted name	Plant family				Uses	
<sup>'</sup> Lundell's 1961 list in alphabetical order	for this plant today?	Medicinal (M)	Edible (E)	Other (O)	No Uses Reported (NU)	Notes of uses	
Clusia	Clusia L.	Clusiaceae	X		Х		M: Some <i>Clusia</i> species are employed to alleviate toothache. The dried and powdered resin is commonly traded and used as a healing plaster for fractures, dislocations, and burns. Decoctions made from the bark and fruit rind are applied to alleviate rheumatic pains. A decoction of the leaves or flowers is taken internally as a remedy for chest complaints.
							O: The bark and the region surrounding the seeds within the fruit contain latex that solidifies when exposed to air. This latex is utilized for caulking boats and has various applications. Wood used as construction material. Might be used as an ornamental species.
							(Lüttge, 2007, Picture This, 2023; Leon Levy, 2024).
Clusia pringlei	Clusia pringlei Lundell	Clusiaceae	Х			Х	M: As other members of the genus, <i>C.pringlei</i> parts may have properties to treat ailments such as skin problems mainly.
							NU: Few or no reports of its uses.
							(FLAAR Mesoamérica).
Clusia salvinii	Clusia salvinii Donn.Sm.	Clusiaceae	Х		Х		M: Utilized to address various health issues like rheumatism, lower back pain, and headaches, as well as for purging and its anti-inflammatory properties. Antibiotic activity against microorganisms that cause venereal disease: this species has not been experimentally studied.
							O: Wood and latex used as construction material. Ornamental plant.
							(Picture This, 2023; Selina Wamucii, 2023).

Genus, species from	What is the accepted name	Plant family				Uses	
<sup>'</sup> Lundell's 1961 list in alphabetical order	for 'this plant today?		Medicinal (M)	Edible (E)	Other (O)	No Uses Reported (NU)	Notes of uses
Coccoloba petenensis	Coccoloba barbadensis Jacq.	Polygonaceae	Х	Х			M: Leaves have been used for their astringent qualities. Used to treat digestive and intestine problems mainly.
							E: Edible fruits, leaves used for teas and infusions.
							(Pennington y Sarukhán, 2005; Selina Wamucii, 2023).
Coccoloba barbadensis	Coccoloba caracasana	Polygonaceae	Х	Х			M: Used to treat digestive and intestine problems mainly.
	Meisn.						E: Edible fruits, leaves used for teas and infusions.
							O: Wood is used for firewood and fence posts. It is also employed as an ornamental plant and shade tree.
							(Blancke, et.al., 2016; Smithsonian Tropical Research Institute, 2023).
Coccoloba escuintlensis	Coccoloba escuintlensis	Polygonaceae	Х	Х			M: Used to treat headaches, fever, digestive and intestinal ailments.
Coccoloba schippii	Lundell						E: Edible fruits, flowers and leaves used in teas and infusions.
							NU: Few or no reports of its uses.
Coccoloba steyermarkii							(Blancke, et.al., 2016).
Coccoloba tenuis	Coccoloba hondurensis Lundell	Polygonaceae	Х	Х		Х	M: As other members of the genus C. hondurensis may be used for the treatment of ailments such as headaches, ulcers, or digestive and intestine problems.
							E: Edible fruit.
							NU: Few or no reports of its uses.
							(FLAAR Mesoamérica, 2024).

Genus, species from	What is the accepted name	Plant family				Uses	
Lundell's 1961 list in alphabetical order	for this plant today?		Medicinal (M)	Edible (E)	Other (O)	No Uses Reported (NU)	Notes of uses
Coccoloba changuinolana Coccoloba	Coccoloba lehmannii Lindau	Polygonaceae	Х	Х	Х	Х	M: As other members of the genus C. <i>lehmannii</i> may be used for the treatment of ailments such as headaches, ulcers, or digestive and intestine problems.
lehmannii							E: Edible fruit.
							O: Ornamental, fiber used as construction material.
							NU: Few or no reports of its uses.
							(Cárdenas, et.al., 2004; FLAAR Mesoamérica, 2024).
Coccoloba montana	Coccoloba montana Standl.	Polygonaceae				Х	NU: Few or no reports of its uses.
Coccoloba	Coccoloba P.Browne	Polygonaceae	Х	Х	Х		M: Parts of plants in the genus <i>Coccoloba</i> , such as leaves, seeds, and flowers, are employed in the treatment of medical complications such as skin-related diseases, headaches, digestive and intestinal disorders, and fevers.
							E: Edible fruit in most species from the genus <i>Coccoloba</i> . Used to make jellies, jams, or beverages or eaten fresh.
							O: Ornamental, fiber, and dry leaves used for construction material.
							(Córdova, et.al.,2004; Blancke, et.al., 2016).
Coccoloba viridis	Coccoloba venosa L.	Polygonaceae	Х	Х	Х	Х	M: Might be used in traditional medicine by indigenous communities in their native regions as other members of the genus.
							E: Edible fruit.
							O: Ornamental.
							NU: Few or no reports of its uses.
							(Useful Tropical Plants Database, 2014).

Genus, species from	What is the accepted name	Plant family				Uses	
<sup>'</sup> Lundell's 1961 list in alphabetical order	for this plant today?		Medicinal (M)	Edible (E)	Other (O)	No Uses Reported (NU)	Notes of uses
Colubrina arborescens	Colubrina arborescens Sarg.	Rhamnaceae	Х		Х		M: Plant used in treatments for gastrointestinal issues, skin conditions, and respiratory complaints mainly.
Colubrina obtusata							O: Fiber used as construction material; ornamental, wildlife attraction.
							(Maya Ethnobotany, 2019; Useful Tropical Plants, 2023).
Colubrina asiatica	Colubrina asiatica Brongn.	Rhamnaceae	Х			Х	M: Like other species within its genus, <i>C. asiatica</i> may possess properties in its leaves, roots, or flowers that are employed to address various ailments.
							NU: Few or no reports of its uses.
							(Useful Tropical Plants, 2023; Center for Aquatic Invasive Plants, 2024).
Colubrina anomala Colubrina beccariana	Colubrina beccariana Warb.	Rhamnaceae				Х	NU: Few or no reports of its uses.
Colubrina californica	I.M.Johnst.	Rhamnaceae	Х		Х	X	M: Employed in traditional medicine due to its anti-inflammatory and antibacterial attributes.
							O: Ornamental mainly.
							NU: Few or no reports of its uses.
							(Fernandez, 2010).
Colubrina celtidifolia	Colubrina celtidifolia	Rhamnaceae	Х		Х	Х	M: Employed in traditional medicine due to its anti-inflammatory and antibacterial attributes.
	Schltdl.						O: Ornamental mainly.
							NU: Few or no reports of its uses.
							(Selina Wamucii, 2023).

Genus, species from Lundell's	What is the accepted name	Plant family				Uses	
<sup>·</sup> Lundell's 1961 list in alphabetical order	for 'this plant today?		Medicinal (M)	Edible (E)	Other (O)	No Uses Reported (NU)	Notes of uses
Colubrina cordifolia	Colubrina cordifolia Reissek	Rhamnaceae	Х		Х		M: It may be employed to treat a range of ailments, including digestive issues, skin conditions, and respiratory complaints.
							O: Ornamental.
							(Selina Wamucii, 2023; Royal Botanic Gardens Kew, 2024).
Colubrina cubensis	Colubrina cubensis	Rhamnaceae	Х		Х	Х	M: Employed in traditional medicine due to its anti-inflammatory and antibacterial attributes.
	Brongn.						O: Ornamental mainly.
							NU: Few or no report of uses.
							(Selina Wamucii, 2023).
Colubrina cubensis var. ekmanii	Colubrina cubensis var. ekmanii M.C.Johnst.	Rhamnaceae				Х	NU: Few or no reports of its uses.
Colubrina cubensis var. floridana	Colubrina ehrenbergii Schltdl.	Rhamnaceae	Х			Х	M: As other members of the genus, may be employed in traditional medicine due to its properties with anti-inflammatory and antibacterial effect
							NU: Few or no report of uses.
							(Fernandez, 2010).
Colubrina elliptica	Colubrina elliptica (Sw.) Briz. & W.L.Stern	Rhamnaceae	X			Х	M: As other members of the genus, may be employed in traditional medicine due to its properties with anti-inflammatory and antibacterial effect.
							NU: Few or no report of uses.
							(Tree World Wholesale, 2022).

Genus, species from	What is the accepted name	Plant family		Uses					
<sup>'</sup> Lundell's 1961 list in alphabetical order	for this plant today?		Medicinal (M)	Edible (E)	Other (O)	No Uses Reported (NU)	Notes of uses		
Colubrina glandulosa	Colubrina glandulosa Perkins	Rhamnaceae	Х		Х		M: May be employed to treat various ailments, such as digestive issues, skin conditions, and respiratory complaints.		
Colubrina rufa var. glandulosa							O: Ornamental, fiber, and wood used as construction material.		
							(El catálogo de sombra, 2023).		
Colubrina rufa var. antillana	Colubrina glandulosa var. antillana (M.C.Johnst.)	Rhamnaceae	Х			Х	M: As other members of the genus may be employed to treat various ailments, such as digestive issues, skin conditions, and respiratory complaints.		
	M.C.Johnst.						NU: Few or no report of uses.		
							(Selina Wamucii, 2023).		
Colubrina nipensis	Colubrina glandulosa var. nipensis (M.C.Johnst.) M.C.Johnst.	Rhamnaceae	Х			Х	M: As other members of the genus may be employed to treat various ailments, such as digestive issues, skin conditions, and respiratory complaints.		
	IVI.C.JOHNSt.						NU: Few or no report of uses.		
							(Selina Wamucii, 2023).		
Colubrina rufa var. reitzii	Colubrina glandulosa var. reitzii (M.C.Johnst.)	Rhamnaceae	Х			Х	M: As other members of the genus may be employed to treat various ailments, such as digestive issues, skin conditions, and respiratory complaints.		
	M.C.Johnst.						NU: Few or no report of uses.		
							(Selina Wamucii, 2023).		
Colubrina greggii	Colubrina greggii S.Watson	Rhamnaceae	X			X	M: In some regions, extracts, or preparations from Colubrina greggii may be used for various ailments, including digestive issues, skin conditions, and respiratory complaints.		
							NU: Few or no report of uses.		
							(García, et.al., 2006).		

Genus, species from	What is the accepted name	Plant family	Uses					
<sup>·</sup> Lundell's 1961 list in alphabetical order	for this plant today?		Medicinal (M)	Edible (E)	Other (O)	No Uses Reported (NU)	Notes of uses	
Colubrina heteroneura	Colubrina heteroneura Standl.	Rhamnaceae	Х		Х	Х	M: As other members of the genus may be employed to treat various ailments, such as digestive issues, skin conditions, and respiratory complaints.	
							O: Fiber used as material construction; also used as source of fuel. It may have ceremonial or cultural significance in some areas.	
							NU: Few or no report of uses.	
							(Fernandez, 2010; Smithsonian Tropical Research Institute, 2023; Selina Wamucii, 2023).	
Colubrina macrocarpa	Colubrina macrocarpa G.Don	Rhamnaceae	Х		Х		M: Roots are used to treat cancer for their cytotoxic activity. Other ailments are treated with infusions or extractions from leaves, flowers or bark.	
							O: Wood and fiber used as construction material; leaves, seeds or flowers may be used to extract essential oils.	
							(Naturalist Newsletter, 2022; Selina Wamucii, 2023).	
Colubrina Ianulosa Colubrina	Colubrina macrocarpa var. lanulosa (S.F.Blake) M.C.Johnst.	Rhamnaceae	Х			Х	M: As other members of the genus may be employed to treat various ailments, such as digestive issues, skin conditions, and respiratory complaints.	
macrocarpa var. lanulosa	WI.C.JOHHSt.						NU: Few or no report of uses.	
							(Selina Wamucii, 2023).	
Colubrina greggii var. macrocarpoides	Colubrina macrocarpa var. macrocarpoides (Suess. ex Suess.	Rhamnaceae	Х		Х	Х	M: As other members of the genus may be employed to treat various ailments, such as digestive issues, skin conditions, and respiratory complaints.	
	& Overkott) M.C.Johnst						O: Wood and fiber used as fuel.	
							NU: Few or no report of uses.	
							(Selina Wamucii, 2023).	

Genus, species from	What is the accepted name	Plant family		·		Uses	
<sup>·</sup> Lundell's 1961 list in alphabetical order	for this plant today?		Medicinal (M)	Edible (E)	Other (O)	No Uses Reported (NU)	Notes of uses
Colubrina oppositifolia	Colubrina oppositifolia	Rhamnaceae			Х	Х	O: Wood and fiber used as fuel or construction material.
	Brongn. ex H.Mann						NU: Few or no report of uses.
	T. Warnin						(Hawaiian Native Plant Propagation Database, 2023).
Colubrina pedunculata	Colubrina pedunculata Baker f.	Rhamnaceae	X		Х		M: As other members of the genus, this species may be employed to treat various ailments, such as digestive issues, skin conditions, and respiratory complaints.
							O: Extractions from leaves may be used to hunt fish. Ornamental.
							(Fernandez, 2010).
Colubrina vellozii var. paranensis	Colubrina retusa (Pittier) R.S.Cowan	Rhamnaceae	Х			Х	M: As other members of the genus may be employed to treat various ailments, such as digestive issues, skin conditions, and respiratory complaints.
							NU: Few or no report of uses.
							(Li, et.al., 1999, Fernandez, 2010).
Colubrina Vellozii var. latifolia Colubrina Vellozii var. sprucei	Colubrina retusa var. latifolia (Reissek) M.C.Johnst.	Rhamnaceae				Х	NU: Few or no report of uses.
Cormonema spinosum var. latifolium							
Cormonema sprucei							

Genus, species from Lundell's	What is the accepted name	Plant family				Uses	
Lundell's 1961 list in alphabetical order	for this plant today?		Medicinal (M)	Edible (E)	Other (O)	No Uses Reported (NU)	Notes of uses
Cormonema Hybosperma Barcena Colubrina	**Colubrina Rich. ex Brongn.	Rhamnaceae	Х		X		M: Certain <i>Colubrina</i> genus species find applications in traditional medicine across diverse regions. They are harnessed to address various health concerns, including digestive disorders, skin-related conditions, and respiratory ailments. Some species may be used to treat cancer.
							O: Wood and fiber used as fuel and construction material. Some species are ornamental. In some regions may be used as an element for rituals or ceremonies.
							(Fernandez, 2010).
Colubrina sordida	Colubrina sordida M.C.Johnst.	Rhamnaceae				Х	NU: Few or no reports of its uses.
Colubrina spinosa	Colubrina spinosa Donn.Sm.	Rhamnaceae	Х			Х	M: Applied in traditional medicine to treat digestive issues and respiratory ailments by infusions or extractions of the leaves and flowers. NU: Few or no reports of its uses. (Ecos del bosque, 2019).
Colubrina spinosa var. Mexicana Cormonema mexicanum	Colubrina spinosa var. mexicana (Rose) M.C.Johnst.	Rhamnaceae				X	NU: Few or no reports of its uses; though may have similar uses as <i>C. spinosa.</i>

Genus, species from	What is the accepted name	Plant family				Uses	
Lundell's 1961 list in alphabetical order	for this plant today?		Medicinal (M)	Edible (E)	Other (O)	No Uses Reported (NU)	Notes of uses
Colubrina stricta Colubrina texensis var.	Colubrina stricta Engelm. ex M.C.Johnst.	Rhamnaceae	Х			X	M: Little is known about the medical applications of this plant; however, it is expected that its medicinal properties are like those of other species of the genus, such as the treatment for respiratory and skin ailments.
pedunculata							NU: Few or no reports of its uses.
							(Selina Wamucii, 2023).
Colubrina texensis	Colubrina texensis A.Gray	Rhamnaceae	Х			Х	M: Little is known about the medical applications of this plant; however, it is expected that its medicinal properties are like those of other species of the genus, such as the treatment for respiratory, digestive, and skin ailments.
							O: Ornamental, wood, and fiber used as fuel and construction material.
							(Wildflower Center: The University of Texas Plant Database, 2023).
Colubrina travancorica	Colubrina travancorica	Rhamnaceae	Х		Х		M: Leaves and roots present properties to treat digestive ailments mainly.
	Bedd.						O: Wood used as construction material. Ornamental and wildlife attraction.
							(Nisha y Saranaya, 2018).
Colubrina ehrenbergii	Colubrina triflora Brongn	Rhamnaceae				Х	NU: Few or no reports of uses.
Colubrina glomerata							

Genus, species from	What is the accepted name	Plant family		Uses					
<sup>·</sup> Lundell's 1961 list in alphabetical order	for this plant today?		Medicinal (M)	Edible (E)	Other (O)	No Uses Reported (NU)	Notes of uses		
Colubrina verrucosa Hybosperma spinosum Hybosperma verrucosum Colubrina	Colubrina stricta Engelm. ex M.C.Johnst.	Rhamnaceae	Х			Х	M: Employed in traditional medicine for the treatment of various conditions. NU: Few or no reports of uses. (FLAAR Mesoamérica, 2024).		
urbanii Colubrina viridis Colubrina glabra	Colubrina viridis (M.E.Jones) M.C.Johnst.	Rhamnaceae				Х	NU: Few or no reports of uses. Little is known about its uses.		
Colubrina greggii var. yucatanensis	Colubrina yucatanensis (M.C.Johnst.) G.L.Nesom	Rhamnaceae	Х			Х	M: May be applied to treat various ailments, such as digestive issues, skin conditions, and respiratory complaints. NU: Few or no reports of uses. (FLAAR Mesoamérica).		
Crossopetalum gaumeri Myginda gaumeri Rhacoma gaumeri	**Crossopetalum gaumeri (Loes.) Lundell	Celastraceae			Х	X	O: They might be used in rituals, ceremonies, or other cultural practices. Mainly wild plants. NU: Few or no reports of uses. (FLAAR Mesoamérica).		

Genus, species from Lundell's	What is the accepted name	Plant family				Uses	
<sup>·</sup> Lundell's 1961 list in alphabetical order	ist in todaỳ? etical		Medicinal (M)	Edible (E)	Other (O)	No Uses Reported (NU)	Notes of uses
Microtropis filipes	**Crossopetalum filipes (Sprague) Lundell	Celastraceae				Х	NU: Few or no reports of uses. Little is known about its uses.
Myginda gentlei							
Myginda puberula							
Crossopetalum filipes							
Crossopetalum gentlei							
Crossopetalum puberulum							
Rhacoma gentlei							
Rhacoma puberula							
Crossopetalum gaumeri	**Crossopetalum gaumeri (Loes.)	Celastraceae			Х	Х	O: They might be used in rituals, ceremonies, or other cultural practices.
Myginda	Lundell						Mainly wild plants.
gaumeri							NU: Few or no reports of uses.
Rhacoma gaumeri							(FLAAR Mesoamérica).
Rhacoma	Crossopetalum	Celastraceae			Х	Х	O: Mainly wild plants.
lanceifolia	lanceifolium (Lundell) Lundell						NU: Few or no reports of uses.

Genus, species from	What is the accepted name	Plant family	Uses					
<sup>·</sup> Lundell's 1961 list in alphabetical order	for this plant today?		Medicinal (M)	Edible (E)	Other (O)	No Uses Reported (NU)	Notes of uses	
Crossopetalum macrocarpum Myginda macrocarpa Rhacoma macrocarpa	**Crossopetalum macrocarpum (Brandegee) Lundell	Celastraceae				Х	NU: Few or no reports of uses.	
Rhacoma managuatillo Crossopetalum managuatillo	Crossopetalum managuatillo (Loes.) Lundell	Celastraceae			Х	Х	O: They might be used in rituals, ceremonies, or other cultural practices. NU: Few or no reports of uses. (Cué, et.al., 2006).	
Crossopetalum oxyphyllum Myginda oxyphylla Rhacoma oxyphylla	**Crossopetalum oxyphyllum (S.F.Blake) Lundell	Celastraceae			Х	Х	O: They might be used in rituals, ceremonies, or other cultural practices. Dry fiber used as fuel material. NU: Few or no reports of uses. (FLAAR Mesoamérica).	
Crossopetalum Myginda Rhacoma	**Crossopetalum P.Browne	Celastraceae						

Genus, species from Lundell's	What is the accepted name	Plant family				Uses	
Lundell's 1961 list in alphabetical order	for this plant today?		Medicinal (M)	Edible (E)	Other (O)	No Uses Reported (NU)	Notes of uses
Crossopetalum parviflorum Crossopetalum eucymosum Euonymus parviflorus Myginda eucymosa Myginda parviflora Microtropis parviflora Rhacoma eucymosa Rhacoma parviflora	**Crossopetalum parviflorum (Hemsl.) Lundell	Celastraceae			X	X	O: Used for firewood and fence posts. Specific uses may vary depending on regional cultural practices and traditions. It may have ceremonial or cultural significance in some areas. NU: Few or no reports of uses. (Austin, 2004).
Crossopetalum riparium Myginda riparia Rhacoma riparia	**Crossopetalum riparium (Lundell) Lundell	Celastraceae				X	NU: Few or no reports of uses. Little is known about its uses.

Genus, species from Lundell's	What is the accepted name	Plant family	Uses							
Lundell's 1961 list in alphabetical order	for this plant today?		Medicinal (M)	Edible (E)	Other (O)	No Uses Reported (NU)	Notes of uses			
Crossopetalum standleyi Myginda standleyi Rhacoma standleyi	**Crossopetalum standleyi (Lundell) Lundell	Celastraceae			Х	X	O: They might be used in rituals, ceremonies, or other cultural practices. Dry fiber used as fuel material. Dry leaves used as fuel material or to make compost. NU: Few or no reports of uses. (Parker, 2008).			
Ardisia amplifolia Yunckeria amplifolia	**Ctenardisia amplifolia (Standl.) Lundell	Primulaceae			Х	X	O: Bark used as construction material. Fiber and dry leaves used as fuel or firewood. NU: Few or no reports of uses. Little is known about its uses. (Parker, 2008).			
Yunckeria	**Ctenardisia Ducke	Primulaceae	Х		Х	Х	M: It is known that plants of this genus have medicinal properties; however, to confirm this information, it is necessary to increase research efforts and continue exploring how native communities use this genus of plants for medicinal purposes.			
							O: Fiber used as fuel and construction material. Some plants of this genus might be used in rituals, ceremonies, or other cultural practices NU: Few or no reports of uses.			
							(Pérez, 2008; Christenhusz et.al., 2017).			
Ardisia ovandensis Yunckeria ovandensis	Ctenardisia ovandensis (Lundell) Lundell	Primulaceae				Х	NU: Few or no reports of uses. Little is known about its uses.			

Genus, species from	What is the accepted name	Plant family				Uses	
Lundell's 1961 list in alphabetical order	for this plant today?		Medicinal (M)	Edible (E)	Other (O)	No Uses Reported (NU)	Notes of uses
Ardisia purpusii Brandegee Yunckeria purpusii	Ctenardisia purpusii (Brandegee) Lundell	Primulaceae				X	NU: Few or no reports of uses. Little is known about its uses.
Cupania	Cupania L.	Sapindaceae	Х	Х	Х		M: Plants of this genus are utilized as herbal remedies for addressing respiratory, digestive, circulatory, and dermatological conditions.
							E: Some <i>Cupania</i> species produce edible fruits, which are consumed by local communities or wildlife. These fruits may have nutritional value and are used for culinary purposes.
							O: Ornamental, wood, and fiber used as construction or fuel material.
							(Hernandez, et.al., 2012; Sobottka, et.al., 2021).
Cupania schippii Colubrina texensis var. pedunculata	Cupania spectabilis Radlk.	Sapindaceae	Х		Х		NU: Few or no reports of uses. Little is known about its uses.
Cypripedium	Cypripedium L.	Orchidaceae			Х		O: Ornamental or no uses.
Cypripedium calceolus var. pubescens	Cypripedium parviflorum var. pubescens O.W.Knight	Orchidaceae			Х		O: Ornamental or no uses.
Cystopteris	Cystopteris Bernh.	Cystopteridaceae			Х		O: No uses found. May be ornamental.

Genus, species from	species from   accepted name			Uses							
<sup>'</sup> Lundell's 1961 list in alphabetical order	for this plant today?	family	Medicinal (M)	Edible (E)	Other (O)	No Uses Reported (NU)	Notes of uses				
Cystopteris bulbifera	Cystopteris bulbifera (L.) Bernh.	Cystopteridaceae			Х		O: No uses found. May be used as ornamental or decoration.				
Dasylirion	Dasylirion Zucc.	Asparagaceae	Х	Х	X		M: Some indigenous communities have used Dasylirion species in traditional medicine for various purposes, although this use is less common. However, to confirm this information, it is necessary to increase research efforts and continue exploring how native communities use this genus of plants for medicinal purposes.				
							E: The core of the <i>Dasylirion</i> plant, known as the "piña," is used to make a traditional alcoholic beverage called "sotol." Beverage is similar to mezcal and tequila.				
							O: Leaves long, tough fibers. These fibers were/are used by indigenous communities for weaving baskets, mats, cords, and other utilitarian items, ornamental.				
							(The University of Arizona, 2012; The University of Texas at Austin Plant Database, 2017; Flores, et.al., 2019; Picture This, 2023).				
Dichapetalum axillare	Dichapetalum axillare Woodson	Dichapetalaceae	Х		Х		M: In some traditional practices, parts of the plant have been used for medicinal purposes. However, its toxic nature makes it a potentially dangerous choice for traditional medicine, and its use in this context is discouraged.				
							O: Similar to other species of the genus, it might be used as fish poison in different regions. Its crushed or ground leaves and seeds are mixed with water and introduced into bodies of water to immobilize fish, facilitating their capture.				
							(Selina Wamucii, 2023; Smithsonian Tropical Research Institute, 2024; FLAAR Mesoamérica, 2024).				

Genus, species from	What is the accepted name	Plant family				Uses	
<sup>·</sup> Lundell's 1961 list in alphabetical order	for <sup>'</sup> this plant today?		Medicinal (M)	Edible (E)	Other (O)	No Uses Reported (NU)	Notes of uses
Dichapetalum	Dichapetalum	Dichapetalaceae				Х	NU: Few or no reports of uses.
brenesii	brenesii Standl						Not well-documented in terms of its specific uses and properties.
Dichapetalum bullatum	Dichapetalum bullatum Standl. & Steyerm.	Dichapetalaceae			Х	Х	Very toxic plant for humans. O: While some <i>Dichapetalum</i> species have been used traditionally for various purposes, <i>Dichapetalum bullatum</i> is primarily known for its toxic nature. It is not commonly used for medicinal, culinary, or other practical applications due to its dangerous properties.
							NU: Few or no reports of uses.
							**No uses.
							(Barton, et.al., 1999; Parker, 2008; FLAAR Mesoamérica, 2024).
Dichapetalum Donnell-	Dichapetalum donnell-smithii	Dichapetalaceae			Х		Contains toxic compounds. These compounds are highly toxic and can be lethal if ingested.
Smithii	Engl.						O: Like other species of the genus, it might be used as fish poison. The crushed or ground seeds or leaves of the plant are mixed with water and introduced into bodies of water to immobilize and catch fish.
							**Few uses.
							(Barton, et.al., 1999; Constable, et.al., 2017; FLAAR Mesoamérica, 2024).
Dichapetalum	Dichapetalum	Dichapetalaceae			Х	Х	Very toxic plant for humans.
chiapasense Dichapetalum	donnell-smithii var. chiapasense (Standl.)						It is expected to have similar uses to those of Dichapetalum donnell-smithii.
gentlei	(Standi.)						NU: Few or no reports of uses.
							(Barton, et.al., 1999; Constable, et.al., 2017; FLAAR Mesoamérica, 2024).

Genus, species from	What is the accepted name	Plant family				Uses	
<sup>·</sup> Lundell's 1961 list in alphabetical order	for this plant today?		Medicinal (M)	Edible (E)	Other (O)	No Uses Reported (NU)	Notes of uses
Dichapetalum nevermannianum	Dichapetalum nevermannianum Standl. & Valerio	Dichapetalaceae			Х	X	Primarily known for its toxic properties, and its uses are generally limited due to its dangerous nature. Some potential traditional uses may exist, but they are typically discouraged due to the plant's extreme toxicity.
							O: Used as a fish poison, similar to other Dichapetalum species.
							NU: Few or no reports of uses.
							(Barton, et.al., 1999; Constable, et.al., 2017; FLAAR Mesoamérica, 2024).
Dichapetalum	Dichapetalum Thouars	Dichapetalaceae			Х	Х	Genus of plants known for its toxic properties and limited traditional uses, primarily as fish poisons.
							Very toxic plants: contain highly toxic compounds. These compounds can be lethal to various organisms, including humans.
							O: Seeds or leaves are crushed or ground, and the toxic compounds within them are mixed with water and introduced into bodies of water. This immobilizes and makes it easier to catch fish.
							NU: Few or no reports of uses.
							Limited documented uses for <i>Dichapetalum</i> species, and their use for any practical or medicinal applications is generally avoided due to their toxic nature.
							(Barton, et.al., 1999; Constable, et.al., 2017; FLAAR Mesoamérica, 2024).

Genus, species from	What is the accepted name	Plant family				Uses	
<sup>·</sup> Lundell's 1961 list in alphabetical order	for <sup>'</sup> this plant today?		Medicinal (M)	Edible (E)	Other (O)	No Uses Reported (NU)	Notes of uses
Dicraspidia	Dicraspidia Standl	Muntingiaceae	Х	Х	Х	Х	M: Used for treating digestive disorders, inflammation, and skin conditions.
							E: Some species of the genus may be used for teas and infusions.
							O: Ornamental; may play a role in agricultural practices, such as cover cropping, green manure, or as a source of mulch.
							NU: Few or no reports of uses. Uses are not widely documented or well- known. Consultations from experts or communities about the genus of the plant and its uses are needed.
							(Marteen, et.al, 2017; Selina Wamucii, 2024).
Didiplis diandra	**Didiplis diandra Wood	Lythraceae			Х	Х	O: Ornamental, aquarium plant. NU: Few or no reports of uses.
Peplis diandra							
Didiplis	Didiplis Raf.	Lythraceae			Х	Х	Genus reported to be mainly ornamental. They are primarily cultivated for their aesthetic qualities, including their vibrant and attractive foliage.
							O: Ornamental, aquarium plant.
							NU: Few or no reports of uses.
Dioscorea villosa Dioscorea quaternata	Dioscorea villosa L.	Dioscoreaceae	Х				M: Used to alleviate symptoms associated with the menstrual cycle, such as cramps and discomfort; used for its potential anti-inflammatory effects. It may be applied topically to soothe inflammatory skin conditions; employed to support digestive health and alleviate issues such as indigestion and gastrointestinal discomfort; antispasmodic to relieve muscle spasms and cramping.
							(Hananja y Mcdermott, 2019; Marby, 2023).

Genus, species from	What is the accepted name	Plant family				Uses	
<sup>·</sup> Lundell's 1961 list in alphabetical order	for this plant today?		Medicinal (M)	Edible (E)	Other (O)	No Uses Reported (NU)	Notes of uses
Dioscorea	Dioscorea L.	Asparagaceae	Х	Х	х		M: May be used to treat various ailments, such as digestive disorders, inflammatory conditions, and skin issues. However, the specific medicinal uses can vary depending on the cultural practices of the region.
							E: Some species**: Tubers of the plant are a significant food source in many regions. Also known as "Yams". Can be cooked in various ways, including boiling, roasting, frying, or mashing, and are used in a wide range of dishes.
							O: Ornamental; significant in cultural and religious rituals in many societies. They are often used as offerings or symbols of abundance and fertility; fiber may be used as fuel material.
							(Salehi, et.al., 2019; Zabetakis, et.al., 2023).
Diospyros anisandra	Diospyros anisandra S.F.Blake	Ebenaceae	Х	Х	Х		M: Bark or leaves have been used for their potential medicinal properties such as skin conditions. However, it's essential to note that scientific evidence supporting these medicinal uses is limited.
							E: Edible fruit.
							O: Ornamental; used for various purposes, such as construction or carpentry, although it is not as commonly used for these purposes as some other timber species.
							(Rosado, et.al., 2008).

Genus, species from	What is the accepted name	Plant family		Uses							
<sup>·</sup> Lundell's 1961 list in alphabetical order	for this plant today?		Medicinal (M)	Edible (E)	Other (O)	No Uses Reported (NU)	Notes of uses				
Diospyros bumelioides	Diospyros bumelioides	Ebenaceae	Х	Х	Х	Х	M: Leaves used to treat skin conditions mainly. Few reports of its medical uses.				
	Standl.						E: Edible fruit.				
							O: Wood and fiber used as fuel and construction material.				
							NU: Few or no reports of uses. Little is known about its uses.				
							(García, et.al., 2015; FLAAR Mesoamerica, 2024).				
Diospyros	Diospyros L.	Ebenaceae	Х	Х	Х		M: Use of leaves, bark, and roots for various purposes, such as treating digestive issues, inflammation, and skin conditions. The properties and medical effects may change within species.				
							E: Edible fruit. For some species the leaves may be used for teas or infusions.				
							O: Wood and fiber used as construction and fuel material. Some species may be used as ornamental. Seeds and leaves used to extract essential oils.				
							(García, et.al., 2015; Rauf, et.al., 2017; FLAAR Mesoamérica, 2024).				
Diospyros cuneata	Diospyros tetrasperma Sw.	Ebenaceae	Х	Х	X		M: Used to address digestive issues, including diarrhea, stomach discomfort, and constipation. Also thought to have anti- inflammatory properties.				
							E: Edible fruit: ich in vitamins and minerals, particularly vitamin C, dietary fiber, and various antioxidants.				
							O: Ornamental. Dry leaves used as fuel material.				
							(Arellano, 2003; Rauf, et.al., 2017).				

Genus, species from	What is the accepted name	Plant family	Uses						
<sup>'</sup> Lundell's 1961 list in alphabetical order	for this plant today?		Medicinal (M)	Edible (E)	Other (O)	No Uses Reported (NU)	Notes of uses		
Diospyros texana	Diospyros texana Scheele	Ebenaceae	X	Х			M: Similar to other species of the genus, <i>D.texana</i> may exhibit various remedies for conditions like diarrhea, digestive problems, and skin issues.		
							E: Edible fruits. Like other species of the genus, it is known to have various properties like Vitamin C and other antioxidants.		
							(The University Of Texas At Austin Plant Database, 2022; Picture This, 2023; Botanica Online SL, 2024).		
Diospyros yatesiana	Diospyros yatesiana	Ebenaceae	Х	Х	Х		M: Leaves, seeds or bark used for digestive remedies and skin conditions mainly.		
	Standl.						E: Edible fruit.		
							O: May have cultural and spiritual significance in some indigenous communities. The tree or its fruit may be used in rituals, ceremonies, or cultural practices or as construction material.		
							(Flora de la península de Yucatán, 2010; Earth. Com, 2024; FLAAR Mesoamérica, 2024).		
Diospyros yucatanensis	Diospyros yucatanensis Lundell.	Ebenaceae	Х	Х			NU: Few or no reports of uses.		
Diospyros spectabilis	Diospyros yucatanensis subsp. spectabilis (Lundell) Provance, I.García & A.C.Sanders	Ebenaceae	Х	Х	Х		NU: Few or no reports of uses.		

Genus, species from	What is the accepted name	Plant family			Uses		
<sup>·</sup> Lundell's 1961 list in alphabetical order	for this plant today?		Medicinal (M)	Edible (E)	Other (O)	No Uses Reported (NU)	Notes of uses
Drimys	Drimys J.R.Forst. & G.Forst	Winteraceae	Х	Х	X		M: Some species are used to treat different ailments; bark can be used for digestion problems including intestinal gas (flatulence), colic, and stomachache. Other properties of the genus include anti-inflammatory, analgesic characteristics. Properties and medical applications may vary within species and communities.
							E: As a spice, condiment, or flavoring.
							O: Known for their aromatic qualities, it is used in soap, shampoo, or perfume. Essential oils are extracted from seeds, flowers, or leaves; ornamental; uses include ceremonial or spiritual purposes, as well as traditional remedies for specific health issues.
							(Muñoz. 2001; Good, 2010 (1847); Rizoma, 2022; Plants for a Future, 2024).
Eragrostis cilianensis	Eragrostis cilianensis (All.) Vignolo ex	Poaceae	Х			Х	M: Roots or leaves have been employed in remedies for ailments like digestive issues or as a diuretic.
	Janch.						NU: Few or no reports of uses. Little is known about its uses.
							(Useful Tropical Plants, 2022).
Eragrostis curvula Eragrostis chloromelas Eragrostis robusta	Eragrostis curvula (Schrad.) Nees	Poaceae			Х		O: Used for pasture and forage in regions with suitable climates. The grass is known for its high palatability and nutritional value, providing food for grazing animals like cattle and sheep; utilized for its ability to help control soil erosion. (Useful Tropical Plants, 2022).

Genus, species from	What is the accepted name	Plant family				Uses	
Lundell's 1961 list in alphabetical order	for this plant today?		Medicinal (M)	Edible (E)	Other (O)	No Uses Reported (NU)	Notes of uses
Eragrostis heteromera	Eragrostis heteromera Stapf	Poaceae			Х		O: Soil stabilization, particularly in areas prone to erosion. May be used as an ornamental plant.
							Mainly a wild weed.
							(Plants of the World, 2023).
Eragrostis intermedia	Eragrostis intermedia Hitchc	Poaceae			Х	Х	O: Used as forage for livestock, including cattle and horses. Unlike other species of the genus, <i>E. intermedia</i> helps stabilize soil and prevent soil erosion. Used with agricultural proposes: this grass is adapted to regions with dry and arid conditions and exhibits drought tolerance, making it suitable for cultivation in areas with limited water resources. May be used as an ornamental plant.
							Mainly wild weeds.
							(Burayu y Umeda, 2021; Picture This, 2023; FLAAR Mesoamérica, 2024).
Eragrostis Iehmanniana	Eragrostis Iehmanniana Nees	Poaceae			Х		O: Used for Forage and grazing of cattle; erosion control, soil stabilization; ornamental landscaping.
							Mainly a wild weed.
							(Tan, 2015).
Eragrostis obtusa	Eragrostis obtusa Munro ex Ficalho &	Poaceae			Х	Х	O: Used for forage and grazing of cattle; erosion control, soil stabilization; ornamental landscaping.
	Hiern						Mainly a wild weed.
							NU: Few or no reports of uses. Little is known about its uses.
							(Selina Wamucii, 2024).

Genus, species from	What is the accepted name	Plant family				Uses	
<sup>·</sup> Lundell's 1961 list in alphabetical order	for this plant today?		Medicinal (M)	Edible (E)	Other (O)	No Uses Reported (NU)	Notes of uses
Eragrostis bicolor	Eragrostis pilosa (L.) P.Beauv.	Poaceae			Х		O: Used for soil erosion control. Its root system and dense growth can help stabilize soil, making it a valuable species for preventing erosion on slopes, along waterways, and in areas prone to soil degradation; used in horticultural and ornamental landscaping, particularly in gardens and landscapes.
							(Picture This, 2023; Plants For a Future).
Eragrostis plana	Eragrostis plana Nees	Poaceae			Х	Х	O: Used for forage and grazing of cattle; erosion control, soil stabilization; ornamental landscaping.
							NU: Few or no reports of uses. Little is known about its uses.
							(Ziller, 2015; Selina Wamucii, 2023).
Eragrostis superba	Eragrostis superba Peyr.	Poaceae			Х	Х	O: Used for forage and grazing of cattle; erosion control, soil stabilization; ornamental landscaping.
							NU: Few or no reports of uses. Little is known about its uses.
							(SANBI, 2023).
Eragrostis	Eragrostis Wolf	Poaceae	Х	Х	Х		M: Some species may exhibit properties to treat ailments, especially digestive problems. The roots or leaves of some species have been employed in remedies for ailments like digestive issues or as a diuretic.
							E: Some plants might be used as ingredients for cereals and/or oatmeals.
							O: Uses in agriculture, landscaping, and ecology: Used for forage and grazing of cattle; erosion control, soil stabilization; ornamental landscaping.
							(Preedy, 2015; Ziller, 2015; AGT Foods Africa, 2018).

Genus, species from	What is the accepted name	Plant family				Uses	
<sup>'</sup> Lundell's 1961 list in alphabetical order	for this plant today?		Medicinal (M)	Edible (E)	Other (O)	No Uses Reported (NU)	Notes of uses
Microtropis	**Euchlora Eckl. & Zeyh	Fabaceae			Х		Genus of plants primarily recognized as an ornamental plant in horticulture and landscaping.
							O: Plants of the genus are cultivated for their ornamental value. They are appreciated for their attractive foliage and flowers and are often grown in gardens and landscapes as ornamental plants; may be cultivated for their aesthetic qualities. The trees and its flowers are very important to attract wildlife, especially pollinators like bees and butterflies.
							(Boawright, 2011; Gardenia, 2024).
Eugenia comitanensis	Eugenia acapulcensis Steud.	Myrtaceae	Х	Х	Х		M: Leaves and fruit used may include remedies for digestive issues, such as diarrhea and stomach discomfort, as well as for their potential antimicrobial properties.
							E: Edible fruit; the fruit is small, has a sweet and mildly tangy flavor. Consumed fresh and is used in various culinary applications, such as making jams, jellies, and beverages.
							O: Ornamental plant; may be used to extract essential oils.
							(Vila, et.al., 2004; Chadwick and Marshal, 2008; Royal Botanic Gardens, 2024).
Eugenia amatenangensis	Eugenia amatenangensis Lundell	Myrtaceae	Х	Х			M: Parts of the plant, such as leaves or fruits, may be used for potential remedies; little is known about the medical applications of this species.
							E: May be used for culinary purposes. Depending on the flavor and properties of the fruit, it could be consumed fresh, used in cooking, or for making jams, jellies, or beverages.
							(FLAAR Mesoamérica, 2024; Selina Wamucii, 2024).

Genus, species from Lundell's	What is the accepted name	Plant family				Uses	
<sup>·</sup> Lundell's 1961 list in alphabetical order	for this plant today?		Medicinal (M)	Edible (E)	Other (O)	No Uses Reported (NU)	Notes of uses
Eugenia axillaris Eugenia guttata Eugenia itzana	Eugenia axillaris (Sw.) Willd.	Myrtaceae		Х	Х		E: Edible fruits: fruits are typically white or pale yellow when ripe and are known for their pleasant flavor, which can be sweet and slightly tart. Consumed fresh when fully ripe. Used in making jams, jellies, and preserves. Used in culinary applications to add a sweet and tangy element to dishes.
Eugenia							O: Ornamental; wildlife attraction; horticultural and gardening interest.
minimiflora							(Tree Wholesale, 2022; Picture This, 2023).
Eugenia cantuana	Eugenia cantuana	Myrtaceae				Х	As other Eugenia species, it is possible that the fruit is consumed locally.
	Lundell						NU: Few or no reports of uses. Little is known about its uses.
Eugenia capuli Eugenia	Eugenia capuli Schltdl.	Myrtaceae	X	Х	Х		M: Used as remedies for digestive issues, such as diarrhea or stomach discomfort; also exhibits antimicrobial and anti-inflammatory properties.
lindeniana Eugenia capuli var. Lindeniana							E: Edible fruit: red or dark purple when ripe. Fruit has a sweet-tart flavor and is enjoyed fresh as a snack or dessert. Used in the preparation of jams, jellies, and beverages.
Eugenia							O: Ornamental; wildlife attraction; horticultural and gardening interest.
tenuissima							(Rebollar y Tapia, 2010; Balick and Arvigo, 2015).
Eugenia chinajensis	Eugenia chinajensis	Myrtaceae				Х	As other <i>Eugenia</i> species, it is possible that the fruit is consumed locally.
	Standl. & Steyerm.						NU: Few or no reports of uses. Little is known about its uses.

Genus, species from	What is the accepted name	Plant family				Uses	
<sup>-</sup> Lundell's 1961 list in alphabetical order	for this plant today?		Medicinal (M)	Edible (E)	Other (O)	No Uses Reported (NU)	Notes of uses
Eugenia crenularis	Eugenia crenularis	Myrtaceae				Х	As other Eugenia species, it is possible that the fruit is consumed locally.
	Lundell						NU: Few or no reports of uses. Little is known about its uses.
Eugenia hintonii	Eugenia crenularis	Myrtaceae		Х	Х		As other <i>Eugenia</i> species, it is possible that the fruit is consumed locally.
	Lundell						NU: Few or no reports of uses. Little is known about its uses
Eugenia culminicola	Eugenia culminicola	Myrtaceae				Х	As other <i>Eugenia</i> species, it is possible that the fruit is consumed locally.
	McVaugh						NU: Few or no reports of uses. Little is known about its uses.
Eugenia doubledayi	Eugenia doubledayi	Myrtaceae				Х	As other <i>Eugenia</i> species, it is possible that the fruit is consumed locally.
	Standl.						NU: Few or no reports of uses. Little is known about its uses.
Eugenia flavida Eugenia	Eugenia flavoviridis Lundell	Myrtaceae				Х	Eugenia flavoviridis information may not be widely available and limited, but many Eugenia species have similar potential uses and applications.
flavoviridis							NU: Few or no reports of uses. Little is known about its uses.
Eugenia argyrea	Eugenia galalonensis (Griseb.) Krug & Urb.	Myrtaceae				Х	Information on this species may not be widely available and limited, but many <i>Eugenia</i> species have similar potential uses and applications.
							As other <i>Eugenia</i> species, it is possible that the fruit is consumed locally.
							NU: Few or no reports of uses. Little is known about its uses.

Genus, species from	What is the accepted name	Plant family				Uses	
<sup>•</sup> Lundell's 1961 list in alphabetical order	for this plant today?		Medicinal (M)	Edible (E)	Other (O)	No Uses Reported (NU)	Notes of uses
Eugenia lundellii	Eugenia gaumeri Standl	Myrtaceae				Х	Information about <i>Eugenia gaumeri</i> may not be widely available and is limited, but many <i>Eugenia</i> species have similar potential uses and applications.
							As other <i>Eugenia</i> species, it is possible that the fruit is consumed locally.
							NU: Few or no reports of uses. Little is known about its uses.
Eugenia guatemalensis	Eugenia guatemalensis Donn.Sm	Myrtaceae				Х	Eugenia guatemalensis information may not be widely available and is limited, but many Eugenia species have similar potential uses and applications.
							As other <i>Eugenia</i> species, it is possible that the fruit is consumed locally.
							NU: Few or no reports of uses. Little is known about its uses.
Eugenia koepperi	Eugenia koepperi Standl.	Myrtaceae				Х	Eugenia kopperi information may not be widely available and is limited, but many Eugenia species have similar potential uses and applications.
							As other <i>Eugenia</i> species, it is possible that the fruit is consumed locally.
							NU: Few or no reports of uses. Little is known about its uses.

Genus, species from	What is the accepted name	Plant family		Uses							
Lundell's 1961 list in alphabetical order	for this plant today?		Medicinal (M)	Edible (E)	Other (O)	No Uses Reported (NU)	Notes of uses				
Eugenia	Eugenia L.	Myrtaceae	X	X	X		<ul> <li>M: Leaves, fruits, or bark have been used in traditional or indigenous medicine. These uses may include remedies for various health issues, such as digestive problems or respiratory conditions.</li> <li>E: Some Eugenia species produce edible fruits, and these fruits are often consumed fresh. Also be used in culinary applications, such as making jams, jellies, pies, and desserts. Fruits are valued for their sweet or tangy flavors.</li> <li>O: Ornamental; wildlife attraction; horticultural and gardening interest; bark and fiber may be used as construction or fuel material.</li> <li>For some species of the genus, there is little or limited information, which enhances the importance of increasing the research efforts.</li> <li>(Rebollar y Tapia, 2010; Balick y Arvigo, 2015;</li> </ul>				
Eugenia calciphila	Eugenia laevis O.Berg	Myrtaceae			X	X	De Souza, et.al., 2018; GTUSH, 2023). Eugenia laevis information may not be widely available and is limited, but many Eugenia species have similar potential uses and applications. As other Eugenia species, it is possible that the fruit is consumed locally. O: Aromatic leaves used for their pleasant scent in various ways, such as in potpourri, scented oils, or for culinary purposes. NU: Few or no reports of uses. Little is known about its uses.				

Genus, species from	What is the accepted name	Plant family				Uses	
'Lundell's 1961 list in alphabetical order	for this plant today?		Medicinal (M)	Edible (E)	Other (O)	No Uses Reported (NU)	Notes of uses
Eugenia letreroana	Eugenia letreroana	Myrtaceae				Х	As other <i>Eugenia</i> species, it is possible that the fruit is consumed locally.
	Lundell						NU: Few or no reports of uses. Little is known about its uses.
Eugenia michoacanensis	Eugenia michoacanensis	Myrtaceae				Х	As other <i>Eugenia</i> species, it is possible that the fruit is consumed locally.
	Lundell						NU: Few or no reports of uses. Little is known about its uses.
Eugenia octopleura	Eugenia octopleura Krug & Urb.	Myrtaceae			Х		It is not as well-known for its fruit production, it's possible that the fruits may have culinary potential.
							O: Used as a hedge or screen in gardens and landscapes. It can provide privacy and serve as a windbreak; used to help control soil erosion in some regions.
							(Tenorio, et.al., 2011).
Eugenia ovandensis	Eugenia ovandensis Lundell	Myrtaceae					Eugenia ovandensis information may not be widely available and is limited, many Eugenia species have similar potential uses and applications.
							As other <i>Eugenia</i> species, it is possible that the fruit is consumed locally.
							NU: Few or no reports of uses. Little is known about its uses.
Eugenia kellermanii	Eugenia pittieri Standl.	Myrtaceae			Х	Х	O: Often cultivated as an ornamental plant for its attractive features; the plant's dense and bushy growth habit makes it suitable for use as a hedge or screen in gardens and landscapes.
							NU: Few or no reports of uses. Little is known about its uses.
							(Selina Wamucii, 2023).

Genus, species from	What is the accepted name	Plant family				Uses	
<sup>·</sup> Lundell's 1961 list in alphabetical order	for this plant today?		Medicinal (M)	Edible (E)	Other (O)	No Uses Reported (NU)	Notes of uses
Eugenia pueblana	Eugenia pueblana Lundell	Myrtaceae			Х	X	Eugenia pueblana information may not be widely available and is limited, but many Eugenia species have similar potential uses and applications. As other Eugenia species, it is possible that the fruit is consumed locally. NU: Few or no reports of uses. Little is known about its uses.
Eugenia riograndis	Eugenia riograndis Lundell	Myrtaceae	X	X			M: Fruit, leaves, and bark have been used for traditional medicinal purposes. Used to treat colds, skin conditions and digestive problems. E: Edible fruit: produces small, round to oval, purple to black fruits with a sweet and tangy flavor. These fruits are typically eaten fresh, and they can be used to make jams, jellies, and desserts. The fruit is rich in vitamin C and antioxidants; used to make traditional beverages, such as "Guabiju" wine or liqueurs. (Souza, et.al., 2018; Lazarini, et.al., 2020; FLAAR Mesoamérica, 2024).
Eugenia rubella	Eugenia rubella Lundell	Myrtaceae		Х	Х		Eugenia rubella information may not be widely available and is limited, but many Eugenia species have similar potential uses and applications. As other Eugenia species, it is possible that the fruit is consumed locally. NU: Few or no reports of uses. Little is known about its uses.

Genus, species from	What is the accepted name	Plant family		Uses						
<sup>'</sup> Lundell's 1961 list in alphabetical order	for this plant today?		Medicinal (M)	Edible (E)	Other (O)	No Uses Reported (NU)	Notes of uses			
Eugenia sasoana	Eugenia sasoana Standl. & Steyerm.	Myrtaceae				Х	Eugenia sasoana information may not be widely available and is limited, but many Eugenia species have similar potential uses and applications.			
							As other <i>Eugenia</i> species, it is possible that the fruit is consumed locally.			
							NU: Few or no reports of uses. Little is known about its uses.			
Eugenia savannarum	Eugenia savannarum	Myrtaceae			Х	Х	As other <i>Eugenia</i> species, it is possible that the fruit is consumed locally.			
	Standl. & Steyerm.						O: The dense growth habit and root system of <i>Eugenia savannarum</i> can make it suitable for controlling soil erosion in some regions; cultivated as ornamental plants due to their attractive features. This may include glossy leaves and beautiful flowers, making them suitable for use in landscaping and gardens.			
							NU: Few or no reports of uses. Little is known about its uses.			
							(Earth.com, 2014; Souza, et.al., 2018).			
Eugenia uliginosa	Eugenia uliginosa Lundell	Myrtaceae				Х	NU: Few or no reports of uses. Little is known about its uses.			
Eugenia ursina	Eugenia ursina Lundell	Myrtaceae				Х	NU: Few or no reports of uses. Little is known about its uses.			
Eugenia origanoides	Eugenia venezuelensis O.Berg	Myrtaceae				Х	Some Eugenia species produce edible fruits. While it's not clear whether Eugenia venezuelensis produces edible fruits, it's possible that they may have culinary potential.			
							NU: Few or no reports of uses. Little is known about its uses.			

Genus, species from	What is the accepted name	Plant family				Uses	
Lundell's 1961 list in alphabetical order	for this plant today?		Medicinal (M)	Edible (E)	Other (O)	No Uses Reported (NU)	Notes of uses
Eugenia yautepecana	Eugenia yautepecana Lundell	Myrtaceae			Х	Х	Some Eugenia species produce edible fruits. While it's not clear whether Eugenia yautepecana produces edible fruits, it's possible that they may have culinary potential.
							O: Ornamental; aromatic leaves and flowers used in scented oils, or for culinary purposes. Dry leaves and bark may be used as fuel material.
							NU: Few or no reports of uses.
Euonymus	Euonymus L.	Celastraceae	Х		Х		M: In traditional medicine, some parts of <i>Euonymus</i> plants have been used for various purposes, though the medicinal use is not common.
							O: Ground cover; the wood of <i>Euonymus</i> plants has been used for various crafting purposes, such as carving and making small tools; ornamental plants; fruit is not commonly eaten because of its bitterness and toxicity for some mammals.
							(Fan, et.al., 2020; Planting Tree, 2024; Plant Addicts, 2024).
Eupatorium glandulosum	Eupatorium album L.	Asteraceae	Х		Х		M: As other plants of the genus, might be used to treat a variety of ailments, including fevers, colds, coughs, and snakebites. However, this plant genus contains toxic compounds called "tremetol", which can be harmful, and its use in modern herbal medicine is not recommended.
							O: Used for erosion control in certain ecological restoration and landscaping projects. Cattle graze on leaves or flowers.
							(Garguillo, 2007; The Naturopathic Herbalist, 2023; USGS, 2024).

Genus, species from	What is the accepted name	Plant family					
Lundell's 1961 list in alphabetical order	for this plant today?		Medicinal (M)	Edible (E)	Other (O)	No Uses Reported (NU)	Notes of uses
Eupatorium	Eupatorium L.	Asteraceae	Х	Х	Х		M: Some plants of the genus exhibit important medicinal properties such as a homeopathic treatment that relieves stiffness and bone pain associated with flu symptoms. Leaves, flowers, or steams used to treat a range of ailments, including fevers, colds, digestive issues, and as diuretics.
							E: Used as food supplements or as an ingredient in certain cereals or/and oats.
							O: Ornamental plants, erosion control, cultivated for their ornamental value and are used in perennial gardens. They are often prized for their late-summer to early-fall bloom period; studied for their potential to accumulate heavy metals and other contaminants in polluted soils.
							(Garguillo, 2007; Mass, et.al., 2011; Wang, et.al., 2020; SGS DIGIC MPLY, 2022; The Naturopathic Herbalist, 2023).
Euphorbia	Euphorbia L.	Euphorbiaceae	X		Х		M: Some species exhibit medical properties to treat such as respiratory ailments (including cough, coryza, bronchitis, and asthma), pediatric worm infestations, dysentery, jaundice, skin imperfections, gonorrhea, digestive disorders, and the occurrence of tumors. Latex with medical properties.
							O: Ornamental; produce latex, which has been used for various purposes, including as a source of rubber and for making traditional crafts like jewelry; In some cultures, <i>Euphorbia</i> plants have cultural or religious significance and are used in ceremonies or rituals.
							(Singer, 2008; Ernts, et.al., 2015; Benjamaa, et.al., 2022; Carter, 2023).

Genus, species from	What is the accepted name	Plant family				Uses	
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Euphorbia spathulata	Euphorbia spathulata Lam	Euphorbiaceae	Х		Х		M: May be used to treat wounds, skin conditions, respiratory and digestive ailments.
							O: Ornamental; drought-tolerant landscaping; may have cultural or symbolic significance and are used in ceremonies or rituals; latex used as a source of rubber or for making traditional crafts.
							(Singer, 2008; Picture This, 2024; FLAAR Mesoamérica, 2024).
Fendlera	Fendlera Engelm. & A.Gray	Hydrangeaceae			Х		O: Wood used as construction material, fiber and wood used to make arrow foreshafts; ornamental plants; may have cultural or symbolic significance and are used in ceremonies or rituals.
							(Austin, 2022; Picture This, 2023).
Fendlera linearis	Fendlera linearis Rehder	Hydrangeaceae			Х		O: In regions where <i>Fendlera linearis</i> is native, it may have cultural or traditional significance and uses among indigenous communities; ornamental plant; fiber used as construction material.
							(Selina Wamucii, 2023).
Ficus petenensis	Ficus apollinaris Dugand	Moraceae			Х	Х	While specific information about the medicinal uses of <i>Ficus apollinaris</i> is limited, some species within the <i>Ficus</i> genus have been used in traditional medicine for various purposes.
							O: Mainly ornamental. Fruit consumed by wildlife such as birds and bats.
							Mainly a wild plant.
							NU: Few or no reports of uses.
							(Ibarra, et.al., 2012; Smithsonian Tropical Research Institute, 2023).

Genus, species from	What is the accepted name	Plant family				Uses	
'Lundell's 1961 list in alphabetical order	for this plant today?		Medicinal (M)	Edible (E)	Other (O)	No Uses Reported (NU)	Notes of uses
Ficus	Ficus L.	Moraceae	Х		Х		M: Some species exhibit properties to treat digestive health, wounds, respiratory conditions, and diabetes.
							O: Ficus trees have cultural and symbolic significance in different cultures and may be used in various rituals and ceremonies; ornamental; some species produce latex used as material source to make rubber and in traditional crafts; provide ample shade and are used as shade trees in parks and public spaces.
							(Ibarra, et.al., 2012; Suzuki, et.al., 2021; Arbolapp, 2023; Guerrero, 2023).
Forchhammeria laxiflora	Forchhammeria Iaxiflora Lundell	Resedaceae					
Forchhammeria Fouquieria	**Forchhammeria Liebm	Resedaceae	Х		Х		M: Some Forchhammeria species may have been used in traditional medicine for various purposes, such as treating specific ailments or conditions.
							O: In regions where <i>Forchhammeria</i> species are native they may have traditional and indigenous uses, including medicinal, cultural, or symbolic applications; ornamental plant.
							(Berlin, 2013; Selina Wamucii, 2023; Selina Wamucii, 2024).
Forchhammeria matudae	Forchhammeria matudae	Resedaceae			Х	Х	O: Ornamental, may have cultural or symbolic significance in the regions where it is found.
	Lundell						NU: Few or no reports of uses. Little is known about its uses.

Genus, species from	What is the accepted name	Plant family	Uses					
'Lundell's 1961 list in alphabetical order	for <sup>'</sup> this plant today?		Medicinal (M)	Edible (E)	Other (O)	No Uses Reported (NU)	Notes of uses	
Forchhammeria trifoliata	Forchhammeria trifoliata Radlk. ex Millsp.	Resedaceae				Х	NU: Few or no reports of uses. Little is known about its uses	
Fraxinus greggii	Fraxinus greggii A.Gray	Oleaceae			Х	Х	O: Commonly used for landscaping on patios and courtyards.	
							NU: Few or no reports of uses. Little is known about its uses.	
Fraxinus	Fraxinus L.	Oleaceae	Х		Х		M: Bark, leaves, and seeds have been utilized for their potential medicinal properties. Some species exhibit anti-inflammatory properties, wound healing, diuretic effects, and effective treatment for digestive ailments and rheumatism.	
							O: In some communities, <i>Fraxinus</i> species have cultural and symbolic significance. They may be associated with myths, legends, and rituals; wood is used in construction, particularly for making beams, frames, and other structural components; the flexible branches of young ash trees are used in basket weaving and traditional crafts. (Kuete, 2017; Safraz, et.al., 2017; UFM, 2024 (1998)).	

Genus, species from	What is the accepted name	Plant family	Uses						
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Guapira Torrubia	**Guapira Aubl.	Nyctaginaceae	X	X	X		<ul> <li>M: Some Guapira species treat ailments such as digestive issues, skin conditions, and respiratory problems, though their efficacy and safety remain largely undocumented, requiring caution.</li> <li>E: Some Guapira species bear edible fruits incorporated into local cuisine based on regional customs.</li> <li>O: Wood from certain Guapira varieties serve as construction, woodworking, and crafting, contributing to the making of furniture and tools; horticulture as ornamental; role in environmental restoration by stabilizing soil, preventing erosion, and enhancing local ecosystems; may have cultural and traditional significance varies among indigenous groups and communities.</li> <li>(Almeida, et.al., 2018; Useful Tropical Plants, 2020; Smithsonian Tropical Research Institute, 2024).</li> </ul>		
Guapira linearibracteata Pisonia linearibracteata	**Guapira costaricana (Standl.) Woodson	Nyctaginaceae	X	X	X		<ul> <li>M: Might have been employed, like other Guapira species, by local communities for various remedies, although the specific applications remain poorly documented.</li> <li>E: Edible fruits: they may be integrated into traditional cuisine, following local culinary customs.</li> <li>O: Cultural and traditional importance, it may be involved in rituals, ceremonies, or symbolically valued by diverse indigenous groups and communities; ornamental and landscaping.</li> <li>(Smithsonian Tropical Research Institute, 2024; Selina Wamucii; FLAAR Mesoamérica, 2024).</li> </ul>		

Genus, species from	What is the accepted name	Plant family		Uses						
'Lundell's 1961 list in alphabetical order	for this plant today?		Medicinal (M)	Edible (E)	Other (O)	No Uses Reported (NU)	Notes of uses			
Torrubia petenensis Guapira petenensis	Guapira petenensis (Lundell) Lundell	Nyctaginaceae	Х		Х		M: Used in traditional medicine for its anti-inflammatory and antifungal properties. O: Used as an ornamental plant in gardens and as a source of timber for construction			
Gyminda costaricensis	Gyminda costaricensis Standl.	Celastraceae				Х	NU: Few or no reports of uses. Little is known about its uses.			
Gyminda	Gyminda Sarg.	Celastraceae	X		Х		<ul> <li>M: Some species of the genus used to treat skin conditions, digestive issues, respiratory ailments and heal wounds. Also present anti-inflammatory and pain relief properties.</li> <li>O: Ornamental; may have cultural or traditional significance in the regions where they are found.</li> <li>(Mory, 2001; Biral, 2019; Selina Wamucii, 2023).</li> </ul>			
Gyminda tonduzii Crossopetalum tonduzii Rhacoma tonduzii	**Gyminda tonduzii Loes	Celastraceae			Х		O: Used as an ornamental plant in gardens and as a source of food for birds and other wildlife; may have cultural or traditional significance in the regions where it is found; used to make fine-toothed combs, because of its unusually dense wood. (Selina Wamucii, 2024).			
Gymnopodium floribundum	Gymnopodium floribundum Rolfe in Hook.	Polygonaceae			Х	X	O: Wood is known for its density and hardness: used in woodworking to create durable and long-lasting items; may have cultural or traditional significance in the regions where it is found. NU: Few or no reports of uses. Little is known about its uses. (Selina Wamucii, 2023).			

Genus, species from	What is the accepted name	Plant family		Uses						
<sup>'</sup> Lundell's 1961 list in alphabetical order	for this plant today?		Medicinal (M)	Edible (E)	Other (O)	No Uses Reported (NU)	Notes of uses			
Gymnopodium	Gymnopodium Rolfe	Polygonaceae			Х	×	O: May have cultural or traditional significance in the regions where they are found; wood may be used as construction material.			
							NU: Few or no reports of uses. Little is known about its uses.			
							(Rohwer, et.al., 2013; Balick, 2015).			
Hackelia grisea	Hackelia besseyi (Rydb.) J.L.Gentry	Boraginaceae			Х		O: Used to provide wildlife habitat, offering sustenance and shelter to various local species, including birds, insects, and small mammals. Its deep-rooted nature contributes to erosion control, stabilizing soil and preventing erosion in environmentally challenging areas, ornamental.			
							(Selina Wamucii, 2023; FLAAR Mesoamérica, 2024).			
Gyminda	Gyminda Sarg.	Celastraceae	Х		Х		M: Some species of the genus used to treat skin conditions, digestive issues, respiratory ailments and heal wounds. Also present anti- inflammatory and pain relief properties.			
							O: Ornamental; may have cultural or traditional significance in the regions where they are found.			
							(Mory, 2001; Biral, 2019; Selina Wamucii, 2023).			
Hackelia floribunda	Hackelia floribunda I.M.Johnst.	Boraginaceae			Х		O: Deep-rooted nature is used for its erosion control efforts, stabilizing soil, and mitigating erosion, particularly in environmentally challenged regions. <i>Hackelia floribunda</i> , with its clusters of blue flowers and distinctively spiky seed heads, holds potential as an ornamental species in native or xeriscape gardens, enriching landscapes with visual appeal.			
							(CALSCAPE.ORG, 2023; SEINET, 2023).			

Genus, species from	What is the accepted name	Plant family				Uses	
<sup>·</sup> Lundell's 1961 list in alphabetical order	for <sup>'</sup> this plant today?		Medicinal (M)	Edible (E)	Other (O)	No Uses Reported (NU)	Notes of uses
Hackelia	Hackelia Opiz	Boraginaceae				Х	O: The genus may be used as ornamental.
							NU: Few or no reports of uses. Little is known about its uses.
Hackelia	Hackelia	Boraginaceae			Х	Х	O: May be used as ornamental.
virginiana	virginiana (L.) I.M.Johnst.						NU: Few or no reports of uses. Little is known about its uses.
llex glabra	llex glabra A.Gray	Aquifoliaceae		Х	Х		E: Tea was made from leaves by Native Americans.
llex montana							O: Used as wildlife attraction, like local birds who eat its small, black berries, ornamental and landscaping shrub; used to control erosion and soil-stabilizing capabilities; may have cultural or traditional importance in some regions, where it may be employed in rituals, ceremonies, or symbolic applications.
							(North Carolina Extension Gardener, 2023; Plants For a Future, 2023).
llex	llex L.	Aquifoliaceae	Х		Х		M: Traditional uses encompass the alleviation of mild digestive issues such as indigestion and stomach discomfort. Some species have been utilized for their perceived antipyretic properties. Plants of these genus exhibit potential in reducing fever and treatment of skin conditions.
							O: Ornamental and landscaping; cultural or symbolic importance in different regions and traditions, may be used in rituals, ceremonies, or other symbolic applications.
							(Hao, et.al., 2015; Gan, et.al., 2018).
llex verticillata	llex verticillata (L.) A.Gray	Aquifoliaceae			Х	Х	O: Ornamental and landscaping; may be used in cultural rituals and ceremonies.
							NU: Few or no reports of uses. Little is known about its uses.

Genus, species from Lundell's	What is the accepted name	Plant family				Uses	
<sup>·</sup> Lundell's 1961 list in alphabetical order	for this plant today?		Medicinal (M)	Edible (E)	Other (O)	No Uses Reported (NU)	Notes of uses
Impatiens capensis Impatiens biflora	Impatiens capensis Meerb.	Balsaminaceae	Х	Х	Х		M: Used for soothing skin irritations, including rashes, insect bites, itching, and minor burns. The juice or sap from the stems and leaves of the plant is applied topically to relieve discomfort caused by contact with irritants like poison ivy and stinging nettles.
							E: While not a primary food source, some parts of the plant, such as the young shoots and leaves, are edible.
							O: Ornamental and landscaping plants.
							(Choukas, 2004; Abrams, et.al, 2012; Karriker, 2022).
Impatiens	Impatiens L.	Balsaminaceae	Х		Х		M: Infusions or poultices derived from Impatiens plants were topically applied to alleviate skin conditions like rashes, minor irritations, or insect bites, leveraging the plant's perceived cooling and soothing attributes.
							O: Ornamental species celebrated for their vibrant and enduring flowers; their compact growth makes them suitable for container gardening, allowing them to adorn patios and small outdoor spaces.
							(Rozum, 2013; Ashagrie, et,.al., 2023; Housing, 2023; Qian, et.al., 2023).
Jacquinia	Jacquinia L.	Primulaceae			Х		O: Used for stabilizing shorelines and preventing erosion due to their ability to thrive in saline or brackish soils; may hold cultural significance in specific regions, utilized in rituals and ceremonies by indigenous communities.
							, ,

Genus, species from	What is the accepted name	Plant family				Uses	
Lundell's 1961 list in alphabetical order	for this plant today?		Medicinal (M)	Edible (E)	Other (O)	No Uses Reported (NU)	Notes of uses
Juniperus ashei	Juniperus ashei J.Buchholz	Cupressaceae			Х	Х	O: Land stabilization, traditional and cultural significance. Utilized for crafting fence posts, crossties, poles, small woodenware items, and as a dependable source of fuel.
							NU: Few or no reports of uses.
							(USDA, 2018; Beautiful Hays County. Org, 2024).
Juniperus deppeana	Juniperus deppeana Steud	Cupressaceae		Х	Х		<ul> <li>M: The seed cones were used medicinally.</li> <li>E: Berries are cooked for consumption, while the fruit can be eaten either raw or cooked after boiling and grinding. Ground berries can be processed into a meal, mixed with water to create a beverage for consumption.</li> <li>O: Wood is valued for woodworking, crafting furniture, cabinets, and rustic wood products, its also a source of firewood, offering a long-lasting and steady burn for heating and cooking. Wood and fiber is often used to craft sturdy fence posts for agricultural and rural fencing.</li> </ul>
							(Southwest Desert Flora, 2022; Useful Temperate Plants, 2022).
Juniperus deppeana var. sperryi	Juniperus deppeana var. deppeana Steud.	Cupressaceae			Х	Х	O: Wood may be used as construction material; land stabilization; may be used as ornamental. NU: Few or no reports of uses. Little is known about its uses.
							(Picture This, 2023).

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Juniperus	Juniperus L.	Cupressaceae	Х	Х	X		<ul> <li>M: Some species of the genus are used to alleviate gastrointestinal ailments, such as indigestion, flatulence, heartburn, bloating, and reduced appetite, as well as for managing gastrointestinal infections and intestinal parasitic infestations; also used to treat urinary tract infections and the dissolution of kidney and bladder stones.</li> <li>E: Edible berries are used in culinary</li> </ul>
							applications, primarily as a spice. O: Aromatic properties used in culinary arts or to make soaps and perfumes. May be used as an ornamental plant. Wood used as fuel material.
							(Bais, et.al., 2014; Adams, 2014; Raina, et.al., 2019; RXList, 2024; Plants for a Future).
Juniperus monosperma	Juniperus monosperma Sarg.	Cupressaceae	X		Х	X	<ul> <li>M: The plant's leaves possess fever-reducing, laxative, and chest-related properties. They're often infused to address stomach issues, constipation, coughs, colds, and muscle relaxation before childbirth. Heated twigs are used as poultices for swelling reduction, while staminate cone infusions treat dysentery. Chewed bark aids spider bite healing and burns, and the fruits act as potent diuretics. Additionally, plant-derived gum serves as a temporary tooth filling.</li> <li>O: Wood may be used as construction material; land stabilization; may be used as ornamental.</li> </ul>
							NU: Few or no reports of uses. Little is known about its uses.
							(Plants for a Future, 2024).

Genus, species from	What is the accepted name	Plant family		Uses							
<sup>'</sup> Lundell's 1961 list in alphabetical order	for this plant today?		Medicinal (M)	Edible (E)	Other (O)	No Uses Reported (NU)	Notes of uses				
Scleria humilis	** Lagenocarpus humilis Kuntze	Cyperaceae			Х		O: Used for erosion control; provides limited grazing value when mixed with other grasses, supporting livestock; its spreading growth makes it an attractive choice for ground cover in gardens and landscapes, particularly in low- maintenance areas.				
							(Alvez, et.al., 2015; Flora e Funda Do Brasil, 2024).				
Lycium Peplis	Lycium L.	Solanaceae	X	Х	Х		M: Some species exhibit medical properties to treat different ailments including blurry vision, abdominal pain, infertility, dry cough, fatigue, dizziness, and headache.				
							E: Edible berries: berries are rich in vitamins, minerals, and antioxidants. They are used in various culinary preparations.				
							O: May have cultural or traditional significance and uses in the regions where they are found. These uses can vary among different indigenous groups and communities and may include rituals, ceremonies, or symbolic applications.				
							(Gao, et.al., 2017; Yao, et.al., 2018).				
Lycium puberulum	Lycium puberulum A.Gray	Solanaceae	Х	Х			M: May have been used to alleviate digestive issues, such as indigestion or stomach discomfort; extracts may have been applied topically to minor wounds or skin irritations; teas, infusions or preparations used to support the immune system and overall well-being.				
							E: Edible berries: Consumed fresh or dried and are rich in nutrients and antioxidants.				
							(Powel and Manning, 1994; Yao, et.al., 2018; Earth.com, 2024).				

Genus, species from Lundell's	What is the accepted name	Plant family				Uses	
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Lycium texanum	Lycium texanum Correll	Solanaceae		Х	Х		E: Edible berries: Can be eaten fresh or dried and are a potential source of vitamins, minerals, and antioxidants.
							O: Ornamental.
							(Texas A&M University, 2024).
Mansonia	Mansonia J.R.Drumm.	Malvaceae	Х		Х		M: Leaves or bark may have been used in traditional medicine practices in the regions where they grow.
							O: Wood used as construction or fuel material.
							(Ogbamgba y Wekhe, 2005).
Matelea alabamensis	Matelea alabamensis (Vail) Woodson	Apocynaceae			Х		O: Used as wildlife habitat, attracting insects and butterflies with its nectar-rich flowers, thereby supporting local ecosystems; used for stabilizing disturbed soils and restoring native vegetation.
							Mainly a wild plant.
							(NatureServe, 2023).
Matelea	<i>Matelea</i> Aubl.	Apocynaceae			Х		O: Cultural and traditional significance, ornamental plants.
							(Romero, 2015).
Matelea edwardsensis	Matelea edwardsensis	Apocynaceae			Х	Х	O: Cultural and traditional significance, ornamental plants
	Correll						NU: Few or no reports of uses. Little is known about its uses.
Matelea parvifolia	Matelea parvifolia (Torr.)	Apocynaceae			Х		O: Ornamental value mainly; also found in forest.
	Woodson						(Picture This, 2024).

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Matelea radiata	Matelea radiata Correll	Apocynaceae			Х	Х	O: Cultural and traditional significance, ornamental plants
							NU: Few or no reports of uses. Little is known about its uses.
Matelea reticulata	Matelea reticulata	Apocynaceae			Х		O: Ornamental plants; fiber and dry leaves may be used as fuel material.
	(Engelm. ex A.Gray) Woodson						(The University of Texas at Austin DataBase, 2020).
Matelea sagittifolia	Matelea sagittifolia (A.Gray) Woodson ex Shinners	Apocynaceae				Х	NU: Few or no reports of uses. Little is known about its uses.
Matudaea	Matudaea Lundell	Hamamelida- ceae				Х	NU: Few or no reports of uses. Little is known about its uses.
Matudaea trinervia	Matudaea trinervia Lundell	Hamamelida- ceae				Х	NU: Few or no reports of uses. Little is known about its uses.
Matudaea hirsuta	Matudaea trinervia var. hirsuta (Lundell) L.M.González & N.Jiménez	Hamamelida- ceae				Х	NU: Few or no reports of uses. Little is known about its uses.
Metopium brownei	Metopium brownei Urb	Anacardiaceae	Х		Х		Contains toxic compounds, particularly in its sap and leaves.
							M: Used to treat a range of ailments, including skin conditions, digestive issues, and respiratory problems.
							O: Wood used as construction material. The bark contains tannins, which are used in tanning leather.
							(Aguilar y Sosa, 2004; Peck, 2016).

Genus, species from	What is the accepted name	Plant family				Uses	
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Metopium gentlei	Metopium gentlei Lundell	Anacardiaceae				Х	NU: Few or no reports of uses. Little is known about its uses.
Metopium	Metopium P.Browne	Anacardiaceae	X		X		Contains toxic compounds, particularly in its sap and leaves. M: Used to treat skin conditions and respiratory problems. A mixture of leaves and twigs combined with bleach has been used to induce abortions but also has the tendency to kill the patient. O: Wood used as construction material. The bark contains tannins, which are used in tanning leather. (Ricardo, et.al., 2006; EvergreeN, 2016;
Metopium toxiferum	Metopium toxiferum Krug & Urb.	Anacardiaceae				X	Esaú, 2021; Picture This, 2024). Contains toxic compounds, particularly in its sap and leaves. NU: Few or no reports of uses. Little is known about its uses. (Picture This, 2024).
Metopium venosum	Metopium venosum Engl.	Anacardiaceae				Х	Contains toxic compounds, particularly in its sap and leaves. NU: Few or no reports of uses. Little is known about its uses. (EvergreeN, 2016).

Genus, species from	What is the accepted name	Plant family		Uses						
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Monotropa hypopitys Monotropa	Monotropa hypopitys L.	Ericaceae	Х			Х	M: Similar to other species of the genus, may be employed as a remedy for a variety of ailments, including as a mild sedative and for the treatment of nervous disorders.			
latisquama							O: Flowers used as a source of natural dye. It can yield various shades of brown and was used for coloring textiles and other materials.			
							(USDA, 2024).			
Monotropa	Monotropa L.	Ericaceae			Х	Х	M: Some species may be used to treat ailments related to nervous disorders.			
							O: Some species may be used to extract compounds useful to dye.			
							NU: Few or no reports of uses.			
							It is not commonly used for traditional medicine, culinary purposes, or other human applications.			
							(Pricket y Walsh, 2019; Picture This, 2024; USDA, 2024).			
Monotropa uniflora	Monotropa uniflora L.	Ericaceae				Х	NU: Few or no reports of uses.			
Mortoniodendron guatemalense	Mortoniodendron guatemalense Standl. & Steyerm.	Malvaceae			Х	X	O: Fiber and wood used for construction, furniture making, and cabinetry. It is valued for its durability and attractive appearance; trees are planted for its ability to provide shade, making it a valuable addition to parks, gardens, and public spaces; ornamental plants.			
							NU: Few or no reports of uses.			
							(Montero, et.al., 2013; CIECO, 2024).			
Mortoniodendron palaciosii	Mortoniodendron palaciosii Miranda	Malvaceae				Х	NU: Few or no reports of uses.			

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Mortoniodendron ruizii	Mortoniodendron ruizii Miranda	Malvaceae			Х	X	O: Fiber and wood used for construction, furniture making, and cabinetry. It is valued for its durability and attractive appearance; trees are planted for its ability to provide shade, making it a valuable addition to parks, gardens, and public spaces; ornamental plants.
							NU: Few or no reports of uses. (Montero, et.al., 2013).
Mortoniodendron	<i>Mortoniodendron</i> Standl. & Steyerm.	Malvaceae			X	X	O: Fiber and wood used for construction, furniture making, and cabinetry. It is valued for its durability and attractive appearance; trees are planted for its ability to provide shade, making it a valuable addition to parks, gardens, and public spaces; ornamental plants.
							NU: Few or no reports of uses.
							(Montero, et.al., 2013).
Mortoniodendron vestitum	Mortoniodendron vestitum Lundell	Malvaceae				Х	NU: Few or no reports of uses.
Muntingia calabura	Muntingia calabura L.	Muntingiaceae	Х	Х			M: Leaves and bark have been used for their potential medicinal properties. They are believed to have various health benefits, such as aiding in the treatment of diarrhea, diabetes, and digestive issues.
							E: Edible fruits: Fruits are edible and can be eaten fresh, used in jams, jellies, and desserts, or made into beverages like juices and fruit salads.
							(Montero, et.al., 2013; Mahmood, et.al., 2014).

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<sup>'</sup> Lundell's 1961 list in alphabetical order	for this plant today?		Medicinal (M)	Edible (E)	Other (O)	No Uses Reported (NU)	Notes of uses
Muntingia	Muntingia L.	Muntingiaceae	Х	Х	Х		M: Leaves and bark are used in traditional medicine for their potential medicinal properties. These uses can include treating digestive issues, diabetes, and other ailments.
							E: Fruits are small, sweet, and edible. They can be eaten fresh or used in culinary preparations like jams, jellies, pies, and beverages.
							O: Ornamental; fiber may be used as construction material.
							(Lim, 2012; World Flora Online, 2024).
Calyptranthes chytraculia	**Myrcia chytraculia (L.) A.R.Lourenço & E.Lucas	Myrtaceae				Х	NU: Few or no reports of uses. Little is known about its uses.
Calyptranthes	**Myrcia DC.	Myrtaceae	Х	Х			M: Leaves, bark, or other plant parts may be prepared as infusions or decoctions and consumed for their potential medicinal properties. Traditional uses can vary and may include treatments for digestive issues, respiratory ailments, and as a general tonic.
							E: Fruits may be consumed as a source of food. The fruits can be eaten fresh or used in culinary preparations.
							(Cerón y Moltav, 1998).
Myrodia	Myrodia Sw.	Malvaceae				Х	NU: Few or no reports of uses. Little is known about its uses.

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Ardisia coriacea Caballeria ferruginea Myrsine guatemalensis Myrsine myricoides Rapanea ferruginea Rapanea jelskii	**Myrsine coriacea (Sw.) R.Br. ex Roem. & Schult.	Primulaceae	X		Х		M: Bark, leaves, and flowers used to treat ailments such as conditions like diarrhea, stomachaches, and skin conditions. O: Flowers, fruit, or leaves used as dye; cultural significance in some regions. It is used in rituals and ceremonies by indigenous communities for spiritual or cultural purposes. (Red Viveros de Biodiversidad y Pronatura Vera Cruz, 2022).
Rapanea Caballeria Rapanea	**Myrsine L.	Primulaceae	X		X		<ul> <li>M: In some traditional or indigenous healing practices, various parts of <i>Myrsine</i> plants have been used for their potential medicinal properties. These uses may include remedies for conditions like diarrhea, stomachaches, and skin issues.</li> <li>O: Ornamental and landscaping, fruits and flowers mainly used as dye material; wood may be used as construction material; cultural and ritual significance in certain indigenous communities.</li> <li>(Correa, et.al., 2019; Oliveira, et.al., 2019; Fibrich, et.al., 2020).</li> </ul>
Cistanthera	**Nesogordonia Baill.	Malvaceae			Х	Х	O: Ornamental use; cultural and religious significance in certain indigenous communities. NU: Few or no reports of uses. Little is known about its uses.

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Lundell's 1961 list in alphabetical order	for this plant today?		Medicinal (M)	Edible (E)	Other (O)	No Uses Reported (NU)	Notes of uses
Opuntia	Opuntia Mill.	Cactaceae	X	X	X		<ul> <li>M: Potential benefits for combating oxidative stress and lowering the risk of chronic diseases; may play a role in diabetes management by virtue of its fiber content and pectin, potentially moderating blood sugar absorption. Some species exhibit anti-inflammatory properties. Extraction of the plant exhibits capacity to soothe gastrointestinal issues like diarrhea and gastritis. Pads and flowers present properties used to treat wounds, cholesterol issues, and even hangover relief in certain cultures.</li> <li>E: Edible fruits: Fruits have a sweet, mildly tangy flavor. They are eaten fresh, used in jams, jellies, and beverages, and are also enjoyed dried. Its fruit is a good source of vitamin C and dietary fiber. Edible pads: young and tender pads (cladodes) can be prepared and consumed as a vegetable. They are often used in salads, stews, and other dishes.</li> <li>O: Ornamental plants, fruit and flowers extraction used as dye; fiber used as construction material for baskets; used for stabilizing soil and controlling erosion in arid regions.</li> <li>(Mondragón y Pérez, 2001; Aleksandroff, 2012; Fawzy, et.al., 2021).</li> </ul>
Ostrya knowltonii	Ostrya knowltonii Sarg.	Betulaceae			Х	Х	O: The wood is dense and strong. It may be used locally for making tool handles, mallet heads and other small, hard, wooden objects.
Ostrya chisosensis							NU: Few or no reports of uses. Little is known about its uses.
							(USDA, 2018).

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Ostrya	<i>Ostrya</i> Scop.	Betulaceae	Х		Х		O: Ornamental and landscaping; wood used as firewood or construction material; root system of Eastern hophornbeam trees can help stabilize soil and reduce erosion; leaves and twigs are browsed by livestock, providing a source of forage.				
							(Red Viveros de Biodiversidad y Pronatura Vera Cruz, 2022).				
Parathesis acuminata	Parathesis acuminata	Primulaceae	Х	Х	Х		M: Exhibits anti-inflammatory, antioxidant and treats digestive aid.				
	Lundell						E: Leaves can be dried and brewed to make a caffeinated herbal tea or infusion. The tea is known for its earthy flavor and is traditionally consumed as a stimulant beverage.				
							O: Cultural and social significance in some indigenous communities. It is often consumed as part of morning rituals and gatherings, where stories, traditions, and knowledge are shared; used in shamanic and healing ceremonies; extracts are used in the cosmetics industry for their potential antioxidant and skin-rejuvenating properties.				
							(Selina Wamucii, 2024; Alexandroff, 2012; FLAAR Mesoamérica, 2024).				
Parathesis agostiniana	Parathesis agostiniana Lundell	Primulaceae				Х	NU: Few or no reports of uses.				
Parathesis angustifolia	Parathesis angustifolia Lundell	Primulaceae				Х	NU: Few or no reports of uses.				
Parathesis aurantiaca	Parathesis aurantiaca	Primulaceae			Х	Х	O: Ornamental mainly.				
aurantiaca	Lundell						NU: Few or no reports of uses.				

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Lundell's 1961 list in alphabetical order	for <sup>'</sup> this plant today?		Medicinal (M)	Edible (E)	Other (O)	No Uses Reported (NU)	Notes of uses			
Parathesis adenanthera Ardisia adenanthera Ardisia ferruginea var. macrophylla Parathesis macrophylla Parathesis rubella Tinus adenanthera	**Parathesis adenanthera (Miq.) Hook.f	Primulaceae			X	X	O: Used as a source of timber for furniture and other wood products. It is also used as an ornamental plant in gardens and parks. NU: Few or no reports of uses. (Selina Wamucii, 2024).			
Parathesis belizensis	Parathesis belizensis Lundell	Primulaceae			Х	X	O: Used as an ornamental plant in gardens and parks. It is also used for erosion control and as a windbreak. May be used as an ornamental plant. NU: Few or no reports of uses. (Selina Wamucii, 2024).			
Parathesis candolleana	Parathesis candolleana Mez	Primulaceae	X		X		<ul> <li>M: May have applications for treating various ailments, such as gastrointestinal issues, wound healing, and skin conditions.</li> <li>O: Used as a source of timber for furniture and other wood products; ornamental.</li> <li>(Selina Wamucii, 2024; FLAAR Mesoamérica, 2024).</li> </ul>			

Genus, species from	What is the accepted name	Plant family				Uses	
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Parathesis chiapensis	Parathesis chiapensis Fernald	Primulaceae			Х		O: Used as an ornamental plant in gardens and parks. It is also used for erosion control and as a windbreak.
							(Selina Wamucii, 2024).
Parathesis columnaris	Parathesis columnaris Lundell	Primulaceae				Х	NU: Few or no reports of uses. Little is known about its uses.
Parathesis conzattii	Parathesis conzattii	Primulaceae	Х		Х		M: Used in traditional medicine to treat fever, headaches, and skin diseases.
Ardisia conzattii	(S.F.Blake) Lundell						O: Used as an ornamental plant because of its attractive flowers and foliage.
Conzutti							(Selina Wamucii, 2024).
Parathesis crassiramea	Parathesis crassiramea	Primulaceae			Х		O: A popular ornamental plant that is grown for its attractive foliage and showy flowers.
	Lundell						(Selina Wamucii, 2024).
Parathesis	Parathesis	Primulaceae	Х		Х		M: Leaves used to treat fever.
crenulata	<i>crenulata</i> (Vent.) Hook.f. ex						O: Ornamental plant in gardens
	Hemsl.						(Selina Wamucii, 2024).
Parathesis donnell-smithii	Parathesis donnell-smithii	Primulaceae			Х		O: Ornamental plant that is grown for its attractive foliage and showy flowers.
Parathesis brevipes	Mez						(Selina Wamucii, 2024).
Parathesis oblongifolia							
Parathesis oxyphylla							

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Parathesis eggersiana	Parathesis eggersiana Mez	Primulaceae				Х	NU: Few or no reports of uses.			
Parathesis elliptica	Parathesis elliptica Lundell	Primulaceae				Х	NU: Few or no reports of uses.			
Parathesis emarginata	Parathesis emarginata	Primulaceae	Х		Х		M: Used as a medicinal plant to treat fever and rheumatism.			
	Lundell						O: Ornamental plants in gardens.			
							(Selina Wamucii, 2024).			
Parathesis ferruginea	Parathesis ferruginea Lundell	Primulaceae				Х	NU: Few or no reports of uses.			
Parathesis glabra	Parathesis glabra Donn.	Primulaceae	Х		Х		M: Plant used to treat ailments like rheumatism and respiratory issues such as allergies.			
	Sm.						O: Used as an ornamental plant, mainly in gardens; may be used in ceremonies and rituals of some indigenous communities; fiber may be used as construction material.			
							(Selina Wamucii, 2024).			
Parathesis hondurensis	Parathesis hondurensis Standl.	Primulaceae	Х		Х		M: May be employed to treat a range of ailments, such as gastrointestinal issues, skin conditions, and wounds.			
Parathesis guatemalensis							O: Ornamental plants mainly.			
gaatematemais							(Selina Wamucii, 2024).			
Parathesis Ianceolata	Parathesis Ianceolata Brandegee	Primulaceae			Х		O: Used as an ornamental plant in gardens and parks. It is also used for erosion control and as a windbreak.			
							(Selina Wamucii, 2024).			

Genus, species from	What is the accepted name	Plant family				Uses	
<sup>'</sup> Lundell's 1961 list in alphabetical order	for this plant today?		Medicinal (M)	Edible (E)	Other (O)	No Uses Reported (NU)	Notes of uses
Parathesis	Parathesis Hook.f.	Primulaceae	X		X		<ul> <li>M: Some species exhibit multiple properties to treat ailments associated with skin issues, digestive and respiratory problems such as allergies. They also can also show antioxidant and skin-rejuvenating characteristics.</li> <li>E: Some species are edible, specifically the leaves or flowers if dried, baked, or cooked. Tea and infusions are made of some of the species of this genus. The tea is known for its earthy flavor and is traditionally consumed as a stimulant beverage.</li> <li>O: Species of the genus may carry cultural and social significance. It is commonly part of morning rituals and communal gatherings, serving to exchange stories, preserve traditions, and impart knowledge; used in shamanic and therapeutic ceremonies, enhancing spiritual practices; extracts are valued in the cosmetics industry for their potential to offer antioxidants and promote skin rejuvenation.</li> <li>(González, et.al., 2005; Cook, 2016; Selina Wamucii, 2024).</li> </ul>
Parathesis latifolia	Parathesis latifolia Lundell	Primulaceae	Х		Х		M: Infusions and teas used to treat digestive issues. O: Ornamental plants for gardens. (Selina Wamucii, 2024).
Parathesis laxa	Parathesis laxa Lundell	Primulaceae				Х	NU: Few or no reports of uses.
Parathesis macronema Parathesis hintonii	Parathesis macronema Bullock	Primulaceae			Х		O: used as an ornamental plant in gardens and parks. It is also used for erosion control and as a windbreak; may be used in ceremonies and rituals of communities. (Selina Wamucii, 2024).

Genus, species from Lundell's	What is the accepted name	Plant family				Uses	
<sup>-</sup> Lundell's 1961 list in alphabetical order	for this plant today?		Medicinal (M)	Edible (E)	Other (O)	No Uses Reported (NU)	Notes of uses
Parathesis mexicana	Parathesis mexicana	Primulaceae	Х		Х		M: Used in traditional medicine for treating fever, inflammation, and skin diseases.
	Lundell						O: Used as an ornamental plant in gardens; flower and leaves extraction used as ingredients in perfumes.
							(Selina Wamucii, 2024).
Parathesis oblanceolata	Parathesis oblanceolata	Primulaceae			Х		O: Used as an ornamental plant in gardens and parks.
	Lundell						(Selina Wamucii, 2024).
Parathesis obtusa	Parathesis obtusa Lundell	Primulaceae	Х				M: As other members of the genus, this plant is used to treat fever and rheumatism.
							(Selina Wamucii, 2024).
Parathesis panamensis	Parathesis panamensis	Primulaceae	Х		Х		M: Leaves and flowers used to treat inflammation
	Lundell						O: used as an ornamental plant in gardens; fiber may be used as construction material.
							(Selina Wamucii, 2024).
Parathesis	Parathesis	Primulaceae			Х	Х	O: Ornamental mainly.
parvifolia	parvifolia Lundell						NU: Few or no reports of uses. Little is known about its uses.
							(Selina Wamucii, 2024).
Parathesis pleurobotryosa	Parathesis pleurobotryosa Donn.Sm	Primulaceae				X	NU: Few or no reports of uses. Little is known about its uses.
Parathesis pyramidalis	Parathesis pyramidalis Lundell	Primulaceae				Х	NU: Few or no reports of uses. Little is known about its uses.

Genus, species from	What is the accepted name	Plant family		Uses						
Lundell's 1961 list in alphabetical order	for this plant today?		Medicinal (M)	Edible (E)	Other (O)	No Uses Reported (NU)	Notes of uses			
Parathesis prionophylla	Parathesis prionophylla Standl.	Primulaceae	Х		Х		M: Mainly used to treat fever; also used to treat wounds or any skin conditions such as inflammation or irritation. May be used also for pain relief (external wounds).			
							O: Fiber may be used as construction and fuel material.			
							(Selina Wamucii, 2024).			
Parathesis rekoi	Parathesis rekoi Standl.	Primulaceae				Х	NU: Few or no reports of uses. Little is known about its uses.			
Parathesis reticulata	Parathesis reticulata Lundell	Primulaceae	Х				M: Teas and infusion to treat fever and digestive ailments; also used to treat open wounds as an anti-inflammatory agent.			
							(Selina Wamucii, 2024).			
Parathesis	Parathesis rosea	Primulaceae			Х	Х	O: Ornamental plants mainly.			
rosea	Lundell						NU: Few or no reports of uses.			
							(Selina Wamucii, 2024).			
Parathesis rufa	Parathesis rufa Lundell	Primulaceae				Х	NU: Few or no reports of uses. Little is known about its uses.			
Parathesis serrulata	Parathesis serrulata (Sw.) Mez	Primulaceae	X				M: As other members of the genus may be employed to treat a range of ailments, such as gastrointestinal issues, skin conditions, and wounds.			
							(Selina Wamucii, 2024).			
Parathesis sessilifolia	Parathesis sessilifolia Donn.Sm.	Primulaceae			Х		O: Used as an ornamental plant in gardens and parks. It is also used for erosion control and as a windbreak.			
							(Selina Wamucii, 2024).			

Genus, species from	What is the accepted name	Plant family				Uses	
<sup>·</sup> Lundell's 1961 list in alphabetical order	for <sup>'</sup> this plant today?		Medicinal (M)	Edible (E)	Other (O)	No Uses Reported (NU)	Notes of uses
Parathesis reticulata var. sinuata	Parathesis sinuata (Lundell) Ricketson & Pipoly	Primulaceae			X		O: Small, white, or pink, small, and bell-shaped used as an ornamental element in gardens and landscapes; fiber may be used as construction material after dried.
							(Selina Wamucii, 2024).
Parathesis skutchii	Parathesis skutchii Lundell	Primulaceae			Х	Х	O: Grown as ornamental plants in gardens and landscapes for their attractive flowers and foliage.
							NU: Few or no reports of uses. Little is known about its uses.
							(Selina Wamucii, 2024).
Parathesis stenophylla	Parathesis stenophylla	Primulaceae			Х	Х	O: Used for erosion control and as a windbreak.
	Lundell						NU: Few or no reports of uses. Little is known about its uses.
							(Selina Wamucii, 2024).
Parathesis	Parathesis	Primulaceae			Х	Х	O: Ornamental mainly.
subcoriacea	subcoriacea Lundell						NU: Few or no reports of uses. Little is known about its uses.
							(Selina Wamucii, 2024).
Parathesis subulata	Parathesis subulata Lundell	Primulaceae				Х	NU: Few or no reports of uses. Little is known about its uses.
Parathesis tenuis	Parathesis tenuis Standl.	Primulaceae	Х		Х		M: Leaves, flowers, seeds, or fiber used to treat fever, inflammation, and skin diseases.
							O: The small and abundant flowers and its foliage-rich appearance used as an ornamental plant.
							Mainly a wild plant.
							(Selina Wamucii, 2024).

Genus, species from	What is the accepted name	Plant family		Uses							
<sup>'</sup> Lundell's 1961 list in alphabetical order	for this plant today?		Medicinal (M)	Edible (E)	Other (O)	No Uses Reported (NU)	Notes of uses				
Parathesis tetramera	Parathesis tetramera Bullock	Primulaceae				Х	NU: Few or no reports of uses. Little is known about its uses.				
Parathesis tomentosa	Parathesis tomentosa Lundell	Primulaceae				Х	NU: Few or no reports of uses. Little is known about its uses.				
Parathesis trichogyne	Parathesis trichogyne	Primulaceae	Х				M: Used to treat arthritis and skin conditions; used as an anti-inflammatory agent.				
Parathesis	Hemsl.						Mainly a wild plant.				
Parathesis pallida							(Selina Wamucii, 2024).				
Parathesis vestita	Parathesis vestita Lundell	Primulaceae			Х		O: Mainly ornamental; dry fiber may be used as construction material; dry leaves used as fuel material.				
							Mainly a wild plant.				
							(Selina Wamucii, 2024).				
Parathesis villosa	Parathesis villosa Lundelll	Primulaceae				Х	NU: Few or no reports of uses. Little is known about its uses.				
Parathesis vulgata	Parathesis vulgata Lundell	Primulaceae			Х		O: Flowers used as an ingredient in perfumes or soaps due to its fragrance; may be used as ornamental plants; may be used in ceremonies and rituals of indigenous communities.				
							(Selina Wamucii, 2024).				
Parnassia asarifolia	Parnassia asarifolia Vent	Primulaceae			Х		O: <i>Parnassia asarifolia</i> is appreciated for its delicate, star-shaped flowers and attractive foliage. It is sometimes grown as an ornamental plant in gardens and landscaping.				
							(Picture This, 2024).				

Genus, species from	What is the accepted name	Plant family				Uses	
Lundell's 1961 list in alphabetical order	: in todaỳ? ical		Medicinal (M)	Edible (E)	Other (O)	No Uses Reported (NU)	Notes of uses
Parrya	Parrya R.Br.	Brassicaceae			Х	Х	O. Used as an ornamental plant for their flowers.
							Mainly a wild plant.
							NU: Few or no reports of uses. Little is known about its uses.
Petenaea	Petenaea	Petenaeaceae				Х	Few or no reports of uses for de genus.
	Lundell						NU: Few or no reports of uses.
Thelypteris phegopteris	**Phegopteris connectilis	Thelypterida- ceae			Х	Х	O: Used as an ornamental plant; may be used as decoration in floral arrangements.
	(Michx.) Watt						(Picture This, 2024).
Phyllanthus	Phyllanthus L	Phyllanthaceae	Х	Х	Х		M: <i>Phyllanthus</i> species are used in traditional medicine for their potential health benefits; used in traditional medicine to treat kidney stones; shown potential antiviral and antioxidant properties, used in traditional and herbal medicine for liver-related issues; diuretic and laxative properties and may be used for digestive and urinary system issues; potential use in managing hepatitis B.
							E: The fruit is edible in some species: Consumed in various culinary preparations, often used in salads, preserves, or as a souring agent in traditional dishes; Some species exhibit edible leaves: consumed dry or cooked.
							O: Some species may be used as ornamental; fruits or/and flowers used for dyeing; dry fiber and leaves may be used as fuel material.
							(Harikumar y Kuttan, 2011; Geethangili y Ding, 2018)
Phyllanthus viridis	Phyllanthus viridis M.E.Jones	Phyllanthaceae				Х	NU: Few or no reports of uses. Little is known about its uses.

Genus, species from	What is the accepted name	Plant family		Uses						
Lundell's 1961 list in alphabetical order	for this plant today?		Medicinal (M)	Edible (E)	Other (O)	No Uses Reported (NU)	Notes of uses			
Physocarpus	Physocarpus (Cambess.) Raf.	Rosaceae			Х		O: Species of the genus are ornamental plants mainly for their flowers arranged in clusters, its showy leaves, and its lush foliage; used in floral arrangements and bouquets.			
Physocarpus monogynus	Physocarpus monogynus (Torr.) J.M.Coult.	Rosaceae			Х		(Adams, 2017) O: Ornamental plant; used in floral arrangements and bouquets. Used by wildlife. (City of Collins, 2023)			
Pickeringia	Pickeringia Nutt.	Fabaceae			Х		O: The deep roots of <i>Pickeringia</i> plants can help stabilize soil, making them useful in erosion control and soil conservation efforts; ornamental plants and landscaping.			
							(Stuart y Sawyer, 2001; Picture This, 2023)			
Pinus cembroides	Pinus albicaulis Engelm.	Pinaceae			Х		O: Wood used for various purposes, such as building materials, but this has become less common due to its relatively small size and the challenge of accessing high elevation stands; used for recreational activities, including hiking, camping, and birdwatching.			
							(Arno y Hoff, 2023)			
Pinus caribaea	Pinus caribaea Mor.	Pinaceae			Х		O: Is primarily grown for its timber. The wood is valued for its strength, durability, and versatility; ed for resin or turpentine production; resin from pine trees has applications in the manufacture of varnishes, paints, and other industrial products; planted for ornamental purposes in parks and gardens due to its attractive appearance and evergreen foliage. (Ávila, 2011)			

Genus, species from	What is the accepted name	Plant family	Uses					
<sup>·</sup> Lundell's 1961 list in alphabetical order	for this plant today?		Medicinal (M)	Edible (E)	Other (O)	No Uses Reported (NU)	Notes of uses	
Pinus osteosperma	Pinus cembroides	Pinaceae		Х	Х		Being a subspecies of <i>Pinus cembroides</i> Zucc., its uses are similar.	
	subsp. cembroides						E: Edible seeds: Highly valued for their edible nuts, known as "piñon nuts" or "pine nuts". These nuts are a traditional food source for indigenous communities in the region. They are used in various dishes, including stews, soups, and desserts, and are often roasted and eaten as a snack.	
							O: It has been used for small-scale construction, fencing, and firewood; ornamental and landscaping; resin production	
							(Pennacchio, et.al., 2010; Plants for a Future, 2024)	
Pinus cembroides var. cembroides	Pinus cembroides Zucc.	Pinaceae		Х	Х		E: Edible seeds: Highly valued for their edible nuts, known as "piñon nuts" or "pine nuts". These nuts are a traditional food source for indigenous communities in the region. They are used in various dishes, including stews, soups, and desserts, and are often roasted and eaten as a snack.	
							O: It has been used for small-scale construction, fencing, and firewood; ornamental and landscaping; resin production	
							(Pennacchio, et.al., 2010; Plants for a Future, 2024)	

Genus, species from	What is the accepted name	Plant family	Uses						
Lundell's 1961 list in alphabetical order	for this plant today?		Medicinal (M)	Edible (E)	Other (O)	No Uses Reported (NU)	Notes of uses		
Pinus edulis	Pinus edulis Engelm. in Wisl.	Pinaceae		X	X		E: Edible seeds; he seeds can be finely ground to create a meal that is versatile for use in various culinary applications, including enriching stews, baking bread and cakes, and producing nut butter. O: Planted for its ornamental value in gardens and landscapes due to its unique appearance; is not as significant as some other pine species, it has been used for small-scale construction, fencing, and as a source of firewood; leaves extractions may be used for essential oils.		
							(C.A.B. International, 2002; Plants for a Future, 2023)		
Pinus Caryopitys Strobus	**Pinus L	Pinaceae	Х	Х	Х		<ul> <li>M: Seeds, leaves and barks used to extract oils and resin, used in ailments such as respiratory and skin conditions.</li> <li>E: Some species produce edible seeds, often referred to as pine nuts. These are used in culinary dishes, such as pesto, salads, and desserts.</li> </ul>		
							<ul> <li>O: Pine wood is widely used in construction for lumber, plywood, and various other building materials. It's valued for its affordability, strength, and versatility in a range of applications, from framing to furniture; pine essential oils are derived from the needles and resin of pine trees. They are used in aromatherapy, perfumes, and various scented products; ornamental, landscaping, and recreation; erosion control.</li> <li>(Richardson, 2000; C.A.B. International, 2002; Pennacchio, et.al., 2010; Stephen, 2019)</li> </ul>		

Genus, species from	What is the accepted name	Plant family		Uses						
<sup>'</sup> Lundell's 1961 list in alphabetical order	for this plant today?		Medicinal (M)	Edible (E)	Other (O)	No Uses Reported (NU)	Notes of uses			
Pinus cembroides var. remota	Pinus remota (Little) D.K.Bailey & Hawksw.	Pinaceae		Х	Х		E: Edible seeds: Nuts have been historically used by indigenous peoples in the region and can be eaten as a snack or used in culinary dishes, such as in salads, stews, and baked. O: Is not as widely used as some other pine			
							species, it can be utilized for small-scale construction, fencing, and as a source of firewood; ornamental, landscaping, and recreation.			
							(Plants for a Future, 2024)			
Pisonia	Pisonia L.	Nyctaginaceae	Х		Х		M: The leaves, bark and flowers of some species are used to create remedies for specific ailments such as the management of arthritis, hypertension, diabetes, asthma, skin thickening, excessive urination (polyuria), and anxiety.			
							O: Wood is generally not as valuable or widely used as that of some other tree species, it has been utilized for small-scale construction, furniture making, and carving in some regions; leaves of Pisonia species have been used as bait to catch fish; erosion control; ornamental plant.			
							(Prota Foundatiom, 2008; Sen, et.al., 2013; Kannaiyan, et.al., 2022)			
Plinia peroblata	Plinia peroblata (Lundell) Lundell	Myrtaceae				Х				
Eugenia peroblata										

Genus, species from	What is the accepted name	Plant family	Uses					
<sup>·</sup> Lundell's 1961 list in alphabetical order	for this plant today?		Medicinal (M)	Edible (E)	Other (O)	No Uses Reported (NU)	Notes of uses	
Plinia	Plinia L.	Myrtaceae	Х		Х		M: Some species are utilized in traditional medicine for the treatment of conditions such as diarrhea, asthma, and inflammatory ailments.	
							E: Edible fruit: Grape-like fruit that grows directly on the trunk of the tree. The fruit is sweet and is consumed fresh, used to make jellies, wines, liqueurs, and in various culinary applications. Leaves may be used in teas and infusions.	
							O: The fruit has cultural and social significance. It is often enjoyed as a delicacy and is part of local customs and celebrations; landscaping; fiber may be used as firewood.	
							(Mihai y Holban, 2019; Medeiros and Albuquerque, 2021; Plants for a Future, 2022)	
Polygala	Polygala L.	Polygalaceae	Х		Х		M: Some species are used for enhancing cognitive function as a medicinal remedy; has been traditionally employed to address various health concerns, including insomnia, memory impairment, depressive symptoms, cough, palpitations, and nervous system ailments.	
							O: Ornamental plant; certain <i>Polygala</i> species have been used in the production of soaps and cosmetics due to their natural foaming properties.	
							(Blake, 2018; Zhao, et.al., 2020; Kuka Jardineria, 2022)	

Genus, species from	species from   accepted name   fam					Uses	
Lundell's 1961 list in alphabetical order	for this plant today?		Medicinal (M)	Edible (E)	Other (O)	No Uses Reported (NU)	Notes of uses
Polygonatum biflorum Polygonatum cobrense	Polygonatum biflorum (Walter) Elliott	Asparagaceae	Х		Х		<ul> <li>M: Used to make poultices or extracts with potential anti-inflammatory properties. These preparations have been applied topically to reduce inflammation and soothe skin irritations; the plant's rhizomes, when prepared as a tea or tincture, were consumed to relieve digestive discomfort, and promote overall gastrointestinal health; sed to address respiratory issues. It was believed to have properties that could help ease coughs and other respiratory complaints.</li> <li>E: While not as common as some other uses, the young shoots of <i>Polygonatum biflorum</i> have been consumed as a vegetable in some regions.</li> <li>(Pennachio, et.al., 2010; Plants for a Future; 2021; Plants for a Future, 2023)</li> </ul>
Polygonatum	Polygonatum Mill.	Asparagaceae	X		X		M: Polygonatum species have rhizomes, wich are dried and ground into a fine powder, used in traditional remedies like teas, tinctures, and poultices. Their anti-inflammatory properties relieve discomfort and reduce swelling. Some Polygonatum species aid digestive health and alleviate gastrointestinal issues. They are also employed for respiratory well- being, particularly in managing coughs. Seen as a holistic health tonic in certain cultures, Polygonatum enhances vitality. E: In some regions, the young shoots are consumed as a nutritious vegetable, showcasing the plant's diverse role in traditional practices. (Zhou, et.al., 2011; Russo, et.al., 2012; Debnath, et.al., 2013; Zhao, et.al., 2018)

Genus, species from	What is the accepted name	Plant family				Uses	
Lundell's 1961 list in alphabetical order	for this plant today?		Medicinal (M)	Edible (E)	Other (O)	No Uses Reported (NU)	Notes of uses
Polygonum	Polygonum L.	Polygonaceae	X	X	X		<ul> <li>M: The leaves, roots, or other parts of the plants are prepared and consumed as herbal remedies for different ailments. <i>Polygonum</i> species are utilized for their diverse medicinal properties, with a focus on anti-inflammatory effects, making them valuable in addressing conditions marked by inflammation; used in supporting digestive health, with preparations aiding in digestion and alleviating gastrointestinal concerns; exhibits antioxidant properties contribute to cell protection against oxidative stress, potentially lowering the risk of chronic diseases.</li> <li>E: Some species have edible leaves: the edibility of <i>Polygonum</i> species varies, and some are indeed edible. However, it's important to note that not all <i>Polygonum</i> species are safe to consume, and some may even be toxic.</li> <li>O: Some <i>Polygonum</i> species have been traditionally used for their natural dyeing properties, yielding various colors for textiles.</li> <li>(Small, 2016; Shen, et.al., 2018; National Library of Medicine, 2020; Mahnashi, et.al., 2022)</li> </ul>
Protium schippii	Protium confusum (Rose) Pittier	Burseraceae	Х		Х		M: Resin and leaves may have anti- inflammatory and analgesic properties, making it suitable for relieving pain and inflammation. O: Aromatic resin may be used in the creation of incense and other craft items due to its fragrant properties; used in spiritual and ceremonial contexts, leaves or fiber often burned as incense in rituals, religious ceremonies, or traditional healing practices. (Santana, et.al., 2009; Municipalidad de San Carlos, 2012)

Genus, species from	What is the accepted name	Plant family				Uses	
<sup>·</sup> Lundell's 1961 list in alphabetical order	for this plant today?		Medicinal (M)	Edible (E)	Other (O)	No Uses Reported (NU)	Notes of uses
Protium Tetragastris	**Protium Burm.f.	Burseraceae	X		X		<ul> <li>M: Some Protium species produce resins often used for their potential anti-inflammatory properties. They may be applied topically to reduce inflammation and relieve discomfort. Resin also exhibit analgesic properties, may be used to alleviate pain associated injuries. Also used to treat respiratory ailments such as discomfort, coughs, or congestion. by the inhalation of the aromatic smoke of burning resin and leaves.</li> <li>O: Some Protium species, produce aromatic resins. These resins have been traditionally used for various purposes, such as incense, perfumes, and medicinal applications. "Copal", a type of resin, is extracted from certain Protium species; the resins and essential oils derived from Protium plants are appreciated for their aromatic qualities and are used in perfumery, aromatherapy, and incense; wood of certain Protium species may be used for construction or for crafting items. (De Almeida, et.al., 2015; Zhongqi, 2017; Malik, 2019; Picture This, 2023)</li> </ul>
Protium copal	Protium copal (Schltdl. & Cham.) Engl	Burseraceae	X		X		M: Used for its potential medicinal properties. It may be applied topically to treat skin irritations, cuts, or insect bites due to its believed healing and anti-inflammatory properties. O: Used as incense in religious and spiritual ceremonies. It is burned to produce fragrant smoke, which is believed to have purifying and cleansing properties; Copal resin is considered sacred in many indigenous and Mesoamerican traditions, used as an offering to deities or spirits in various rituals and ceremonies; copal resin into jewelry and crafts: resin can be polished and shaped to create decorative items. (Ubani, 2017; Buttner, 2017; Merali, et.al., 2018)

Genus, species from	What is the accepted name	Plant family		Uses						
<sup>•</sup> Lundell's 1961 list in alphabetical order	for this plant today?		Medicinal (M)	Edible (E)	Other (O)	No Uses Reported (NU)	Notes of uses			
Protium copal var. glabrum	Protium glabrum Engl.	Burseraceae	Х		Х		<ul> <li>M: May be used in traditional medicine. It is believed to have healing and anti- inflammatory properties, can be applied topically to treat skin irritations, cuts, or insect bites.</li> <li>O: Known for its resin production used as a spiritual item, construction material and aromatherapy for its aromatic properties. (Selina Wamucii, 2024)</li> </ul>			
Protium multiramiflorum	Protium multiramiflorum Lundell	Burseraceae				Х				
Tetragastris panamensis Tetragastris stevensonii	Protium stevensonii (Standl.) Daly	Burseraceae	X		Х		M: The resin and leaves are potentially endowed with anti-inflammatory and analgesic characteristics, rendering them suitable for mitigating pain and inflammation.			
SLEVENSONN							O: Valued for its aromatic qualities, the resin is employed in crafting incense and various artisanal items; employed in spiritual and ceremonial settings, the leaves or fiber are frequently burned as incense during rituals, religious observances, or traditional healing practices.			
							(Bray y Merino, 2007; Royal Botanic Gardens, 2019)			

Genus, species from	What is the accepted name	Plant family				Uses	
<sup>'</sup> Lundell's 1961 list in alphabetical order	for this plant today?		Medicinal (M)	Edible (E)	Other (O)	No Uses Reported (NU)	Notes of uses
Quararibea	Quararibea Aubl.	Malvaceae	X	X	Х		<ul> <li>M: Some parts of the plant, such as leaves or bark, are believed to have digestive properties and are used to treat gastrointestinal issues. Plant extracts or preparations may be used topically for wound healing or to soothe skin irritations. Certain compounds in the plants might be used for their potential anti- inflammatory effects.</li> <li>E: Edible fruit: Some species of the genus produces edible fruits. These fruits can be consumed fresh, or they are sometimes used in traditional dishes and beverages.</li> <li>O: Plants may hold cultural or ritual significance. They might be used in ceremonies, storytelling, or other cultural practices; Some species of <i>Quararibea</i> are cultivated as shade trees in gardens or coffee plantations; <i>Quararibea</i> plants with attractive flowers or foliage are sometimes cultivated as ornamental plants in gardens and landscapes.</li> <li>(Ravindran, 2017; Bosque Protector Prosperina, 2019; Fernandez y Cornejo, 2021; Jimenez, et.al., 2023; Plants for a Future, 2024)</li> </ul>
Quararibea turbinata	Quararibea turbinata (Sw.) Poir.	Burseraceae	X	Х	X		M: Used to address respiratory issues such as coughs, potentially aiding in promoting healthier breathing; may have anti- inflammatory properties, and as such, it may be used to alleviate inflammation and associated discomfort. E: Edible fruit: Known for its sweet and aromatic flavor. People eat the fruit fresh, use it in culinary preparations like jams, jellies, or beverages, and sometimes make alcoholic beverages from it. Edible leaves: may be used in teas and infusions. O: Sometimes planted as an ornamental tree for its attractive foliage and fragrant flowers. (Seidemann, 2005; Arcangeli, 2015; Plane, 2020; The New York Botanical Garden, 2024).

Genus, species from	What is the accepted name	Plant family	Uses							
<sup>·</sup> Lundell's 1961 list in alphabetical order	1961 list in today? alphabetical		Medicinal (M)	Edible (E)	Other (O)	No Uses Reported (NU)	Notes of uses			
Quararibea parviflora Myrodia angustifolia	** Quararibea parviflora Lundell	Malvaceae	Х	Х	Х		<ul> <li>M: Certain parts of the plant, such as the bark or leaves, are used to prepare remedies; remedies may be used to treat digestive issues or for their potential anti-inflammatory properties.</li> <li>E: Edible fruit: Consumed in certain regions. It is often described as having a sweet, fruity taste. The fruit is used in culinary preparations like jams, jellies, beverages, or eaten fresh.</li> </ul>			
							O: Wood can be used for various craft purposes. It may be used for making traditional tools, utensils, or decorative items; also used as a source of timber for construction or woodworking; tree's broad and dense canopy provides shade and can be planted for this purpose. (Parker, 2008; Hellmuth, 2013; Mulik y Ozuna, 2020; FLAAR Mesoamérica, 2024)			
Quararibea verticillaris	Quararibea verticillaris (Moc. & Sessé ex DC.) Vischer	Malvaceae				X				

Genus, species from	What is the accepted name	Plant family	Uses					
<sup>·</sup> Lundell's 1961 list in alphabetical order	for this plant today?		Medicinal (M)	Edible (E)	Other (O)	No Uses Reported (NU)	Notes of uses	
Quercus	Quercus L.	Fagaceae	X	X	X		M: Bark has been used as an astringent due to its tannin content. Astringents can help tighten and constrict tissues and may have been applied topically to treat minor skin irritations, rashes, or insect bites. Some oak species have been used in traditional medicine to address inflammatory conditions. Infusions or poultices made from oak leaves or bark were believed to have anti- inflammatory properties, although scientific evidence supporting these claims is limited. Oak galls, which are abnormal growths on oak trees caused by insect activity, have been used historically as a source of tannic acid. Tannic acid has mild antiseptic properties and has been employed in topical applications to disinfect wounds. Oak bark is used as a remedy for gastrointestinal issues, including diarrhea. E: Edible nuts: the nuts of some oak trees are edible but typically require extensive processing to remove bitter tannins. Edible leaves: young oak leaves have been used for culinary purposes. They are sometimes blanched and used in salads, though their flavor can be somewhat bitter. O: Oak wood is highly regarded for its top-quality attributes in construction and woodworking due to its durability, longevity, and attractive grain patterns; also used for crafting furniture; oak hardwood is a popular material for flooring due to its enduring nature and timeless aesthetics; some oak species, such as <i>Quercus alba</i> , are crucial in making barrels used for aging beverages like wine and whiskey and wine. (Valencia, 2004; Ismail, et.al., 2016; Taib, et.al., 2020; Healthline, 2024).	

Genus, species from	What is the accepted name	Plant family		Uses						
'Lundell's 1961 list in alphabetical order	in today?		Medicinal (M)	Edible (E)	Other (O)	No Uses Reported (NU)	Notes of uses			
Polygala maravillasensis	**Rhinotropis maravillasensis (Correll) J.R.Abbott	Polygalaceae			Х		O: Used as an ornamental plant in gardens and as a groundcover in landscaping. (Selina Wamucii, 2024).			
Scleria setacea	Rhynchospora tenerrima subsp. tenerrima	Cyperaceae				Х	NU: Few or no reports of uses.			
Dichromena	**Rhynchospora Vahl	Cyperaceae	Х		Х		M: Certain species from the genus have been used in traditional medicine for various purposes, such as wound healing or as diuretics.			
							O: Some <i>Rhynchospora</i> species have fibrous roots and are used for stabilizing soil and preventing erosion, particularly in wetland and riparian areas; the flexible and slender stems of some <i>Rhynchospora</i> species may be used in traditional crafts or basket weaving; ornamental and landscaping plant.			
							(Les, 2020; Royal Botanic Gardens, 2024; Selina Wamucii, 2024).			
Armoracia aquatica	Rorippa amphibia Besser	Brassicaceae		X	X		<ul> <li>E: Edible leaves: Young leaves are cooked or baked, used in dishes like salads or soups.</li> <li>O: Wildlife habitat and attraction since it provides habitat and food for various aquatic and wetland wildlife, including insects, amphibians, and waterfowl; used to improve water quality in wetland ecosystems by absorbing excess nutrients and filtering contaminants; may be used to stabilize soil and control erosion along water bodies; flowers of may attract pollinators like bees.</li> <li>(Plants for a Future, 2024; Picture This, 2024; New Zealand Plant Conservation Network, 2024; Native Plant Trust, 2024).</li> </ul>			

Genus, species from Lundell's	What is the accepted name	Plant family		Uses							
Lundell's 1961 list in alphabetical order	for this plant today?		Medicinal (M)	Edible (E)	Other (O)	No Uses Reported (NU)	Notes of uses				
Russelia campechiana Russelia campechiana var. lilacina	Russelia campechiana Standl.	Plantaginaceae			Х	Х	O: Ornamental and landscaping; wildlife attraction. NU: Few or no reports of uses. Little is known about its uses.				
Russelia	Russelia Jacq.	Plantaginaceae	Х		Х		M: Some species are used to treat malaria, cancer, and inflammatory diseases. Used to promote hair growth.				
							O: Ornamental and landscaping.				
							(Calix, 2020; Carlson, 2021; Philippine Medical Plants, 2022).				
Sambucus caerulea	Sambucus cerulea Raf.	Viburnaceae	Х	Х	Х		M: Blue elderberries used various ailments such as digestive issues. They are believed to have potential health benefits due to their antioxidant-rich properties; used to boost the immune system, alleviate cold and flu symptoms, and reduce inflammation.				
							E: Edible fruits: Edible berries; these berries can be used to make jams, jellies, pies, and syrups. They are also used to flavor beverages, including elderberry wine.				
							O: Flowers and fruit used to produce natural dyes, often used for coloring fabrics and crafts.				
							(Gough, 2008; Montana Plant Life, 2024; Plants for a Future, 2024; Rxlist, 2024).				

Genus, species from	What is the accepted name	Plant family		<u> </u>		Uses	
Lundell's 1961 list in alphabetical order	for this plant today?		Medicinal (M)	Edible (E)	Other (O)	No Uses Reported (NU)	Notes of uses
Sambucus	Sambucus L.	Viburnaceae	Х	Х	Х		M: Some species exhibit anti-inflammatory and antioxidant properties; used mainly in skin and digestive issues.
							E: Some species produce clusters of small, bluish-black berries that are edible when fully ripe: used in dishes such as salads, pies, or beverages.
							O: Some species flowers and fruits are used for dyes, and coloring fabrics and crafts.
							(Gough, 2008; Martínez, et.al., 2020; RxList, 2024).
Sambucus mexicana	Sambucus mexicana	Viburnaceae	Х	Х	Х		M: Used to alleviate symptoms of colds and flu and reduce inflammation.
	C.Presl ex DC						E: Edible fruits: berries used to make a variety of culinary products, including jams, jellies, pies, syrups, and beverages.
							O: Fruits used as dye.
							(Plants for a Future, 2024).
Bauhinia gentlei	**Schnella microstachya var.	Fabaceae				Х	O: Cultural or ritual significance; they may be used in ceremonies, rituals, or traditional practices of certain indigenous groups.
	microstachya						(Royal Botanic Gardens, 2024).
Schoenus	Schoenus L.	Cyperaceae			Х		O: Some Schoenus species have fibrous roots and can be used for erosion control in areas with unstable soils or along riverbanks; it may be used in wetland restoration projects to help stabilize the ecosystem and promote the growth of other wetland plants; traditional healers might have specific uses for Schoenus plants, which can include medicinal applications or cultural purposes.
							(Simpson e Inglis, 2001; FLAAR Mesoamerica, 2024).

Genus, species from	What is the accepted name	Plant family	Uses						
<sup>•</sup> Lundell's 1961 list in alphabetical order	for this plant today?		Medicinal (M)	Edible (E)	Other (O)	No Uses Reported (NU)	Notes of uses		
Scleria macrocarpa	**Scirpodendron ghaeri Merr.	Cyperaceae			Х		O: Wood is prized by woodworkers and artisans for its beautiful appearance and workability. It is often used in crafting high- quality furniture, cabinetry, and decorative wood items; wood is highly sought after for its acoustic properties and is used in the construction of musical instruments; durability of the wood makes it suitable for use as flooring material.		
							(Selina Wamucii, 2024; Useful Tropical Plants, 2024).		
Scirpus	Scirpus L.	Cyperaceae			Х		O: Used in phytoremediation, a process in which plants are employed to remove pollutants and contaminants from water and soil; stems and leaves of Scirpus plants used by indigenous and traditional communities for weaving baskets, mats, and other handicrafts; some Scirpus species have been used in traditional papermaking processes.		
							(Song of the Woods, 2021; Plants for a Future, 2021; Plants for a Future, 2024).		
Scleria reflexa	Scleria boivinii Steud.	Cyperaceae		Х	Х		E: While not a widely recognized food source, some parts of the <i>Scleria boivinii</i> plant may have edible parts. In some cultures, the roots or rhizomes are consumed after appropriate preparation to make them palatable.		
							O: Fibers from <i>Scleria boivinii</i> for crafts and weaving. The plant's fibers can be extracted and used to create items like baskets, mats, or textiles; soil stabilization and erosion control.		
							(Useful Tropical Plants, 2023).		

Genus, species from	What is the accepted name	Plant family				Uses	
<sup>'</sup> Lundell's 1961 list in alphabetical order	for this plant today?		Medicinal (M)	Edible (E)	Other (O)	No Uses Reported (NU)	Notes of uses
Scleria bracteate	Scleria bracteata Cav.	Cyperaceae			Х		O: Ornamental, fiber used for crafts and construction material.
Scleria							Mainly a wild weed.
bracteata var. floribunda							(Selina Wamucii, 2024).
Scleria bracteata f. simplicior							
Scleria bracteata var. supra- gynaecea							
Scleria floribunda							
Macrolomia bracteata							
Scleria cenchroides	Scleria bulbifera Hochst. ex A.Rich.	Cyperaceae			Х		O: Source of food for cattle; fiber may be used for crafts or as construction material; erosion control.
							(Gálan, 2017).
Scleria ciliate Scleria	Scleria ciliata Michx.	Cyperaceae		Х	Х		E: Some communities may eat roots or rhizomes with special preparation to make them palatable.
macrantha							O: Fibers used for crafts; may be used as an ornamental plant.
							(USGS, 2024).

Genus, species from	What is the accepted name	Plant family		Uses						
<sup>·</sup> Lundell's 1961 list in alphabetical order	for this plant today?		Medicinal (M)	Edible (E)	Other (O)	No Uses Reported (NU)	Notes of uses			
Scleria ciliata var. pauciflora	Scleria ciliata var. ciliata	Cyperaceae			Х	Х	O: Ornamental and landscaping; source of food for cattle; fibers may be used as craft material; no economic importance.			
							NU: Few or no reports of uses. Little is known about its uses.			
							(NatureServe Explorer, 2024).			
Scleria ciliata var. elliottii	Scleria ciliata var. elliottii (Chapm.) Fernald	Cyperaceae				Х	NU: Few or no reports of uses. Little is known about its uses			
Scleria elliottii	Scleria ciliata var. elliottii (Chapm.) Fernald	Cyperaceae			Х	Х	NU: Few or no reports of uses. Little is known about its uses.			
Scleria nutans Scleria tenella Hypoporum	**Scleria distans Poir.	Cyperaceae			Х		O: The plant's tough and flexible stems have been used to create cordage, baskets, and other woven items in some traditional communities; planted to help control soil erosion, especially in areas where it is native.			
distans							(Selina Wamucii, 2024).			
Cenchrus hirsutus Hypoporum	**Scleria distans var. distans	Cyperaceae				Х	NU: Few or no reports of uses. Little is known about its uses			
nutans										
Scleria hirtella var. glabrescens										
Scleria hirtella var. pauciciliata										
Scleria michauxii										
Scleria mollis										

Genus, species from	What is the accepted name	Plant family				Uses	
Lundell's for thi 1961 list in too alphabetical order	for this plant today?		Medicinal (M)	Edible (E)	Other (O)	No Uses Reported (NU)	Notes of uses
Scleria eggersiana Scleria grisebachii Scleria microcarpa var.	Scleria eggersiana Boeckeler	Cyperaceae			Х		O: Ornamental plant; fiber used as craft material; planted to control erosion and soil stabilization. (Selina Wamucii, 2024).
latifolia Scleria	Scleria	Cyperaceae			X		O: Source of food for cattle; ornamental plant.
elongata	elongatissima Piérart						Mainly a wild weed. (Selina Wamucii, 2024).
Schoenus lithospermus Schoenus secans Scleria margaritifera	**Scleria flagellum- nigrorum P.J.Bergius	Cyperaceae			Х		O: Used to make furniture, baskets, and other crafts. It is also used as a soil stabilizer and erosion control. (Selina Wamucii, 2024).
Scleria foliosa	Scleria foliosa Hochst. ex A.Rich.	Cyperaceae			Х		O: Flexible stems have been utilized to create cordage, baskets, mats, and other woven items.
							(Selina Wamucii, 2024).

Genus, species from Lundell's	What is the accepted name	Plant family				Uses	
Lundell's 1961 list in alphabetical order	for this plant today?		Medicinal (M)	Edible (E)	Other (O)	No Uses Reported (NU)	Notes of uses
alphabetical	** Scleria gaertneri Raddi	Cyperaceae					M: May be employed to address digestive issues, as an anti-inflammatory agent, or to promote wound healing. O: Used for crafts and basket weaving. The plant's fibers are valued for their strength and flexibility in creating various woven items. (Bezerra, et.al., 2022; Selina Wamucii, 2024).
Scleria simplicior Scleria subulate							

Genus, species from	What is the accepted name	Plant family		Uses						
species from Lundell's 1961 list in alphabetical order	for <sup>'</sup> this plant today?		Medicinal (M)	Edible (E)	Other (O)	No Uses Reported (NU)	Notes of uses			
Scleria georgiana	Scleria georgiana Core	Cyperaceae				Х	NU: Few or no reports of uses. Little is known about its uses.			
Scleria hirta	Scleria hirta Boeckeler	Cyperaceae				Х	NU: Few or no reports of uses. Little is known about its uses.			
Scleria hirtella Hypoporum hirtellum	**Scleria hirtella Sw.	Cyperaceae				X	NU: Few or no reports of uses. Little is known about its uses.			
Anerma hispidula	** Scleria hispidula Hochst. ex A.Rich.	Cyperaceae				Х	NU: Few or no reports of uses. Little is known about its uses.			
Scleria ovuligera	Scleria induta Turrill	Cyperaceae			Х		O: Used as an ornamental plant in gardens and as a natural insect repellent. (Coronado,et.al., 2016).			
Scleria interrupta Hypoporum interruptum Scleria distans var. interrupta Scleria pinetorum Scleria pittieri Scleria distans var. interrupta	** Scleria interrupta Rich.	Cyperaceae			X		O: <i>Scleria interrupta</i> is known for its extensive root system, which can help prevent soil erosion; fiber used for crafts and basketry. (Schneider and Gil, 2021).			

Genus, species from Lundell's	What is the accepted name for this plant	Plant family				Uses	
Lundell's 1961 list in alphabetical order	for this plant today?		Medicinal (M)	Edible (E)	Other (O)	No Uses Reported (NU)	Notes of uses
Scleria arundinacea Scleria	Scleria latifolia Sw.	Cyperaceae	Х		Х		M: Used to treat ailments such as digestive issues, reducing inflammation, and treating minor injuries by infusions or extractions of roots or leaves.
cyanocarpa Scleria							O: Food source for cattle, fiber used for crafts; ornamental plant; may be planted for erosion and stabilization soil control.
grandifolia Scleria kappleriana							(Ecos del bosque, 2024; Selina Wamucii, 2024).
Scleria lacunose							
Scleria kappleriana							
Scleria lacunose							
Scleria Ialifolia var. arundinacea							
Scleria latifolia							
Scleria loefgreniana							
Scleria nervosa							
Scleria sylvestris							

Genus, species from Lundell's	What is the accepted name	Plant family	Uses						
Lundell's 1961 list in alphabetical order	for this plant today?		Medicinal (M)	Edible (E)	Other (O)	No Uses Reported (NU)	Notes of uses		
Carex tenuis Hypoporum Lithospermum Hypoporum	**Scleria lithosperma (L.) Sw.	Cyperaceae	Х		Х		M: Used to treat ailments such as digestive issues. The extract has historically been used to treat skin conditions, as an abortifacient, and to normalize menstrual cycles. Also used because it effectively produces antinephritic activity.		
sieberi Scirpus lithospermus Scleria lithosperma Scleria wightiana							O: Used for its ability to stabilize soil and prevent erosion; some indigenous and local communities may have traditional uses for <i>Scleria lithosperma</i> . These traditional applications might include medicinal uses or other purposes. It's essential to consult with knowledgeable individuals from these communities to understand their practices fully. (Lingam, et.al., 2023; Flowers of India, 2024).		
Hypoporum capillare Hypoporum gracile	**Scleria lithosperma var. lithosperma	Cyperaceae				Х	NU: Few or no reports of uses. Little is known about its uses.		
Scleria capillaris									
Scleria filiformis									
Scleria glaucescens									
Scleria gracilis									
Scleria krugiana									
Scleria lithosperma var. filiformis									
Scleria purpurea									
Scleria tenuis									

Genus, species from	What is the accepted name	Plant family				Uses	
<sup>'</sup> Lundell's 1961 list in alphabetical order	for this plant today?		Medicinal (M)	Edible (E)	Other (O)	No Uses Reported (NU)	Notes of uses
Scleria macrophylla	**Scleria macrophylla	Cyperaceae			Х		O: Ornamental; erosion control; food source for cattle; may be used as craft material.
Ophryoscleria asperrima	J.Presl & C.Presl						(Selina Wamucii, 2024).
Ophryoscleria paludosa							
Scleria asperrima							
Scleria macrophylla							
Scleria palmifolia							
Scleria paludosa							
Scleria microcarpa	**Scleria microcarpa	Cyperaceae			Х		O: Fiber used as construction and craft material; may have cultural or symbolic
Scleria microcarpa var.	Nees						significance, with uses related to traditions, ceremonies, or rituals.
foliosa							(Selina Wamucii, 2024; FLAAR Mesoamerica, 2024).
Ophryoscleria microcarpa							FLAAR Mesoamerica, 2024).
Scleria mitis	**Scleria mitis	Cyperaceae			Х	Х	O: Ornamental plant; planted for
Scleria praealta	P.J.Bergius						erosion control.
Scleria riparia							(Selina Wamucii, 2024).
Carex mitis							
Scleria lucida							
Ophryoscleria lucida							
Ophryoscleria mitis							

Genus, species from Lundell's	What is the accepted name	Plant family				Uses	
Lundell's 1961 list in alphabetical order	for this plant today?		Medicinal (M)	Edible (E)	Other (O)	No Uses Reported (NU)	Notes of uses
Scleria bracteata var. angusta	Scleria muehlenbergii Steud.	Cyperaceae			Х		O: Used as an ornamental plant in gardens and as a groundcover. It is also used in erosion control and to provide habitat for wildlife.
Scleria debilis							(Selina Wamucii, 2024).
Scleria dictyocarpa							
Scleria hemitaphra							
Scleria latilacunosa							
Scleria laxa							
Scleria							
reticularis var. pubescens							
Scleria rigens							
Scleria							
setacea var. hemitaphra							
Scleria torreyana							
Scleria oligantha	Scleria oligantha Michx.	Cyperaceae			Х		O: Used to stabilize soil and prevent erosion. Its fibrous root system helps bind the soil; may be used as ornamental. (Selina Wamucii, 2024).

Genus, species from	What is the accepted name	Plant family					
<sup>·</sup> Lundell's 1961 list in alphabetical order	for <sup>'</sup> this plant today?		Medicinal (M)	Edible (E)	Other (O)	No Uses Reported (NU)	Notes of uses
Hypoporum Macrolomia	**Scleria P.J.Bergius	Cyperaceae	X	Х	Х		M: Some species of the genus are used to treat ailments such as digestive issues, reducing inflammation, and treating minor injuries. Roots, rhizomes, and leaves are used for these proposes.
Mastigoscleria Ophryoscleria							E: Some communities may eat roots and rhizomes of some <i>Scleria</i> species.
Scleria							O: The fibers are used to make crafts such as baskets because of its flexibility and durability; many species are planted to control erosion and soil stabilization; may also have cultural importance: used in rituals and ceremonies; can be used as ornamental and landscaping; source of food for cattle.
							Many of the species have no uses or are simply wild weeds.
							(Mohlenbrock, 2001; Shrestha, et.al., 2018; Wiart, 2021; Bezerra, et.al., 2022; Selina Wamucii, 2024).
Scleria papillata	Scleria papillata Willd. ex Kunth	Cyperaceae				Х	NU: Few or no reports of uses. Little is known about its uses.
Scleria pauciflora var. caroliniana Scleria caroliniana	Scleria pauciflora var. caroliniana Alph. Wood	Cyperaceae				Х	NU: Few or no reports of uses. Little is known about its uses.
Scleria pauciflora var. effusa	Scleria pauciflora var. effusa	Cyperaceae				Х	NU: Few or no reports of uses. Little is known about its uses.

Genus, species from	What is the accepted name	Plant family				Uses	
Lundell's 1961 list in alphabetical order	for this plant today?		Medicinal (M)	Edible (E)	Other (O)	No Uses Reported (NU)	Notes of uses
Scleria pauciflora	Scleria pauciflora var.	Cyperaceae			Х		NU: Few or no reports of uses. Little is known about its uses.
Scleria pauciflora var. elliottii	pauciflora						
Scleria pauciflora var. kansana							
Scleria micrantha	Scleria polycarpa Boeckeler	Cyperaceae			Х		O: Used as an ornamental plant in gardens and as a ground cover. It is also used to stabilize soil and control erosion.
							(Selina Wamucii, 2024).
Scleria pulchella	Scleria pulchella Ridl	Cyperaceae				Х	NU: Few or no reports of uses. Little is known about its uses.
Carex lithosperma	**Scleria reticularis Michx	Cyperaceae				Х	NU: Few or no reports of uses. Little is known about its uses.
Scleria trichopoda							
Scleria scabra	Scleria scabra Willd.	Cyperaceae			Х		O: Ornamental plant that is used in gardens and parks. It is also used as a cut flower in
Scleria lobulate	vvilia.						floral arrangements. The plant is known for its attractive foliage and showy flowers.
Scleria porphyrorhiza							(Selina Wamucii, 2024).

Genus, species from	What is the accepted name	Plant family				Uses	
<sup>·</sup> Lundell's 1961 list in alphabetical order	for this plant today?		Medicinal (M)	Edible (E)	Other (O)	No Uses Reported (NU)	Notes of uses
Scleria secans Scleria caricifolia Scleria renggeriana Scleria reticularis Scleria weigeltiana	Scleria secans Urb.	Cyperaceae			Х		O: Known for its utilization as a thatching material for roofing and construction. The plant's long, durable leaves are skillfully woven into thatch, which provides effective shelter from the elements and maintains a cooler interior temperature; employed for basketry and crafting various items, owing to its flexibility and strength. Used to make paper. (Strong, 2020; Selina Wamucii, 2024).
Hypoporum micrococcum Hypoporum purpurascens Hypoporum tenellum Scleria areolate Scleria luzuliformis Scleria verticillata f. brevis Scleria verlicillata f. capillaris Scleria verlicillata var. tenella	** Scleria tenella Kunth	Cyperaceae	X		X		M: Infusions and extractions from roots and leaves used to treat skin conditions and for pain relief. In traditional medicine to treat a variety of conditions, including fever, diarrhea, and skin diseases. It is also believed to have anti-inflammatory and antioxidant properties. O: The plant's root system is beneficial for preventing soil erosion in areas with loose or sandy soils. (Selina Wamucii, 2024).

Genus, species from	What is the accepted name	Plant family				Uses	
'Lundell's 1961 list in alphabetical order	for this plant today?		Medicinal (M)	Edible (E)	Other (O)	No Uses Reported (NU)	Notes of uses
Scleria trialata	Scleria trialata Poir.	Cyperaceae			Х		NU: Few or no reports of uses. Little is known about its uses.
Scleria trinitalis	Scleria trinitatis Boeckeler	Cyperaceae			Х	Х	NU: Few or no reports of uses. Little is known about its uses.
Scleria verticillata Hypoporum dijfusum Hypoporum verticillatum	**Scleria verticillata Muhl. ex Willd.	Cyperaceae			Х		NU: Few or no reports of uses. Little is known about its uses.
Scleria kunthiana Scleria tenuiflora							
Scleria diffusa Scleria trigonocarpa	Scleria virgata (Nees) Steud.	Cyperaceae			Х		O: A common ornamental plant in gardens and is also used as a ground cover. It has a low growing, spreading habit and is tolerant of a wide range of soil types and conditions. It is also used in landscaping and as a border plant.
Serjania incisa	Serjania incisa Torr.	Sapindaceae	Х		Х		(Selina Wamucii, 2024). NU: Few or no reports of uses. Little is known about its uses.
Serjania	<i>Serjania</i> Plum. ex Mill.	Sapindaceae	Х		Х		M: Some species are known to treat ailments such as inflammation, pain relief or digestive issues. O: Some Serjania species are cultivated as ornamental plants for their attractive foliage, vines, or colorful berries.
							(Quattrocchi, 2016; Leon Levy Native Plant Preserve, 2024; The University of Texas at Austin, 2024).

Genus, species from	What is the accepted name	Plant family		Uses						
<sup>·</sup> Lundell's 1961 list in alphabetical order	961 list in today? Dhabetical		Medicinal (M)	Edible (E)	Other (O)	No Uses Reported (NU)	Notes of uses			
Smilax caudata Smilax domingensis	Smilax domingensis Willd.	Smilacaceae	×	Х			M: Have been traditionally used to purify the blood and improve overall health; used for its anti-inflammatory properties and has been employed to alleviate joint pain and arthritis.			
Smilax engleriana							E: Has been used as a flavoring agent in beverages, particularly root beer and sarsaparilla drinks; roots used to make "zarzaparrilla" teas.			
							(Cacéres, et.al., 2012; Hentze , 2012; Selina Wamucii, 2024).			
Smilax	Smilax L.	Smilacaceae	Х	Х	Х		M: Certain <i>Smilax</i> species have a history of use in traditional medicine by indigenous cultures. They have been used for a range of purposes, including as a diuretic, blood purifier, and for treating various ailments; roots used to make teas, tonics, and herbal remedies to treat skin conditions, joint pain, and other health issues.			
							E: The roots of some <i>Smilax</i> species are used to produce "sarsaparilla", a flavoring and natural remedy for various purposes, including beverages and dishes.			
							O: Some indigenous cultures have used the vines and fibers from certain <i>Smilax</i> species for weaving baskets and crafts; extracts from <i>Smilax</i> plants have been used in cosmetics and skincare products for their potential skin benefits; grown for their ornamental value,with their vines used for landscaping and decoration.			
							(Runkel y Bull, 2009; Cacéres, et.al., 2012; Van Wyk and Wink, 2016; Selina Wamucii, 2024).			

Genus, species from	What is the accepted name	Plant family				Uses	
<sup>·</sup> Lundell's 1961 list in alphabetical order	for this plant today?		Medicinal (M)	Edible (E)	Other (O)	No Uses Reported (NU)	Notes of uses
Smilax Ianceolata	Smilax laurifolia L.	Smilacaceae	Х	Х	Х		M: Used as a blood purifier and general tonic; exhibits anti-inflammatory properties and has been used to alleviate joint pain and arthritis. Some traditional systems employ this plant for detoxification and cleansing purposes.
							E: Young shoots are edible and can be cooked or consumed raw. They have been used as a wild edible plant in traditional cuisine.
							O: May be used in the production of natural products, including herbal supplements, herbal teas, and cosmetics.
							(Les, 2020; Useful Temperate Plants Database, 2022; Plant Delights Nursery, 2024; Plants for a Future, Herbs, 2024).
Smilax mollis Smilax gentlei	Smilax mollis Humb. & Bonpl. ex Willd.	Smilacaceae	Х	Х	Х		M: Utilized due to its perceived anti- inflammatory properties, which have been applied to alleviate conditions such as joint pain and arthritis.
							E: They have been used as a flavoring agent in beverages, including root beer and sarsaparilla drinks. These beverages are known for their unique and pleasant flavor; some indigenous cultures have utilized the young shoots as a wild edible, cooking them or consuming them raw.
							O: May be used as an ornamental plant; compounds and extracts derived from <i>Smilax</i> <i>mollis</i> used in creating natural products, including herbal supplements, teas, and cosmetics. Reported to be used as fish poison.
							(Balick y Arvigo, 2015; Selina Wamucii, 2024).

Genus, What is the species from accepted name		Plant family		Uses						
'Lundell's 1961 list in alphabetical order	for this plant today?		Medicinal (M)	Edible (E)	Other (O)	No Uses Reported (NU)	Notes of uses			
Smilax lundellii	Smilax spinosa Mill.	Smilacaceae	X	Х			M: Known for its properties to treat skin conditions such as acne; exhibits potential for pain relief. Used for stomach and intestinal problems and as a stimulant.			
							E: Roots and dry leaves used as a flavoring agent; roots may be used for teas and infusions.			
							(Seelinger, et.al., 2012; Backyard Nature Home, 2024; FLAAR Mesoamerica, 2024).			
Smilax subpubescens Smilax purpusii Smilax rufa	Smilax subpubescens A.DC.	Smilacaceae	X	Х			M: It is believed to have blood-purifying properties and is used to cleanse the blood; traditionally employed for its potential anti- inflammatory effects; used for detoxifying the body and eliminating toxins; used to address skin conditions, including acne and psoriasis.			
Smilax venosa							E: Roots and dry leaves used as a flavoring agent; extracts and compounds may be used in the production of dietary supplements, particularly those aimed at supporting joint health, detoxification, or skin health.			
							(Ferrufino, 2010; Benz, et.al., 2016; Benz, et.al., 2016).			

Genus, species from	What is the accepted name	Plant family				Uses	
'Lundell's 1961 list in alphabetical order	for this plant today?		Medicinal (M)	Edible (E)	Other (O)	No Uses Reported (NU)	Notes of uses
Sophora	Sophora L.	Smilacaceae	Х	Х	Х		M: Certain Sophora species are used traditionally to address digestive issues and skin conditions, while some contain antioxidant compounds with potential health benefits. Also used for cardiovascular health, supporting blood circulation, and reducing blood pressure.
							E: Some species exhibit edible parts like flowers, seeds, leaves, and young pods.
							O: Many species of <i>Sophora</i> are grown for their ornamental qualities. They are appreciated for their attractive foliage, colorful flowers, and overall aesthetics; some <i>Sophora</i> species have been used for their flowers, which can be a source of yellow dye; in some regions, the wood of certain <i>Sophora</i> species may be used for various purposes, such as for construction or making tools.
							(Jiao, 2003; Wakefield, 2014; He,at.al., 2015; He,et.al., 2016; Abd, et.al., 2021; Picture This, 2024).
Colubrina rufa	**Strychnos parvifolia A.DC.	Loganiaceae				Х	Plant species that contains the highly toxic alkaloid strychnine.
							"Strychnine" is a highly toxic compound that affects the central nervous system and can lead to severe and life-threatening symptoms, including muscle spasms, convulsions, and respiratory failure. Even small amounts of strychnine can be lethal to humans and animals.
							NU: Few or no reports of uses. (Silva, et.al., 2005; Setubal, et.al., 2021).

Genus, species from	What is the accepted name	Plant family					
<sup>·</sup> Lundell's 1961 list in alphabetical order	for <sup>'</sup> this plant today?		Medicinal (M)	Edible (E)	Other (O)	No Uses Reported (NU)	Notes of uses
Stylogyne	Stylogyne A.DC.	Primulaceae	Х	Х	Х		M: Medical uses such as antiseptic, anti- inflammatory and anti-fungal.
							E: Some communities may eat its fruits or leaves.
							O: Some <i>Stylogyne</i> species may be grown for their ornamental value due to their attractive foliage or flowers. They are used in landscaping and gardens to enhance visual aesthetics. Used as natural dye.
							(Carrijo, et.al., 2012; Quattrocchi, 2016; Selina Wamucii, 2024; Selina Wamucii, 2024; Royal Botanic Gardens, 2024).
Ardisia ibaguensis	Stylogyne turbacensis	Primulaceae	Х		Х		M: Used in human and animal medicine. Presents antiseptic properties.
Stylogyne guatemalensis	(Kunth) Mez						O: Can serve as valuable components of local ecosystems, providing habitat and food for wildlife; ornamental plants.
Stylogyne laevis							(Jimenez, et.al., 2007; Royal Botanic Gardens, 2024; FLAAR Mesoamerica, 2024).
Stylogyne nicaraguensis							
Ardisia laevis Ardisia ramiflora Stylogyne ramiflora	Stylogyne turbacensis subsp. laevis (Oerst.) Ricketson & Pipoly	Primulaceae				X	NU: Few or no reports of uses. Little is known about its uses.
Stylogyne standleyi							

Genus, species from	What is the accepted name	Plant family				Uses	
<sup>·</sup> Lundell's 1961 list in alphabetical order	for this plant today?		Medicinal (M)	Edible (E)	Other (O)	No Uses Reported (NU)	Notes of uses
Eugenia mirandae	**Syzygium mirandae (Merr.) Merr	Myrtaceae				Х	NU: Few or no reports of uses. Little is known about its uses.
Thelypteris	Thelypteris Schmidel	Thelypterida- ceae			Х		O: Thelypteris ferns are often chosen for shaded or partially shaded areas in gardens; some Thelypteris species are suitable for indoor cultivation; used for erosion control and land stabilization due to their extensive root systems; ornamental.
							(De León, et.al., 2007; Picture This, 2023).
Triplochiton	Triplochiton	Malvaceae	Х	Х	Х		(Empathies on Triplochiton scleroxylon).
	K.Schum.						M: Some species of the genus are used to alleviate pain and discomfort, including headaches and body aches; may also be used to reduce fever and address gastrointestinal problems, such as diarrhea and stomach discomfort.
							E: Some species of the genus exhibit edible parts such as fruits, bark and/or leaves.
							O: Tress highly valued for their timber. The wood is lightweight, easy to work with, and possesses good stability, making it suitable for various applications; used to extract fibers that are used for making ropes, twine, and cordage. These fibers are strong and flexible.
							(Quirce, et.al., 2000; Borota, 2012 CSIC, INIA y Gobierno de España, 2022; Maderas Barber the Right Wood, 2023; Plants for a Future, 2024; Useful Tropical Plants, 2024).

Genus, species from	What is the accepted name	Plant family				Uses	
<sup>'</sup> Lundell's 1961 list in alphabetical order	for this plant today?		Medicinal (M)	Edible (E)	Other (O)	No Uses Reported (NU)	Notes of uses
Valeriana arizonica	Valeriana arizonica A.Gray	Caprifoliaceae	Х	Х	Х		M: It is often used to help with conditions such as anxiety, nervousness, and insomnia; some communities utilize <i>Valeriana arizonica</i> for its potential digestive benefits; used to alleviate mild pain, including headaches and menstrual cramps.
							E: As food condiment or infusions (teas).
							O: May have a mildly pleasant aroma used in soaps and perfumes; ornamental plants.
							(Kane 2017; Picture This, 2024; SERNEC, 2024).
Valeriana	Valeriana L.	Caprifoliaceae	Х	X	Х		M: Some species of the genus are known for its sedative properties, aiding sleep, and relaxation. It serves as a natural remedy for insomnia and stress, calming the nervous system; used to mild pain relief, muscle relaxation, and easing digestive discomfort; also used to reduce restlessness, and can lower blood pressure during times of stress. E: Some species may be used as a condiment for food or for infusions.
							O: Some other Valeriana species have fragrant flowers, used in perfumery to create scents and perfumes; ornamental plants.
							(Villar y Carretero, 2001; NIH, 2013; Aronson, 2016; Kane, 2017; Picture This 2024; WEB MD, 2024).
Valeriana	Valeriana texana	Caprifoliaceae			Х	Х	O: Mainly a wild plant.
texana	Steyerm						NU: Few or no reports of uses. Little is known about its uses.
							(New Mexico Rare Plants, 2024).

Genus, species from	What is the accepted name		Uses						
<sup>•</sup> Lundell's 1961 list in alphabetical order	for this plant today?		Medicinal (M)	Edible (E)	Other (O)	No Uses Reported (NU)	Notes of uses		
Vellozia	Vellozia Vand.	Velloziaceae	Х		Х		M: Some species are used to treat skin problems, fevers and headaches.		
							O: Some Vellozia species are appreciated for their unique and attractive appearance. They are occasionally cultivated as ornamental plants, particularly in rock gardens and succulent collections.		
							(Conceição, 2018; Selina Wamucii, 2024; Selina Wamucii, 2024).		
Viburnum optatum	Viburnum blandum	Viburnaceae			Х		O: Used as an ornamental plant and wildlife attractor.		
Viburnum optatum var. vagum	C.V.Morton						(Selina Wamucii, 2024).		
Viburnum disjunctum Viburnum	Viburnum disjunctum C.V.Morton	Viburnaceae				Х	NU: Few or no reports of uses. Little is known about its uses.		
mendax									
Viburnum hondurense	Viburnum hondurense Standl.	Viburnaceae	Х			Х	NU: Few or no reports of uses. Little is known about its uses.		

Genus, species from	species from   accepted name		Uses						
<sup>'</sup> Lundell's 1961 list in alphabetical order	for <sup>'</sup> this plant today?	family	Medicinal (M)	Edible (E)	Other (O)	No Uses Reported (NU)	Notes of uses		
Viburnum Tinus	**Viburnum L.	Viburnaceae	X	X			<ul> <li>M: Some species are used as a remedy for menstrual discomfort and related issues, such as menstrual cramps; they are sometimes used to address conditions related to the uterus and its functioning; exhibit muscle-relaxing properties. Used for the treatment of diseases such as rheumatoid arthritis, cough, diarrhea, tumefaction, swelling, kidney cramps, antitumor, antimicrobial, antioxidant, antihyperglycemic, anti-inflammatory, and neuroprotective activities.</li> <li>E: In some cultures, the berries of certain <i>Viburnum</i> species are used to make jams, jellies, and beverages. Leaves, bark and/or fruit may be used as food ingredients.</li> <li>O: Mainly ornamental. (Sharifi, et.al., 2021).</li> </ul>		
Viburnum lautum Viburnum amatenangense Viburnum siltepecanum	Viburnum lautum C.V.Morton	Viburnaceae			Х		O: Its dense growth habit can be used as a hedge or screen plant. It creates natural boundaries and privacy screens in gardens and landscapes. Wildlife attraction. (Selina Wamucii, 2024).		
Viburnum molinae	Viburnum molinae Lundell	Viburnaceae				Х	NU: Few or no reports of uses. Little is known about its uses.		
Viburnum subpubescens	Viburnum subpubescens	Viburnaceae		Х	Х		E: Edible berries used for juices or jams. O: Ornamental plant.		
	Lundell						(Selina Wamucii, 2024).		

Genus, species from	What is the accepted name	Plant family				Uses	
Lundell's 1961 list in alphabetical order	for this plant today?		Medicinal (M)	Edible (E)	Other (O)	No Uses Reported (NU)	Notes of uses
Wallenia	Wallenia Sw.	Primulaceae	Х	Х	Х		M: Some plants of the genus are used in traditional Chinese medicine. E: Some plants present edible fruits. Leaves
							are used as an ingredient in foods. O: Ornamental. Some cultures use the plant as decoration or as part of their rituals.
							(Christenhusz, et.al., 2017; Selina Wamucii, 2024; Selina Wamucii, 2024).
Xyris elliottii	Xyris elliottii Chapm.	Xyridaceae				X	O: Used and planted for erosion control and stabilization of soil; also, as a wildlife attractor since it has various pollinators such as insects. Also used as an indicator of ecosystem health.
							(Coastal Plain Plants, 2022).
Xyris	Xyris L.	Xyridaceae		Х	Х		M: Some species are used in traditional medicine to treat various ailments.
							O: Some species are cultivated as ornamental plants for their unique appearance; <i>Xyris</i> plants are often found in wetland ecosystems and can help stabilize soil and prevent erosion in these habitats. Also used as a wildlife attraction.
							(SANBI, 2023; NatureServe Explorer, 2024; Picture This, 2024; Selina Wamucii, 2024).
Yucca	Yucca L.	Asparagaceae	Х	Х	Х		M: Some species of Yucca are thought to have anti-inflammatory, antibacterial, and antifungal properties.
							E: Significant source of food in many tropical countries. Roots are rich in carbohydrates and can be consumed after proper preparation. They can be boiled, fried, or made into various dishes, such as cassava fries or "yuca con mojo."
							O: Ornamental plant; starch derived from the roots serves diverse industries such as food processing, textiles, adhesives, and paper manufacturing; used as animal feed due to their protein content.
							(El Amouri, 2018; Netmeds, 2023; Britannica, 2024; Picture This, 2024; RxList, 2024).

## **APPENDIX B** Where has Tasiste Palm been collected in Guatemala for Herbaria and is in on-line databases

Guatemala, Petén, Rio Pucte, on river bank

Guatemala, Petén, Sayaxche, Rio Pucte camp, in tintal, 1 km. south of the camp, 200m east of the river

Guatemala, Petén, El Ceibo, bordering Rio San Pedro, about 500m of the village

Guatemala, Petén, Tikal National Park, 46 km, on Brecha (J) Petrolera -- pinal Bajo de Santa Fe

## **APPENDIX C**

Photos of Tasiste in Tasistal-like areas in Bajo de Santa Fe between outside edge of PANAT and the El Pinal area





The "Trail" is to the left. All the fallen branches cause your feet to get caught and trip you. And when anything growing up was cut down by the trail-makers, they left a "stump" of about 5 to 10 cm hall that is a perfect thing to trip you over and fall flat on your face.

Fortunately this area is not being invaded, so not much evidence of fire. It would help to make the entire Bajo de Santa Fe a special protected area and have park rangers here.





The falling leaves are normal for tasiste palm. In areas where the savannas are burned, these leaves get burned off. But since this area here is a bajo forest, there is no savanna remaining to burn.

This is a good view since it shows that although some areas have hundreds of tasiste palms, this area is primarily normal bajo. A "normal bajo" rarely has tasiste palm. That's why I estimate that in the past this was a savanna that got reforested by Mother Nature. Best for a geographer, soil scientist and ecologist to study this savanna in depth and provide discussion on this aspect.



Here more palms on this side, but still lots of bajo vegetation behind and to the right.

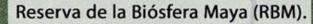


Every hundred meters you reach areas of almost solid tasiste; these solid areas are what I call a tasistal. In our FLAAR Reports on Tasistal Arroyo Petexbatun you can see a tasistal about 1 km by 300 meters across. In Parque Nacional Laguna del Tigre (PNLT) we have found potentially the largest tasistal area of all Guatemala.

# **APPENDIX D**

GPS Positions for Photography from Uaxactun to northern border of PANAT and from there hiking to the El Pinal area through Bajo de Santa Fe

Point number	Time	Name of the point
1	10:19:00	Corozera (this is a local term for forest patches where the corozo palm, in the <i>Attalea genus</i> , prevails).
2	10:46:00	North limit of Tikal park.
3	11:26:00	Limit of the management unit Uaxactún.
4	11:55:00	Esquinero (right upper corner of Tikal's limits).
5	12:09:00	Trail's entrance. This trail leads to the pine forest.
6	(a) 12:48:00	Tasiste
	(b) 15:04:00	Arroyo (creek).
7	13:04:00	Tazistal.
8	13:36:00	First pine tree.
9	15:07:00	Creek 2.
10	17:20:00	Starting (at 10:00:00) and ending point of the hike.
11	18:27:00	End of the expedition.



ejo Uaxa Unidad de Manejo S Barrogues

### **Route from Uaxactún to** pine forest remnant

Route traveled and hiked on Monday, May 15th of 2023.

1

Source: Elaboration via GPS and then data put in the map by Sergio D'angelo Jerez. Photographic background generated with Caltopo.com @caroro and reproduced with permission. It contains layers from CalTopo, MapBox, Maxar, USDA Farm Service Agency, EOX IT, and modified Copernicus data (2019).



Unidad de Manejo Uaxactún 10 Parque Nacional Tikal 2 3 4 5967 8 Ñ 20 km 10

The attributions for each layer of the Caltopo images are included in this report following the reference section

Unidad de Manejo Uaxactún Unidad de Manejo San Bartolo

3

Parque Nacional Tikal

# Route hiked to pine forest remnant

10

Route hiked on Monday, May 15th of 2023.

Source: Elaboration via GPS and then data put in the map by Sergio D'angelo Jerez. Photographic background generated with Caltopo.com @ccrowo and reproduced with permission. It contains layers from CalTopo, MapBox, Maxar, USDA Farm Service Agency, EOX IT, and modified Copernicus data (2019).

FLAAR





5967

8

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### Last 2 km in the route hiked to the pine forest

9<sub>6b</sub>6a

5

Route hiked on Monday, May 15th of 2023. Here the pine forest appears in the center and can be somehow easily distinguished.

Source: Elaboration via GPS and then data put in the map by Sergio D'angelo Jerez. Photographic background generated with Caltopo.com @caroec and reproduced with permission. It contains layers from CalTopo, MapBox, Maxar, USDA Farm Service Agency, EOX IT, and modified Copernicus data (2019).

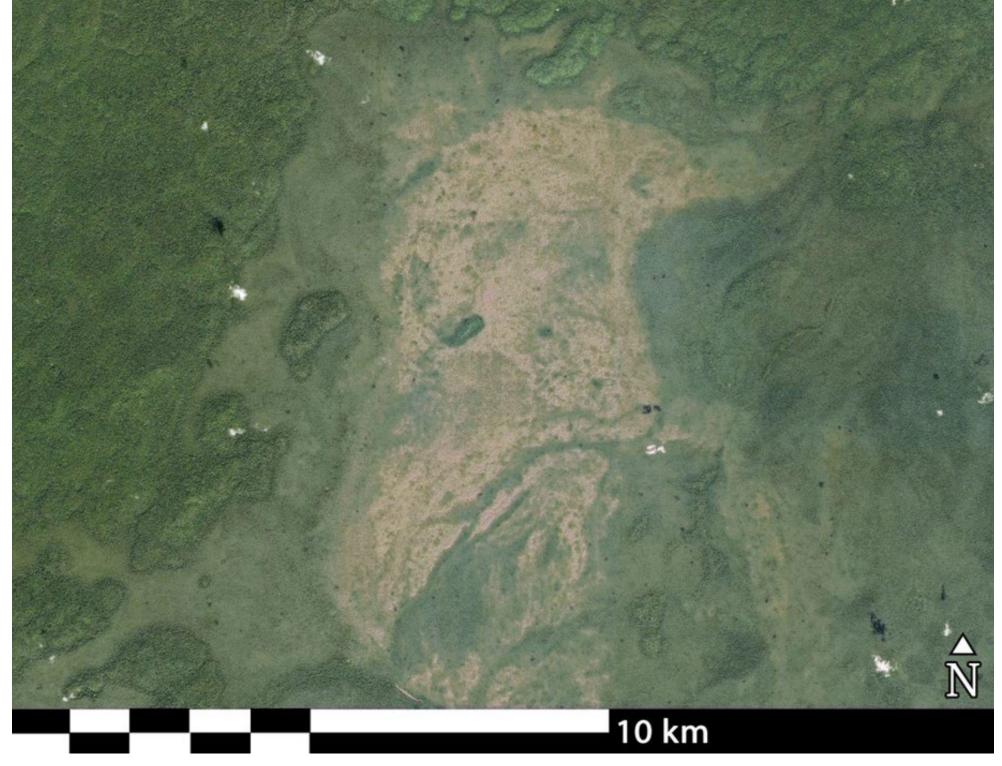
FLAAR







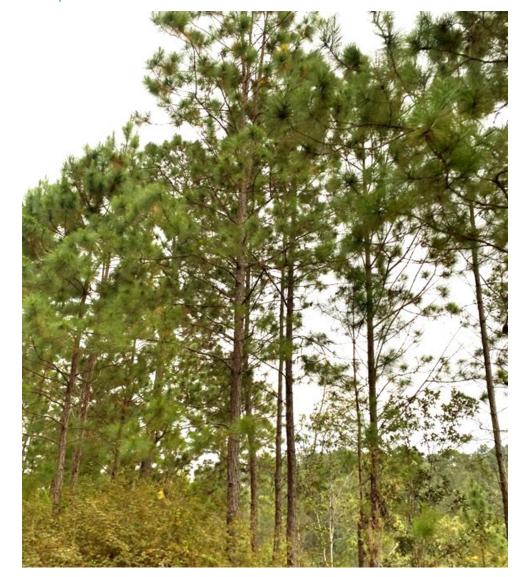
This is the same area showcased in the previous map. All elements were removed to have a better view.





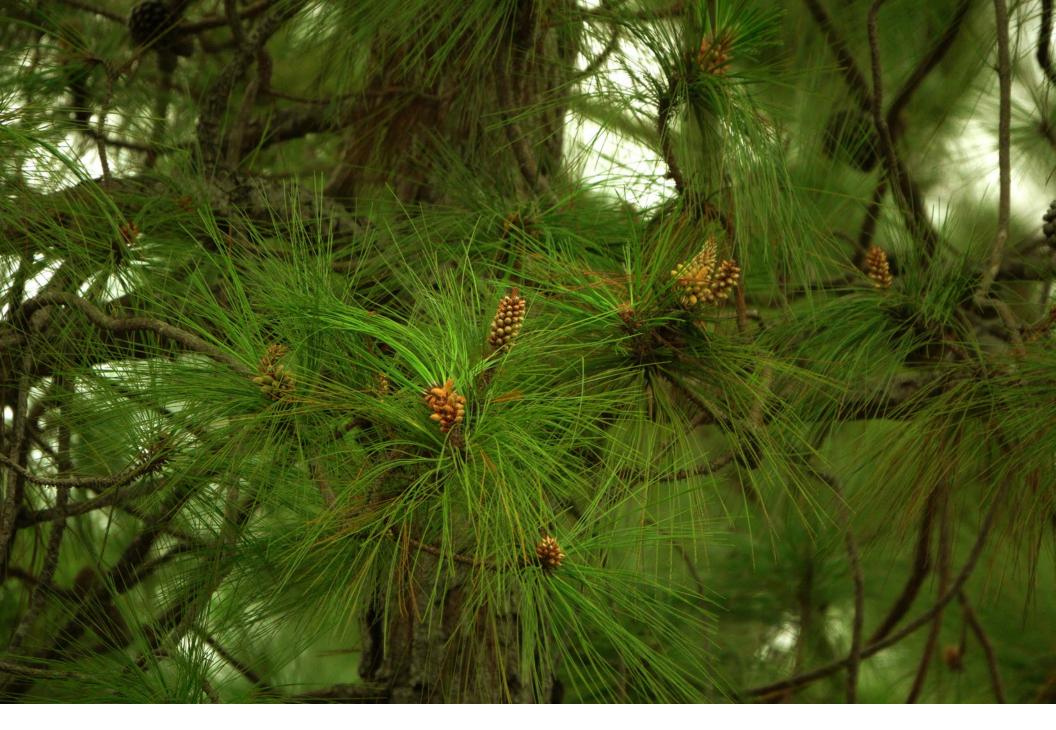
Google Earth does not have an adequate resolution but is "better than nothing". Satellites.Pro did not produce an adequate view; gave error messages and commercial adverts covered most of the map. If you are at a university you will have access to significantly higher resolution satellite views. This Caltopo view shows how many "islands" of distinct vegetation are here.

## **APPENDIX E** *Pinus caribaea* in Jalapa









# References Cited and additional Suggested Reading on the El Pinal Area near the Northeast border of Parque Nacional Tikal (PANAT),

Reserva de la Biosfera Maya (RBM), Peten, Guatemala

This bibliography is by Sergio Jerez and Nicholas Hellmuth.

#### **BESTELMEYER, Brandon**

2000 Introduction to the RAP Expedition to Laguna del Tigre National Park, Petén, Guatemala. In: Bestelmeyer, B. and Alonso, L. (editors). 2000. A Biological Assessment of Laguna del Tigre National Park, Petén, Guatemala. Chapter 1. Pp. 20-25.

In pp. 21 it is cited the possibility that during the last glacial period major parts of Peten were covered by pine-oak formations.

Download online: <u>https://www.researchgate.net/publication/303882937</u> An ichthyological survey of Laguna del Tigre National Park <u>Peten Guatemala</u>

#### CHAN, Rosa, SECAIRA, Estuardo, and María Elena MOLINA (eds.)

2003 Plan Maestro del Parque Nacional Tikal 2003-2008. Guatemala. Ministerio de Cultura y Deportes-Dirección del Patrimonio Cultural y Natural-Parque Nacional Tikal; The Nature Conservancy; RARE Center para la Conservación Tropical; Wildlife Conservation Society (WCS); Organización de las Naciones Unidas para la Educación, la Ciencia y la Cultura (UNESCO); Agencia Internacional para el Desarrollo-Gobierno de Estados Unidos de América (USAID). 127 pages.

Map 2 (pp. 12), map 3 (pp. 26), map 4 (pp. 33), map 6 (pp. 49), map 8 (pp. 120), and map 9 (pp. 121) show the pine forest near the North East corner of the park's border. Mapa 2 shows precisely where the pine-oak area is. It is not "northeast" it is east of the east side of Tikal. It is in the northern sector, but it is not "north" of Tikal park whatsoever (north of Tikal site yes; but it is east of the park border; not north nor northeast of the park).

#### e) Pine Forest

It's an area of approximately 200 hectares of mainly *Pinus caribaea*, located on the outsides of the park, at 3 km from the northeast corner, called El Pinal. It's located on an inlined plane in areas dominated by (*Haematoxylum campechianum*). They are associated with tasise (*Paurotis whrigthii*), *Quercus shippii*, nance (*Byrsonima* spp.), morro (*Crescentia cujete*) (Fialko, 2001; Plan Maestro 2003-2008: 29).

The word savanna is not mentioned one single time for Tikal in the entire 135 page document (only mentioned for Poptun savannas).

#### Download online:

https://www.conservationgateway.org/Documents/10.Plan%20Maestro%20Tikal%20FINAL.pdf

#### DUNNING, Nicholas P., LUZZADDER-BEACH, S., BEACH, T. P., JONES, John G., SCARBOROUGH, V. L., and T. Patrick CULBERT

2002 Arising from the Bajos: the evolution of a neotropical landscape and the rise of Maya civilization. Ann. Assoc. Am. Geogr. 92, 267-283.

Pine/palmetto savanna, Bajo de Santa Fe, 18 km to northeast of Tikal. That's why we hiked from Uaxactun, where you can drive a portion of the distance and then have to hike only 10 kilometers in (and then the same 10 km back out to the 4x4 pickup truck).

#### DVORAK, William, HAMRICK, J. L. and E. A. GUTIERREZ

2005 The Origin of Caribbean Pine in the Seasonal Swamps of the Yucatan. International Journal of Plant Sciences 166(6):985-994 · November 2005.

Commercially overpriced: <a href="https://www.jstor.org/stable/10.1086/449314?seq=1#page\_scan\_tab\_contents">www.jstor.org/stable/10.1086/449314?seq=1#page\_scan\_tab\_contents</a>

Fortunately, also available on the more fair-priced ResearchGate.net (except you have to write the authors to request it, a waste of their time and your time). Scholarly articles should be easy downloads.

#### FIALKO, Vilma

2001 Investigaciones arqueológicas en el Bajo Santa Fe y la Cuenca del Río Holmul, Petén: Parte 2. Región Noreste del Parque Nacional Tikal y Periferia de Nakum. Temporada 2001. Proyecto Nacional Tikal. Sub-Proyecto Triángulo Yaxhá-NakumNaranjo. Instituto de Antropología e Historia. Guatemala.

#### FIALKO, Vilma

2002 Investigaciones arqueológicas en la cuenca media del río Holmul entre Nakum y Naranjo. Manuscrito PROSIAPETEN- PRONAT, Instituto de Antropología e Historia, Guatemala.

#### FIALKO, Vilma

2005 Diez años de investigaciones arqueológicas en la cuenca del Río Holmul, Región Noreste de Petén. In: Memoria. 2005. Simposio de Investigaciones Arqueológicas en Guatemala (18:2004, Guatemala). Guatemala. Ministerio de Cultura y Deportes, Instituto de Antropología e Historia, Asociación Tikal.

In pp. 7 it is mentioned how the archaeological site Isla Los Pinos is associated with the pine forest.

Download online: http://www.famsi.org/reports/03101es/19fialko/19fialko.pdf

#### FIALKO, Vilma

2008 La periferia este de Tikal en el periodo Preclásico dentro del contexto de la cuenca del río Holmul. In: Laporte, J., Arroyo, B., and H. Mejía (editors). XXI *Simposio de Arqueología en Guatemala*, 2007. Pp. 239-247. Museo Nacional de Arqueología y Etnología, Guatemala (versión digital).

Page 244 mentions that the archaeological sites Jahuia and Isla Los Pinos are near many hectares of pine forest.

Figure 1 (pp. 241) shows the location of Jahuia and Isla Los Pinos archaeological sites.

Download online: <a href="http://www.asociaciontikal.com/wp-content/uploads/2016/08/15.07">www.asociaciontikal.com/wp-content/uploads/2016/08/15.07</a> Fialko.07.pdf

#### FRANCIS, J.K.

1992 Pinus caribaea Morelet. Caribbean pine. Pinaceae. Pine family. Forest Service, Southern Forest Experiment Station, Institute of Tropical Forestry. New Orleans, USA.

#### LAWS, W. Derby

1961 Investigations of Swamp Soils from the Tintal and Pinal Associations of Peten, Guatemala. Wrightia Volume 2, Number 3, pages 127-132.

https://archive.org/stream/mobot31753002567417/mobot31753002567417\_djvu.txt (so not as a PDF but something-is-better-than-nothing).

#### LENTZ, David L., JAEGER, J. and C. ROBIN

2003 The Pine Tree Trade: Exchange and Distribution Among Late Classic Maya in the Upper Belize River Valley. Paper presented at the 44th Annual Meeting of the Society for Economic Botany, Tucson,

#### LENTZ, David L.

2003 Statement of Proposed Study: Tikal Plant Use. FAMSI Grant Proposal. On file, Chicago Botanic Garden.

#### LENTZ, David L.

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On pages 111-113, Cyrus Lundell lists all the plants he found and identified in the pine area. We show his list as an Appendix; plus our team organizes them into alphabetical order.

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# Attributions for satellite imagery used in this report

The following attributions correspond to each layer of the Caltopo images that were used as a photographic background for the maps in this report.

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# Helpful web sites for any and all plants

There are several web sites that are helpful even though not of a university or botanical garden or government institute.

However most popular web sites are copy-and-paste (a polite way of saying that their authors do not work out in the field, or even in a botanical garden). Many of these web sites are click bait (they make money when you buy stuff in the advertisements that are all along the sides and in wide banners also). So we prefer to focus on web sites that have reliable information.

#### https://serv.biokic.asu.edu/neotrop/plantae/

Neotropical Flora database. To start your search click on this page: https://serv.biokic.asu.edu/neotrop/plantae/collections/harvestparams.php

#### http://enciclovida.mx

CONABIO. The video they show on their homepage shows a wide range of flowers, pollinators, a snake and animals. The videos of the insects are great.

#### www.kew.org/science/tropamerica/imagedatabase/index.html

Kew gardens in the UK is one of several botanical gardens that I have visited (also New York Botanical Gardens and Missouri Botanical Gardens (MOBOT), in St Louis. Also the botanical garden in Singapore and El Jardín Botánico, the open forest botanical garden in Guatemala City).

#### www.ThePlantList.org

This is the most reliable botanical web site to find synonyms. In the recent year, only one plant had more synonyms on another botanical web site.

# Web pages specifically on *Acoelorraphe wrightii*, especially tasiste palm of Guatemala

99% of webpages on Acoelorraphe wrightii are on Everglades palm, Paurotis palm, of Florida (so not of Mesoamerica). This same palm is wild and native to Guatemala and adjacent countries of Mesoamerica.

https://edis.ifas.ufl.edu/st058\_ University of Florida, on why fronds are often yellow color.

www.maya-ethnobotany.org/mayan-ecosystems-chiapas-peten-belize/acoelorrhaphe-wrightii-palmetto-palm-mayan-savanna-ecosystemhellmuth-flaar-nakum-peten.php Tasiste palm discovered near Crescentia cujete trees in Savanna East of Nakum, PNYNN.

www.palmworld.org/view\_object.php?p=MjQ4 Helpful introduction.

http://sds.yucatan.gob.mx/flora/fichas-tecnicas/Tasiste.pdf One small photo; one short page.

### ACKNOWLEDGEMENTS TO FLAAR MESOAMÉRICA

Vivian Hurtado is an environmental engineer and passionate researcher. She is the general coordinator of FLAAR Mesoamerica and is responsible for managing the development of projects.

Jorge Luis Arana is responsible for the financial administration of the institution and supports the supervision of daily activities.

Sergio Jerez is an agricultural engineering student involved in plant identification and supports research topics.

Mariana Rivas is a biologist and is responsible for editing information for our reports. She also helps with various investigations and data processing for FLAAR projects.

Alejandra Valenzuela is a biology student and part of the research team. He edits reports and supports other activities. He also supports the creation and analysis of web statistics.

**Pamela Jerez** is a biologist and is mainly in charge of managing FLAAR's social networks, and also supports as a researcher.

Andrea Sánchez is a graphic designer who helps prepare the graphic line of our publications. She is our editorial art director.

Jaqueline González is a graphic designer who diagrams text and photographs to create our reports.

**Carlos Marroquín** is a graphic designer and designs the publications that are made on social networks, as well as diagramming some of the flora and fauna reports that we generate.

Edwin Solares He is an environmental engineer, as well as a photographer and videographer during our expeditions. He then edits this content to be used in our different materials.

Pedro Pablo Ranero has a degree in communications and is in charge of editing videos of flora and fauna to create content on our sites.

Milstrid Arana is in charge of editing videos for our social networks.

**Paulo Núñez** is an engineer and the administrator of our websites. He is the director of the web team and is responsible for the maintenance and programming of the entire FLAAR network of websites.

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Andrés Fernández is a graphic designer and is in charge of keeping our websites updated and making them more efficient for the user.

Valeria Avilés is a graphic designer and illustrator. She is the director of MayanToons, our children's division and is in charge of coordinating the team's activities, as well as creating illustrations for the different materials we prepare.

Laura Morales is a digital content engineer and is in charge of directing the animation department at MayanToons.

Paula García is a graphic designer and part of our MayanToons Animation team. Her job is to bring our favorite characters to life.

Niza Franco is a graphic designer and part of our MayanToons Animation team. Her job is to bring our favorite characters to life.

Isabel Trejo is a graphic designer and illustrator for MayanToons and social media posts. Josefina Sequén is an illustrator for MayanToons.

Dafne Ramírez is an illustrator for MayanToons

Karen Arana ayuda en la planificación y gestión de las actividades de FLAAR USA y FLAAR Mesoamérica.

Byron Pacay is our assistant during field trips.

Norma Cho is our assistant during field trips.

Karla Cho ayuda de manera general en las investigaciones y brinda asistencia en la oficina

### **Otras publicaciones sobre el Proyecto RBM**





SERGIO D'ANGELO JEREZ FLAAR MESOAMERICA

Documenting our remote field work Descargar aquí



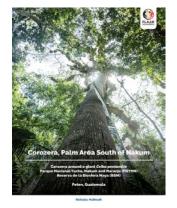
Epiphytes in Tikal Descargar aquí



Island of Thalia geniculata Descargar aquí



Fruits of Gaussia maya palms Descargar aquí



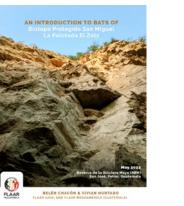
Corozera, Palm Area South of Nakum Descargar aquí



Nasua narica-Coatimundi Descargar aquí



Wild Vanilla Orchid, Vanilla insignis Descargar aquí



Bats from El Zotz Descargar aquí

Si desea más informes FLAAR sobre el Proyecto RBM de Guatemala, visite nuestro sitio web: https://flaar-mesoamerica.org/reserva-biosfera-maya-project/

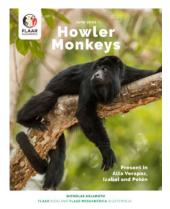
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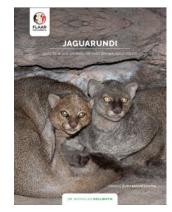


Listado actualizado de los Mamíferos de Guatemala Descargar aquí



Spider Diversity of Alta Verapaz

Spider Diversity of Alta Verapaz Descargar aquí



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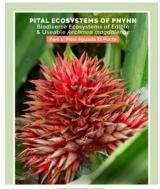
Honey Bees Descargar aquí

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NICHOLAS HELLMUTH TLAAR (USA) AND FLAAR HESOANÉRICA (QUATEMALA)

Pital Ecosystem Descargar aquí Why are Giverumo Buds not Listed as "Edible" within Lists of Edible Plants of the Maya?



Notoles Milando Decopio pello FLAAR (USA) and FLAAR Microsometica Geodemide Patter California (Social Marcole Patter) Strategie California (Social Marcole Patter) Patter, California

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Importancia del Dosel de los Bosques Tropicales Descargar aquí

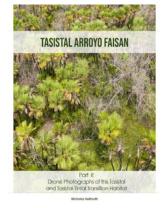


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